### Simsbury Water Pollution Control Presentation Pine Hill Sewer Replacement

## December 8, 2022

E EL

### WPCA Overview

- Operate and maintain an advanced wastewater treatment plant: 3.8 MGD capacity, 5 pumping stations, 85 miles of sewer lines, and 2,300 manholes
- 4,500 residential accounts and non-residential accounts
- Service Area includes Simsbury and portions of Avon and Granby
- Avon and Granby are co-owners of the treatment facility and participate in debt reduction and O&M funding
- Provide administrative services, oversee sewer usage billing, conducts inspections and develop long term planning

### **Mission** - Duties



- WPCA is the sole decision making authority for sewer installations and repairs
- Finances are solely by supported by user fees:
  - Facility Connection Charges (FCC)
  - Sewer use fee

\* The US Environmental Protection Agency, NPDES permit references CT state statute 22a-430-3 which mandates that the WPCA maintain adequate funding for repairs, operations and potential catastrophic equipment failures



### **Project History**

- March 1979, condition assessment and upgrade recommendations were provided by Tighe & Bond
- October 1997, recommendations were provided by the Town to alleviate backups in the area.
- October 2003, Pine Hill residents requested information on replacement of sanitary sewers.
- April 2008, AECOM conducted a condition assessment and upgrade recommendations for the area.
- 2008 Manholes installed to provide access for cleaning

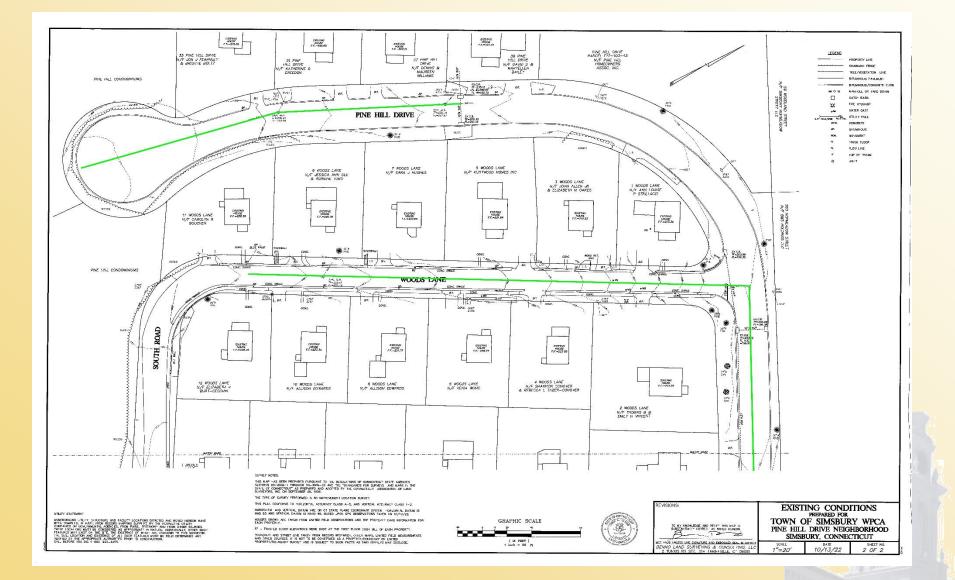


- Currently Pine Hill Homeowners Association owns and maintains the existing sanitary sewers.
- Existing sanitary sewers in the area are not constructed to Town of Simsbury standards.
- Proposed to replace and/or install new main lines and extend existing laterals to approximately 25 feet from the homes as needed.

### **Proposed** Design

#### MATCH MARK NODUE LANE N/F KATE RONCARI 615399 10172 15-234.24 7 MODLE LANE N/F KEVIN P & LYNN M RYAN 9 MIDDLE LANE N/F MICHAEL D 11 MIDDLE LANE N/# NEE NEE'S RENTALS (LC CASTING HOUST CANK . ESULTINO MONESE E.S.: 277.42 ACOSE FC-20195 Tast of S MIDDLE LANE 20, 10, 1, -20, 3 1, 00, 14 -200, 12 1, 10, 12 1, 10 HALL A ркол 7-19 1.18 П. 9 8 М SOUTH ROAD 191. N/F JONATHAN P LEE & CARLY C ROSS MODIE LAN • MC Tene S -----3 82 6 -LOUSE LOUSE 19 10157 CASTAN HOLST Ensing Asose 65.-antes HOUSE TA-IM BE A025 ANTING HOLDE 21.C.B. 11-192.57 72-194.00 ALA -121.57 -121.57 -124.03 28% 2 MIDDLE LANE N/F JEFFREY & AMARA SARA SCHRANDI 4 MIDDLE LANE N/F JOHN T & ASHLEY A SIMPSON 6 MIDDLE LANE N/F JOFSPH J & GINA MARIE CADORET 12 MIDDLE LANE 0.51 8 MIDDLE LANE 10 MIDDLE LANE PINE 10 HILL U-225.08 11 STEBBINS BROOK (J N/F PAUL J & DAWH C PETCRSEN `.⇒--9 STERBINS BROOK LAKE DRIVE 7 STEBBINS BROOK LANE 3 STEBBINS BROOK LANS 3 STEBBINS BROOK LANS 4 STEEBHINS BROOK LAND 1 SOUTH ROAD N/F CHAISTEN FEOLA ENSING NOUSE 563 HOPKENDOW STREE ASUSC ASUSC UCASE FF--226 C E ENSINC NOVIE NUME NUME 2.051045 /40.052 /7.-222.67 ENSTAG MOSE 1000 SALT 292. SAT is for ser / ----01.4 STEPPING PROOF LAN 57-21.50 E-217.12 m. (\*\* 217.8 DX. C.B. LF -- 218.1 R. M--213. R. K--213. 8012 R. - 6 👷 15 EX 107. 1.1.=217.58 TU=373.92 2 STEBBINS BROOK LANE H/F EME Y J & PETER D LINN 5081146 70092 17.-20645 EUSTIK HOUSE 10052 1.7.-278.29 10.6.4 7-130.37 7. 5-163.60 7. 8-363.67 7. 50-104.3 6 STEBBINS BROOK LANE N/F BEVERLY J HANSON 553 HOPMEADOW STREET N/F THOWAS A & LAURA NISBO 4 STEBBINS BROOK LANE N/F VERONICA & KEVIN FRASER LECEND SURVEY NOTES PROPORTY LINE THE UTILITY POLE MAP REFERENCES: THE HAY HAD OTHER PREMIES FURSIMIT TO THE EXCLUSION OF CONTINCTICUT STATE ARENES SECTIONS 30-200-1 THEORY SOLZOR-20-400 AND THE STATEMORE FOR INFERTS AND UNITS IN TH STATE OF CONVECTICUT AS PREPARED AND ADDRESS BY THE DOWNECTICUT ASSOCIATION OF LAND SUMPETICES. NO. OF SEPTIMEER 25, 1998. 30% e CHAIN INK PERCE 0.0 DEACHET "PLAN OF RE-SUBDIVISION "PINE HIL" SECTION I OTHER BY PINE HIL ASSOCIATES ROUTE IS -HO'NEARDON ST. SINSURY, CONK. SCALE "F-40" AUGUST, 1974 HODGE SURVEYING ASSOCIATES, P.4." SURVEY, DESCRIPTION OF SURVEYING ASSOCIATES, P.4." PASTING AGASE F.F.- 148.29 TREE/VEGETATION UNG BILMINOUS 924 W 12. 101.73 BITUNINOUS PAVENENT HONUMENT THE TIPE OF SURVEY PERFORMED IS AN IMPROVEMENT LOCATION SURVEY. D HIS PLAN CONFORMS TO HORZONTAL ACCURACY CLASS A-2, AND TOTHCAL ACCURACY CLASS T-2. BITURINOUS/CONGRETE CURB FINSE FLOOR 24% WANHOLF OR YARD DRAIN FLOW UNE HORIZONTAL AND VEH ICAL DATUM ARE ON C? STATE PLANE DOORDHATE SYNTEM. HORIZONTAL UALINA IS NAD 82 AND VERTICAL DATUM IS NAVD 86. BASED UPON GPS CESERVATIONS TAKEN ON 10/10/32. V# 0 10 Ξ CATCH UNDIN TOP OF TRAME HOUSES SHOWN ARE TAKEN FROM UNITED RIELD DESERVATIONS AND THE PROPERTY CARD INFORMATION FOR EACH PROPERTY. 10.2.19 10.03 0.00 14 . . THE HYDRAY UGHT C. 8.4 FT - FRISHED FLOOR ELEVATIONS MERE SHOT AT THE FIRST FLOOR DOOR SLL OF EACH PROPERTY WATER GATE ANDSCATTN HOPMEADOW STREET BOUNDARY AND STREET LACE TAKEN FROM RECORD RESEARCH, ORDER MARS, UNITED RELED MEASU AND OTHER SOURCES, IT IS NOT TO BE CONSTRUCT AS A PROPERTY/BOUNDARY OR UNITED PROPERTY/BOUNDARY SUFFY AND IS SUFFYED RECENT AS THE SUFFYED MAY DECLORE. EXISTING CONDITIONS GRAPHIC SCALE TOWN OF SIMSBURY WPCA UTILITY STATEMENT WY KNOWLEDCE AND BELIEF THIS WAP IS PINE HILL DRIVE NEIGHBORHOOD F2 ( IN FEET ) 1 mch = 20 m. SIMSBURY, CONNECTICUT THE UNE SETMATURE AND THE SHEET NO. 1 OF 2 10/13/22 2 TUNKS BD STE 214 TAB TMLLE, CT 060 1"=20'

### **Proposed** Design



### **Construction** Costs

- Preliminary cost estimate for survey, lateral construction, main line construction and restoration is \$975,000.
- Project includes:
  - 2,120 If of main line sanitary sewer
  - 2,335 If of sewer laterals
  - 7,200 sy of pavement
- This would be approximately \$24,375 per home
- Costs have continued to rise and estimates are based on our most recent project this past season.
- Construction prices continue to be impacted by supply chain and inflation issues, as well as diesel pricing.

### Financing

- You have the option to finance the project with the Town and repay over 15 years at the Town's bond rate (assumed to be 4%) and simple interest.
- You do not have to finance with the Town.
- No payments until after the project is completed and accepted.
- Breakdown to monthly fee of \$216 first year, declining to \$140 in the last year.

Assumed Rate		4.00%
Fiscal Year Budget Impact		2024
Amount Issued		\$24,375
Term (Years)		15
Interest Only Years		0
Structure		1
Payment		\$2,192.31
Principal	Interest	<u>Total</u>
-	-	-
-	-	-
1,625	975	2,600
1,625	910	2,535
1,625	845	2,470
1,625	780	2,405
1,625	715	2,340
1,625	650	2,275
1,625	585	2,210
1,625	520	2,145
1,625	455	2,080
1,625	390	2,015
1,625	325	1,950
1,625	260	1,885
1,625	195	1,820
1,625	130	1,755
1,625	65	1,690



### Main Line Sanitary Sewer:

- Built to Town Standard
- Town will take ownership including all future maintenance
- Final design will require easements be granted to the Town of Simsbury for installation and maintenance of the sanitary sewer.
- Removal of existing structures





#### Sanitary Laterals:

- Replaced to within ~25' of home. Will vary based on landscaping and point of exit from home.
- Connection will be made to "sound pipe".
  - Sound pipe could be clay tile pipe in good condition.
    If pipe is in poor condition or has roots, the town will
    "chase the issue" closer to the house. This may
    involve root cutting, installing liner or new pipe.
- Intent is to avoid costly damage to properties



# Pavement: All roads will be repaved, curb to curb.







Driveways: If a driveway is disturbed by construction it, it will be patched (straight cut pavement, repaved to be flush with existing)





### Sidewalks: Existing sidewalks and drainage swales will be removed and roads will be widened to extent of previous

walks







Unmarked drainage, conflicts, repairs

- inaccurate plans for area sewers, unknown location of sewer lines and laterals
- underground utilities
- Replacement of retaining walls
- Escalation of costs due to economy



### What to Expect

- Construction:
  - It's going to be disruptive
  - You will always have access to your house/car
  - No significant service interruptions
- Restoration:
  - New pavement
  - Regrading and seeding of lawns
    - If you water for us, it will provide a better final product
  - Replacement of retaining walls if required



### **Project** Timing



If approved by the WPCA this project would have an anticipated construction of Summer / Fall 2023



#### WPCA Board

Paul Gilmore - Chairman Jerry Sheehan – Vice Chairman Thomas Hickey Edward Kelly Michael Park Jacques Brignac Lucian Dragulski

Questions...

( ( ) tr