<u>NEW GARAGE BUILDING FOR:</u> THE GARRARD COUNTY COOPERATIVE EXTENSION SERVICE

1302 Stanford Road // US Hwy 27 Lancaster, Kentucky 40444

ARCHITECT

VANHOOK ARCHITECTURAL SERVICES GARLAN VANHOOK, ARCHITECT 919 Lancaster Street Stanford, Kentucky 40484

FEBRUARY 28, 2025

TABLE OF CONTENTS

DOCUMENT & TITLE

PAGES

INTRODUCTORY PAGES

- COVER PAGE - TABLE OF CONTENTS - INVITATION TO BID - INSTRUCTIONS TO BIDDERS - BID FORM	1 1 1 1	THRU THRU	3 2
SPECIFICATIONS			
DIVISION 1 - GENERAL CONDITIONS:	1	THRU	6
DIVISION 2 - SITE GRADING:	1	THRU	11
DIVISION 3 - CONCRETE:	1		
DIVISION 4 - MASONRY:	1		
DIVISION 5 - METALS:	1		

DIVISION 6 - CARPENTRY:1 THRU 3DIVISION 7 - WATERPROOFING/THERMAL PROTECTION:1 THRU 2DIVISION 8 - DOORS AND WINDOWS:1DIVISION 9 - FINISHES:1 THRU 2DIVISION 10 - SPECIALTIES:1 THRU 2

DIVISION 11 - EQUIPMENT: (NONE IN THIS PROJECT) DIVISION 12 - FURNISHINGS: (NONE IN THIS PROJECT) DIVISION 13 - SPECIAL CONSTRUCTION: (NONE IN THIS PROJECT)

DIVISION 15 - MECHANICAL/PLUMBING: 1 THRU 2 DIVISION 16 - ELECTRICAL: 1 THRU 4

END OF TABLE OF CONTENTS

Page 1 of 1

INVITATION TO BID

Public Notice is given hereby that; THE GARRARD COUNTY COOPEERATIVE EXTENSION SERVICE

will accept bids for the construction of; A NEW GARAGE BUILDING

According to drawings and specifications prepared by VANHOOK ARCHITECTURAL SERVICES, and described in general as:

Wood framed construction of approximately 2575 square feet, with a minimum finished garage area of 1375 square feet, and a finished garage bay and office area of 1200 square feet. Further described to have metal panel exterior siding, truss framed roof structure, with shingled roof. Interior finishes of gyp-bd, metal, and plywood. Sealed concrete slab floor. Mechanical HVAC and Plumbing. M/E plans include grinder pump station for sanitary sewer service for the building. New 200-amp electrical service. General site and civil work for cut and fill of building pad, foundations, site grading, and utilities installations.

Sealed bids will be received in the office of The Garrard County Cooperative Extension Service, 1302 Stanford, KY, Lancaster, Kentucky on Thursday, April 24th, 2025 at 3:00 PM EST.

Bids will be opened and read aloud in the Garrard County Cooperative Extension Services Meeting Room. Bids received after the time established by the Owner will not be accepted. Interested parties are invited to attend.

Proposed Contract Documents may be examined during business hours at:

Garrard County Cooperative Extension Office, 1302 Stanford Road, Lancaster, KY Vanhook Architectural Services - 913 Lancaster Street, Stanford, KY

General contract bidder may secure copies of the proposed Contract Documents as follows;

Lynn Imaging, Vine Street, Lexington, KY // plan distribution depart.

- General and sub-contract contract bidders may purchase plan sets of 1. the contract documents at cost, and is non-refundable. A postage and handling fee, payable direct to Lynn Imaging, shall be charged on each set of plans issued which are not picked up at the printer's place of business, this fee is not refundable. 2.
- No partial sets will be issued.

A Pre-Bid Conference will be held at the project site Wednesday, April 16th, 2025 at 3:00 PM EST. All interested bidders should attend this meeting to publicly ask questions and request clarifications of the documents.

Bid security in the amount of 5% of the base bid will be required to accompany bids.

The Owner reserves the right to reject any or all bids and to waive irregularity and any informalities in the bids and in the bidding processes.

End of Invitation to Bid

INSTRUCTIONS TO BIDDERS

1. THE WORK

New Garage Building for: the Garrard County Cooperative Extension Service.

2. SECURING DOCUMENTS

Copies of the proposed Contract Documents may be obtained at:

Lynn Imaging, Vine Street, Lexington, KY;

or viewed at;

The Garrard County Cooperative Extension Office, 1302 Stanford Road // Hwy 27 South, Lancaster, Kentucky.

upon the conditions set forth in the invitation to bid.

3. BID FORM

In order to receive consideration, make bids in strict accordance with the following.

A. Make bids upon the forms provided therefore, properly signed and with all items filled out. Do not change the wording of the bid form, and do not add words to the bid form. Unauthorized conditions, limitations, or provisions attached to the bid will cause for rejection of the bid. If alterations by erasure or interlineation are made for any reason, explain over such erasure or interlineation with a signed statement from the bidder.

B. No telegraphic bid or telegraphic modification of a bid will be considered. No bids received after the time fixed for receiving them will be considered. Late bids will be returned to the bidder unopened.

C. Address bids to the Owner, and deliver to the address given in the invitation to bid on or before the day and hour set for opening the bids. enclose each bid in a sealed envelope bearing the title of the Work, the name of the bidder, and the date and hour of the bid opening. Submit only the original signed copy of the bid. It is the sole responsibility of the bidder to see that his bid is received on time.

D. Bidder shall provide 5% Bid Bond Certificate of Insurance to the Owner with the Bid Form. The bid bond shall represent 5% of the value of the Proposed Base Bid. The Owner shall Be named as the Bond holder / insured. A Certified Check made out to the Owner, in the amount of 5% of the Base Bid value, shall also be considered an acceptable form of the Bid Bond for this project.

4. EXAMINATION OF DOCUMENTS AND SITE OF WORK

Before submitting a bid, each bidder shall examine the Drawings carefully, shall read the Specifications and all other proposed Contract Documents, and shall visit the site of the Work. Each bidder shall fully inform himself prior to bidding as to existing conditions and limitations under which

INSTRUCTIONS TO BIDDERS

the Work is to be performed, and shall include in the bid a sum to cover the cost of items necessary to perform the Work as set forth in the proposed Contract Documents. No allowance will be made to a bidder because of lack of such examination or knowledge. The submission of a bid will be considered as conclusive evidence that the bidder has made such examination.

5. PROOF OF COMPETENCY OF BIDDER

Although the bidders are invited to Bid this project, a bidder shall be required to furnish evidence satisfactory to the Owner that they "and" their proposed subcontractors have sufficient means and experience, in this type and scope of work called for, to assure completion of the Contract in a satisfactory manner.

6. WITHDRAWAL OF BIDS

A. A bidder may withdraw their bid, either personally or by written request, at any time prior to the scheduled time for opening bids.

B. No bidder may withdraw their bid for a period of forty-five (45) calendar days after the date set for opening thereof, and bids shall be subject to acceptance by the Owner during the period.

7. AWARD OR REJECTION OF BIDS

The Contract, if awarded, will be awarded to the responsible bidder who has proposed the lowest and best Contract Sum, remaining subject to the Owner's right to reject any, or, all bids, and to waive informality and irregularity in the bids and in the bidding processes.

8. EXECUTION OF AGREEMENT

A. The form of Agreement which the successful bidder will be required to execute is noted in the Specification.

B. The bidder to whom the Contract is awarded shall, within ten calendar days after notice of award and receipt of the Form of Agreement from the Owner, sign and deliver to the owner the required copies, of the Agreement along with proper bonding certificates and insurance certificates.

C. At or prior to delivery of the signed Agreement, the bidder to whom the Contract is awarded shall deliver to the Owner those Certificates of Insurance required by Law and the Contract Documents.

D. Certificates of Insurance shall be approved, and found acceptable to the owner, before the contractor / successful bidder may proceed with the Work. This shall include also 100% Performance and Payment Bond. Insurance companies providing coverage to this project shall be licensed to do Business within the Commonwealth of KY, and Registered properly with the Office of Ky Secretary of State and with the State Insurance Regulatory Service Board.

INSTRUCTIONS TO BIDDERS

Failure or refusal to provide Certificates of Insurance in a form satisfactory to the Owner shall subject the successful bidder to loss of time from the allowable construction period equal to the time of delay in furnishing the required material.

9. INTERPRETATION OF CONTRACT DOCUMENTS PRIOR TO BIDDING

A. If any person contemplating submitting a bid for construction of the Work is in doubt as to the true meaning of any part of the proposed Contract Documents, or finds discrepancies in or omissions from any part of the proposed Contract Documents, he may submit to the Architect a written request for interpretation thereof not later than seven days before bids will be opened. The person submitting the request shall be responsible for its prompt delivery.

B. Interpretation or correction of proposed Contract Documents will be made only in writing by Addendum and may be faxed, mailed, e-mailed, or delivered to each general contract bidder of record. The Owner will not be responsible for any other explanations or interpretations of the proposed Contract Documents.

10. PRE-BID CONFERENCE

Prior to the scheduled bid opening, a Pre-Bid Conference time may be established for the purpose of considering questions posed by bidders. The conference will be open to general contract and subcontract bidders. The location and time of conference will be established by the Architect/Owner. Contact Architect to verify. The Architect/Owner may elect not to have such conference without invalidating any specification requirements. See also Invitation to Bid.

11. CONSTRUCTION TIME AND LIQUIDATION DAMAGES

A. The Agreement will include a stipulation that the Work be completed in a length of time as agreed upon by and between the Owner and the bidder who is selected to be Contractor. This time shall be agreed too prior to the Owner's Notice to Proceed. The project construction time is defined in the Division One section of this specification document.

B. The Agreement will include a stipulation that the Contractor will pay the Owner as liquidated damages an agreed amount per calendar day for each calendar day after the agreed completion date that the Work is not fully certified by the Architect as being Substantially Complete as that stage of completion is defined in the specifications, and general conditions of the contract. This amount shall not be less than \$500.00 per day.

12. PERFORMANCE AND PAYMENT BOND

A. Contract award shall require 100% Performance and Payment Bond by the General Contractor and as described elsewhere in this specification document.

End of Instructions to Bidders Page 3

THE BID FORM

TO: The <u>Garrard County Cooperative Extension Service</u>, hereinafter called the "Owner".

1. The Undersigned, having examined the proposed Contract

Documents titled: New Garage Building for- Garrard County Cooperative Extension Service Building, Lancaster, Kentucky and having visited the site and examined the conditions affecting the work, hereby proposes and agrees to furnish all labor and materials required to perform operations necessary to complete the work as required by said proposed Contract Documents, for the stipulated sum of,

DOLLARS (\$_____)

Written enumeration of bid amount

2. Should the Owner elect to proceed with the addition or inclusion of certain items or to omit certain items or work as defined in the Specifications, the undersigned proposes the following **unit prices**.

THE BID FORM

Α.	Stone base aggregate: 4" lifts	cu/yd.	·
В.	Mass rock removal	cu/yd.	·
С.	Trench rock:	cu/yd.	
D.	Concrete walks 4' wide	cu/yd.	
E.	FOUNDATIONS WALLS: Ea. Additiona (if required below 2'6" min. for	l 8" depth/LF proper soil bea	aring)
F.	Outlets: Telephone/ data Outle	t Ea.	·
	Duplex Outlet	Ea.	
	Switch - single .	/ 3way	/
	Junction Box and Cir	ccuit to Panel	·
Bidder Nam	e		
Addr	ess		
Phon	eE-Ma:	il	
Sign	ature		
	End of Bid Form Page 1 of 2		

THE BID FORM PAGE 2 Of 2

The Garrard County Cooperative Extension Service

1. Sub-Contractor listing,

1. Material and Supplier listing

Acknowlege addendums related to this bid (list number) _____.

End of Bid Form Page 2 of 2

SPECIFICATIONS

DIVISION ONE - GENERAL CONDITIONS

1.01 PROPOSAL

A. Bidders shall submit proposal on proper form only. See Instruction Bidders.

B. Proposals qualified in any manner may be rejected.

C. The Owner reserves the right to accept or reject any or all bids and waive formalities without accounting.

D. Bidder shall visit the site and satisfy themselves as to the nature and scope of the work required. Submission of a bid shall be evidence that said site examination was made. No claims for additional compensation will be made for difficulties encountered which could have been foreseen had such an examination been made.

E. "The General Conditions of the Contract for Construction" A.I.A. Document A201, 1997 Edition, shall govern the performance of this contract. They shall govern fully and with the same force as though copied verbatim herein.

F. The Owner retains the right to contract sections or portions of work separately under separate/ independent contracts; However, all work on this project shall be done subject to these documents in their entirety, any independent contract with the Owner shall be subject to coordination and scheduling by the General Contractor as selected by the Owner. All work shall be subject to Architect/Owner review and acceptance prior to final payments. Bidding only a portion of work does not relieve that Contractor from supplying all work required by that section of work and/or as required by these Contract Documents.

G. Any Owner furnished equipment shall be coordinated by Contractor and all coordination for installing units shall be the responsibility of the Contractor whose work the units fit into or connects with.

1.02 AGREEMENT / CONTRACT TIME

Successful bidder will be required to execute AIA Form A 107 -Owner -Contractor Agreement Form - stipulated sum, with Owner for construction of this project. Bidder shall further agree to complete the work in 190 calendar days (6 MONTHES) from date of contract.

1.03 INSURANCE

Contractor or any Sub Contractors shall carry a builder's risk insurance on the project. Proof of insurance shall be required before a Contract can be signed or prior to work beginning. Working without proper proof of insurance will void any Contract(s) with Owner.

 $% \left(Minimum \right) = 0.01$ Minimum amounts of insurance coverage to be carried by all Contractors and/or Sub Contractors.

Workman's Compensation - KRS statutory limit. Page 1

Public liability: Each person (bodily injury) \$250,000.00 Each occurrence (bodily injury) \$500,000.00 Property Damage: Each occurrence \$500,000.00 Limit \$1,000,000.00 during term of policy Contractor's Protective Liability (automobile): Each person \$100,000.00 Each occurrence \$300,000.00 Contractor's Property Damage: Each occurrence \$25,000.00 Builders Risk Policy: value of the project contract.

Owner to be named as co-insured on all policies. Proof of insurance shall be submitted on AIA Form G705 or a completed and signed Insurance Company's Certificate of Insurance.

The owner shall maintain their existing property insurance policy on the existing building for coverage that would not be related to, or the responsibility of, the contactors, or construction activities.

1.04 MATERIAL QUALITY

A. All materials and equipment provided for this project shall be new without defects visible or invisible and of first quality. All materials shall be of a nationally recognized manufacturer and of commercial quality products when not specifically identified here in these documents. Materials that do not meet these criteria shall be removed from the job site and replaced with materials that do meet the criteria.

B. All materials required may not be fully described or identified in these specifications. Bidders shall select based on above criteria and/or as may be called out in the drawings.

C. Architect/Owner shall have final approval of all materials installed in this project.

D. All materials shall be stored and protected from damage. Damaged or improperly stored materials shall not be paid for nor shall it be permitted to be installed. All materials stored on site shall be the Contractor's responsibility.

1.05 PAYMENTS TO CONTRACTOR

Successful bidder/bidders shall submit cost breakdown of the work proposed. Indicate breakdown of all material costs and labor costs. No payments will be released without this breakdown. Submit breakdown to Architect.

This breakdown will be used to determine monetary value of work accomplished each month. Monthly payments will be made to Contractor for work in place less a retainage of 10%. Likewise, Sub Contractors shall have payments made subject to the same conditions. Project shall be ready for punch list inspection prior to 90% of contract amount being paid. Final payment will be made within 30 days after final completion. No interest will accrue to Contractor on retainage held by Owner. The breakdown shall be broken down to the satisfaction of the Architect.

1.06 DEFINITIONS

A. Provide - furnish and install.

B. As required - use materials or methods dictated by job site conditions for complete first quality installation.

C. Rock - limestone or sandstone occurring in mass or ledge formation of such character as to warrant removal shall be by trench rock methods by unit pricing. No blasting shall be used. (Rock is not anticipated to be encountered For this project foundation)

D. Architect-Vanhook Architectural Services - Stanford, Kentucky 40484.

E. Date of Completion - Date Architect approves or issues substantial completion or when Architect approves final payment.

F. Installer - The person or entity engaged by contract to perform work or units of work. These persons are to be experts in the operations of their trade.

G. General Contractor - Person or persons employed by Contract or other agreement to coordinate the work required by the general conditions and other sections of these documents, and any or all separate Sub-Contracts of work on this project. Also referenced as "Contractor".

H. Owner-The Garrard County Cooperastive Extension Services Board-Lancaster, Kentucky 40444.

1.07 INDEMNIFICATION

A. The General Contractor and/or any other Contractor/Sub Contractor employed on this project shall indemnify and hold harmless the Owner and the Architect and their agents and employees from and against all claims, damages, losses, and expenses including attorney's fees arising out of or resulting from the performance of the work, provided that any such claim, damage, loss, or expense (a) is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the work itself) including the loss of use resulting there from and (b) is caused in whole or in part by any negligent act or omission of the Contractor, any Sub Contractor, anyone directly or indirectly employed by any of them of them may be liable, regardless of whether or not it is caused in part by a partly indemnified herein.

B. In any and all claims against the Owner or the Architect or any of their agents or employees by any employee of the Contractor, any Sub Contractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this Article shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Sub Contractor under Workman's Compensation acts, disability benefit acts or other employee benefit acts.

C. The obligations of the Contractor under this Article shall not extend to the liability of the Architect, his agents or employees arising out of (1) The preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications, or (2) the giving of or the failure to give directions or instructions by the Architect, his agents or employees provided such giving or failure to give is the primary cause of the injury or damage.

1.08 MANUFACTURERS LITERATURE

A. Contractor shall submit digital (PDF files) product/ material tech sheets to the architect, via E-Mail; hard copy data files may be submittals and acceptable as alternate venue for submittals when coordinated and agreed by the architect), manufacturers catalog cuts describing in detail all equipment and materials proposed for inclusion in this project and obtain Architect's concurrence prior to ordering any materials or equipment. Proposed equal product shall require Architect's approval prior to bidding if a specific product is not called for or listed by these specifications or on the drawings. Color selection submittals shall be actual product samples provided to the architect for selection.

B. Mechanical and electrical equipment submittals shall include maintenance and operating instructions. A final hard copy binder containing one copy of all equipment maintenance and operating instructions as well as complete list of Sub Contractors and contact information for them, shall be submitted to Owner/Architect with close out documents prior to final payment being made.

1.09 CONTRACTOR COORDINATION

A. The General Contractor and or all Sub Contractors shall coordinate their work to expedite the progress of the work and require that all Sub Contractors refer to the drawings and specifications of other trades involved with their work before proceeding. Any work installed which conflicts with another trade and has not been brought to the attention of the Architect shall be removed at no additional expense to the Owner.

B. The General Contractor shall be responsible for everything shown on the drawings or specified herein. He shall be responsible for coordinating all work among the different Sub Contractors and/or suppliers to make certain everything shown on the Drawings or specified herein is completed fully and correctly.

C. The General Contractor shall coordinate installation of all work of all trades on this project. Installed work shall be protected from damage. If damage shall occur, it shall be the responsibility of the damaging party and/or the Contractor.

1.10 CUTTING AND PATCHING - NEW WORK

A. Cutting and Patching shall be done by craftsman skilled and experienced in the trade or craft that installed or furnished the original work. Repairs shall be equal in quality and appearance to similar adjacent work and shall not be obviously apparent as a patch or repair. Work that cannot be satisfactorily repaired shall be removed and replaced.

B. Refer to Architectural, Mechanical, and Electrical drawings for cutting and patching. All new work shall be connected in a neat and workmanlike manner Do all patching of the existing construction as may be required for the new construction. Cutting for M/E items shall be done by the M/E Sub-Contractor. Patching shall be done by craftsman skilled and experienced in that specific trade. Any existing item damaged shall be replaced at the Contractor's expense.

1.11 TEMPORARY FACILITIES

A. Contractor shall provide temporary toilet facility equal to a "porto-let" or temporary toilet of approved type.

B. Contractor shall establish a temporary electrical service in the owner's name with the local utility company for the construction of the project. And final transition to the permanent service. The Owner shall pay the utility billings during the construction period-(see also Division 16).

1.12 INTERPRETATION OF CONTRACT DOCUMENTS

A. If any person contemplating the submission of a bid for the proposed Contract is in doubt as to the true meaning of any part of the plans, specification, or other proposed Contract Documents, he should submit a request for interpretation thereof to the Architect. Any interpretation of the Contract Documents will be made official by written addenda only. Verbal explanations shall not be part of the Contract Documents.

1.13 GUARANTEE

A. The General Contractor or Sub Contractors shall guarantee unconditionally all labor materials and equipment for a period of 365 days from date of final completion. All warranties shall provide for complete replacement or repair like new for this period. Certain items shall have warranties/ guarantees beyond the one ear period from the installers and or the manufacturers as may specified elsewhere in this document.

B. Provide Owner with copies of all manufacturers guarantees and warranties of mechanical and electrical equipment. This information shall be included in the required M & O binder; referenced in section 1.08 above.

1.14 DEMOLITION

A. Dispose of all materials off site at no additional cost to Owner. Natural solid material may be disposed of on site at Owners directions if the Owner is agreeable. Should solid material be disposed on site at the completion of work, the area shall be covered by topsoil so no evidence of the disposed material is visible.

B. Items on the site identified to be protected or to remain shall be protected and selectively removed. Items removed which are called to remain shall be repaired and replaced at no cost to the owner by the contractor.

1.15 GENERAL

A. Under various sections of the Specifications, such paragraphs as WORK INCLUDED, GENERAL, MATERIALS, ETC., and any other descriptive heading or listing of work in the specific branch referred to, are intended to recite generally to the Contractor the principal items included and covered there under. Should such headings or descriptions above referred to, fail to mention any item obviously necessary for the completion of that specific branch of the work, it shall not relieve the Contractor of the responsibility of furnishing such items not specifically listed hereunder.

B. The Owner reserves the right to alter or modify the Drawings and Specifications in any part, and the Architects shall be at liberty to make any reasonable amount of deviation in the construction detail or execution without in either case, invalidating or rendering void the Contract. In case any such alteration or deviation shall increase or diminish the cost of doing the work, the amount to be allowed to the Contractor or Owner shall be as much as may be equitable and justly determined.

1.16 PERFORMANCE/PAYMENT BOND

A. 100% performance and payment bond are required to be provided by the awarded contractor. Bond shall be provided by an insurance company, acceptance to the owner, and as described elsewhere in this specification.

1.17 WAGES

- A. All contractors shall bid in accordance with KY State Law and Ky Labor Cabinet rules and or regulations. The General Contractor and all Sub contractors shall be responsible for compliance with these regulatory requirements.
- B. The Contractor and or sub-contractors shall comply with local employment and or business licensing and the local tax administration regulation related to local employment.

End of Division One

GENERAL

The general contractor shall provide for all grading and excavation of the project. Grade as required to provide finished surfaces to elevations shown or called on Drawings. Grade as required to provide positive drain away from building and to provide no water shall stand on any new paving. Provide all work associated with site excavation, cut and fill, rough and finish grading, paving and site utility work and as required to complete the building and site development called for by these contract documents. CALL BEFORE YOU DIG 411.

2.01 REFERENCE STANDARDS

- A. Kentucky Transportation Cabinet, Department of Highways Standard Specifications for Road, and Bridge Construction.
 - 1. All methods and Materials shall conform to the KY D.O.T. Standard Specifications for Road and Bridge Construction 2008 Edition.
- B. AASHTO -- AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
 - AASHTO GDPS Guide for Design of Pavement Structures, Volume 1; 1993 with 1998 supplement.
 - AASHTO M 147 Standard Specification for Materials for Aggregate and Soil-Aggregate Subbase, Base and Surface Courses; 1965 (2004).
 - AASHTO T 238 Standard Specification for Density of Soil and Soil-Aggregate In-Place by Nuclear Methods (Shallow Depth); 1997.
 - AASHTO T 239 Standard Specification for Moisture Content of Soil and Soil-Aggregate In-Place by Nuclear Methods (Shallow Depth); 1997.

2.02 GENERAL PROJECT SCOPE /REQUIREMENTS

- A. Provide all work associated with new grading required for the Building Pad and building foundation and the required modification of the stone covered parking area.
- B. Protect existing paved drive adjacent to the work area (repair and replace any damaged areas per the paving specs referenced above).Provide for the complete termite pretreatment of soils at inside and outside of the perimeter foundations. Coordinate with the owner's existing termite treatment service. The owner shall pay this pretreat termite treatment contractor as direct pay owner expense.
- C. contractor shall "finish" all disturbed soil areas with, seed and straw, netted in to prevent and promote stabilizing and minimize erosion. Provide disposal of brush and other unusable materials discovered during the work required by site plan earthwork.
- D. Provide all excavation and grading for mechanical plumbing, and electrical installations. Clear and excavate for all connections to existing sewer pump station. Care shall be taken to locate and protect the existing lines. Notify architect or any deficiencies that may require corrections or modifications related to this portion of the new force main to the exisitng plumbing / pump station. Page 1

- E. Provide all material and labor to provide all site work to install and complete utilities connections such as water, electrical, telephone and sewer system to existing utility location, inclusive of all utility relocations, and extensions required. Contractor shall obtain all approvals required for this work and pay any or all such fees. CALL BEFORE YOU DIG 411.
- F. Provide a site plan marked and dimensioned as a record of drawing of exact locations (as installed) of all site utilities. Final payment shall not be made for this work or the project until owner / architect shall receive this record drawing.

2.02 SITE ACCESS ROAD / DRIVE

- A. All project access for the work shall use the south drive for entering and exiting access off US 27 to the site. This shall be designated the site entrance and driveway for all construction traffic. Use of existing paved parking areas at south section of the lot may be used by construction personnel parking. Control all construction vehicular traffic and parking to prevent interference with access by owner's or owner's guests, and or Owner's daily operations.
- B. Tracked vehicles not allowed on paved areas, unless these areas are to be resurfaced as part of this contract.
- C. Provide and maintain access to fire hydrants free of obstructions.
- E. Coordinate with the owner use of and maintenance of exiting parking areas and entrance ways with the Extension Service clients, staff members, public, and construction traffic
- F. Do not allow heavy vehicles or construction equipment in parking areas.
- G. keep parking areas used by construction personnel clean.
- H. Maintain existing paved areas used for construction; promptly repair breaks, potholes, low areas, standing water, and other deficiencies, to maintain paving and drainage in original, or specified, condition.

.03 EROSION AND SEDIMENT CONTROL

- A. Prevent erosion due to construction activities. Protect the existing storm drains with sediment control measures.
- B. Prevent sedimentation of waterways, open drainage ways, and storm and sanitary sewers due to construction activities.
- C. Restore areas eroded due to insufficient preventive measures.
- D. The contractor shall Compensate Garrard Co. Extension Service Board for any fines levied by authorities having jurisdiction due to noncompliance by Contractor.

1. Garrard Co. Extension Service Board will withhold payment to Contractor equivalent to all fines resulting from non-compliance with applicable regulations.

- E. Comply with all requirements of U.S. Environmental Protection Agency for erosion and sedimentation control, as specified for the National Pollutant Discharge Elimination System (NPDES), Phases I and II, under requirements for the 2003 Construction General Permit (CGP), whether the project is required by law to comply or not.
- F. Also comply with any or all more stringent requirements of State of Kentucky Erosion and Sedimentation Control Manual.
- G. Develop and follow an Erosion and Sedimentation Prevention Plan and submit periodic inspection reports.
- H. Do not begin clearing, grading, or other work involving disturbance of ground surface cover until applicable permits have been obtained; furnish all documentation required to obtain applicable permits.
- I. Timing: Put preventive measures in place as soon as possible after disturbance of surface cover and before precipitation occurs.
- J. Storm Water Runoff: Control increased storm water runoff due to disturbance of surface cover due to construction activities for this project.
 - Prevent runoff into storm and sanitary sewer systems, including open drainage channels, more than actual capacity or amount allowed by authorities having jurisdiction, whichever is less.
 - 2. Anticipate runoff volume due to the most extreme short term and 24hour rainfall events that might occur in 25 years.
- K. Erosion On Site: Minimize wind, water, and vehicular erosion of soil on project site due to construction activities for this project.
 - 1. Control movement of sediment and soil from any temporary stockpiles of soil.
 - 2. Prevent development of ruts due to equipment and vehicular traffic.
 - 3. If erosion occurs due to non-compliance with these requirements, restore eroded areas at no cost to Garrard Co. Extension Service Board.
- L. Erosion Off Site: Prevent erosion of soil and deposition of sediment on other properties caused by water leaving the project site due to construction activities for this project.
 - 1. Prevent windblown soil from leaving the project site.
 - 2. Prevent tracking of mud onto public roads outside site.
 - 3. If erosion occurs due to non-compliance with these requirements, restore eroded areas at no cost to Garrard Co. Extension Service Board.
- M. Sedimentation of Waterways On Site: Prevent sedimentation of any waterway(s) on or adjacent to the project site, including rivers, streams, lakes, ponds, open drainage ways, storm sewers, and sanitary sewers.
 - If sedimentation occurs, install or correct the preventive measures immediately at no cost to Garrard Co. Extension Service Board; remove deposited sediments from the area of damage.

- N. Prevent standing water that could become stagnant.
- O. Silt Fences:
 - 1. Store and handle fabric in accordance with ASTM D 4873.

2. Where slope gradient is less than 3:1 or barriers will be in place less than 6 months, use nominal 16 inch high barriers with minimum 36 inch long posts spaced at 6 feet maximum, with fabric embedded at least 4 inches in ground.

- P. Erosion and Sedimentation Control Plan (as may be required by law) provided in format required by law is acceptable, obtain the approval of the Plan by authorities having jurisdiction, obtain the approval of the Plan by Garrard Co. Extension Service Board.
- Q. The project has a temporary grading easement from the adjacent property owner (City of Lancaster). The contractor shall be respectful of the boundaries of the temporary easement as defined by the plan for this adjacent site grading work. The City property shall be restored to the grass and finished ground cover equal to the condition prior to new grades / grading.

2.04 SITE DEMOLITION

- A. Limit removal/ demo of existing paving and curbs of the main parking lot.
- B. Abandonment and removal of existing utilities and utility structures.
- C. Protect existing structures and other elements that are not to be removed.
 - 1. Provide bracing and shoring.
 - 2. Protect any existing manholes and manhole covers, curb inlets and catch basins.
 - 3. Stop work immediately if adjacent structures appear to be in danger.
- D. Partial Removal of Paving and Curbs: Neatly saw cut at right angle to surface.
- E. Coordinate site work with utility companies; notify before starting work and comply with their requirements; obtain required permits.
- F. Protect existing utilities to remain from damage.
- G Do not disrupt public utilities without permit from authority having jurisdiction. Do not close, shut off, or disrupt existing utility services to other campus facilities without prior notification to the owner/ Garrard County Extension Board.
- Locate and mark utilities to remain; mark using highly visible tags or flags, with identification of utility type; protect from damage due to subsequent construction, using substantial barricades if necessary.
- J. Remove debris, junk, and trash from site.
- L. Leave site in clean condition, ready for subsequent work.

M. Do not burn, bury, landfill, or leave on site.

2.09 GRADING

- A. Stockpile excavated topsoil at designated locations.
- B. Stockpile subsoil to be re-used on site; remove remainder from site.
- C. Stockpiles: Use areas designated on site; pile depth not to exceed 8 feet; protect from erosion.
- D. Remove subsoil from areas to be further excavated, re-landscaped, or regraded. In areas where vehicles or equipment have compacted soil, scarify surface to depth of 3 inches.

2.10 FILL MATERIALS

- A. General Trench Fill Fill Type #9 Crushed Limestone filled to half the diameter of the pipe: Conforming to State of Kentucky Highway Department standard. The remainder of the trench may be filled with Suitable Subsoils excavated on site. This fill type will only be used in areas that get grass cover.
- B. Structural Fill Fill Type Full Depth #9 Crushed Limestone: Conforming to State of Kentucky Highway Department standard. This fill will be used under all paved surfaces.

2.11 TRENCHING

- A. Notify VanHook Architecture of unexpected subsurface conditions and discontinue affected Work in area until notified to resume work.
- B. Slope banks of excavations deeper than 4 feet to angle of repose or less until shored.
- C. Do not interfere within a 45 degree bearing splay of foundation soils.
- D. Cut trenches wide enough to allow inspection of installed utilities.
- E. Hand trim excavations. Remove loose matter.
- F. Remove large stones and other hard matter that could damage piping or impede consistent backfilling or compaction.
- G. Remove lumped subsoil, boulders, and rock up to 1/3 cu yd measured by volume. (rock removal per unit price)
- H. Remove excavated material that is unsuitable for re-use from site.
- I. Stockpile excavated material to be re-used in area designated on site in accordance with other Sections of this spec.
- J. Remove excess excavated material from site.

2.12 PREPARATION FOR UTILITY PLACEMENT

- A. Cut out soft areas of subgrade not capable of compaction in place. Backfill with #9 Crushed Limestone.
- B. Compact subgrade to density equal to or greater than requirements for subsequent fill material.

C. Until ready to backfill, maintain excavations and prevent loose soil from falling into excavation.

2.13 BACKFILLING

- A. Backfill to contours and elevations indicated using unfrozen materials.
- B. Fill up to subgrade elevations unless otherwise indicated.
- C. Employ a placement method that does not disturb or damage other work.
- D. Systematically fill to allow maximum time for natural settlement. Do not fill over porous, wet, frozen, or spongy subgrade surfaces.
- E. Maintain optimum moisture content of fill materials to attain required compaction density.
- F. Granular Fill: Place and compact materials in equal continuous layers not exceeding 8 inches compacted depth.
- G. Soil Fill: Place and compact material in equal continuous layers not exceeding 8 inches compacted depth.
- H. Correct areas that are over-excavated.
 - 1. Other areas: Use #9 Crushed Limestone, flush to required elevation.
 - 2. Other areas: Use general fill, flush to required elevation, compacted to minimum 97 percent of maximum dry density.
- I. Compaction Density Unless Otherwise Specified or Indicated:
 - 1. Under paving, slabs-on-grade, and structural construction: 97 percent of maximum dry density.
 - 2. At other locations: 95 percent of maximum dry density.

2.14 BEDDING AND FILL AT SPECIFIC LOCATIONS

- A. Storm Sewer Utility Piping and Conduits:
 - 1. Bedding: Use structural fill.
 - 2. Cover with the appropriate fill materials as described above.
 - 3. Fill up to subgrade elevation.
 - 4. Compact in maximum 8-inch lifts to 97 percent of maximum dry density.
- B. At Pipe Culverts:
 - 1. Bedding: Use structural fill.
 - 2. Cover with structural fill.
 - 3. Fill up to subgrade elevation.
 - 4. Compact in maximum 8-inch lifts to 97 percent of maximum dry density.

2.15 TOLERANCES

- A. Top Surface of General Backfilling: Plus, or minus 2 inchess from required elevations.
- B. Top Surface of Backfilling Under Paved Areas: Plus, or minus 1 inch from required elevations.

2.16 FIELD QUALITY CONTROL

A. Perform compaction density testing on compacted fill in accordance with ASTM D1556 or ASTM D2167, ASTM D2922, or ASTM D3017.

- B. Evaluate results in relation to compaction curve determined by testing uncompacted material in accordance with ASTM D 698 ("standard Proctor"), ASTM D 1557 ("modified Proctor"), or AASHTO T 180.
- C. If tests indicate work does not meet specified requirements, remove work, replace, and retest.
- D. Frequency of Tests: to be field determined by special inspections agency.
- E. Include cost of special inspections for building pad installation to verify compaction values prior to foundation installations.

2.17 ROCK REMOVAL

- A. Removal of identified rock during excavation.
- B. Site Rock: Solid mineral material with a volume in excess of 1/3 cubic yard or solid material that cannot be removed with a 3/4 cubic yard capacity power shovel without drilling.
- C. Trench Rock: Solid mineral material with a volume in excess of 1/6 cubic yard or solid material that cannot be removed with a 3/4 cubic yard capacity power shovel without drilling.
- D. Rock: Solid mineral material of a size that cannot be removed with a 3/4 cubic yard capacity power shovel.
- E. There will be a unit price for rock removal / a Rock Clause included as unit price on the bid form.
- F. Excavate and remove rock by mechanical methods only; use of explosives is prohibited.
- G. Mechanical Methods: Drill holes and utilize expansive tools to fracture rock or use a hoe ram mounted on a track hoe.
- H. Form level bearing at bottom of excavations.
- Remove shale like layers to provide sound and unshattered base for footings.
- J. In utility trenches, excavate to 6 inches below invert elevation of pipe and 24 inches wider than pipe diameter.
- K. Remove excavated materials from site.
- L. Correct unauthorized excavations in accordance with backfilling and compacting requirements, at no cost to the owner.

2.18 EXCAVATING

- A. Excavate to accommodate new structures and construction operations.
- B. Notify VanHook Architecture of unexpected subsurface conditions and discontinue affected Work in area until notified to resume work.
- C. Slope banks of excavations deeper than 4 feet to angle of repose or less until shored.
- D. Cut utility trenches wide enough to allow inspection of installed utilities.

- E. Hand trim excavations. Remove loose matter.
- F. Remove lumped subsoil, boulders, and rock up to 1/3 cu yd measured by volume. See other section of this specification section for removal of larger material reference.
- G. Correct areas that are over-excavated and load-bearing surfaces that are disturbed, at no cost to the owner.
- H. Grade top perimeter of excavation to prevent surface water from draining into excavation.
- I. Remove excavated material that is unsuitable for re-use from site.
- J. Stockpile excavated material to be re-used in area designated on site in accordance with

2.19 FILLING

- A. Fill to contours and elevations indicated using unfrozen materials.
- B. Fill up to subgrade elevations unless otherwise indicated.
- C. Employ a placement method that does not disturb or damage other work.
- D. Systematically fill to allow maximum time for natural settlement. Do not fill over porous, wet, frozen, or spongy subgrade surfaces.
- E. Maintain optimum moisture content of fill materials to attain required compaction density.
- F. Granular Fill / Soil Fill: Place and compact material in equal continuous layers not exceeding 8 inches compacted depth.
- H. Correct areas that are over-excavated.1. Use general fill, flush to required elevation, compacted to minimum 97 percent of maximum dry density.
- Compaction Density Unless Otherwise Specified or Indicated:
 Under paving, slabs-on-grade, and structural construction elements:
 97 percent of maximum dry density.
- J. Reshape and re-compact fill areas subjected to vehicular traffic.

2.20 FILL AT SPECIFIC LOCATIONS / COMPACTION

- A. Structural Fill at trench or over excavated areas that are to be paved:1. Maximum depth per lift: 8 inches, compacted.
 - 2. Compact to minimum 97 percent of maximum dry density.
- B. Over Buried Utility Piping, Conduits, and Duct Bank in Trenches and Under all Paved Areas:
 - 1. Bedding: Use Fill Type #9 Crushed Limestone.
 - 2. Cover with #9 Crushed Limestone.
 - 3. Fill up to subgrade elevation; Compact in 8" lifts
- C. At Lawn Areas:
 - 1. Use general fill.
 - 2. Compact to 95 percent of maximum dry density.

2.21 Riprap

A. Provide in accordance with State of Kentucky Highways standards. Standard Specifications for Roadway and Bridge Construction 2008 edition.

2.22 AGGREGATE BASE COURSES / repaired parking area

- A. Unit Prices, for general requirements applicable to unit prices for earthwork. The Per Ton Unit Bid Item Furnish and Install Crushed Stone Base Subgrade will be full compensation for all Aggregate Base Courses required to achieve the lines and grades as shown on the Site Grading Plan.
- B. Coarse Aggregate Type #2 Crushed Limestone: By the Ton. Includes supplying aggregate material, stockpiling, scarifying substrate surface, placing, and compacting. The Per Ton Unit Bid Item Furnish and Install # 2 Crushed Limestone will be full compensation for all Coarse Aggregate Base Courses required to achieve the lines and grades as shown on the Typical Section Sheets of the Contract Documents
- C. Subgrade Aggregate Type Crushed Stone Base, DGA or Equivalent: Coarse aggregate, conforming to State of Kentucky Standard Specifications for Road and Bridge Construction 2008 Edition.
- D. Coarse Aggregate Type #2 Crushed Limestone]: Pit run washed stone; free of shale, clay, friable material, and debris.
- E. Spread aggregate over prepared substrate to a total compacted thickness of 4 inches.
- F. Level and contour surfaces to elevations and gradients indicated.
- G. Add small quantities of fine aggregate to coarse aggregate as appropriate to assist compaction.
- H. Add water to assist compaction. If excess water is apparent, remove aggregate and aerate to reduce moisture content.
- I. Use mechanical tamping equipment in areas inaccessible to compaction equipment.

2.23 ASPHALT PAVING / as required for repairs

- A. Aggregate base course.
- B. Single course bituminous concrete paving.
- C. Double course bituminous concrete paving.
- D. Unit Prices for requirements applicable to this section. Measurement and payment will be as follows: The Per Ton Unit Bid Item Furnish and Install Bituminous Concrete Base Will be complete and Full Compensation for all Items necessary to placing the 3 inch Base Course. The Per Ton Unit Bid Item Furnish and Install Bituminous Concrete Surface Will be complete and Full Compensation for all Items necessary to placing 1 inch Surface Course.

- E. Asphalt Pavement Mix (Base Course): By the ton. Includes preparing base, tack coating surfaces, placing, compacting, and rolling, testing. Includes mix design, supplying to site, testing.
- F. Asphalt Pavement Mix (Wearing Course): By the ton. Includes preparing base, tack coating surfaces, placing, compacting, and rolling, testing. Includes mix design, supplying to site, testing.
- G. Do not place asphalt when ambient air or base surface temperature is less than 40 degrees F, or surface is wet or frozen.

2.24 ASPHALT PAVING MIXES AND MIX DESIGN

- A. Base Course: 3.0 to 6 percent of asphalt cement by weight in mixture in accordance with AI MS-2.
- B. Wearing Course: 5 to 7 percent of asphalt cement by weight in mixture in accordance with AI MS-2.
- C. Place asphalt within 24 hours of applying primer or tack coat.
- D. Compact pavement by rolling to specified density. Do not displace or extrude pavement from position. Hand compact in areas inaccessible to rolling equipment.
- E. Perform rolling with consecutive passes to achieve even and smooth finish without roller marks.
- F. Roadway lane markings and crosswalk markings.
- G. Line and Zone Marking Paint: MPI No. 97 Latex Traffic Marking Paint; color(s) as indicated.
- H. Reflective Glass Beads: FS TT-B-1325, Type I (low index of refraction), Gradation A (coarse, drop-on); with silicone or other suitable waterproofing coating to ensure free flow.
- I. Temporary Marking Tape: Preformed, reflective, pressure sensitive adhesive tape in color(s) required; Contractor is responsible for selection of material of sufficient durability as to perform satisfactorily during period for which its use is required.
- J. If substrate preparation is the responsibility of another installer, notify VanHook Architecture of unsatisfactory preparation before proceeding.
- K. Protect newly painted markings so that paint is not picked up by tires, smeared, or tracked.
- L. Allow paint to dry at least the minimum time specified by the applicable paint standard and not less than that recommended by the manufacturer.
- M. Replace removed markings at no additional cost to Garrard Co. Extension Service Board.
- N. Install pipe, fittings, and accessories in accordance with manufacturer's instructions. Seal watertight.
- 0. Lay pipe to slope gradients noted on layout drawings; with maximum variation from true slope of 1/8 inch in 10 feet.

P. Connect to building storm drainage system, foundation drainage system, and utility/municipal sewer system.

2.25 INSTALLATION - CATCH BASINS AND CLEANOUTS

- A. Form bottom of excavation clean and smooth to correct elevation.
- B. Establish elevations and pipe inverts for inlets and outlets as indicated.
- C. Mount lid and frame level in grout, secured to top cone section to elevation indicated.
- D. Install pipe, fittings, and accessories in accordance with manufacturer's instructions. Seal watertight.
- E. Lay pipe to slope gradients noted on layout drawings; with maximum variation from true slope of 1/8 inch in 10 feet.
- F. Connect to building storm drainage system, foundation drainage system, and utility/municipal sewer system.

2.26 INSTALLATION - PIPE

- A. Verify that trench cut is ready to receive work and excavations, dimensions, and elevations are as indicated on layout drawings.
- B. Install pipe and accessories in accordance with manufacturer's instructions
- C. Lift or roll pipe into position. Do not drop or drag pipe over prepared bedding.
- D. Shore pipe to required position; retain in place until after compaction of adjacent fills. Ensure pipe remains in correct position and to required slope.
- E. Repair surface damage to pipe protective coating with two coats of compatible bituminous paint coating.
- F. Place fill at pipe ends, as indicated. Place Drop Inlet Boxes as Indicated on Storm Plans.

2.28 TOLERANCES

A. Lay pipe to alignment and slope gradients noted on layout drawings; with maximum variation from true slope of 1/8 inch in 10 feet.

2.29 GENERAL COMPACTION / FINISH GRADING

A. Compact all fill under slabs and paving to prevent settlement. All footings shall bear on undisturbed earth. Contractor shall excavate to a depth to achieve undisturbed soil bearing or verify compaction of soil bearing by independent engineering testing, at no additional cost to the owner. Soil shall be capable of 2500 psf bearing capacity minimum. The contractor shall prepare and provide all areas with proper top soil and final grade elevation for landscaping operations to be performed as base bid requirements of the project.

End of Division Two

DIVISION THREE - CONCRETE

3.01 Furnish only plant mix concrete products. Supply and provide all material and labor required to complete this section of work. Coordinate with all trades and other work that may cross or penetrate the concrete walls or slabs; Inclusive of Division One requirements.

A. Provide concrete forms, accessories, shoring, and bracing as required to accomplish cast- in-place concrete work.

B. Design and construct to provide resultant concrete that conforms to design with respect to shape, lines, and dimensions

- C. Steel Welded Wire Reinforcement: ASTM A 185/A 185M, plain type. 1. Flat Sheets.
 - 2. Mesh Size: 6 x 6.
 - 3. Wire Gage: 10x10.
- D. Renforcement Accessories:
 - Chairs, Bolsters, Bar Supports, Spacers, ties: Sized and shaped for adequate support of reinforcement during concrete placement.

3.02 CONCRETE STRENGTH

A. Footings - Concrete shall be 3,500.00 P.S.I. minimum.

B. Slabs, Steps, and curbs, etc. - 3500 P.S.I. with 5% air entrainment. All exterior concrete to contain air entrainment agent.

C. Reinforcing Steel - New rail steel. Use bar size #4 bars or as called by plan details.

D. Maximum Slump - 4"

3.03 All expansion joints to be 1/2-inch asphaltic expansion material or close cell foam product. The top of joint is to be caulked to depth recommended by manufacturer.

3.04 Carefully tie all reinforcing steel in place. Provide 1 1/2" coverage on all steel reinforcing. No steel shall touch the soil or be exposed.

3.05 Except as otherwise noted reinforce concrete slabs with minimum $6 \ge 6 \ge 10/10$ welded wire mesh. Mesh shall be held up off ground for complete coverage in slab.

3.06 Provide 6 mil. vapor barriers under building slabs.

3.06 Provide smooth floor finish to all slab finishes. Provide smooth wearing surface (not a polished). Seal finished floor surface.

End of Division Three

DIVISION FOUR - MASONRY

GENERAL: Provide all CMU masonry work indicated on drawings and as required to complete the work of this section; inclusive of Division One requirements.

- 4.01 CMU Masonry
 - A. Use modular concrete masonry units for foundations. Utilize light weight structural units of size and type to accomplish the work as detailed. Grout/ fill all cores of the foundation walls.
 - B. Mortar shall be uniformly premixed Type "N" masonry mortar as manufactured by Brixment or equal. Mortar color may be Brixment (grey) at unexposed masonry work.
 - C. Provide running bond coursing. Provide for any cut units to meet proper elevations for finish floors.
 - D. Install control joints to industry standards. Provide expansion material between walks and masonry walls.
 - E. foundation masonry will be exposed above grade. Establish final footing elevations for CMU layout to meet required finish grade on all faces of the building.

4.02 MORTAR

- A. Shall be uniformly premixed Type "N" masonry mortar as manufactured by Brixment or equal. Provide color selection from Brixment standard color selection.
- B. Provide high strength grouts where required to set anchors and anchor bolts, level elements, as required or called on the Plans.

4.03 JOINTING

- A. All joints to be "concave " smooth rodded type where exposed
- B. Lay work in running bond and/or other coursings to match existing.

4.04 PROTECTION AND CLEANING

Care shall be taken to keep masonry clean during installation as may be required prior to the gutter installations. Provide straw at grade splash to keep eave drip from splashing mud onto installed face brick. Upon completion of the work, clean all exposed surfaces completely. Cleaning method shall be approved by Architect. Protect all other work or areas. Provide or more than one method of cleaning with no added cost to Owner regardless of Architect's decision.

End of Division Four

DIVISION FIVE - METALS

Provide all metal and metal fabrications required to complete the work indicated on drawings. Provide and install in accordance with all state and local codes. Comply with A.I.S.C. manual of steel construction standards for steel fabrication/ installation.

- 5.01 All steel shall be A.36 steel.
- 5.02 Provide all miscellaneous fasteners and bolts required or called for by the drawings and or other sections of this specification for code compliant connections and installations.
- 5.03 Provide all specialty anchors required to set materials such as plates and trusses. Provide minimum 16 Ga. "Simpson" hurricane clips to set/anchor all trusses to wall framing and plates. These anchors to be reviewed by architect prior to installation.
- 5.04 Set all expansion anchors used in high strength grout or approved epoxy and tighten after the grout / epoxy is properly set.
- 5.05 Set and install all steel fabrications with proper equipment. Set /install to current industry standards. All exterior wall anchor bolts shall be minimum 1/2" dia x 12" j-bolt, set minimum 8" into foundation walls. Set at 6'-0" O.C. and maximum 1'-0" from any corner.

End of Division Five

DIVISION SIX - CARPENTRY

GENERAL: Provide all materials required to complete the work of this specification section. Provide all rough carpentry and all finish carpentry.

6.01 FRAMING LUMBER

- A. Studs/Plates/Blocking/Purlins yellow pine, Douglas Fir, or Spruce. All bottom plates shall be pressure treated. Structural wall framing 2x6's at 24" O.C.
- B. Trusses, Joists, and or Rafters Yellow Pine 1500F minimum.
- C. Plywood ½"x 4x8 structural C-D INT-DFPA Group 2 or 3, 5 ply ext. glue sheets as indicated on plans for interior wainscot application or other specific uses.
- D. Building exterior sheathing etc., 1/2" thickness minimum (equal O.S.B. wall sheathing acceptable
- E. Provide 5/8" "ZIP System" deck sheathing for roof deck, install per manufacturers recommendations.

6.02 FINISH CARPENTRY

- A. Alum Wrap Exterior Trims poplar or white pine. All exterior wood trim materials to be pre-finished aluminum wrapped, and the trim boards shall be prime coated materials prior to installation and covering with the break metal wraps.
- B. Doors Frames (Reference Division 8)Door frames shall be HM frames with HM Doors.
- C. At all exterior soffits/overhang, provide- "vented type vinyl" soffit vent material. Vinyl soffit material shall be equal to that manufactured by "Wolverine" or "Certainteed" or equal products. The product style to match main campus building soffits, as approved by Architect. Color (White) or as approved by architect/owner from manufacturers standard colors.

6.03 MISCELLANEOUS

- A. The General Contractor shall coordinate and be responsible for rough carpentry and all structural and miscellaneous blocking requirements for anchoring finish work.
- B. Shop Drawings of products and materials shall be provided to the architect for approval prior to fabrications and or installations.
- C. Provide an attic access hatch framing of minimum size 22" x 24" to fit between 24" truss ceiling structure; located in mech room.
- D. Provide all required anchors and fasteners for execution of to work of this section of work, inclusive of truss hurricane "Simpson" clips.
- E. Provide building wrap/ vapor barrier equal to DOW-Tyvek or equal or Fiberwerks-Typar or equal approved by architect.

DIVISION SIX - CARPENTRY

6.04 TRUSSES

- A. Trusses shall be designed and engineered by the manufacturer of the truss, and shall bear the seal and signature of a licensed engineer, licensed to practice in the state of Kentucky.
- B. Shop Drawings of the roof trusses and truss plan shall be submitted to the architect and owner for approval prior to fabrication. Truss Engineer shall pay Special attention to the (2) two truss types as called for by the plan/ drawings. Design for a 250 lbs. per square shingle weight; minimum.
- C. Design: Load requirements are to be established by design engineer to comply with the 2015 INTERNATIONAL BUILDING CODE AND KBC ADMENDMENTS.

1. Additionally, truss design shall Comply with pertinent provisions of:

a. "Timber Construction Standards" of the American Institute of Timber Construction;

b. "Quality Control Manual" of the Truss Plate Institute;

2. Provide gable end trusses;

* Also provide gable end truss at smoke partition, design this unit to support gyp-board application.

3. Prefabricate in strict accordance with the Shop Drawings and other data when reviewed/acceptable by the Architect.

4. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect.

- 5. Simpson truss anchors / hurricane clips or equal.
- Truss design to account for hanging items such as fixtures / Overhead doors and industrial ceiling fans.
- 7. Coordinate with Division 15 and 16 Mechanical Electrical Equipment and Layout.
- 8. Install the work of this Section in strict accordance with the drawings, industry standard, approved Shop Drawings, and applicable requirements of governmental agencies having jurisdiction. Comply with all manufacturer's recommended installation procedures, Such as Truss engineer's instructions for bracing. Anchor all components firmly into position for long life / hard use.
 - a. Hoist the trusses into position with proper bracings secure at indicated lifting points.

b. Exercise care to keep any bending of trusses to a minimum. Page $2\,$

DIVISION SIX - CARPENTRY

c. Install temporary horizontal and cross bracing to trusses for plumb and safe condition until permanent bracing is installed.

d. Install permanent bracing and related components prior to application of loads to trusses, and in accordance to recommendation of the truss engineer.

e. Tighten loose connectors.

f. Restrict/ avoid any construction loads to prevent overstressing trusses.

g. Do not cut or remove truss members.

End of Division Six

DIVISION SEVEN - WATERPROOFING/THERMAL PROTECTION

- GENERAL: Provide all materials and labor to provide the work required by this section of work.
- 7.01 ROOFING MATERIALS
 - A. Roofing shall be shingle roofing system equal to Certainteed, Landmark Pro shingle; dimensional style shingle with 250 lbs weight per square. Install shingles over minimum 30 lbs. felt and "Winter Guard" (ice guard product) underlayment at edges minimum 24"x continuous along gutter line and rake edges.
 - 1. Equal products of Owens Corning, Duration or other equal product as may be acceptable when approved by architect prior to bid. acceptable. Install in strict accordance with manufacturer's recommendation.
 - 2. Minimum 30-year warranty.
 - C. Gutters and Supports prefinished material square box pattern and min. 5" size. Provide new guttering as required to provide complete gutter system. Down spout anchors shall be prefabricated and pressed to fit the design configuration of the down spout used.
 - D. Downspouts rectangular shape or square shape of prefinished material. Provide preformed units only with factory or machine seams. Drop downspouts to foundation drainage boots at grade; (boots connected to foundation drain system and system drain lines connected to existing storm drain basin on the site.
 - E. Provide pre-finished 1 1/2" aluminum drip edge; color to match guttering materials. Provide pre-finished aluminum materials to match gutters for all aluminum wrapped exterior trim. All wraps shall be of sufficient gauged material that will prevent warping or oil canning. Install with fasteners to match material color- hide fasteners when practical. All joints and bends shall be neat and true. Any sealants used shall match material finish color.
- 7.02 METAL SIDING AND TRIM ACCESSORIES
 - A. All sheet metal wall siding and trim installations shall meet SMACMA Standards. All field formed metal components shall have hemmed edges. No raw or cut edges shall be acceptable and shall be replaced.
 - B. Provide pre-finished 26 ga metal siding material for all metal sidings for exterior application. Provide the same product for interior wall finish area of the pass-thru bay as shown on the drawings. (color by owner from standard manufacturer colors). Metal shall have a min. 40 year finish warranty.
 - F. Provide like material for all trim and accessory items for the Proper trim and water tight installation.
- 7.03 INSULATION
 - A. Exterior Wall insulation at office/ pass thru bay.

DIVISION SEVEN - WATERPROOFING/THERMAL PROTECTION

- Fiberglass R-19 6" kraft laminated face with staple flange at all new work. Stuff and fill header and shim space voids with a closed cell foam.
- 2.
- 3. In lieu of wall batt insulations, Expanded Spray Foam insulation shall be considered an equal or better product for use as wall insulation. Spray fill stud spaces with open-cell foam to fill/cover all voids required to achieve the min R-19 Value. Install in a neat and workman like manner.
- 4. Interior walls will require 3.5" sound batt-insulation

B. Ceiling Insulation

 At Office/ Pass-Thru Bay attic spaces provide R-38 blown in, or batt insulation.

NOTE: 3 Bay Garage section shall be uninsulated (only the common wall of the Pass-thru Bay will insulate.

7.04 SEALANTS/CAULKING

A. This work shall be done in neat and workmanship like manner by experienced workmen. Poor caulking shall be removed and redone.

B. Provide all caulkings and sealants required to seal interior spaces from exterior spaces.

C. Provide all sealants to seal between dissimilar materials. (i.e. seal doors and window perimeters), to seal exterior spaces from interior spaces.

D. Provide proper sized backer rods in voids too large to support or hold caulk bead if required.

E. This work may be covered in other sections of work but must be coordinated by General Contractor to insure a complete and thorough job.

End of Division Seven

DIVISION EIGHT - DOORS AND WINDOWS

Provide all work required for complete installation of this section of work. Furnish and install all doors, garage doors, and door accessories; Inclusive but not limited to hardware, thresholds, weather strip, etc..

8.01 DOORS

- A. Typical Doors
 - New 1 3/4 inch thick; HM insulated metal doors. Embossed 6 panel door units equal to Steelcraft CE Series Embossed Panel Doors units or equal products of Atlas.
 - a. Include Standard 14-gauge top bottom channel caps. Premium door construction with beveled lock and hinge side, epoxy filled interlock edges, and 7-gauge hinge reinforcement.
 - b. Prep for hardware, with 1-1/2 pair hinges; (reference also door schedule) for hardware applications for each door.
 - c. Provide knock down type 16-gauge Hollow Metal Door Frame with reinforced heavy duty hinge plates
 - d. Door #01/02/03/ to have entry hardware with exit devise hardware.

8.03 GARAGE DOORs

- A. Provide track style garage door units equal to Overhead Door, Clopay, Raynor, or approved equal. Unit shall be insulated heavy gauge aluminum sectional door with all accessories and hardware for complete installation. All solid panel sections. Heavy duty track and springs with remote and automatic door opener with all required safety over ride features for code compliant installation and operation. Include lock and latch capable for manual operation if disconnected from automatic opener. Weather stripping and floor seal to be bulb type neoprene.
- B. At scissor truss Garage area; Overhead door track to be installed to the slope with angel of the roof truss.

8.04 HARDWARE

A. Provide all hardware required to operate and install doors. Coordinate installation with all door units supplied to project. (See Door schedule, Plans, and division 10 for additional hardware information, for hardware standards and specifications)

End of Division Eight

DIVISION NINE - FINISHES

General: Provide labor and materials for all interior finishes as called for by the drawings and defined in this specification. Finishes as related to final material applications as the intended finish or wearing surfaces.

9.01 WALLS

- A. New office area interior partitions to receive 5/8" type "x" gyp bd. Water resistant board to 4' above finish floor; and 5/8" type "x" gyp bd. Above 4' panels.
- B. Provide all required casing bead, corner bead, etc., for proper installation of gyp board systems. Nail edges and screw anchor field. (Minimum 3 field screws per joist per 4'-0" wide gypsum board).
- C. Gypsum board shall be equal to National Gypsum Company or United States Gypsum Company.
- D. All Gyp-Bd finish surfaces shall be smooth and free of scars and pits.
- E. The Pass-thu Bay wall finish to be metal panels / match exterior wall siding panels. (color from standard manufacturers colors for owner selection)
- F. All interior walls to have sound insulation/ minimum 3.5" sound batts.
- G. Three Bay Garage area exterior walls to have ½" cdx plywood panels to 4' above finish floor. Common interior wall (separation wall) to have ½" type "x" Gyp above the 4' plywood panel

9.02 CEILINGS

- A. Office areas to have 5/8" Type "X" gypsum board at all gypsum board ceilings.
- B. Pass-Thru Bay to have 5/8" type "X" exterior ceiling board ceiling.
- C. All ceilings to have Smooth finish and painted.
- D. Three Bay Garage area is to be an exposed structure (No ceiling finish ceiling/and no roof no insulation)

9.03 FLOORS -

- A. Floor finishes are exposed sealed concrete for all areas. Provide smooth industrial floor surface with a clear concrete sealer finish; apply single coat of sealer at all areas.
- 9.04 BASE -
 - A. Provide all areas with 6" vinyl base equal to Flexco, Tarkett-Johnsonite, or Roppe. Color from standard colors.

DIVISION NINE

9.04 SEALANTS/CAULKING

- A. As manufactured by Sonolastic or equal products by G.E., Trimco or Dow. Provide appropriate caulking for the intended use exterior and interior. Use paintable products or provide color to match adjacent work where adjacent materials are prefinished or do not receive paint.
- B. Concrete sealer- products of Sherwin- Williams, Behr, Sure-seal other equal products as approved by the architect prior to bid.

9.05 PAINTING

- A. Paint all items and surfaces that have no factory finish. Provide proper paint for material and condition of exposure as per paint manufacturer's recommendation.
- B. Paint shall be of one supplier, products of Sherwin Williams or equal by Porter, Devoe, Glidden, Benjamin Moore, or others as approved by Architect prior to the bid. All colors to be approved by Architect/Owner.
- C. Interior walls Gypsum Board Prime coat and 2 coats wall paint- egg shell or satin finish Prime and 2 coats paint.
- D. Interior plywood surfaces- 2 coats of clear sealer
- E. Prime any or all exterior wood trims (all surfaces) that are to receive aluminum wrap.
- F. Ceilings Prime coat and 2 coats ceiling white flat on all ceilings where ceilings are smooth finished gyp board.
- G. Hollow Metal doors and frames
- H. Concrete floors single coat of polyurethane concrete sealer.

End of Division Nine

DIVISION TEN - SPECIALTIES

10.01 MISCELLANEOUS EQUIPMENT

- A. Toilet Accessories Provide grab bars, paper towel holders, and tissue paper holders equal to Bobrick. All items shall be A.D.A compliant.
- B. Each Water Closet Toilet tissue holder semi-recessed in wall. (stainless). Grab bars (stainless) as required by A.D.A. compliant design/ one 36", one 42" and one 18" vertical bar at each accessible WC.
- C. At Each Lavatory Beveled edge plate glass mirrors. Size equal to vanity width x 36" hgt.. Mount to A.D.A. required dimensions or as indicated on drawings.
 - 1. Paper towel dispenser Bobrick B-262 stainless steel C-Fold dispenser.
- D. Provide toilet room signage- one each for Men/ Women. balck background with white letters. Provide units equal to 6"x9" Hillman Group ADA Braile Sign.

10.02 HARDWARE

- A. All locksets shall be heavy duty- grade 1 cylinder locksets equal to Yale, 5300 Series cylinder locks with lever handles to match existing style of building units. Provide proper function for doors indicated by schedule. Provide CO rose trim components. Equal products by Sclagg, or Russwin is acceptable. Submit hardware shop drawings to Architect/Owner for approval, to match existing hardware of the main campus Office Building is minimum standard.
- B. Provide US26D finish at interior doors. Provide stainless steel US32D at exterior conditions.
- C. At mechanical rooms/ utility closets, provide Litchfield style knurl knobs. Provide standard rabbeted strikes.
- D. At exterior doors #01, #02, #3 entry lock set married to Panic Exit device.
- E. At toilet rooms privacy lockset. Provide lever handled Augusta style.
- F. Provide standard rabbeted strikes at all locations.
- G. Hinges 1 1/2 pair each door. Ball bearing brushed chrome finish min. Exterior hinges to be stainless steel and shall be anti-theft type hinges.
- H. Anodized aluminum thresholds at aluminum exterior doors. Coordinate with Division 8. Set in sealant. Standard aluminum at HMF doors.

DIVISION TEN

- I. Provide all accessories for complete installation of hardware. Provide hardware as required to satisfy all state and local codes including H.C. accessibility requirements.
- J. Hardware set type requirements are identified on the drawings. The Contractor shall submit shop drawings for the sets for approval prior to installation.
- K. Provide Door closures at all exterior doors and toilet room doors. All closures shall be ADA approved type and operate in compliance with ADA requirements for accessible entry /exit.

10.03 SPECIAL ITEMS

- A. Provide mop/utility sink unit and mop hanger in utility closet. fiberglass sink style unit is acceptable.
- B. Exterior louvers prefinished metal louvers at exhaust and attic gable vents. Provide with insect screen and finish to match metal siding.

10.04 FIRE EXTIGUISHERS

Provide (3) surface mounted fire extinguishers. Provide blocking to assure secure and stable anchor. Provide AMERIC units to match existing / 10 lbs. /ABC units.

End of Division Ten

DIVISION FIFTEEN - MECHANICAL/PLUMBING

HVAC GENERAL:

Provide all labor and material for all mechanical and plumbing and related work indicated on plans. HVAC contractor shall provide a final design for the system to be installed for the project, certifying to the owner the system meets all state, local, and applicable mechanical codes, and the design intent of this system description.

1. The H.V.A.C. Systems shall be required to maintain inside temperatures ranging from a low of 68 degrees during heating season; to a high of 75 degrees at all other times throughout the entire building, regardless of outside temperatures. Installation shall meet all Local, State, and BOCA Mechanical Code requirements whether noted specifically in this specification. Provide one (1) new 2.0-ton cooling system-heat pump with 120,000 btu heat side system. Provide minimum 16 SEER equipment. Provide resistance electric heat coil for emergency heat service/supply to the system under very low exterior temperatures.

2 The system shall be designed and installed by a Certified Contractor, licensed and certified by the State of KY to install this type mechanical system. The contractor shall provide any required engineered drawings or verification of the system design via shop drawings to be submitted to the Architect for final approval prior to the installation of the system. Contractor shall provide all required approvals and inspections required by state code.

3. Equipment equal to Trane, Carrier, Daikin, Lennox shall be used. Duct work shall be insulated metal trunk lines with insulate flex runs to diffusers. Balance system with mandatory and proper mixing of fresh air intake.

4. Controls/Thermostat shall be centrally located in office area corridor. Provide simple on stat programable controls capable of night set backs and occupancy programing as a minimum. Controls equal to Honeywell, or Johnson Control, capable as noted herein, this shall be the standard for quality products, and or others may be approved by the architect prior to bid.

PLUMBING GENERAL

A. All work shall be per state and local codes. Contractor shall acquire all permits for the plumbing system and provide the owner with a shop drawing of all plumbing products provided.

B. Plumbing fixtures- water closets / lavatories shall be equal to products manufactured by American Standard, Zurn Elkay, or Crane. All fixtures shall be Handicap approved type. Tank type Water Closets. Provide wall mounted lavatory unit equal to American Standard- Lucerne- 18.5"x 20.5" / center mount faucet. All fixtures to "white" vitreous-china. Provide accessory items. ie open toilet seats /tank lush mechanism's / and toilet paper dispenser at each water closets.

C. Faucets shall be washer-less type equal to Delta. All faucets shall be lever or button type handicap approved units. provide mixing valve to prevent scalding per code.

D. Provide all equipment as listed or have alternate/equal equipment approved by Architect prior to Bid. Page 1

DIVISION FIFTEEN - MECHANICAL/PLUMBING

E. In lieu of a specific itemized materials and equipment list, all products supplied to the project shall be first quality products from national brand-named manufacturers.

F. The General Contractor shall coordinate all work with other trades and provide that all related work is coordinated.

G. All Public Utilities shall be considered by the bidders to be provided to the owner's property line of the US 27 R/W. The base bid shall include extending water and electric service lines from the building to the service meters/ transformers at the property line of US 27. Coordinate with all local utility representatives to locate exact locations and connection conditions and connection criteria. All permit fees shall be included in this contract.

H. Provide low-boy 38 gal minimum electric water heater equal to A.O Smith, General Bradford White, or equal approved by the architect prior to the bid. Shelf mount in Mech Room.

I. Provide utility sink- Equal to E.L. Mustee-MODEL #19CFP UTILITUB 20

J. All Water piping shall be PEX. Sanitary lines shall be Schedule-40 plastic and or as required to meet code for the application used. Sleeve and protect any piping crossing foundations, drives and or roadways/ or roadway R/W's.

K. Insulate the exposed piping under sinks to meet A.D.A. requirements and to prevent exposure to hot pipes.

L. Provide freeze proof hose cocks at front, of the building. Provide light commercial wall mount/ key handle turn, Hose Bid equal to Zurn-Elkay Z1334-C.

M. Provide Grinder Pump Station- ZOELLER-"Shark Series Grinder Pump Model #820 as Scheduled/Specified on Sheet M-1 of the Drawings, or equal systems of Liberty as approved by the A/E prior to the bid. Provide all accessories and associated piping to complete the systems force main lines connection to the existing "Main Campus Building" sanitary lines; and make the system completely operational. Provide Owner with maintenance and operational information; for its general care and knowledge of its general operational limits.

N. Provide Greenheck or equal exhaust fan units/ with minimum 155 CFM / 120v fan-motor, with Gyp-bd mounting flange and grille.

End of Division Fifteen

GENERAL: Provide all labor and material for a complete electrical system and operational building, provide all required electrical components to meet the requirements of division one of this specification and as indicated on plans. The plans provided are not extensive in detail and describe the work and required elements of the system in general terms as does this specification.

D. The General Contractor shall coordinate all work with other trades and provide that all related work is coordinated.

E. All work shall be per local, state, and National Electric Code. Contractor shall provide for all inspection and inspection fees associated with the work of this project. Provide Electrical Equipment and components of the electrical system described in the contract documents. These systems include, but are not necessarily limited to:

- Main service panel, system breakers, and main switches as shown or as required for proper installation and expansion of the existing service to new panel;
- 2. Feeder systems, MC Cable to branch circuits panels;

3. Branch circuit panels for power and lighting;

4. Branch circuit wiring, MC Cable, for lighting, receptacles, junction boxes, motors, etc...

5. Hangers, anchors, sleeves, chases, supports for fixtures, and other electrical materials and equipment in association therewith;

6. Fixture lamps, outlets, switches, and data/telephone outlet;

7. Wiring system, may require conduit in lieu of MC cable, for certain equipment and controls of items requiring power and provided under other Sections of this Specification including, but not necessarily limited to mechanical sections; where required by code provide the connections in conduit for proper quality installation.

8. Motor starters and controls for motors provided under the Contract, but for which motor starters and controls are not otherwise provided;

9. Other items and services required to complete the systems and/or as indicated on Drawings or required for code compliance.

10. Provide electric smoke detectors with battery backup as indicated on Plans. Interconnect all units. Install in accordance with manufacturer's recommendation and all applicable codes and regulations. Basic system horns strobe and other alarm related items to meet code for the building type.

F. The contractor shall coordinate a new electrical service for the projects electrical power needs. Coordinate and establish a Temporary service in the Owner's name and the Owner shall pay for the utility services for the project. The contractor shall not abuse the use of these utilities' services offered to the project by the owner. The contractor shall provide for O.S.A.H. approved and safe use of these services on the project site.

G. WIRING MATERIALS

- 1. Branch circuit conductors shall be copper; MC Cable and shall not be smaller than No. 12 AWG. Conductors shall be continuous from outlet to outlet and no splices shall be made except within outlet or junction boxes. Wire connectors or insulating material or solderless pressure connectors, properly taped, shall be utilized for all splices in wiring where possible.
- 2. Insulation, unless otherwise noted, shall be Thermo-plastic Type TW.
- 3. The color code of all conductors shall be in accordance with the National Electrical Code.
- 4. The use of soldered joints shall not be used. Mechanical type splicing devices and lugs shall be employed throughout.
- 5. Aluminum branch circuit conductors are not acceptable.
- 6. 220v circuits as required for equipment or noted on plans.

H. Panelboard feeders may be three-wire service entrance cable with ground, provided all feeders are installed overhead and are installed in a manner acceptable to the Architect.

1. Furnish and install new lighting and power service panel at the locations shown on the Drawings. The service panel shall be of the "dead-front", quick-make, quick-break, circuit breaker type with trip-indicating and trip-free handles. All circuit breakers shall be properly numbered and shall be provided with thermal-magnetic protection. The panelboards shall each be enclosed in a code-gauge steel cabinet and shall be provided with a directory card, filled in with circuit numbers and description. All panelboards shall be provided with hinged type door. The panel shall be three-wire, solid neutral. The Service Panel shall be by one manufacturer and shall be as manufactured by General Electric, Square D, ITE, Cutler Hammer, or Murray.

- I. SAFETY SWITCHES
 - 1. In general, safety switches shall be quick-make, quick-break type, fused or unfused as required or specified, rated at 240 volts, and shall be general-duty type General Electric, Square D or ITE. Each switch shall have a capacity indicated on the Drawings. Exterior switches shall be of the rain tight type or shall be mounted in weatherproof enclosure.

- Each motor shall be provided with a disconnecting means where required by the National Electrical Code, even though not indicated on the Drawings.
- J. LOCAL WALL SWITCHES
 - 1. All wall switches shall be of the flush tumbler ivory type with a rating of 15 amperes and 125 volts.
 - Single Pole Leviton 53501-I or equal to match existing Three Way - Leviton 53503-I - or equal to match existing
 - Lighted handle wall switches shall be Hubbell 221PLC. or equal.

K. RECEPTACLES

- In general, duplex outlets shall be of the grounding type, rated at 15 amperes, 125 volts and shall be Leviton 5014-I, - or equal to match existing.
- 2. 50-ampere three-wire range outlets shall be rated at 250 volts and shall be of the flush type, Leviton No. 5050. Each outlet shall be installed in a 4" outlet box set flush with finished wall/ or floor where floor box is located. (exterior 220v outlet shall be for exterior application and have safety accessories for such location and use, - or equal.
- 3. GFCI receptacles shall have solid state sensing circuitry and a circuit interrupter switch. It shall be rated for operation on a 60 Hz, 120V, 20A branch circuit. Device shall have nominal sensitivity to ground leakage current of four to six milliamperes and shall function to interrupt the current supply for any value of ground leakage current above five milliamperes on load side of the device. Device shall have a minimum nominal tripping time of 1/30th of a second. Hubbell GF5352, or equal. Comparable receptacles as manufactured by Eagle or General Electric, or equal.
- L. INSTALLATION OF OUTLETS

1. Height of new outlets from center to finish floor, unless otherwise noted, shall be as follows: (All heights shall meet ADA Accessibility requirements)

All Units and General Areas

Switches	42 Inches
Combination Switch & Receptacle	42 Inches
Duplex Receptacle	16 Inches
Outlets	16 Inches
Telephone Outlets	16 Inches/ or as noted
Receptacles above counters/sinks	42 Inches
Page 3	

M. Provide electric smoke detectors with battery backup. Interconnect all units with a notification alarm system panel. Install in accordance with manufacturer's recommendation and all applicable codes and regulations. (See also Division 10 min fire alarm/ security system).

N. Provide minimum (smoke detection) Alarm System- with minimum Honeywell VISTA250-FBPT alarm panel, or equal products of Modern Security. Somerset, KY for smoke alarm system noted above

O. Provide exit signs and emergency lighting with battery backup power sources. Connect battery backup to exterior egress path light fixture noted on the plan.

P. Provide data and communication lines to a patch panel, pig tail to mechanical room data box or patch panel. Provide minimum Cat 5 Enhanced wiring for all data wiring. Owner shall provide any final data connections for data/ phone services for the facility.

Q. Provide all equipment as listed or have alternate/equal equipment approved by Architect prior to Bid.

R. In lieu of a specific itemized materials and equipment list, all products supplied to the project shall be first quality products from national brand-named manufacturers.

M. LIGHT FIXTURE SCHEDULE

Provide fixtures as noted or equal fixtures of other manufacturers, i.e. LITHONIA, General Electric, Metalux, SureLite, Elite, Kichler or other approved prior to bid.

LF-1 LITHONIA 1X4 (surface mount) LITHONIA#SB432 MVOLT GEB 10IS

LF-1E LITHONIA 1X4 (surface mount) LITHONIA#SB432 MVOLT GEB 10IS W/PS300

- LF-2 EMERGENCY EXIT SIGN -LITHONIA #LHQM-R M6 (19" LED EXIT/ EMERGENCY COMBO UNIT/ RED LETTERS) 120 W/ EM BATT BACKUP ADD
- LF-3 WALL MOUNT exterior (at exterior doors) (Vapor Tight LED "jelly jar caged wall light") (provide with emergency battery back up at exit doors as exterior exit light requirement)
- LF-4 SECURITY LIGHT (GABLE END WALL MOUNT) (100-watt color select LED HUBBLE "WALL PACK" w/ photo cell/ switch
- LF-5 VANITY LIGHT LITHONIA-FMVCSLS 24IN MVOLT 30K35K40K 90CRI BZ M6

End of Division Sixteen



VANHOOK ARCHITECTURAL $S - E - R - \vee - | - C - E - S$

GARLAN VANHOOK, ARCHITECT 919 LANCASTER STREET STANFORD, KENTUCKY 40484 (859) 324-1765

BUILDING CRITERIA ARCHITECTURAL DRAWING INDEX COVER G-1 SITE PLAN BUILDING SIZE - 2575 SF G-2 ENLARGED SITE PLAN CODE - 2015 IBC W/ 2018 KY BUILD'G CODE AMENDMENTS G-3 SITE DETAILS TYPE IV- CONSTRUCTION USE GROUP / UTILITY - 2575 SQ FT A-1 FOUNDATION AND FLOOR PLAN A-2 ELEVATIONS A-3 BUILDING CROSS SECTION A-4 BUILDING CROSS SECTION/ DETAIL A-5 BUILDING LONG SECTION/ DETAIL A-6 DETAIL WALL SECTIONS A-7 SCHEDULES / DETAILS E-1 ELECTRICAL / LIGHTING PLANS MP-1 MECHANICAL/ PLUMBING /

RISER DIAGRAM



















GENERAL NOTES:

- A. CONTRACTOR TO PROVIDE IN-WALL/PARTITION BLOCKING AND REINFORCING MOUNTING PLATES AS APPLICABLE, AS PROVISION FOR
- SECURE MOUNTING OF ALL TOILET ACCESSORIES
- PRIOR TO INSTALLATION OF IN-WALL/PARTITION BLOCKING AND В. REINFORCEMENTS, CONTRACTOR SHALL VERIFY MOUNTING REQUIREMENTS OF ALL TOILET ACCESSORIES
- MOUNTING HEIGHTS INDICATED FOR TOILET ACCESSORIES ARE C. BASED ON STANDARD COMMERCIAL ACCESSORIES ADA DIMENSION DIAGRAMS
- PROTECT ALL EXPOSED PIPING/SUPPLY AND TRAP LINES UNDER D. WALL-MOUNTED LAVATORIES WITH UNDER-LAV GUARD KIT.

TOILET ACCESSORIES:

TBA* RA	DESCRIPTION	Mounting: Height Aff uno	SEE MOUNTING DIAGRAM BELOW	SURFACE Z	SEMI- RECESSED 71 Z	RECESSED 🛛 🚡	
1	TOILET TISSUE DISPENSER	24" AFF TO CL	A	•			
2	18" GRAB BAR (VERTICAL)	58" AFF TO TOP	с	•			
з	36" GRAB BAR (HORIZONTAL)	34" AFF TO CL	в	•			
4	42" GRAB BAR (HORIZONTAL)	34" AFF TO CL	с	•			
5	SOAP DISPENSER	40" TO TOP		•			
6	MIRROR 18" X 36" ABOVE LAV	40" TO MIRROR GLASS	D	•			
٦	NOT USED	30" AFF TO WASTE RIM	E				
8	PAPER TOWEL DISPENSER (ELEC.)	45" AFF TO AUTO SENSOR	F	•			
ŋ	ELECTRIC HAND DRYER	PER MFR FOR WOMEN & MEN		•			
10	BABT CHANGING FOLD-DOWN TABLE	34" AFF TO TOP OF OPEN TABLE		•			
11	MOP / BROOM HOLDER WITH SHELF	60" TO SHELF TOP		•			
12	COAT HOOK (DOUBLE)	54" TO CENTER		•			

SCHEDULE REMARKS

- 1 WHERE ACCESSORY IS MOUNTED ON STUD WALL, PROVIDE BLOCKING. CONCEALED AND SECURELY ANCHORED IN WALL BEHIND ACCESSORY
- ACCESSORY WITH ELECTRICAL REQUIREMENTS. PROVIDE 2 ELECTRICAL POWER AS REQUIRED FOR ACCESSORY.
- PROVIDE HIGH STRENGTH GRAB BARS W/ 350-LB CAPACITY 3.

ADA DIMENSIONAL DIAGRAMS

ğ	DOOR SCHEDULE													
Ě		DOORS FRAMES UHARDWARE				REMARKS								
007	NO.	SIZE	MAT'L	TYPECLOSER	GLASS THICK	MAT'L	TYPE				FIRE ATIN	SET NO,	NOTES / FUNCTION	
											- 0Z			
	Øl	36	НM	YES	1 ³ ⁄4 "	ΗМ							ENTRY / EXIT DEVISE / DOG DN	INSULATED 6 PANEL EMBOSSED METAL DR
	Ø2	3068	нM	YES	1 ³ ⁄4 "	НM							ENTRY / EXIT DEVISE / DOG DN	INSULATED 6 PANEL EMBOSSED METAL DR
	Ø3	368	НМ	YES	1 ³ ⁄4 "	НM							ENTRY / EXIT DEVISE / DOG DN	INSULATED 6 PANEL EMBOSSED METAL D
Й.		- 0 - 8			12 - 11									
Ŋ.	Ø4	30 60	ΗМ		P4"	нм							CLASS ROOM FUNCTION	INSULATED 6 PANEL EMBOSSED METAL DI
0	Ø5	3 6	НМ		13/4 "	ΗМ							CLASS ROOM FUNCTION	INSULATED 6 PANEL EMBOSSED METAL DF
щ	06	3 6	ΗМ	YES	13/4 "	ΗМ							ENTRY / EXIT DEVISE / DOG DN	INSULATED 6 PANEL EMBOSSED METAL DR
H-	01	3068			13⁄4 "	нм							MECHANICAL ROOM FUNCTION	INSULATED 6 PANEL EMBOSSED METAL D
0)	Ø8	3068	ΗМ	YES	13/4 "	HМ							PRIVACY LOCK SET	INSULATED 6 PANEL EMBOSSED METAL D
Ť.	Ø9	3 ⁰ 6 ⁸	НМ	YES	1 ³ ⁄4 "	нM							PRIVACY LOCK SET	INSULATED 6 PANEL EMBOSSED METAL D
	10	3068	ΗM		³ ⁄4 "	НМ							MECHANICAL ROOM FUNCTION	INSULATED 6 PANEL EMBOSSED METAL DR

HARDWARE NOTES:

1. ALL HARDWARE SHALL HAVE D-26 FINISH

- 2. ALL CLOSURES SHALL BE A.D.A. APPROVED CLOSURES
- 3. EACH DOOR SHALL HAVE 1-1/2 PR. OF HINGES AND ALL OTHER ACCESSORIES FOR PROPER DOOR FUNCTION ALL EXTERIOR DOOR TO HAVE SECURITY HINGES
- 4. PROVIDE THRESHOLD TRANSITIONS UNDER EXTERIOR DOORS
- 5. ** HARDWARE NOTE -- ALL NEW HARDWARE LOCKSETS SHALL ACCEPT THE OWNERS EXISTING KEYING SYSTEM. ALL NEW CORES TO BE KEYED TO THE OWNERS MASTER KEYING SYSTEM.

HARDWARE SET SCHEDULE

SET NO. 1 OFFICE / ENTRY FUNCTION LOCK SET WITH DOOR STRIKES AND EXIT DEVISE 1-1/2 PR. OF HINGES NEOPRENE GASKET WEATHER STRIPING CLOSURE SHALL BE A.D.A. COMPLIANT

* AT EXTERIOR DOORS PROVIDE H.C. ALUM THRESHOLDS AND SECURITY / TAMPER PROOF HINGES

- SET NO. 2 LEVER HANDLED CLASS ROOM FUNCTION LOCKSET 1-1/2 PR. OF HINGES SILENCERS / DOOR STOP
- SET NO. 3 LEVER HANDLED PRIVACY FUNCTION LOCKSET 1-1/2 PR. OF HINGES SILENCERS/ DOOR STOP
- SET NO. 4 LEVER HANDLED MECH ROOM FUNCTION LOCKSET / KNURLED HANDLE 1-1/2 PR. OF HINGES SILENCERS/ NEOPRENE GASKETING / DOOR STOP

DOOR SCHEDULE SCALE: NO SCALE

NEW GARAGE BUILDING FOR GARRARD COUNTY COOPERATIVE EXTENSION SERVICE 1302 STANFORD ROAD // U.S. HWY 27 SOUTH LANCASTER, KY 40444	
VANHOOK ARCHITECTURAL 8 - E - R - V - I - C - E - 8 GARLAN VANHOOK, ARCHITECT 919 LANCASTER STREET 872NFORD, KENTUCKY 40484 (859) 324-1765	
DRAWN BY: DATE: GV 2/28/25 REVISED: SHEET NO.	

Д

