

*Perspective View*

**NOTE:**

1. This plan set shows details for a three (3) Bin unit. The plan set is to be adapted for \_\_\_\_\_ Primary Bins and \_\_\_\_\_ Secondary Bins. See sheet 4 of 4 for estimated quantities.
2. Each Bin shall have a gate, sliding boards, or other closure. For clarity only one gate is shown in the perspective view.

The following Construction Specifications are incorporated by reference:

- AR-21 Excavation
- AR-23C Earthfill Class C
- AR-31 Concrete for Major Structures
- AR-32 Structure Concrete
- AR-34 Steel Reinforcement
- AR-81 Metal Fabrication
- AR-83 Timber Fabrication

\*The full text of the Construction Specifications can be found on the web at [http://www.ar.nrcs.usda.gov/technical/engineering\\_construction\\_specs.html](http://www.ar.nrcs.usda.gov/technical/engineering_construction_specs.html)

I certify that the composter was built according to this set of drawings:

\_\_\_\_\_  
Contractor/Landowner

This composter meets NRCS Standards and Specifications

\_\_\_\_\_  
NRCS Representative



**Know what's below.  
Call before you dig.**

TABLE 1			
No. of Primary Bins	Total Length Ft.-In. (Bins in Two Rows)	Composter Footprint Area - Sq. Ft.	Area of Concrete Apron - Sq.Ft.
3	32'-8"	251	425
4	42'-8"	327	555
5	52'-8" (55'-4")	404 (424)	685 (719)
6	62'-8" (65'-4")	481 (501)	815 (849)
7	72'-8" (75'-4")	557 (578)	945 (979)
8	82'-8" (85'-4")	634 (654)	1075 (1109)
9	(95'-4")	(731)	(1239)
10	(105'-4")	(808)	(1369)

\* Areas for cost estimates not for determining # of bins

Standard Drawing  
AR-ENG-416

Date \_\_\_\_\_

Designed \_\_\_\_\_

Drawn \_\_\_\_\_

Checked \_\_\_\_\_

Approved \_\_\_\_\_

POULTRY COMPOSTING BINS  
 5' REINFORCED  
 CONCRETE STRUCTURE  
 GENERAL LAYOUT  
 \_\_\_\_\_ COUNTY, AR



File Name \_\_\_\_\_

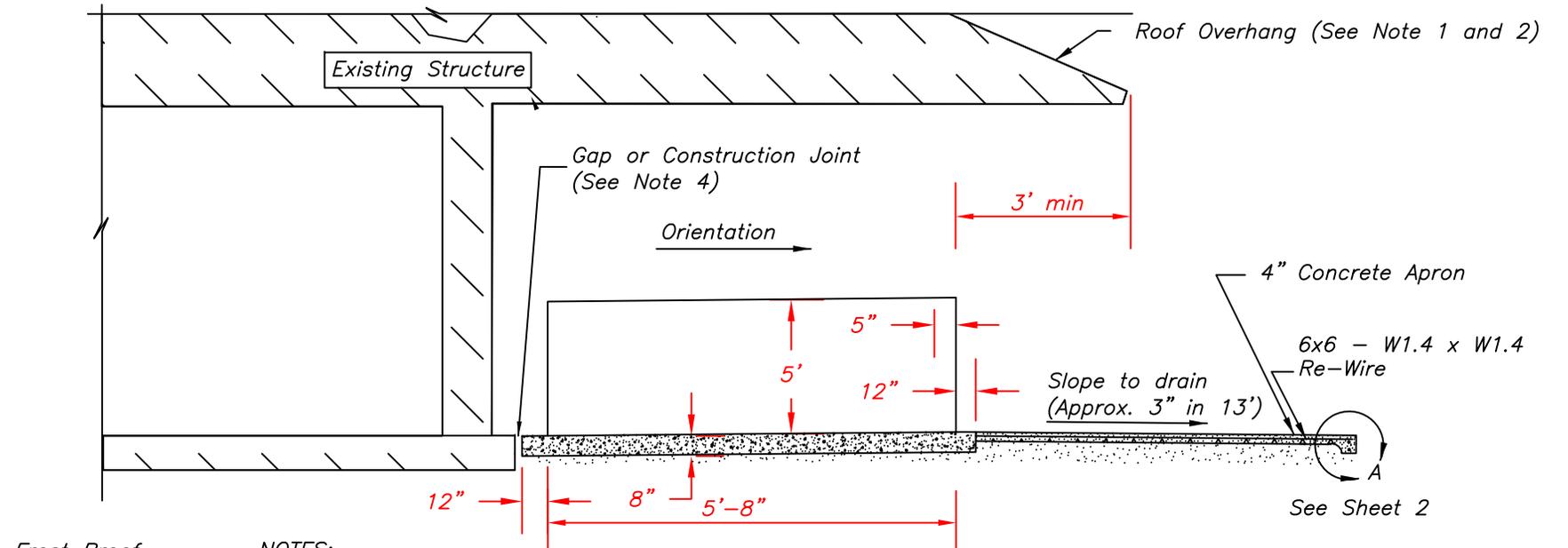
Drawing Name  
AR-ENG-416  
Rev. 11-2010

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

POULTRY COMPOSTING BINS  
 5' REINFORCED  
 CONCRETE STRUCTURE  
 GENERAL LAYOUT  
 \_\_\_\_\_ COUNTY, AR



File Name \_\_\_\_\_  
 Drawing Name  
 AR-ENG-416  
 Rev. 11-2010  
 Sheet 2 of 4

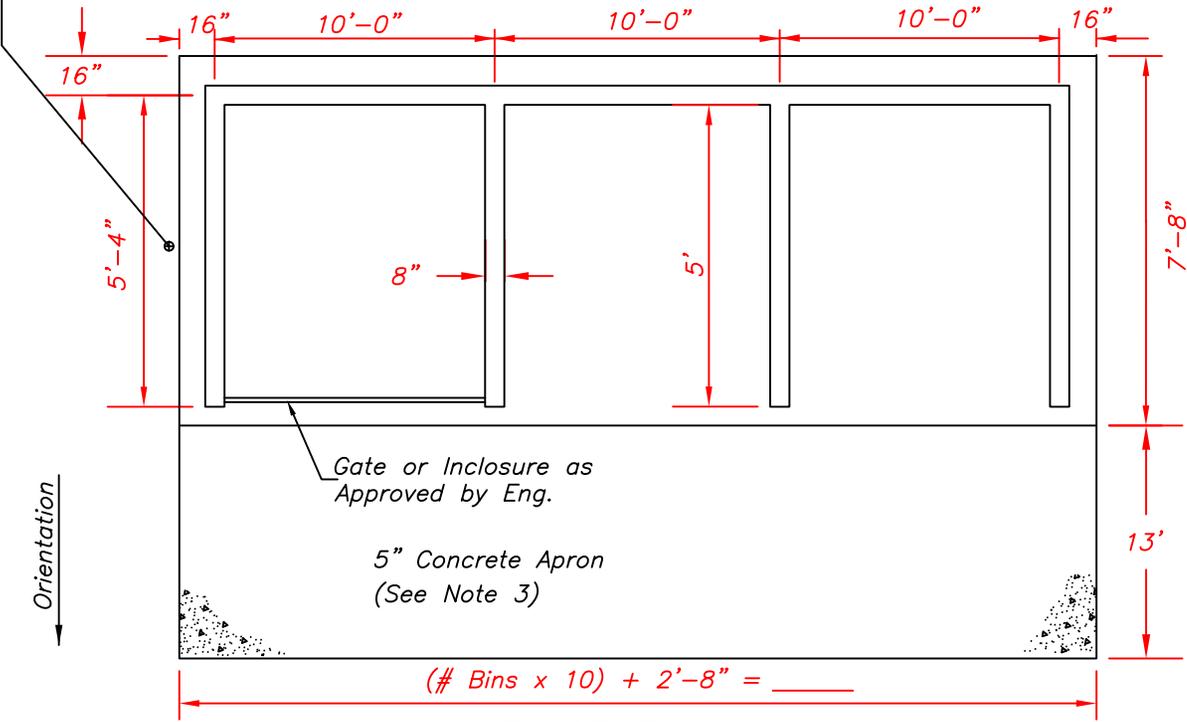


END VIEW

Frost Proof Hydrant  
 (Located at either end of structure)

NOTES:  
 1. Frost-proof hydrant is required UNLESS there is an alternative water source (such as a hydrant) available within 150'.

PARTIAL REAR ELEVATION



FLOOR PLAN

NOTES:

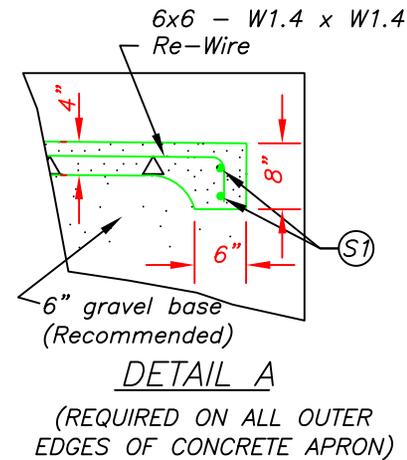
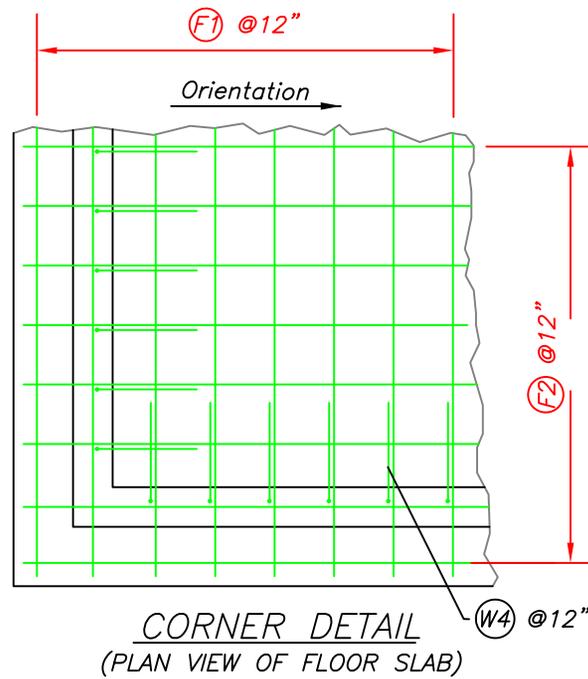
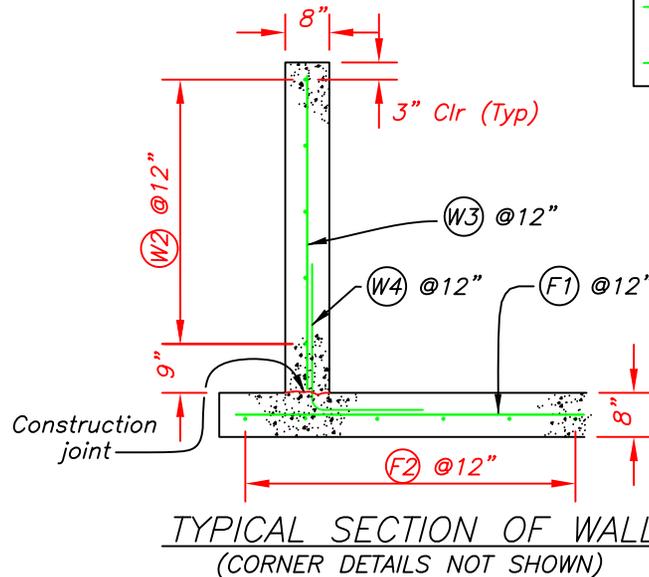
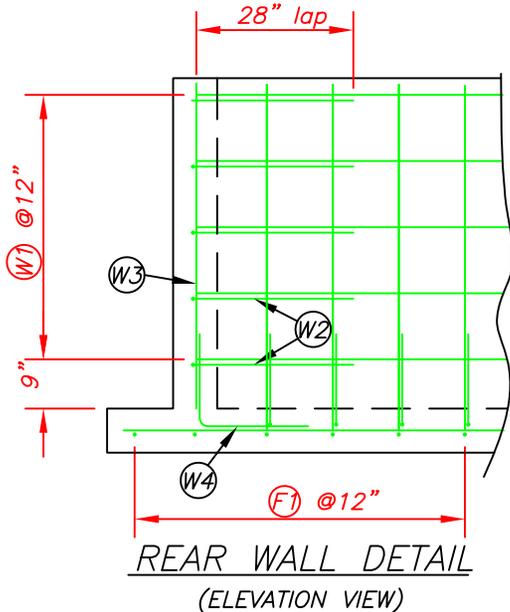
1. Composting bins must be covered by roof structure. All roof structures shall be NRCS approved design, or designed by a Professional Engineer registered in Arkansas. All such designs shall show truss, truss supports, and footings.
2. Roof overhang shall extend 3' min beyond composter wall.
3. The area in front of the bins shall be protect by a concrete apron.
4. Composting bins shall not be tied structurally to any other structure. Any Structure adjacent to bins shall be separated, of a minimum, by use of a construction joint.
5. Concrete for floor and walls shall be In Accordance with Construction Specification AR-31 Concrete for Major Structures.
6. Concrete for Apron shall be In Accordance with Construction Specification AR-32 Concrete for Major Structures.

NOT TO SCALE

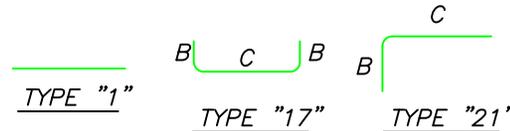
LANDOWNER: \_\_\_\_\_

STEEL SCHEDULE									
MARK	SIZE	QUANTITY	LENGTH	TYPE	B	C	3 BIN-TOTAL LENGTH	4 BIN-TOTAL LENGTH	ADT'L BIN(S)-LENGTH
F1	4	33*	7-6	1	----	----	247-6	322-6	75-0
F2	4	8	32	1	----	----	256-0	336-0	80-0
W1	4	5	30-2*	1	----	----	150-10	200-10	50-0
W2	4	20*	7-7	21	2-4	5-1	151-8	189-7	38-1
W3	5	56*	4-9	1	----	----	266-0	342-0	76-0
W4	5	56*	4-4	21	1-4	2-7	240-10	309-7	69-2
*S1	4	2	32*	(1)	----	----	64-0	84-0	20-0

\* Assumes 3 Bins.



**STEEL TYPES**



NOT TO SCALE

- NOTES:**
- All exposed concrete edges and corners shall be rounded or chamfered 1".
  - Bar spacing is measured from center to center.
  - Unless otherwise marked, all steel shall be in center of concrete.
  - Unless otherwise marked, splices shall be as follows:
    - Horiz. bars in wall: 28"
    - All other bars:
      - #4 - 22"
      - #5 - 27"

Date \_\_\_\_\_

Designed \_\_\_\_\_

Drawn \_\_\_\_\_

Checked \_\_\_\_\_

Approved \_\_\_\_\_

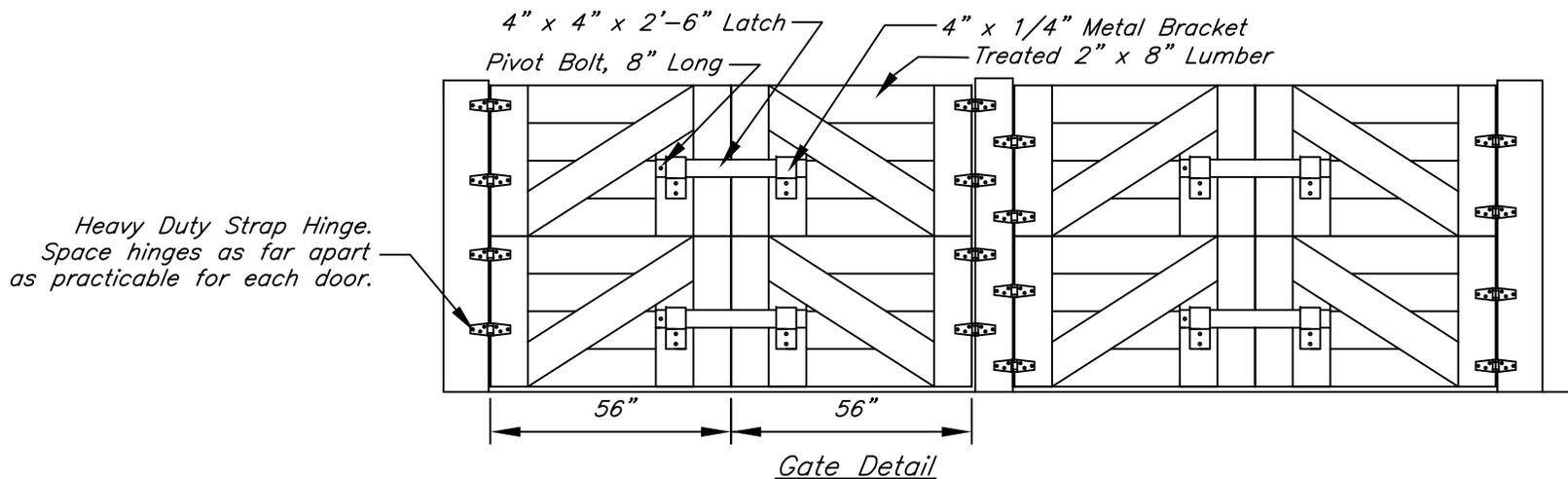
POULTRY COMPOSTING BINS  
5' REINFORCED  
CONCRETE STRUCTURE  
CONCRETE DETAILS  
\_\_\_\_\_ COUNTY, AR



File Name \_\_\_\_\_

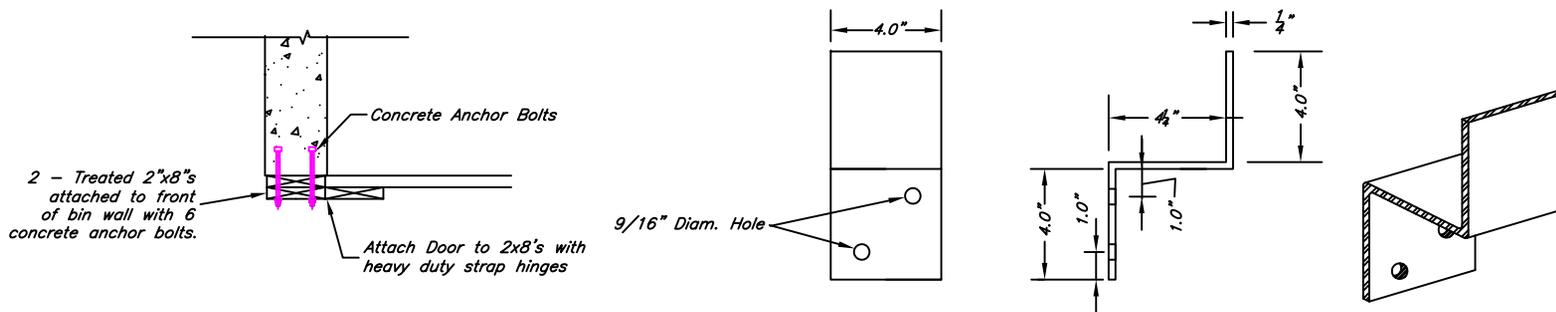
Drawing Name  
AR-ENG-416  
Rev. 11-2010

Sheet 3 of 4



Heavy Duty Strap Hinge.  
Space hinges as far apart  
as practicable for each door.

Gate Detail



NOTE: Doors may be attached with an alternate method, with prior approval from the engineer.

NOTE: Attach Metal Bracket with 2 - 1/2\" x 4\" Bolts with nut and flat washers.

Bracket Detail

BILL OF MATERIALS	NUMBER OF BINS								
	3	4	5	6	7	8	9	10	
<b>CONCRETE FLOOR AND WALLS</b>									
Concrete = _____ Cu. Yds.	15	20	25	30	35	39	44	49	
#4 Reinforcing Bar = _____ Lin. Ft.	2,020	2,615	3,206	3,798	4,389	49,81	5,572	6,164	
<b>CONCRETE APRON</b>									
Concrete, Cu. Yds.	7	9	11	13	15	17	19	21	
#4 Reinforcing Bar = _____ Lin. Ft.	65	85	105	125	145	165	185	205	
6x6-W1.4xW1.4 Wire Mesh - Sq. Ft.	425	555	685	815	945	1075	1205	1335	

**NOTE:**

If Bins are to be constructed in two or more rows, add the quantities given in table above for each row.  
Example: 6 Bins constructed in two rows, Concrete = 20 + 20 Cu. Yds.

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

POULTRY COMPOSTING FACILITY  
5' REINFORCED  
CONCRETE STRUCTURE  
DETAILS AND BILL OF MATERIALS  
COUNTY, AR



File Name

Drawing Name  
AR-ENG-416  
Rev. 11-2010