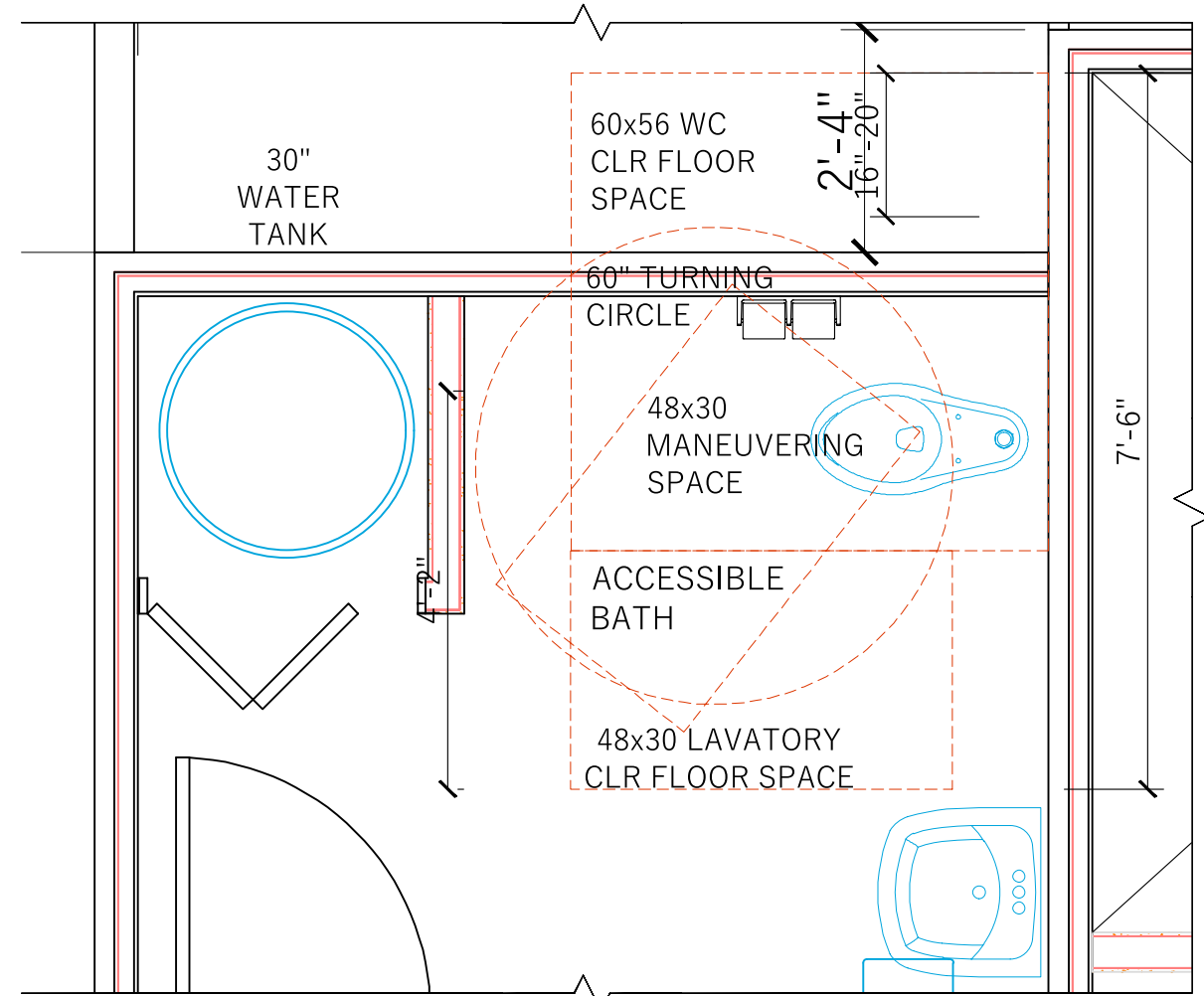


**FLOOR PLAN**  
SCALE: 1/4"=1'-0"



**ADA BATH**  
SCALE: 1/2"=1'-0"

**SCOPE STATEMENT:**  
THE ENGINEER'S SCOPE IS LIMITED TO USDA CUSTOM SLAUGHTER & CUSTOM PROCESSING SLAUGHTER HOUSE FLOOR LAYOUT DESIGN, MECHANICAL, ELECTRICAL & PLUMBING DESIGN. NO STRUCTURAL DESIGN OF ANY EQUIPMENT AND BUILDING STRUCTURES ARE INCLUDED WITH THIS SUBMITTAL.

\* MIN. INSULATION REQUIREMENTS  
NOTES A:

- 1) METAL BUILDING  
ROOF = R-19+R-11 LS;  
R-25+R-8 LS
  - 2) WALLS ABOVE  
GRADE,  
METAL FRAMED=  
R-13+R7.5 ci
  - 3) WALLS BELOW  
GRADE = R-7.5ci
  - 3) FLOOR SLAB  
ON GRADE=R-15 FOR 24"  
MASS = R-14.6ci
- LS= LINEAR SYSTEM  
ci = CONTINUOUS  
INSULATION

(REFER TO 2018 NORTH CAROLINA ENGERY  
CONSERVATION CHAPTER 4 COMMERCIAL ENERGY  
EFFICIENCY 402 BUILDING ENVELOPE REQUIREMENTS)

LEGEND	
FD	FLOOR DRAIN
PC	PERMANENTLY CLOSED
FO LAV	FOOT OPERATED LAVATORY
H&C	HOT AND COLD WATER BIBBS, MIN. 7" A.F.F. FOR ABOVE UNIT
BSD	BACK SIPHONAGE DEVICE
PCV	POWERED CEILING VENT
SC	SELF CLOSING DOOR
S S SINK & DR BD	STAINLESS STEEL SINK AND DRAIN BOARD
WH	WATER HEATER
TD	LINEAR TRENCH DRAIN
OFFPP	ON FARM POULTRY PROCESSING

**ADA MOUNTING HEIGHT REQUIREMENTS FOR TOILET ROOMS**

**FIXTURES**

**WATER CLOSETS**  
TOP OF SEAT  
CONTROLS FOR FLUSH VALVES  
GRAB BARS FOR WATER CLOSETS

**LAVATORIES**  
COUNTERTOP OR RIM  
BOTTOM OF APRON  
KNEE CLEARANCE  
TOE CLEARANCE TO WALL

**LAVATORY MIRRORS**  
BOTTOM OF REFLECTIVE SURFACE  
TOP OF REFLECTING SURFACE

**ACCESSORIES**  
DISPENSERS, RECEPTACLES  
AND CONTROLS  
TOILET PAPER HOLDER  
HAND DRYERS  
SOAP DISPENSERS  
PAPER TOWEL DISPENSER  
FIRE EXTINGUISHERS

**17" - 19" A.F.F.**  
**44" MAX. A.F.F.**  
**33" - 36" A.F.F. TO CENTER LINE**

**34" MAX. A.F.F.**  
**29" MIN. A.F.F.**  
**8" MIN. TO ANY OBSTRUCTION**  
**9" H X 6" D**

**40" MAX. A.F.F.**  
**74" MIN. A.F.F.**

**15" MIN. A.F.F.**  
**19" A.F.F. TO CENTER LINE**

**38" - 48" A.F.F. TO CONTROL SWITCH**  
**38" - 48" A.F.F.**  
**38" - 48" A.F.F. TO TOWEL**  
**5'-0" MAX. TO TOP**

\* A.F.F. = ABOVE FINISH FLOOR

- GENERAL NOTES:**
- THE OWNER OF CUSTOM SLAUGHTER OR PROCESSING FACILITY SHALL COMPLY WITH USDA FSIS GUIDELINES
  - ALL EQUIPMENT AND APPLIANCES SHALL BE STAINLESS STEEL
  - THE FLOOR PLANS ARE DIAGRAMMATIC ONLY, FOR ESTABLISHING RELATIONSHIP AND DIMENSIONAL INTENTS. DO NOT SCALE DRAWINGS. EACH SUBCONTRACTOR IS RESPONSIBLE FOR VERIFYING CONDITIONS BEFORE BEGGING HIS/HER WORK. THE ENGINEER SHALL BE CONSULTED PRIOR TO IMPLEMENTATION OF ADJUSTMENTS TO THE DESIGN THAT MAY BE NECESSARY DUE TO CONDITIONS IN THE FIELD.
  - ALL CONTRACTORS SHALL CARRY ADEQUATE LIABILITY INSURANCE AS MAY BE REQUIRED BY THE CLIENT AND LOCAL ORDINANCES. CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION OF WORK, MATERIALS, PROJECT AND BUILDING, ETC. FROM LOSS AND DAMAGE.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK AND COMPLYING WITH ALL RULES AND REGULATIONS. NOTIFY THE ENGINEER OF ANY CONFLICTS.
  - COOLERS AND FREEZERS, INCLUDING DOORS, SHOULD BE CONSTRUCTED OF MATERIALS THAT CAN BE READILY AND THOROUGHLY CLEANED, AND DURABLE, RIGID, IMPERVIOUS TO MOISTURE, NON-TOXIC, AND NON-CORROSIVE. FREEZER DOORS SHOULD BE CONSTRUCTED AND INSTALLED TO PREVENT ACCUMULATION OF FROST.
  - COOLERS AND FREEZERS SHOULD BE EQUIPPED WITH FLOOR RACKS, PALLETS, OR OTHER MEANS TO ENSURE PROTECTION OF PRODUCT FROM CONTAMINATION FROM THE FLOOR.
  - DRY STORAGE MATERIALS SHOULD BE STORED IN A ROOM DEDICATED TO DRY STORAGE ONLY.
  - AREAS OUTSIDE THE BUILDING WHERE VEHICLES ARE LOADED OR UNLOADED SHOULD BE PAVED WITH CONCRETE OR A SIMILAR HARD SURFACE. HARD SURFACE AREAS ALLOW THESE AREAS TO BE KEPT CLEAN AND ELIMINATE THE POTENTIAL FOR WATER PUDDLES OR DUST.
  - AREAS OUTSIDE THE BUILDING WHERE VEHICLES ARE LOADED OR UNLOADED SHOULD BE DRAINED. DRAINAGE FROM THE LOADING DOCKS SHOULD BE CONFINED TO THE IMMEDIATE AREA OF THE DOCK.
  - THE VEHICULAR AREAS SHOULD BE LARGE ENOUGH TO ACCOMMODATE THE TURNING RADIUS OF THE LARGEST TRUCKS OR SHIPPING VEHICLES USED BY THE ESTABLISHMENT.
  - LOCKERS SHOULD BE LARGE ENOUGH TO STORE A CHANGE OF CLOTHING AND OTHER PERSONAL ITEMS. FOR EASE OF CLEANING, LOCKERS SHOULD BE CONSTRUCTED OF MATERIALS THAT ARE RIGID, DURABLE, NON-CORROSIVE, EASILY CLEANED AND INSPECTED, IMPERVIOUS TO MOISTURE, A LIGHT, SOLID COLOR, WITH A SMOOTH OR EASILY CLEANED TEXTURE, AND HAVE SLOPING TOPS. LOCKERS SHOULD EITHER BE INSTALLED SO THAT THERE IS ENOUGH ROOM UNDER THEM THAT THEY CAN BE EASILY CLEANED AND INSPECTED, OR THEY SHOULD BE SEALED TO THE FLOOR
  - FLOORS IN AREAS WHERE PRODUCT IS HANDLED OR STORED SHOULD BE CONSTRUCTED OF DURABLE, EASILY CLEANABLE MATERIALS, AND BE IMPERVIOUS TO MOISTURE. COMMONLY USED MATERIALS ARE CONCRETE, QUARRY TILE, BRICK, AND SYNTHETIC MATERIAL.
  - FLOORS WHERE OPERATIONS ARE CONDUCTED SHOULD HAVE A SLIP-RESISTANT SURFACE. GOOD RESULTS ARE OBTAINED BY USING BRICK OR CONCRETE FLOORS WITH ABRASIVE PARTICLES EMBEDDED IN THE SURFACE. CONCRETE FLOORS SHOULD HAVE A ROUGH FINISH.
  - ALL SEAMS SHOULD BE TIGHT-FITTING AND SEALED TO ELIMINATE ALL CRACKS AND CREVICES WHICH MAY SHELTER INSECTS, VERMIN, AND MICROORGANISMS.
  - WALLS SHOULD HAVE A SMOOTH TEXTURE, NOT ONE THAT IS ROUGH OR UNEVEN.
  - FASTENERS FOR WALL COVERING MATERIAL SHOULD BE SOLID, SMOOTH HEADED, AND NOT HAVE RECESSES WHICH ALLOWS THE COLLECTION OF FOREIGN MATERIAL.
  - CEILINGS AND OVERHEAD STRUCTURES BE MAINTAINED FREE OF SEALING PAINT OR PLASTER, DUST, CONDENSATE, LEAKS, AND OTHER MATERIALS OR DEFECTS.
  - CEILINGS IN AREAS WHERE PRODUCT IS STORED OR HANDLED SHOULD BE CONSTRUCTED AND FINISHED WITH MATERIALS THAT CAN BE THOROUGHLY CLEANED AND ARE MOISTURE RESISTANT.
  - ALL OUTSIDE WINDOWS, EXCEPT FOR THOSE IN RECEIVING AND FEED ROOMS, SHOULD HAVE PROTECTION TO EXCLUDE INSECTS, BIRDS, AND OTHER VERMIN.
  - WINDOWS THAT ARE INSTALLED IN WALLS IN EXPOSED PRODUCT ROOMS SHOULD HAVE PANES OF ACRYLIC OR POLYCARBONATE PLASTIC OR OTHER SHATTER-PROOF MATERIAL.
  - DOORS ARE IMPERVIOUS TO MOISTURE, TIGHT FITTING TO MINIMIZE AIR EXCHANGE AND TO PREVENT THE ENTRY OF INSECTS AND VERMIN INTO THE ESTABLISHMENTS.
  - DOORS ARE SELF-CLOSING AND USED THROUGHOUT THE ESTABLISHMENT, ESPECIALLY IN AREAS WHERE TOILET ROOMS OPEN DIRECTLY INTO ROOMS WHERE MEAT AND POULTRY ARE EXPOSED, TO PREVENT CONTAMINATION OF PRODUCTS WITH ODORS AND THEIR ASSOCIATED CONTAMINANTS.
  - DOORS ARE RIGID AND DURABLE, AND THE JUNCTIONS AT JAMBS, WALLS, AND FLOORS ARE SEALED TO ELIMINATE ALL CRACKS AND CREVICES FOR DEBRIS, INSECTS, AND DIRT TO COLLECT.
  - LIGHT FIXTURES IN ROOMS WHERE EXPOSED MEAT OR POULTRY IS HANDLED SHOULD ENSURE MAXIMUM SAFETY, TO PRECLUDE CONTAMINATION OF PRODUCTS WITH BROKEN GLASS AND PREVENT THE COLLECTION OF DIRT, PRODUCT, AND DEBRIS ON LAMP SURFACES, INCLUDING FIXTURE SURFACES NOT EASILY CLEANED OR INSPECTED.
  - EQUIPMENT MATERIALS SHOULD COMPLY WITH 21 CFR, PARTS 170-190 OF THE FOOD AND DRUG ADMINISTRATION (FDA) REGULATIONS FOR DIRECT FOOD CONTACT.
  - ALL DIRECT PRODUCT CONTACT SURFACES SHOULD BE SMOOTH, MAINTAINED FREE OF PITS, CRACKS, CREVICES, AND SCALE; CORROSION AND ABRASION RESISTANT; NON-ABSORBENT; SHATTERPROOF; NONTOXIC, AND NOT CAPABLE OF MIGRATING INTO FOOD PRODUCTS.
  - EQUIPMENT SHOULD NOT BE PAINTED ON AREAS IN OR ABOVE THE DIRECT PRODUCT CONTACT AREA.
  - EQUIPMENT SHOULD BE DESIGNED AND INSTALLED IN SUCH A WAY THAT FOREIGN MATERIALS, SUCH AS LUBRICANTS, HEAT EXCHANGER MEDIA, CONDENSATE, CLEANING SOLUTIONS, SANITIZERS, AND OTHER NONFOOD MATERIALS, DO NOT CONTAMINATE FOOD PRODUCTS.
  - EQUIPMENT IS SELF-DRAINING OR DESIGNED TO BE EVACUATED OF WATER.
  - ALL PRODUCT CONTACT SURFACES ALLOW CONTACT WITH CLEANING SOLUTIONS AND RINSE WATER.
  - CLEAN-IN-PLACE (CIP) SYSTEMS SHOULD HAVE SANITATION PROCEDURES THAT ARE AS COMPLETE AND EFFECTIVE AS THOSE FOR CLEANING AND SANITIZING DISASSEMBLED EQUIPMENT.
  - THE PLANT WATER SUPPLY MUST MEET THE POTABILITY STANDARDS IN THE NATIONAL PRIMARY DRINKING WATER REGULATIONS ISSUED BY THE ENVIRONMENTAL PROTECTION AGENCY (EPA).

NO.	DATE	DESCRIPTIONS
0	11/17/20	INITIAL DESIGN

**FLOOR PLAN, DETAILS**

**SITE ADDRESS:**  
1235 Atkins Rd,  
Fuquay-Varina, NC 27526

**PROFESSIONAL SEAL**

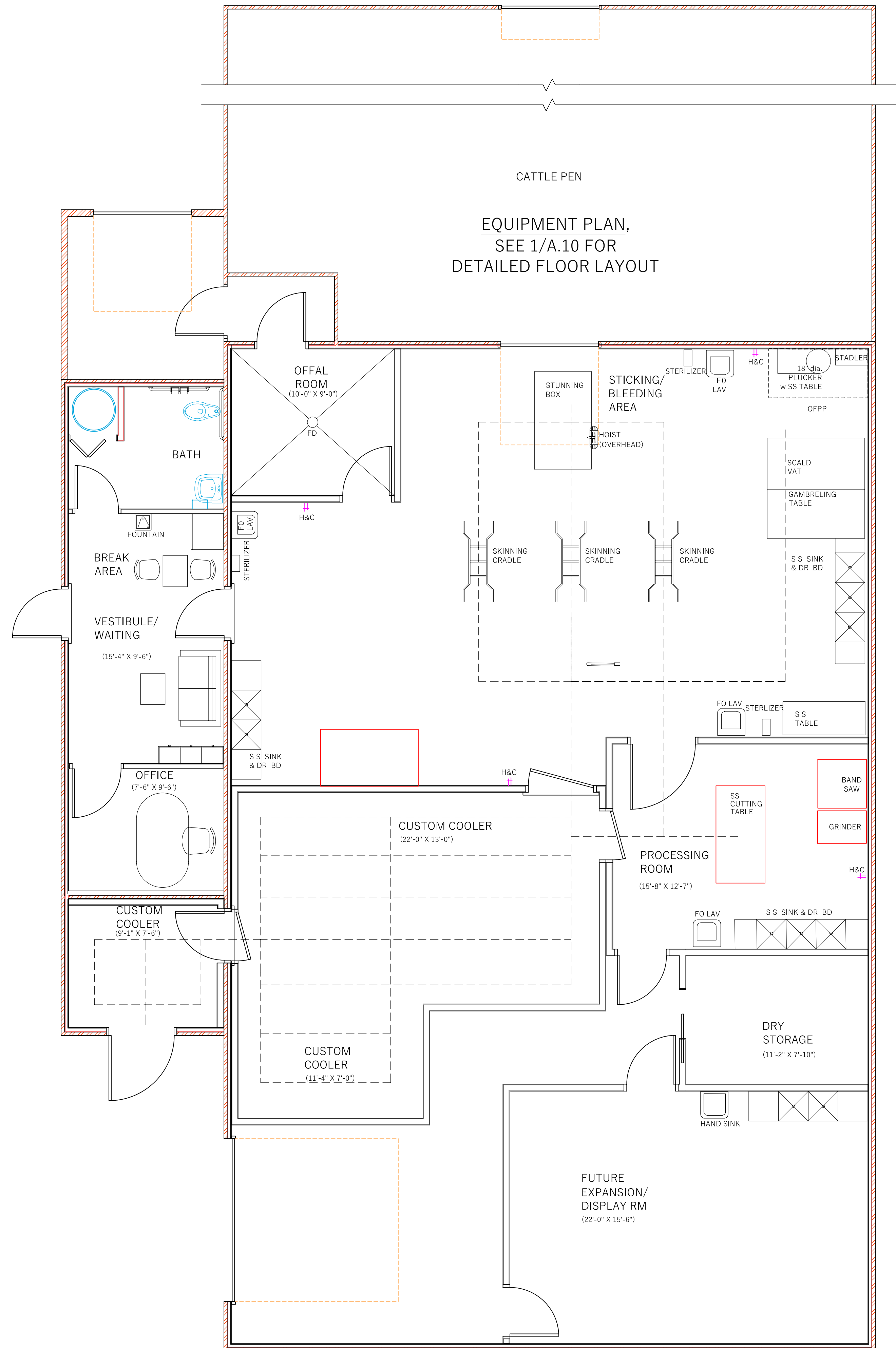
DISTRICT OF COLUMBIA  
MOTI KC  
No. PE 921804  
LICENSED PROFESSIONAL ENGINEER  
Matti  
12/07/2020

**EQUAGEN**  
engineering by ingenuity

FIRM LIC. # 4869

121 EDINBURGH SOUTH DRIVE, SUITE 103  
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PHONE: 919.444.5442  
EMAIL: MOTI.KC@EQUAGEN.COM

DRAWN BY:	EQG
CHECKED BY:	MKC
DATE:	11-17-20
SCALE:	AS SHOWN
<b>A1.0</b>	<b>20-1035</b>



EQUIPMENT PLAN,  
SEE 1/A.10 FOR  
DETAILED FLOOR LAYOUT

EQUIPMENT LIST

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

EQUIPMENT LIST							
EQUIPMENT NAME	QUANTITY	MOUNTING	VOLTS	PHASE	WATTAGE (kW)	PRODUCT NAME	MANUFACTURER-MODEL (AS LISTED OR APPROVED ALTERNATE)
STUNNING BOX	01	FLOOR	277	1	0.75	COW KILLING MACHINE CATTLE SLAUGHTER KNOCKING STUNNING BOX	RIOPEL RB-1102
OVERHEAD HOIST (LIVESTOCK LIFT)	01	CEILING	277/480	3	2.2	2.2 TON VERTICAL TYPE CATTLE LIFT MACHINE ABATTOIR (SLAUGHTERHOUSE)	EME QE-C107-I
ELECTRICAL RAIL	01	CEILING	277/480	3	2.2	CATTLE CARCASS PROCESSING STEPPING CONVEYOR	LeFIELL 6600 "WALKING BEAM" OR RAIL SYSTEM BY ABATTOIR EQUIPMENT SUPPLIES
SKINNING MACHINE WITH PNEUMATIC LIFT	01	CEILING	220-380-415	3	30	HYDRAULIC CATTLE SKINNING MACHINE CATTLE SKIN PEELING MACHINE	MECANOVA M0102301 DEHIDING V 80
BRISKET SAW PNEUMATIC	01	CEILING	--	3	--	CHEST OPENING SAW CATTLE SLAUGHTER MACHINE CUTTING SAW	KENTMASTER ABB-II
SPLITTING CHAIN SAW	01	CEILING	42-550	3	1.5	BELT TYPE CARCASS CUTTING SAW FOR CATTLE SLAUGHTER LINE	KENTMASTER BM-V-SDB
TRIBE MACHINE	01	FLOOR	277/480	3	2.94	TRIBE WASHING MACHINE STOMACH AND PAUNCH CLEANING	MECANOVA P-75 (OR HIGHER PER OWNER)
CARCASS WASHER	01	FLOOR	--	3	--	CATTLE SLAUGHTER MACHINE COW CARCASS WASHING	KENTMASTER VAC-SAN
ELECTRICAL CHAIN ABATTOIR HOIST	01	CEILING	115	3	--	1 TON CAPACITY ELECTRIC CHAIN HOIST	ADVANTAGE A-100-20-15
CUSTOM COOLER	01	FLOOR	--	3	--	COLD STORAGE ROOM	SRC WALK IN COOLERS (RALEIGH, NC)
BAND SAW	01	FLOOR	115	1	1.1	FROZEN MEAT CUTTING MACHINE BONE SAW CUTTER	PRO-CUT KSP-116
MEAT GRINDER	01	FLOOR	220	1	2.2	KESTER-MEAT GRINDER	PRO-CUT KG-32-MP #32
STERILIZER	05	WALL	115	1	.75	KNIVES STERILIZER	EDLUND KSUV-18
WATER HEATER	01	FLOOR	120	1	--	COMMERCIAL GAS WATER HEATER, 91.0 GAL	RHEEM- RUUD G91-200
POULTRY PLUCKER	01	FLOOR	240	1	.75	POULTRY AND TURKEY PLUCKING MACHINE	FEATHERMAN PRO XL PLUCKER
SCALDING MACHINE	01	FLOOR	277	1	2	POULTRY AND TURKEY SCALDER, 40 GAL	FEATHERMAN POULTRY SCALDER PP-923
METAL DETECTOR	01	FLOOR	277	1	1.5	METAL DETECTOR CONVEYOR FOR GLS OR C-SCAN GHF METAL	SESOTEC RAPICON (OWNER TO DETERMINE ALTERNATE HIGH END PERFORMANCE BASED UNIT)
WORKER BOOT STERILIZER	01	FLOOR	480	3	.75	ABATTOIR MACHINERY BOOT WASHER	HORIZON EQUIPMENT COMPANY (HEC) BOOT-MASTER
REFRIGERATOR	01	FLOOR	115	1	.25	STORAGE REFRIGERATOR	TURBO AIR M3R47-2-N (OWNER TO DECIDE PER NEED)
WASTE INCINATOR	01	FLOOR	230	--	--	SLAUGHTER HOUSE WASTE DEAD ANIMALS CARCASSES INCINERATOR	WASTE SPECTRUM VOLKAN 1750 (OWNER TO DECIDE ALTERNATE CAPACITY AND MODEL)
INTESTINE WASHING MACHINE	01	FLOOR	--	--	--	CLEANING INTESTINES WASHING MACHINE OFFAL MACHINERY	MECANOVA P-120 (OWNER TO DECIDE ALTERNATE CAPACITY AND MODEL)

EQUIPMENT LIST							
EQUIPMENT NAME	QUANTITY	MOUNTING	VOLTS	PHASE	WATTAGE (kW)	PRODUCT NAME	MANUFACTURER-MODEL (AS LISTED OR EQUIVALENT)
FOOT OPERATED LAVATORY	02	FLOOR	--	--	--	FOOT VALVE HAND SINK	AERO - HSB
HOT AND COLD WATER BIBBS	03	WALL	--	--	--	HOT AND COLD WATER MIXING VALVE AND UNIT	SUPERKLEAN - 3600M-B
TWO COMPARTMENT SINK	02	WALL	--	--	--	72" TWO COMPARTMENT COMMERCIAL SINK WITH 2 DRAIN BOARDS	REGENCY - 600S217172G
THREE COMPARTMENT SINK	02	WALL	--	--	--	94" THREE COMPARTMENT COMMERCIAL SINK WITH 2 DRAIN BOARDS	REGENCY - 600S318242X
CUTTING TABLE	01	FLOOR	--	--	--	30"x60" 18 GAUGE 430 STAINLESS STEEL WORK TABLE WITH UNDERSHELF	STEELTON - 522ETSG3060
ICE MACHINE	01	FLOOR	115	1	5.97	SELF CONTAINED ICE MAKER, CAPACITY 280 LB/24 HOUR	ATOSA YR280-AP-161
HAND SINK	01	WALL	--	--	--	SPLASH GUARD ON BOTH SIDES	REGENCY 17x15 GOOSENECK FAUCET AND SIDE SPLASH GUARD

NO.	DATE	INITIAL DESIGN	DESCRIPTIONS
0	11/17/20		

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SITE ADDRESS:  
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Fuquay-Varina, NC 27526



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