

PLAN

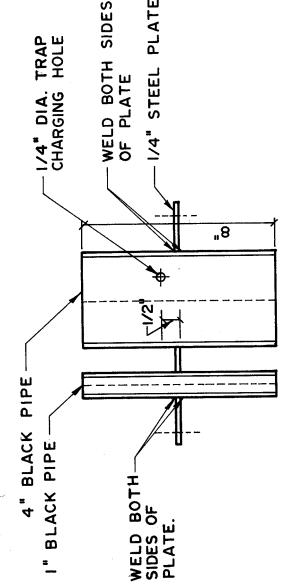
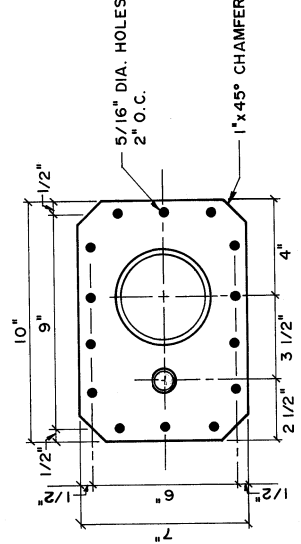
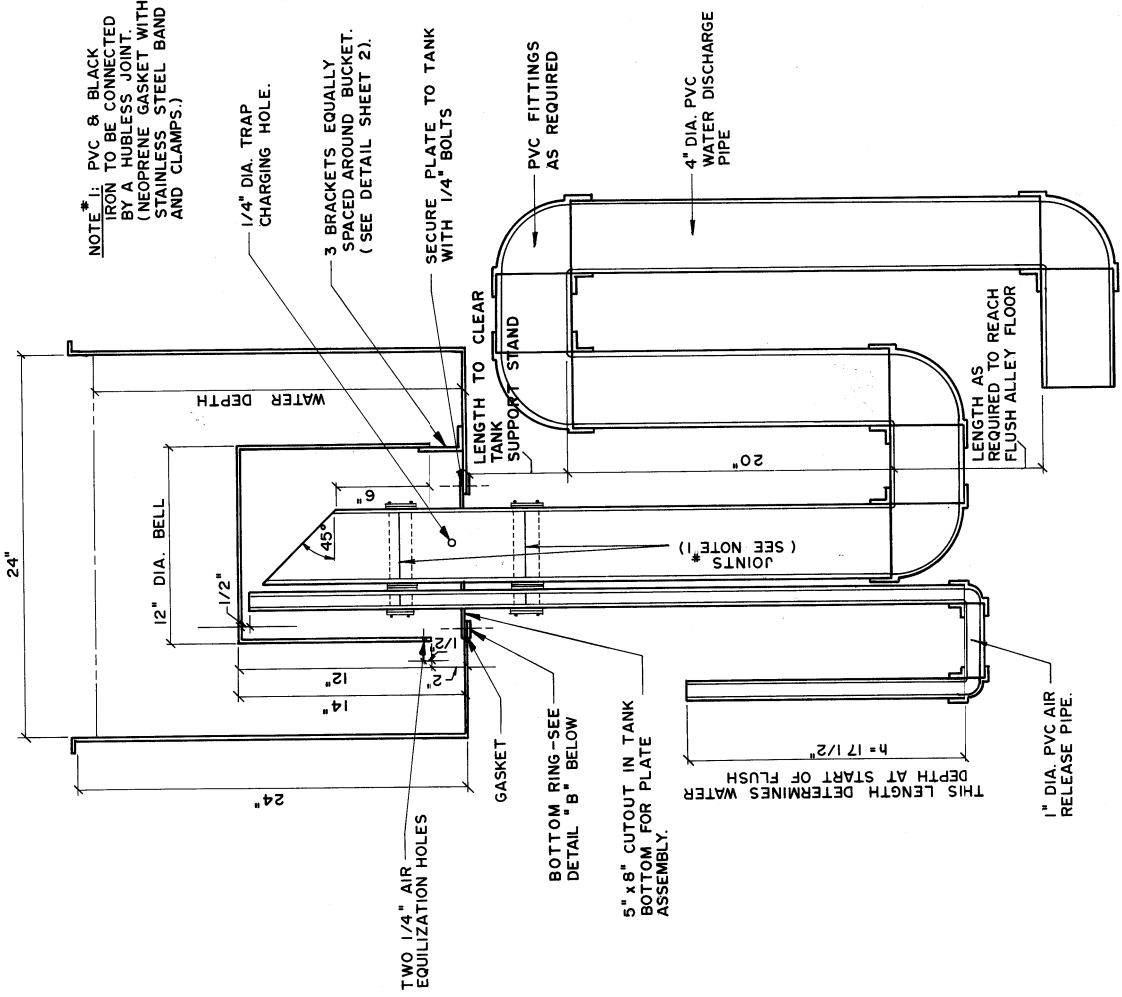
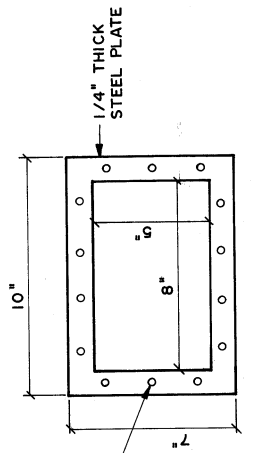


PLATE DETAIL "A"



5/16" DIA. HOLES TO MATCH HOLES IN PLATE ASSEMBLY

BOTTOM RING DETAIL "B"



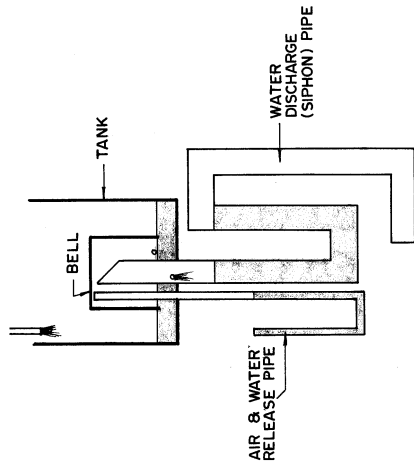
SECTION "A-A"

NOTE: THE BLACK IRON PIPE AND PLATE ASSEMBLY ARE SUBJECT TO RUST AND MAY REQUIRE REPLACEMENT EVERY FEW YEARS.

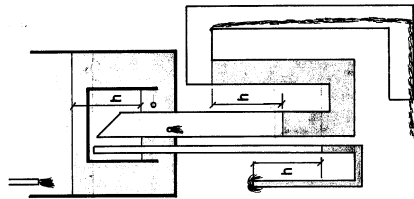
COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS
STATE OF TENNESSEE
UNIVERSITY OF TENNESSEE
AGRICULTURAL ENGINEERING DEPARTMENT
AND
UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

SIPHON FLUSH TANK

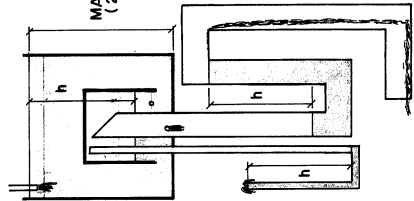
TENN 1-11-80 SHEET 1 OF 2
GFG/RJH PLAN NO. T4058
(REVISED 10/3/80)



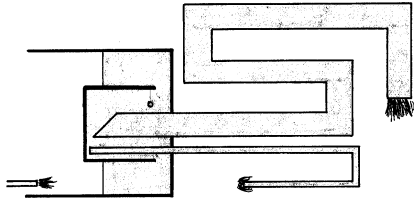
START OF REFILLING
(JUST AFTER END OF FLUSH)



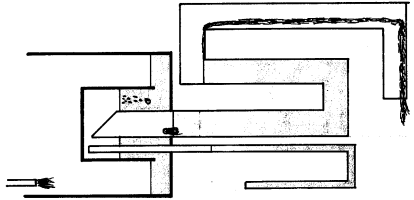
DURING FILLING



JUST BEFORE FLUSH



DURING FLUSH



END OF FLUSH
(JUST BEFORE STARTING
TO REFILL)

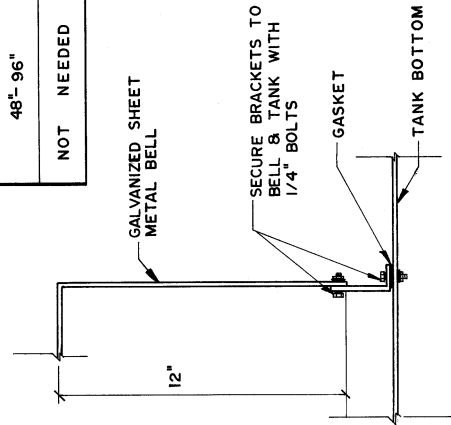
OPERATION OF THE SIPHON FLUSH TANK

SUGGESTED SIPHON SIZES FOR A GUTTER
SLOPED 2 PERCENT UP TO 145ft LONG

FARROWING HOUSE- NURSERY GUTTER WIDTH (IN.)	FINISHING HOUSE GUTTER WIDTH (IN.)	GALS. WATER TO BE FLUSHED	TANK SIZE * (GALS.)	SIPHON SIZE (IN. DIA.)	BELL DIA. (IN.)	MAX. WATER DEPTH (IN.)
12" - 24"	12" - 24"	50-100	60-120	3"	10"	24"
24" - 48"	24" - 36"	100-175	120-210	4"	12"	24"
48" - 96"	36" - 48"	175-250	210-300	6"	18"	24"
NOT NEEDED	48" - 60"	250-300	300-360	TWO 6" **	24"	24"

* THERE IS SOME WATER LEFT IN THE SIPHON TANK.
** BOTH SIPHONS MUST BE UNDER THE SAME BELL.

- NOTES:
- DIMENSIONS AND SIZES SHOWN ON SHEET 1 ARE FOR A 167 GALLON GALVANIZED STOCK WATERING TANK WHICH IS TO RELEASE APPROXIMATELY 140 GALLONS PER FLUSH THROUGH A 4" DIA. DISCHARGE PIPE (30" WIDE GUTTER) SEE THE TABLE ABOVE FOR OTHER SIZE RECOMMENDATIONS.
 - WHEN STARTING A NEW (DRY) TANK, ALL TRAPS MUST BE FULL TO PROVIDE AN AIR LOCK.
 - SIPHON FLUSH TANKS DISCHARGE A TRICKLE OF WATER DURING THE FILLING CYCLE.
 - ALL CONNECTIONS MUST BE AIRTIGHT.



SUPPORT BRACKET DETAIL

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SIPHON FLUSH TANK

TENN 1-11-80
GFG/RJH

PLAN NO. T4058

SHEET 2 OF 2

(REVISED 10/3/80)