

Permit Number:**281828**
APPLICATION - PERMIT
ON-SITE WASTEWATER SYSTEM


(Please Type or Print Legibly)

OWNER'S NAME:

Why Knot Properties, LLC

PHONE:

ADDRESS:

424 Hope Drive Middletown, DE 19709

PROJECT LOCATION:

432 Hope Drive Middletown, DE 19709

TAX/MAP #: 13-003.40-020

APPLICATION
PREPARER:

Kimberly A. Yanaitis, P.E.-Septic Solutions, LLC

DNREC
LICENSE #: 4195

PREPARER'S ADDRESS:

13 Charles Pointe Newark, DE 19702

RECEIVED

PHONE:

(302) 438-7498

kyanaitis@comcast.net

10/22/2025

I hereby affirm that the information provided on this document is accurate and complete.

Preparer's Signature: Kimberly YanaitisDate: 10/16/25

By signing this permit application, the preparer further certifies they were physically present at the site.

Division of Water**-SEPTIC DESIGN CRITERIA-**

(Please check all boxes that apply)

System Type: (CF = Cap & Fill / FD = Full Depth)

Low Pressure Pipe (FD)
 Elevated Sand Mound
 Pressure Dose (FD)
 Holding Tank
 Gravity (FD)
 Std. Pressure Dose (FD)
 Std. Pressure Dose (CF)

Low Pressure Pipe (CF)
 Wisconsin At-Grade
 Pressure Dose (CF)
 Subsurface Micro Irrigation
 Gravity (CF)
 Other _____

Bed or Trench
 Gravelless Chamber or Stone/Gravel
 Sand-lined Yes No

Existing System Malfunctioning Yes No N/A

Pre-Treatment Units

Septic Tank Recirculating Sand Filter
 Other _____

Central Water Available Yes No
 (If yes, please state Utility Name:)**Type of Construction:**

Replacement Expansion
 New Construction
 Component Replacement
 Repair to Existing System

Component: _____

Reason: _____

 Authorization to Use Existing System

Permit #: _____

Present Condition: _____

Structure to be connected: _____

of Bedrooms: 10

Avg. Percolation Rate: 50

Gallons Per Day Flow: 1200

Minimum Sq. Ft.:

Required:

$$0.33 * \text{sqrt}(50) * 1200 \text{ gpd} * 75\% = 2101 \text{ sf}$$
 (25% Infiltrator Reduction)

Existing: 7 Trenches * 3' * 80 lf = 1680 sf

Proposed: 2 Trenches * 3' * 80 lf = 480 sf

2160 sf

(End caps not included in calculation)

Revised 02/22/00

PAID**\$ 50.00 11/04/2025**

GENERAL NOTES

1. The septic design is based on conditions stated in the Site Evaluation report. No liability will be assumed for malfunctioning septic system components due to a variation in the water table, unapproved field changes, faulty installation, lack of maintenance or failure to comply with conditions in the approved permit. It shall be the responsibility of the installer to notify the designer of field conditions that require changes to the individual septic system design.
2. This septic design does not constitute a formal survey.
3. The Site Evaluation report is an integral part of this design. It shall be the responsibility of the installer to obtain and familiarize himself with the specific requirements. The Site Evaluation was prepared by Bruce B. Bagley, CPSS and was approved by DNREC on 2/17/2025. The Site Evaluation Reference number is 572575.
4. Topography, boundary and existing and proposed features are based on information provided in the site evaluation and a Record Re-Subdivision Plan of Mounthope prepared by Clifton L. Bakhsh, Jr. and recorded in MF # 9948.
5. The septic disposal area(s) shall be fenced off prior to any activity on the lot to preserve the integrity of subsurface soil conditions and shall not be used for storage of any materials, stockpiling of topsoil, parking of any vehicles, etc.
6. The sides and bottom of the trenches shall be thoroughly scarified prior to the installation of the infiltrators.
7. ***Final Inspection:*** A Class I inspection is required for this site. A minimum 48 hour notice shall be provided to the inspector, prior to calling for the required inspection. Contact Kimberly A. Yanaitis, PE at 302-438-7498 or other Class I licensee. It shall be the responsibility of the contractor to ensure that all interested parties are scheduled for the inspection.
8. The installer shall be on-site during all final inspections. Any equipment necessary including, but not limited to, electrical generator, hoses, pressure gages and water, shall be provided by the contractor.
9. The replacement disposal system shall be the same as the initial system if space permits or a sand-lined upgrade in the immediate vicinity of the initial disposal system.
10. The septic disposal field shall be required to maintain a minimum of 100 feet from all adjacent domestic wells and 150 feet from all public wells.
11. All trees and shrubs within 10' of the tanks and disposal fields shall be removed prior to installation unless a Tree Waiver is signed by the applicant and submitted to DNREC.

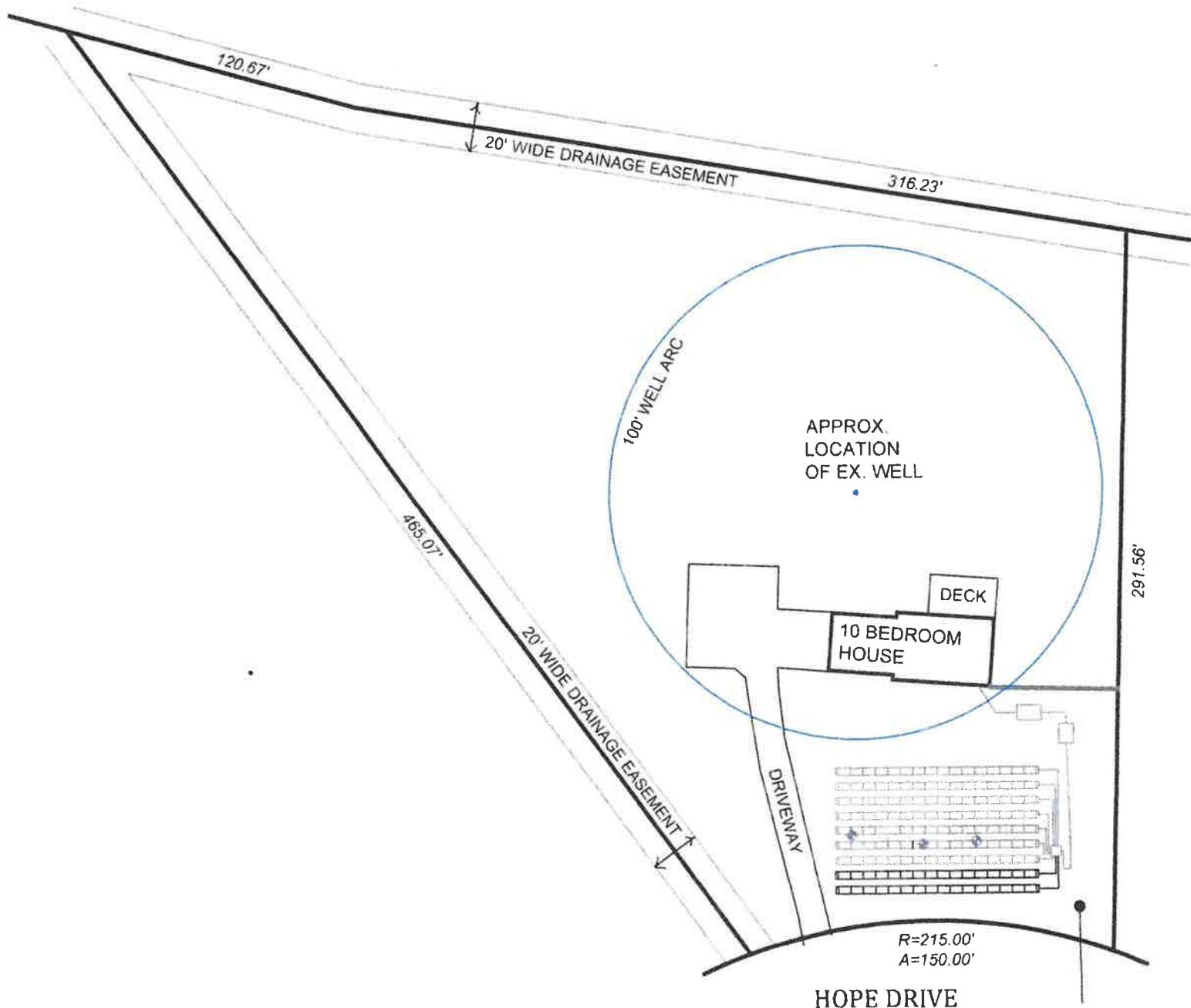
12. It shall be the responsibility of the builder to ensure that the dwelling elevation is set properly for adequate fall from the sewer outfall to the septic tank. Coordinate with septic installer as required.
13. Property owner shall be responsible for establishing exact property corners.
14. The installer shall not encroach any more than 10 feet from any property line.
15. The contractor is responsible for field verifying all isolation distances prior to initiating construction of system. If discrepancies are noted, the contractor shall contact engineer prior to commencing construction.
16. Any changes in specified equipment, including but not limited to, pumps, alarms, timers, etc., shall be approved by the engineer prior to initiating construction.
17. Any changes made to the system location, tank placement, etc. deemed necessary by the installer or the owner, shall be first noted to the engineer for approval prior to initiating the changes.
18. Any change requiring "As-Built" drawings shall be submitted to DNREC within ten (10) days of the system completion.
19. The system shall not be installed during inclement weather conditions (saturated, frozen and/or dessicated soil conditions, etc.) that would create compaction, smearing or destruction of the soil structure in the disposal area.
20. Allow 2' of excavation clearance around tanks for settling and backfilling. Fill and hand tamp in 8" lifts.
21. The installing contractor shall be responsible to fill and grade over septic tanks, dosing tanks, transmission line, lateral trenches and any other below grade fixtures installed as part of this project.
22. The installing contractor shall verify the location of all wells within 150' of the disposal area.
23. The interior and exterior of the tanks shall be free of cracks, voids and other defects. Two piece tanks shall have the joint properly sealed before joining.
24. The building sewer line to all septic tanks shall be 4" Schd 40 PVC pipe.
25. All tank accessways shall have appropriate extensions installed to facilitate access to finished grade.
26. Laterals are to be placed along the contour.
27. Lawn sprinkler systems shall not be installed in the vicinity of the septic disposal field.

28. Water softeners are not permitted to be connected to the proposed septic system. Water softener brine shall be discharged in a manner that does not allow surface discharge (curtain drain).

N

THIS SEPTIC DESIGN IS DONE IN
CONJUNCTION WITH A SITE
EVALUATION APPROVED BY
D.N.R.E.C. DATED 2/17/2025.
REFERENCE NUMBER 572575

DUE TO LIMITED SUITABLE SOIL,
NO BACKUP SITE HAS BEEN
PROVIDED. THE REPLACEMENT
DISPOSAL SYSTEM MAY BE THE
SAME AS THE INITIAL SYSTEM IF
SPACE PERMITS, OR A
SAND-LINED UPGRADE.

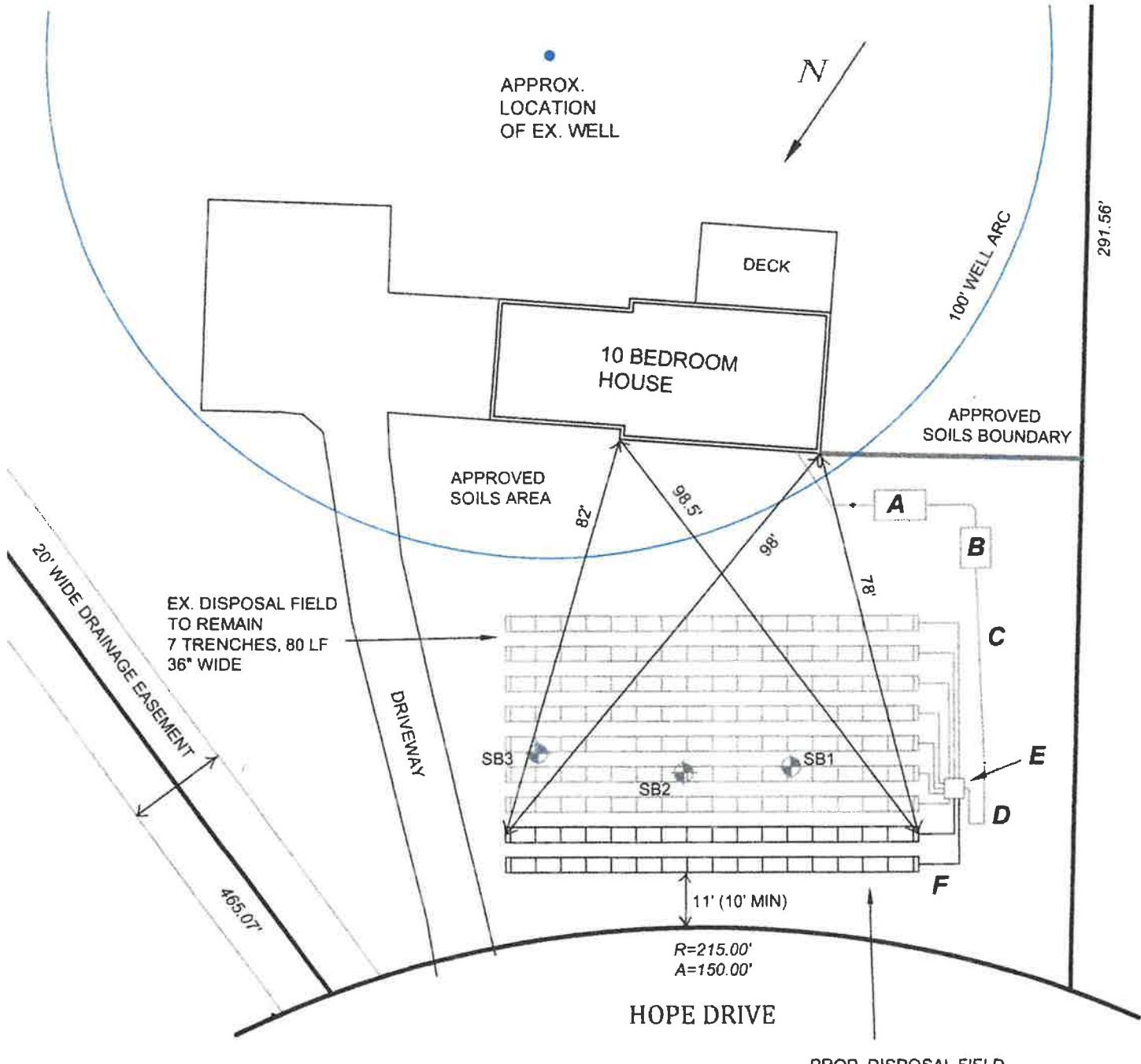


SCALE:
1" = 60'

OWNER OR AUTHORIZED AGENT SIGNATURE:

DATE: 11/10/25

* A COPY OF THIS PAGE MUST BE SUBMITTED WITH BOTH THE SEPTIC SYSTEM AND WELL CONSTRUCTION REPORT(S).

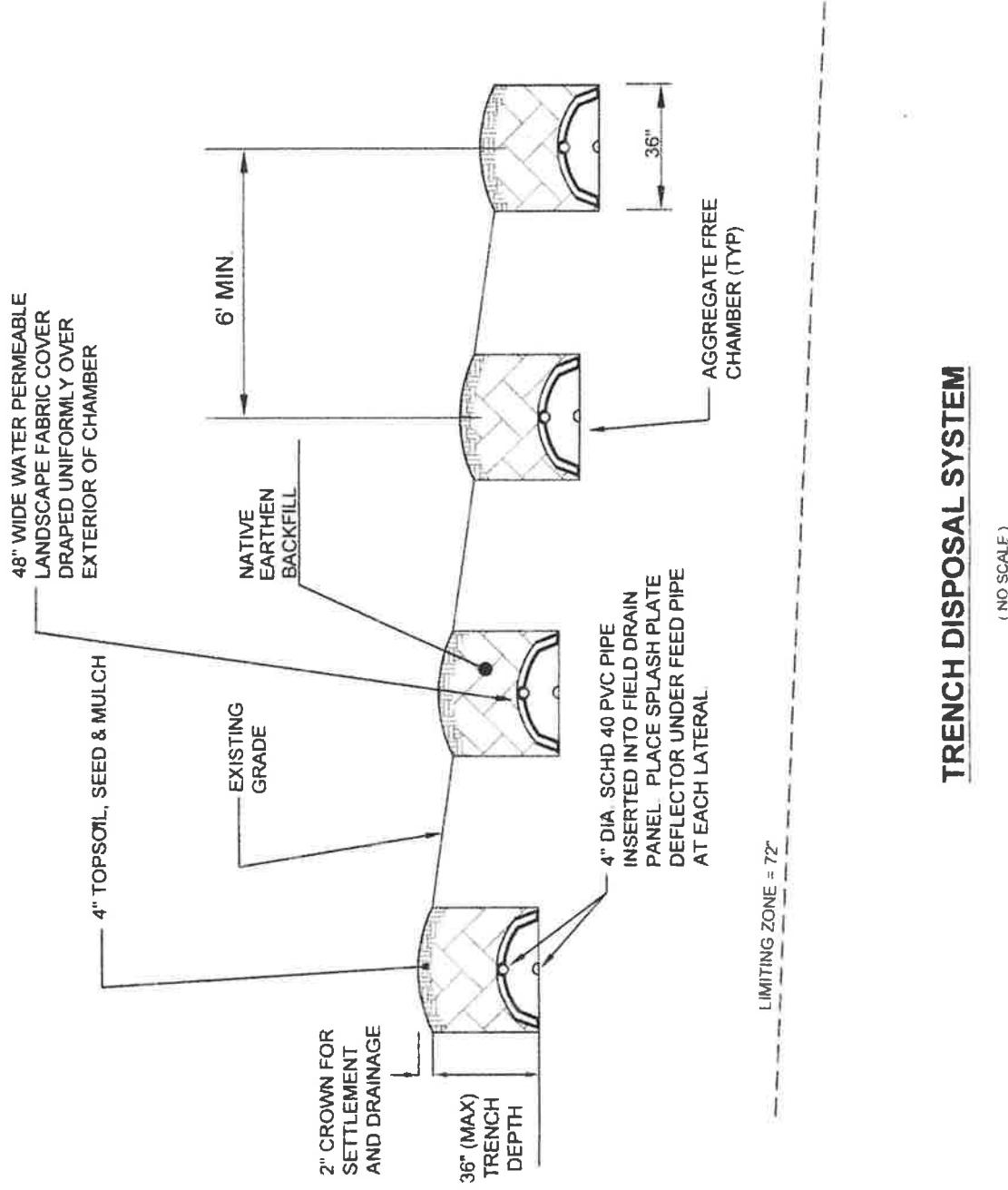


- A. EX. 2,200 GAL SEPTIC TANK TO REMAIN
- B. EX. 1,000 GAL LIFT STATION TO REMAIN
- C. EX. 2" SCHD 40 PVC TRANSMISSION LINE TO REMAIN
- D. EX. 4" SCHD 40 PVC TO REMAIN
- E. EX. "D" BOX TO REMAIN
- F. 5 LF MIN SOLID 4" SCHD 40 PVC

PROPOSED GRAVITY DISPOSAL FIELD
 2 TRENCHES, 80 LF
 (82 LF TOTAL LENGTH INCLUDING END PLATES)
 36" WIDE, 6' OC, 36" DEEP (MAX)
 SIXTEEN (16) QUICK 5 INFILTRATOR CHAMBERS
 PLUS TWO (2) END PLATES PER TRENCH

SCALE:
1" = 30'

FOR MORE DETAILS
REFER TO DNREC
EXHIBIT L



TRENCH DISPOSAL SYSTEM

Quick5 Standard Chambers

The Quick5 Standard Chamber fits in a 36" wide trench and is ideal for curved or straight systems. It features the atent-pending Contour Swivel Connection™ which permits turns up to 10°, right or left. The MultiPort™ endcap allows multiple piping options and eliminates pipe fittings. The chamber's five-foot length provides optimal installation flexibility.



Quick5 Standard 5 with MultiPort EndCap



Benefits

- Advanced contouring connections swivel up to 10°, right or left
- Latching mechanism allows for quick installation
- Five-foot chambers are easy to handle and install
- The Quick5 Standard Chamber supports wheel loads of 16,000 lbs/axle with only 12" of cover
- Certified by the International Association of Plumbing and Mechanical Officials (IAPMO)

Quick5 Standard Chamber Specifications	
Size	34"W x 65"L x 12"H (864 mm x 1651 mm x 305 mm)
Effective Length	60" (1524 mm)
Louver Height	8" (203 mm)
Storage Capacity	56.5 gal (215 L)
Invert Height	8" (203 mm)

MultiPort Endcap Benefits:

- Eight molded-in inlets/outlets allow for piping flexibility
- Eliminates pipe fittings
- Fits on either end of the Quick5 Standard Chamber

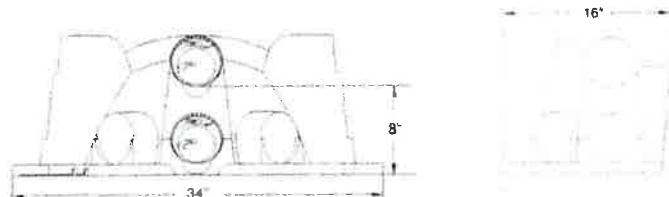
Contact Infiltrator's Technical Services Department for assistance at 1-800-221-4436 or info@infiltratorwater.com

Quick5 Standard Chamber - Part Number Q5STD

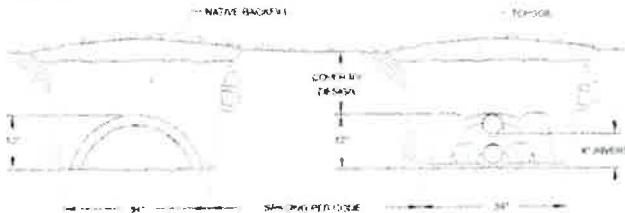


Scan QR Code
for Installation
Instructions

MultiPort EndCap



Typical Trench View



QF25 0625

 **Infiltrator**
Water Technologies
Part of 

infiltratorwater.com • (800) 221-4436

Parcel # 1300340020

Property Address: 432 HOPE DR
MIDDLETOWN, DE 19709-
Subdivision: MOUNTHOPE
Owner: WHY KNOT PROPERTIES LLC
424 HOPE DR
Owner Address:
MIDDLETOWN, DE 19709
Municipal Info: Unincorporated

Lot #:	24	Property Class:	RESIDENTIAL
Location:		Lot Size:	2
Map Grid:	07803060	Lot Depth:	465.10
Block:		Lot Frontage:	150
Census Tract:	166.11	Street Finish:	
Street Type:	NEIGHBORHOOD		
Water:	PUBLIC		
Microfilm #:	009948		

Tax/Assessment Info

Current Assessment

Land: 157000
Structure: 366400
Homesite: 0
Total: 523400
County Taxable: 523400
School Taxable: 523400

Related Project Plans

	A/P No.	Project Name	Work Type	Status
Details	20240676	432 HOPE DRIVE	ZONING VERIFICATION PROCESS	COMPLETE
Details	20250435	MOUNT HOPE LOT 24	SITE PLAN	Active

District & Zoning Info

Districts

- **FIRE/RESCUE - ODESSA**
- **APPOQUINIMINK SCHOOL DIST-TRES**
- **MOUNT HOPE - Civic Organization**
- PLANNING 7 - MOT
- DE REP 09-KEVIN S HENSLEY
- COUNCIL 12 - KEVIN CANECO
- SEWER DISTRICT SOUTHERN-ASMT
- SOUTH OF C & D CANAL
- LIGHT-ORNAM POLE HPSODIUM-TRES
- DE SEN 12-NICOLE POORE

Zoning

- NC40 - UDC - SINGLE FAMILY - 40000 SF

Deed History

Grantee(s)	Deed	Multi?	Sale Date	Sale Amount
STOVER BUILDERS INC	477 103	Y	12/2/1986	\$287,500.00
GREGG ROBERT W JR & CAROL J	800 256	N	12/9/1988	\$134,495.00
IRISH DAVID W & CHRISTINE M	1763 297	N	6/30/1994	\$167,000.00
HEADLEY JAMES R JR & KAREN D	2212 255	N	12/6/1996	\$183,000.00
HEADLEY JAMES R JR & KAREN D	2231 73	N	12/7/1996	\$183,000.00
RHOADS BRITTANY A	20250205 0008351	N	1/30/2025	\$10.00
THOMPSON VICTOR L	20250205 0008351	N	1/30/2025	\$10.00
WHY KNOT PROPERTIES LLC	20250731 0053718	N	7/30/2025	\$10.00

Tax Bills as of 11/7/2025 3:00:36 AM

Tax Year	County			School		
	Principal Due	Penalty Due	Amt Paid	Principal Due	Penalty Due	Amt Paid
2010A	\$0.00	\$0.00	\$705.43	\$0.00	\$0.00	\$1,363.97
2011A	\$0.00	\$0.00	\$713.45	\$0.00	\$0.00	\$1,367.40
2012A	\$0.00	\$0.00	\$703.89	\$0.00	\$0.00	\$1,503.82
2013A	\$0.00	\$0.00	\$698.41	\$0.00	\$0.00	\$1,632.52
2014A	\$0.00	\$0.00	\$714.17	\$0.00	\$0.00	\$1,645.64
2015A	\$0.00	\$0.00	\$709.73	\$0.00	\$0.00	\$1,652.25
2016A	\$0.00	\$0.00	\$703.29	\$0.00	\$0.00	\$1,720.80
2017A	\$0.00	\$0.00	\$719.39	\$0.00	\$0.00	\$1,941.40
2018A	\$0.00	\$0.00	\$763.65	\$0.00	\$0.00	\$2,010.46
2019A	\$0.00	\$0.00	\$795.01	\$0.00	\$0.00	\$2,073.87

2020A	\$0.00	\$0.00	\$799.02	\$0.00	\$0.00	\$0.00	\$2,291.81
2021A	\$0.00	\$0.00	\$808.90	\$0.00	\$0.00	\$0.00	\$2,325.09
2022A	\$0.00	\$0.00	\$808.60	\$0.00	\$0.00	\$0.00	\$2,365.76
2023A	\$0.00	\$0.00	\$791.69	\$0.00	\$0.00	\$0.00	\$2,377.95
2024A	\$0.00	\$0.00	\$828.67	\$0.00	\$0.00	\$0.00	\$2,878.93
2025A	\$997.71	\$0.00	\$0.00	\$3,562.27	\$0.00	\$0.00	\$0.00

Tax Payments as of 11/7/2025 3:00:36 AM

Date Paid	Amt Paid
9/21/2010	\$2,069.40
9/23/2011	\$2,080.85
9/26/2012	\$2,207.71
9/30/2013	\$2,330.93
9/17/2014	\$2,359.81
9/25/2015	\$2,361.98
9/26/2016	\$2,424.09
9/25/2017	\$2,660.79
9/7/2018	\$2,774.11
9/26/2019	\$2,868.88
9/14/2020	\$3,090.83
9/24/2020	\$3,090.83
9/27/2021	\$3,133.99
9/27/2022	\$3,174.36
10/12/2023	\$3,169.64
9/30/2024	\$3,707.60

County Balance Due: \$997.71

School Balance Due: \$3,562.27

These amounts are valid through the last day of the month. For accounts with delinquent balances, statutory penalty will accrue on the first day of next month.