



JOHN F. WERNE III
ARCHITECT

1020 OWEN COURT, ASHLAND CITY, TENNESSEE 37015 615-793-3966 jwerne3@gmail.com

ROBERTSON COUNTY
ANIMAL CONTROL

W. COUNTY FARM ROAD, ROBERTSON COUNTY, TN

DESIGNER	REVIEWER
PROJECT	
DATE	5/19/20
SHEET	

ROBERTSON COUNTY ANIMAL CONTROL

W. COUNTY FARM ROAD, ROBERTSON COUNTY, TN

**JOHN F. WERNE III
ARCHITECT**

1020 OWEN COURT, ASHLAND CITY, TENNESSEE 37015 615-792-3966

**CSR ENGINEERING, INC.
CIVIL/STRUCTURAL ENGINEER**

1116 Main St. Pleasant View, TN 37146 615.247.5384 direct

**MICHAEL BUSBY, PE
MECHANICAL ENGINEER**

P.O. BOX 813, GOODLETTSVILLE, TN 37070, 615-512-7597

DRC ENGINEERING

DARON CHRISTY, ELECTRICAL ENGINEER

2585 PLEASANT VIEW RD, PLEASANT VIEW, TN 37146, 616-714-1812

INDEX OF DRAWINGS

CIVIL

- C- 0 CIVIL COVER
- C- 1 EXISTING SITE PLAN
- C- 2 SITE PLAN
- C- 3 GRADING PLAN
- C- 4 CUT AND FILL QUANTITIES
- C- 5 EPSC PLAN
- C- 6 EPSC DETAILS
- C- 7 UTILITY PLAN
- C- 8 STORMWATER DETAILS
- C- 9 SITE DETAILS

STRUCTURAL

- S1 GENERAL NOTES
- S2 FOUNDATION PLAN
- S3 SLAB PLAN
- S4 ROOF FRAMING PLAN
- S5 DETAILS
- S6 DETAILS

HVAC

- M-1 MECHANICAL PLANS
- M-2 GAS PIPING

ARCHITECTURAL

- A-0 LIFE SAFETY PLAN/OVERALL PLAN
- A-1 FLOOR PLAN
- A-2 EXTERIOR ELEVATIONS
- A-3 REFLECTED CEILING PLAN
- A-4 SECTIONS
- A-5 ROOF PLAN
- A-6 FINISH PLAN

ELECTRICAL

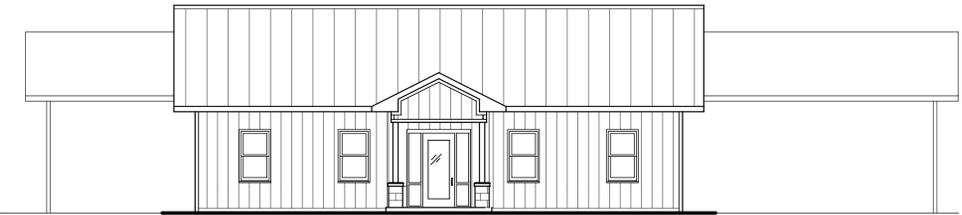
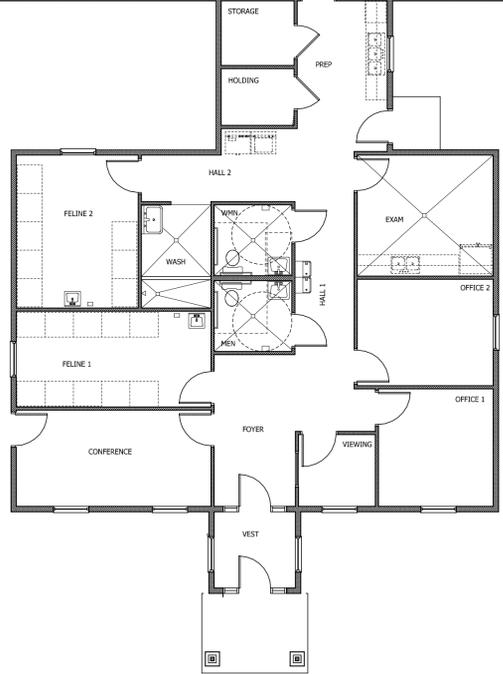
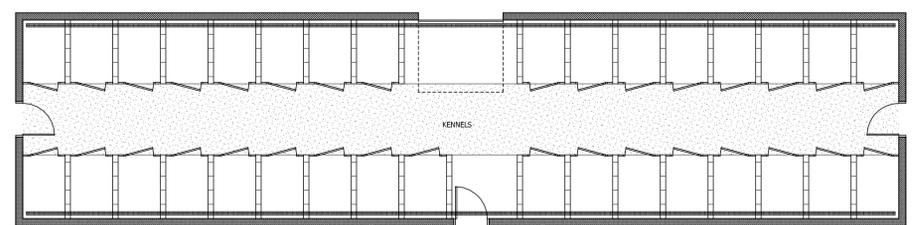
- E-1 LIGHTING PLAN
- E-2 POWER PLAN
- E-3 ELECTRICAL SCHEDULES AND NOTES

NOTE: ALL DRAWINGS, SPECIFICATIONS AND CODES LISTED OR REFERENCED ABOVE APPLY AS A WHOLE DOCUMENT AND SHALL NOT BE CONSIDERED AS SEPARATE REQUIREMENTS BASED ON DISCIPLINE, SUBCONTRACT OR OTHER ENTITY.

CONSTRUCTION SHALL COMPLY WITH:

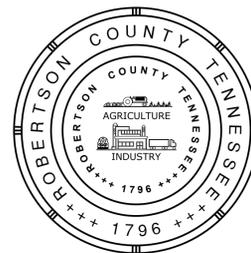
- 2012 International Building Code
- 2009 ICC A 117.1 Accessible & Useable Buildings & Facilities
- 2012 International Plumbing Code
- 2012 NFPA Life Safety Code 101
- 2012 International Mechanical Code
- 2011 National Electric Code
- 2012 International Fire Code
- 2009 International Energy Conservation Code
- AMERICANS WITH DISABILITIES ACT (ADA)

ALL IBC W/ LOCAL AMENDMENTS

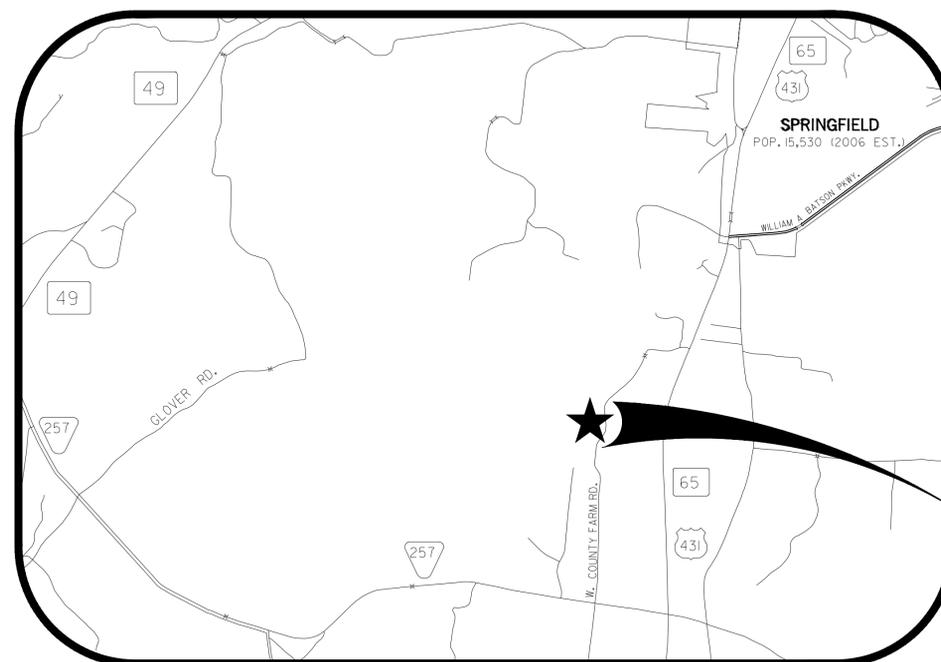


SITE DEVELOPMENT PLANS OF ANIMAL CONTROL EXPANSION FOR ROBERTSON COUNTY ANIMAL CONTROL

SPRINGFIELD, TN



JANUARY 2020



LOCATION MAP

REVISIONS			
NO.	DATE	BY	DESCRIPTION
△	6-4-20	PLC	REVISED STORMWATER, REMOVED SHEET C7

CONTRACTOR'S NOTES:

THE CONTRACTOR'S WORK TO BE PERFORMED UNDER THIS PROJECT WILL CONSIST OF FURNISHING ALL EQUIPMENT, LABOR, MATERIALS, TOOLS AND SUPERVISION NECESSARY FOR THE CONSTRUCTION OF THE PROPOSED ANIMAL CONTROL EXPANSION AND OTHER RELATED WORK AS LISTED IN THE PLANS AND SPECIFICATIONS.

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, UTILITY LOCATIONS, ELEVATIONS, EXISTING INVERTS PRIOR TO ORDERING ANY MATERIAL. IF A DISCREPANCY IS FOUND, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR REPRESENTATIVE IMMEDIATELY.

ALL WORK SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL CODES AND LAWS. ALL NECESSARY LICENSES AND PERMITS NOT OBTAINED BY THE OWNER SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

EXTERIOR CONCRETE SHALL BE 4,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS, 4-INCH MAXIMUM SLUMP AND 5 TO 7 PERCENT AIR ENTRAINED.

ALL SITE CONCRETE SHALL BE FINISHED AS SPECIFIED IN THE PLANS.

ALL WORK PERFORMED SHALL BE IN THE BEST RECOGNIZED TRADE PRACTICES AND TO THE ENTIRE SATISFACTION OF THE OWNER.

INDEX OF DRAWINGS

SHEET	DESCRIPTION
T1.	TITLE SHEET
C1.	EXISTING SITE
	<u>PROPOSED</u>
C2.	SITE PLAN
C3.	GRADING PLAN
C4.	EPSC PLAN
C5.	EPSC DETAILS
C6.	UTILITY PLAN
C7.	STORMWATER DETAILS

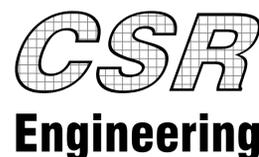
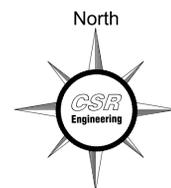
UTILITY COMPANIES:

GAS -
SPRINGFIELD GAS DEPARTMENT
1311 R. W. GORDON DRIVE,
SPRINGFIELD TN
(615) 382-2200

WATER -
SPRINGFIELD WATER DEPARTMENT
824 CENTRAL AVE,
SPRINGFIELD, TN
(615) 382-1600

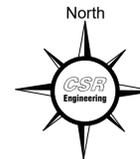
SEWER -
SPRINGFIELD WASTEWATER DEPT
824 CENTRAL AVE,
SPRINGFIELD, TN
(615) 382-1600

ELECTRIC -
CEMC
1201 5TH AVE NORTH,
SPRINGFIELD, TN
(615) 384-5566

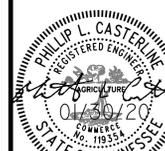


CSR Engineering, Inc.
1116 Main Street
Pleasant View, TN 37146
P: 615.212.2389
F: 615.246.3815
www.csrengineers.com





EXISTING SITE
W. COUNTY FARM RD.
FOR
ANIMAL CONTROL EXPANSION
ROBERTSON COUNTY
ANIMAL CONTROL



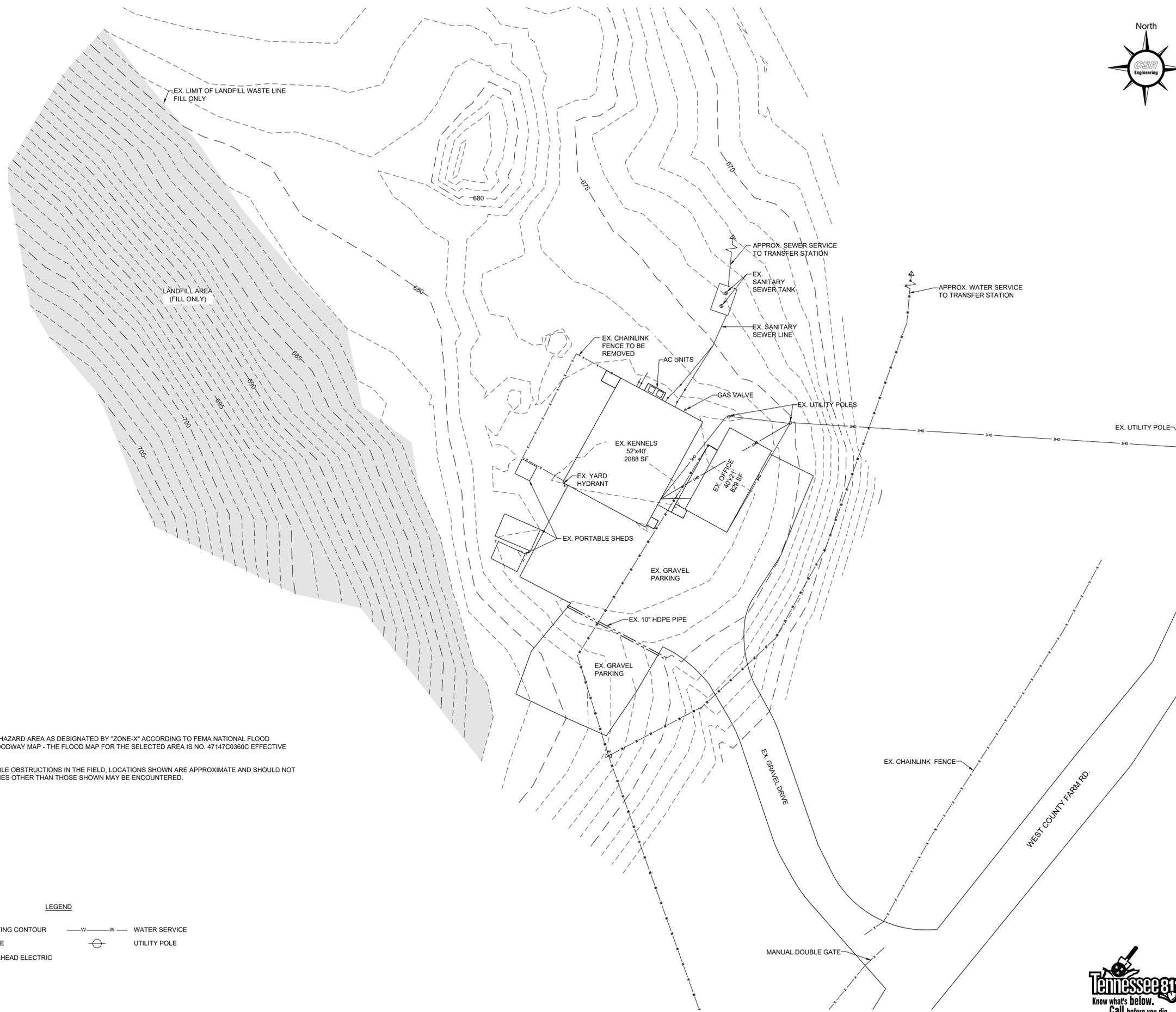
REVISIONS	
NO.	DESCRIPTION

DESIGNER MSS
REVIEWER PLC

PROJECT 18-145

DATE 1-30-20

SHEET C1



EXISTING SITE NOTE

THIS BUILDING SITE DOES NOT LIE WITHIN A FLOOD HAZARD AREA AS DESIGNATED BY "ZONE-X" ACCORDING TO FEMA NATIONAL FLOOD INSURANCE PROGRAM - FLOOD BOUNDARY AND FLOODWAY MAP - THE FLOOD MAP FOR THE SELECTED AREA IS NO. 47147C0360C EFFECTIVE DATE: APRIL 16, 2008.

UTILITIES SHOWN HEREON WERE TAKEN FROM VISIBLE OBSTRUCTIONS IN THE FIELD. LOCATIONS SHOWN ARE APPROXIMATE AND SHOULD NOT BE RELIED UPON AS ACCURATE. ADDITIONAL, UTILITIES OTHER THAN THOSE SHOWN MAY BE ENCOUNTERED.

LEGEND

- - - 680 - - - EXISTING CONTOUR
- x - x - x - FENCE
- - - OHE - - - OVERHEAD ELECTRIC
- w - - - w - WATER SERVICE
- ⊕ UTILITY POLE



PURPOSE FOR ISSUE: CONSTRUCTION

SCALE: 1"=20'





SITE PLAN
W. COUNTY FARM RD.
ANIMAL CONTROL EXPANSION
FOR
ROBERTSON COUNTY
ANIMAL CONTROL



REVISIONS

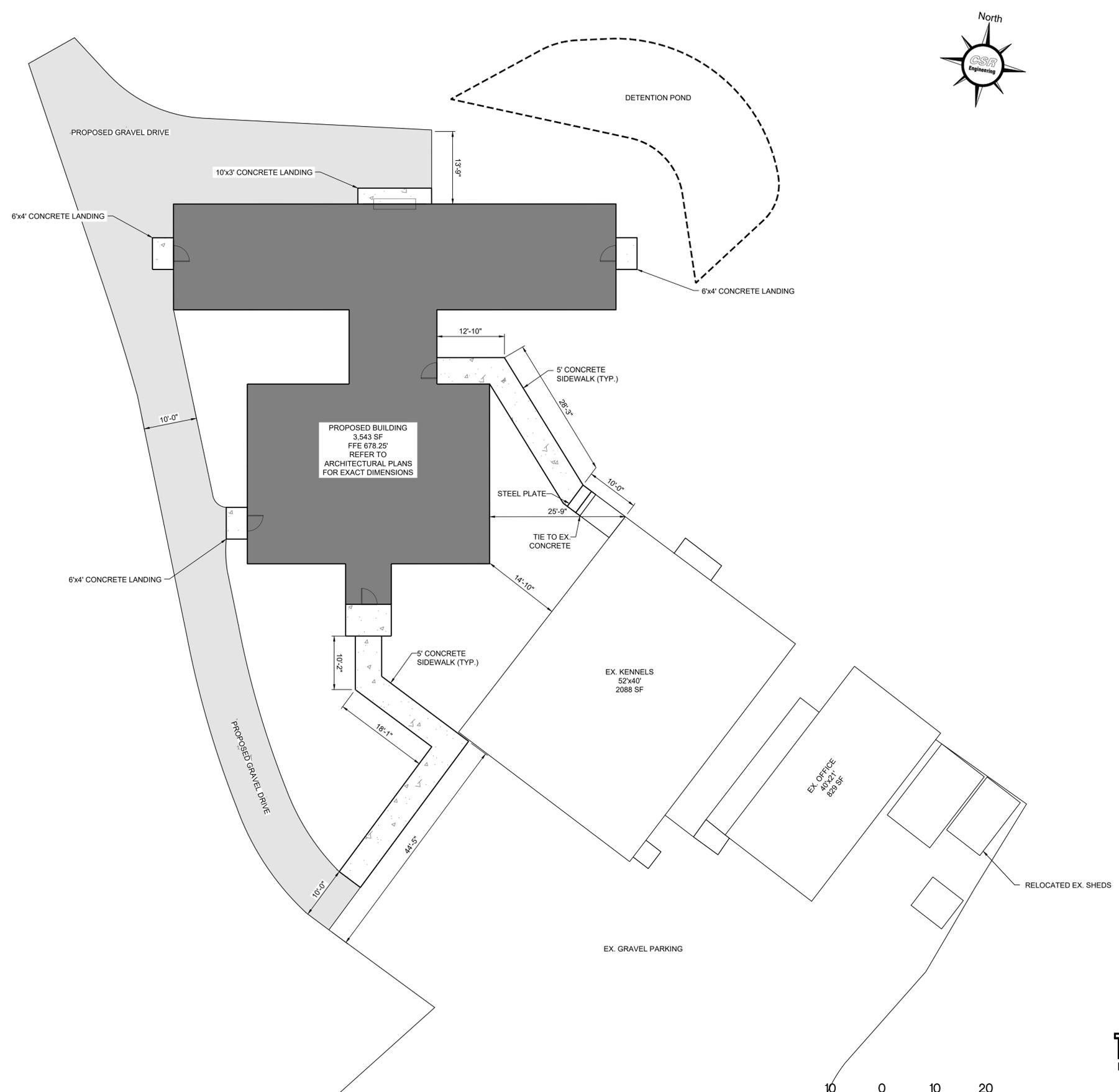
NO.	DATE	BY	DESCRIPTION
1	6-4-20	PLC	REVISED STORMWATER CONTROL

DESIGNER: MSS
REVIEWER: PLC

PROJECT: 18-145

DATE: 1-30-20
REV. 6-4-20

SHEET: C2



PURPOSE FOR ISSUE: CONSTRUCTION SCALE: 1"=10'





EPSC PLAN
 W. COUNTY FARM RD.
 ANIMAL CONTROL EXPANSION
 FOR
 ROBERTSON COUNTY
 ANIMAL CONTROL



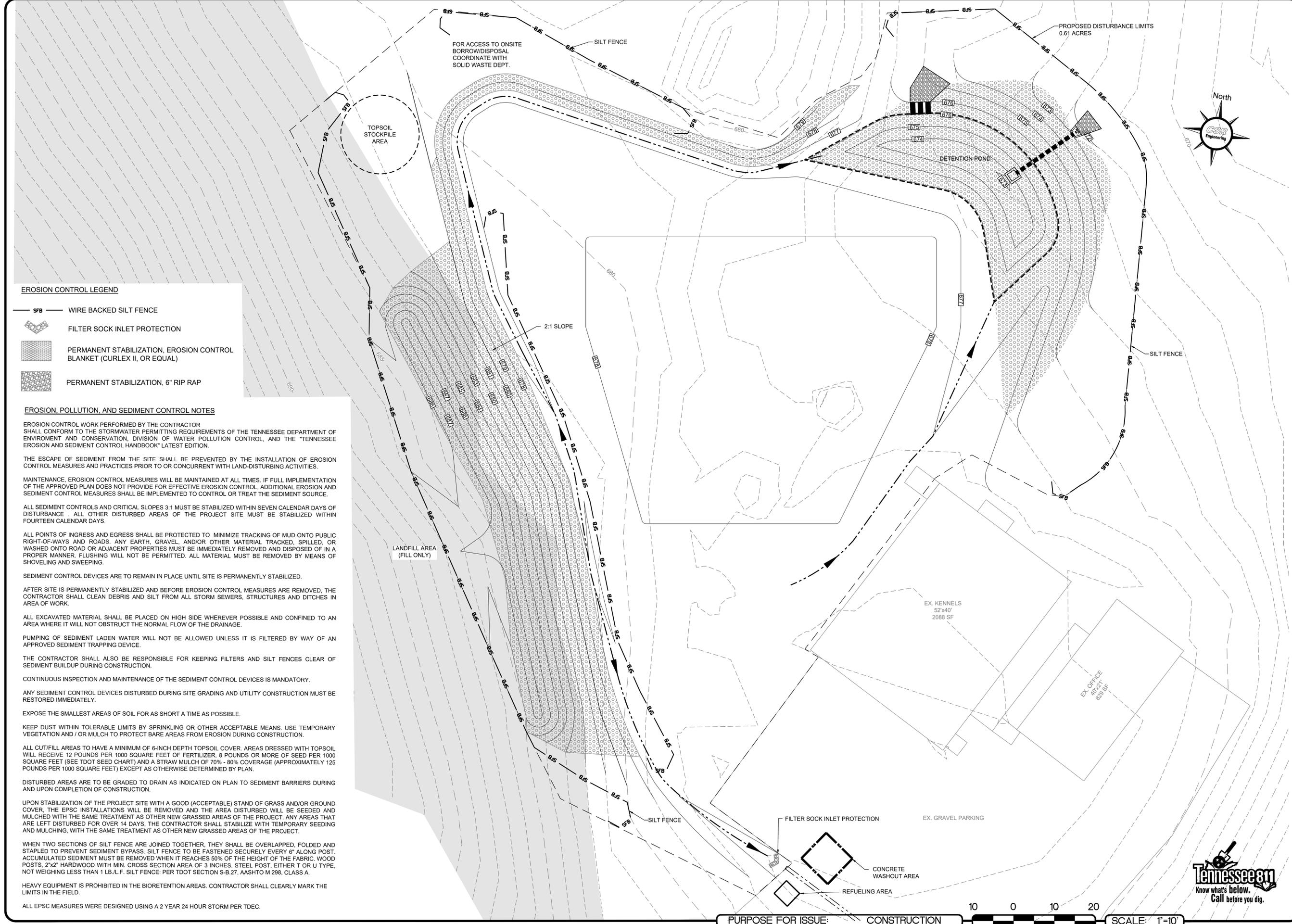
NO.	DATE	BY	DESCRIPTION
1	6-4-20	PLC	MODIFY STORMWATER OUTLET PROTECTION

DESIGNER: MSS
 REVIEWER: PLC

PROJECT: 18-145

DATE: 1-30-20
 REV. 6-4-20

SHEET: C4



EROSION CONTROL LEGEND

- WIRE BACKED SILT FENCE
- FILTER SOCK INLET PROTECTION
- PERMANENT STABILIZATION, EROSION CONTROL BLANKET (CURLIX II, OR EQUAL)
- PERMANENT STABILIZATION, 6" RIP RAP

EROSION, POLLUTION, AND SEDIMENT CONTROL NOTES

EROSION CONTROL WORK PERFORMED BY THE CONTRACTOR SHALL CONFORM TO THE STORMWATER PERMITTING REQUIREMENTS OF THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION, DIVISION OF WATER POLLUTION CONTROL, AND THE "TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK" LATEST EDITION.

THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES PRIOR TO OR CONCURRENT WITH LAND-DISTURBING ACTIVITIES.

MAINTENANCE. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.

ALL SEDIMENT CONTROLS AND CRITICAL SLOPES 3:1 MUST BE STABILIZED WITHIN SEVEN CALENDAR DAYS OF DISTURBANCE. ALL OTHER DISTURBED AREAS OF THE PROJECT SITE MUST BE STABILIZED WITHIN FOURTEEN CALENDAR DAYS.

ALL POINTS OF INGRESS AND EGRESS SHALL BE PROTECTED TO MINIMIZE TRACKING OF MUD ONTO PUBLIC RIGHT-OF-WAYS AND ROADS. ANY EARTH, GRAVEL, AND/OR OTHER MATERIAL TRACKED, SPILLED, OR WASHED ONTO ROAD OR ADJACENT PROPERTIES MUST BE IMMEDIATELY REMOVED AND DISPOSED OF IN A PROPER MANNER. FLUSHING WILL NOT BE PERMITTED. ALL MATERIAL MUST BE REMOVED BY MEANS OF SHOVELING AND SWEEPING.

SEDIMENT CONTROL DEVICES ARE TO REMAIN IN PLACE UNTIL SITE IS PERMANENTLY STABILIZED.

AFTER SITE IS PERMANENTLY STABILIZED AND BEFORE EROSION CONTROL MEASURES ARE REMOVED, THE CONTRACTOR SHALL CLEAN DEBRIS AND SILT FROM ALL STORM SEWERS, STRUCTURES AND DITCHES IN AREA OF WORK.

ALL EXCAVATED MATERIAL SHALL BE PLACED ON HIGH SIDE WHEREVER POSSIBLE AND CONFINED TO AN AREA WHERE IT WILL NOT OBSTRUCT THE NORMAL FLOW OF THE DRAINAGE.

PUMPING OF SEDIMENT LADEN WATER WILL NOT BE ALLOWED UNLESS IT IS FILTERED BY WAY OF AN APPROVED SEDIMENT TRAPPING DEVICE.

THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR KEEPING FILTERS AND SILT FENCES CLEAR OF SEDIMENT BUILDUP DURING CONSTRUCTION.

CONTINUOUS INSPECTION AND MAINTENANCE OF THE SEDIMENT CONTROL DEVICES IS MANDATORY.

ANY SEDIMENT CONTROL DEVICES DISTURBED DURING SITE GRADING AND UTILITY CONSTRUCTION MUST BE RESTORED IMMEDIATELY.

EXPOSE THE SMALLEST AREAS OF SOIL FOR AS SHORT A TIME AS POSSIBLE.

KEEP DUST WITHIN TOLERABLE LIMITS BY SPRINKLING OR OTHER ACCEPTABLE MEANS. USE TEMPORARY VEGETATION AND / OR MULCH TO PROTECT BARE AREAS FROM EROSION DURING CONSTRUCTION.

ALL CUT/FILL AREAS TO HAVE A MINIMUM OF 6-INCH DEPTH TOPSOIL COVER. AREAS DRESSED WITH TOPSOIL WILL RECEIVE 12 POUNDS PER 1000 SQUARE FEET OF FERTILIZER, 8 POUNDS OR MORE OF SEED PER 1000 SQUARE FEET (SEE TDOT SEED CHART) AND A STRAW MULCH OF 70% - 80% COVERAGE (APPROXIMATELY 125 POUNDS PER 1000 SQUARE FEET) EXCEPT AS OTHERWISE DETERMINED BY PLAN.

DISTURBED AREAS ARE TO BE GRADED TO DRAIN AS INDICATED ON PLAN TO SEDIMENT BARRIERS DURING AND UPON COMPLETION OF CONSTRUCTION.

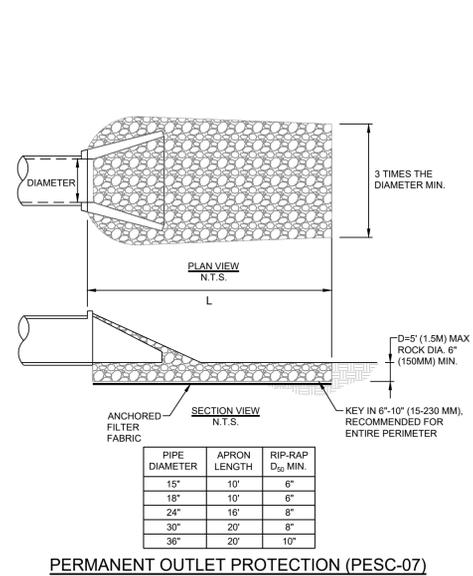
UPON STABILIZATION OF THE PROJECT SITE WITH A GOOD (ACCEPTABLE) STAND OF GRASS AND/OR GROUND COVER, THE EPSC INSTALLATIONS WILL BE REMOVED AND THE AREA DISTURBED WILL BE SEED AND MULCHED WITH THE SAME TREATMENT AS OTHER NEW GRASSED AREAS OF THE PROJECT. ANY AREAS THAT ARE LEFT DISTURBED FOR OVER 14 DAYS, THE CONTRACTOR SHALL STABILIZE WITH TEMPORARY SEEDING AND MULCHING, WITH THE SAME TREATMENT AS OTHER NEW GRASSED AREAS OF THE PROJECT.

WHEN TWO SECTIONS OF SILT FENCE ARE JOINED TOGETHER, THEY SHALL BE OVERLAPPED, FOLDED AND STAPLED TO PREVENT SEDIMENT BYPASS. SILT FENCE TO BE FASTENED SECURELY EVERY 6" ALONG POST. ACCUMULATED SEDIMENT MUST BE REMOVED WHEN IT REACHES 50% OF THE HEIGHT OF THE FABRIC. WOOD POSTS, 2"x2" HARDWOOD WITH MIN. CROSS SECTION AREA OF 3 INCHES. STEEL POST, EITHER T OR U TYPE, NOT WEIGHING LESS THAN 1 LB./L.F. SILT FENCE: PER TDOT SECTION S-B.27, AASHTO M 298, CLASS A.

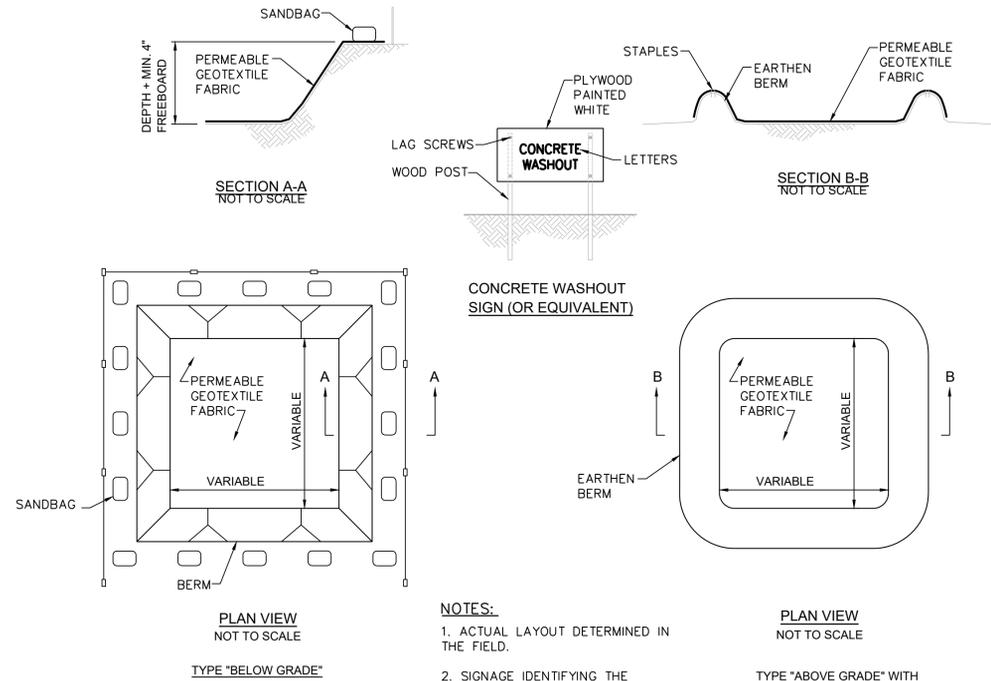
HEAVY EQUIPMENT IS PROHIBITED IN THE BIORETENTION AREAS. CONTRACTOR SHALL CLEARLY MARK THE LIMITS IN THE FIELD.

ALL EPSC MEASURES WERE DESIGNED USING A 2 YEAR 24 HOUR STORM PER TDEC.





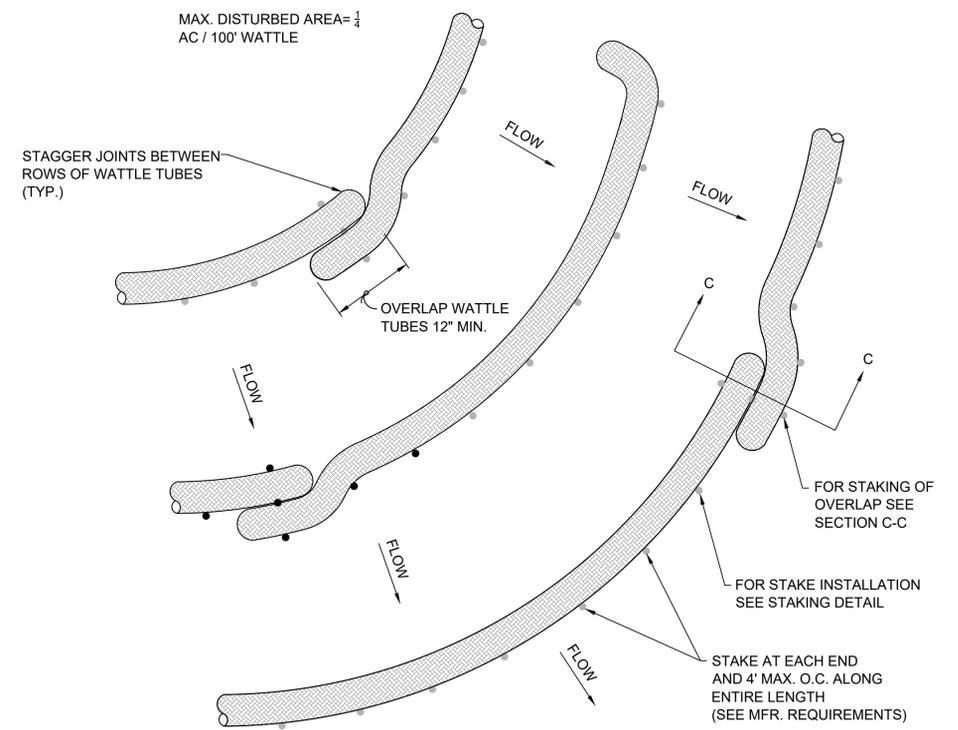
PERMANENT OUTLET PROTECTION (PESC-07)



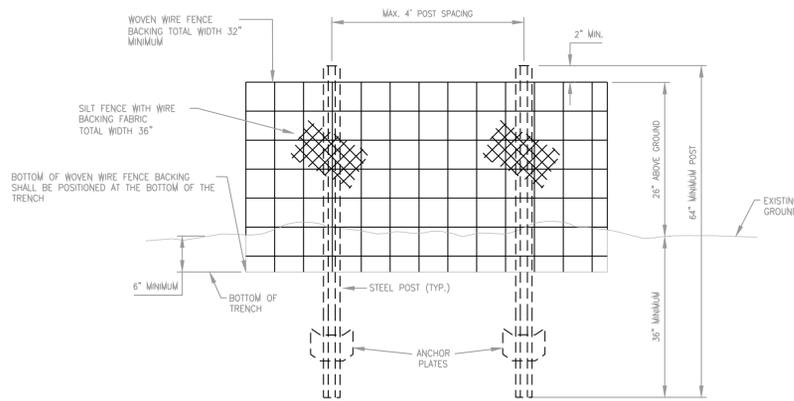
CONCRETE WASHDOWN AREA DETAIL (CP-10)

NOTES:

1. ACTUAL LAYOUT DETERMINED IN THE FIELD.
2. SIGNAGE IDENTIFYING THE CONCRETE WASHOUT AREA SHALL BE INSTALLED WITHIN 5 FT. OF THE WASHOUT FACILITY.



PLAN VIEW FOR SLOPE APPLICATION



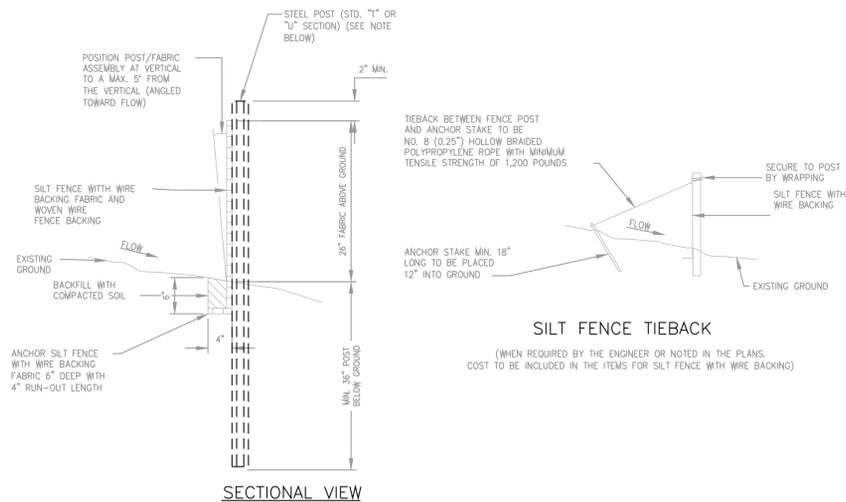
ELEVATION VIEW

SILT FENCE NOTES

1. FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL AND CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS.
2. USE METAL TIES TO SECURE SILT FENCE TO METAL FENCE.
3. SILT FENCE SHALL COMPLY WITH THE TN. DEPT. OF ENVIRONMENT AND CONSERVATION EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.
4. INSTALL PERIMETER SILTATION CONTROL PRIOR TO APPLICATION OF GRADING PERMIT.

SILT FENCE MAINTENANCE PLAN

1. CARE SHALL BE TAKEN TO MINIMIZE THE MOVEMENT OF SEDIMENT INTO ALL STORM DRAIN APPURTENANCES AND PUBLIC ROADS UNTIL THE IMPERVIOUS MATERIAL (ROAD/PARKING AREA SURFACE) IS APPLIED.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED FOR STABILITY AND OPERATIONAL INTEGRITY FOLLOWING EVERY RUNOFF PRODUCING RAINFALL BUT IN NO CASE LESS THAN EVERY WEEK. ANY NECESSARY REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN THE MEASURE'S PERFORMANCE AS DESIGNATED.
3. SEDIMENT WILL BE REMOVED FROM THE UPSTREAM FACE OF SILT FENCE WHEN IT REACHES A MAXIMUM SIX-INCH (6") DEPTH AT THE FENCE. THE FENCE WILL BE REPLACED AS NECESSARY TO MAINTAIN A BARRIER.



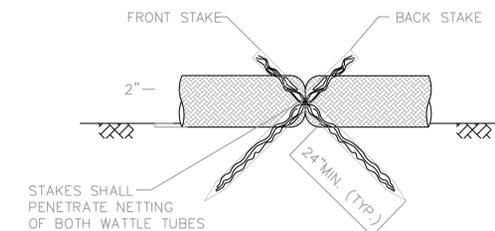
SILT FENCE TIEBACK

(WHEN REQUIRED BY THE ENGINEER OR NOTED IN THE PLANS. COST TO BE INCLUDED IN THE ITEMS FOR SILT FENCE WITH WIRE BACKING)



STAKING DETAIL

SECTION C-C



JOINT STAKING DETAIL

WEIGHTED SEDIMENT TUBE (TCP-14)

NOTE: STEEL POSTS SHALL BE ROLLED FROM HIGH CARBON STEEL AND SHALL HAVE A MINIMUM WEIGHT OF 1.25 LB/FT. POSTS SHALL BE HOT-DIPPED GALVANIZED OR PAINTED WITH HIGH GRADE WEATHER RESISTANT STEEL PAINT. STEEL POSTS SHALL BE EQUIPPED WITH AN ANCHOR PLATE HAVING A MINIMUM AREA OF 14 SQUARE INCHES. POSTS SHALL BE STUDDED, EMBOSSED, OR PUNCHED TO AID IN THE ATTACHMENT OF THE WIRE BACKING. POSTS AND ANCHOR PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A702.

EROSION CONTROL PLAN LEGEND: — SFB — SILT FENCE WITH WIRE BACKING

NO.	DATE	BY	DESCRIPTION

DESIGNER **MSS**
REVIEWER **PLC**

PROJECT **18-145**

DATE **1-30-20**

SHEET **C5**



UTILITY LEGEND

- OHE — OVERHEAD ELECTRIC
- UGE — UNDERGROUND ELECTRIC
- OHT — OVERHEAD TELECOMMUNICATIONS
- W — SERVICE WATER LINE
- 4"-SA — SANITARY SEWER SERVICE
- CLEANOUT SANITARY SEWER

UTILITY NOTES

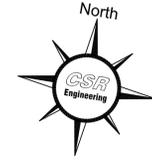
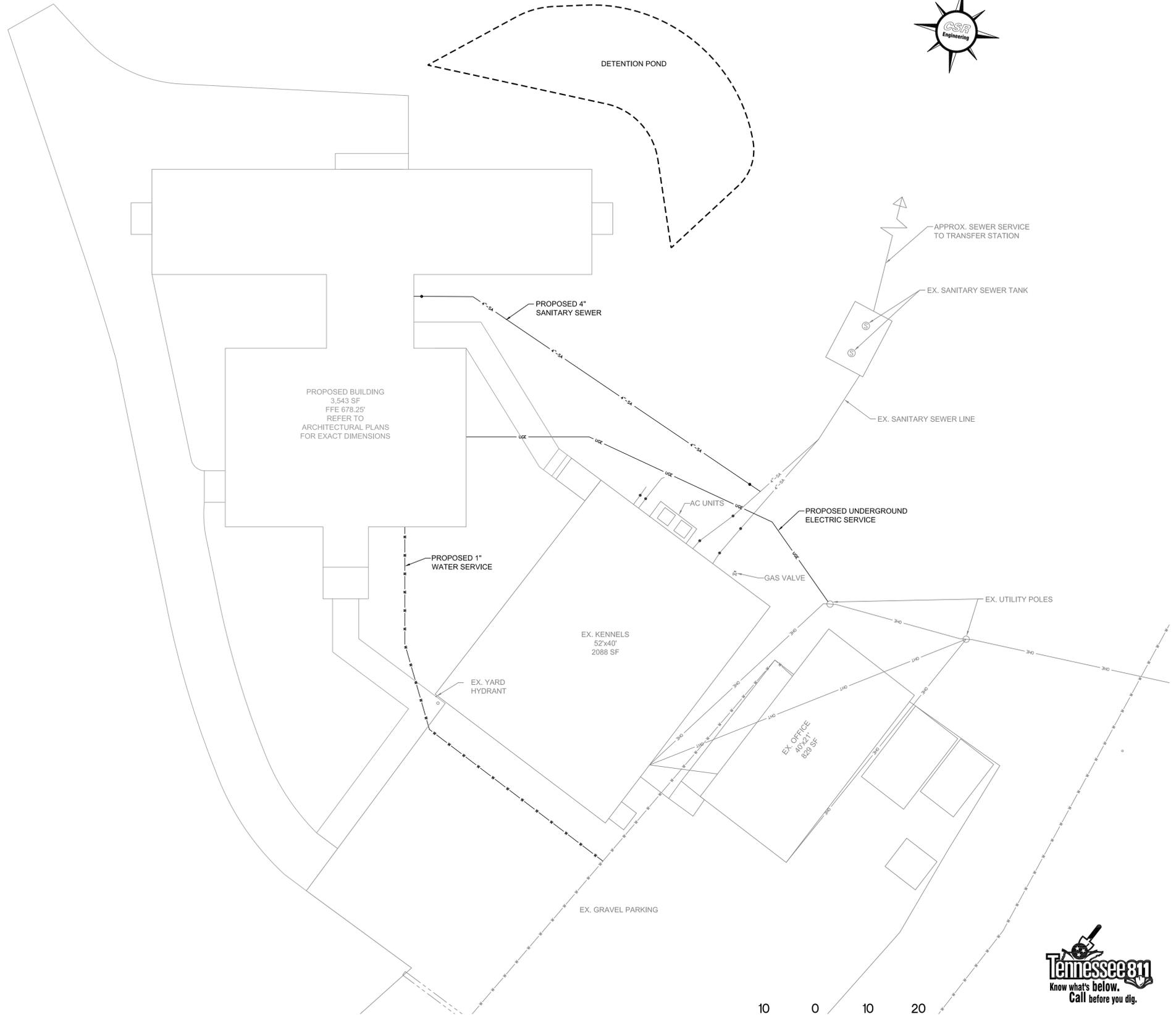
1. ALL SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH SPECIFICATIONS AND STANDARD DETAILS OF THE SPRINGFIELD WATER/WASTE WATER DEPARTMENT AND OSHA GUIDELINES.
2. UTILITIES SHOWN HEREON WERE TAKEN FROM VISIBLE OBSTRUCTIONS IN THE FIELD. LOCATIONS SHOWN ARE APPROXIMATE AND SHOULD NOT BE RELIED UPON AS ACCURATE. ADDITIONALLY, UTILITIES OTHER THAN THOSE SHOWN MAY BE ENCOUNTERED.
3. PRIOR TO CONSTRUCTION, EXCAVATION, OR DISTURBANCE OF THE EXISTING GROUND ELEVATION, THE CONTRACTOR SHALL ASSUME THE RESPONSIBILITY AND EXPENSE OF CONTACTING THE LOCAL UTILITY OWNERS AND DEFINITELY ESTABLISHING THE EXISTENCE, EXACT LOCATIONS AND SIZES OF UNDERGROUND UTILITIES TO AVOID ANY HAZARD OR CONFLICT.
4. TENNESSEE LAW REQUIRES NO LESS THAN THREE NOR MORE THAN TEN WORKING DAYS NOTICE TO UNDERGROUND UTILITY OWNERS PRIOR TO INTENT TO EXCAVATE. A LIST OF THESE UTILITIES MAY BE OBTAINED FROM EACH COUNTY'S REGISTER OF DEEDS. THOSE UTILITIES THAT PARTICIPATE IN THE TN ONE-CALL SYSTEM CAN BE NOTIFIED AT 1-800-351-1111.
5. CONTRACTOR IS TO PROTECT UTILITIES THAT ARE TO REMAIN AND ALL EXISTING IMPROVEMENTS INCLUDING BUT NOT LIMITED TO STRUCTURES, PAVEMENT, RAMPS, TREES, SIDEWALKS, CULVERTS, ETC. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING IMPROVEMENTS AND UTILITIES TO REMAIN ACCORDING TO LOCAL STANDARDS AND AT THE CONTRACTOR'S EXPENSE. CONTRACTOR IS TO COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY AUTHORITIES.

WATER NOTES

ALL WATER CONSTRUCTION SHALL BE IN ACCORDANCE WITH SPECIFICATIONS AND STANDARD DETAILS OF SPRINGFIELD WATER/WASTE WATER DEPARTMENT.

PROPOSED UTILITY NOTES

- SEE SHEET C7 FOR STORMWATER DETAILS.
- ALL UTILITIES SHALL BE INSTALLED UNDERGROUND UNLESS NOTED OTHERWISE.
- UNDERGROUND ELECTRIC SHOWN IS APPROXIMATE. FINAL LOCATION AND EASEMENTS SHALL BE DETERMINED BY CEMC.



PURPOSE FOR ISSUE: CONSTRUCTION



CSR Engineering, Inc.
1116 Main Street
Pleasant View, TN 37146
P: 615.212.2389
F: 615.246.3815
www.csrengineers.com



UTILITY PLAN
W. COUNTY FARM RD.
ANIMAL CONTROL EXPANSION
FOR
ROBERTSON COUNTY
ANIMAL CONTROL



REVISIONS	
NO.	DESCRIPTION

DESIGNER: MSS
REVIEWER: PLC

PROJECT: 18-145

DATE: 1-30-20

SHEET: C6



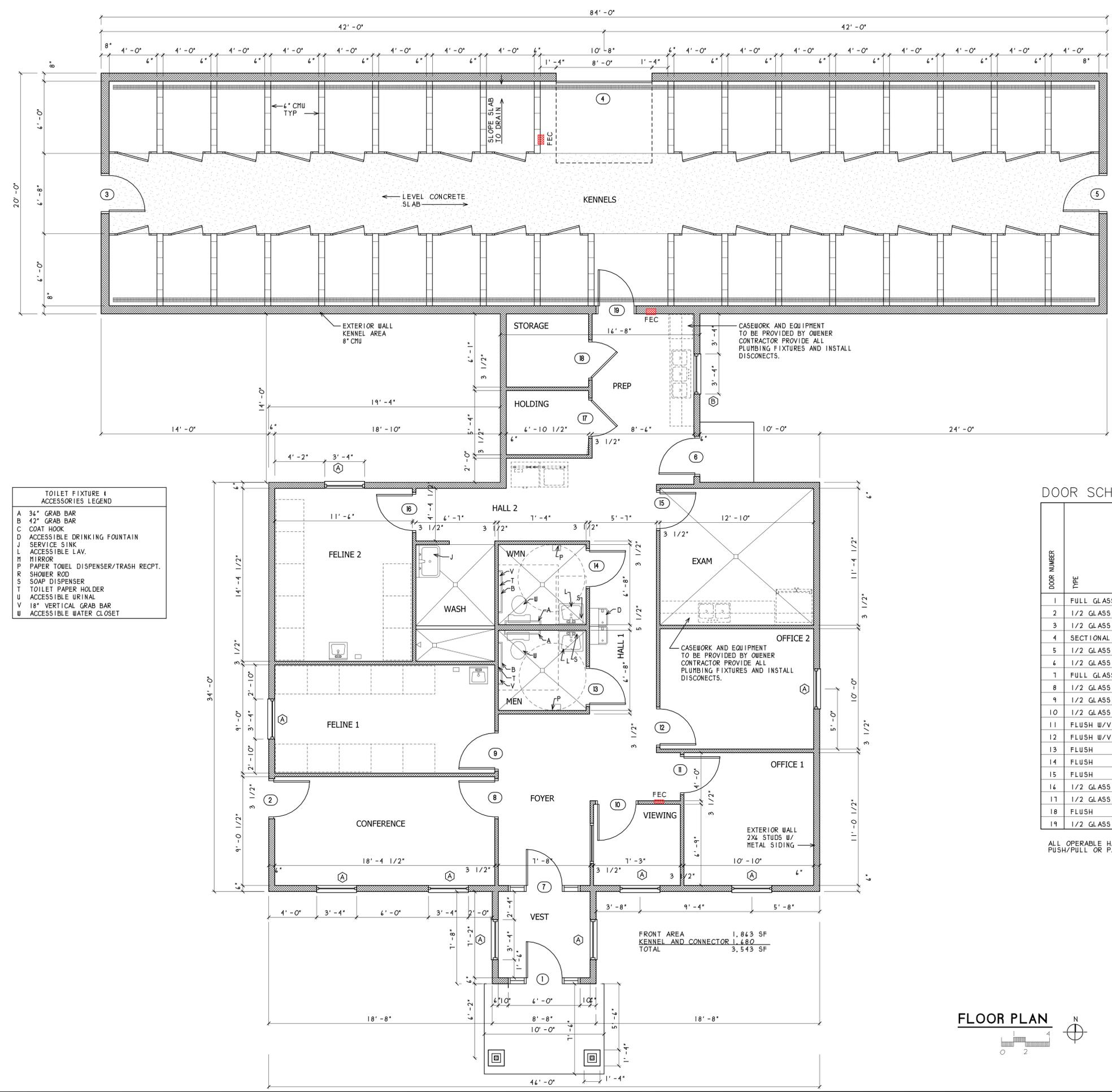


JOHN F. WERNE III
ARCHITECT

1020 OWEN COURT, ASHLAND CITY, TENNESSEE 37015 615-793-3965 jwerne3@gmail.com

ROBERTSON COUNTY
ANIMAL CONTROL

W. COUNTY FARM ROAD, ROBERTSON COUNTY, TN



TOILET FIXTURE & ACCESSORIES LEGEND

- A 36" GRAB BAR
- B 42" GRAB BAR
- C COAT HOOK
- D ACCESSIBLE DRINKING FOUNTAIN
- J SERVICE SINK
- L ACCESSIBLE LAV.
- M MIRROR
- P PAPER TOWEL DISPENSER/TRASH RECEPT.
- R SHOWER ROD
- S SOAP DISPENSER
- T TOILET PAPER HOLDER
- U ACCESSIBLE URINAL
- V 18" VERTICAL GRAB BAR
- W ACCESSIBLE WATER CLOSET

DOOR SCHEDULE

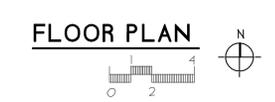
DOOR NUMBER	TYPE	WIDTH	HEIGHT	DOOR MATERIAL	FRAME MATERIAL	RATING	LOCATION	SET OF HINGES	LOCKSET	PRIVACY LATCHSET	CLOSER	PUSH/PULL	SILENCERS	STOP	THRESHOLD	WEATHER SEAL
1	FULL GLASS	3'-0"	7'-0"	AL	AL	AL	VEST ENT	■	■	■	■	■	■	■	■	■
2	1/2 GLASS	3'-0"	7'-0"	HM	HM	HM	CONFERENCE	■	■	■	■	■	■	■	■	■
3	1/2 GLASS	3'-0"	7'-0"	HM	HM	HM	KENNELS	■	■	■	■	■	■	■	■	■
4	SECTIONAL	8'-0"	7'-0"	HM	HM	HM	KENNELS	■	■	■	■	■	■	■	■	■
5	1/2 GLASS	3'-0"	7'-0"	HM	HM	HM	KENNELS	■	■	■	■	■	■	■	■	■
6	1/2 GLASS	3'-0"	7'-0"	HM	HM	HM	PREP	■	■	■	■	■	■	■	■	■
7	FULL GLASS	3'-0"	7'-0"	AL	AL	AL	VEST/FOYER	■	■	■	■	■	■	■	■	■
8	1/2 GLASS	3'-0"	7'-0"	HM	HM	HM	CONFERENCE	■	■	■	■	■	■	■	■	■
9	1/2 GLASS	3'-0"	7'-0"	HM	HM	HM	FELINE 1	■	■	■	■	■	■	■	■	■
10	1/2 GLASS	3'-0"	7'-0"	HM	HM	HM	VIEWING	■	■	■	■	■	■	■	■	■
11	FLUSH W/VIEW	3'-0"	7'-0"	HM	HM	HM	OFFICE 1	■	■	■	■	■	■	■	■	■
12	FLUSH W/VIEW	3'-0"	7'-0"	HM	HM	HM	OFFICE 2	■	■	■	■	■	■	■	■	■
13	FLUSH	3'-0"	7'-0"	HM	HM	HM	MEN	■	■	■	■	■	■	■	■	■
14	FLUSH	3'-0"	7'-0"	HM	HM	HM	WOMEN	■	■	■	■	■	■	■	■	■
15	FLUSH	3'-0"	7'-0"	HM	HM	HM	EXAM	■	■	■	■	■	■	■	■	■
16	1/2 GLASS	3'-0"	7'-0"	HM	HM	HM	FELINE 2	■	■	■	■	■	■	■	■	■
17	1/2 GLASS	3'-0"	7'-0"	HM	HM	HM	HOLDING	■	■	■	■	■	■	■	■	■
18	FLUSH	3'-0"	7'-0"	HM	HM	HM	STORAGE	■	■	■	■	■	■	■	■	■
19	1/2 GLASS	3'-0"	7'-0"	HM	HM	HM	KENNELS	■	■	■	■	■	■	■	■	■

HARDWARE SCHEDULE

WINDOW SCHEDULE

MARK	TYPE	NOMINAL OPENING		HEAD HEIGHT	FRAME	GLAZING	REMARKS
		WIDTH	HEIGHT				
A	DBL HUNG	3'-4"	5'-4"	7'-4"	AL	DBL	
B	DBL HUNG	3'-4"	3'-4"	7'-4"	AL	DBL	

ALL OPERABLE HARDWARE SHALL BE LEVER ACTION. MATCH DOOR 1 STOREFRONT TO DOOR 1 STOREFRONT ELEVATION PUSH/PULL OR PANIC DEVICE.



DESIGNER _____
 REVIEWER _____
 PROJECT _____
 DATE 5/19/20
 SHEET **A-1**

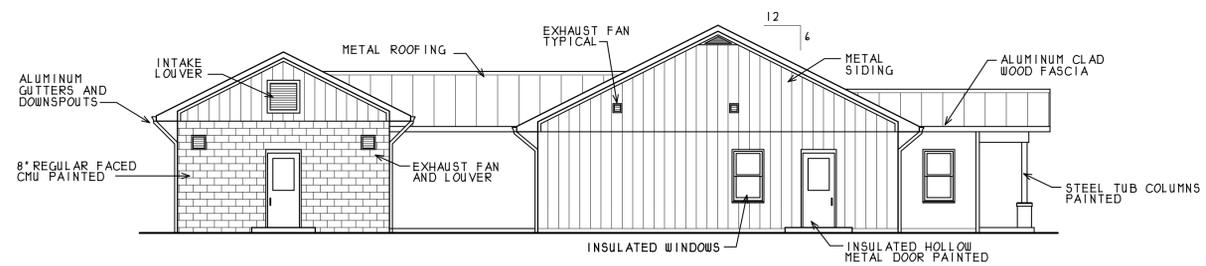


JOHN F. WERNE
ARCHITECT

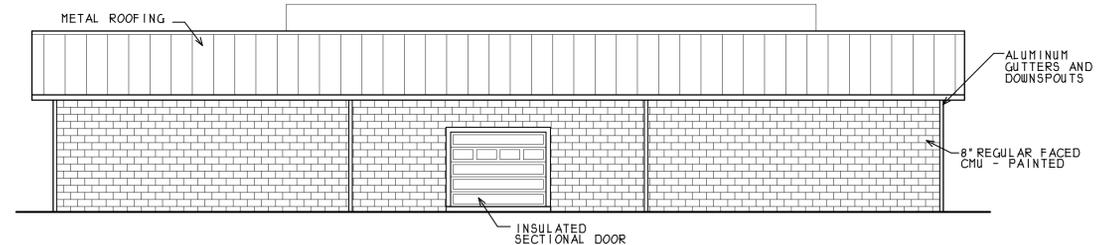
1020 OWEN COURT, ASHLAND CITY, TENNESSEE 37015 615-792-3966 jwerne3@gmail.com

ROBERTSON COUNTY
ANIMAL CONTROL

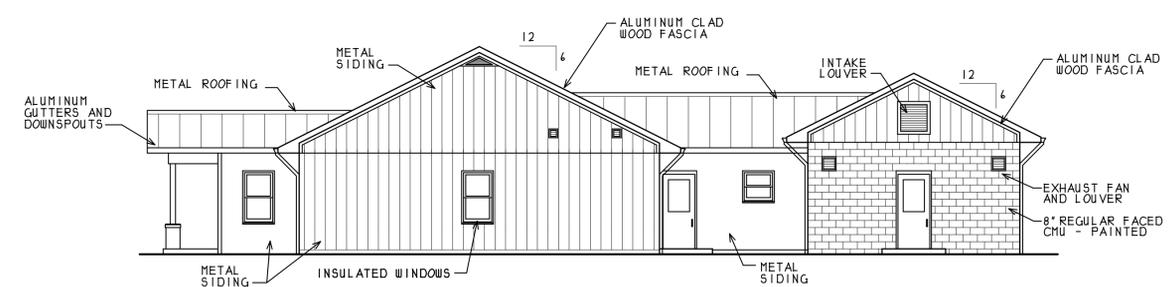
W. COUNTY FARM ROAD, ROBERTSON COUNTY, TN



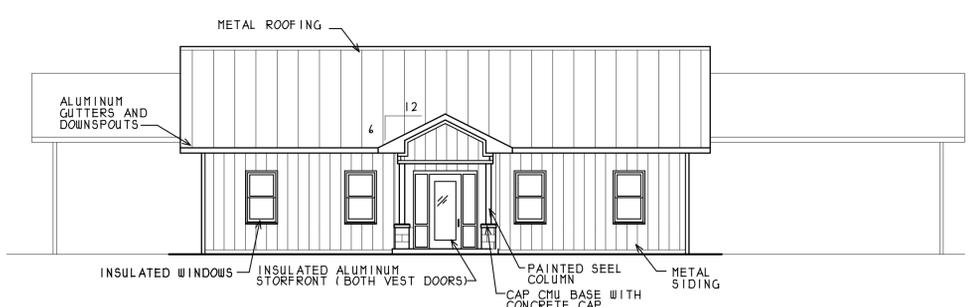
LEFT ELEVATION



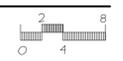
REAR ELEVATION



RIGHT ELEVATION



FRONT ELEVATION

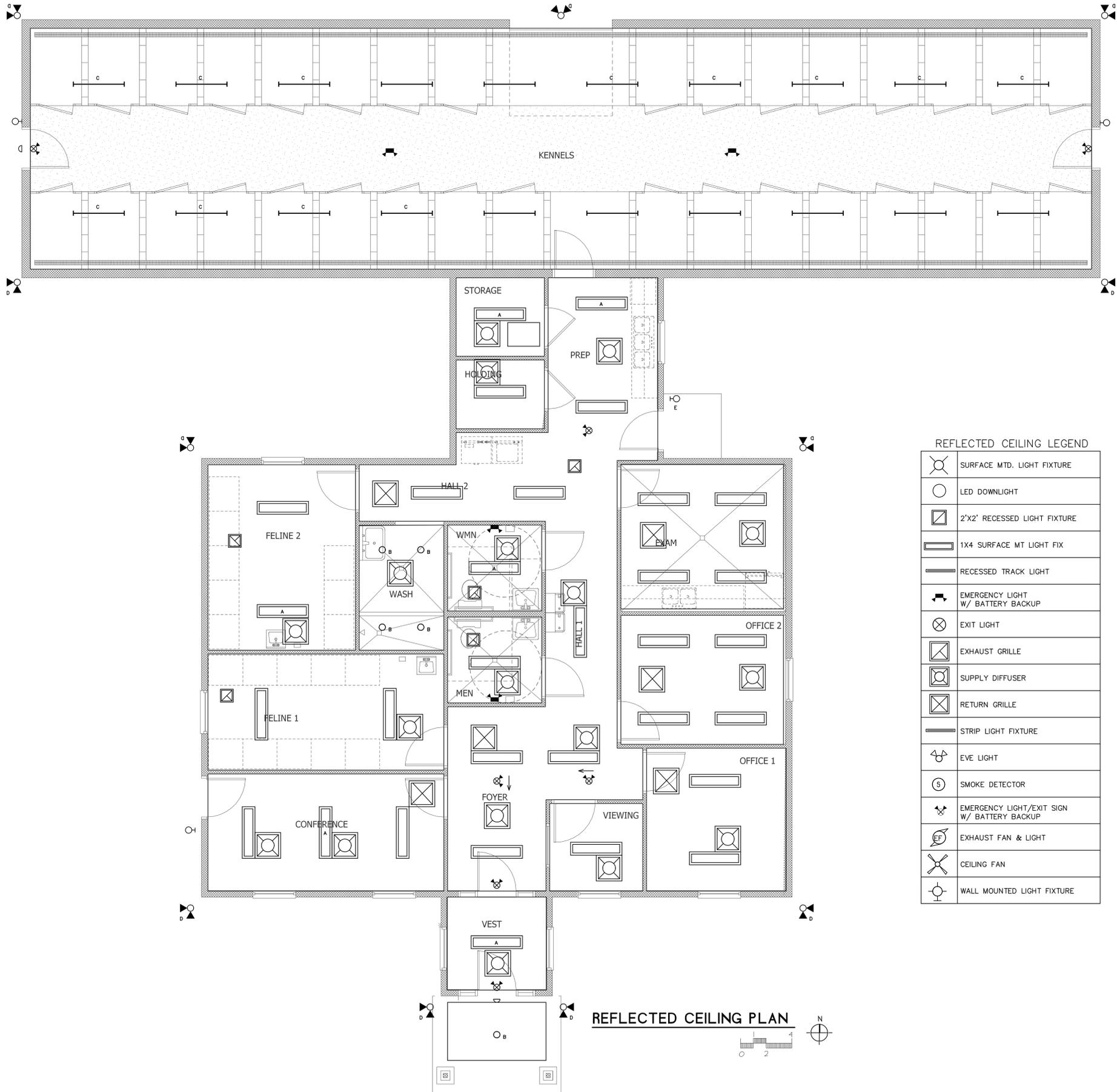


DESIGNER
 REVIEWER

PROJECT

DATE 5/19/20

SHEET **A-2**



REFLECTED CEILING LEGEND

	SURFACE MTD. LIGHT FIXTURE
	LED DOWNLIGHT
	2'X2' RECESSED LIGHT FIXTURE
	1X4 SURFACE MT LIGHT FIX
	RECESSED TRACK LIGHT
	EMERGENCY LIGHT W/ BATTERY BACKUP
	EXIT LIGHT
	EXHAUST GRILLE
	SUPPLY DIFFUSER
	RETURN GRILLE
	STRIP LIGHT FIXTURE
	EYE LIGHT
	SMOKE DETECTOR
	EMERGENCY LIGHT/EXIT SIGN W/ BATTERY BACKUP
	EXHAUST FAN & LIGHT
	CEILING FAN
	WALL MOUNTED LIGHT FIXTURE



JOHN F. WERNE
ARCHITECT

1020 OWEN COURT, ASHLAND CITY, TENNESSEE 37015 615-792-3965 jwerne3@gmail.com

ROBERTSON COUNTY
ANIMAL CONTROL

W. COUNTY FARM ROAD, ROBERTSON COUNTY, TN

DESIGNER
REVIEWER

PROJECT

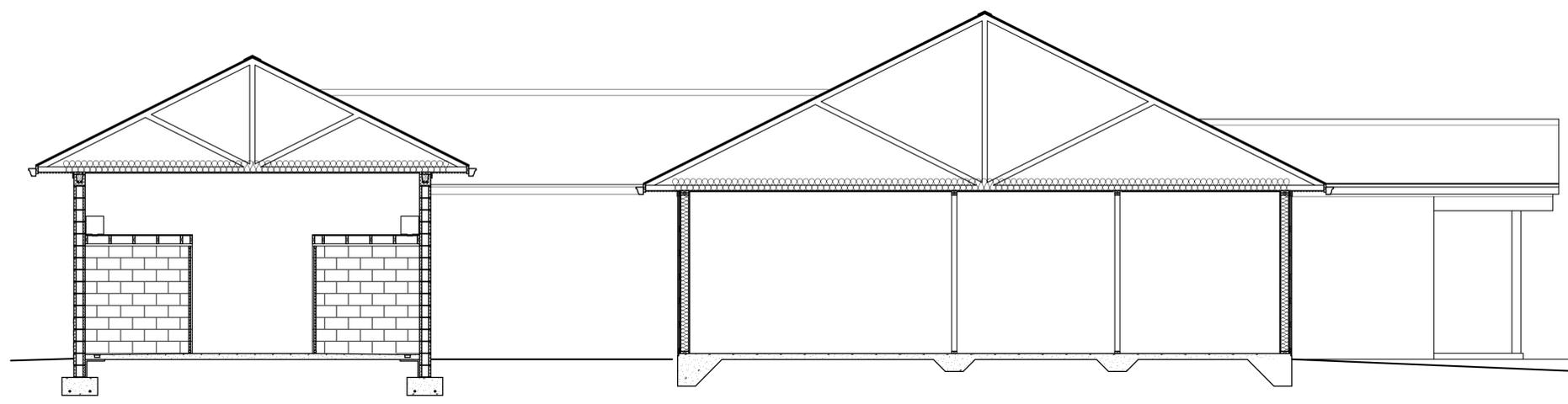
DATE 5/19/20

SHEET **A-3**

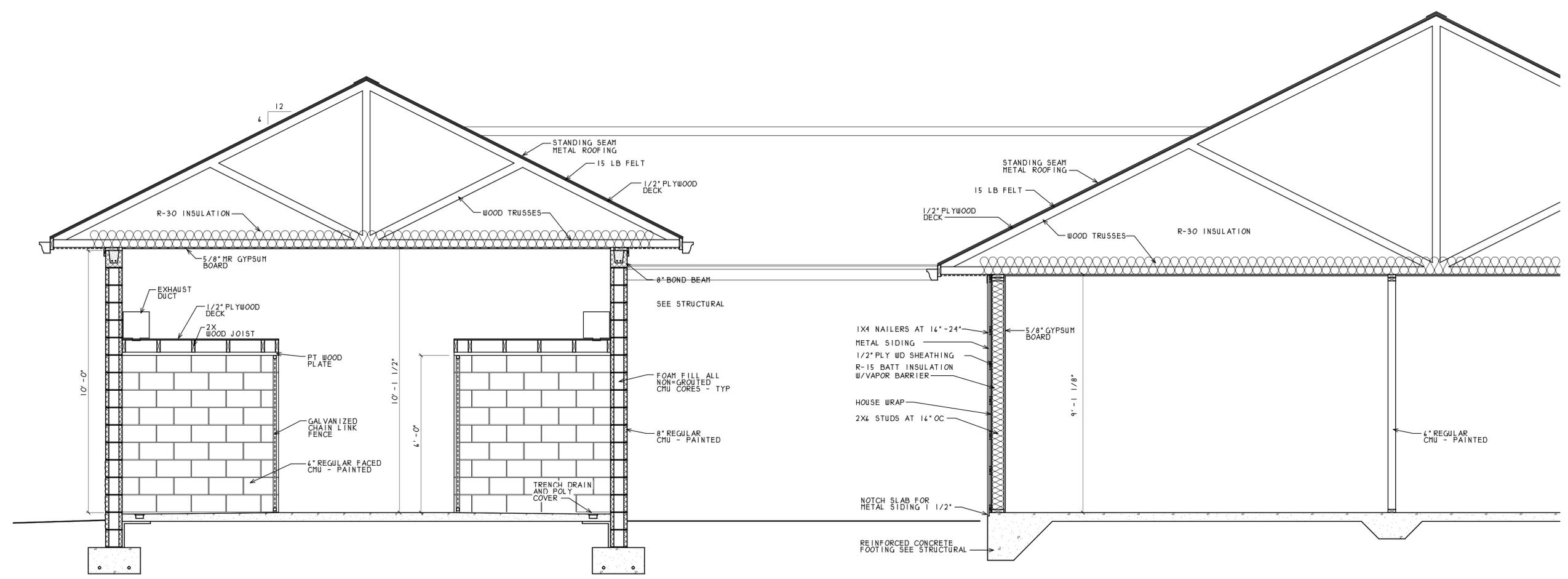


JOHN F. WERNE
ARCHITECT

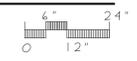
1020 OWEN COURT, ASHLAND CITY, TENNESSEE 37015 615-792-3965 jwerne3@gmail.com



OVERALL SECTION



SECTION



ROBERTSON COUNTY
ANIMAL CONTROL

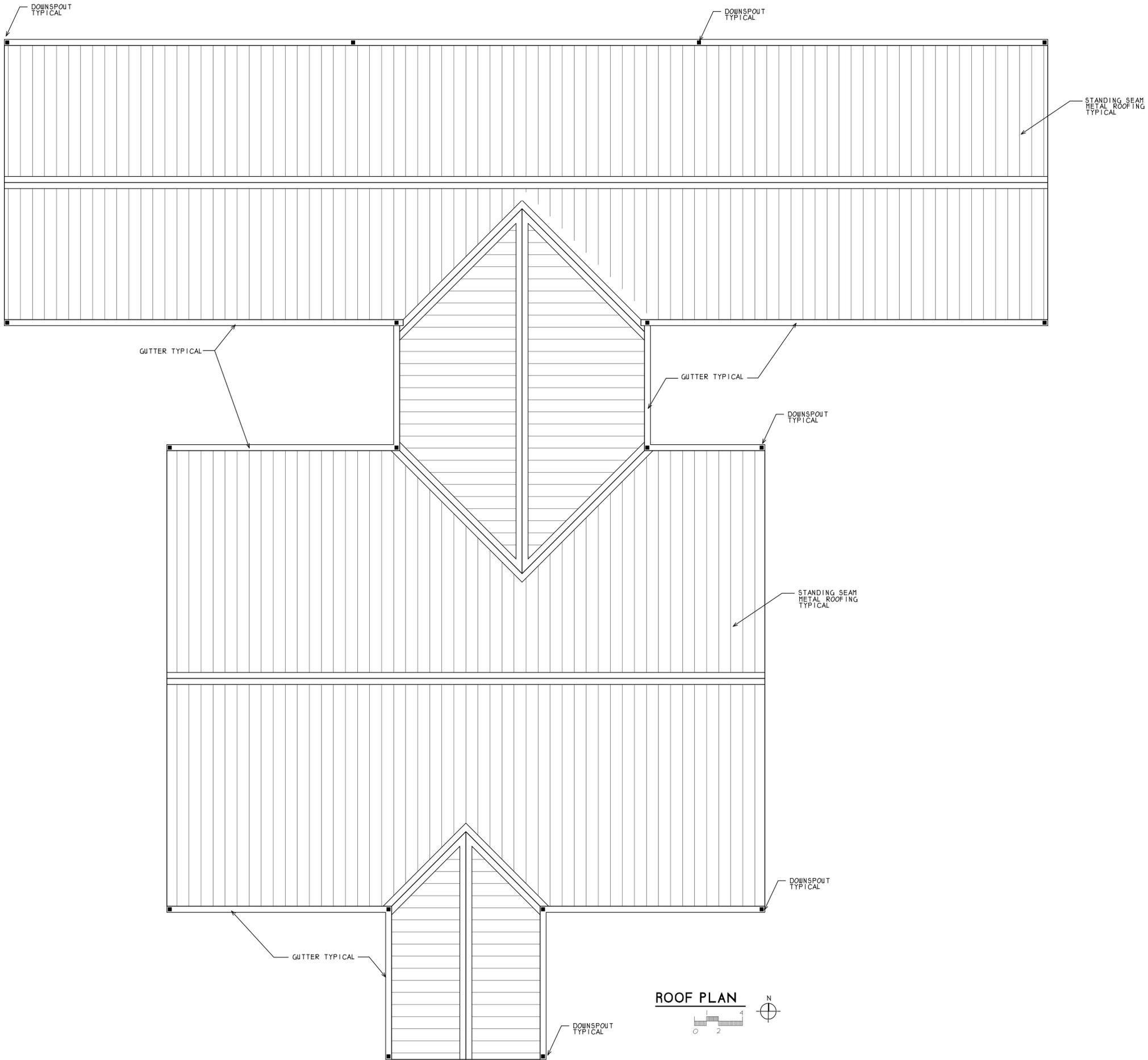
W. COUNTY FARM ROAD, ROBERTSON COUNTY, TN

DESIGNER
REVIEWER

PROJECT

DATE 5/19/20

SHEET **A-4**



JOHN F. WERNE
ARCHITECT

1020 OWEN COURT, ASHLAND CITY, TENNESSEE 37015 615-793-3966 jwerne3@gmail.com

ROBERTSON COUNTY
ANIMAL CONTROL

W. COUNTY FARM ROAD, ROBERTSON COUNTY, TN

DESIGNER
 REVIEWER

PROJECT

DATE 5/19/20

SHEET **A-5**



JOHN F. WERNE III
ARCHITECT

1020 OWEN COURT, ASHLAND CITY, TENNESSEE 37015 615-792-3965 jwerne3@gmail.com

ROBERTSON COUNTY
ANIMAL CONTROL

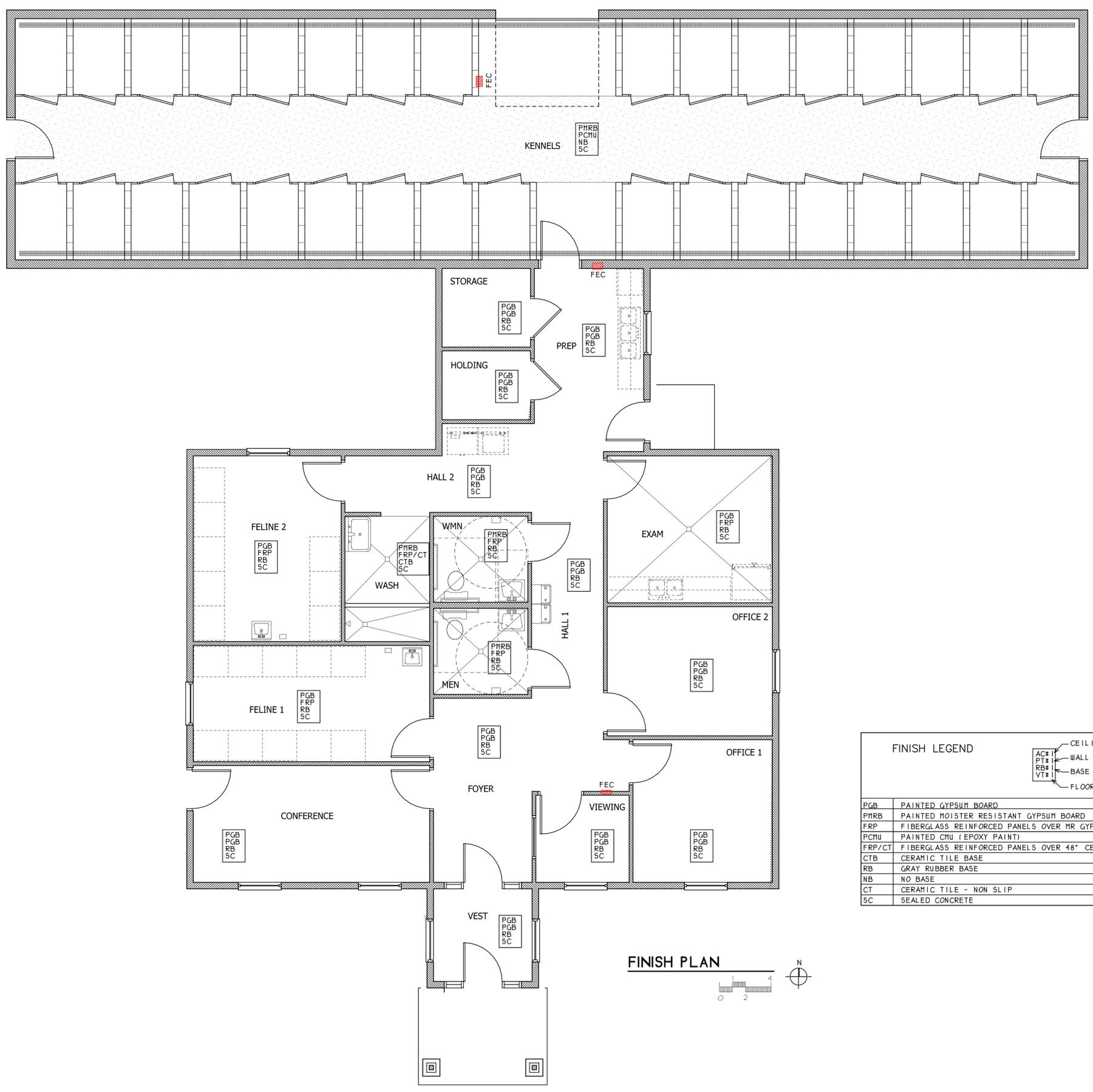
W. COUNTY FARM ROAD, ROBERTSON COUNTY, TN

DESIGNER
 REVIEWER

PROJECT

DATE 5/19/20

SHEET **A-6**



FINISH LEGEND	
AC#	CEILING FINISH
PT#	WALL FINISH
RB#	BASE FINISH
VT#	FLOOR FINISH
PGB	PAINTED GYPSUM BOARD
PMRB	PAINTED MOISTURE RESISTANT GYPSUM BOARD
FRP	FIBERGLASS REINFORCED PANELS OVER MR GYP BD
PCHU	PAINTED CHU (EPOXY PAINT)
FRP/CT	FIBERGLASS REINFORCED PANELS OVER 48" CERAMIC TILE
CTB	CERAMIC TILE BASE
RB	GRAY RUBBER BASE
NB	NO BASE
CT	CERAMIC TILE - NON SLIP
SC	SEALED CONCRETE



GENERAL NOTES

DESIGN CRITERIA

(1) CODE: INTERNATIONAL BUILDING CODE, 2012 EDITION WITH LOCAL AMENDMENTS

(2) DESIGN LOADS:

DEAD LOADS:
SELF WEIGHT OF STRUCTURE
GROUND SNOW LOAD 10 PSF

LIVE LOADS:
ROOF LIVE LOAD 20 PSF; 300 LB CONCENTRATED
PERMITTED TO BE REDUCED PER IBC SECTION 1607.12.2.1
PARTITION LOADING 5 PSF MINIMUM

WIND DESIGN CRITERIA:
RISK CATEGORY II
ULTIMATE DESIGN WIND SPEED 115 MPH
EXPOSURE CATEGORY C
ENCLOSURE CLASSIFICATION ENCLOSED
SEE SHEET S7 FOR C&C WIND PRESSURES (SERVICE LEVEL)

SEISMIC DESIGN CRITERIA:
IMPORTANCE FACTOR 1.0
SITE CLASS C
SEISMIC DESIGN CATEGORY C
S/S 0.335
S/1 0.155
S/DS 0.268
S/D1 0.170

SEISMIC FORCE RESISTING SYSTEM:
RESISTING SYSTEM: INTERMEDIATE REINFORCED MASONRY SHEAR WALLS
RESPONSE MODIFICATION FACTOR R: 3.5
ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE
SEISMIC RESPONSE COEFFICIENT: 0.077
BASE SHEAR: 26K

GENERAL

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, AND EXISTING CONDITIONS PRIOR TO STARTING CONSTRUCTION AND NOTIFY THE ARCHITECT & ENGINEER OF ANY DISCREPANCIES OR INCONSISTENCIES

ALL DIMENSIONS TO TAKE PRECEDENCE OVER SCALE SHOWN ON PLANS, SECTIONS, AND DETAILS

THE CONTRACTOR IS RESPONSIBLE FOR ALL MEANS AND METHODS OF CONSTRUCTION AS WELL AS ALL JOBSITE SAFETY AND MEASURES NECESSARY TO PROTECT THE PROPOSED AND EXISTING STRUCTURES. SUCH MEASURES INCLUDE, BUT ARE NOT LIMITED TO BRACING, SHORING FOR EXCAVATIONS, SHORING FOR CONSTRUCTION EQUIPMENT, FORMWORK, SCAFFOLDING, AND PROTECTION OF UTILITIES.

FOUNDATION NOTES

INDIVIDUAL FOOTINGS ARE DESIGNED TO BEAR ON UNIFORM SOIL CAPABLE OF SUPPORTING 3,000 PSF. STRIP FOOTINGS ARE DESIGNED TO BEAR ON UNIFORM SOIL CAPABLE OF SUPPORTING 3,000 PSF. IF POOR SOILS ARE ENCOUNTERED, THEY SHALL BE REMOVED AND FILLED IN WITH COMPACTED STRUCTURAL FILL.

THE SOIL BEARING CAPACITY AND CONSISTENCY SHALL BE VERIFIED FOR THE BUILDING LIMITS BY A PROFESSIONAL ENGINEER WHEN FOUNDATION EXCAVATIONS HAVE BEEN CARRIED DOWN TO THE PROPOSED ELEVATIONS

BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE 1'-6" BELOW FINISHED GRADE.

WHERE FOOTING STEPS ARE NECESSARY, THEY SHALL BE NO STEEPER THAN 1 VERTICAL TO 2 HORIZONTAL UNLESS SHOWN OTHERWISE ON PLANS

IF IT IS NECESSARY TO LEAVE FOOTINGS OPEN OVERNIGHT OR MAY BE EXPOSED TO RAINFALL, THEY SHALL BE COVERED AND THE GROUND SURFACE ALONG THE SIDES OF THE FOOTINGS SLOPED AWAY FROM THE FOOTING EXCAVATION. ALTERNATIVELY, THE EXCAVATION MAY BE UNDERCUT AND A 3 INCH THICK MUD MAT OF 2,000 PSI CONCRETE SHALL BE PLACED IN THE BOTTOM TO PROTECT THE BEARING SOIL.

REINFORCED CONCRETE

REINFORCED CONCRETE DESIGNED PER ACI 318.

CONCRETE WORK SHALL CONFORM TO REQUIREMENTS OF ACI 301 - SPECIFICATIONS FOR STRUCTURAL CONCRETE.

THE COMPRESSIVE STRENGTH AT 28 DAYS OF ALL CAST IN PLACE CONCRETE SHALL BE:

4,000 PSI - ELEVATED SLABS, SLAB ON GRADE, WALLS, AND FOOTING PEDESTALS

3,000 PSI - ISOLATED, PERIMETER, AND INTERIOR STRIP FOOTINGS

5,000 PSI - CONCRETE EXPOSED TO FREEZING-AND-THAWING CYCLES AND DEICING AGENTS

REINFORCING STEEL SHALL BE DEFORMED BARS ASTM A615 GRADE 60.

LAP SPLICES FOR REINFORCING BARS SHALL BE CLASS B IN ACCORDANCE WITH ACI 318-11, UNLESS NOTED OTHERWISE

PROVIDE MINIMUM (2) #4 X 6'-0" BARS AT 45 DEGREES AT ALL REENTRANT CORNERS IN SLAB ON GRADE

CLEAR CONCRETE COVER FOR REINFORCING STEEL (U.N.O.):

WALLS 2" FOR #6 BARS OR GREATER

1-1/2" FOR #5 BARS OR SMALLER

FOOTINGS 2" FORMED EDGES

3" CAST AGAINST GROUND

SLAB ON GRADE LOCATED IN TOP 1/3 OF SLAB

MASONRY WALLS LOCATE IN CENTER OF WALL

CONCRETE MIX DESIGNS SHALL BE ESTABLISHED BY THE SUPPLIER IN ACCORDANCE WITH ACI 318-11. MIX DESIGNS SHALL BE SUBMITTED WITH BACK-UP DATA PER ACI 318-11 TO THE ENGINEER FOR REVIEW PRIOR TO CONCRETE PLACEMENT.

ALL CONCRETE EXPOSED TO WEATHER SHALL CONTAIN 6 TO 8% ENTRAINED AIR.

ALL CONCRETE PLACED SHALL BE VIBRATED WITH MECHANICAL VIBRATORS

FINISHED CONCRETE SLAB SHALL HAVE A HARD TROWELED FINISH IN ACCORDANCE WITH ACI 117

LONGITUDINAL REINFORCING STEEL IN BOND BEAMS, WALLS, AND FOOTINGS SHALL BE CONTINUOUS AROUND CORNERS.

AN EVAPORATION CONTROL AGENT (CURING COMPOUND) SHALL BE APPLIED TO THE SURFACE OF THE NEWLY CAST SLABS AT THE RATE SPECIFIED BY THE MANUFACTURER. SAWCUT TYPE CONTROL JOINTS IN CONCRETE SLABS SHALL BE CUT AS SOON AS THE CONCRETE CAN BE SAWED WITHOUT CAUSING THE EDGES TO RAVEL AND IN NO CASE SHALL BE LATER THAN 12 HOURS AFTER THE SLAB IS PLACED.

CONCRETE SHALL BE TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF ACI 318-11 SECTIONS 5.6

CONCRETE MASONRY

CONCRETE MASONRY SHALL CONFORM TO THE NATIONAL CONCRETE MASONRY ASSOCIATION SPECIFICATIONS AND HAVE A DENSITY OF 125 PCF AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS (F'm) OF 1500 PSI

GROUT FOR FILLING CONCRETE MASONRY CELLS SHALL CONFORM TO STANDARD SPECIFICATIONS ASTM C476 AND SHALL HAVE A COMPRESSIVE STRENGTH (F'm) OF 3,000 PSI AT 28 DAYS. THE SLUMP SHALL BE BETWEEN 9 AND 11 INCHES. WHERE THE MINIMUM DIMENSION OF ANY CONTINUOUS VERTICAL CELL IS 3 INCHES OR LESS, USE FINE GROUT OTHERWISE USE A COARSE (PEA GRAVEL) GROUT.

MORTAR FOR CONCRETE MASONRY SHALL BE TYPE 'S' AND SHALL CONFORM TO ASTM C-270

MASONRY CONSTRUCTION SHALL BE BUILT IN LIFTS NOT TO EXCEED 4 FEET PRIOR TO GROUTING CORES. KEY NEXT GROUT LIFT INTO PRIOR LIFT BY STOPPING FIRST LIFT 2" BELOW TOP OF BLOCK. DO NOT FORM GROUT KEYS IN BEAMS OR LINTELS

ALL REINFORCING BARS IN FILLED CELLS SHALL BE DOWELED INTO FOOTINGS WITH STANDARD 90 DEGREE HOOKS AND DOWELED 7 INCHES INTO BOND BEAMS AT TOPS OF WALLS

REBAR POSITIONERS SHALL BE USED TO ENSURE PROPER BAR ALIGNMENT IN CELLS

MASONRY WALL CONTROL JOINTS SHALL BE LOCATED AS SHOWN ON THE ARCHITECTURAL DRAWINGS.

REINFORCEMENT IN WALLS SHALL BE PLACED IN THE CENTER OF THE WALL UNLESS NOTED OTHERWISE. ALL CELLS WITH VERTICAL REINFORCING BARS SHALL BE GROUTED SOLID.

ALL GROUT SHALL BE VIBRATED

EXTERIOR MASONRY WALLS (8")

VERTICAL REINFORCING BARS SHALL BE LOCATED WITHIN 16" OF EACH SIDE OF OPENINGS, 8" OF END OF WALLS, AND SPACED NO GREATER THAN 32" ON CENTER. ALL VERTICAL BARS SHALL BE #5 BARS

HORIZONTAL REINFORCING BARS SHALL BE PROVIDED AT THE TOP OF WALLS AND BOTTOM AND TOP OF WALL OPENINGS AND SHALL EXTEND 24" OR 40 BAR DIAMETERS PAST THE OPENING. HORIZONTAL REINFORCEMENT SHALL CONSIST OF 8" CMU BOND BEAMS W/ (2) #5s TYPICAL. HORIZONTAL REINFORCEMENT SHALL BE CONTINUOUS AROUND CORNERS

INTERIOR MASONRY WALLS (6")

VERTICAL REINFORCING BARS SHALL BE LOCATED WITHIN 16" OF EACH SIDE OF OPENINGS, 8" OF END OF WALLS, AND SPACED NO GREATER THAN 72" ON CENTER. ALL VERTICAL BARS SHALL BE #5 BARS

HORIZONTAL REINFORCING SHALL CONSIST OF W1.7 LADDER MESH REINFORCEMENT SPACED AT 16" O.C. WITH A 6" CMU BOND BEAMS W/ (1) #5s TYPICAL

INTERIOR MASONRY WALLS ARE DESIGNED TO BE LOAD BEARING. PROVIDE BLOCKING BETWEEN TRUSSES AT 32" O.C. TO LATERALLY SUPPORT TOPS OF WALLS THAT ARE PARALLEL TO TRUSS ORIENTATION.

DOG KENNEL MASONRY WALLS (6") ARE TO BE OF PLAIN MASONRY CONSTRUCTION AND DO NOT REQUIRE REINFORCEMENT

STRUCTURAL STEEL

ALL STRUCTURAL STEEL WORK SHALL CONFORM TO THE AISC "MANUAL OF STEEL CONSTRUCTION ALLOWABLE STRESS DESIGN"

MATERIALS ARE TO BE AS FOLLOWS, UNLESS NOTED OTHERWISE:

W-SHAPES - ASTM A-992 GRADE 50

CHANNEL, PLATE, AND ANGLES - ASTM A-36

ROUND HSS - ASTM A500 GRADE B (Fy=42KSI)

RECT. HSS - ASTM A500 GRADE B (Fy=46KSI)

STRUCTURAL PIPE COLUMNS - ASTM A53 GRADE B

ANCHOR RODS - ASTM F1554 GRADE 36

ANCHOR EPOXY - HILTI HIT-HY 200-R OR APPROVED EQUAL

WELDS - E70 SERIES ELECTRODES

NON-SHRINK GROUT - 5,000 PSI MINIMUM

WOOD NOTES

MATERIAL

- 1. ALL MATERIAL SHALL BE CLEARLY MARKED WITH GRADE STAMPS
2. ALL LUMBER SHALL BE KILN-DRIED
3. PRESSURE TREATED LUMBER SHALL BE KILN DRIED AFTER TREATMENT
4. ALL WOOD STUDS SHALL BE SYP STUD GRADE (Fb = 600PSI) OR BETTER
5. ALL EXTERIOR WALL STUDS SHALL BE 2X6 @ 16" O.C., ALL OTHERS ARE 2X4 @ 16" O.C.
6. SHEATHING SHALL BE O.S.B. OR PLYWOOD CONFORMING TO DOC PS 1 OR PS 2
7. SHEATHING MATERIAL SHALL BE APA RATED SHEATHING GRADE
8. JOISTS, RAFTERS, HEADERS, AND SILLS SHALL BE NO.1 GRADE SOUTHERN PINE (SPIB) OR NO. 1/NO.2 SPRUCE PINE FIR (WWPA)

ROOF SHEATHING

- 1. EXTERIOR, PS 1 OR PS 2
2. SPAN RATING: 32/16
3. THICKNESS: 1/2"

FASTENING: USE 10d NAILS (1 1/2" MINIMUM PENETRATION INTO FRAMING AT 6" O.C. AT SUPPORTING EDGES AND 6" O.C. FOR INTERMEDIATE FRAMING MEMBERS.

HEADERS:

- 1. PROVIDE (2) 2X6 MIN HEADERS FOR ALL INTERIOR 2X4 WALLS
2. PROVIDE (3) 2X8 MIN HEADERS FOR ALL EXTERIOR 2X6 WALLS

NAILS SHALL BE COMMON WIRE NAILS UNLESS NOTED OTHERWISE AND MATERIAL SHALL BE PER A.I.T.C., NDS, AND APPLICABLE BUILDING CODE REQUIREMENTS

NAILS SHALL PENETRATE A MINIMUM OF 10 TIMES THE NAIL DIAMETER INTO SUPPORTING MEMBER, UNLESS NOTED OTHER WISE

NAILS SHALL BE SPACED AND LOCATED AWAY FROM EDGES AND ENDS IN A MANNER TO PREVENT SPLITTING OF WOOD

BOLT HOLES IN WOOD SHALL BE OVERSIZED BY 1/16" MAX. LARGER THAN THE BOLT DIAMETER AND STANDARD WASHERS SHALL BE SUPPLIED AT BOTH THE BOLT HEAD AND NUT

PROVIDE 1/8" GAP ON ALL EDGES OF ROOF SHEATHING. INSTALL ONE SIMPSON "PSCl" PANEL SHEATHING CLIP PER SPAN

SHEATHING SHALL BE INSTALLED IN AT LEAST A 2 SPAN CONDITION WITH THE LONG DIMENSION ACROSS SUPPORTS

ANY WOOD IN CONTACT WITH CONCRETE, MASONRY, OR STEEL SHALL BE PRESSURE TREATED

ALL WOOD SILLS (TOP PLATES ON MASONRY) ARE TO HAVE ANCHOR BOLTS PLACED NOT MORE THAN 12" FROM ENDS OF SILL PIECES AND SHALL NOT BE SPACED GREATER THAN 3'-0" ON CENTER. ANCHORS SHALL BE 1/2" DIAMETER WITH 7" EMBEDMENT INTO BOND BEAM OR SLAB. USE 3X3X1/4" PLATE WASHERS WITH ANCHORS

SEE ARCHITECTURAL PLAN SHEETS FOR DIMENSIONS AND WALL SECTION PREFERENCES

WHERE STUDS ARE CUT OR NOTCHED BEYOND CODE APPROVED LIMITS, ADDL STUDS SHALL BE ADDED.

FACE NAIL BUILT UP STUDS W/ (2) 10d @ 8" O.C. EA PLY

LAP WALL TOP PLATES AT CORNERS AND INTERSECTIONS.

ALL NUTS SHALL BE TIGHTENED WHEN PLACED AND RE-TIGHTENED AT COMPLETION OF JOB.

ALL NAILING REQUIREMENTS NOT STATED IN THESE PLANS SHALL REFER TO IBC TABLE 2304.9.1 ALL FASTENERS AND ACCESSORIES IN CONTACT WITH PRESERVATIVE TREATED WOOD OR FIRE TREATED WOOD SHALL HAVE CORROSION PROTECTION

USE SIMPSON HGA10 CONNECTORS AT 24" ON CENTER FOR GABLE END TRUSSES ON MASONRY SILL PLATE. USE BURMON BHSP CONNECTORS WITH 3 FASTENERS PER SIDE FOR ALL OTHER ROOF TRUSS BEARING LOCATIONS UNLESS NOTED OTHERWISE

ROOF TRUSS NOTES

TRUSS SHOP DRAWINGS SHALL BE PREPARED AND CERTIFIED BY A QUALIFIED PROFESSIONAL ENGINEER IN LICENSED IN THE STATE OF TENNESSEE AND SHALL BE SUBMITTED TO EOR PRIOR TO MANUFACTURE. TRUSS MANUFACTURER MAY SUBMIT ALTERNATE ROOF DESIGN/LAYOUT TO EOR FOR APPROVAL

TRUSS MANUFACTURER SHALL INDICATE ALL TEMPORARY AND PERMANENT BRACING AND BRIDGING REQUIREMENTS ON THE TRUSS ERECTION DRAWINGS

ROOF TRUSSES SHALL BE DESIGNED FOR L/240 TOTAL AND L/360 LIVE

TRUSS MANUFACTURER SHALL SUBMIT PREFERRED METHOD OF BRACING TOPS OF INTERIOR WALLS FROM LATERAL MOVEMENT. DESIGN OUT OF PLANE LOADING AT TOP OF WALL FOR INTERIOR 6" CMU WALLS IS 25PLF (SERVICE LOAD)

INSTALLATION AND BRACING OF WOOD TRUSSES SHALL COMPLY WITH "HANDLING, INSTALLING, AND BRACING METAL PLATE CONNECTED WOOD TRUSSES" (BCS1 1-08) AS PUBLISHED BY THE TPI AND WTCA

STATEMENT OF SPECIAL INSPECTIONS

SOILS AND FOUNDATIONS

SPECIAL INSPECTOR SHALL PERFORM PERIODIC INSPECTIONS TO VERIFY THE FOLLOWING:

- 1. MATERIAL BELOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE DESIGN BEARING CAPACITY.
2. EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.
3. OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.

CONCRETE CONSTRUCTION

SPECIAL INSPECTOR SHALL PERFORM PERIODIC INSPECTIONS TO VERIFY THE FOLLOWING:

- 1. VERIFY LOCATION, QUANTITY, GRADE, AND PLACEMENT OF REINFORCING STEEL
2. INSPECTION OF ANCHORS POST-INSTALLED IN CONCRETE.
3. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF CONCRETE MEMBER BEING FORMED.
4. VERIFY USE OF REQUIRED DESIGN MIX.

SPECIAL INSPECTOR SHALL PERFORM CONTINUOUS INSPECTIONS TO VERIFY THE FOLLOWING:

- 1. FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORMANCE SLUMP AD AIR CONTENT TESTS, AND RECORD TEMPERATURE OF FRESH CONCRETE. (PER ACI 318-11 SECTION 5.6)

MASONRY CONSTRUCTION

SPECIAL INSPECTOR SHALL PERFORM INSPECTIONS TO VERIFY THE FOLLOWING:

PERIODICALLY VERIFY PROPORTIONS OF SITE PREPARED MORTAR, CONSTRUCTION OF MORTAR JOINTS, GROUT SPACE, GRADE TYPE, AND SIZE OF REINFORCEMENT AND ANCHORS, AND PLACEMENT OF MASONRY UNITS ARE IN COMPLIANCE

CONTINUOUSLY VERIFY PLACEMENT OF REINFORCEMENT AND CONNECTORS, THE GROUT SPACE PRIOR TO GROUTING, AND THE TYPE, SIZE, AND LOCATION OF ANCHORS INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS



CSR Engineering, Inc.
1116 Main Street
Pleasant View, TN 37146
P: 615.212.2389
F: 615.246.3815
www.csrengineers.com



GENERAL NOTES
OF
ANIMAL CONTROL BUILDING
FOR
ROBERTSON COUNTY ANIMAL CONTROL
2900 WEST COUNTY FARM RD.
SPRINGFIELD, TN 37172
ROBERTSON COUNTY



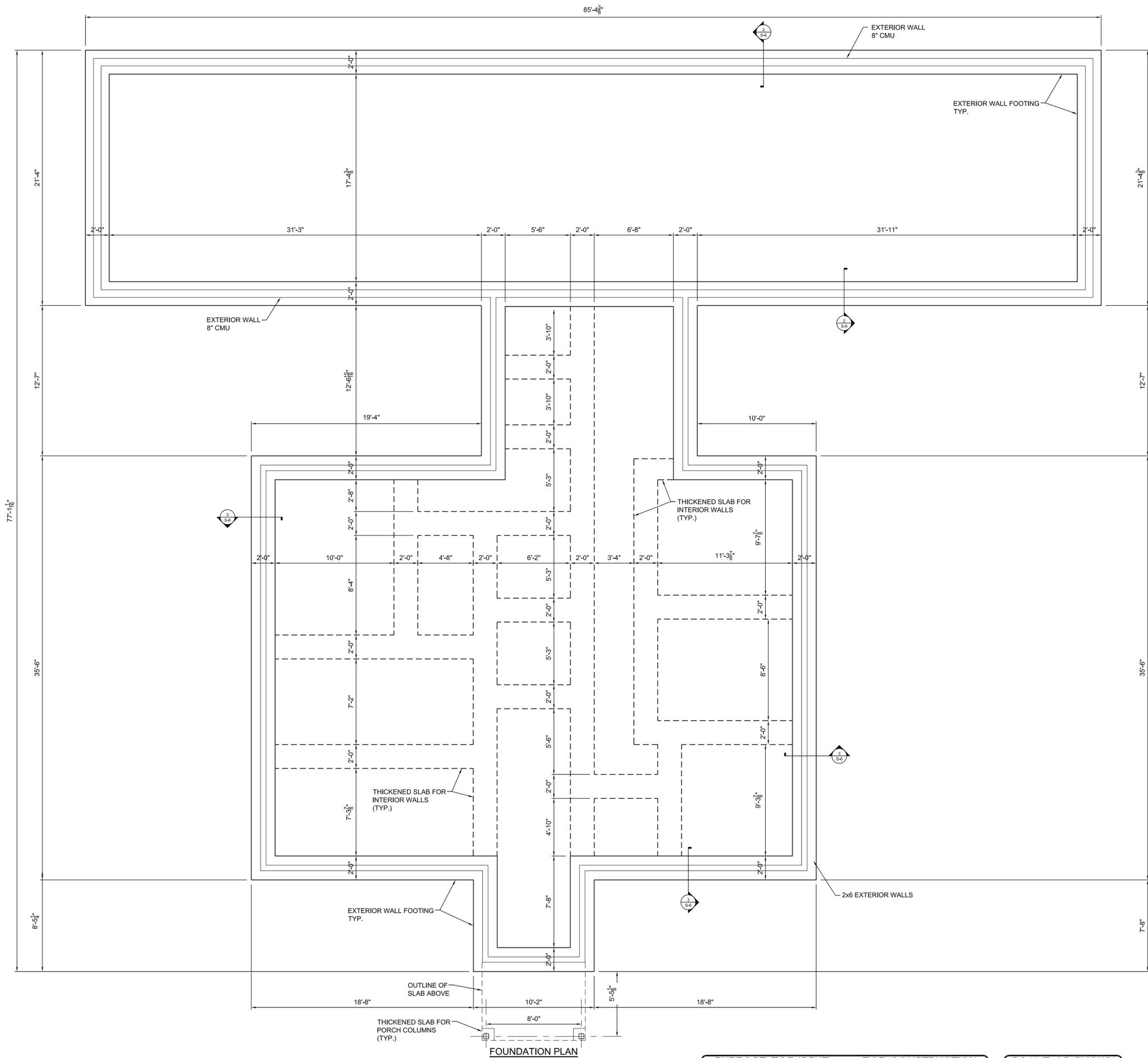
Table with 4 columns: NO., DATE, BY, DESCRIPTION. Row 1: 1, 6/18/20, SC, ADDED WOOD NOTES

DESIGNER DKH
REVIEWER SJC

PROJECT 18-145

DATE 6-18-20

SHEET S-1



FOUNDATION PLAN

PURPOSE FOR ISSUE: FOR CONSTRUCTION SCALE: AS SHOWN



CSR Engineering, Inc.
 1116 Main Street
 Pleasant View, TN 37146
 P: 615.212.2389
 F: 615.246.3815
 www.csrengineers.com



FOUNDATION PLAN
 OF
ANIMAL CONTROL BUILDING
 FOR
ROBERTSON COUNTY ANIMAL CONTROL
 2900 WEST COUNTY FARM RD.
 SPRINGFIELD, TN 37172
 ROBERTSON COUNTY



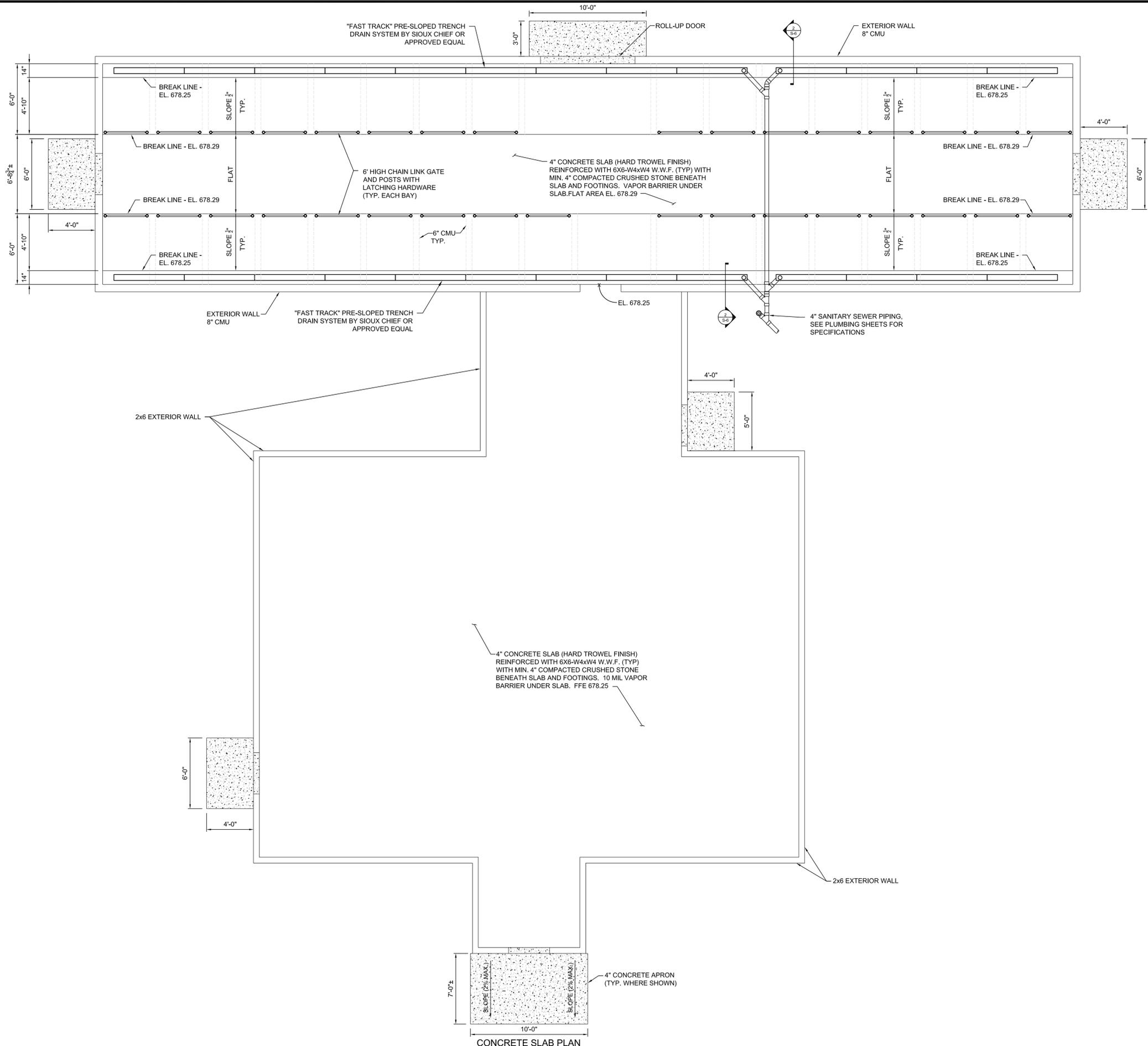
NO.	DATE	BY	DESCRIPTION
1	6/22/20	SC	CHANGE EXT. WALL TO 2X6

DESIGNER **DKH**
 REVIEWER **SJC**

PROJECT **18-145**

DATE **6-22-20**

SHEET **S-2**



CONCRETE SLAB PLAN
 OF
ANIMAL CONTROL BUILDING
 FOR
ROBERTSON COUNTY ANIMAL CONTROL
 2900 WEST COUNTY FARM RD.
 SPRINGFIELD, TN 37172
 ROBERTSON COUNTY



REVISIONS

NO.	DATE	BY	DESCRIPTION

DESIGNER **DKH**
 REVIEWER **SJC**

PROJECT **18-145**

DATE **6-19-20**

SHEET **S-3**



ROOF PLAN
OF
ANIMAL CONTROL BUILDING
FOR
ROBERTSON COUNTY ANIMAL CONTROL
2900 WEST COUNTY FARM RD.
SPRINGFIELD, TN 37172
ROBERTSON COUNTY



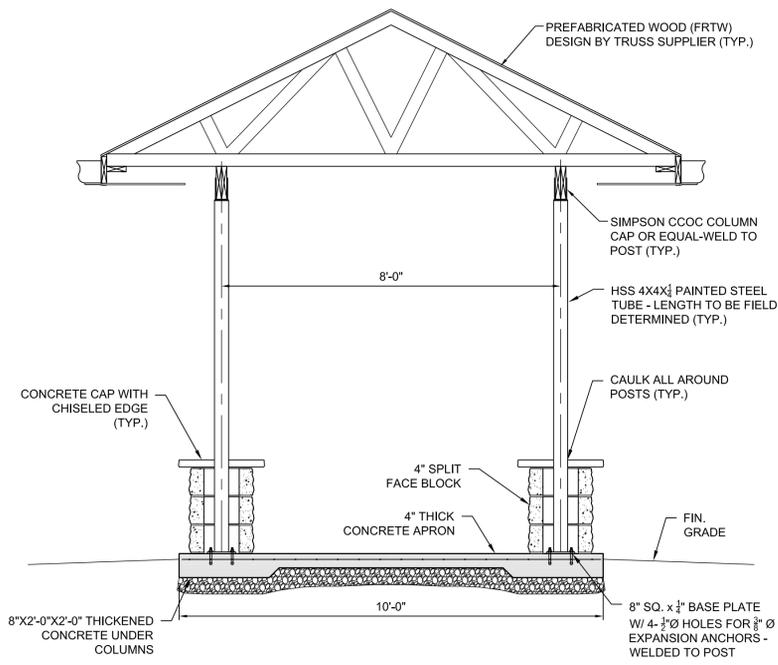
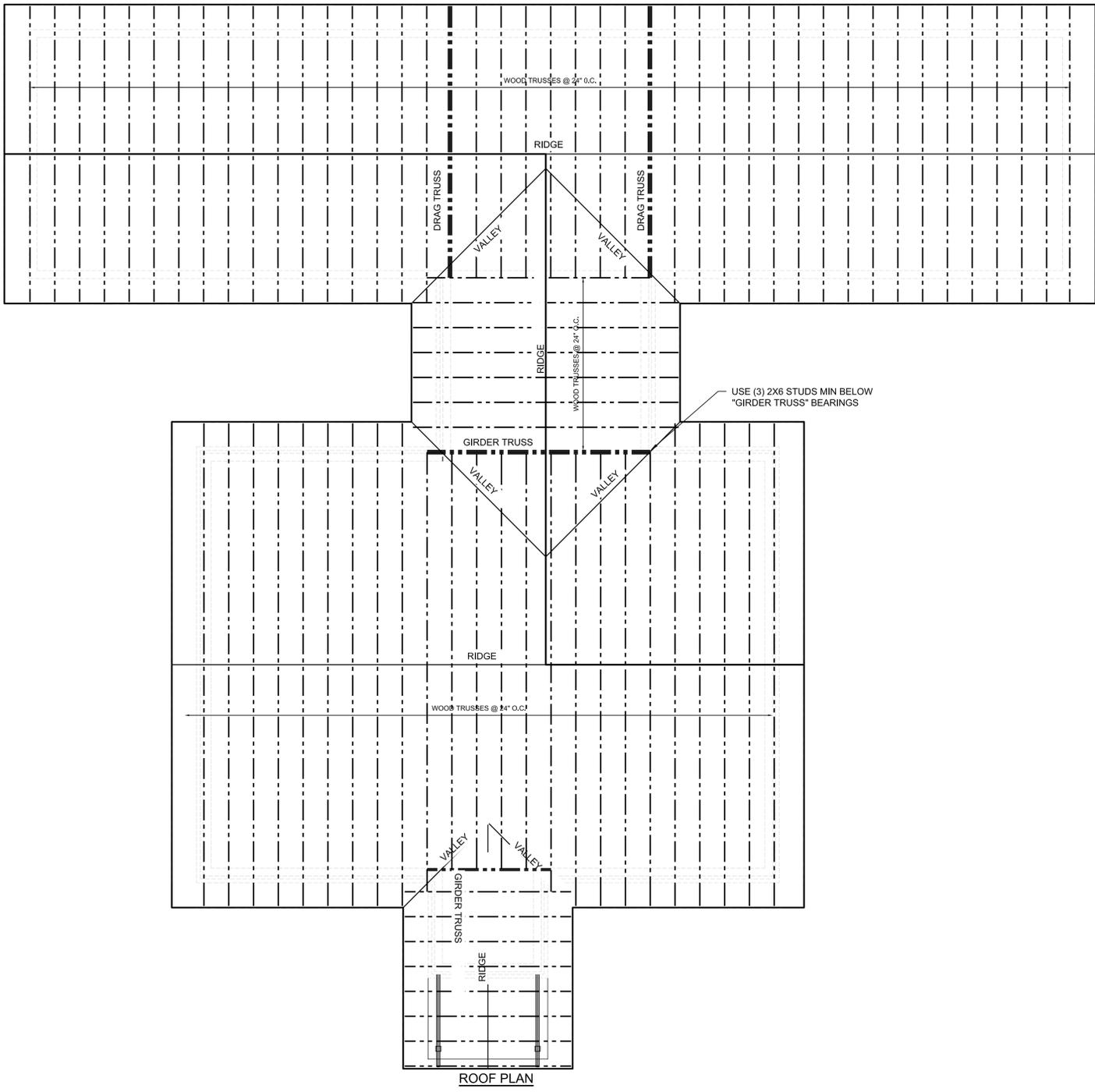
NO.	DATE	BY	DESCRIPTION
1	6/19/20	SC	CHANGED EXT. WALLS TO WOOD FRAMING

DESIGNER **DKH**
REVIEWER **SJC**

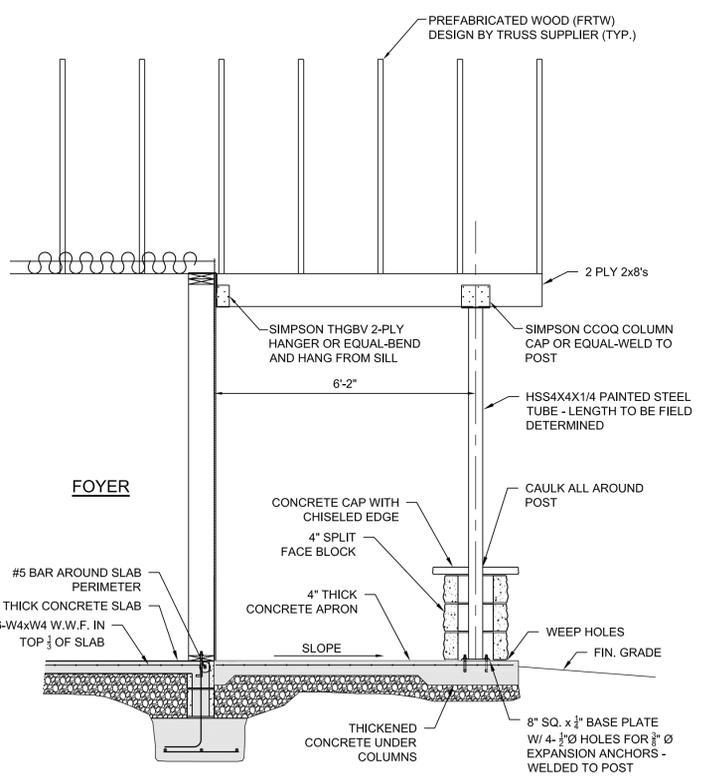
PROJECT **18-145**

DATE **6-19-20**

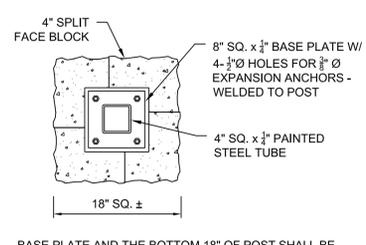
SHEET **S-3**



COVERED PORCH DETAIL
SEE "ARCHITECTURAL PLANS" FOR ADDITIONAL FINISHING DETAILS



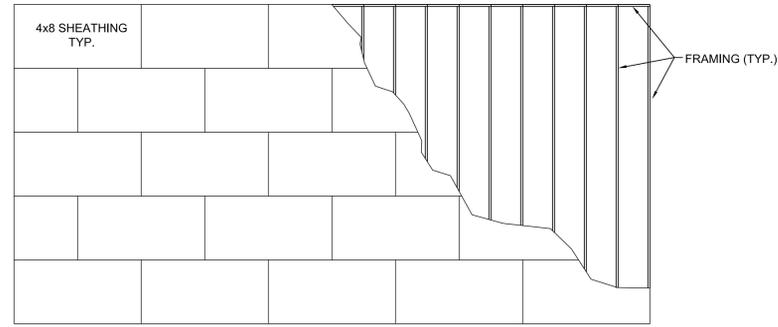
COVERED PORCH DETAIL
SEE "ARCHITECTURAL PLANS" FOR ADDITIONAL FINISHING DETAILS



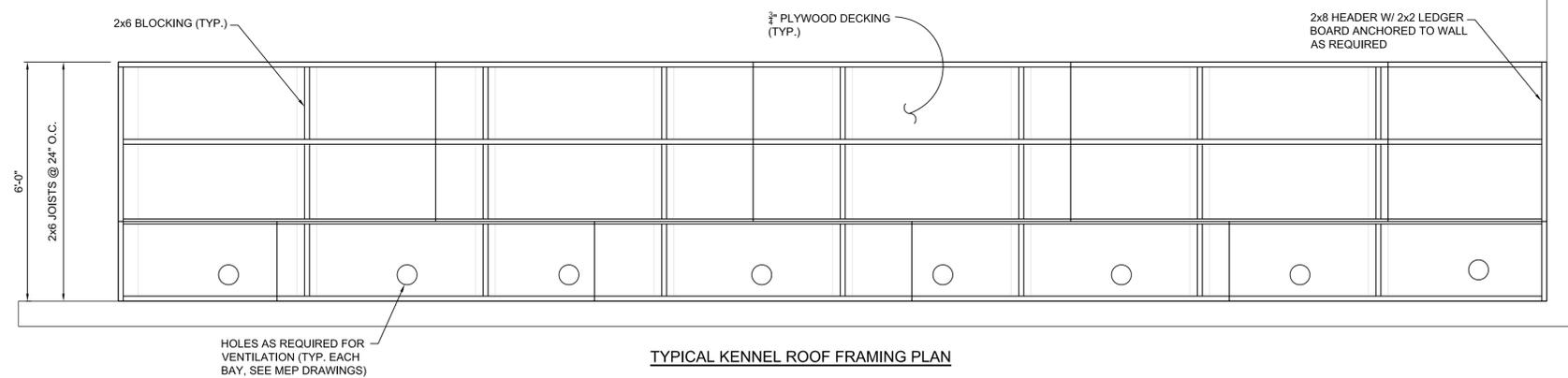
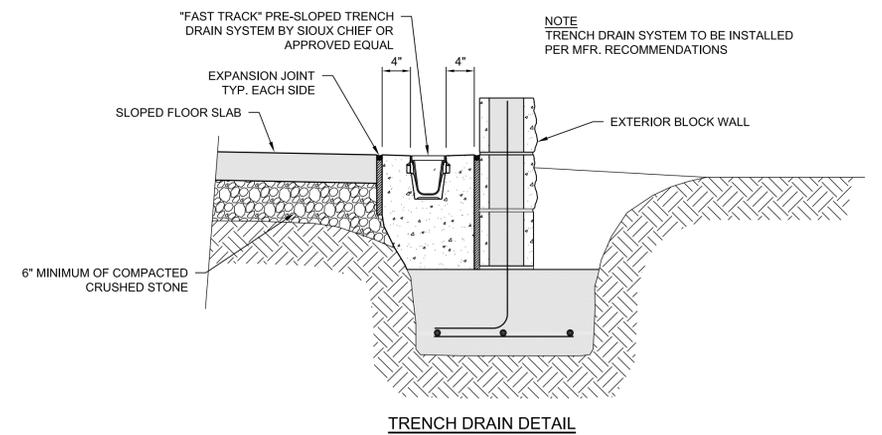
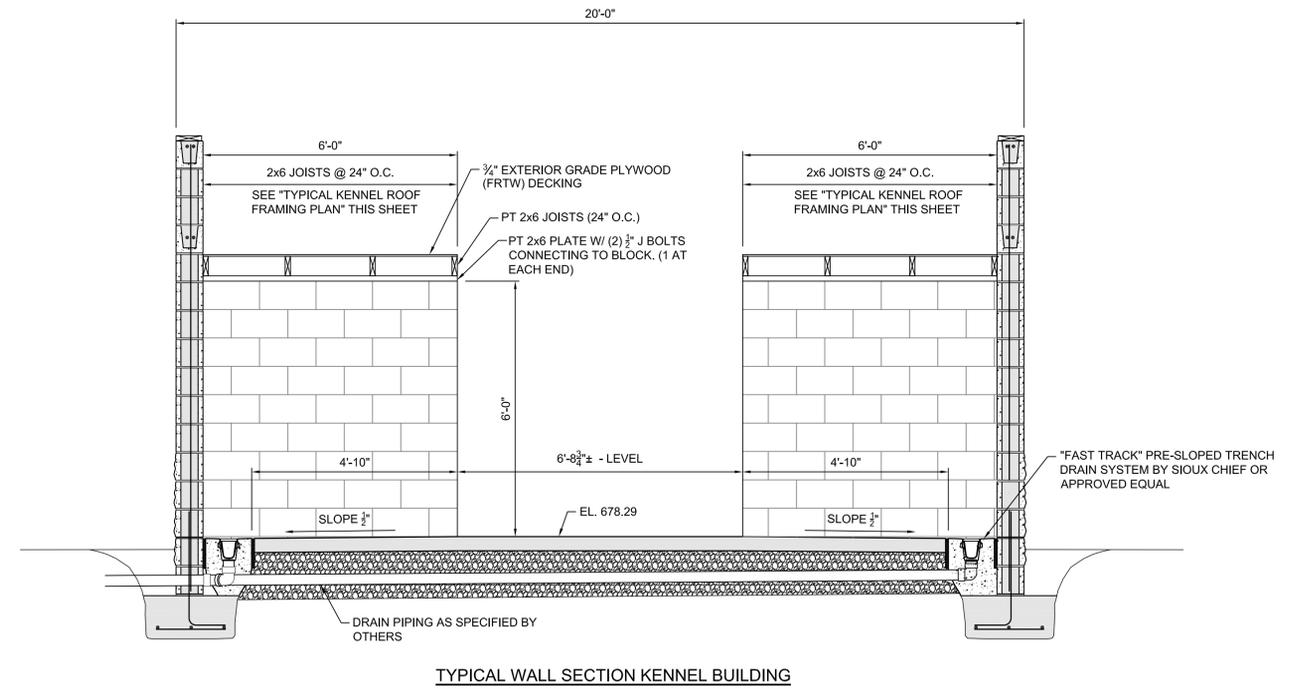
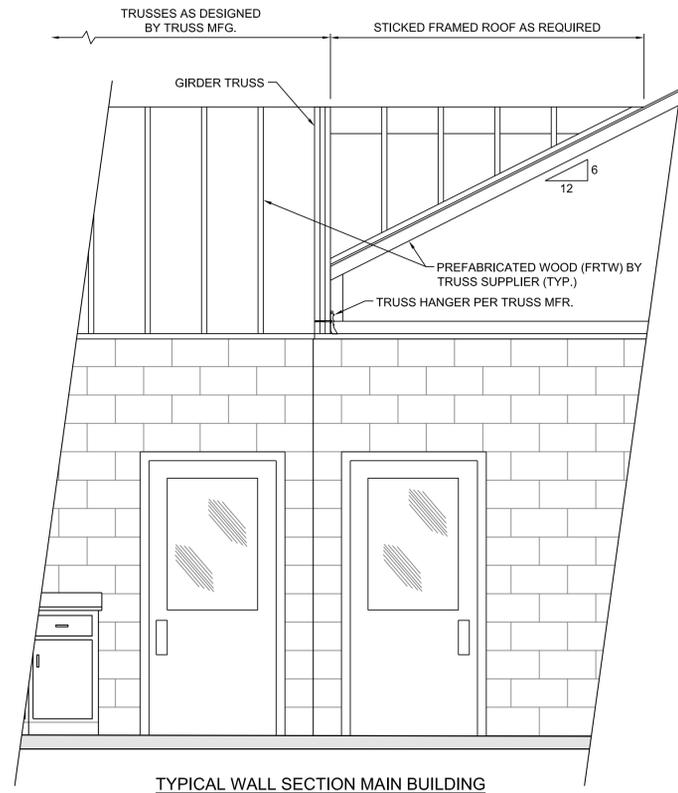
COLUMN BASE PLAN
BASE PLATE AND THE BOTTOM 18" OF POST SHALL BE COATED WITH MASTIC AFTER INSTALLATION

MIN THICK	PANEL GRADE	SPAN RATING	BOND CLASS	FRM @ JOINTS		FASTENERS		
				VERT	HORZ	SIZE	EDGE	FIELD
7/16"	APA RATED SHEATHING	24/16	EXP. 1	2X	NONE	8D COMMON	6"	12"

1. COORDINATE ALL GYPSUM WALL BOARD AND WSP THICKNESSES WITH UL LISTINGS. REF ARCH.
2. STUDS SHALL BE SPACED @ 16" OC MAX U.N.O.
3. NO FASTENERS SHALL BE CLOSER THAN 1/2" FROM PANEL EDGE.
4. DRIVE FASTENERS FLUSH. DO NOT PENETRATE THE SURFACE OF THE SHEATHING.



TYPICAL ROOF SHEATHING PATTERN



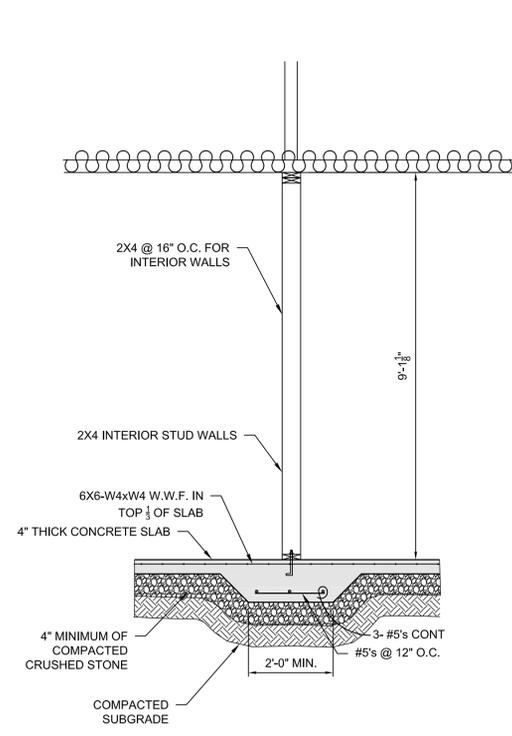
NO.	DATE	BY	DESCRIPTION

DESIGNER **DKH**
REVIEWER **SJC**

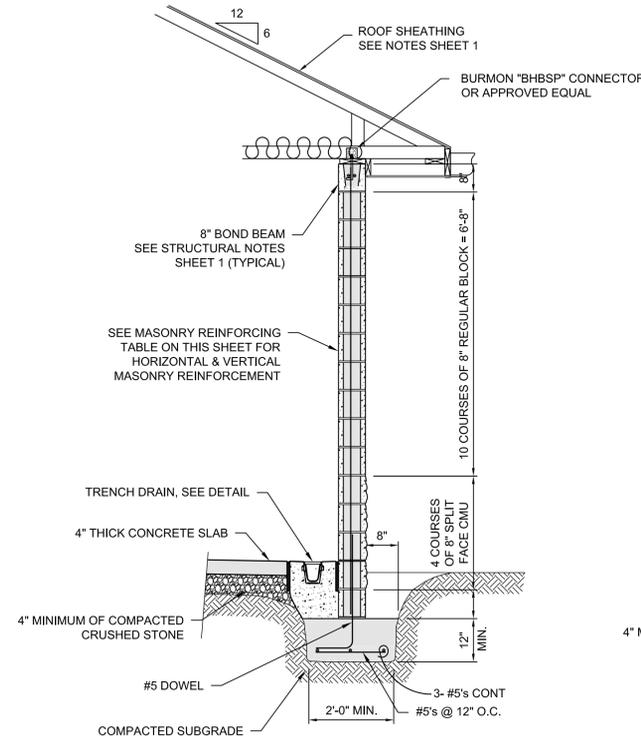
PROJECT **18-145**

DATE **6-19-20**

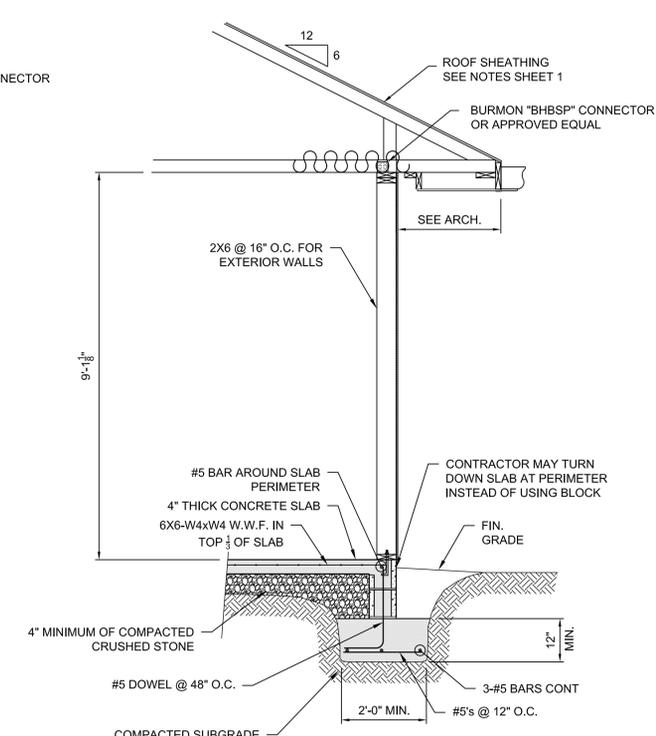
SHEET **S-5**



1 TYPICAL WALL SECTION INTERIOR WALLS
SEE "ARCHITECTURAL PLANS" FOR ADDITIONAL FINISHING DETAILS



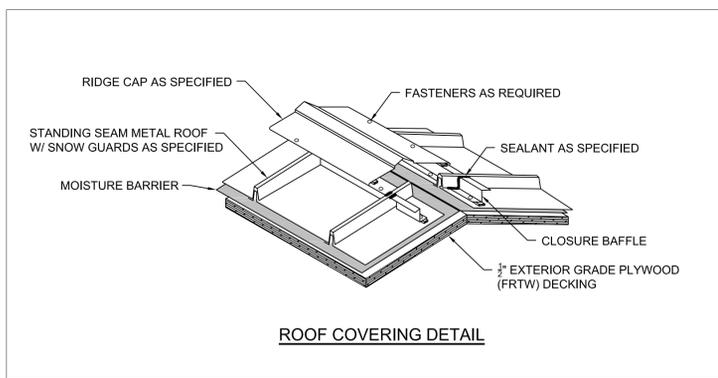
2 TYPICAL WALL SECTION KENNEL BUILDING
SEE "ARCHITECTURAL PLANS" FOR ADDITIONAL FINISHING DETAILS



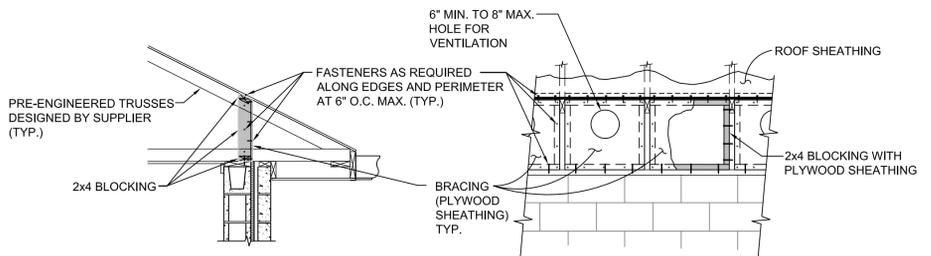
3 TYPICAL WALL SECTION MAIN BUILDING
SEE "ARCHITECTURAL PLANS" FOR ADDITIONAL FINISHING DETAILS

MASONRY REINFORCEMENT TABLE		
BLOCK SIZE	VERTICAL REINFORCEMENT	HORIZONTAL REINFORCEMENT
8" BLOCK	WITHIN 16" OF EACH SIDE OF OPENINGS, 8" OF END OF WALLS & CORNERS & @ 32" O.C. MAX	BOND BEAMS W/ (2) #5's AT TOP OF WALLS (CONTINUOUS AROUND CORNERS), SINGLE #5 AT BOTTOM OF OPENINGS. SEE LINTEL SCHEDULE FOR TOP OF WALL OPENINGS. BARS SHALL EXTEND 24" OR 40 BAR DIAMETERS PAST THE OPENING.
6" BLOCK	WITHIN 16" OF EACH SIDE OF OPENINGS, 8" OF END OF WALLS & CORNERS & @ 72" O.C. MAX	W1.7 LADDER MESH @ 16" O.C. & BOND BEAM AT TOP OF WALL WITH (1) #5 BAR CONTINUOUS AROUND CORNERS. SEE LINTEL SCHEDULE FOR TOP OF WALL OPENINGS.

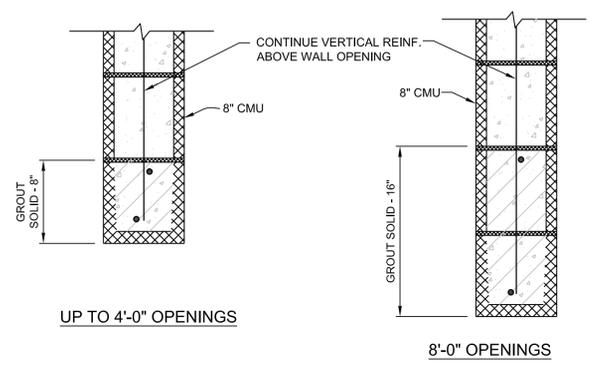
* BARS SHALL HAVE 180° HOOKED ENDS PAST OPENINGS



ROOF COVERING DETAIL



BRACED WALL PANEL TOP PLATE CONNECTION DETAIL



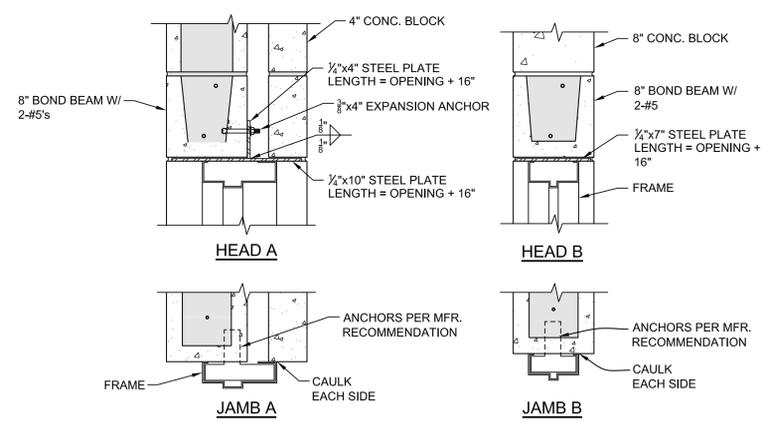
UP TO 4'-0" OPENINGS

8'-0" OPENINGS

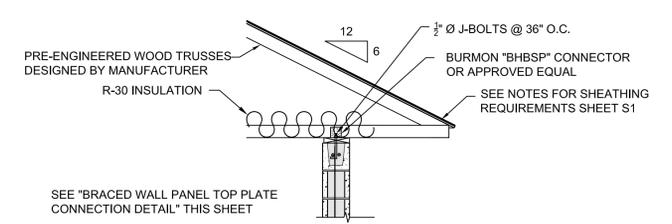
UP TO 4'-0" OPENINGS		
WALL SIZE	LINTEL TYPE	REMARKS
6" BLOCK	6"x8" BOND BEAM W/ (1) #5 T&B	
8" BLOCK	8"x8" BOND BEAM W/ (1) #5 T&B	

8'-0" OPENINGS		
WALL SIZE	LINTEL TYPE	REMARKS
8" BLOCK	8"x16" BOND BEAM W/ (1) #5 T&B	

STANDARD LINTEL SCHEDULE - 6 FT. & 8 FT.
SCALE: NTS



DOOR DETAILS
NO SCALE



TYPICAL ROOF DETAIL

NOTE: TRIM, INSULATION, AND OTHER NON STRUCTURAL ITEMS SHOWN ARE FOR ILLUSTRATION PURPOSES ONLY. REFER TO ARCHITECTURAL DRAWINGS CONCERNING ANY DISCREPANCIES.



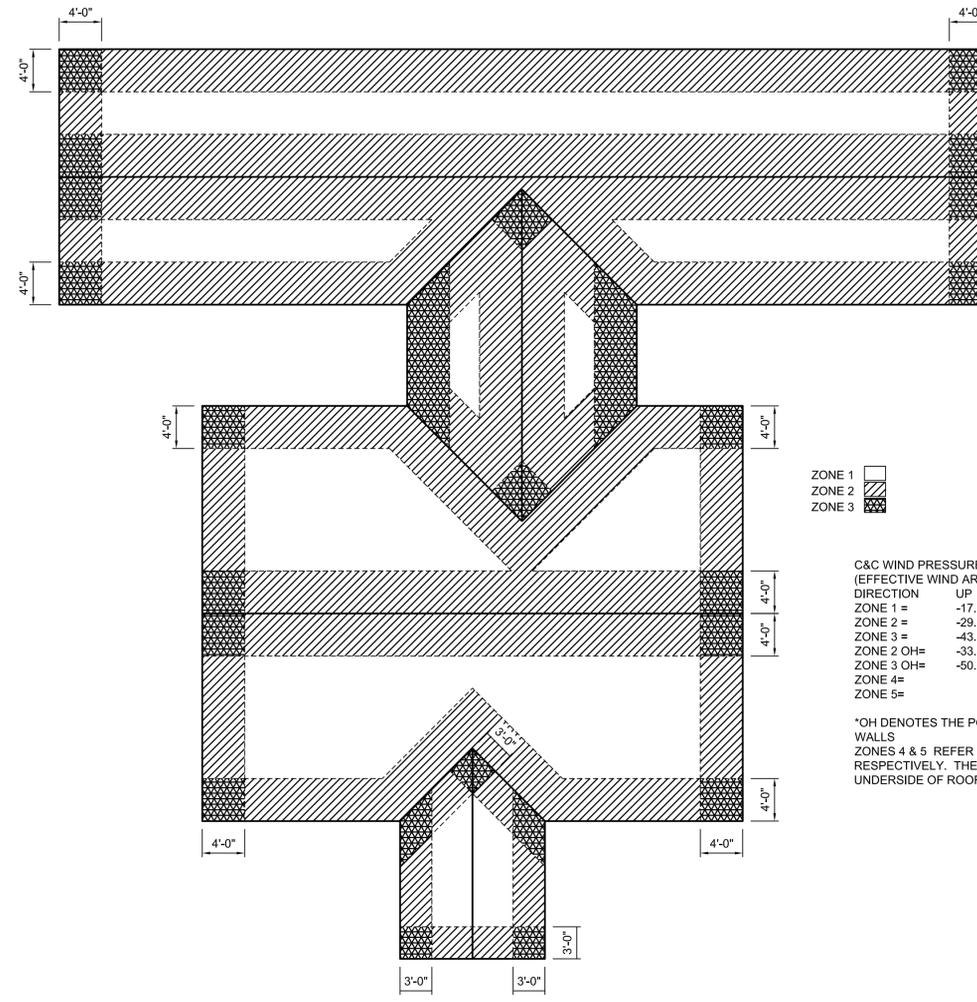
NO.	DATE	BY	DESCRIPTION
1	6/19/20	SC	CHANGED EXT. WALLS TO WOOD FRAMING

DESIGNER DKH
REVIEWER SJC

PROJECT 18-145

DATE 6-19-20

SHEET S-6



ROOF PRESSURE ZONES (C&C)

- ZONE 1
- ZONE 2
- ZONE 3

C&C WIND PRESSURES (SERVICE LEVEL 0.6W)
(EFFECTIVE WIND AREA = 10 SF, MAY BE REDUCED IF APPLICABLE)

DIRECTION	UP	DOWN	HORIZONTAL
ZONE 1 =	-17.3 PSF	10 PSF	
ZONE 2 =	-29.3 PSF	10 PSF	
ZONE 3 =	-43.7 PSF	10 PSF	
ZONE 2 OH=	-33.7 PSF	11.5 PSF	
ZONE 3 OH=	-50.2 PSF	11.5 PSF	
ZONE 4=			21.6 PSF
ZONE 5=			33.4 PSF

*OH DENOTES THE PORTION OF ROOF OVERHANGING EXTERIOR WALLS
ZONES 4 & 5 REFER TO WALL PRESSURES BELOW ZONES 2 & 3 RESPECTIVELY. THESE PRESSURES ARE ALSO APPLIED TO THE UNDERSIDE OF ROOF OVERHANG.



ROOF PRESSURE DIAGRAM
OF
ANIMAL CONTROL BUILDING
FOR
ROBERTSON COUNTY ANIMAL CONTROL
2900 WEST COUNTY FARM RD.
SPRINGFIELD, TN 37172
ROBERTSON COUNTY



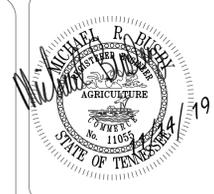
REVISIONS		NO.	DATE	BY	DESCRIPTION

DESIGNER **DKH**
REVIEWER **SJC**

PROJECT **18-145**

DATE **6-19-20**

SHEET **S-7**

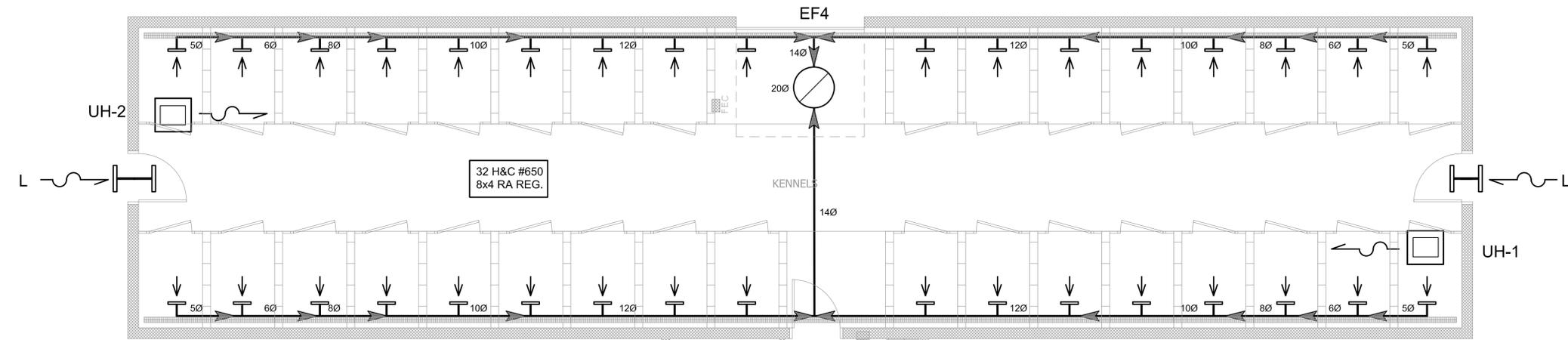


JOHN F. WERNE
ARCHITECT

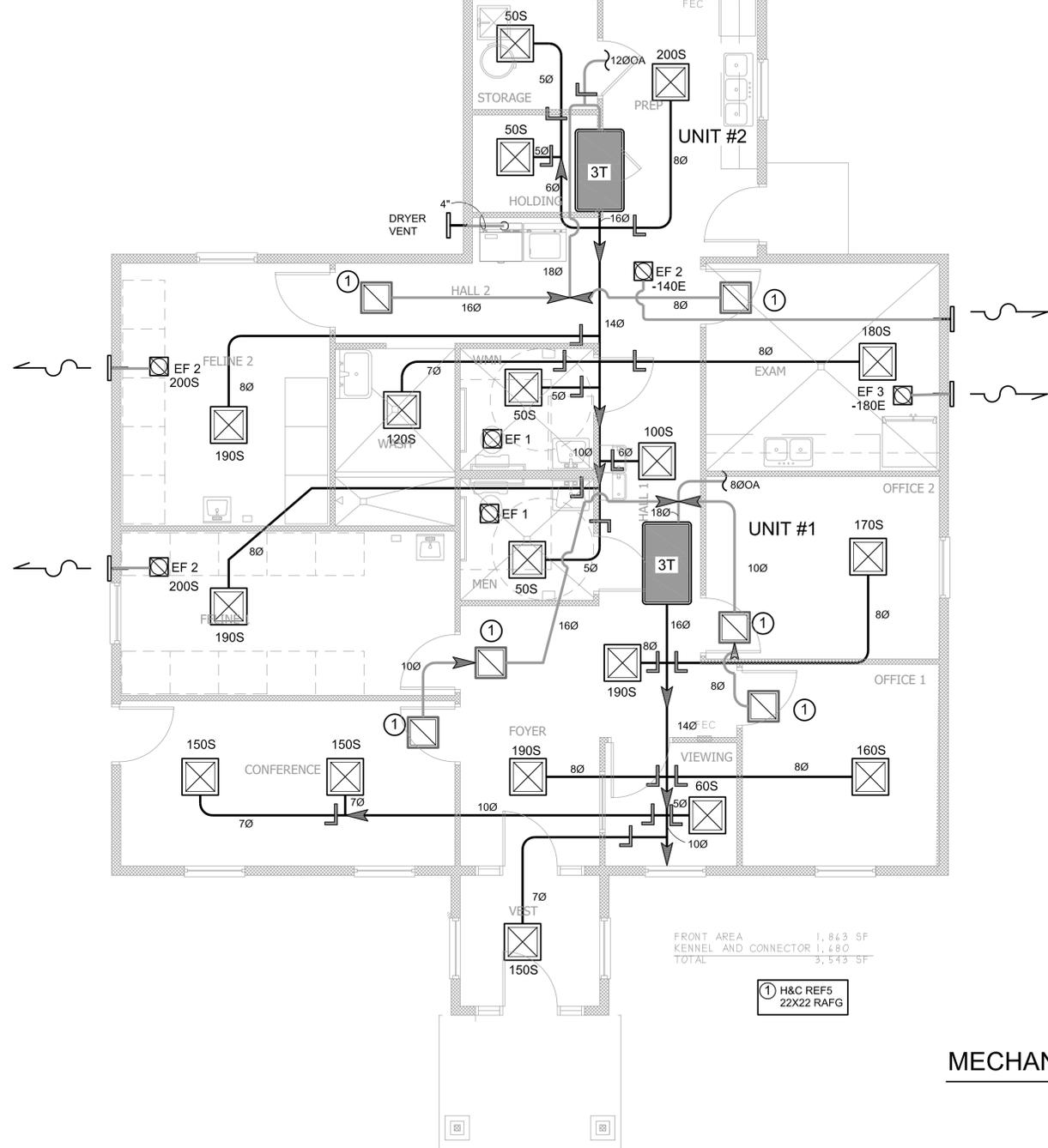
1020 OWEN COURT, ASHLAND CITY, TENNESSEE 37015 615-792-3966 jwerne3@gmail.com

ROBERTSON COUNTY
ANIMAL CONTROL

W. COUNTY FARM ROAD, ROBERTSON COUNTY, TN



SUPPLY REGISTER SCHEDULE DRY WALL CEILING CONSTRUCTION	
HART & COOLEY ARF 4-WAY CEILING DIFFUSERS	
6 X 6	50 - 70 CFM
9 X 9	100 - 140 CFM
12 X 12	150 - 250 CFM
15 X 15	250 - 400 CFM
18 X 18	400 - 500 CFM



ROBERTSON COUNTY ANIMAL CONTROL

SPECIFICATIONS (UNIT #1 & UNIT#2)

GAS FUR (TRANE OR EQUAL)	4TTR4036/4TXCB004+TUH1C1B080
NOMINAL TONS	3
DESIGN CFM	1200
COOLING CAPACITY, BTUH	35400
HEATING CAPACITY, IN/OUT, BTU	77000/73200
EXTERNAL STATIC, IN WG	0.30
V/PHHZ (CU)	208-230/1/60
MCA/MOCP (CU)	10.2/15
V/PHHZ (AH)	115/1/60
MCA/MOCP (AH)	18/30
UNIT #1 OA (CFM)	200
UNIT #2 OA (CFM)	400

SPECIFICATIONS (UH-1 & UH-2)

GAS UNIT HEATER (TRANE OR EQUAL) GPND-006	
HEATING CAPACITY, IN/OUT, BTUH	60000/48600
NPT	1/2-IN

EF1: PENN-ZEPHR Z3H; 39 W; 0.5 A; 1550 RPM; 70 CFM @ 0.125"
 EF2: PENN-ZEPHR Z6H; 108 W; 1.4 A; 1550 RPM; 200S CFM @ 0.125"
 EF3: PENN-ZEPHR Z6H; 108 W; 1.4 A; 1550 RPM; 180 CFM @ 0.25"
 EF4: DAYTON UPBLAST VENTILATOR MODEL# 48C180 GRAINGER # 48C180
 12.5" WHEEL DIA; DIRECT DRIVE; EC MOTOR; 11V1 PH/60 HZ;
 781/1180/1923 CFM @ 0.25"

L: INTAKE LOUVER: DAYTON MODEL # 20UA08 GRAINGER # 20UA08
 18X X 18W MIN WALL OPENING; 0.89 SQ FT; BIRD SCREEN

NOTE: HVAC UNIT MUST HAVE AIR ECONOMIZER IF REQUIRED BY LOCAL CODES

GENERAL NOTES

- ALL DUCT DIMENSIONS INDICATE CLEAR INSIDE OPENING: 26 GA. MINIMUM FOR DUCT LARGER THAN 14" OR 28 GA. MINIMUM FOR DUCT SMALLER THAN 14"
- PROVIDE ALL NECESSARY DUCT TRANSITIONS TO AND FROM ALL AIR MOVING EQUIPMENT
- CO-ORDINATE EXACT LOCATION OF CEILING DIFFUSERS AND REGISTERS WITH ARCHITECT CEILING PLAN AND ELECTRICAL LIGHTING
- CONTRACTOR TO FIELD VERIFY ALL DUCTWORK SIZING AND ROUTING WITH BUILDING CONTRACTOR PRIOR TO FABRICATION
- SCREW AND TAPE ALL DUCT JOINTS; SCREW AND CAULK ALL TAKE-OFFS
- WRAP ALL DUCTWORK WITH R-8 FOILBACK DUCTWRAP INSULATION
- ALL REGISTERS SHALL BE HART & COOLEY OR EQUIVALENT; STYLE AND SIZE AS INDICATED
- PROVIDE FLEXIBLE CONNECTORS AT SUPPLY AND RETURN DUCTS AT UNITS
- INSTALL ALL SYSTEMS IN COMPLIANCE WITH LOCAL, STATE, AND NATIONAL CODES
- MECHANICAL CONTRACTOR TO INSTALL REFRIGERANT LINES IN ACCORDANCE TO MANUFACTURER'S DATA AND TO PROVIDE OUTDOOR UNIT CONCRETE PADS.
- PROVIDE VIBRATION ISOLATORS AND CONDENSATE PAN WITH DRAIN FOR AHU
- HVAC CONTRACTOR TO COORDINATE AND VERIFY ALL UNIT SPECIFICATIONS AND ELECTRICAL REQUIREMENTS PRIOR TO PURCHASE OF EQUIPMENT AND INSTALLATION.

COMcheck Software Version 4.1.0.0
Mechanical Compliance Certificate

Section 1: Project Information

Energy Code: 2009 IECC
 Project Title: ROBERTSON COUNTY ANIMAL CONTROL
 Project Type: New Construction

Construction Site: W COUNTY FARM ROAD, SPRINGFIELD, TN
 Owner/Agent: _____
 Designer/Contractor: _____

Section 2: General Information

Building Location (for weather data): Springfield, Tennessee
 Climate Zone: 4a

Section 3: Mechanical Systems List

Quantity System Type & Description

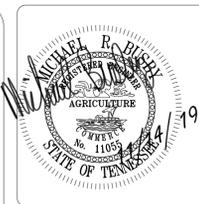
2 HVAC System 1 (Single Zone):
 Heating: 1 each - Central Furnace, Gas, Capacity = 77 kBtu/h
 Proposed Efficiency = 80.00% Et, Required Efficiency: 80.00 % Et (or 78% APUE)
 Cooling: 1 each - Split System, Capacity = 35 kBtu/h, Air Cooled Condenser, No Economizer, Economizer exception: None
 Proposed Efficiency = 14.00 SEER, Required Efficiency: 13.00 SEER
 Fan System: None

1 Water Heater 1:
 Gas Storage Water Heater, Capacity: 71 gallons, Input Rating: 75 kBtu/h
 Proposed Efficiency: 0.54 EF, Required Efficiency: 0.54 EF

MECHANICAL FLOOR PLAN

FRONT AREA 1,863 SF
 KENNEL AND CONNECTOR 1,480 SF
 TOTAL 3,343 SF

① H&C REFS 22X22 RAFG



JOHN F. WERNE
ARCHITECT

1020 OWEN COURT, ASHLAND CITY, TENNESSEE 37015 615-792-3966 jwerne3@gmail.com

ROBERTSON COUNTY
ANIMAL CONTROL

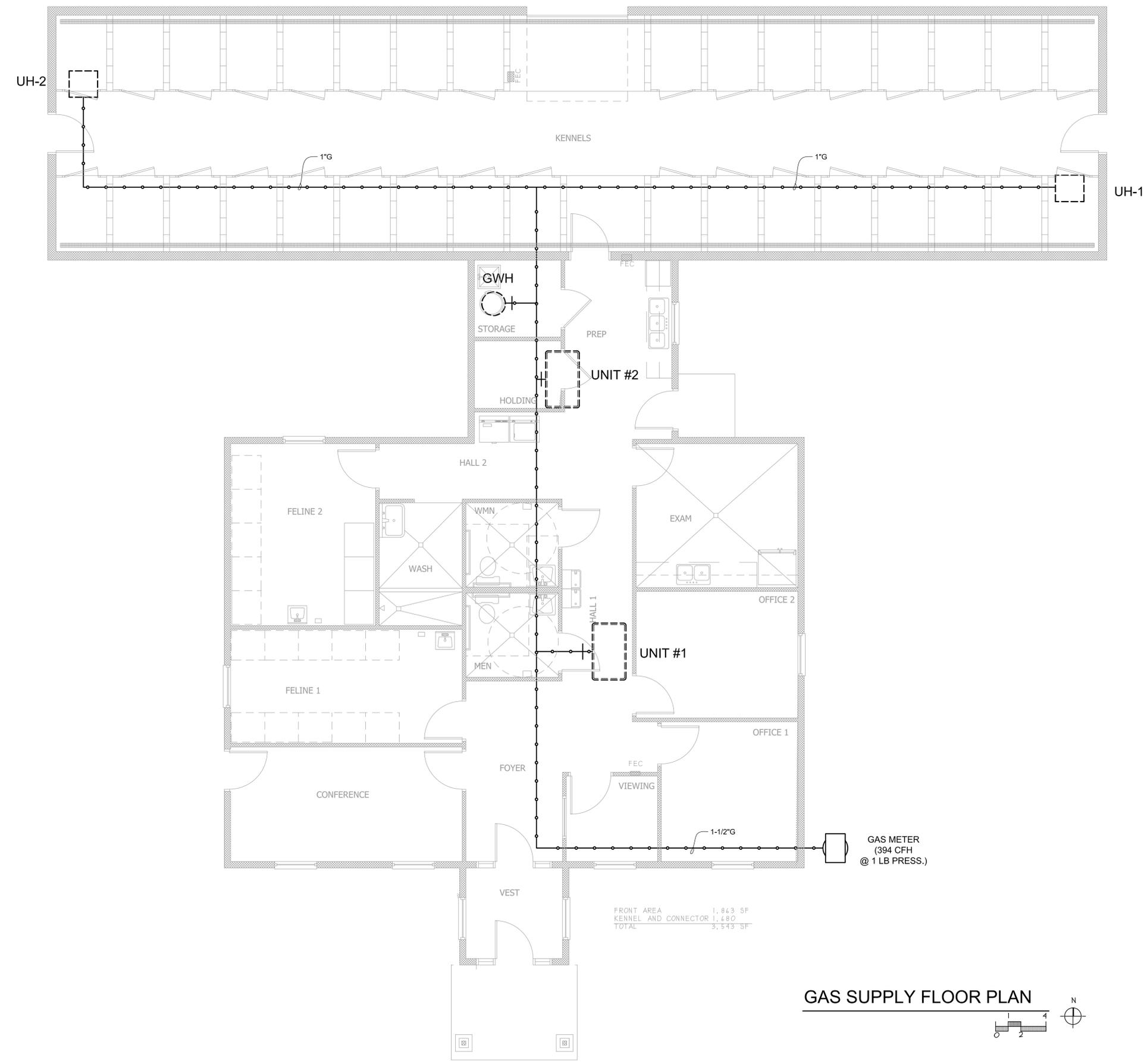
W. COUNTY FARM ROAD, ROBERTSON COUNTY, TN

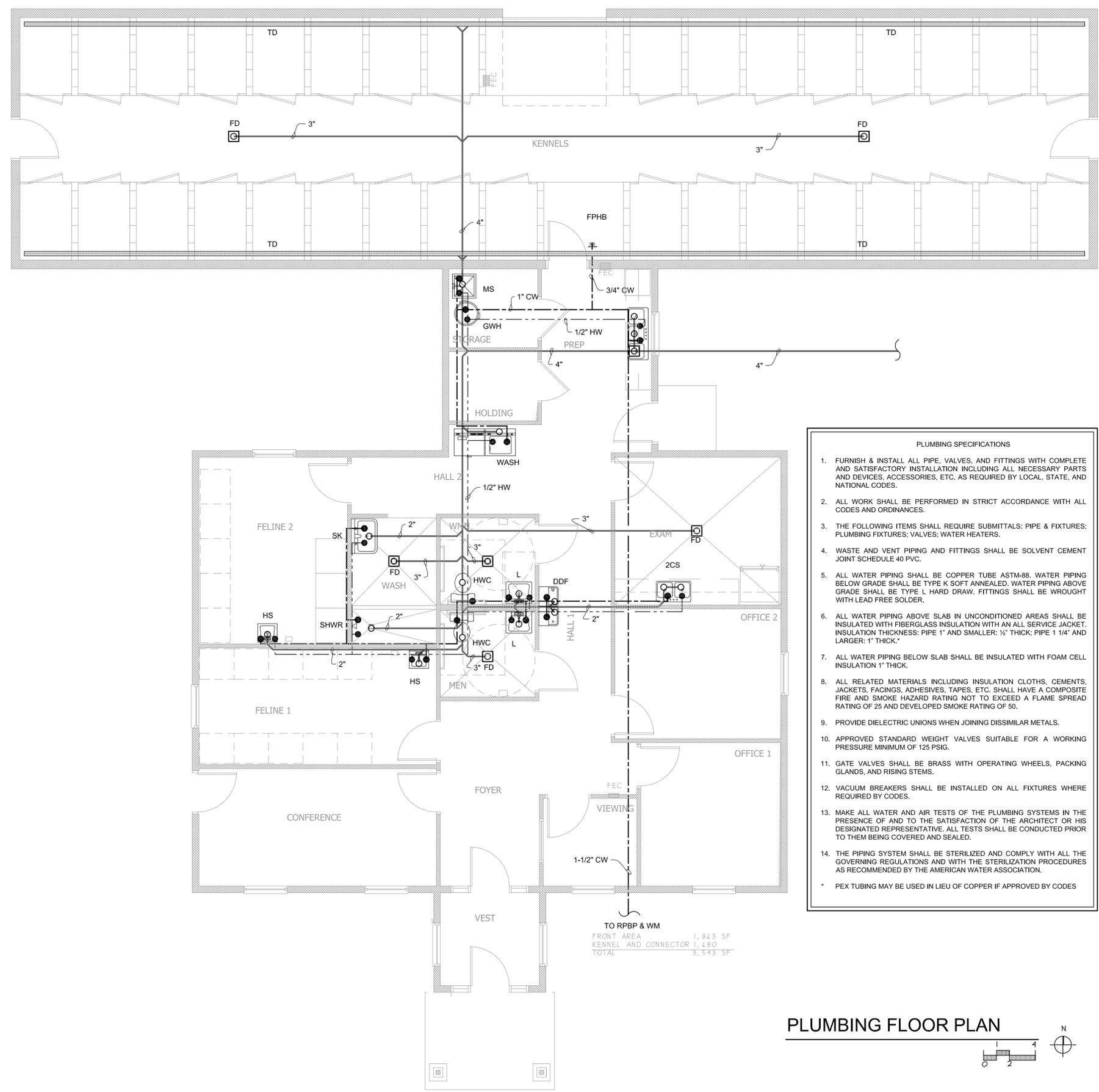
DESIGNER
 REVIEWER

PROJECT

DATE 9/26/19

SHEET M-2



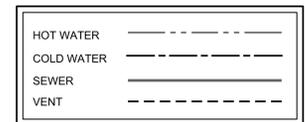


- PLUMBING SPECIFICATIONS**
- FURNISH & INSTALL ALL PIPE, VALVES, AND FITTINGS WITH COMPLETE AND SATISFACTORY INSTALLATION INCLUDING ALL NECESSARY PARTS AND DEVICES, ACCESSORIES, ETC. AS REQUIRED BY LOCAL, STATE, AND NATIONAL CODES.
 - ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL CODES AND ORDINANCES.
 - THE FOLLOWING ITEMS SHALL REQUIRE SUBMITTALS: PIPE & FIXTURES; PLUMBING FIXTURES; VALVES; WATER HEATERS.
 - WASTE AND VENT PIPING AND FITTINGS SHALL BE SOLVENT CEMENT JOINT SCHEDULE 40 PVC.
 - ALL WATER PIPING SHALL BE COPPER TUBE ASTM-88. WATER PIPING BELOW GRADE SHALL BE TYPE K SOFT ANNEALED. WATER PIPING ABOVE GRADE SHALL BE TYPE L HARD DRAW. FITTINGS SHALL BE WROUGHT WITH LEAD FREE SOLDER.
 - ALL WATER PIPING ABOVE SLAB IN UNCONDITIONED AREAS SHALL BE INSULATED WITH FIBERGLASS INSULATION WITH AN ALL SERVICE JACKET. INSULATION THICKNESS: PIPE 1" AND SMALLER: 1/2" THICK; PIPE 1 1/4" AND LARGER: 1" THICK.
 - ALL WATER PIPING BELOW SLAB SHALL BE INSULATED WITH FOAM CELL INSULATION 1" THICK.
 - ALL RELATED MATERIALS INCLUDING INSULATION CLOTHS, CEMENTS, JACKETS, FACINGS, ADHESIVES, TAPES, ETC. SHALL HAVE A COMPOSITE FIRE AND SMOKE HAZARD RATING NOT TO EXCEED A FLAME SPREAD RATING OF 25 AND DEVELOPED SMOKE RATING OF 50.
 - PROVIDE DIELECTRIC UNIONS WHEN JOINING DISSIMILAR METALS.
 - APPROVED STANDARD WEIGHT VALVES SUITABLE FOR A WORKING PRESSURE MINIMUM OF 125 PSIG.
 - GATE VALVES SHALL BE BRASS WITH OPERATING WHEELS, PACKING GLANDS, AND RISING STEMS.
 - VACUUM BREAKERS SHALL BE INSTALLED ON ALL FIXTURES WHERE REQUIRED BY CODES.
 - MAKE ALL WATER AND AIR TESTS OF THE PLUMBING SYSTEMS IN THE PRESENCE OF AND TO THE SATISFACTION OF THE ARCHITECT OR HIS DESIGNATED REPRESENTATIVE. ALL TESTS SHALL BE CONDUCTED PRIOR TO THEM BEING COVERED AND SEALED.
 - THE PIPING SYSTEM SHALL BE STERILIZED AND COMPLY WITH ALL THE GOVERNING REGULATIONS AND WITH THE STERILIZATION PROCEDURES AS RECOMMENDED BY THE AMERICAN WATER ASSOCIATION.
- * PEX TUBING MAY BE USED IN LIEU OF COPPER IF APPROVED BY CODES

PLUMBING FIXTURES SPECIFICATIONS

NOTE:
 ALL SPECIFIED PLUMBING FIXTURES MAY BE SUBSTITUTED WITH THOSE OF EQUAL QUALITY AND FUNCTION. PRIOR TO PURCHASE, ALL PLUMBING FIXTURES MUST BE APPROVED BY OWNER & PLUMBING SUBMITTALS ARE REQUIRED

HWC	ADA FLUSH VALVE WATER CLOSET KOHLER K4368-0 1.6 12 EB VC BOWL *HIGHCL WHIT ZURN ZZ6000WS1YBYC 1.6 CLST FLUSH VLV W/ SWT KIT PROFLO PFTSCOF2000WH EB CLST SEAT COMM OFLC WHIT
L	LAVATORY (WALL HUNG, A.D.A. COMPLIANT) AMERICAN STANDARD MODEL #0321.026 SYMMONS #5-20 SINGLE LEVEL HANDLE FAUCET MCGUIRE #155-A GRID DRAIN MCGUIRE 1 1/4 IN # 8872 P-TRAP MCGUIRE #2165CC SUPPLIES
3CS	THREE COMPARTMENT SINK ADVANCE TABCO FE-3-1620-18RLX SS ELJER MODEL #4182070 FAUCETS; TWO WRIST ACTION HANDEL HI-RINSE
2CS	B SS SINK W/GOOSENECK FCT ELKAY ELR33213 2CS 33X21 3H 2B SS SINK *LUSTER CHICAGO C786GN2FCCP CP 2HDL GN FCT ZURN ZZ8741 2-3/4X4-3/8 CP BASKET STRAINER ZURN ZZ8702 1-1/2X1-1/2 CP P-TRAP WITH C/O ZURN ZZ8804LR TWO 1/2NOMX3/800 STD STOPS W/ FLEX
FS	FLOOR SINK (3" DIAM OUTLET) J.R. SMITH MODEL #2230-S-Y WITH SQUARE TOP HINGED GRATE; SEDIMENT BUCKET, P-TRAP AND TRAP PRIMER CONNECTION
HS	18 SS SINK W/GOOSENECK FCT (WALL-MOUNTED) ELKAY EHS-14-SSX 18 SS SINK W/ 18 GA; 300 SERIES SS; 6-IN BACKLASH; GOOSENECK FAUCET
DDF	WATER COOLER B/L-LEVEL ELKAY EEZSTL8LC 8G BI LVL ADA WTR COLR LIGR COMP
WASH	CLOTHES WASHER (SELECTED BY OWNER)
SHWR	SHOWER BY OWNER
FPHB	FREEZE PROOF HOSE BIBB ZURN MODEL #Z-1320 WITH ANTI-SOPHON BACKFLOW PREVENTER, AUTOMATIC DRAINING; KEY OPERATED
SK	SINK (SELECTED BY OWNER)
MS	MOP SINK AMERICAN STANDARD MODEL #7741000 28"X28"X13" FLOOR MOUNTED BASIN WITH VINYL RIM GUARD CAMBRIDGE #28T9 FAUCET WITH VACUUM BKR, STOPS, PAIL HOOK, 4-ARM HANDLES
FD	FLOOR DRAIN (3" DIAM OUTLET) J. R. SMITH MODEL #2005-A WITH ADJUSTABLE ROUND STRAINER HEAD; P-TRAP AND TRAP PRIMER CONNECTION
FPHB	FREEZE PROOF HOSE BIBB ZURN MODEL #Z-1320 WITH ANTI-SOPHON BACKFLOW PREVENTER, AUTOMATIC DRAINING; KEY OPERATED
GWH	GAS WATER HEATER STATE S8D71120NE: 71G; 71 GAL; 120,000 BTUH; NAT GAS WATER HEATER ALUM; 187013 IPS CORP; 30" ALUMINUM WATER HEATER PAN WITH HOSE CONNECTION, 6 IN DIAM GAS FLUE. ASME T&P RELIEF VALVE, DIELECTRIC UNIONS AT CONNECTIONS TO DISSIMILAR METALS, SHUT-OFF VALVES ON HOT & COLD WATER



PLUMBING FLOOR PLAN

JOHN F. WERNE
ARCHITECT

1020 OWEN COURT, ASHLAND CITY, TENNESSEE 37015 615-792-3966 jwerne3@gmail.com

ROBERTSON COUNTY
ANIMAL CONTROL

W. COUNTY FARM ROAD, ROBERTSON COUNTY, TN

DESIGNER
REVIEWER

PROJECT

DATE 9/26/19

SHEET P-1



JOHN F. WERNE
ARCHITECT

1020 OWEN COURT, ASHLAND CITY, TENNESSEE 37015 615-792-9966 jwerne3@gmail.com

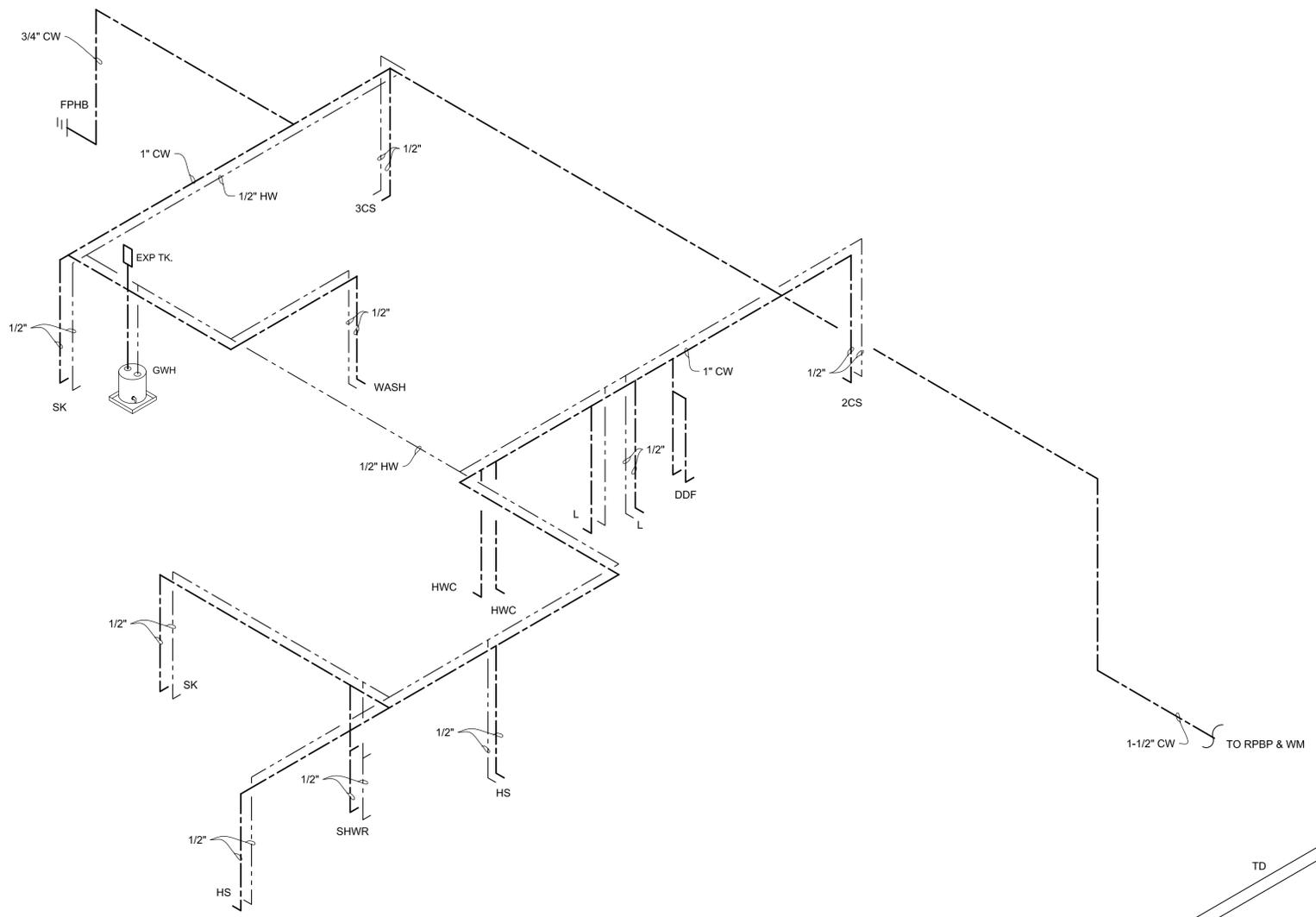
ROBERTSON COUNTY
ANIMAL CONTROL
 W. COUNTY FARM ROAD, ROBERTSON COUNTY, TN

DESIGNER
 REVIEWER

PROJECT

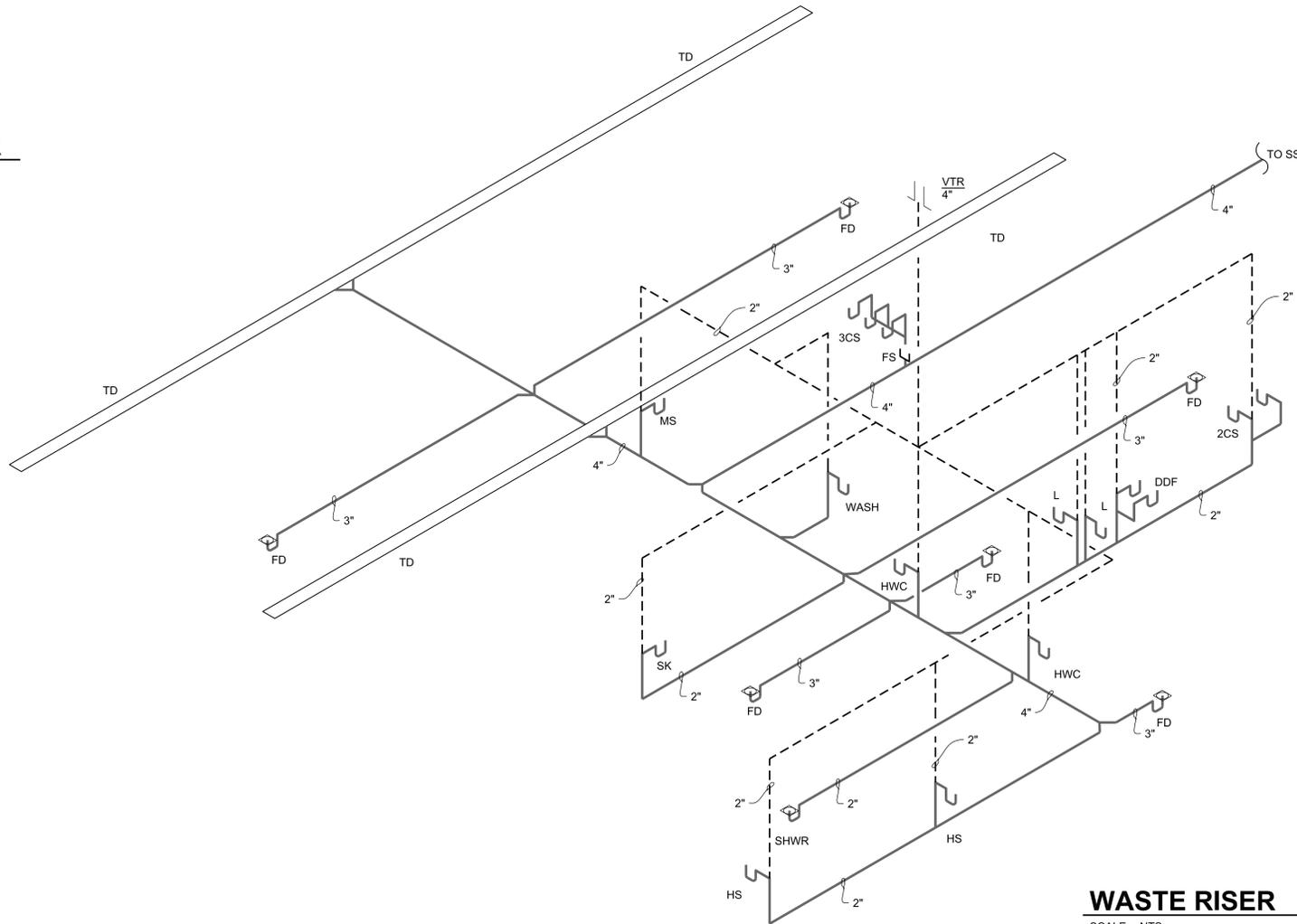
DATE 9/26/19

SHEET P-2



SUPPLY RISER

SCALE: NTS



WASTE RISER

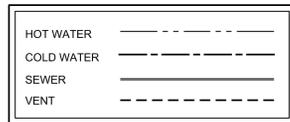
SCALE: NTS

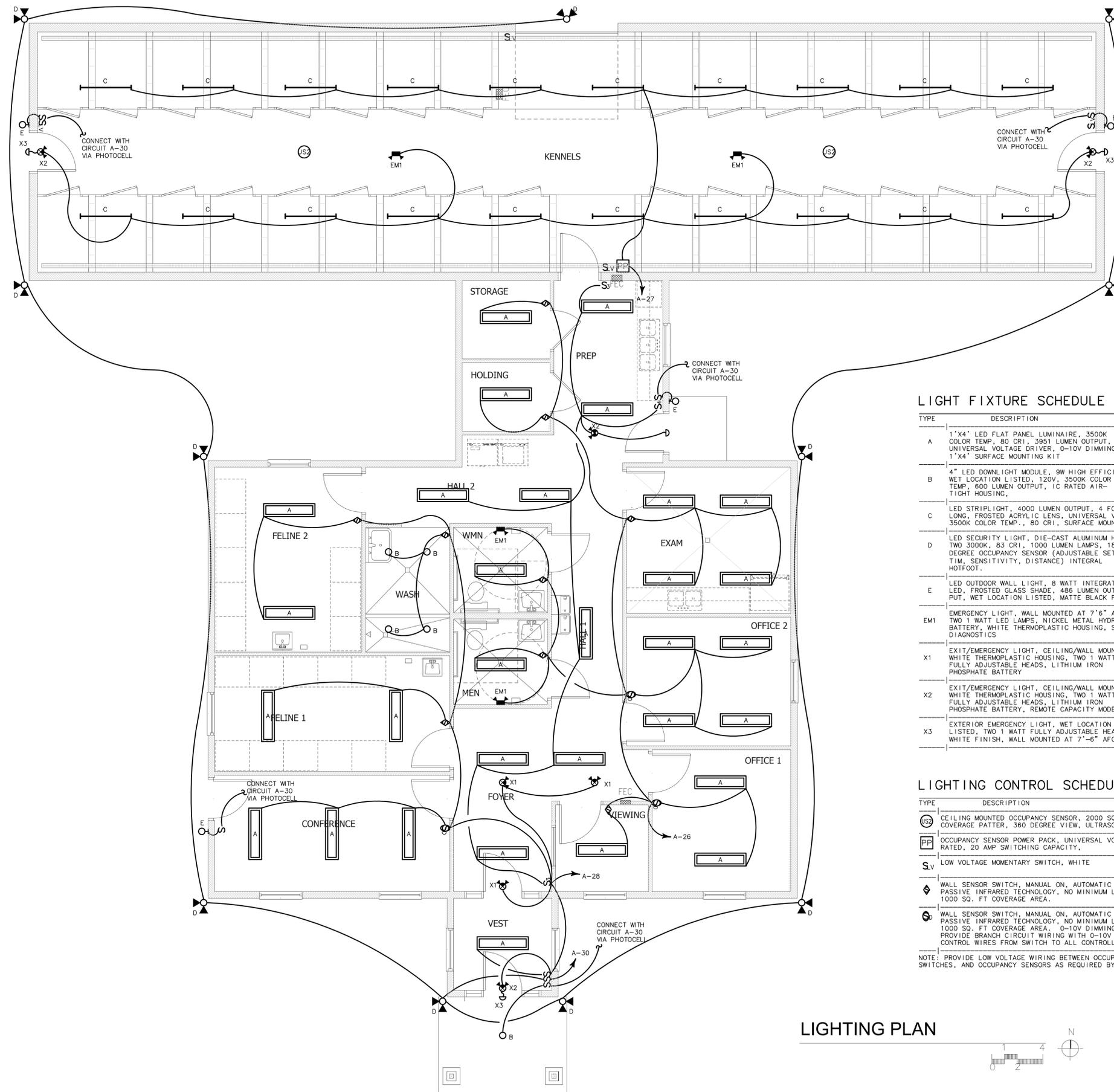
PLUMBING FIXTURES SPECIFICATIONS

NOTE:

ALL SPECIFIED PLUMBING FIXTURES MAY BE SUBSTITUTED WITH THOSE OF EQUAL QUALITY AND FUNCTION. PRIOR TO PURCHASE, ALL PLUMBING FIXTURES MUST BE APPROVED BY OWNER & PLUMBING SUBMITTALS ARE REQUIRED

HWC	ADA FLUSH VALVE WATER CLOSET KOHLER K4388-0 1.6 12 EB VC BOWL *HIGHCL WHIT ZURN ZZ6000WS1YBYC 1.6 CLST FLUSH VLV W/ SWT KIT PROFLO PFTSCOF2000WH EB CLST SEAT COMM OFLC WHIT
L	LAVATORY (WALL HUNG, A.D.A. COMPLIANT) AMERICAN STANDARD MODEL #0321.026 SYMMONS #5-20 SINGLE LEVEL HANDLE FAUCET MCGUIRE #155-A GRID DRAIN MCGUIRE 1 1/4 IN # 8872 P-TRAP MCGUIRE #2165CC SUPPLIES
3CS	THREE COMPARTMENT SINK ADVANCE TABCO FE-3-1620-18RLX SS ELJER MODEL #4182070 FAUCETS; TWO WRIST ACTION HANDEL HI-RINSE
2CS	B SS SINK W/GOOSENECK FCT ELKAY ELR33213 2CS 33X21 3H 2B SS SINK *LUSTER CHICAGO C786GN2FCCP CP 2HDL GN FCT ZURN ZZ8741 2-3/4X4-3/8 CP BASKET STRAINER ZURN ZZ8702 1-1/2X1-1/2 CP P-TRAP WITH C/O ZURN ZZ8804LR TWO 1/2NOMX3/8OD STD STOPS W/ FLEX
FS	FLOOR SINK (3" DIAM OUTLET) J.R. SMITH MODEL #2230-S-Y WITH SQUARE TOP HINGED GRATE; SEDIMENT BUCKET, P-TRAP AND TRAP PRIMER CONNECTION
HS	1B SS SINK W/GOOSENECK FCT (WALL-MOUNTED) ELKAY EHS-14-SSX 1B SS SINK W/ 18 GA; 300 SERIES SS; 6-IN BACKLASH; GOOSENECK FAUCET
DDF	WATER COOLER BI-LEVEL ELKAY EEZSTL8LC 8G BI LVL ADA WTR COLR LIGR COMP
WASH	CLOTHES WASHER (SELECTED BY OWNER)
SHWR	SHOWER BY OWNER
FPHB	FREEZE PROOF HOSE BIBB ZURN MODEL #Z-1320 WITH ANTI-SOPHON BACKFLOW PREVENTER, AUTOMATIC DRAINING; KEY OPERATED
SK	SINK (SELECTED BY OWNER)
MS	MOP SINK AMERICAN STANDARD MODEL #7741000 28"X28"X13" FLOOR MOUNTED BASIN WITH VINYL RIM GUARD CAMBRIDGE #28T9 FAUCET WITH VACUUM BKR, STOPS, PAIL HOOK, 4-ARM HANDLES
FD	FLOOR DRAIN (3" DIAM OUTLET) J. R. SMITH MODEL #2005-A WITH ADJUSTABLE ROUND STRAINER HEAD; P-TRAP AND TRAP PRIMER CONNECTION
FPHB	FREEZE PROOF HOSE BIBB ZURN MODEL #Z-1320 WITH ANTI-SOPHON BACKFLOW PREVENTER, AUTOMATIC DRAINING; KEY OPERATED
GWH	GAS WATER HEATER STATE SSB071120NE: 71G; 71 GAL; 120,000 BTUH; NAT GAS WATER HEATER ALUM; 187013 IPS CORP; 30" ALUMINUM WATER HEATER PAN WITH HOSE CONNECTION, 6 IN DIAM GAS FLUE, ASME T&P RELIEF VALVE, DIELECTRIC UNIONS AT CONNECTIONS TO DISSIMILAR METALS, SHUT-OFF VALVES ON HOT & COLD WATER





LIGHT FIXTURE SCHEDULE

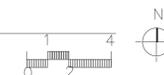
TYPE	DESCRIPTION	WATT	VOLT	MANUFACTURER
A	1"x4" LED FLAT PANEL LUMINAIRE, 3500K COLOR TEMP., 80 CRI, 3951 LUMEN OUTPUT, UNIVERSAL VOLTAGE DRIVER, 0-10V DIMMING, 1"x4" SURFACE MOUNTING KIT	39	UNV	COLUMBIA LIGHTING #CFP14-4035-CFPSMK-14
B	4" LED DOWNLIGHT MODULE, 9W HIGH EFFICIENCY WET LOCATION LISTED, 120V, 3500K COLOR TEMP., 600 LUMEN OUTPUT, IC RATED AIR-TIGHT HOUSING,	9	120	PRESCOLITE #LB4A-6L-35K-9-WH + #1BX4QL-120
C	LED STRIPLIGHT, 4000 LUMEN OUTPUT, 4 FOOT LONG, FROSTED ACRYLIC LENS, UNIVERSAL VOLT. 3500K COLOR TEMP., 80 CRI, SURFACE MOUNTED	40.2	UNV	COLUMBIA LIGHTING #CSL4-4035
D	LED SECURITY LIGHT, DIE-CAST ALUMINUM HEADS TWO 3000K, 83 CRI, 1000 LUMEN LAMPS, 180 DEGREE OCCUPANCY SENSOR (ADJUSTABLE SETTINGS TIM, SENSITIVITY, DISTANCE) INTEGRAL HOTFOOT.	26.6	120	HUBBELL OUTDOOR LIGHTING #M-2L-3K1-WH
E	LED OUTDOOR WALL LIGHT, 8 WATT INTEGRATED LED, FROSTED GLASS SHADE, 486 LUMEN OUTPUT, WET LOCATION LISTED, MATTE BLACK FINISH	9	120	PORTFOLIO #FEW1691A-7
EM1	EMERGENCY LIGHT, WALL MOUNTED AT 7'-6" AFF TWO 1 WATT LED LAMPS, NICKEL METAL HYDRIDE BATTERY, WHITE THERMOPLASTIC HOUSING, SELF DIAGNOSTICS	1.1	120	DUAL LITE #EV2-1
X1	EXIT/EMERGENCY LIGHT, CEILING/WALL MOUNTED WHITE THERMOPLASTIC HOUSING, TWO 1 WATT FULLY ADJUSTABLE HEADS, LITHIUM IRON PHOSPHATE BATTERY	1.7	120	DUAL LITE #EVCURW
X2	EXIT/EMERGENCY LIGHT, CEILING/WALL MOUNTED WHITE THERMOPLASTIC HOUSING, TWO 1 WATT FULLY ADJUSTABLE HEADS, LITHIUM IRON PHOSPHATE BATTERY, REMOTE CAPACITY MODEL	1.7	120	DUAL LITE #EVCURW4
X3	EXTERIOR EMERGENCY LIGHT, WET LOCATION LISTED, TWO 1 WATT FULLY ADJUSTABLE HEADS WHITE FINISH, WALL MOUNTED AT 7'-6" AFG			DUAL LITE #EVO-D-W

LIGHTING CONTROL SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER
USP	CEILING MOUNTED OCCUPANCY SENSOR, 2000 SQUARE FOOT COVERAGE PATTERN, 360 DEGREE VIEW, ULTRASONIC TECH.	LUTRON #LOS-CUS-2000
PP	OCCUPANCY SENSOR POWER PACK, UNIVERSAL VOLTAGE, PLENUM RATED, 20 AMP SWITCHING CAPACITY,	LUTRON #PP-DV-M
Sv	LOW VOLTAGE MOMENTARY SWITCH, WHITE	LUTRON #NTRCS-1-WH
MS	WALL SENSOR SWITCH, MANUAL ON, AUTOMATIC OFF, PASSIVE INFRARED TECHNOLOGY, NO MINIMUM LOAD 1000 SQ. FT COVERAGE AREA.	LUTRON #MS-OPSM2N-DV-WH
MS	WALL SENSOR SWITCH, MANUAL ON, AUTOMATIC OFF, PASSIVE INFRARED TECHNOLOGY, NO MINIMUM LOAD 1000 SQ. FT COVERAGE AREA. 0-10V DIMMING CONTROL PROVIDE BRANCH CIRCUIT WIRING WITH 0-10V DIMMING CONTROL WIRES FROM SWITCH TO ALL CONTROLLED LIGHT FIXTURES.	LUTRON #MS-Z101-WH

NOTE: PROVIDE LOW VOLTAGE WIRING BETWEEN OCCUPANCY SENSOR POWER PACKS, LOW VOLTAGE SWITCHES, AND OCCUPANCY SENSORS AS REQUIRED BY EQUIPMENT MANUFACTURER.

LIGHTING PLAN

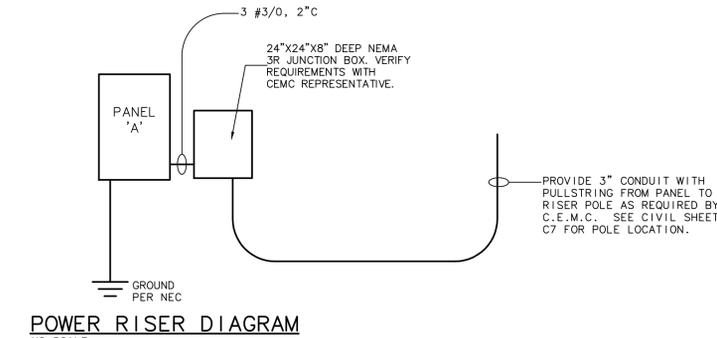
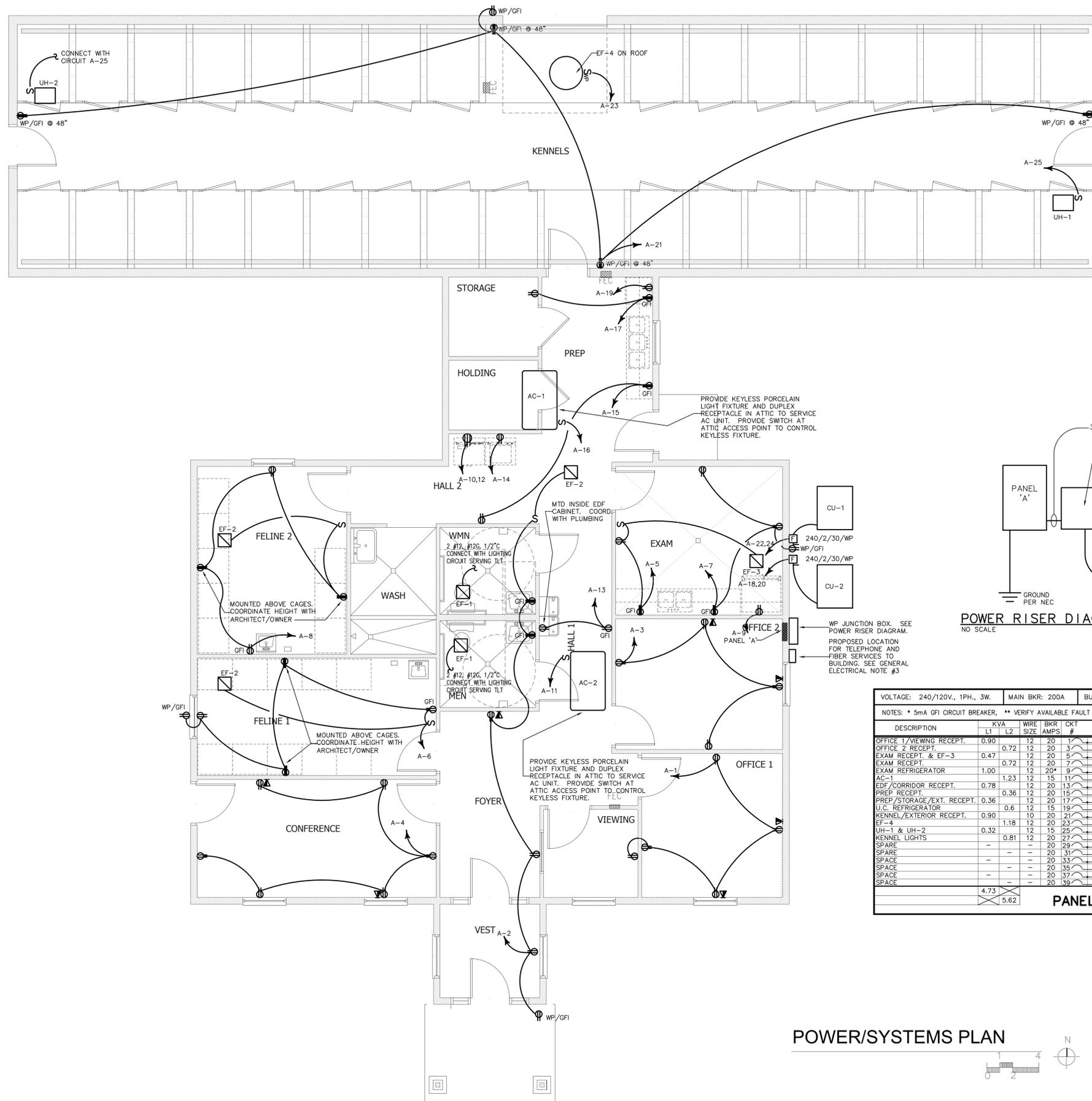


DESIGNER
 REVIEWER

PROJECT

DATE 11/22/19
 REV 6/2/20

SHEET **E-1**



VOLTAGE: 240/120V., 1PH., 3W. MAIN BKR: 200A BUS: 225 AMP --- A.I.C.: 22K** FLUSH MOUNTED

NOTES: * 5mA GFI CIRCUIT BREAKER, ** VERIFY AVAILABLE FAULT CURRENT WITH CEMC REPRESENTATIVE PRIOR TO ORDERING PANEL

DESCRIPTION	KVA		WIRE		BKR		CKT		WIRE		KVA		DESCRIPTION
	L1	L2	SIZE	AMPS	#	#	AMPS	SIZE	L1	L2	L1	L2	
OFFICE 1/VIEWING RECEPT.	0.90		12	20	1	2	20	12	1.19				RECEPT./EF-2
OFFICE 2 RECEPT.	0.72		12	20	3	4	20	12	1.08				CONF. RECEPTACLES
EXAM RECEPT. & EF-3	0.47		12	20	5	6	20	12	1.01				FELINE 1 RECEPT./EF-2
EXAM RECEPT.	0.72		12	20	7	8	20	12	0.83				FELINE 2 RECEPT./EF-2
EXAM REFRIGERATOR	1.00		12	20*	9	10	30*	10	2.50				CLOTHES DRYER
AC-1	1.23		12	15	11	12							
EDF/CORRIDOR RECEPT.	0.78		12	20	13	14	20*	12	1.50				CLOTHES WASHER
PREP RECEPT.	0.36		12	20	15	16	15	12	1.23				AC-1
PREP/STORAGE/EXT. RECEPT.	0.36		12	20	17	18	30	10	1.79				CU-2
U.C. REFRIGERATOR	0.6		12	15	19	20			1.79				
KENNEL/EXTERIOR RECEPT.	0.90		10	20	21	22	30	10	1.79				CU-1
EF-4	1.18		12	20	23	24			1.79				
UH-1 & UH-2	0.32		12	15	25	26	20	12	0.63				LIGHTS
KENNEL LIGHTS	0.81		12	20	27	28	20	12	0.66				LIGHTS
SPARE	-		-	-	29	30	20	12	0.33				EXTERIOR LIGHTS
SPARE	-		-	-	31	32	20	-	-				SPARE
SPACE	-		-	-	33	34	20	-	-				SPARE
SPACE	-		-	-	35	36	20	-	-				SPACE
SPACE	-		-	-	37	38	20	-	-				SPACE
SPACE	-		-	-	39	40	20	-	-				SPACE
	4.73								10.74				L1: 15.47 KVA
	5.62								9.88				L2: 15.50 KVA
													TOTAL: 30.97 KVA

PANEL "A"



Section 1: Project Information

Energy Code: 2009 IECC
 Project Title: Robertson Co. Animal Control
 Project Type: New Construction

Construction Site: W. County Farm Road, Springfield, TN
 Owner/Agent:
 Designer/Contractor:

Section 2: Interior Lighting and Power Calculation

A Area Category	B Floor Area (ft ²)	C Allowed Watts / ft ²	D Allowed Watts (B x C)
Office	3635	1	3635
Total Allowed Watts =			3635

Section 3: Interior Lighting Fixture Schedule

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Office (3635 sq.ft.)				
LED 1: A: 1x4 Surface LED: Other:	1	31	39	1209
LED 2: B: 4" LED Downlight: Other:	1	4	9	36
LED 3: C: LED Singslight: Other:	1	20	40.2	804
Total Proposed Watts =				2049

Section 4: Requirements Checklist

Interior Lighting PASSES: Design 44% better than code.

- Lighting Wattage:**
- Total proposed watts must be less than or equal to total allowed watts.
- | Allowed Watts | Proposed Watts | Complies |
|---------------|----------------|----------|
| 3635 | 2049 | YES |
- Controls, Switching, and Wiring:**
- Daylight zones under skylights more than 15 feet from the perimeter have lighting controls separate from daylight zones adjacent to vertical fenestration.
 - Daylight zones have individual lighting controls independent from that of the general area lighting.
- Exceptions:**
- Contiguous daylight zones spanning no more than two orientations are allowed to be controlled by a single controlling device.
 - Daylight spaces enclosed by walls or ceiling height partitions and containing two or fewer light fixtures are not required to have a separate switch for general area lighting.
 - Independent controls for each space (switch/occupancy sensor).
- Exceptions:**
- Areas designated as security or emergency areas that must be continuously illuminated.
 - Lighting in stairways or corridors that are elements of the means of egress.

Project Title: Robertson Co. Animal Control
 Data filename: D:\DRC Engineering\02019\19096\19096-comcheck.ck
 Report date: 11/22/19
 Page 1 of 4

- Master switch at entry to hotel/motel/guest room.
 - Individual dwelling units separately metered.
 - Medical task lighting or art/history display lighting claimed to be exempt from compliance has a control device independent of the control of the nonexempt lighting.
 - Each space required to have a manual control also allows for reducing the connected lighting load by at least 50 percent by either controlling all luminaires, dual switching of alternate rows of luminaires, alternate luminaires, or alternate lamps, switching the middle lamp luminaires independently of other lamps, or switching each luminaire or each lamp.
- Exceptions:**
- Only one luminaire in space.
 - An occupant-sensing device controls the area.
 - The area is a corridor, storeroom, restroom, public lobby or sleeping unit.
 - Areas that use less than 0.6 Watts/sq.ft.
- Automatic lighting shutoff control in buildings larger than 5,000 sq.ft.
- Exceptions:**
- Sleeping units, patient care areas; and spaces where automatic shutoff would endanger safety or security.
- Photocell/astronomical time switch on exterior lights.
- Exceptions:**
- Lighting intended for 24 hour use.
- Tandem wired one-lamp and three-lamp ballasted luminaires (No single-lamp ballasts).
- Exceptions:**
- Electronic high-frequency ballasts; Luminaires on emergency circuits or with no available pair.

Section 5: Compliance Statement

Compliance Statement: The proposed lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2009 IECC requirements in COMcheck Version 4.1.1.0 and to comply with the mandatory requirements in the Requirements Checklist.

Daron R. Christy, P.E.
 Name - Title
 Signature
 11-22-19
 Date

Project Title: Robertson Co. Animal Control
 Data filename: D:\DRC Engineering\02019\19096\19096-comcheck.ck
 Report date: 11/22/19
 Page 2 of 4

Section 1: Project Information

Energy Code: 2009 IECC
 Project Title: Robertson Co. Animal Control
 Project Type: New Construction
 Exterior Lighting Zone: 2 (Residentially zoned area)

Construction Site: W. County Farm Road, Springfield, TN
 Owner/Agent:
 Designer/Contractor:

Section 2: Exterior Lighting Area/Surface Power Calculation

A Exterior Area/Surface	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (B x C)	F Proposed Watts
Main entry	3 ft of door width	20	Yes	60	9
Other door (not main entry)	12 ft of door width	20	Yes	240	32
Illuminated length of facade wall or surface	379 ft.	2.5	No	948	292
Total Tradable Watts* =				300	41
Total Allowed Watts =				1248	
Total Allowed Supplemental Watts** =				600	

* Wattage tradeoffs are only allowed between tradable areas/surfaces.
 ** A supplemental allowance equal to 600 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Section 3: Exterior Lighting Fixture Schedule

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Main entry (3 ft of door width): Tradable Wattage				
LED 1: B: 4" LED downlight: Other:	1	1	9	9
Other door (not main entry) (12 ft of door width): Tradable Wattage				
LED 2: E: LED Wall light: Other:	1	4	8	32
Illuminated length of facade wall or surface (379 ft): Non-tradable Wattage				
LED 3: D: LED Motion Activated: Other:	2	11	26.6	292.6
Total Tradable Proposed Watts =				41

Section 4: Requirements Checklist

- Lighting Wattage:**
- Within each non-tradable area/surface, total proposed watts must be less than or equal to total allowed watts. Across all tradable areas/surfaces, total proposed watts must be less than or equal to total allowed watts.
- Compliance:** Passes.
- Controls, Switching, and Wiring:**
- All exemption claims are associated with fixtures that have a control device independent of the control of the nonexempt lighting.
 - Lighting not designated for dusk-to-dawn operation is controlled by either a photosensor (with time switch), or an astronomical time switch.

Project Title: Robertson Co. Animal Control
 Data filename: D:\DRC Engineering\02019\19096\19096-comcheck.ck
 Report date: 11/22/19
 Page 3 of 4

- Lighting designated for dusk-to-dawn operation is controlled by an astronomical time switch or photosensor.
 - All time switches are capable of retaining programming and the time setting during loss of power for a period of at least 10 hours.
- Exterior Lighting Efficacy:**
- All exterior building grounds luminaires that operate at greater than 100W have minimum efficacy of 60 lumens/watt.
- Exceptions:**
- Lighting that has been claimed as exempt and is identified as such in Section 3 table above.
 - Lighting that is specifically designated as required by a health or life safety statute, ordinance, or regulation.
 - Emergency lighting that is automatically off during normal building operation.
 - Lighting that is controlled by motion sensor.

Section 5: Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2009 IECC requirements in COMcheck Version 4.1.1.0 and to comply with the mandatory requirements in the Requirements Checklist.

Daron R. Christy, P.E.
 Name - Title
 Signature
 11-22-19
 Date

Project Title: Robertson Co. Animal Control
 Data filename: D:\DRC Engineering\02019\19096\19096-comcheck.ck
 Report date: 11/22/19
 Page 4 of 4

ELECTRICAL SPECIFICATIONS
 SECTION 16000 GENERAL PROVISIONS

- PART 1 GENERAL
- Reference Standards
 - 2017 NFPA 70 National Electrical Code
 - 2012 International Building Code
 - 2009 International Energy Conservation Code
 - All other applicable State and Local codes.
 - Submittals
 - Shop Drawings:
 - Submit for approval, prior to installation, one pdf copy of complete descriptive data on all equipment and systems as required by other sections of this specification. Clearly indicate all proposed substitutions and deviations from drawings and specifications.
 - Check all submittals for clearances and coordination with other trades. Submittals shall be certified, by the Contractor's approval stamp, that all conditions have been checked and that no conflicts exist.
 - Record Drawings
 - Submit, to the Owner, record drawings showing field changes marked in red.

- Coordination
 - Utility Company
 - Coordinate with utility companies for specific requirements and exact locations for electric power, cable tv, and telephone services.
 - Other Trades
 - Coordinate with mechanical and plumbing drawings for power and control requirements for the specific equipment to be installed and for equipment such as starters and disconnect switches which may be furnished with equipment.
- Work Included
 - The work of this section includes furnishing of labor and materials as required for installation of a new electrical distribution system including service, feeders, panelboards, branch circuits, lighting, and connections to all equipment requiring electrical power.
 - Installation of conduit for telephone cabling. Cable installation by others.
- Drawings
 - The drawings are partly diagrammatic and do not show in detail all required features of the work nor concealed conditions. They shall be supplemented by the Contractor's knowledge and experience.

- PART 2 PRODUCTS
- General
 - All electrical equipment installed shall bear the U.L. label except where U.L. does not label such equipment.
 - Guarantee
 - Furnish a written guarantee that all equipment furnished and installed will be free of defects of material and workmanship for a period of 1 year from date of acceptance of the work by the Owner. Promptly replace and repair all defective equipment and all other equipment damaged thereby at no additional cost to the Owner.

- PART 3 EXECUTION
- General
 - Visit project site before submission of bid and become familiar with existing conditions and locations of existing utilities.
 - The entire installation shall be made in a neat manner by persons skilled in the electrical trade and shall be in accordance with the reference standards listed above.
 - Make power connections to air conditioning equipment and Owner furnished equipment. Furnish and install all associated receptacles and disconnect switches. Fuse sizes for disconnect switches shall be as recommended by the equipment manufacturer.
 - Furnish and install conduit and wire for air conditioning control equipment. See mechanical drawings for locations and requirements.
 - Testing
 - All systems and equipment installed shall be completely tested and shall be left in good working order.

SECTION 16050 BASIC ELECTRICAL MATERIALS AND METHODS

- PART 1 GENERAL
- Submittals
 - Wiring Devices

- PART 2 PRODUCTS
- Raceways
 - Rigid Steel Conduit
 - Electrical Metallic Tubing
 - Polyvinylchloride Conduit
 - Wires and Cables
 - Feeders and Branch Circuit Wires: Copper conductor, 600 Volt, type THHN or THWN insulation.
 - Branch Circuit Cables (concealed above ceiling or within walls that provide a thermal barrier of material that has at least a 1-minute finish rating as identified in listings of fire-rated assemblies): Copper conductor, type NM cable.
 - Control Circuit Cables: Copper conductor, No.14 AWG, type THHN, or as required by equipment manufacturer.
 - Wiring Devices
 - Wall Switches: AC general use snap switch with toggle handle, specification grade, 20 amperes, 120-277 volts. Verify device finish with owner's representatives prior to ordering.
 - Receptacles: Type 5-15R, unless indicated otherwise, specification grade, plastic face. Duplex receptacles on dedicated circuits shall be NEMA type 5-20R. Verify device finish with owner's representatives prior to ordering.
 - Coverplates
 - Indoor: Nylon. Verify device finish with owner's representatives prior to ordering.
 - Outdoor: Galvanized steel, weatherproof while-in-use type
 - Identification
 - Provide laminated plastic tags for all panelboards and disconnect switches. Tags shall completely identify equipment marked or controlled.

- PART 3 EXECUTION
- Raceways
 - All raceways shall be installed in accordance with manufacturers' instructions.
 - Permitted Usage:
 - All interior raceways shall be galvanized electrical metallic tubing (EMT) equipped with steel set screw couplings and box connectors.
 - Raceways underground, exposed to exterior, or cast in concrete shall be galvanized rigid steel conduit (RGS) or schedule 40 PVC.
 - Installation:
 - In long raceways furnish and install the proper number and size pull boxes to facilitate installation of conductors.
 - Install separate grounding conductor in each raceway.
 - Provide rigid galvanized steel elbows and vertical sections of underground and underfloor runs of PVC conduit.
 - Wires and Cables
 - All power wiring shall be installed in conduit.
 - Branch Circuit Cables (concealed above ceiling or within walls that provide a thermal barrier of material that has at least a 1-minute finish rating as identified in listings of fire-rated assemblies): Copper conductor, type NM cable.
 - Low voltage control and signal cable may be run open. Cables installed in air plenums must be plenum rated. Open wiring shall be supported from structure.

SECTION 16400 SERVICE AND DISTRIBUTION

- PART 1 GENERAL
- Submittals
 - Panelboards
 - Disconnect switches
- PART 2 PRODUCTS
- Panelboards
 - Circuit breaker type as described on the panel schedules. Load center type panelboards are not acceptable. Approved manufacturers are Cutler Hammer, General Electric, Siemens, and Square D.
 - Disconnect Switches
 - Fusible or nonfusible quick-make, quick-break, load interrupter enclosed knife switch with externally operable handle interlocked to prevent opening front cover with switch in "On" position. Approved manufacturers are Cutler Hammer, General Electric, Siemens, and Square D.

- PART 3 EXECUTION
- General
 - Maintain code required working clearances around all electrical equipment. Coordinate installation with architectural features, piping locations, and ductwork.
 - Panelboards
 - Install new panelboards as indicated.
 - All panels shall have engraved plastic labels and typewritten directories. Directories shall describe type of load and location of load, using Owner's space names or numbers, for each branch circuit.

SECTION 16500 LIGHTING

- PART 1 GENERAL
- Submittals
 - Lighting Fixtures
- PART 2 PRODUCTS
- General
 - Provide lighting fixtures as specified on Lighting Fixture Schedule of sizes, types, ratings, and with features indicated. Substitutions shall be equal in performance and appearance to fixtures listed.
 - Fixtures shall be complete with all parts, hardware, and accessories for installation and proper operation.
- PART 3 EXECUTION
- General
 - Install fixtures as indicated on drawings. Refer to reflected ceiling plan for exact locations.

END OF ELECTRICAL SPECIFICATIONS



JOHN F. WERNE ARCHITECT

1020 OWEN COURT, ASHLAND CITY, TENNESSEE 37015 615-792-3966 jwerne3@gmail.com

ROBERTSON COUNTY ANIMAL CONTROL

W. COUNTY FARM ROAD, ROBERTSON COUNTY, TN

DESIGNER
REVIEWER

PROJECT

DATE 11/22/19

SHEET **E-3**

GENERAL ELECTRICAL NOTES

- VISIT PROJECT SITE BEFORE SUBMISSION OF BID AND BECOME FAMILIAR WITH EXISTING CONDITIONS AND LOCATIONS OF UTILITIES.
- COORDINATE INSTALLATION OF NEW ELECTRICAL SERVICE WITH ELECTRIC UTILITY COMPANY. PROVIDE TRENCHING, CONDUIT, AND OTHER ITEMS AS REQUIRED. COORDINATE WITH UTILITY COMPANY TO MAINTAIN EXISTING C.T. METERING.
- COORDINATE INSTALLATION OF TELEPHONE SERVICE CONDUIT WITH TELEPHONE COMPANY AND FIBER OPTIC SERVICE WITH CEMC. PROVIDE 2" CONDUIT WITH PULLSTRING FROM BUILDING TO RISER POLE FOR TELEPHONE SERVICE AND 1" CONDUIT WITH PULLSTRING FROM BUILDING TO RISER POLE FOR FIBER SERVICE. ALSO PROVIDE A #6 COPPER GROUND WIRE FROM BUILDING SERVICE ENTRANCE POINT(S) TO THE SERVICE ENTRANCE GROUND.
- INSTALL 3/4" CONDUIT FROM EACH TELEPHONE OUTLET AND DATA OUTLET INTO THE ATTIC SPACE WITH AN INSULATED BUSHING ON EACH END.
- VERIFY ELECTRICAL REQUIREMENTS FOR ALL EQUIPMENT. PROVIDE CIRCUITS AND FUSES SIZED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
- MAINTAIN CODE REQUIRED WORKING CLEARANCE AT ALL ELECTRICAL PANELS, DISCONNECT SWITCHES, AND STARTERS. THERE SHALL BE NO EQUIPMENT, PIPING OR DUCT WORK INSTALLED IN OR ABOVE THE WORKING CLEARANCES.
- PROVIDE DISCONNECT SWITCH FOR ANY HARDWIRED EQUIPMENT NOT SUPPLIED WITH DISCONNECTING MEANS.
- SEE MECHANICAL PLANS FOR EXACT LOCATIONS AND CONTROL REQUIREMENTS FOR MECHANICAL EQUIPMENT.
- CONNECT EXHAUST FAN TO LIGHT FIXTURE IN SAME SPACE SUCH THAT THEY ARE SWITCHED TOGETHER.
- COORDINATE EXACT LOCATION OF ALL CEILING MOUNTED LIGHT FIXTURES WITH ARCHITECTURAL DRAWINGS. PROVIDE FIXTURES COMPATIBLE WITH CEILING TYPE INSTALLED.
- SEE ARCHITECTURAL ELEVATIONS FOR EXACT LOCATION OF EXTERIOR WALL-MOUNTED LIGHTING FIXTURES.
- CONNECT EXIT LIGHTS AND EMERGENCY LIGHTS WITH INTEGRAL BATTERY TO LOCAL LIGHTING CIRCUIT AHEAD OF SWITCH SUCH THAT THEY AUTOMATICALLY CONVERT TO BATTERY OPERATION UPON LOSS OF NORMAL POWER.
- ALL RECEPTACLES ON DEDICATED CIRCUITS SHALL BE RATED NO LESS THAN CIRCUIT OVERCURRENT DEVICE.
- EXTERIOR LIGHTING SHALL BE TURNED ON AND OFF BY A PHOTOCELL. PHOTOCELLS SHALL BE MOUNTED ON BUILDING NEAR ROOF.
- FURNISH AS-BUILT DRAWINGS FOR ELECTRIC POWER SYSTEMS WITHIN 30 DAYS OF BUILDING ACCEPTANCE TO TENANT'S REPRESENTATIVE.
- FURNISH O & M INSTRUCTIONS FOR SYSTEMS AND EQUIPMENT TO THE TENANT'S REPRESENTATIVE.
- TEST LIGHTING SYSTEMS TO ENSURE PROPER CALIBRATION, ADJUSTMENT, PROGRAMMING, AND OPERATION COMPLY WITH THE APPLI CABLE INTERNATIONAL ENERGY CONSERVATION CODE BEING ENFORCED BY LOCAL AUTHORITIES.

ELECTRICAL LEGEND

- MOUNTING HEIGHTS MEASURED TO \bar{g}
- CONDUIT RUN CONCEALED IN WALL, CEILING, OR FLOOR
 - CONDUIT RUN, CONCEALED IN FLOOR OR UNDERGROUND
 - HOMERUN TO PANEL INDICATED
 - RECEPTACLE, DUPLEX, 120V, 15A, UNO, @ 18" AFF
 - RECEPTACLE, DUPLEX, 120V, 15A, UNO, SMH
 - RECEPTACLE, QUADRAPLEX, 120V, 15A, UNO, @ 18" AFF
 - RECEPTACLE, QUADRAPLEX, 120V, 15A, UNO, SMH
 - RECEPTACLE, SINGLE, 250V, AMPS AS NOTED, @ 18" AFF
 - JUNCTION BOX, SIZE AS REQUIRED
 - SWITCH, SINGLE POLE, 120/277V, 20A, 45" AFF
 - SWITCH, LOW VOLTAGE, 45" AFF. SEE LIGHTING CONTROL SCHEDULE
 - FOUR SWITCHES, LOW VOLTAGE, 45" AFF. SEE LIGHTING CONTROL SCHEDULE
 - SWITCH, OCCUPANCY SENSOR TYPE, 120/277V, 45" AFF
SEE OCCUPANCY SENSOR SCHEDULE
 - OCCUPANCY SENSOR POWER PACK, MOUNTED ABOVE CEILING
SEE OCCUPANCY SENSOR SCHEDULE
 - CEILING MOUNTED OCCUPANCY SENSOR, SEE OCCUPANCY SENSOR SCHEDULE
 - PHONE/DATA OUTLET - @ 18" AFF
 - LIGHTING FIXTURES
SEE FIXTURE SCHEDULE
 - DISCONNECT SWITCH, NON-FUSED, DESCRIBED BY:
VOLTAGE RATING/NO. OF POLES/SWITCH SIZE IN AMPS
 - DISCONNECT SWITCH, FUSED, DESCRIBED BY:
VOLTAGE RATING/NO. OF POLES/FUSE SIZE IN AMPS

ABBREVIATIONS:

- AFF ABOVE FINISHED FLOOR
- AFG ABOVE FINISHED GRADE
- AHU AIR HANDLING UNIT
- BRKR BREAKER
- \bar{g} CENTERLINE
- CU CONDENSING UNIT
- EF EXHAUST FAN
- GFI GROUND FAULT INTERRUPTER
- MTD MOUNTED
- SMH SPECIAL MOUNTING HEIGHT
(4" \bar{g} ABOVE CASEWORK/BACKSPASH OR 45" \bar{g}
AFF IF NO CASEWORK/BACKSPASH)
- UNO UNLESS NOTED OTHERWISE
- XFMR TRANSFORMER
- WH WATER HEATER
- WP WEATHERPROOF