

SECTION 114020 – KILL FLOOR EQUIPMENT

PART 1 - GENERAL

1.1 SCOPE OF PROJECT

- A. This project consists of the design, procurement and installation of a kill floor system including kill floor carcass rail in Appalachian Abattoir located at 4808 Kanawha Boulevard East, Charleston, WV 25306. Work is to be performed by the Contractor and is to include the design of the kill floor within the building/room boundaries, as well as the installation of commercial grade kill floor equipment, carcass rail, drains, needed electric/hydraulic/pneumatic fittings as needed, and blood pump system. Grading, curbing and drainage will be installed by the general contractor prior to equipment installation. It is important that the design of kill floor incorporates the performance specifications outlined in this RFP. The funding source for this project is WV AML Pilot Program 2017 award and is administered by the WVDEP office of Abandon Mine Lands. All equipment will be assembled and installed by the Contractor as coordinated with the General Building Construction Contractor, who is under a separate contract with the Owner.
- B. Buzz Food Service (Buzz, Owner) requires Contractor to present a kill floor system design that meets or exceeds all current federal food safety standards and OSHA requirements. The proposals shall include the costs of delivered kill floor equipment as designed, inclusive of the equipment structures, components, hardware, technical installation instructions and maintenance & operations manuals from manufacturer; cost for design and coordination with project architects prior to installation; and installation oversight during construction.
- C. Delegated Design: Contractor is to provide engineered design authored by professional engineer. Design is to provide complete equipment layout to produce a fully functional operating kill floor system.
- D. Required submittals include the following:
 - 1. Complete product data.
 - 2. Detailed equipment layout shop drawings bearing professional seal and contact information for the engineer responsible for design.
 - 3. Installation instructions and details.
 - 4. Operation instructions and maintenance data.
- E. Prospective Bidders are advised that the contract awarded under this bid is to be funded in whole or in part by the Buzz Food Service and West Virginia Department of Environmental Protection – Office of Abandoned Mine Lands and Reclamation.

1.2 DESIGN ELEMENT GUIDELINES & KILL FLOOR SPECIFICATIONS

- A. Base kill floor equipment designs on meeting food safety and safety standards as well as the guidelines & specifications listed in this RFP. Quality of equipment components, quality of design performance specifications, and functionality in the plan workflow will all be components in the required items.

1.3 QUALITY ASSURANCE

- A. Contractor is to have a minimum of twenty (20) years' experience in supplying and installing the type of equipment specified herein.
 - 1. Contractor is to submit a list of ten (10) successful installations that either match or exceed the scope of this project.

Area	Equipment Name	Description	Performance Standards
Kill Floor Area	Squeeze Box	<p>Crate style pig, lamb, goat, veal restrainer with pneumatic operated entrance and side discharge gate/floor. Frame shall be constructed of stainless steel with non-conductive plastic insulated sidewalls (UHMW). Box shall accommodate standard market size pigs and lamb via adjustment or other system. Box must allow and/or provide a forward visual barrier between live animals and the rest of the kill floor until the animal is restrained (in case of lamb). Box may include optional halal head restraints for small ruminants. Squeeze box restraints should be designed to have smooth and steady movement to avoid startling livestock, hydraulic or pneumatically powered restraints should be equipped with pressure regulating devices to prevent accidental excessive pressure.</p>	<p>Squeeze box must allow for the humane stunning of hogs, veal, and small ruminants and safely allow for use of captive bolt and electric stunning techniques.</p>
Kill Floor Area	Blood Drainage System	<p>Blood shall be collected via a drain under the bleeding area on the kill floor. Dual-drain diversion or comparable system should be embedded in the floor and flow via gravity in under slab piping large enough to adequately flush and clean to an intermediate storage basin located inside of the temperature-controlled kill floor.</p> <p>Blood storage basin should have a capacity of at least 15 cubic feet and be of stainless steel construction (or comparable material). The basin must include a drain connection at the lowest point which will remain sealed during blood collection operation but uncovered for cleaning operations.</p> <p>The system shall also include a Blood pump system to pump blood from the intermediate storage basin to a separate storage container located in the Offal storage room. Pump must be designed appropriately for blood handling and achieve a flow of at least 20 gpm and be capable of pumping blood at least 18 ft. above floor level at this rate.</p> <p>Piping from the highest level above the pump must be located to bring the blood from basin into a Blood Tank in the Offal Storage room.</p>	<p>A solution for the collection and intermediate storage of blood from stunning. System that diverts blood from wastewater drainage systems, and allows for secondary collection and pumping to a larger, separate storage container in offal room while allowing for effective maintenance and cleaning.</p>

Kill Floor Area	Beef Kill Box	Beef kill box must be equipped with hydraulic operated entrance gate, head restraints, and side discharge gate/floor. Box must allow and/or provide visual barriers between live animals and the rest of the kill floor at least until fully restrained. All required hydraulic or pneumatic power units to operate kill box must be a complete package with proper controls. Kill box and its components shall be constructed of stainless steel. Box shall be sized to accommodate standard market size cow with approximate dimensions of 10 ft. long x 4 ft. wide x 9 ft. high, or comparable. Restraints should be designed to have smooth and steady movement to avoid startling livestock, hydraulic or pneumatically powered restraints should be equipped with pressure regulating devices to prevent accidental excessive pressure. Box may include optional halal head restraints and/or capability to add them in the future.	Kill box must allow for the humane stunning beef cattle and safely allow for use of captive bolt stunning techniques.
Kill Floor Area	Beef Kill Box Platform and Sanitation	Stationary Beef kill box platform must provide workers safe access to livestock to allow for humane stunning practices. Sanitation station must be included as part of the platform.	Platform must allow for safe operation and sanitation during stunning procedures.
Kill Floor Area	Beef Hoist	Automatic hoist shall be rated for a load capacity of 2,500-lb. Assembly shall come equipped with trolley, hook mounted attachment and 20 ft. stainless steel chain. Hoist shall not have a lifting speed exceeding 40 feet/min. Hoist and Trolley shall be capable of easily transferring carcasses on gambrel & trolley to separate main rail.	Safely and effectively hoist cattle for bleeding after stunning. Hoist to move along I-beam to allow for transfer to gambrel/rail.
Kill Floor Area	Pork Hoist	Automatic hoist shall be rated for a load capacity of 2,000-lb. Assembly shall come equipped with trolley, hook mounted attachment and 20 ft. stainless steel chain. Hoist shall not have a lifting speed less than 30 (preferably 40-45) feet/min.	Safely and effectively hoist hogs, veal and small ruminants for bleeding after stunning.
Kill Floor Area	Scalding/Dehairing	Equipment must be capable of accomplishing both operations of scalding and dehairing. Machine shall be designed to support hogs weighing up to 350 pounds each. Built in separation of hair and water is required. Drains must be incorporated into the equipment with the appropriate valve for release water following use. Controls must be mounted on unit. Scalding must include appropriate heating method to reach and maintain water temperature of approximately 140 °F. Shall be constructed of stainless steel for all animal contact surfaces.	Safely scald and de-hair hogs in a single unit. Table/landing area is required to allow for scraping and transfer to gambrel.

Kill Floor Area	Station: Platform and Transfer winch for Transfer Rail to Main Rail	Platform Frame to consist of stainless steel design to allow employees to easily transfer carcasses from bleed rail to main rail. Unit shall be capable of transferring both carcasses on hooks as well as gambrels to separate rail system. Unit shall come equipped with any required and appropriate components and/or attachments to complete transfer such as winch with hook to ensure proper lift and transfer of carcass and sanitation stations.	Platform with wash and sterilizer and appropriate winch to allow for safe lift and transfer of beef, hog, veal, and small ruminant carcasses to the main rail.
Kill Floor Area	Weasand Roding	Shall be constructed of stainless steel with appropriate dimensions to separate weasand rod from the trachea as well as pushing the weasand back up toward the lungs. Approximate dimensions are 1 inch diameter handle with 24 inch length in rod. A Shank of approximately 5/16" shall be welded to handle.	To allow for accurate rod and clipping
Kill Floor Area	Hide Puller (winch)	“Winch” style Hide puller shall consist of stainless steel construction including any required stationary or movable galvanized or stainless platforms. Hide puller must be capable of processing both small ruminants, hogs, and cattle with a minimum processing rate of 5 cattle per hour. Equipment shall consist of both ergonomic and hygienic design in a manner that does not require the forelegs of the carcasses to be secured, top-down dehidng method. Hide puller shall come equipped with all operationally required components such as but not limited to: dehidng chains, floor rollers, hide clamps, chain, hold down ring, hoist, etc. Equipment must be designed for the hide pulling application and must operate in a manner that minimizes damage to the skin of the carcass.	To effectively and cleaning remove hides from animal carcasses.
Kill Floor Area	Head Wash Cabinet	Cabinet is to be constructed of stainless steel with approximate dimensions of 30 inch wide x 30 inch long x 60 inch high. Design of cabinet shall include a sloped base with an opening to ensure appropriate draining can be achieved. Head wash cabinet must include washing hose/gun, optional light fixture, and head hooks to allow for ergonomic positioning of head mouth and nostrils during flushing. Cabinet shall have side mounted stainless steel table top for head working approximately 3 ft. wide x 3 ft. long.	Ergonomic and easily cleaned head wash cabinet for flushing head prior to inspection. Cabinet includes both wash and working table.
Kill Floor Area	Organ Inspection and Wash Station	Organ Inspection and wash station shall be constructed of stainless steel with sink attachment and approximate dimensions of 48 in long x 24" wide x 32" high. Sink shall be applicable for 140° F as well as cold water. Unit may come equipped with light fixture with adjustable arm to assist during the inspection process.	Evisceration Station including Organ Inspection and wash station, and table to offal room. Key required features: ► Elevating evisceration

Kill Floor Area	Organ Table – sloped table along wall	Stainless steel table will be sloped with gates in place to allow for USDA inspection, then gravity flow through a gate into offal storage room.	<ul style="list-style-type: none"> ▶ platform ▶ Sterilization/wash stations ▶ Inspector platform ▶ Organ wash & equipment ▶ Inspection tables/gates as needed ▶ Sloped table to Offal room ▶ Required hoses, gates, controls etc.
Kill Floor Area	Evisceration Platform	Stainless steel elevating hydraulic and/or pneumatic platform approximately 48" long x 36" wide x 8" deep. Platform shall come equipped with knife sterilizer. Knife sterilizer to be constructed of stainless steel with heating element to ensure water temperature of 180° F. Platform shall include any appropriate drainage for both the platform itself as well as the knife sterilizer. Platform shall arrive as a functional unit with any required hydraulic power unit to elevate platform a minimum of 4 ft.	Provide workers and inspector ergonomic access to eviscerate, inspect/wash organs, and release through a sloped table to Offal room to minimize gut truck contamination.
Kill Floor Area	Mobile Inspector Platform	Stainless steel mobile platform to allow USDA inspector ergonomic option to allow for thorough inspection of hanging carcasses.	To allow USDA inspector ergonomic option to allow for thorough inspection of hanging carcasses.
Kill Floor Area	Re-Inspection table/sink	Sink/wash & working table with cutting board, sterilization for re inspection of organs if needed. Allows for more space and inspection.	To allow for re-inspection/wash of organs if needed.
Kill Floor Area	Carcass Splitting station	Stainless steel elevating foot operated hydraulic and/or pneumatic platform and rail carcass Spreader. Saw and balancers will be provided by the client. Platform shall come equipped with knife sterilizer. Knife sterilizer to be constructed of stainless steel with heating element to ensure water temperature of 180° F. Platform shall include any appropriate drainage for both the platform itself as well as the knife sterilizer. Platform shall arrive as a functional unit with any required hydraulic power unit to elevate platform a minimum of 4 ft.	Station to allow for ergonomic splitting of the carcass with a foot operated platform and spreader.
Kill Floor Area	Carcass Wash Platform	Stainless steel elevating hydraulic and/or pneumatic platform approximately 48" long x 36" wide x 8" deep. Platform shall come equipped with manual carcass washing hose and knife sterilizer. Knife sterilizer to be constructed of stainless steel with heating element to ensure water temperature of 180° F. Platform shall include any appropriate drainage for both the platform itself as well as the knife sterilizer. Platform shall arrive as a functional unit with any required hydraulic power unit to elevate platform a minimum of 4 ft. Platform should allow employees to ergonomically wash down carcasses with required wash solutions.	To allow for effective and safe final carcass wash and inspection of carcasses prior to movement into chill cooler.

Kill Floor Area	Rail structure throughout kill floor.		Ensuring a continual rail from the legs transfer through to the carcass cooler.
Kill Floor Area	Rail Scale	An accurate and certifiable rail-scale to record carcass weights.	To ensure accurate reporting of hot carcass weights.
Kill Floor Area	Trough Drains	Trough drains to be located underneath rail structure to collect and screen water, blood, hair. Drains to be designed for effective maintenance and cleaning of the kill floor.	To ensure effective drainage, screening, and cleaning of kill floor.
		All equipment must be compatible with the 10 NAMI principles of sanitary equipment design.	

1.4 SYSTEM QUALITIES:

- A. In the proposal, provide a list of the components proposed for the Appalachian Abattoir Kill Floor. Include structure and component model numbers, materials, recommendations, required utilities (if any) estimated lifetime of equipment including manufacturer's warranty and any other relevant descriptive information.
- B. Design shall safely fit in the kill floor area as shown on the site plans (Attachment A). Contractors are encouraged to be creative in their designs to maximize efficient use of space and workflow in their proposals.

1.5 ASSEMBLY/INSTALLATION AND INSPECTION

- A. Equipment assembly and installation will be provided and managed by the Contractor in coordination with the General Building Construction Contractor as needed. The Contractor must supply direct supervision from manufacturer or supply qualified and certified representative familiar with kill floor equipment installation. All tools and equipment required to install equipment shall be provided or coordinated with the General Contractor. The Contractor will be given forty-five (45) calendar days to complete the proposed work. Working days will begin as outlined in the Notice to Proceed.
- B. It is a requirement that the Contractor shall provide and pay for equipment installation supervision.
- C. A representative of the Contractor is required to conduct a post-installation inspection of equipment upon completion to insure the proper installation of the equipment. If not properly installed, modifications must be submitted in writing to Buzz and remedied immediately. Co-inspection with the Contractor's representative of assembly and installation work will be conducted by Buzz following installation. Buzz will supply the punch list for final completion generated by this co-inspection. The Contractor shall submit to Buzz the manufacturer's certification of compliance and warranty following punch list completion.
- D. Warranty: Upon completion of installation, the Contractor must provide documentation attesting the equipment has been installed meeting all specifications thereby warranted by manufacturer if applicable. Additionally, it is the Contractor's responsibility to provide to Buzz the manufacturer's warranty of installed equipment.

1.6 COMPLIANCE

- A. All equipment must meet and/or exceed all federal guidelines. Documentation of compliance must be provided to Buzz with the Contractor's proposal.
- B. In accordance with Federal guidelines, the Contractor will ensure that hiring is made based on merit and qualifications and that there will be no discrimination based on race, color, religion, creed, political ideas, sex, age, marital status, physical or mental handicap or national origin by the persons performing the contract.
- C. The Contractor must provide an original Certificate of Product Liability Insurance

1.7 USE OF MINORITY, WOMEN’S AND SMALL BUSINESS ENTERPRISES

- A. Should the Contractor intend to sublet a portion of the work on this project, it shall seek out and consider minority, women and small business enterprises as potential subcontractors. The Contractor shall contact minority, women’s and small businesses to solicit their interest, capability, and prices, and shall retain proper documentation to substantiate such contacts.
- B. The Contractor will sign and provide the Minority, Women’s and Small Business Affirmative Action Certification to DEP along with the name(s) of any subcontractor(s) it submits for approval

PROPOSAL SUBMITTAL AND CONTENT

- C. The following is the anticipated Solicitation Schedule. Appalachian Abattoir may, in its sole discretion, change this schedule at any time. If Appalachian Abattoir changes dates in the schedule before the deadline for receipt of proposals, it will do so by an addendum to this RFP. It is each prospective Bidder’s responsibility to check with Appalachian Abattoir for current information regarding this RFP and its implementation timeline.

Bid stage	Date	Action step
RFP Released	3/11/2020	RFP released, available on Buzz website. Posted in Charleston Gazette 3/13/2020 3/20/2020
Proposal	3/25/2020	Expression of intent to bid due. March 25, 2020. Email or mail Annie Stroud at annie@beef.buzz , 4818 Kanawha Blvd. East, Charleston WV 25306 with your firm’s name, contact person, and email address for future addendums.
	3/25/2020	Clarifying questions due March 25, 2020. Answers will be made available on http://beef.buzz/content/bid-opportunities by 3/27/2020 and emailed out to all pre-registrants.
	4/7/2020	Proposals due by 4:00pm EST April 7, 2020 Public Bid opening 4:00pm April 7, 2020 at the Buzz Office.
Selection	4/7/2020-4/14/2020	Bids reviewed by Buzz and WV DEP, OSM offices. Bidders notified.

1.8 PROCUREMENT OFFICIAL

Annie Stroud, Project Manager
Appalachian Abattoir/ Buzz Food Service
304-925-4781 X114
annie@beef.buzz
<http://beef.buzz/content/bid-opportunities>

PART 2 - EXECUTION

2.1 INSTALLATION

- A. Install all equipment level and plumb, according to manufacturer's written instructions.
 - 1. Connect equipment to utilities.
 - 2. Provide cutouts in equipment, neatly formed, where required to run service lines through equipment to make final connections.
- B. Complete equipment assembly where field assembly is required.
 - 1. Provide closed butt and contact joints that do not require a filler.
 - 2. Grind field welds on stainless steel equipment until smooth and polish to match adjacent finish.
- C. Install equipment with access and maintenance clearances that comply with manufacturer's written installation instructions and with requirements of authorities having jurisdiction.
- D. Install joint sealant in joints between equipment and abutting surfaces with continuous joint backing unless otherwise indicated. Produce airtight, watertight, vermin-proof, sanitary joints.

2.2 CLEANING AND PROTECTING

- A. After completing installation of equipment, repair damaged finishes.
- B. Clean and adjust equipment as required to produce ready-for-use condition.
- C. Protect equipment from damage during remainder of the construction period.

2.3 DEMONSTRATION

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

END OF SECTION

PROPOSAL FORM

Dated: _____
(Bidder to insert date bid submitted)

SUBMITTED BY:

_____ (hereinafter called "Bidder")

SUBMITTED TO:

Buzz Food Service
4818 Kanawha Boulevard East
Charleston, West Virginia 25306 (hereinafter called "Owner")

The Bidder, being familiar with conditions affecting the cost of the Work and the Contract Documents, including Advertisement For Bids, Bid Form, Specification Section 114020, and any Addenda or Clarifications issued, hereby propose to furnish all material, labor, tools, taxes, transportation and expendable equipment necessary for the satisfactory and complete installation of

APPALACHIAN ABATTOIR KILL FLOOR
4818 Kanawha Boulevard East
Charleston, West Virginia 25306

in every detail and ready for operation, all in full accordance with, and in conformity to, the Contract Documents, for the stipulated sums as follows:

The Undersigned Bidder Agrees:

1. To accept the provisions of all sections of the documents listed above.
2. That the amounts stated in this Form of Proposal represents the entire cost of the work. The completion time stated represents the entire time for performance of the work. The amount bid includes allowances for all fees for permits, regulatory notifications, taxes, and insurance required or applicable to the work. That no claims shall be made for any increases in wage scales or material costs.
3. To certify that this bid is genuine and not sham or collusive or made in the interest or in behalf of any person not herein named, and that the undersigned has not directly or indirectly induced or solicited any other bidder to put in a sham bid, or any other person, firm or corporation to refrain from bidding and that the undersigned bidder has not in any manner sought by collusion to secure for himself an advantage over any other bidder.
4. That the bidder shall comply with all City, State, and Federal statutes relating to liability insurance, working hours, minimum wages, safety and sanitary regulation, including requirements set forth governing federal participation under this project, which in any way may affect those engaged or employed on the work in the event that the award of the Contract is made on the bid herein submitted.

Submitted by: _____
(Firm Name)

BASE BID:

For the sum of: _____
_____ (\$ _____).

If awarded contract on Base Bid, I (we) agree to perform the work to completion and ready for occupancy and use within _____ **days of the date of the Owner's Notice to Proceed.** The Bidder understands that the Owner may retain a sum as set forth in Article 9, Paragraph 9.11 - "Liquidated Damages," of the Supplementary Conditions, for each day thereafter, Sundays and holidays included, that the Work remains uncompleted, such sum is agreed upon as the proper measure of liquidated damages which the Owner will sustain per diem by the failure of the Contractor to complete the Work in the stipulated time, and the sum is not to be construed in any sense a penalty.

The Bidder certifies that this bid has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this bid with any other bidder or with any competitor. The Bidder agrees that the Owner reserves the right to reject any or all bids, and to waive any formalities in the bidding. The Bidder agrees that this bid shall be good and may not be withdrawn for a period of 60 days.

The Bidder acknowledges receipt of the following Addenda: (Please list by number and date.)

_____	_____	_____
_____	_____	_____
_____	_____	_____

SIGNATURE OF BIDDER:

Firm: _____	By: _____
Address: _____	Title: _____
Address: _____	Phone: _____
Address: _____	Fax: _____
Tax Cert. #: _____	

END OF BID FORM

