

NOTE:

1. This plan set shows details for a four (4) Primary Bin unit. The plan set is to be adapted for _____ Primary Bins and _____ Storage Bins. See sheet 6 of 6 for estimated quantities.
2. Each Primary Bin shall have a gate. 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

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

Contractor/Landowner

This composter meets NRCS Standards and Specifications

NRCS Representative

Perspective View



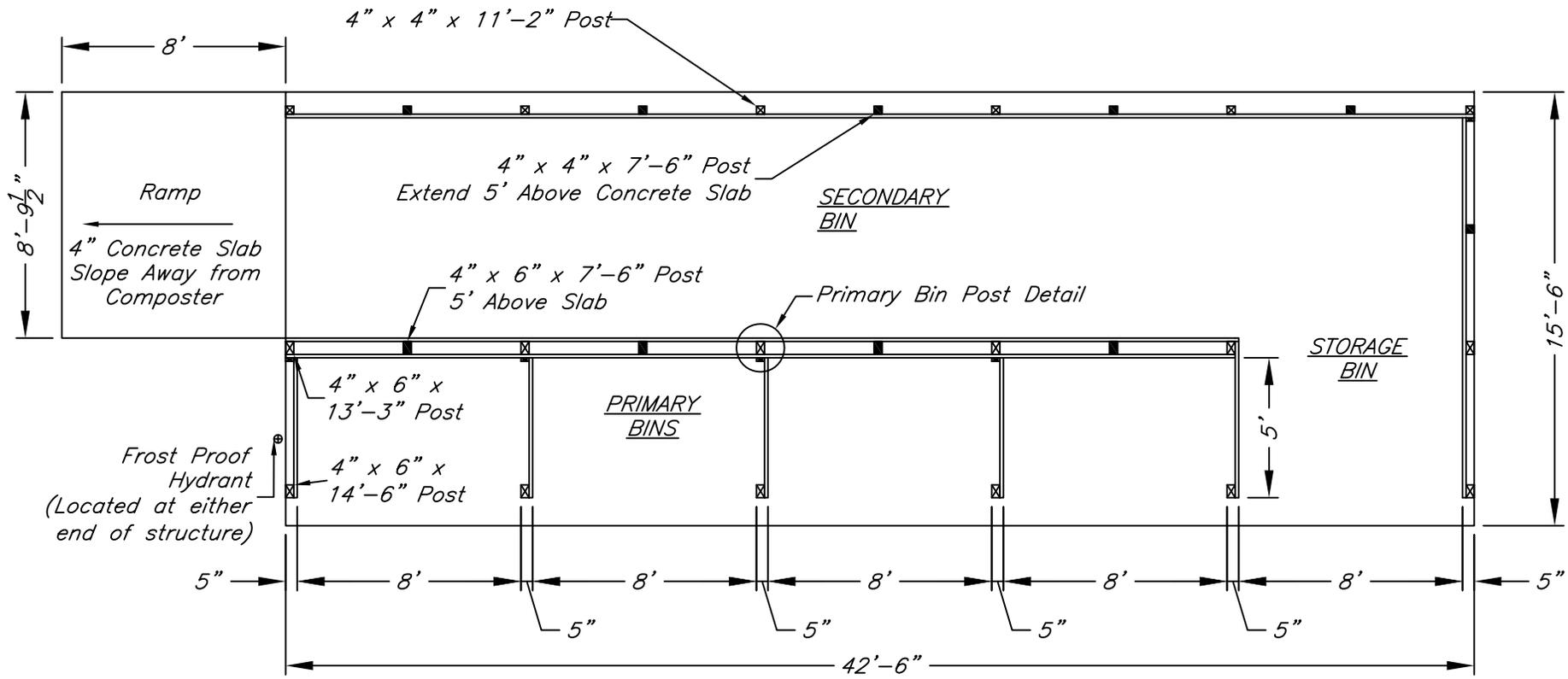
**Know what's below.
Call before you dig.**

No. of Primary Bins	* Total Length Ft.-In.	Composting and Storage Area - Sq. Ft.	Area of Concrete Ramps - Sq.Ft.
2	25'-8"	398	404
3	34'-1"	528	513
4	42'-6"	659	623
5	50'-11"	789	732
6	59'-4"	920	842
7	67'-9"	1050	951
8	76'-2"	1181	1060
* Includes one 8' wide storage bin.			Standard Drawing AR-ENG-414

Date	_____
Designed	_____
Drawn	_____
Checked	_____
Approved	_____

MORTALITY COMPOST FACILITY
8' Wide Bins
Customer: _____





Plan View

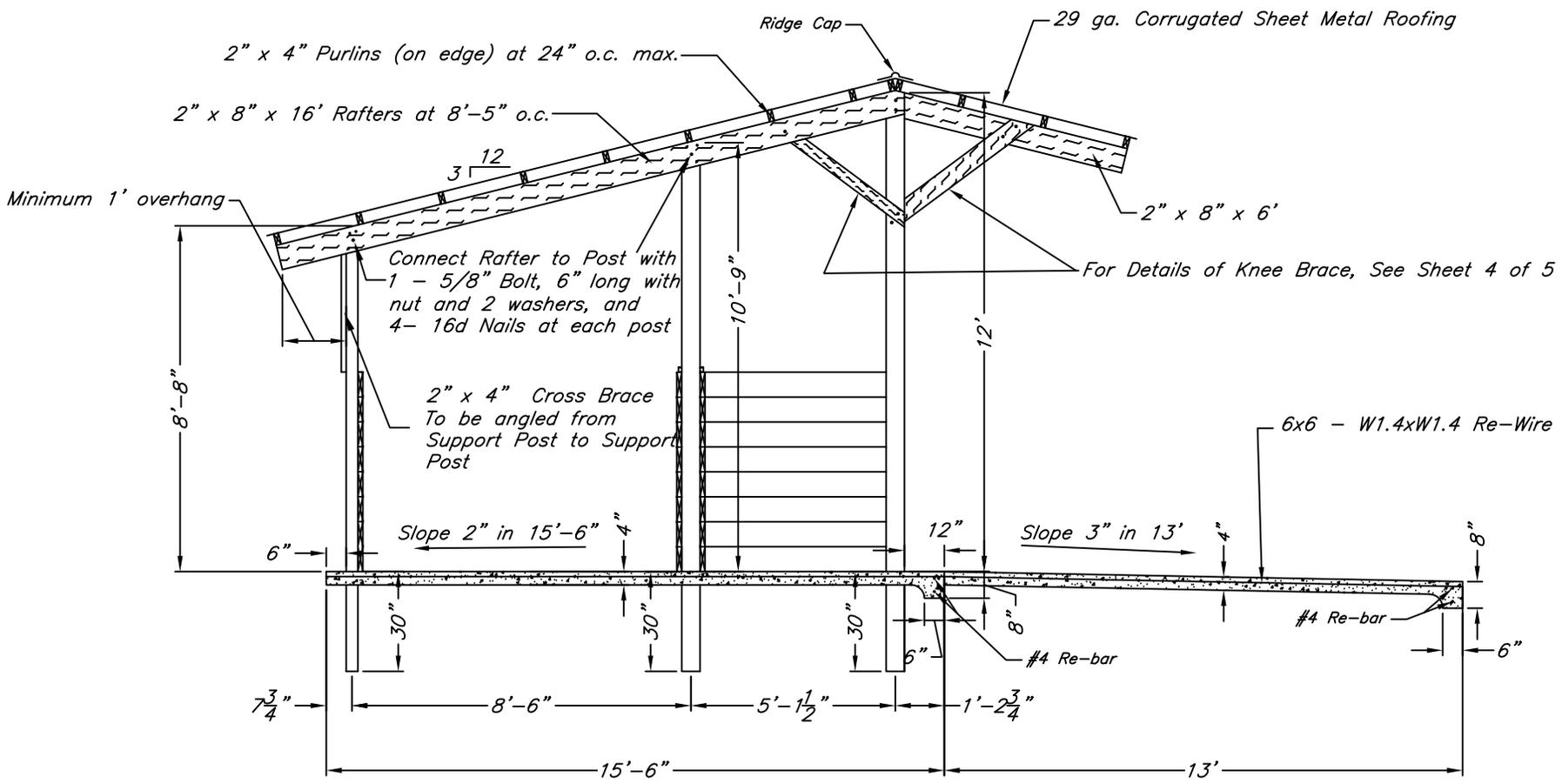
NOTES:

1. Treated lumber (0.4 lbs. per cu. ft.) is to be used for all lumber except rafters, purlins, knee braces, and cross braces. All lumber is to be #2 Southern Yellow Pine.
2. Planks are to be 2" x 8" treated lumber of variable lengths to result in staggered joint locations.
3. Attach each purlin to each rafter with a manufactured framing anchor. Where Purlin joints are needed, they are to overlap 18" above a rafter.
4. Roofing material is to be attached to each purlin using fasteners and fastener spacing recommended by the roofing manufacturer. The contractor shall provide a copy of the manufacturers fastening recommendations prior to final inspection.
5. Double wall between secondary bin and primary bins will have a 2" x 8" cap.
6. Frost-proof hydrant is required UNLESS there is an alternative water source (such as a hydrant) available within 150'.
7. If Storage Bin is not needed, a wall is required at one end of secondary bin.

Date	Designed	Drawn	Checked	Approved

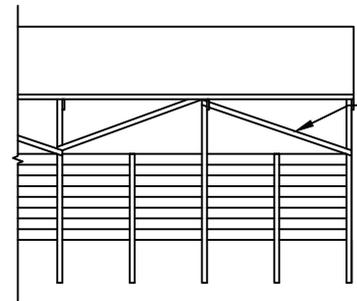
MORTALITY COMPOST FACILITY
8' Wide Bins
Customer: _____





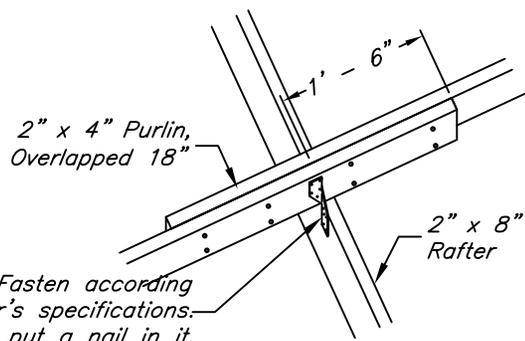
Cross Section View

- NOTES:**
1. Concrete is to have a 28 day strength of 3,000 psi.
 2. Fiber reinforced concrete can be used in lieu of conventional concrete and reinforcing wire.
 3. Thickened concrete edge is to be placed on all edges of concrete slab that will be receiving oncoming vehicular traffic.
 4. Construction and/or contraction joints are to have a maximum spacing of 13'.



Back View
Not to Scale

2" x 4" Cross Brace
To be angled from
Support Post to Support
Post



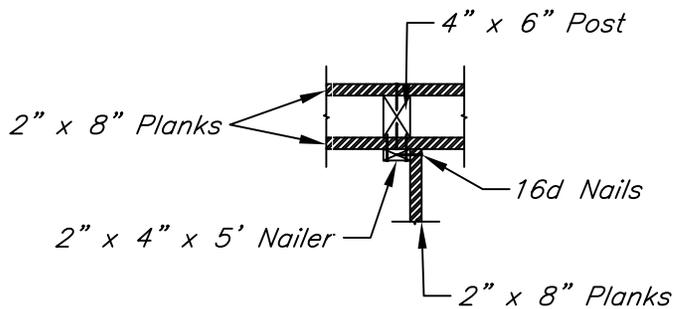
Purlin to Rafter Detail
Not to Scale

Hurricane Tie. Fasten according to manufacturer's specifications. If there is a hole, put a nail in it.

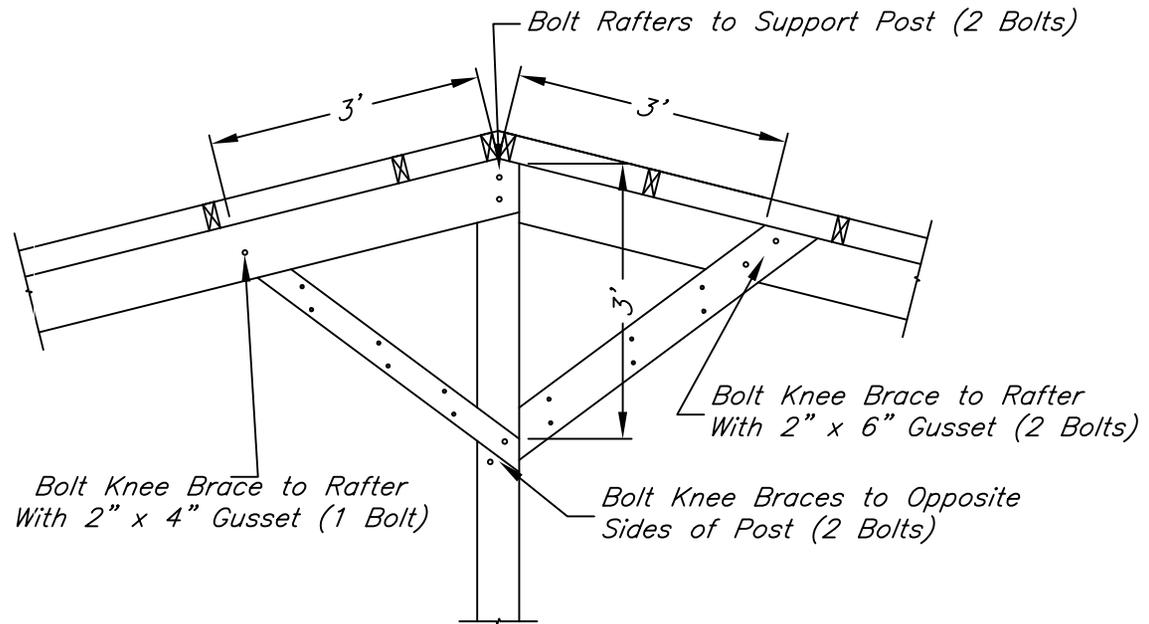
Designated	_____
Drawn	_____
Checked	_____
Approved	_____

MORTALITY COMPOST FACILITY
8' Wide Bins
Customer: _____

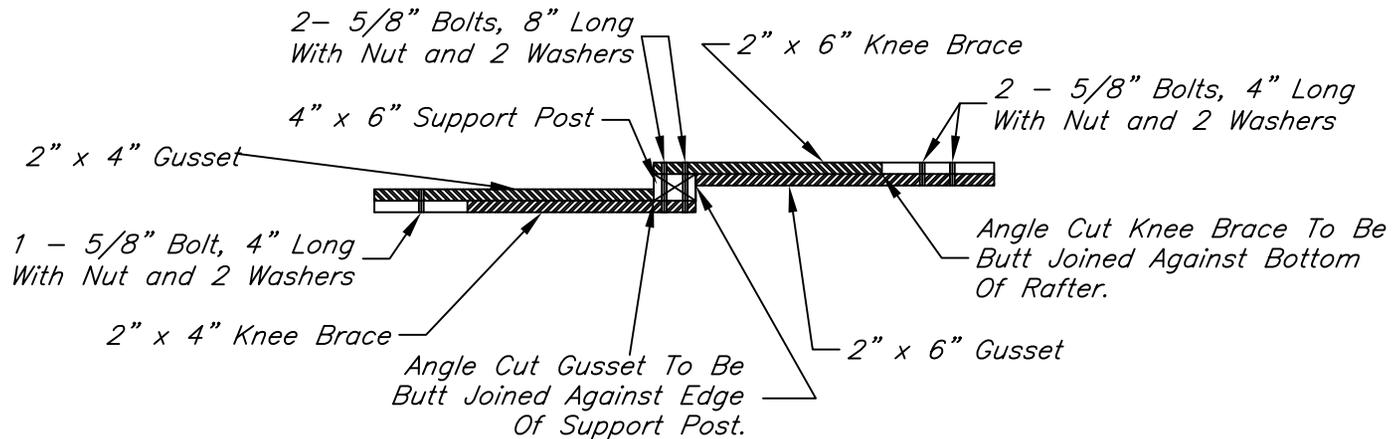




PRIMARY BIN POST DETAIL



KNEE BRACE DETAIL



PLAN VIEW - KNEE BRACE

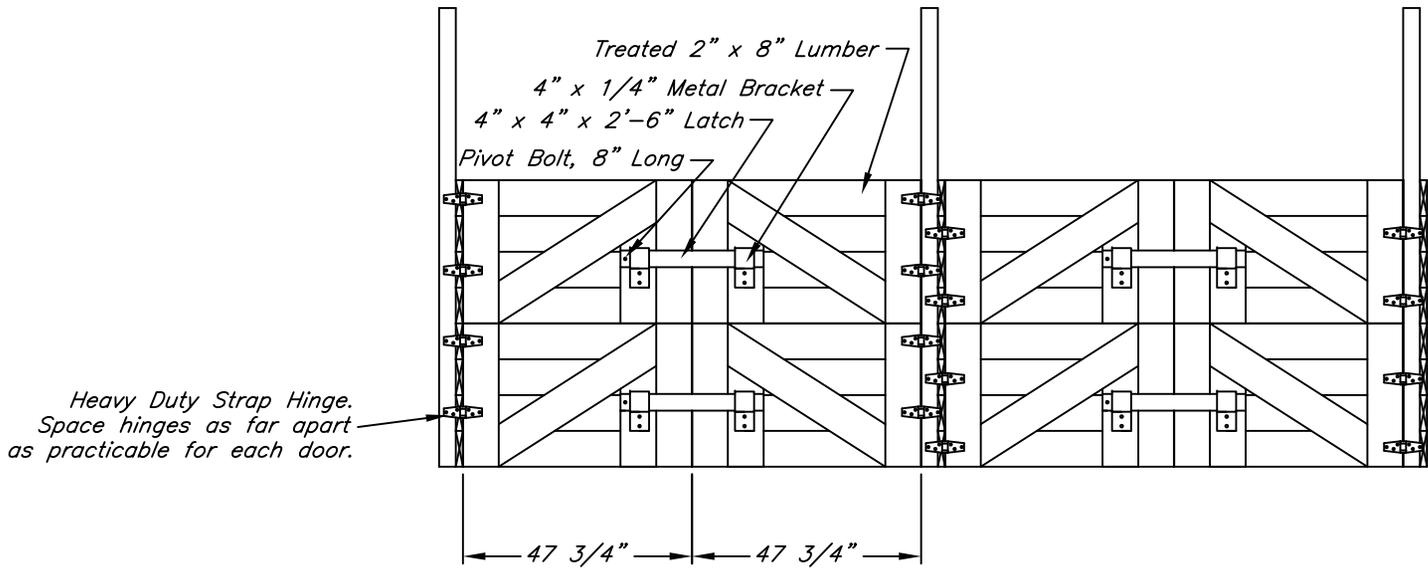
Notes:

1. All bolts shall be $\frac{5}{8}$ " diameter with washers at both ends.
2. All 16d nails shall be Ring Shankd.
3. Nail gusset and knee brace together. Use a minimum of six (6) 16d nails, clinched.

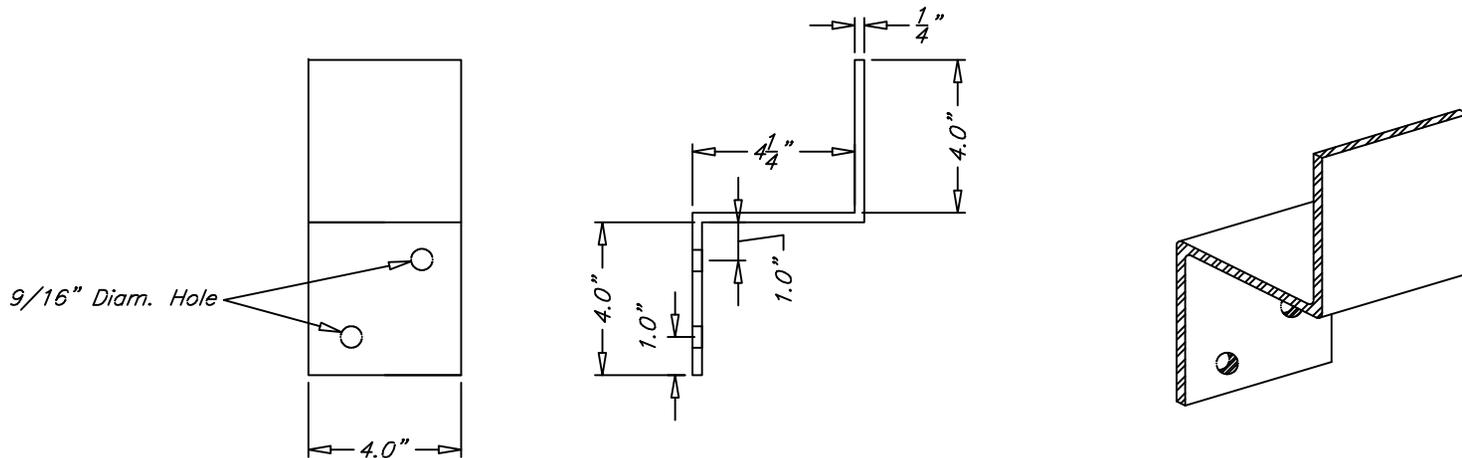
Date	Designed	Drawn	Checked	Approved

MORTALITY COMPOST FACILITY
8' Wide Bins
Customer: _____





GATE DETAIL



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

BRACKET DETAIL

Designated	Drawn	Checked	Approved
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

MORTALITY COMPOST FACILITY
 8' Wide Bins
 Customer: _____



Composter Without Storage Area

	Number of Primary Cells								**
	2	3	4	5	6	7	8		
Length	17'-3"	25'-8"	34'-1"	42'-6"	50'-11'	59'-4"	67'-9"	8'-5"	
CONCRETE, Cu. Yd.	8.1	11.2	14.3	17.4	20.5	23.6	26.7	3.1	
CONCRETE REINFORCEMENT									
6X6-W1.4xW1.4 wire mesh, sq.ft.	474	706	937	1169	1400	1632	1863	231	
#4 Reinforcing Bar, Lin. Ft.	68	102	136	169	203	237	270	34	
TREATED LUMBER									
POSTS									
4"x6"x 14'-6"	3	4	5	6	7	8	9	1	
4"x6"x 13'-3"	3	4	5	6	7	8	9	1	
4"x4"x 11'-2"	3	4	5	6	7	8	9	1	
4"x6"x 7'-6"	2	3	4	5	6	7	8	1	
4"x4"x 7'-6"	2	3	4	5	6	7	8	1	
2"x8" PLANKING									
5'-0"	24	32	40	48	56	64	72	8	
14'-0"	0	0	0	0	0	0	0	0	
Additional Lin. Ft. (back of Prim. and Sec. bins)	411	613	815	1017	1219	1421	1623	202	
Nails									
2"x4"x 5'-0"	3	4	5	6	7	8	9	1	
Cap (between secondary and primary)									
2"x8"x 8'-1.5"	2	3	4	5	6	7	8	1	
DOORS									
2"x8"x 8' Treated	22	33	44	55	66	77	88	11	
2"x8"x 10' Treated	4	6	8	10	12	14	16	2	
4"x4"x 5'	2	3	4	5	6	7	8	1	
4" Heavy Duty Strap Hinge	16	24	32	40	48	56	64	8	
4" x 1/2" Metal Bracket	8	12	16	20	24	28	32	4	
1/2" x 4" Metal Bolts	16	24	32	40	48	56	64	8	
1/2" x 8" Bolts	4	6	8	10	12	14	16	2	
NON-TREATED LUMBER									
2"x8"x 16'-0"	3	4	5	6	7	8	9	1	
2"x8"x 6'-0"	3	4	5	6	7	8	9	1	
2"x6"x 4'-0"	6	8	10	12	14	16	18	2	
2"x4"x 3'-6"	6	8	10	12	14	16	18	2	
2"x4"x 9'-6"	2	3	4	5	6	7	8	1	
PURLINS									
2"x4"x 10'	26	39	52	65	78	91	104	13	
ROOFING MATERIAL - sq.ft.	388	577	766	955	1145	1334	1523	189	
BOLTS - 3/8" Diam.									
4" Length	9	12	15	18	21	24	27	3	
6" Length	6	8	10	12	14	16	18	2	
8" Length	12	16	20	24	28	32	36	4	
Washers - 3/8" Diam.	42	56	70	84	98	112	126	14	
Framing Anchors	39	52	65	78	91	104	117	13	

** Additional Material for each added bin

Composter With Storage Area

	Number of Primary Cells								**
	2	3	4	5	6	7	8		
Length	25'-8"	34'-1"	42'-6"	50'-11'	59'-4"	67'-9"	76'-2"	8'-5"	
CONCRETE, Cu. Yd.	11.2	14.3	17.4	20.5	23.6	26.7	29.8	3.1	
CONCRETE REINFORCEMENT									
6X6-W1.4xW1.4 wire mesh, sq.ft.	706	937	1169	1400	1632	1863	2095	231	
#4 Reinforcing Bar, Lin. Ft.	101	135	169	202	236	270	303	34	
TREATED LUMBER									
POSTS									
4"x6"x 14'-6"	4	5	6	7	8	9	10	1	
4"x6"x 13'-3"	4	5	6	7	8	9	10	1	
4"x4"x 11'-2"	4	5	6	7	8	9	10	1	
4"x6"x 7'-6"	2	3	4	5	6	7	8	1	
4"x4"x 7'-6"	4	5	6	7	8	9	10	1	
2"x8" PLANKING									
5'-0"	24	32	40	48	56	64	72	8	
14'-0"	8	8	8	8	8	8	8	0	
Additional Lin. Ft. (back of Prim. and Sec. bins)	480	682	884	1086	1288	1490	1692	202	
Nails									
2"x4"x 5'-0"	4	5	6	7	8	9	10	1	
Cap (between secondary and primary)									
2"x8"x 8'-1.5"	2	3	4	5	6	7	8	1	
DOORS									
2"x8"x 8' Treated	22	33	44	55	66	77	88	11	
2"x8"x 10' Treated	4	6	8	10	12	14	16	2	
4"x4"x 5'	2	3	4	5	6	7	8	1	
4" Heavy Duty Strap Hinge	16	24	32	40	48	56	64	8	
4" x 1/2" Metal Bracket	8	12	16	20	24	28	32	4	
1/2" x 4" Metal Bolts	16	24	32	40	48	56	64	8	
1/2" x 8" Bolts	4	6	8	10	12	14	16	2	
NON-TREATED LUMBER									
2"x8"x 16'-0"	4	5	6	7	8	9	10	1	
2"x8"x 6'-0"	4	5	6	7	8	9	10	1	
2"x6"x 4'-0"	8	10	12	14	16	18	20	2	
2"x4"x 3'-6"	8	10	12	14	16	18	20	2	
2"x4"x 9'-6"	3	4	5	6	7	8	9	1	
PURLINS									
2"x4"x 10'	39	52	65	78	91	104	117	13	
ROOFING MATERIAL - sq.ft.	577	766	955	1145	1334	1523	1712	189	
BOLTS - 3/8" Diam.									
4" Length	12	15	18	21	24	27	30	3	
6" Length	8	10	12	14	16	18	20	2	
8" Length	16	20	24	28	32	36	40	4	
Washers - 3/8" Diam.	56	70	84	98	112	126	140	14	
Framing Anchors	52	65	78	91	104	117	130	13	

** Additional Material for each added bin

Date _____
 Designed _____
 Drawn _____
 Checked _____
 Approved _____

MORTALITY COMPOST FACILITY
 8' Wide Bins
 Customer: _____

