



ORGANIC AND HYDRAULIC CALCULATIONS:

RV EFFLUENT STRENGTH (BOD) WILL BE ESTIMATED ON DOUBLE THAT OF RESIDENTIAL EFFLUENT
(USEPA ONSITE WASTEWATER TREATMENT SYSTEMS MANUAL, 2002)

MULTIPLIER FACTOR= 100% / 50% = 2
RV EFFLUENT STRENGTH (BOD) = 2 X 300 MG/L (HOUSEHOLD STRENGTH NEIGHBORING = 600 MG/L

1,380 G.P.D. X 8.34 X 600 MG/L = 6,905,552 / 1,000,000 = 6.90 LBS./BDD

TYPICAL 1,500 G.P.D. A.T.U. WILL TREAT 3.75 lb/BDD/DAY X 2 = 7.50 LBS./BDD/DAY

THEREFORE TWO 1,500 G.P.D. A.T.U.'S SHOULD SUFFICE WITH DOSING

CALCULATION SUMMARY:

TOTAL NUMBER OF TRAVEL TRAILERS: 18 (50 GAL EACH = 900 GPD)
TOTAL NUMBER OF HOMESTES: 2 (3-BDR UNDER 2,500 EACH = 240 GPD X 2 = 480 GPD)
Q = 1,380 G.P.D. (900 GPD + 480 GPD)
APPLICATION RATE: 0.10 gal./sq.ft./DAY
TOTAL DRIP AREA REQUIRED = 13,800 sq.ft. (6,900 LIN.F.T.)
TOTAL DRAIN AREA DESIGNED = 14,280 sq.ft. (6,974 LIN.F.T.)
INSTALL (ZONE 1 = 6 LINES AT 103' + 2 AT 117' + 16 AT 148' + 2 AT 118' = 3,456 LIN.F.T.)
(ZONE 2 = 20 AT 145' + 6 AT 103 = 3,518 LIN.F.T.)
6,974' / 2 = 3,487 EMITTERS
3,487 X 0.50 GPH = 1,744 GPH DR 29.00 GPM
1,980 GPD / 29.00 GPM = 48 MINUTES OF TOTAL PUMP RUN TIME
SET TO DUSE 4 TIMES A DAY (ONCE EVERY 6 HOURS) AT ABOUT 15 MIN EACH
INSTALL A 0.5 hp. PRO FLD SUBMERSTIBLE PUMP (OR EQUIV.)
DESIGN BASED ON FINDINGS BY SITE EVALUATOR

LEGEND:

- TANKS = (2) 500 gal. PRETREATMENT TANKS
- (2) 750 gal. PRETREATMENT TANKS
- (2) 1,500 gal. PUMP TANKS
- (2) 1,500 G.P.D. AEROBIC TREATMENT UNITS
- 4,000 gal. PUMP TANK WITH CHLORINATOR (DUAL ALTERNATING PUMPS)
- C/O = 2 WAY CLEAN-OUTS AT ALL STUB-OUTS FROM HOUSE
- 1 WAY CLEAN-OUTS EVERY 50' AND AT EVERY 90° TURN IN DIRECTION

● = BORE HOLE SITE



60'

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| NAME: MAPLE RV (HARRY TRAN) | SURVEY: THEODORE DORSETT |
| ADDRESS: 11891 FM 1409 | ABSTRACT: 173 |
| CITY, STATE, ZIP DAYTON, TX 77353 | ACRES: 2.32 |
| SUBDIVISION: N/A | BLOCK: N/A |
| COUNTY: LIBERTY | SECTION: N/A |
| DESIGNER: JOHN SAINZ / WANECK | PHONE #: (936) 672-7025 |
| | FAX #: (936) 273-9096 |
| | DATE: 09-24-2021 |
| | SCALE: 1" = 60' |