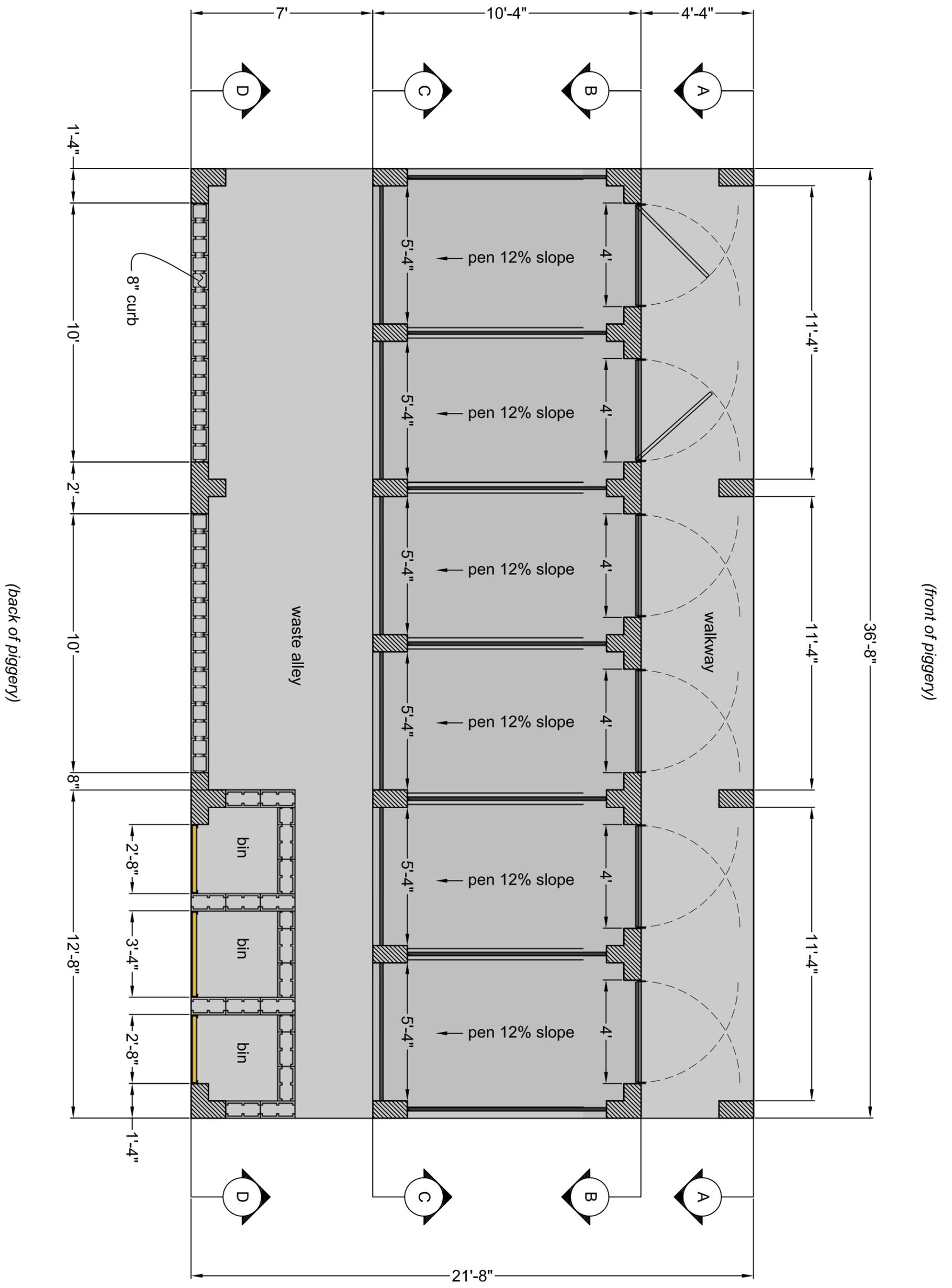


(left side of piggery)



(front of piggery)

(right side of piggery)

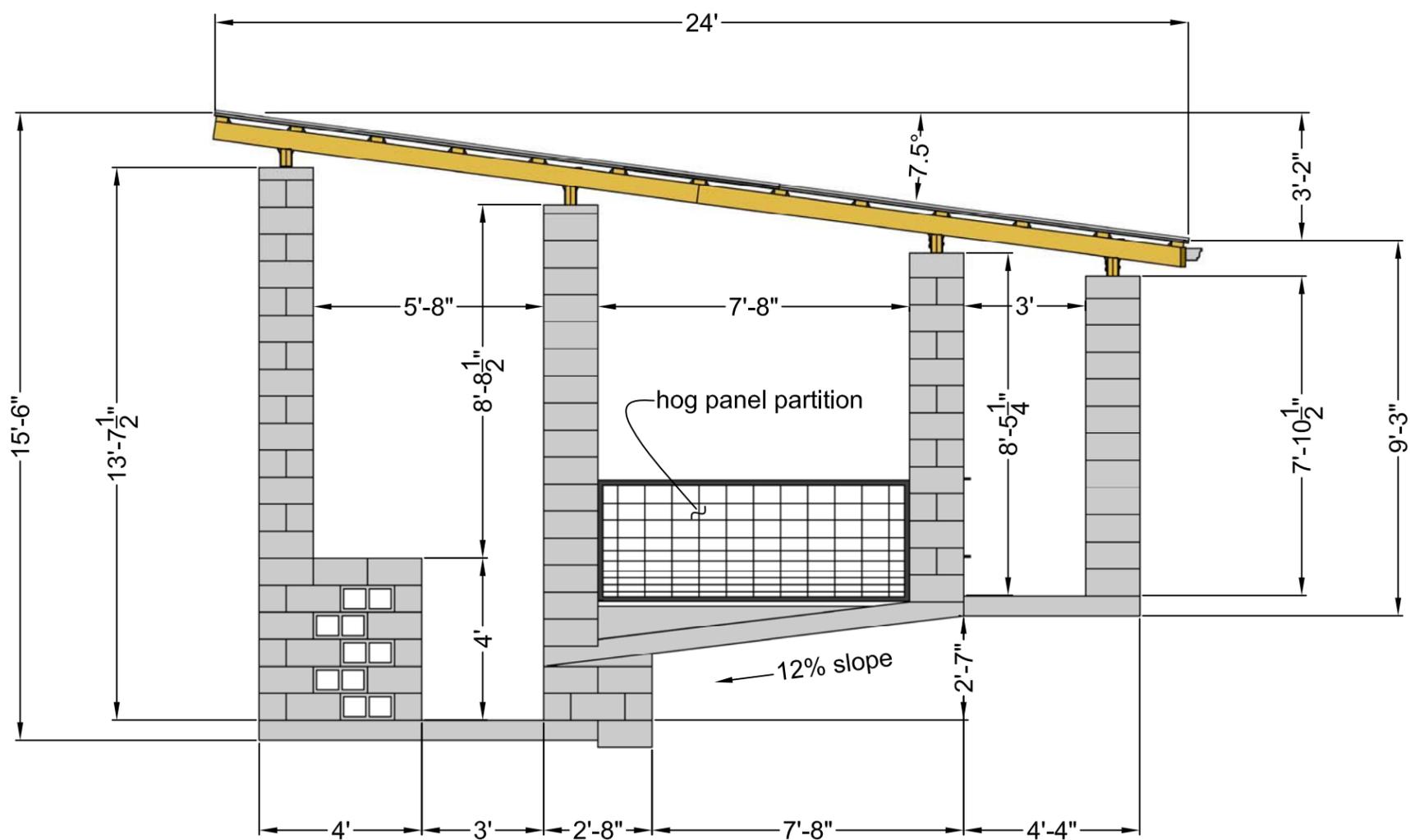
(back of piggery)



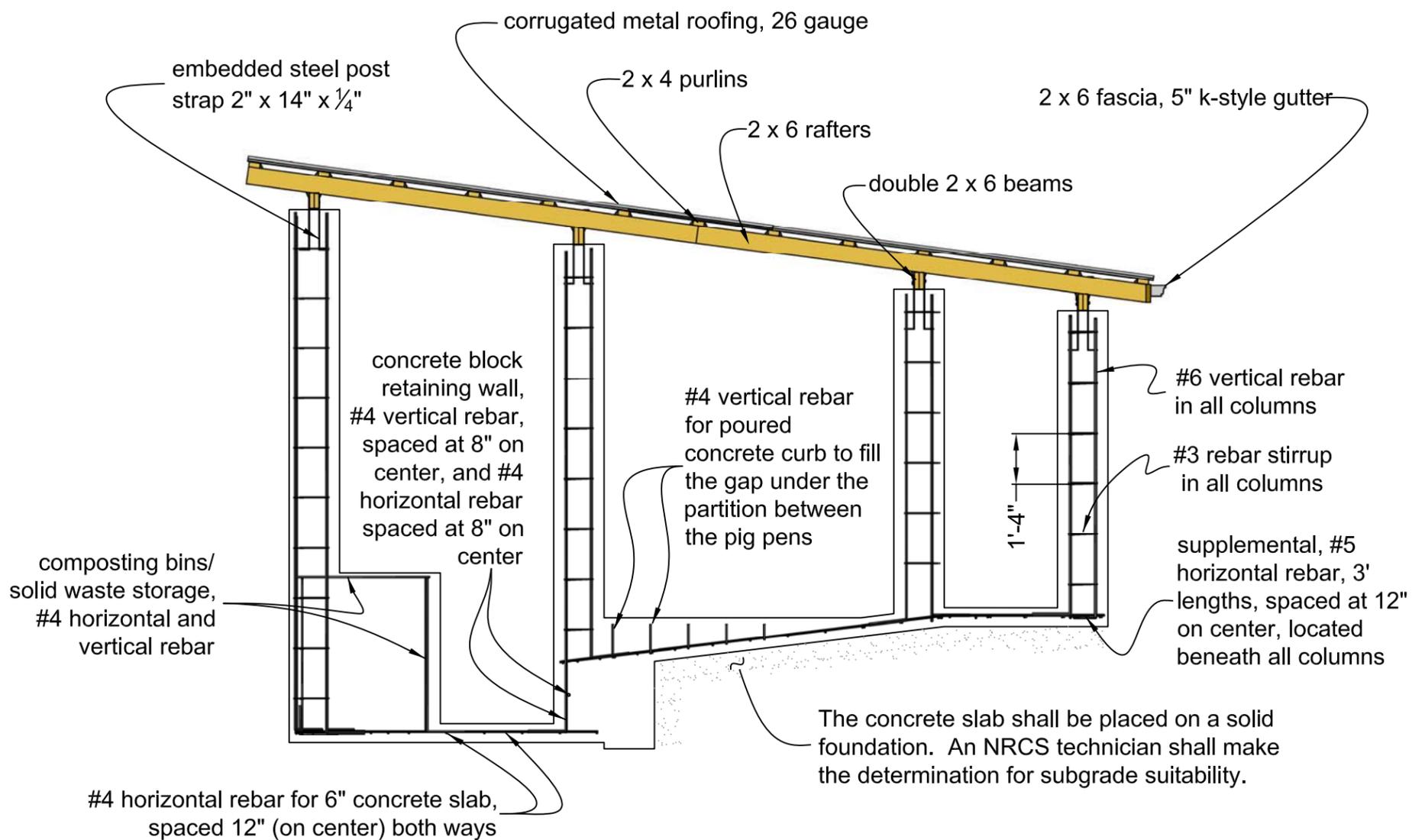
### Dry Litter Piggery 6-Pens Slab and Floorplan

Designed	_____	Date	_____
Drawn	_____		_____
Checked	_____		_____
Approved	_____		_____

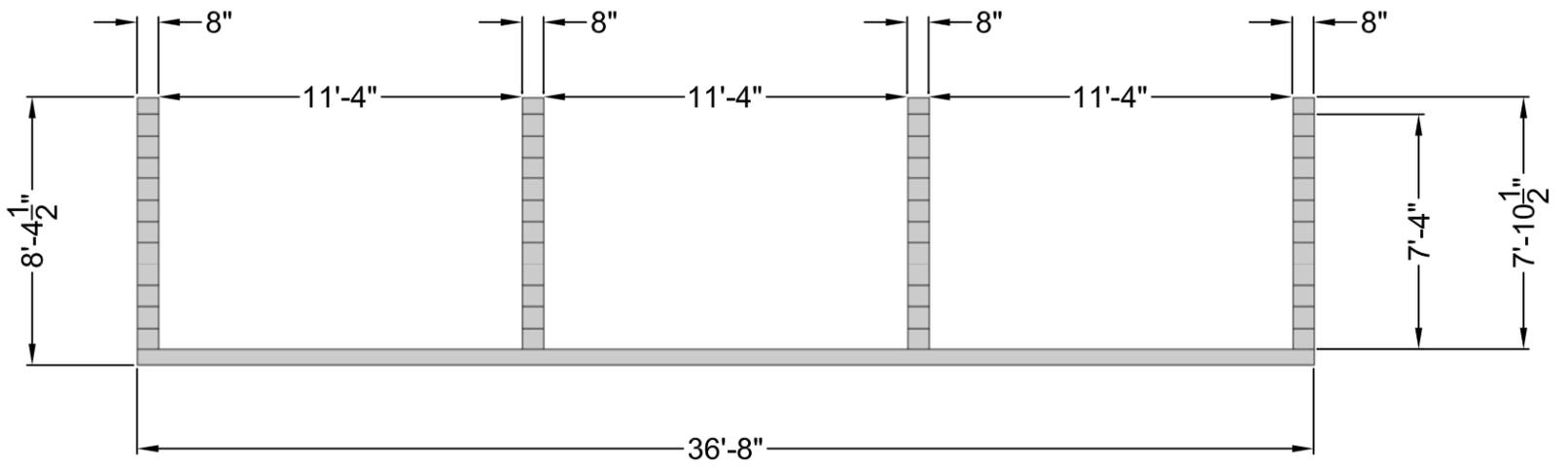
File No. *6 pen piggery.dwg*  
 Drawing No. *PB-xx-xx*  
 Sheet *x* of *xx*



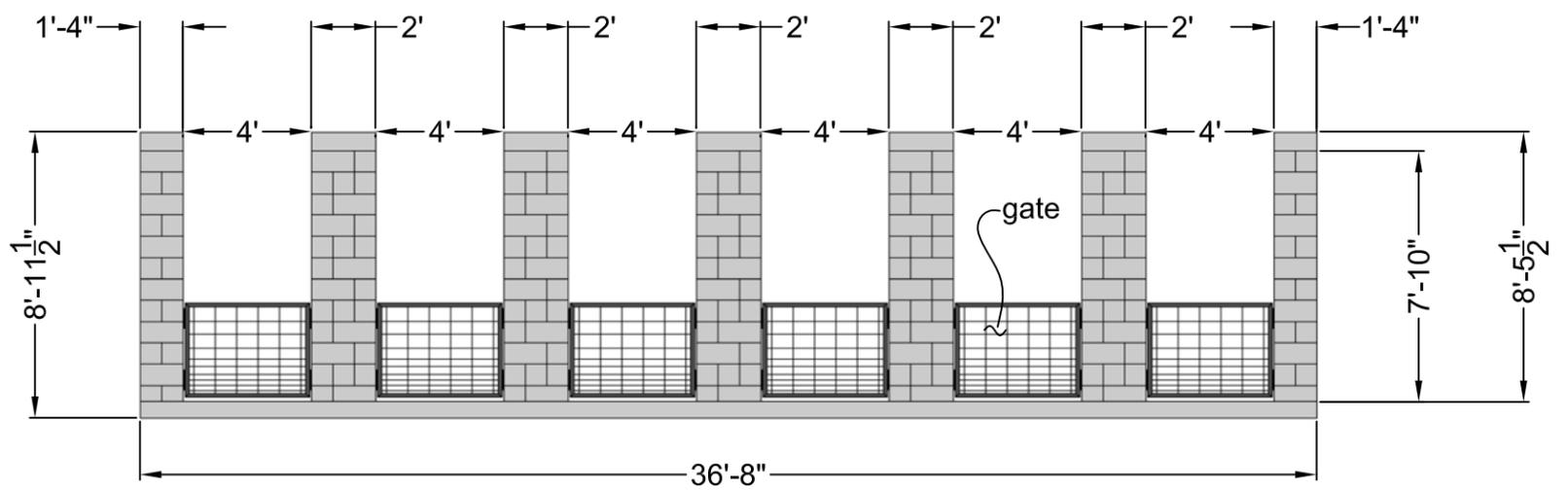
Right Side View



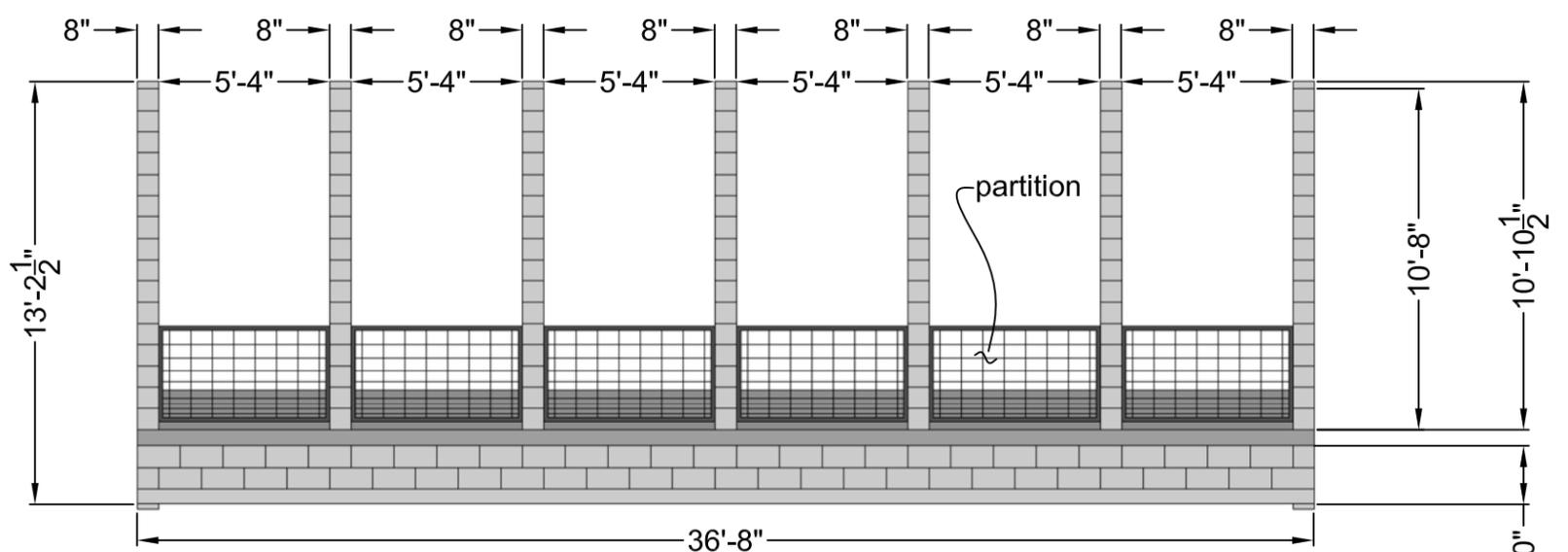
Right Side Section



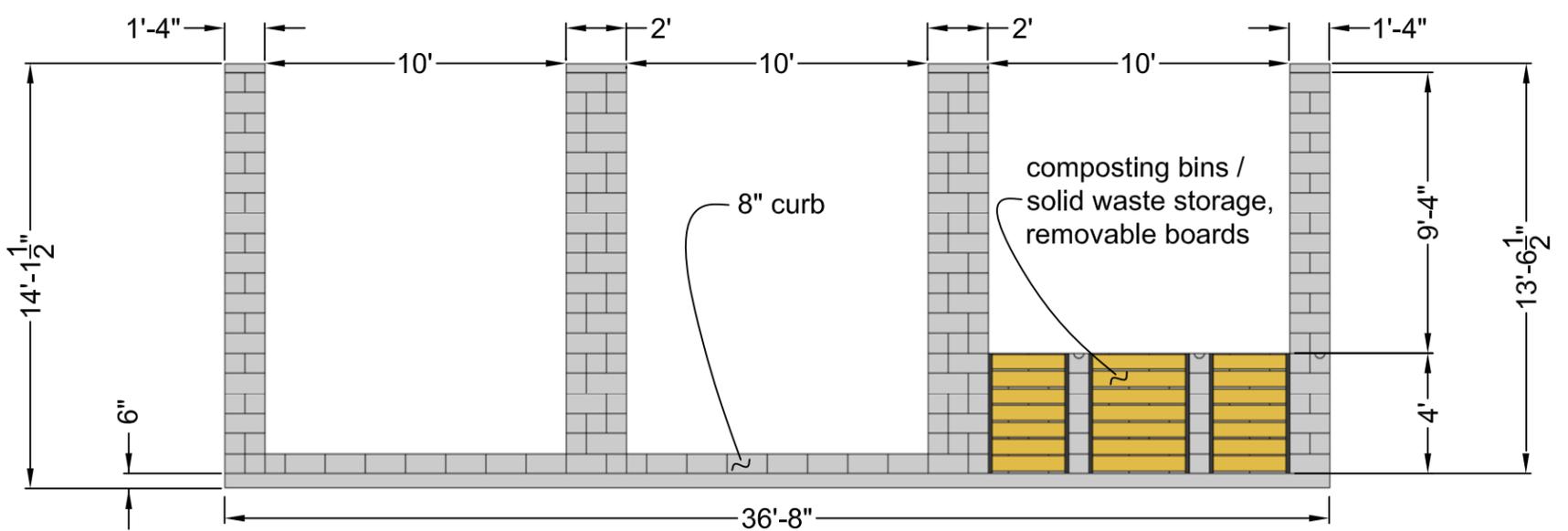
section (A) 1st Row of Columns (view from the front of the piggery)



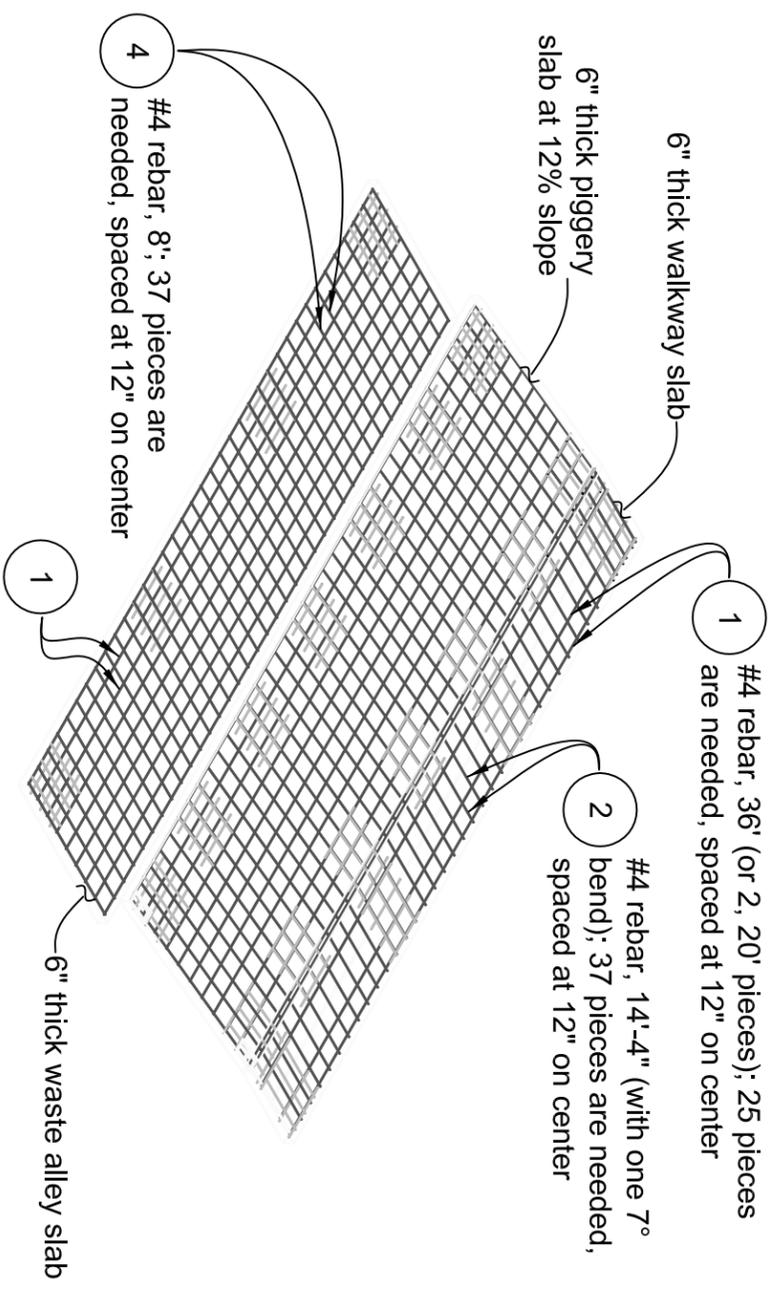
section (B) 2nd Row of Columns (view from the front of the piggery)



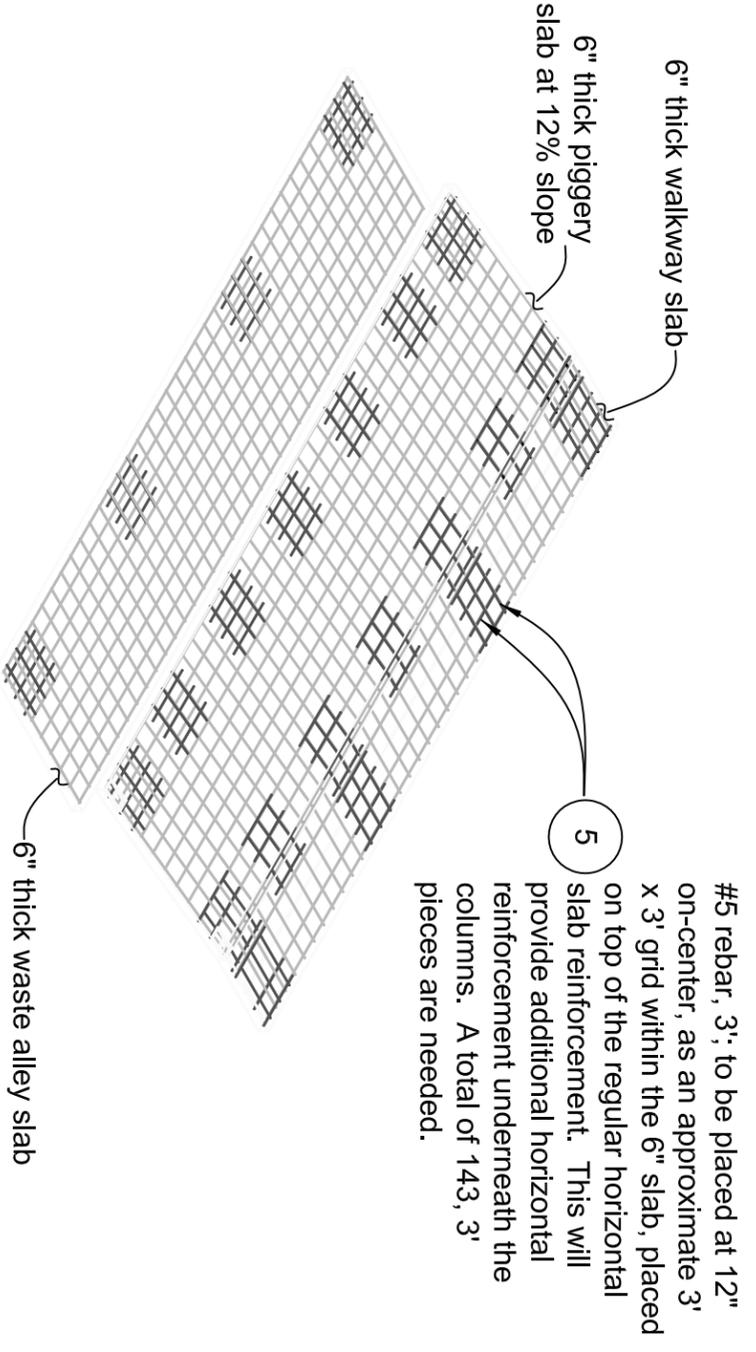
section (C) 3rd Row of Columns (view from the back of the piggery)



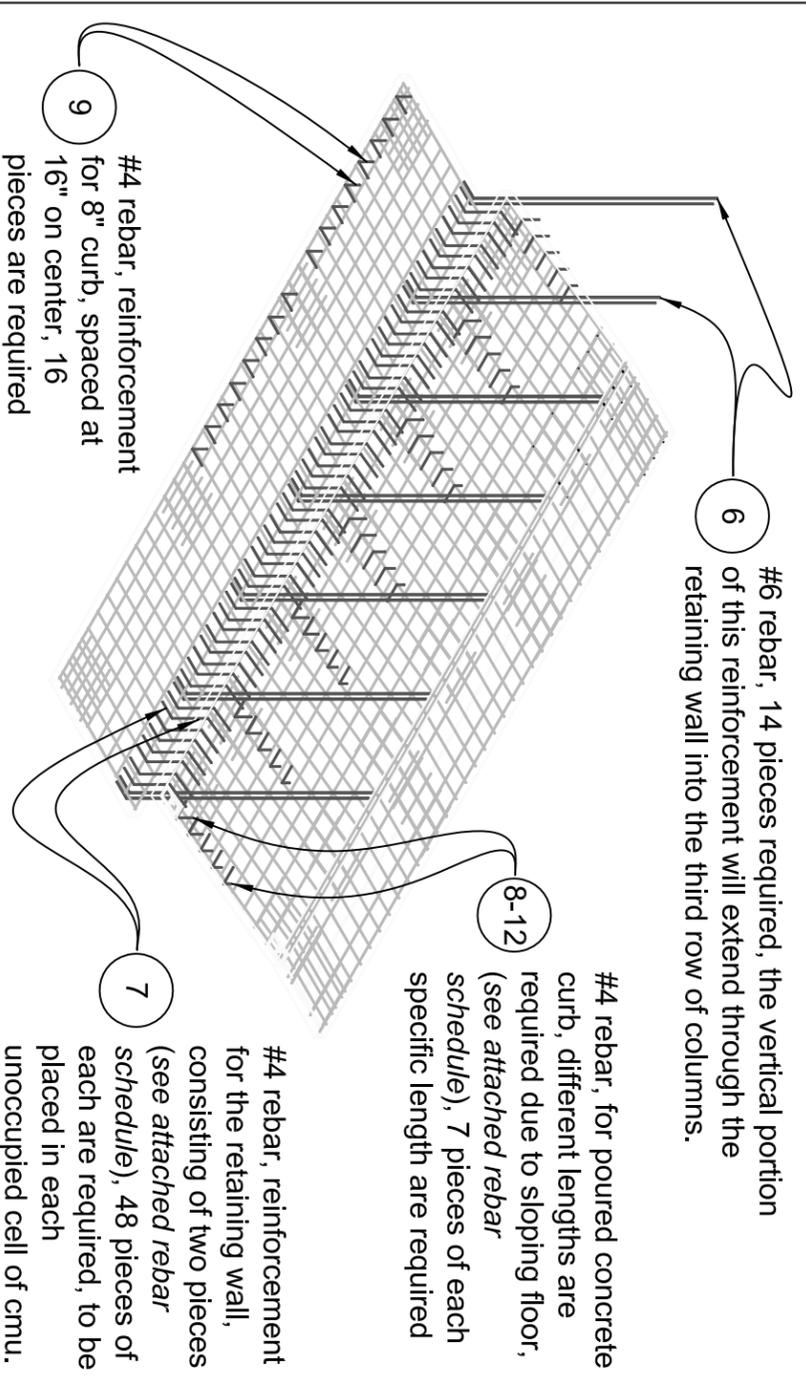
section (D) 4th Row of Columns (view from the back of the piggery)



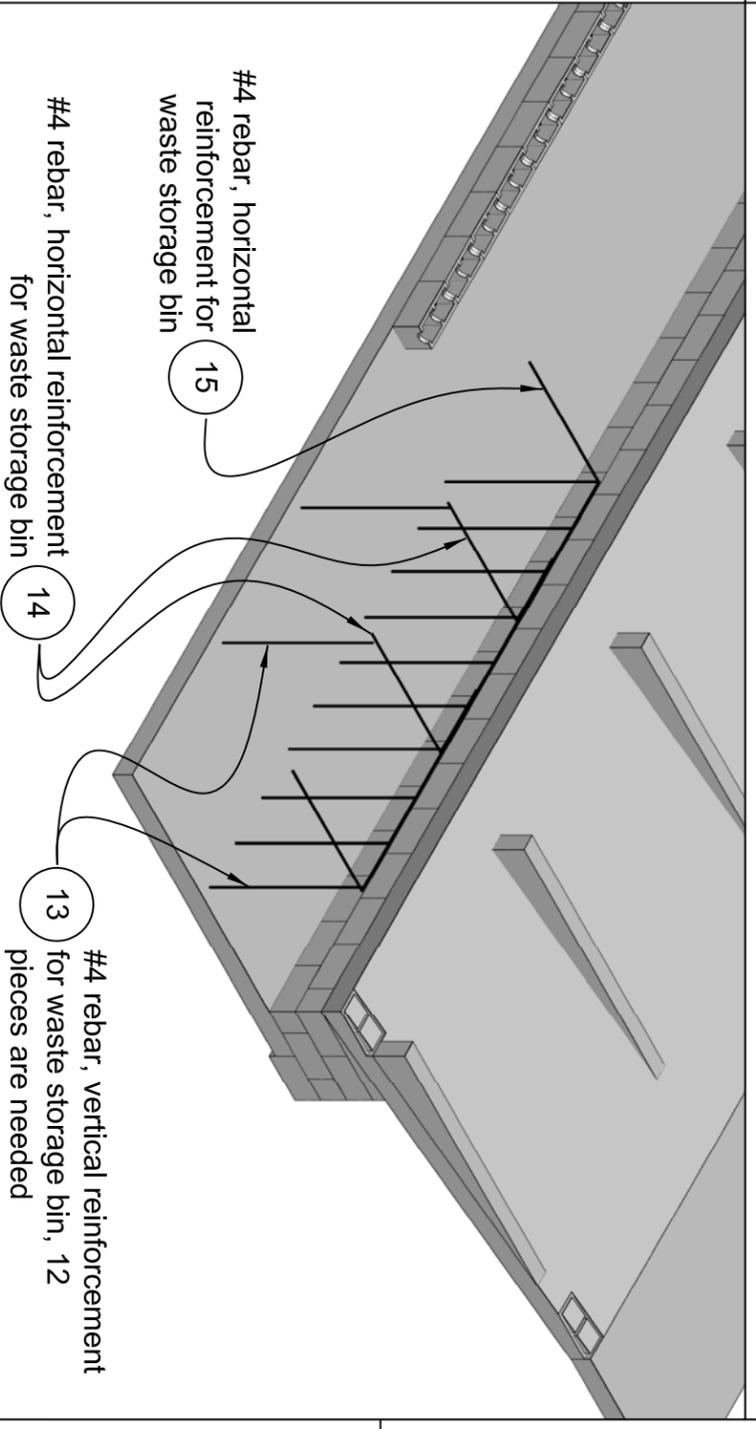
**Horizontal Reinforcement for Slabs**



**Additional Horizontal Reinforcement Under Columns**



**Retaining Wall, and Curb Reinforcement**

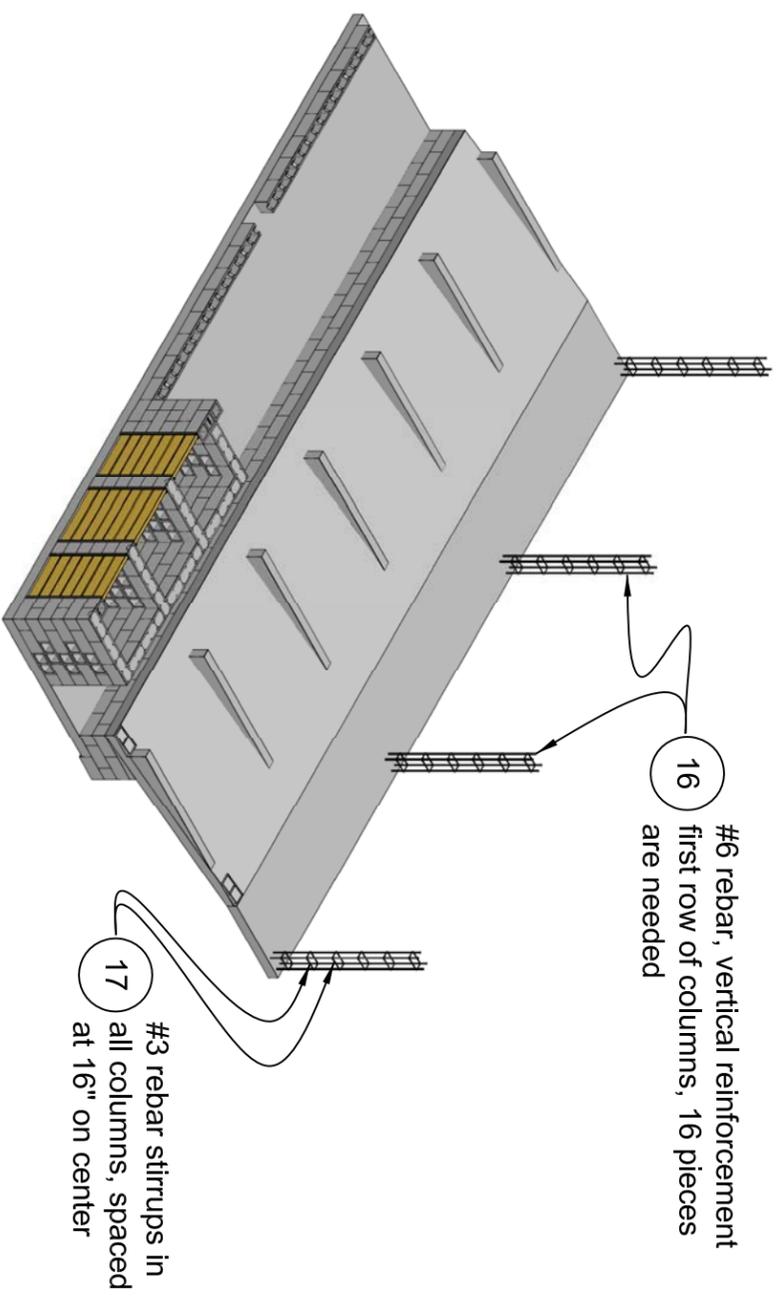


**Solid Waste Storage Bin Reinforcement**

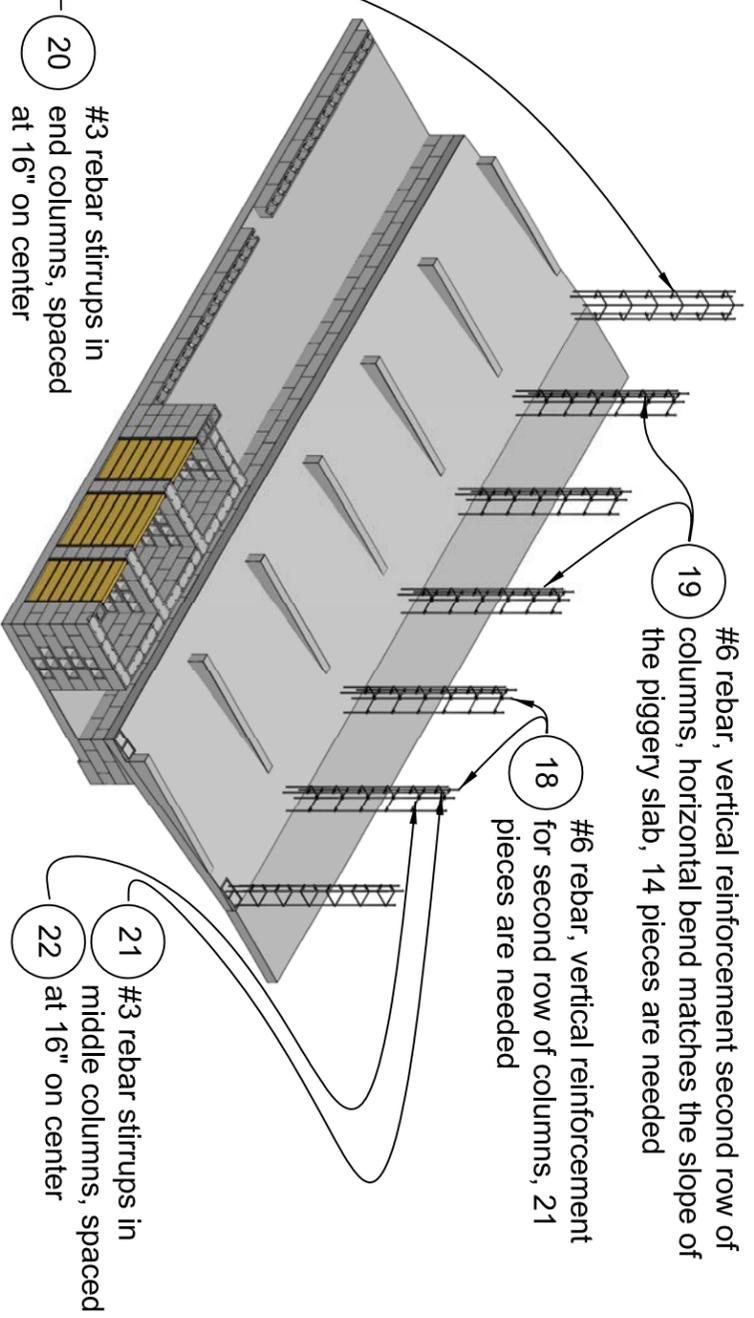
Designed	_____	Date	_____
Drawn	_____		_____
Checked	_____		_____
Approved	_____		_____

**Dry Litter Piggery 6-Pens  
Steel Reinforcement**

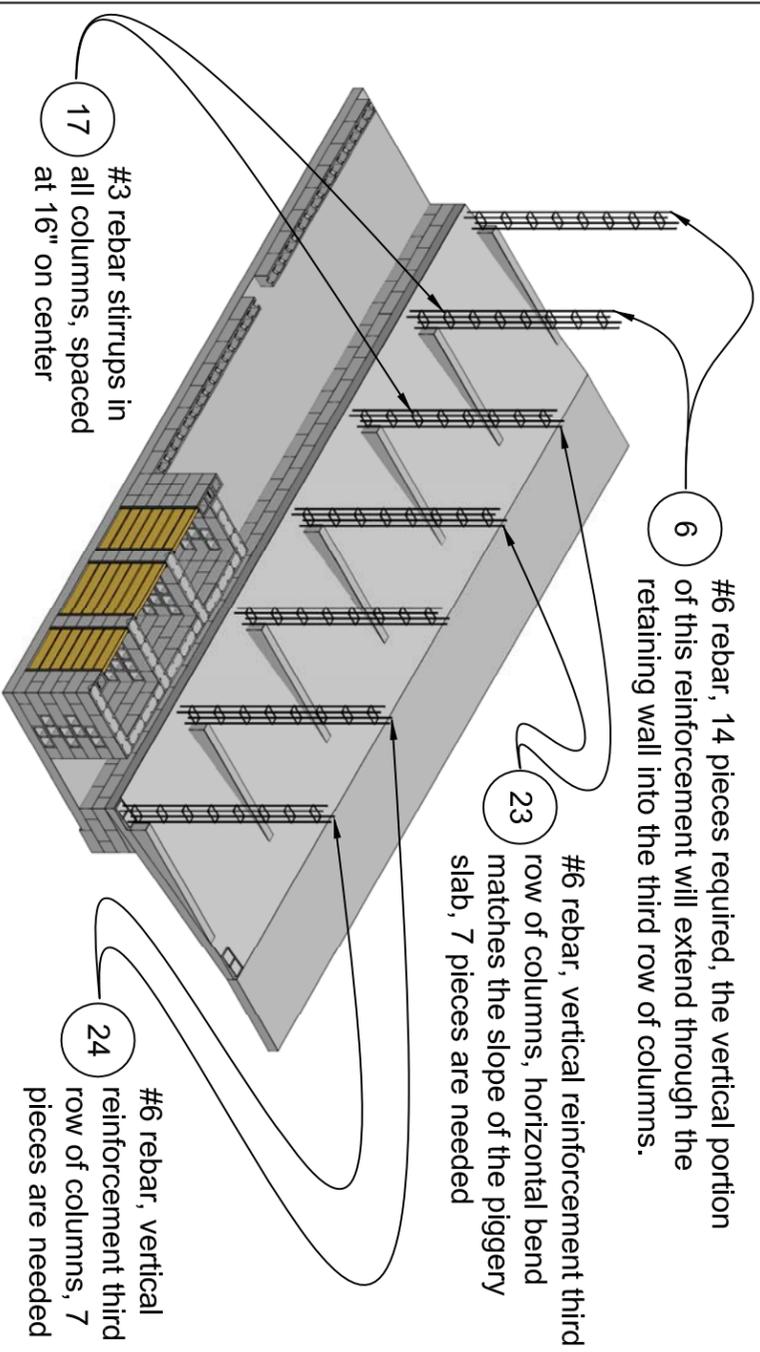




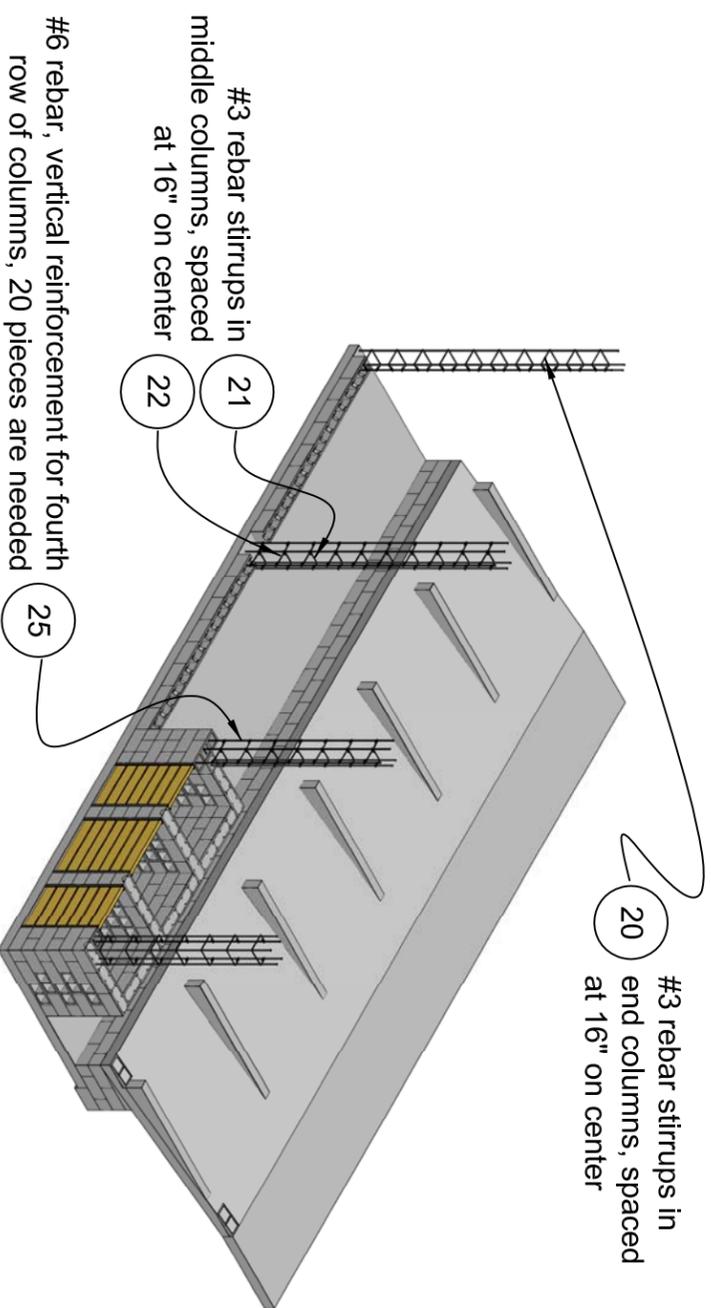
Column Reinforcement (1st Row of Columns)



Column Reinforcement (2nd Row of Columns)



Column Reinforcement (3rd Row of Columns)



Column Reinforcement (4th Row of Columns)

Date \_\_\_\_\_

Designed \_\_\_\_\_

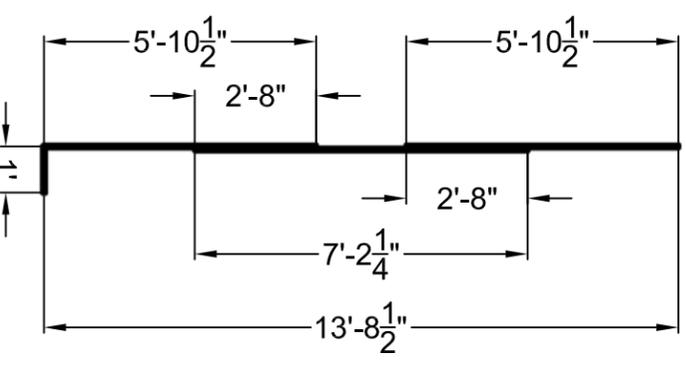
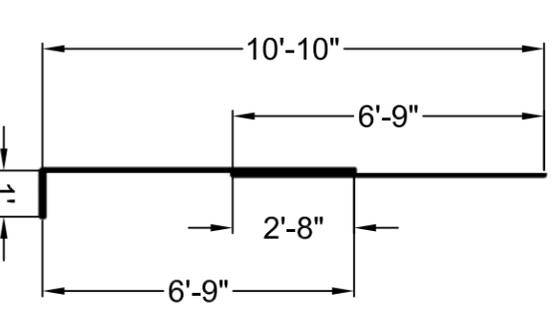
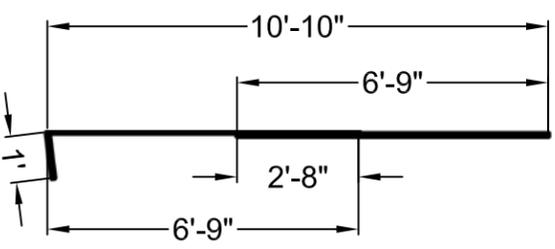
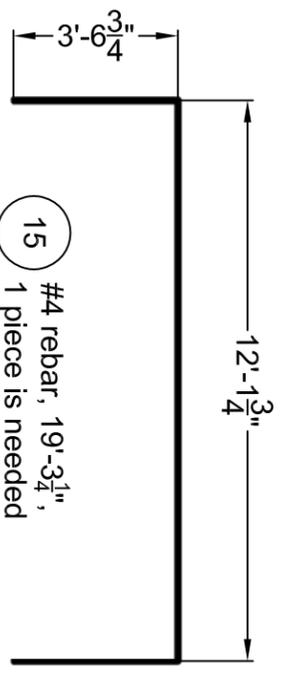
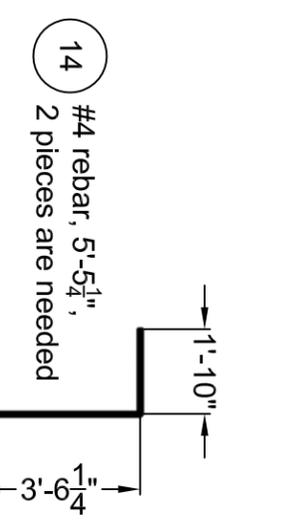
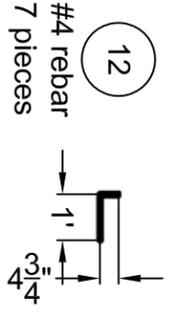
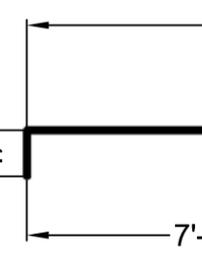
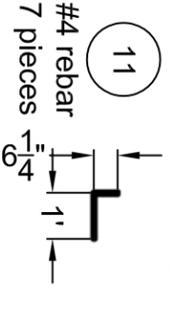
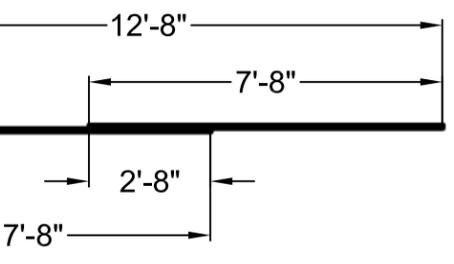
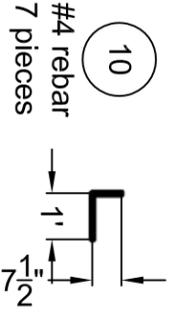
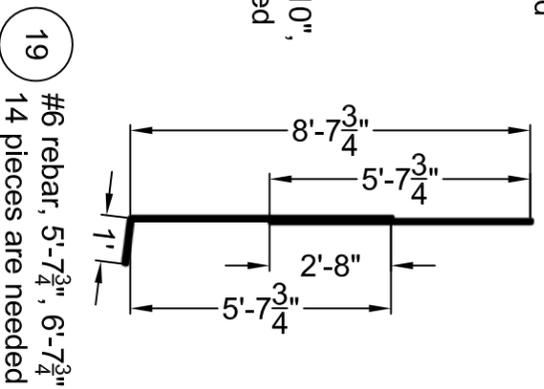
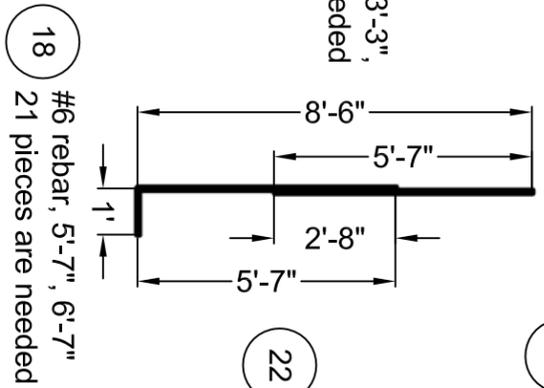
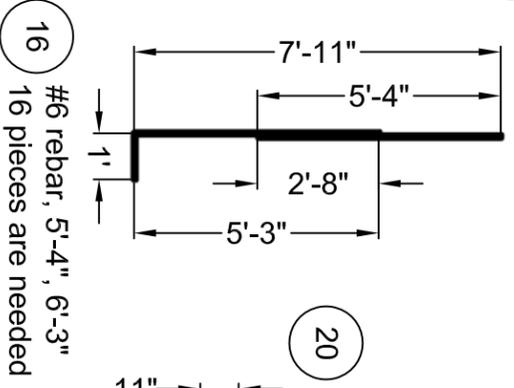
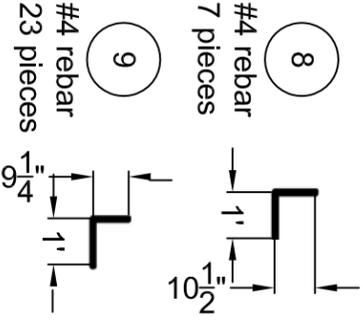
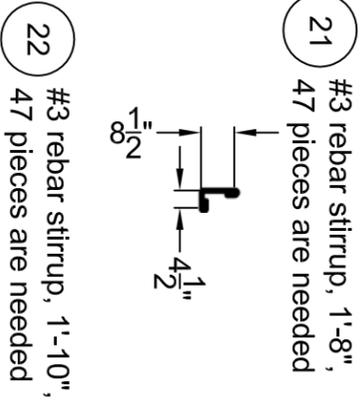
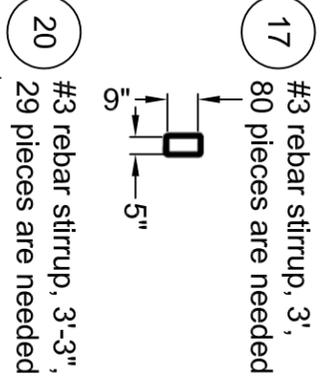
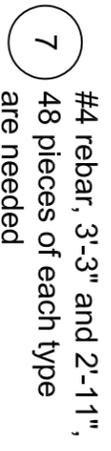
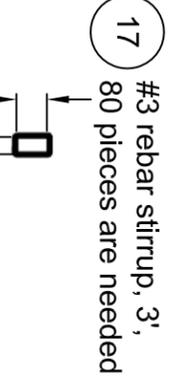
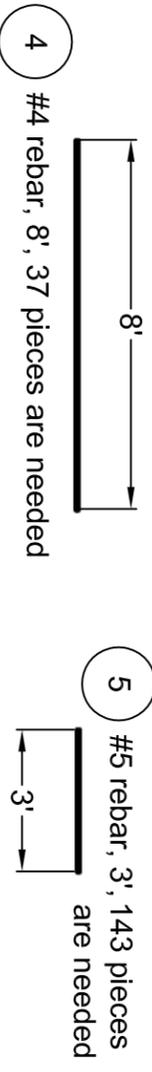
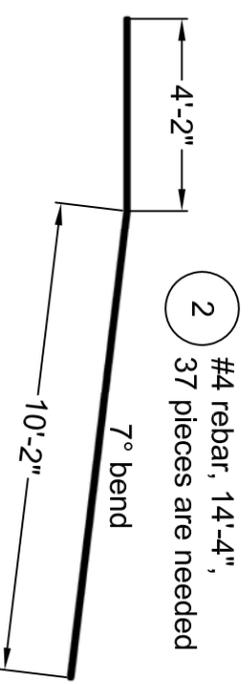
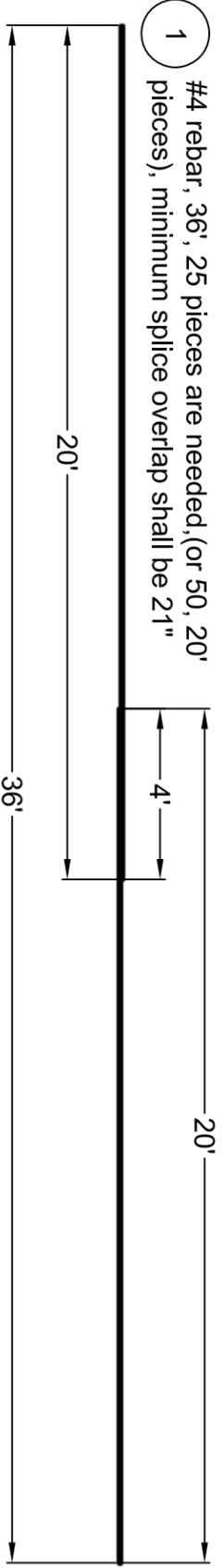
Drawn \_\_\_\_\_

Checked \_\_\_\_\_

Approved \_\_\_\_\_

Dry Litter Piggyery 6-Pens  
Steel Reinforcement

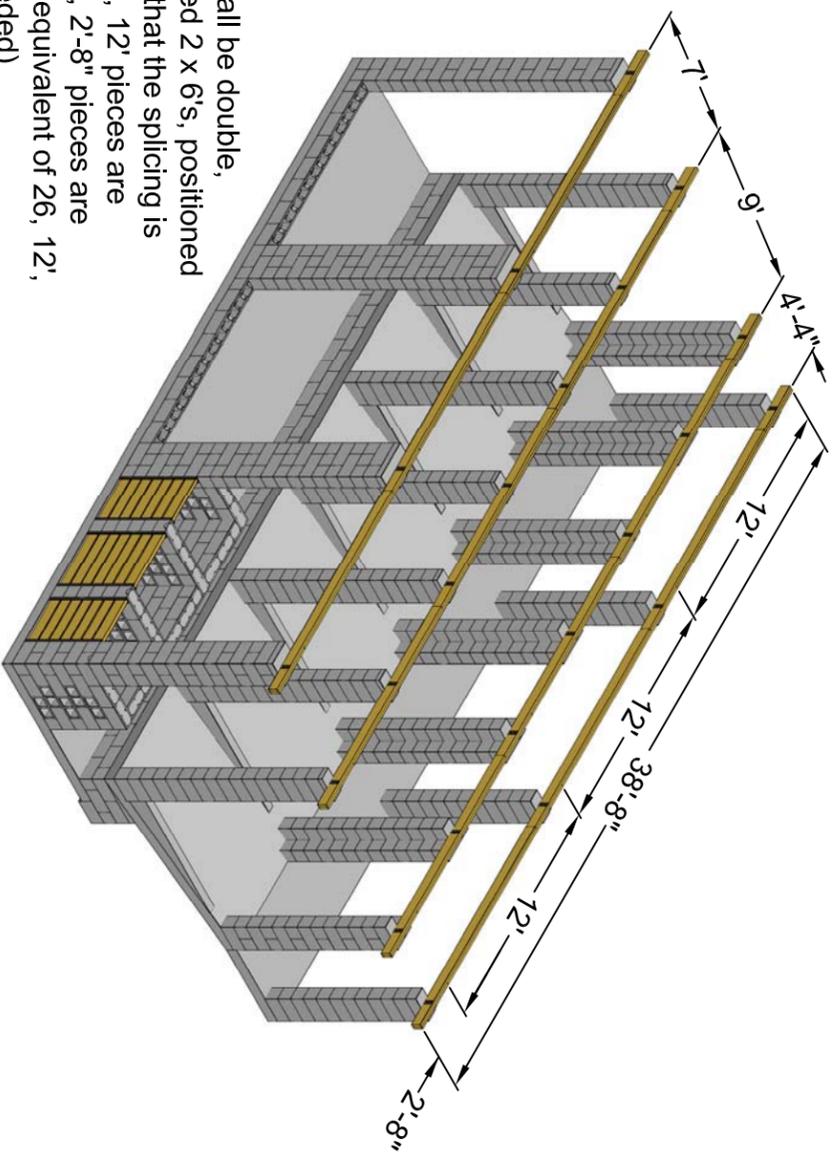




Date \_\_\_\_\_  
 Designed \_\_\_\_\_  
 Drawn \_\_\_\_\_  
 Checked \_\_\_\_\_  
 Approved \_\_\_\_\_

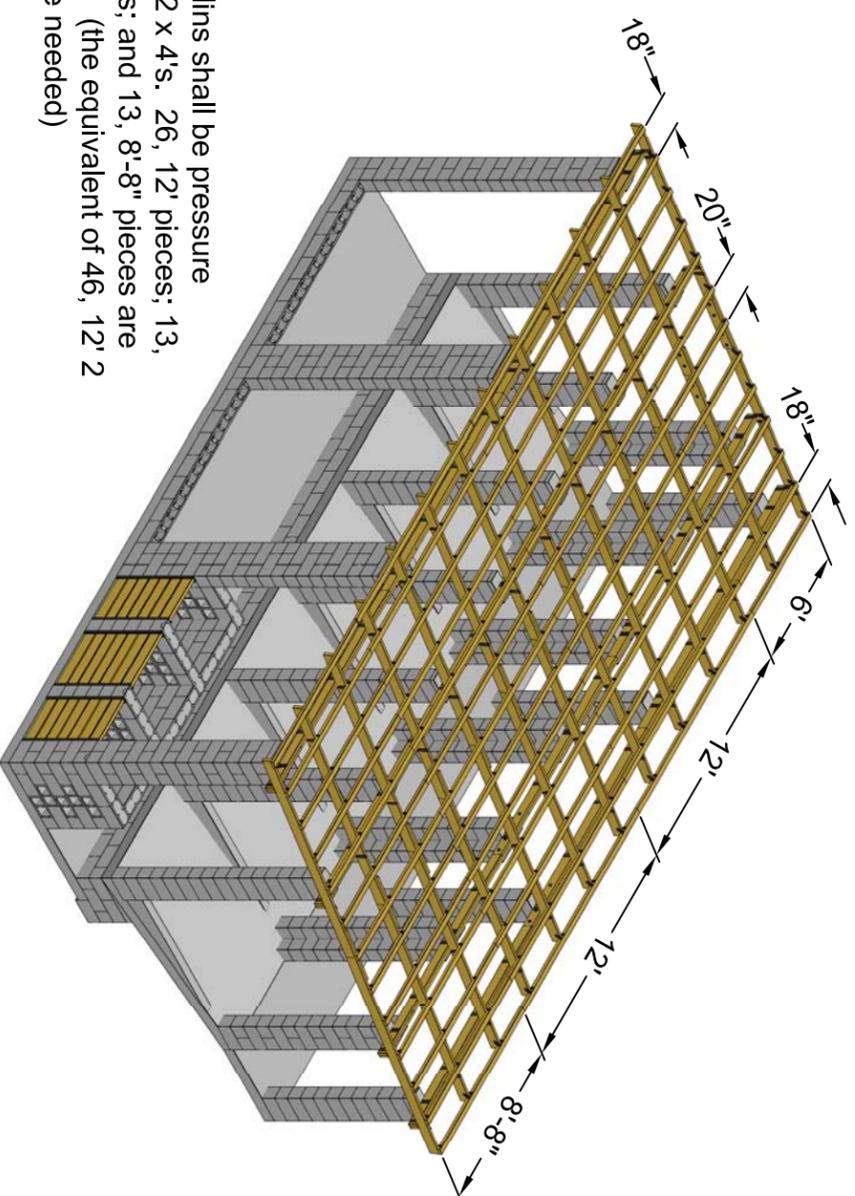
## Dry Litter Piggery 6-Pens Steel Schedule





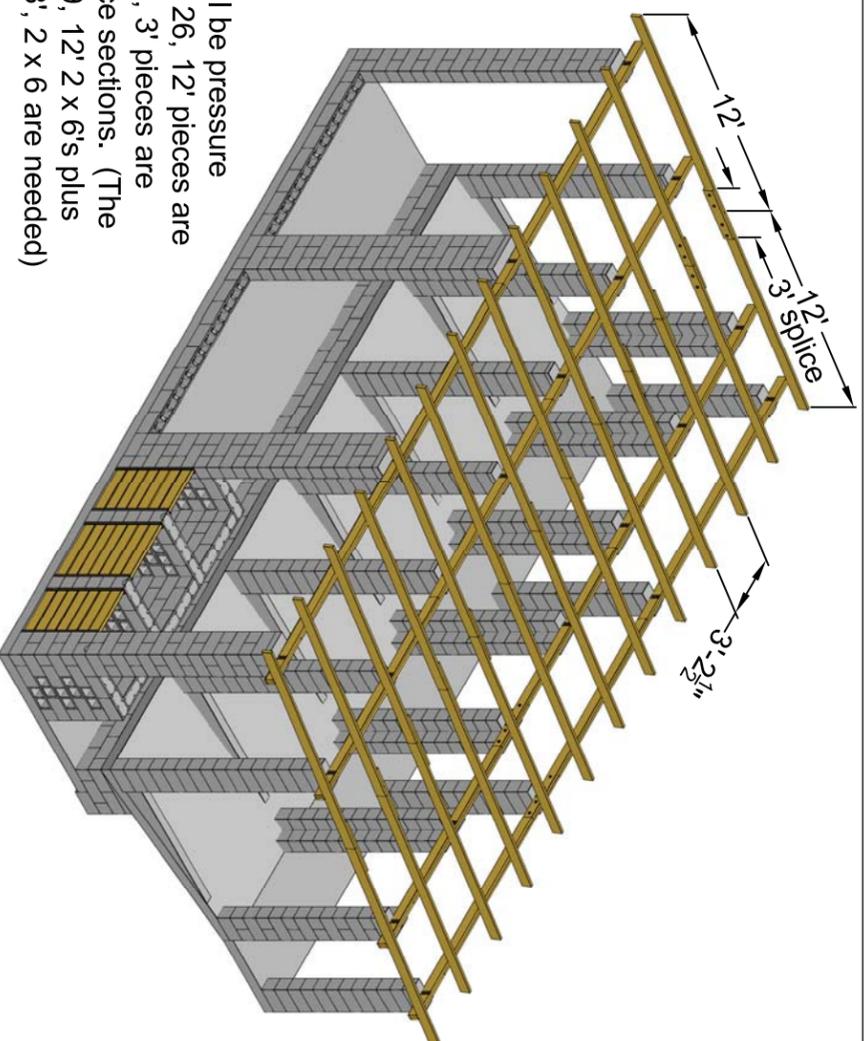
The beams shall be double, pressure treated 2 x 6's, positioned in such a way that the splicing is staggered. 24, 12' pieces are needed, and 8, 2'-8" pieces are needed. (The equivalent of 26, 12', 2 x 6's are needed)

Framing - Beam Placement



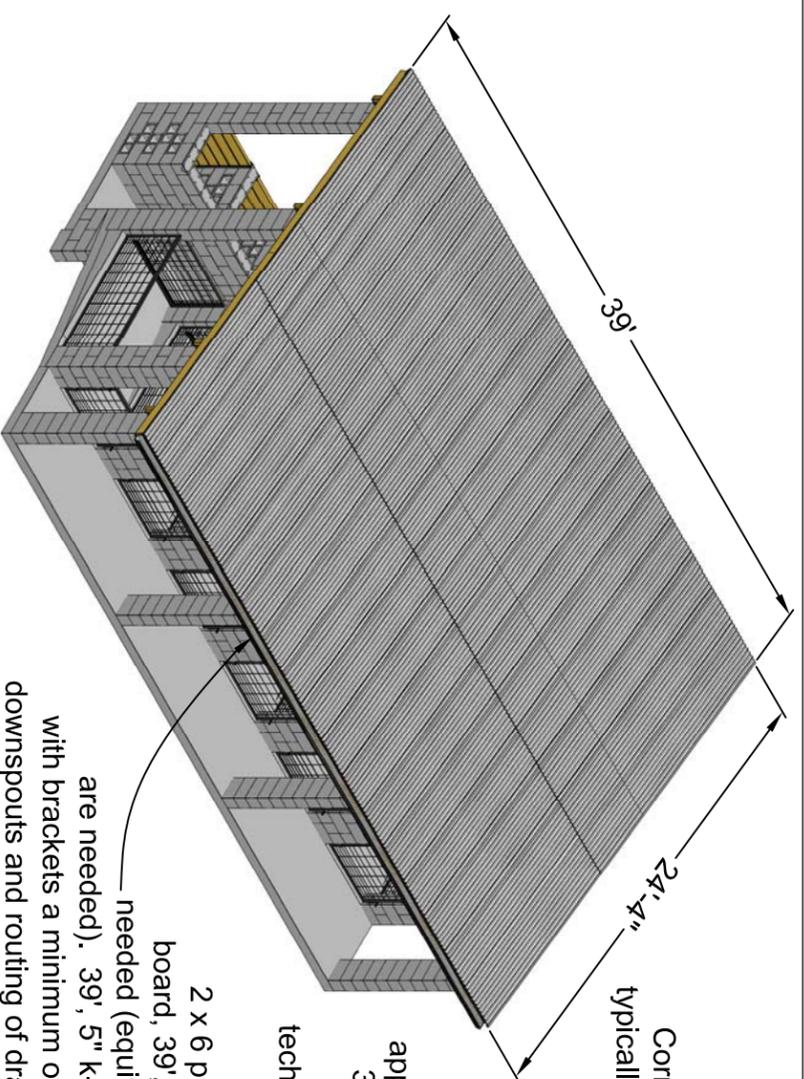
The purlins shall be pressure treated 2 x 4's. 26, 12' pieces; 13, 6' pieces; and 13, 8'-8" pieces are needed. (the equivalent of 46, 12' 2 x 4's are needed)

Framing - Purlin Placement



The rafters shall be pressure treated 2 x 6's. 26, 12' pieces are needed, and 13, 3' pieces are needed for splice sections. (The equivalent of 29, 12' 2 x 6's plus and additional 3', 2 x 6 are needed)

Framing - Rafter Placement



Corrugated metal roofing, typically 26 gauge or thicker, corrugations spaced at 2<sup>1</sup>/<sub>2</sub>" or less. Typically sold in sheets measuring 2'-8" x 14'. To cover approximately 950 sq.ft., 34 sheets are needed. Consult with NRCS technician as to suitability of materials

2 x 6 pressure treated fascia board, 39', with 2' splices where needed (equivalent of 4, 12' 2 x 6's are needed). 39', 5" k-line gutter, supported with brackets a minimum of every 4'. Number of downspouts and routing of drainage is site specific, please consult with NRCS technician.

Roof and Gutters

Designed	_____	Date	_____
Drawn	_____		_____
Checked	_____		_____
Approved	_____		_____

## Dry Litter Piggery 6-Pens Roof Framing Plan





Site Preparation		
Mobilization	to be determined	I.S.
Excavation	to be determined	cu.yd.
Subgrade (placement & compaction)	to be determined	cu.yd.

Materials		
Concrete	17	cu.yd.
Grout/Mortar	4	cu.yd.
8 x 8 x 16 concrete masonry unit	490	ea.
8 x 8 x 8 concrete masonry unit	276	ea.
#3 rebar	500	I.f.
#4 rebar	2298	I.f.
#5 rebar	429	I.f.
#6 rebar	1444	I.f.
2 x 6 pressure treated lumber, (12' length)	70	ea.
2 x 4 pressure treated lumber, (12' length)	46	ea.
beam tie("post strap") galvanized	22	ea.
rafter tie galvanized	104	ea.
purlin tie galvanized	338	ea.
5/8" bolts, nuts, washers	148	ea.
hog panels, (34" x 16' panels)	9	ea.
angle iron	326	I.f.
channel iron	24	I.f.
fabricated hinges	24	ea.
corrugated metal roofing (2'8" x 14' pieces)	34	ea.
misc.		to be determined

## Quantities

- The location of this piggery shall be shown on a plan view of the property.
- The concrete for the pad shall be placed on a sound foundation free of organic matter. If necessary, organic matter shall be removed and replaced with granular fill. An NRCS technician shall make the determination for subgrade suitability. The minimum bearing capacity shall be 3,000 lbs. per square foot. Softer soils may need to be excavated up to two feet and replaced with compacted granular fill. Granular fill shall be placed in 6 inch loose lifts and compacted with at least 5 passes of a 160 lb. vibratory plate per lift. Backfill material shall be well graded sands and gravels (USCS SW, GW, GM, SM).
- Individual components of this project shall conform to the following NRCS practice standards and specifications:
  - Composting Facility – (317) Composting Facility
  - Solid Waste Storage – (313) Waste Storage Facility (an alternative to Composting Facility)
  - Pig Pens – (313) Waste Storage Facility
  - Waste Alley – (634) Waste Transfer
  - Roof – (367) Roofs and Covers
  - Walkway – (561) Heavy Use Area Protection
- The concrete shall meet the provisions of ASTM C-94. Concrete shall have a minimum compressive strength of 3,000 psi at 28 days, have an air content of 4 to 7%, and contain a minimum of 6 bags of cement per cubic yard. Cement shall be type 1 or 1A (or JIS R-5210). Coarse aggregate shall conform to ASTM C-33 size numbers 467, 67 or 57. Slump shall be 3 1/2" + or - 1". Concrete may be mixed on-site, providing concrete is proportioned and mixed to meet the above specifications.
- The concrete shall be moist cured for seven days following placement. Moist curing can be accomplished by keeping it covered with damp cloth, organic material, or plastic sheeting. Moisture shall be added to maintain the dampness during the curing period. Concrete shall be covered to prevent damage from rain during the curing period. Curing for grout (blockfill) and mortar is not required.
- Grout (5 parts masonry "Penn" sand and 1 part Portland cement) shall be used to fill the cells in the CMU.
- 40,000 psi deformed steel reinforcement shall be used. Lateral splices shall have an overlap of 42 times the diameter of the rebar.
- There shall be a minimum 3 inches of cover between reinforcing steel and subgrade material, and a minimum of 2 inches of cover between reinforcing steel and any concrete surface. Concrete chairs, steel or min. 3,000 psi concrete shall be used to place and secure the reinforcing steel prior to pouring concrete.
- Placement of steel shall have a mandatory inspection by NRCS prior to pouring of concrete. NOTIFY NRCS A MINIMUM OF 48 HOURS PRIOR TO SCHEDULED POURING OF CONCRETE. NO CONCRETE SHALL BE POURED WITHOUT PRIOR APPROVAL OF A NRCS TECHNICAL REPRESENTATIVE.

## Construction Notes

Date \_\_\_\_\_  
 \_\_\_\_\_  
 Designed \_\_\_\_\_  
 Drawn \_\_\_\_\_  
 Checked \_\_\_\_\_  
 Approved \_\_\_\_\_

## Dry Litter Piggery 6-Pens Quantities - Notes

