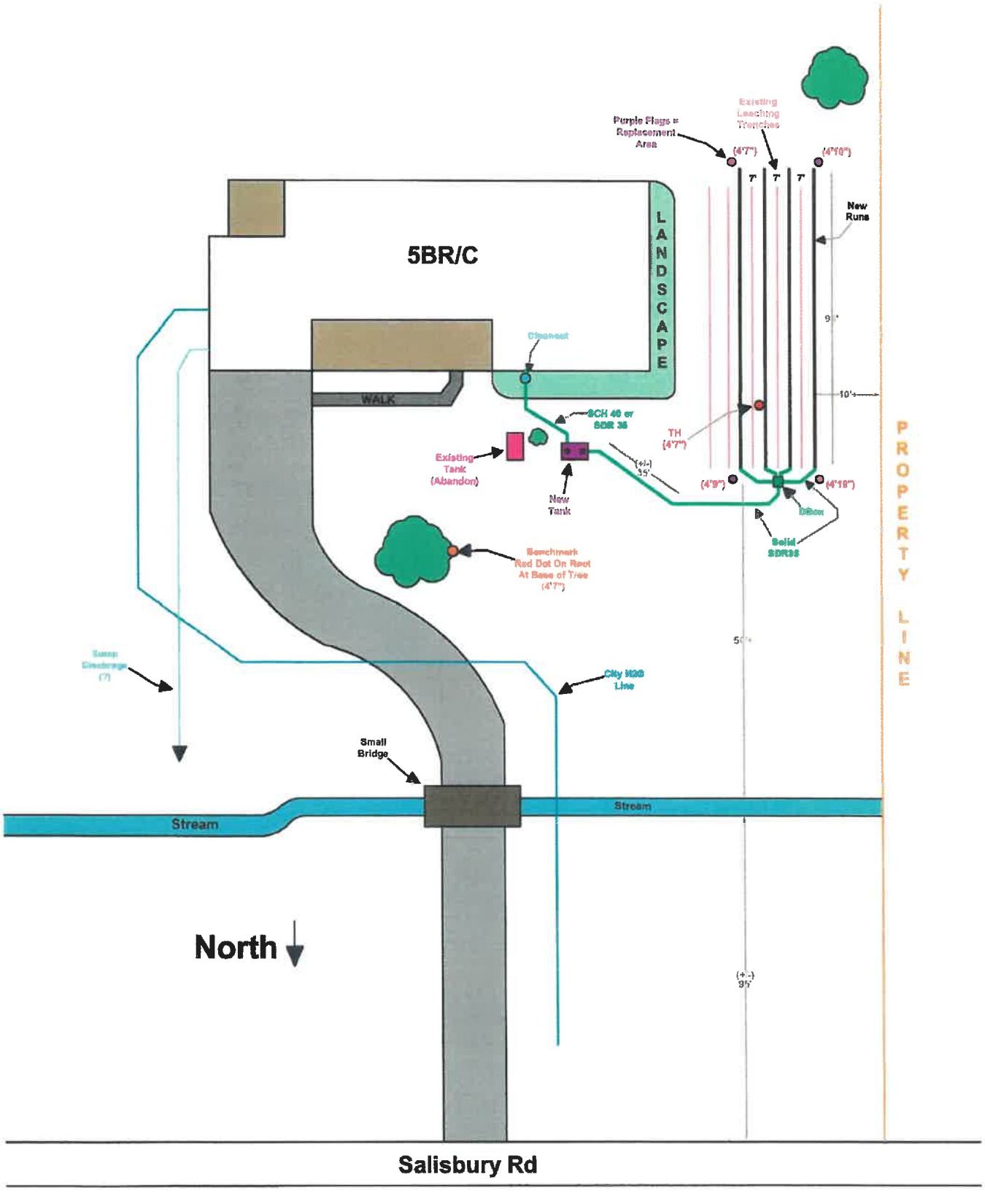
# *DESIGN SPECIFICS FOR 9595 SALISBURY ROAD – 5 BR/C - REPLACEMENT (MONCLOVA TOWNSHIP – LUCAS COUNTY)*

1. STS Rules 3701-29 of the OAC shall be followed.
2. Contact OUPS (#811) prior to installing septic system.
3. LHD, installer &/or designer must discuss any questions, changes or concerns prior to/during installation of the septic system as needed.
4. Confirm that all gray water (laundry, utility sinks etc.) is being discharge into the main sewer line and that all clear water (sump, downspouts etc.) is being rerouted away from the main sewer line *as required and as needed.*
5. Install new line from the house to the new septic tank. Line must be **SDR 35 or SCH 40** and must maintain 1/8" – ¼" per foot. Install an exterior clean-out with a slide style cover (not threaded). First 3' – 4' ONLY of sanitary line exiting the house must be bedded in leach field stone to prevent settling however the remainder of the line must be bedded in the existing in-situ soil, 310's or 411's *not leach field stone*.
6. Install a new state approved 2000 – gallon two compartment **septic tank** with inlet and outlet risers that are flush with grade. If the inlet baffle is not precast into the tank, install a 4" to 6" sanitary **inlet tee** (cut 6" below the flow line). Install the required 4" or 6" sanitary **outlet tee** with an 18" drop down and an effluent filter. **Existing septic tank** must be pumped and properly abandoned and proper documentation submitted to the TLCHD. **SDR 35** is required from the tank to the **distribution box**. Maintain a minimum of ½" of fall per 10' of run length. Bed line in firmly packed in-situ soil, 310's/411's, not leach field stone.
7. The lines exiting the distribution box will be **SDR 35** and shall be at the same elevation. Obtain a distribution box designed to handle the system design as shown. Cap with handle/elbow is required to allow one (1) 96' run of the system to "rest" at all times.
8. System design based on a standard stone/pipe leach leaching trench. Trench width will be 36". [***NOTE***: Due to site limitations, the **new leaching trenches** will be installed between the **existing trenches** as shown].
9. **Bench Mark** is the *surface root of the large tree marked with a red dot and arrow.* **Area of the test hole** is *level with* the bench mark. *No fill will be required prior to installation of the leaching trenches*. The leaching trenches will be installed on the average of 21" into the existing in-situ soil (see trench detail for specifics). A VSD of 12" from the perched seasonal water table will be maintained along the entire length of contour therefore the HLLR of 5.0 was utilized for this design proposal.
10. **Bottom of leaching trench** will be *21" below* the benchmark; **Top of the pipe** will be *13" below* the benchmark and the **Final grade** over the top of the entire leaching field area will average *level with* the benchmark.
11. Install the standard stone/pipe leach field as follows: Trench **length:** 96'; Total **number of runs:** 5; Average Initial/final trench **depth:** 21"; Total **stone depth:** 10" (***NOTE***: *If possible, depending on the new tank placement and elevation, the leach field pipe can be raised and up to allow for a total stone depth of 12": 6" of stone below and 2" above the 4" pipe*).; Use stone that is clean and sized between ¾" to 1 ½"; **Distance between leaching trenches:** 7' on center
12. Maintain at least 10' from the house, property lines, easements/right of ways, all hardscapes (sidewalks, driveway patios etc.); 8' from the **city water line** and any proposed or existing drain/**sump lines** and 50' form the **perennial ditch/stream** (3701-29-06 (3) (a) and any existing wells.
13. Plant grass ASAP after system is backfilled.

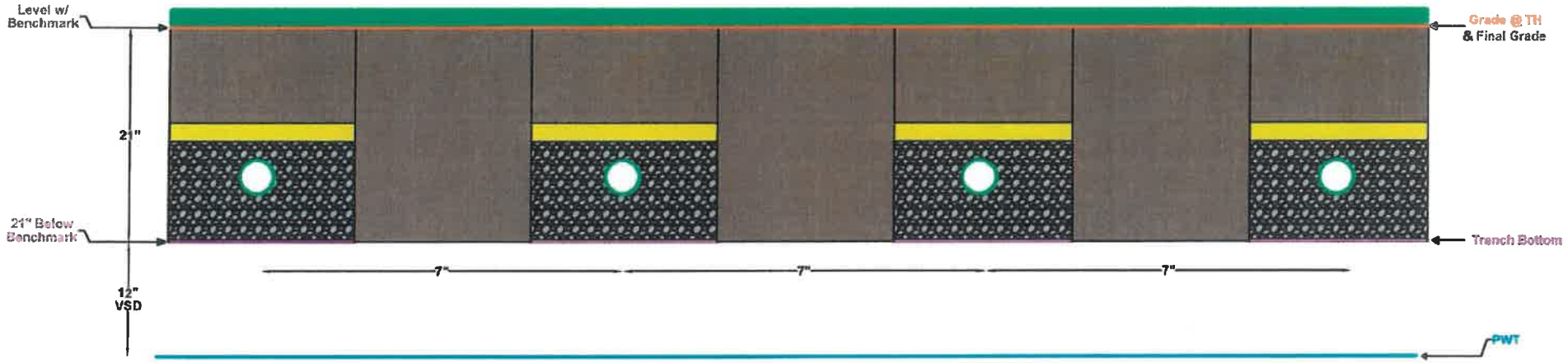
# Septic Design Proposal

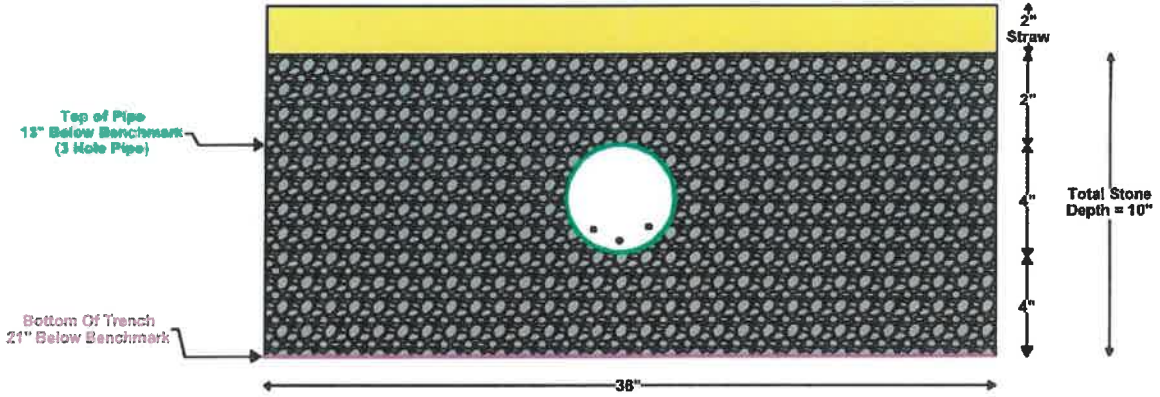
# 9595 Salisbury Rd (Monclova Twp)



# Leach Field - Trench Detail

## 9595 Salisbury Rd (Monclova Twp)




**Standard Stone/Pipe Trench**

**(N.T.S.)**

***Benchmark for 9595 Salisbury Road – Monclova Township – Lucas County***

TOWNSHIP: Meadows — LOT NO. W 5 ac of N 20 ac of the E 1/2 of SE 1/4 of Sec 16, T 7 N, R 9 E

VILLAGE: — SECTION: —

SUB-DIVISION: —

OWNER: Wayne Westlake — ADDRESS: 9595 Salisbury

BUSINESS: —

WATER SUPPLY: Well ☒ City ☐

SEWAGE DISPOSAL UNIT: Septic Tank Size: 1500 gallon

SECONDARY TREATMENT: Tile Disposal Field: 474' + 450' =

Sub-Surface Filter: 924 Linear Ft

Other: —

REMARKS:

Contractor: Owner

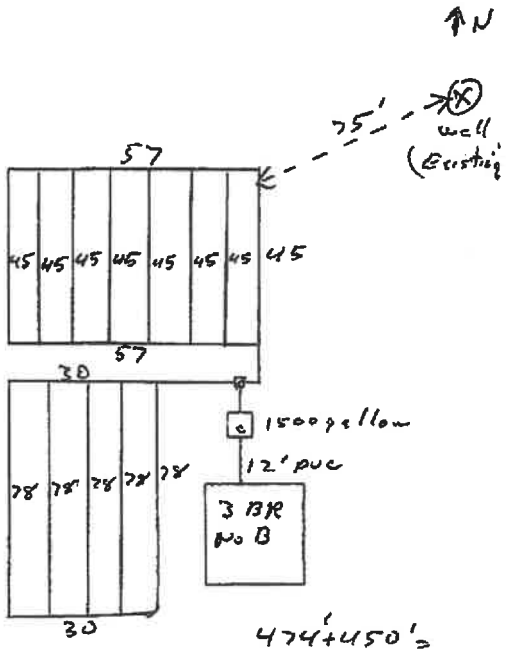
Size of Lot: 165 x 396

Permit No.: A 154

Date of Inspection: 11/3/77 JRS

38-31781

Salisbury




474' + 450' =
924 Linear Ft
Approved
JRS

# Soil Evaluation


May 20, 2026

**Soil Evaluation for Septic System**
**9595 Salisbury Road**
**Monclova, Ohio 43542**
**1 inch = 54 feet**
**= soil test hole**

1:646

0 0.01 0.01 0.02 mi

0 0.01 0.01 0.03 km



R

# Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Lucas
Township / Sec.: Monclova
Property Address/Location: 9595 Salisbury Rd. Monclova, OH 43542
Applicant Name: Bayley
Address: (same)
Phone #:
Lot #:
Test Hole #: 1
Latitude/Longitude: 41.58210; -83.77105
Method: ___ Pit X Auger ___ Probe

Land Use / Vegetation: res / grass
Landform: lake plain
Position on Landform: flat
Percent Slope: 2-3
Shape of Slope: concave, slightly

Date: 5/21/26
Evaluator: Richard Scharf
9455 Neumann Cir.
Ypsilanti, MI 48197

Certification Stamp or Certification #:
Signature:
Phone#: (734) 255-4546

| Soil Profile | | Estimating Soil Saturation | | | Estimating Soil Permeability | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Munsell Color (hue, value, chroma) | | | | | | | | | | |
| | | | Redoximorphic Features | | Texture | | | Structure | | | | |
| Horizon | Depth (inches) | Matrix Color | Concentrations | Depletions | Class | Approx. % Clay | Approx. % Fragments | Grade | Size | Type (shape) | Consistence | Other Soil Features |
| $A_p$ | 0-10 | 10YR 3/3 | - | - | S | 0 | 0 | 0/SG | - | - | loose | |
| $B_{w1}$ | 10-33 | 10YR 5/4 | 10YR 5/6 | - | S | 0 | 0 | ↓ | - | - | ↓ | |
| $B_{w2}$ | 33-64 | 10YR 5/3 | 10YR 5/4 10YR 5/6 | - | S | 0 | 0 | ↓ | - | - | ↓ | Soil noted @ 35" hole collapsed back to 32" |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

| Limiting Conditions | Depth to (in.) | Descriptive Notes | Remarks / Risk Factors: |
|---|---|---|---|
| Perched Seasonal Water Table | 33 | | |
| Apparent Water Table | n.a. | | |
| Highly Permeable Material | none | | |
| Bedrock | >64 | | Too deep to influence system design. |
| Restrictive Layer | >64 | | " " " " " " |

Note: The evaluation should include a complete site plan or site drawing

# Leaching Trench Design Calculations
## For Replacement Leach Field

| Information from soil evaluation | |
|---|---|
| Hydraulic Linear Loading Rate (gpd/ft) | 5 |
| Soil Infiltration Loading Rates (gpd/ft²) | 0.8 |
| Number of Bedrooms | 5 |
| Depth to Limiting Condition at TH | 33 inches |
| Width of Trenches (inches) | 36 |

| Property Information | | | |
|---|---|---|---|
| Owner | BAYLY | | |
| Address | 9595 SALISBURY ROAD | | |
| Township | MONCLOVA (LUCAS COUNTY) | | |
| New | | Replacement | X |

| Overview of System Requirements | |
|---|---|
| Number of Trenches | 4 |
| Length of Trenches | 120 |
| Width of Trenches (inches) | 3 |
| Total Lineal Feet | 480 |
| Width Between Trenches (on center) | 7 foot |
| Drainage | TBD |

**Daily Design Flow**

(120 gpd) X (Number of Bedrooms)

120 gpd — 5 Bedrooms = 600 gpd

**Minimum Length of Leach Lines**

Daily Design Fl / Hydraulic Linear Loading Rate

600 / 5 = 120 ft

Minimum Length of Leach Lines Rounded To Next Whole Number 120 ft

**Total Length of Leach Lines**

Minimum Absorption Area / Width of the Trench

937.5 / 3 = 312.5 ft

**Number of Trenches**

Total Length / Trench Length

312.5 / 120 = 2.60416667

Round Number of trenches to next whole number 3 Trenches

**Minimum Absorption Area Width**

Min. Absorption Area / Min. Absorption Area Length

937.5 / 120 = 7.8125 ft

**Minimum Absorption Area**

Daily Design Flow / Soil Infiltration Loading Rate

600 / 0.8 = 750 $ft^2$

**Additional Area Required for 25% Resting**

Minimum Absorption Area X 0.25

750 X 0.25 = 187.5 $ft^2$

**Total Absorption Area**

Minimum Absorption Area + 25% Resting

750 + 187.5 = 937.5 $ft^2$

**Number of Trenches to Maintain Total Absorption Area**

Trench Length X Trench Width = Absorption Area Per Trench

120 X 3 = 360 $ft^2$

Min. Absorption Area / Absorption Area Per Trench

750 / 360 = 2.08333333 Trenches

3 Trenches in use at all times

Add'l 25% absorption area for resting / absorption area per trench

187.5 / 360 = 0.52083333

1 Trench(es) to rest at all times

**** CHAMBERS ONLY ** with * 25% Reduction***
**Number of Trenches to Maintain Total Absorption Area**

Minimum Absorption Area * 25% = Reduction for Chamber System

750 * 0.25 = 187.5 $ft^2$

25% Reduction for Chamber System

Minimum Absorption Area - 25% Reduction = New Min. Absorption Area for Chamber System

750 - 187.5 = 562.5 $ft^2$

Additional Area Required for 25% Resting

Minimum Absorption Area X 0.25

562.5 X 0.25 = 140.625 $ft^2$

Total Absorption Area for Chambers

Minimum Absorption Area + 25% Resting

562.5 + 140.625 = 703.125 $ft^2$

NEW Min. Absorption Area / Absorption Area Per Trench

562.5 / 360 = 1.5625 Trenches

2 Trenches in use at all times

Add'l 25% absorption area for resting / absorption area per trench

140.625 / 360 = 0.390625

1 Trench(es) to rest at all times

**If Replacement System:**
Up to 20% can be cut in the length of the leach lines. BUT...the Total surface area must be maintained.

Total Surface Area = 937.5 $ft^2$

Original Calculated Length = 120 ft.

20% of Original Calculated Length = 24 ft.

Reduced Length = 96 ft.

Trench Length X Trench Width = Absorption Area Per Trench

96 X 3 = 288 ft2

Min. Required Absorption Area / Absorption Area Per Trench = Number of trenches in use a all times

750 / 288 = 2.60416667 Trenches

3 Trenches in use at all times

Add'l 25% absorption area for resting / absorption area per trench = Number of trenches to rest

187.5 / 288 = 0.65104167

1 Trench(es) to rest at all times

| REPLACEMENT System Overview | |
|---|---|
| Number of Trenches | 4 |
| Length of Trenches | 96 |
| Width of Trenches (inches) | 36 |
| Total Lineal Feet | 384 |
| Width Between Trenches (on center) | 7 foot |
| Drainage | existing |

**** CHAMBERS ONLY***** (Replacement)
[Up to 20% can be cut in the length of the leach lines. BUT...the Total surface area must be maintained]

Chambers Total Surface Area = 562.5 $ft^2$

Original Calculated Length = 120 ft.

20% of Original Calculated Length = 24 ft.

Reduced Length = 96 ft.

Trench Length X Trench Width = Absorption Area Per Trench

96 X 3 = 288 ft2

Min. Required Absorption Area / Absorption Area Per Trench = Number of trenches in use a all times

562.5 / 288 = 1.953125 Trenches

2 Trenches in use at all times

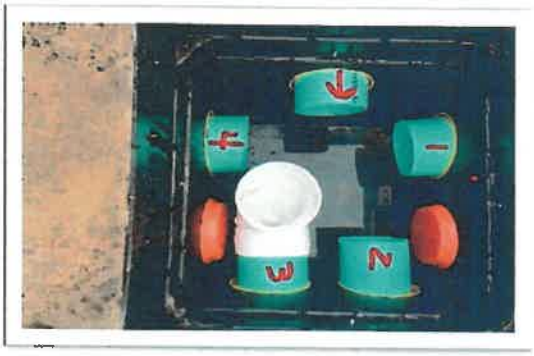
Add'l 25% absorption area for resting / absorption area per trench = Number of trenches to rest

140.625 / 288 = 0.48828125

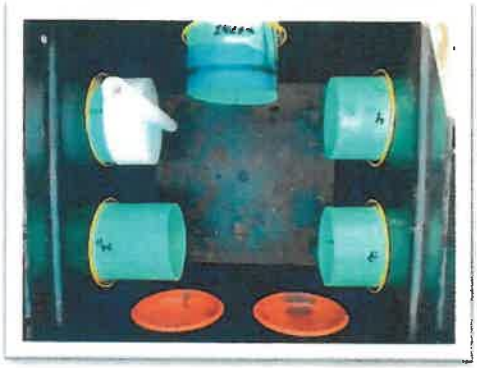
1 Trench(es) to rest at all times

4" to 6" sanitary inlet tee

Poly Lock Distribution Box (Recommended)



Distribution Box with "Elbow" Style Divertor



Distribution Box with "Cap with Handle"

4" & 6" (Recommended) Effulent Outlet Filters