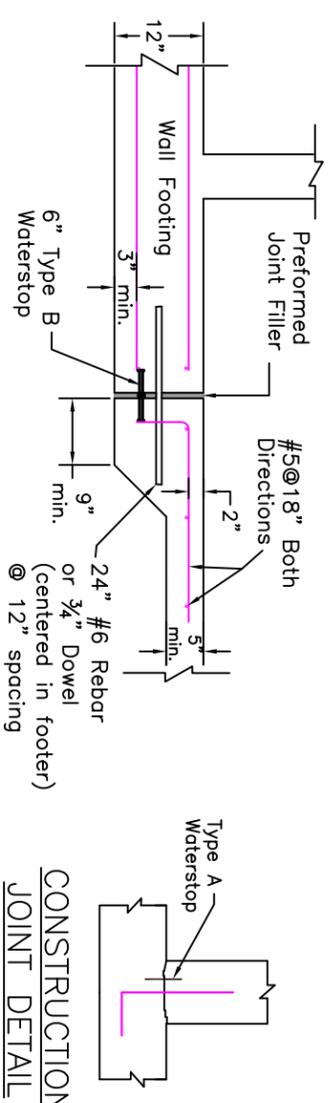
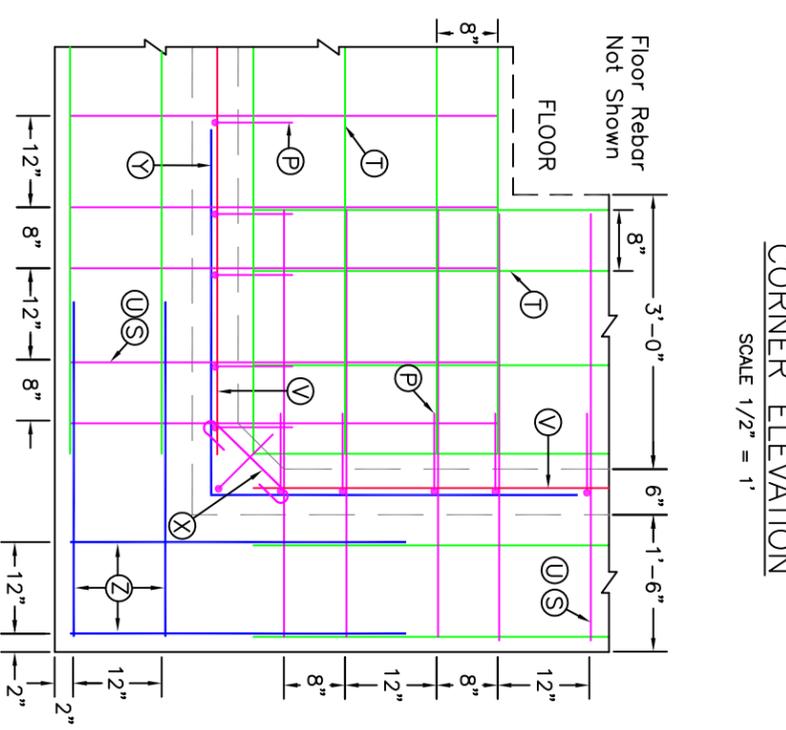
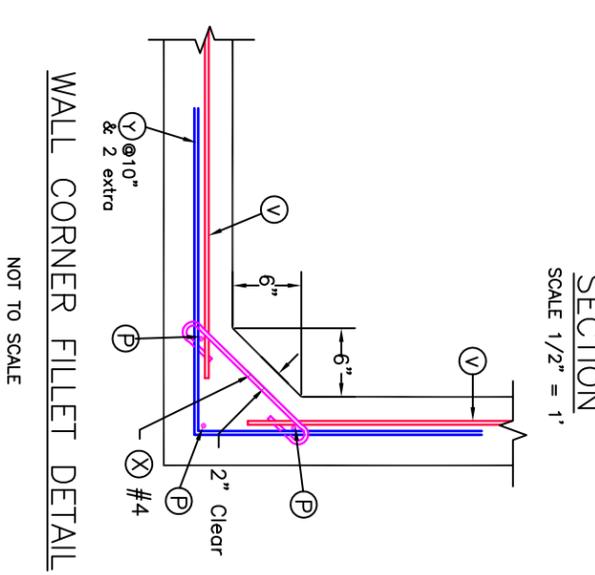
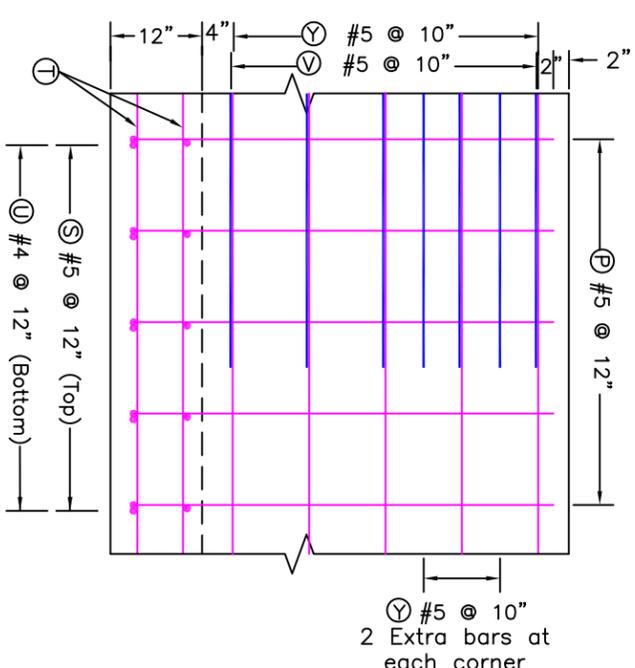
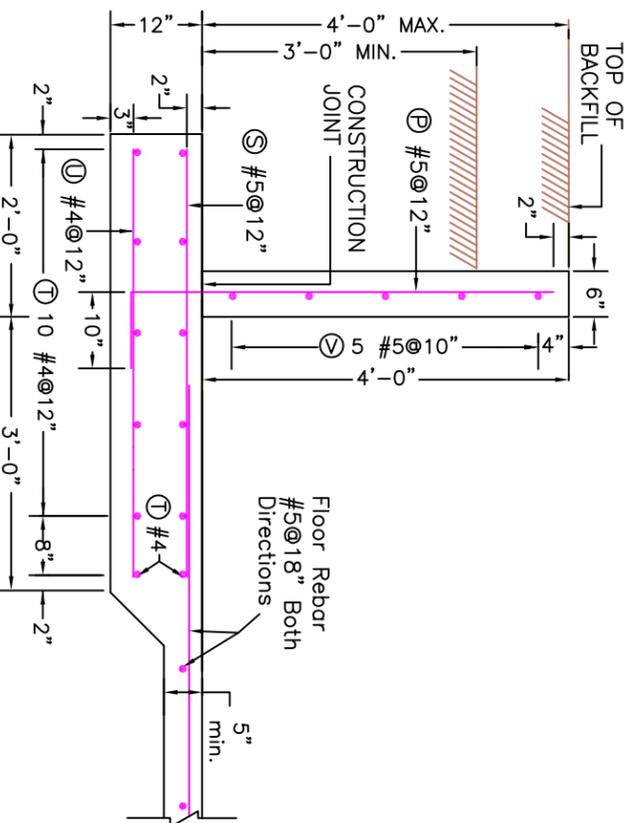


STEEL SCHEDULE

| MARK | SIZE | QUANTITY | TYPE | a | b | c | LENGTH | TOTAL LENGTH |
|------|------|----------|----------|-----------|-----------|-------|--------|--------------|
| P | 5 | 21 | Straight | 4'-7" | 0'-10" | - | 5'-5" | |
| S | 5 | | Straight | - | - | - | 4'-8" | |
| T | 4 | | Straight | - | - | - | 4'-8" | |
| U | 4 | | Straight | - | - | - | 4'-8" | |
| V | 5 | | Straight | - | - | - | 2'-3" | |
| X | 4 | 22 | Straight | 1'-2 1/2" | 0'-2 1/4" | 0'-4" | 2'-3" | |
| Y | 5 | 21 | Straight | 4'-0" | 4'-0" | - | 8'-0" | |
| Z | 4 | | Straight | - | - | - | 3'-8" | |

#4 BARS, TOTAL LENGTH = _____ X 0.668 LBS/FT. = _____ LBS
 #5 BARS, TOTAL LENGTH = _____ X 1.043 LBS/FT. = _____ LBS
 TOTAL REBAR = _____ LBS
 CONCRETE = 0.259 CY/FT. OF WALL LENGTH ESTIMATED TOTAL = _____ CY



OPTIONAL FLOOR DETAIL
NOT TO SCALE

WALL DESIGN LOADING

- * MANURE LOADING = 65 pcf
- * BACKFILL: GRANULAR, NON-COHESIVE
- * DENSITY = 120 pcf; $\phi = 30^\circ$
- * SURCHARGE = 2' OF BACKFILL EQUIVALENT (120 psf EFP REPRESENTING MACHINERY LOAD ON SOIL)

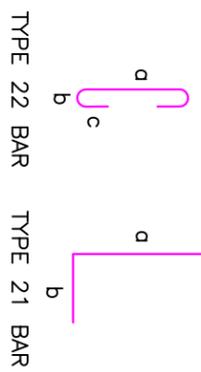
CONSTRUCTION

- * CONTRACTION JOINTS SHALL BE PLACED IN WALLS AT A MAXIMUM SPACING OF 150'.
- * EXPANSION JOINTS IN THE FLOOR SLABS SHALL BE A MAXIMUM OF 80'.
- * THE SUBBASE MATERIAL UNDER THE SLAB SHALL BE SAND, OR AT LEAST 2" OF SAND OVER CRUSHED STONE OR GRAVEL. SEE PROJECT DRAWINGS AND SPECS FOR ADDITIONAL SUBBASE REQUIREMENTS.
- * UNLESS OTHERWISE SHOWN, PROVIDE A MINIMUM OF 2" OF CONCRETE COVER OVER ALL STEEL.
- * ALL CONTRACTION AND EXPANSION JOINTS SHALL HAVE TYPE B WATERSTOPS.
- * DRAINAGE SHALL BE DIRECTED AWAY FROM THE WALL.
- * THE TOP WIDTH OF THE BACKFILL AROUND THE WALL SHALL BE AT LEAST 2 TIMES THE BACKFILL HEIGHT.

CONDITIONS OF USE

- * STANDARD DRAWING - DESIGNER MUST ENSURE THE APPLICATION OF THIS DRAWING MEETS THE ASSUMPTIONS OF THE DESIGN AS STATED.
- * BACKFILL HEIGHT = 3' TO 4'.
- * SOIL BACKFILL SHALL BE PLACED TO A MINIMUM DEPTH OF 3' BEFORE THE AREA IS USED FOR STORAGE.
- * FOOTING MUST BE RESTRAINED WITH A FLOOR SLAB.
- * DRAINAGE CONDITION: FULL DRAINAGE, EITHER BY COARSE WELL DRAINED BACKFILL OR A DRAINAGE SYSTEM.
- * MINIMUM SUBGRADE BEARING CAPACITY = 2,000 psf
- * CONCRETE STRENGTH = 4,000 psi REBAR = GRADE 60

MINIMUM LAP SPLICE
 #4 bars = 1'-8"
 #5 bars = 2'-1"



CORNER DETAIL (PLAN VIEW)

SCALE 1/2" = 1'

WASTE STORAGE FACILITY
 4' HIGH "TEE" WALL
 FULL BACKFILL (3 TO 4 FEET)
 STANDARD DWG. NO. MA-WSF-02
 DATE Sept. 2009 SHEET 1 OF 1

Date _____
 Designed _____
 Drawn _____
 Checked _____
 Approved _____

STANDARD DRAWING
 4' HIGH "TEE" WALL
 FULL BACKFILL (3 TO 4 FEET)
 WASTE STORAGE FACILITY

United States Department of Agriculture
 Natural Resources Conservation Service

Project Name _____
 Drawing Name MA-WSF-02
 Sheet # of _____