

**EAST LYME WATER & SEWER COMMISSION  
SPECIAL MEETING  
Thursday, JULY 28th, 2016  
MINUTES**

The East Lyme Water & Sewer Commission held a Special Meeting on the Saunders Point Wastewater Facilities Plan on Thursday, July 28, 2016 at Town Hall, 108 Pennsylvania Avenue, Niantic, CT. Chairman Nickerson called this Special Meeting to order at 6:01 PM.

**PRESENT:** Mark Nickerson, Chairman, Dave Murphy, Dave Jacques, Carol Russell, Dave Zoller

**FILED**

**ALSO PRESENT:** Joe Bragaw, Public Works Director  
Brad Kargl, Municipal Utility Engineer  
Kevin Seery, Deputy First Selectman  
Robert Tedeschi, PE; Ingrid Jacobs, PE and Sarah  
Bucci, PE - Weston & Sampson Presenters

Aug 2 20 16 AT 10:05 AM PM  
*W. G. Galt, Jr.*  
EAST LYME TOWN CLERK

**ABSENT:** Dave Bond, Steve DiGiovanna, Joe Mingo, Roger Spencer

Chairman Nickerson called the Special Meeting to order at 6:01 PM and led the assembly in the Pledge of Allegiance.

He explained that this is a lengthy process – and that they are in the preliminary stages of it. This is a community outreach meeting where Weston & Sampson will present some further information and once that is completed they will answer questions from the public. He asked that they hold their questions until the presentation is completed.

Mr. Kargl explained that they are not talking about designing a system or doing anything at this point. They are only designing a 'wastewater facilities plan' as they are required to look at all of the various options such as a community septic system, a community treatment plant or connection to existing sewers. However, they first have to establish a need. They have input from Ledge Light Health and they have done a lot of research and there appears to be gaps in the information. Their job is to establish need and the areas of need – it is a defined process that they have to follow that is outlined by the DEEP.

Mike Tedeschi, PE; Ingrid Jacobs, PE & Sarah Bucci, PE from Weston & Sampson reviewed the PowerPoint presentation (Copy attached).

Ms. Jacobs said that the Ledge Road area was primarily in the 1985 Facilities Plan and explained that they chose to follow the process that Mr. Kargl had spoken about and in order to qualify for funding they need to go through this regimented process.

Ms. Bucci reviewed the types of sewage handling systems and the types of sewer systems – grinder pump; gravity feed and the need for a pumping station. She detailed what would be needed for each type and how they would work.

(Note: 6:25 PM – Mr. Murphy joined the meeting.)

It was noted that very preliminary findings on the potential cost of the options fall between \$6.5M - \$10M depending upon which options are found to be the best and what they would follow. At this point everything is extremely preliminary. They distributed the needs survey (Copy attached) which they asked those present to complete. They explained that they had prepared mapping showing the various areas and the parcel ID's for them to put on the survey form. After the meeting they would help them locate their parcels and the parcel ID on the various maps.

Mr. Nickerson said that the presenters from Weston & Sampson would be staying and would be available to answer questions and to help with the survey forms. He called for questions from the public asking that they identify themselves and state their address for the record.

Skip Saunders, 12 Center Road asked what constitutes a failed system. He said that they pump it every few years and asked if that is considered a failed system.

Mr. Kargl said that if they do not have a leach field that is something that is good to indicate on the survey form. He explained that a failed system percolates on top of the ground or backs up into the house while a broken box or pipe to the house Ledge Light would not consider a failure.

Mr. Saunders said that they for the most part reside on small lots at Saunders Point.

Regina Hitchery, 32 Bishops Bay asked if compensation is made to people if some of their property was to be used for a pump station or something else that might be required by the system.

Mr. Kargl said that could happen in a number of ways – it could be a taking although they do not like to go that way; they could also do as they did in Pine Grove – they were given an easement, and lastly they could purchase what they need.

Sandra Maheu, 50 Saunders Drive asked what Ledge Light had based their information on.

Mr. Tedeschi and Ms. Bucci said that Ledge Light had records of a failure but not other specifics. However, people would not typically replace their system unless it had failed badly and a new system had to be put in. The information was limited in many aspects.

Craig Woody, 105 Oswegatchie Hills Road asked how they could define where things such as pump stations would go unless they have already designed the system.

Ms. Jacobs stressed that they are only at the planning level of the project and not at the design phase. They have to determine what they might do and all the potential scenarios that could happen..

Mr. Woody asked if this was a couple of years out.

Mr. Kargl said yes as the process is just beginning.

Alicia Lockwood, 107 Oswegatchie Hills Road said that when they are speaking about information and dates from Ledge Light that there are other people who are not here tonight that might also have information to add.

Mr. Nickerson said that they do not need to have 100% of the homes with this fact finding. Once they get the surveys back they will see if there are voids and then Weston & Sampson can go out and knock on doors in some of those areas and fill in missing information.

Ms. Bucci added that usually an area that is represented holds for that area – where they do not have any information they will go out and look and ask so they can determine a benchmark.

Elizabeth Martin, 103 Oswegatchie Hills Road mentioned the water quality of the cove and asked if the DEEP utilizes that information.

Ms. Jacobs said yes they do use that information.

Mr. Kargl added that they also use the supporting evidence of what has happened since Pine Grove has had sewers installed.

Eric Whited, 10 South Road asked about the location if they were to direct drill to Pine Grove and also if they would need generators like they have at Pine Grove. He also asked if the generators would run each week as a test.

Ms. Bucci indicated a rough location on a map and said that it would be underground trenchless technology that would be used.

Mr. Kargl said yes to the generators and yes to them being tested once each week.

Regina Hitchery, 32 Bishops Bay asked about the potential cost when they get to 2018.

Mr. Kargl explained that there is a Town contribution among other aspects and that it is a fluid discussion as there are many variables.

Mr. Nickerson said that it would have to be north of \$12,000.

Mr. Bragaw mentioned the roads and those conditions. He said that there is a place holder on the replacement of those roads as they could realize a savings if they do not fix them now and wait to see what happens here. If sewers go through – the roads would have to be torn up so there would be no purpose to repairing the roads now only to have them torn up in a few years. It would be worth it to wait and do everything at once.

Mr. Nickerson said that they have to figure out if this project is going to go forward or not and that is the process that they are involved in now.

Sandra Maheu, 50 Saunders Drive asked – they have not decided if they are doing this project yet. Mr. Nickerson said that was correct – they have to see where the DEEP stands on this once they have done all of their due diligence and the Water & Sewer Commission also has to vote on it once all the information is in.

Mr. Kargl added that some funding comes from the State and they need to determine what that is. Further, each home pays the same amount to hook up as it is all residential.

Ms. Maheu asked if she would have to get her own plumber to reconfigure her system in her home. Mr. Kargl said yes – everyone would get their own plumber. The laterals are put in at the street and they would all have to connect there.

Gary Spearburg, 40 Saunders Drive asked if the septic tank would have to be destroyed.

Mr. Kargl said yes – it would have to be crushed and filled in place and the contractor typically does it.

Barbara Johnson, 11 Town Road asked what the cost to hook up to the system would be – a ball park figure from what Pine Grove paid – and also as she has a brand new septic system with 13 galleys – would she have to abandon it.

Mr. Kargl said that Pine Grove has very small lots with very short runs to the street so their cost would not be a ball park figure that they could use. If the system is set up as an opt-in then she would not have to abandon her septic system until it failed.

Regina Hitchery said that she spoke with the Pine Grove representative and was told that it averaged \$1300 to hook up there.

Mr. Kargl said that it would be more in Saunders Point as they have longer runs.

Joe Hitchery, 32 Bishops Bay asked about crushing the tanks as he did not think they did that.

Mr. Kargl said that they crush them in place and fill them with sand.

Mr. Hitchery asked about the issue of sewer capacity and if that would have an impact on this project.

Mr. Nickerson said that they are working on that during this process and that he could not comment on that at this time as there is on-going litigation.

Ed Gaynor, 7 East Road asked if it is up to them that this study is being done or if they are being told that they have to do it by the State.

Mr. Kargl said that they are not being ordered to do this.

Mr. Nickerson noted that when they did the Pine Grove sewers that the Niantic River water quality improved.

Mr. Kargl added that they also were not ordered to do the Pine Grove sewers.

Joan Gibson, 30 Town Road asked if this could go to a Town Meeting and be defeated by the Town.

Mr. Nickerson said that the Town portion would go for a vote.

Craig Woody, 105 Oswegatchie Hills Road said that the DEEP has ordered other beach communities to go to sewers and maybe if they were to wait that it would happen here.

Ms. Jacobs said that typically the DEEP looks for an approved waste water facilities plan and then there is a whole checklist of items that they have to go through. It is still a long process and it has to be done regardless.

Joe Gareis, 8 South Road asked if the project does go through – how far away in time are they looking at to hook up to it.

Ms. Jacobs said that they would be looking at a 2019 time frame for connection.

Ms. Bucci added that it could also be a phased in project – they have not made any decisions and are still fact-finding.

Regina Hitchery, 32 Bishops Bay asked if this is the only project that the Town is looking at right now. Mr. Nickerson said yes.

Sandra Maheu, 50 Saunders Drive thanked them for the presentation and said that she is confident that they would continue in this format sharing information.

Mr. Nickerson said that the Weston & Sampson presenters would remain to help them find their lots on the maps and answer questions. He thanked everyone for coming and asked that they make sure to return the completed survey form.

Mr. Nickerson called for a motion to adjourn this Special Meeting.

**\*\*MOTION (1)**

**Mr. Zoller moved to adjourn the Special Meeting on the Saunders Point Wastewater Facilities Plan at 7:19 PM.**

**Mr. Murphy seconded the motion.**

**Vote: 5 – 0 – 0. Motion passed.**

Respectfully submitted,

Karen Zmitruk,  
Recording Secretary

# Saunders Point Community Outreach Meeting



## Public Workshop Town of East Lyme

July 28, 2016

| *Weston&Sampson*

## Presenters

**Robert Tedeschi, PE**  
Team Leader

**Ingrid Jacobs, PE**  
Project Manager

**Sarah Bucci, PE**  
Project Engineer

| *Weston&Sampson*

DRAFT

Attachment 11128 Special 7/28/16 <sup>1</sup>

# Agenda

1. Project History
2. Sewage Handling Options
3. Preliminary Needs Analysis
4. Community Feedback for Needs Evaluation

Saunders Point – East Lyme, CT

**Weston&Sampson**

# Project History

- Concern Identified in 1985 Facilities Plan
- Shallow Soils and Rock Outcropping



Saunders Point Area

**Weston&Sampson**



# Project History

- Determine Best Solution for Wastewater Management



Saunders Point Area

# Sewage Handling Options

- Types of Sewage Handling
- Potential Community Sites
- Pumping Stations/ Lift Stations

Saunders Point – East Lyme, CT



# Types of Sewage Handling

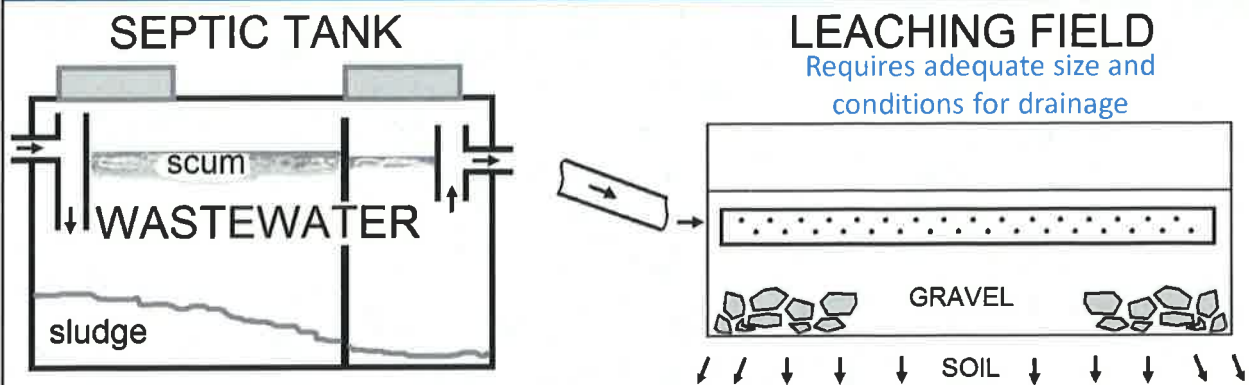
- Private Septic Systems
- Community Septic Systems
- Community Treatment Plants
- Connection to Existing Sewers

Saunders Point – East Lyme, CT

Weston&Sampson

# Private Septic Systems

- Individual homeowner's property



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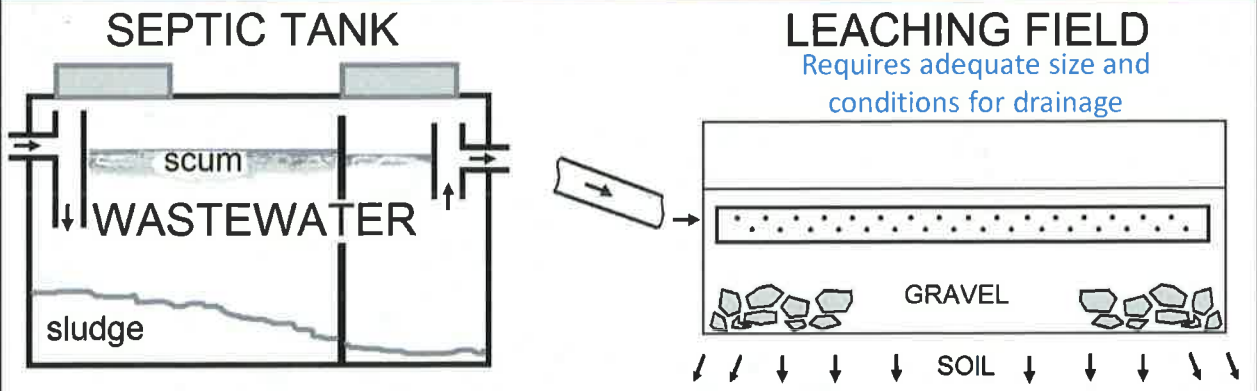
Weston&Sampson

*' Wastewater Treatment '*



# Community Septic Systems

- Serves two or more properties

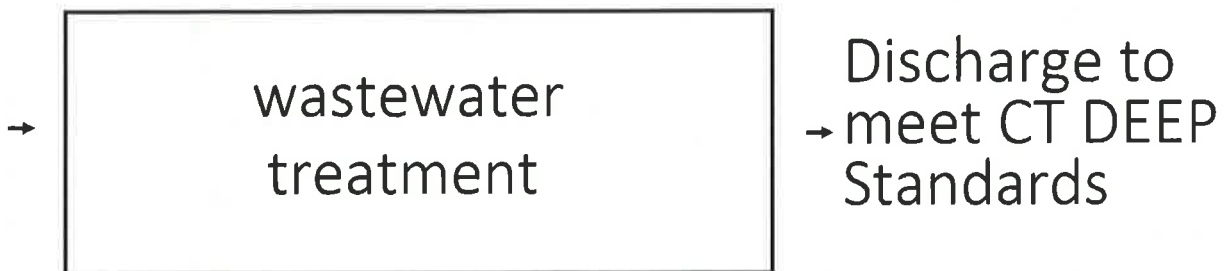


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# Community Treatment Plants

## Community Treatment



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Weston&Sampson

# Connection to Existing Sewers

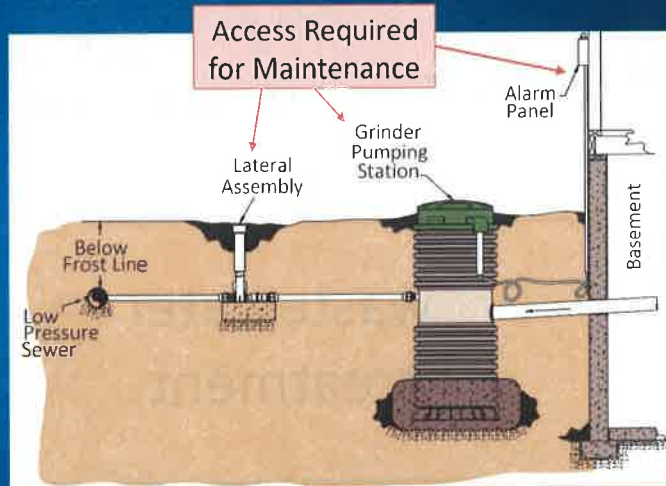
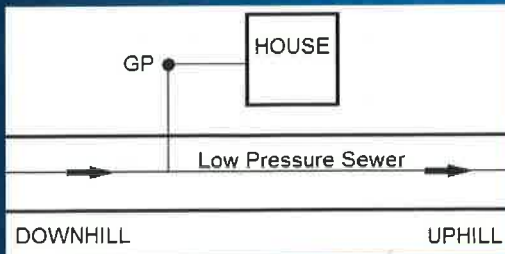
- Low Pressure Sewers
- Gravity Sewers
- Combination System

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# Low Pressure Sewer

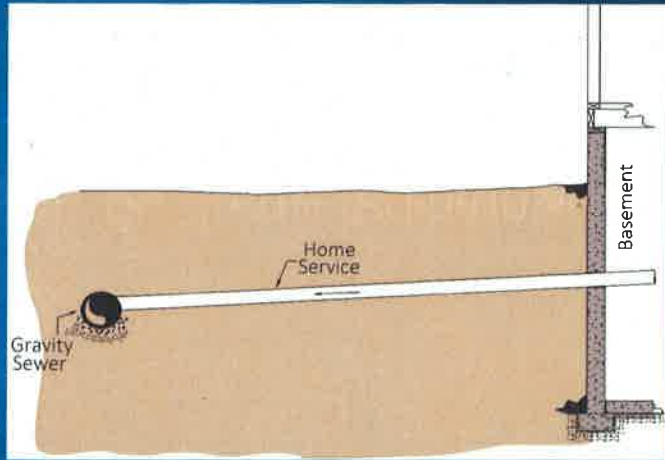
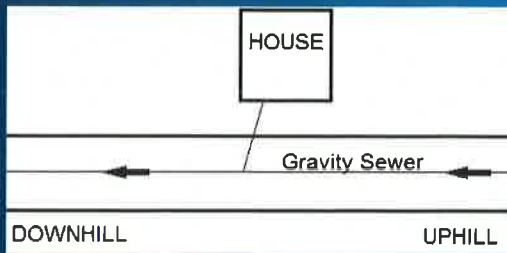
## With Individual Grinder Pumping Stations



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# Gravity Sewer With Municipal Pumping Stations



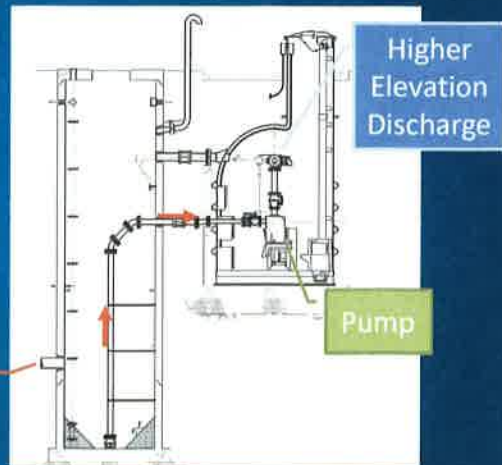
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# Municipal Pumping Station



Sewage in from  
Collection System



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# Potential Community Sites

- Community Septic Systems
- Community Treatment Plants
- Municipal Pumping Stations

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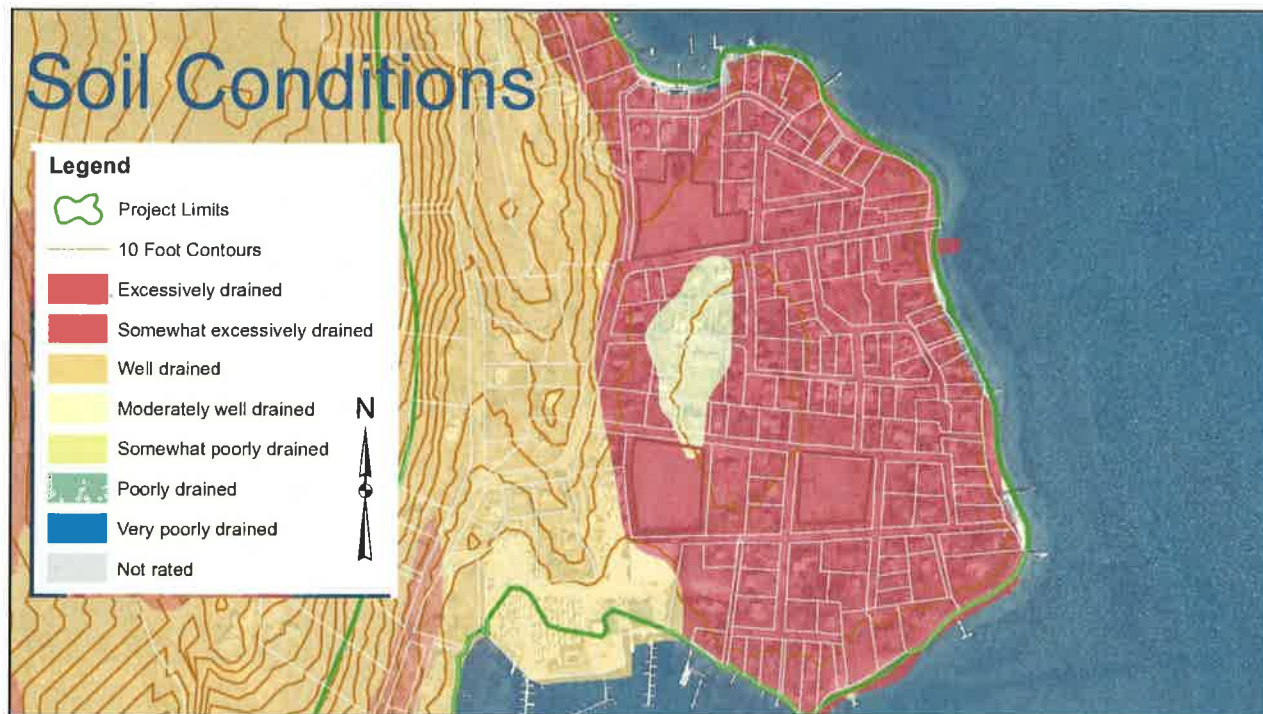
Weston & Sampson

## Identified Potential Community Sites



*need - places large, no homes on them, sandy soil*





## Potential Community Sites

- ~~Community Septic Systems~~
- Community Treatment Plants
- Municipal Pumping Stations

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*Were not looking further at the  
Community Treatment plant*



## Community Treatment Plant

- Effluent Discharge into Smith Cove
- Resistance from CT DEEP
- Daily O&M

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| *Weston&Sampson*

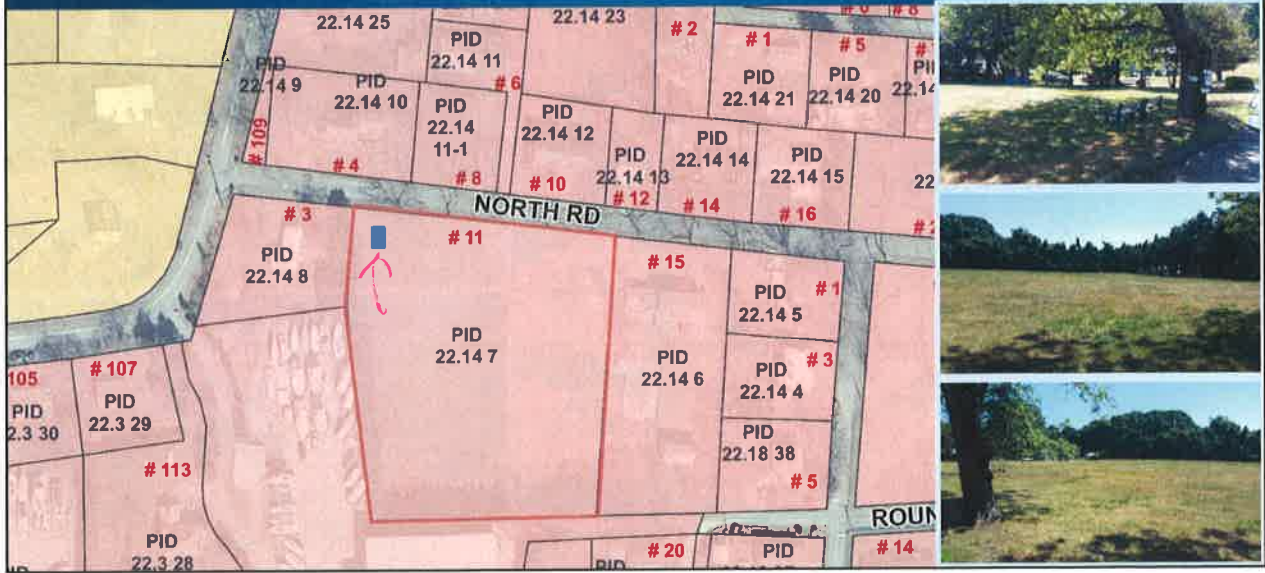
## Potential Community Sites

- ~~Community Septic Systems~~
- ~~Community Treatment Plants~~
- Municipal Pumping Stations

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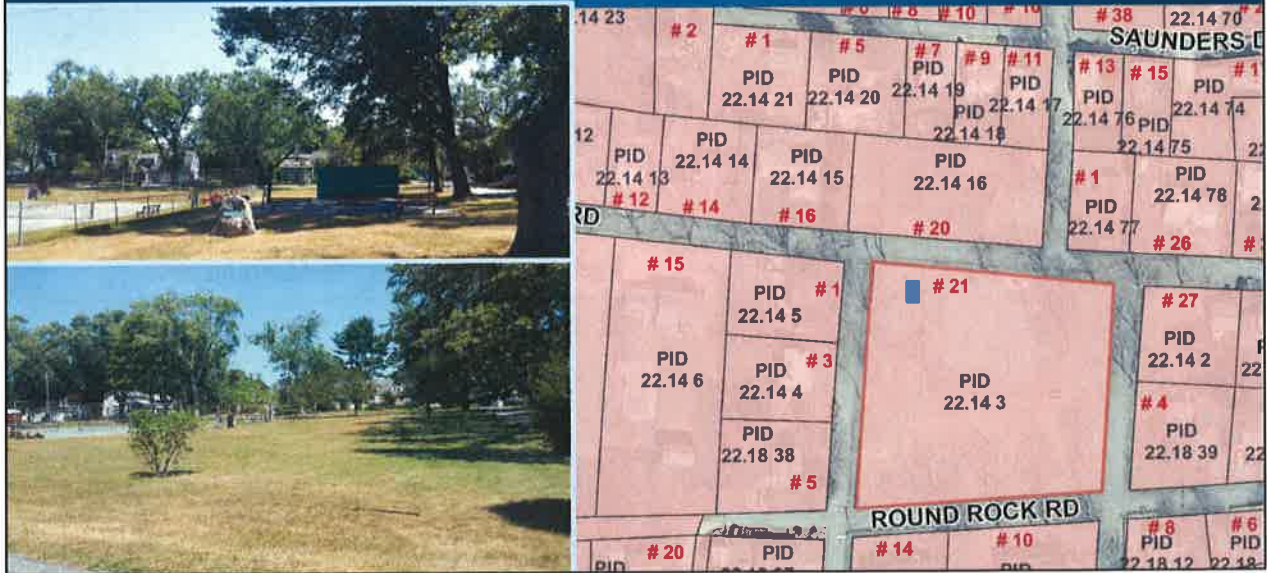
| *Weston&Sampson*

# 11 North Road Glendenning Field



*blue rectangle is for size concept ONLY  
not placement - of pump beds.*

# 21 North Road Tennis Courts





# 8 Town Rd OHC Golf Course



## Sewer Connection Options

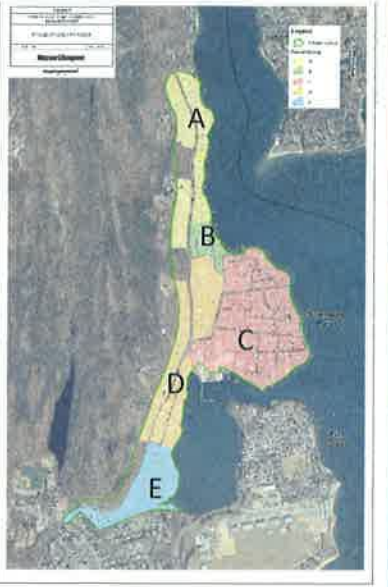


Path	Description
1	Directional Drill to Pine Grove
2	Pressure Sewer Main to E. Pattagansett Rd.
3	Pressure Sewer Main to Main Street

Saunders Point – East Lyme, CT



## Preliminary Needs Analysis Results



HIGHEST NEED

- B – Ledge Road Properties
- C – Saunders Point Properties
- A – Quarry Dock Road Properties
- D – Central Oswegatchie Hills Rd
- E – Southern Oswegatchie Hills Rd

lowest need

Sanitary Priority Ranking in Saunders Point

**Weston & Sampson**

*A, B & C pretty close in need; others - not so*

## Preliminary OPCC in Millions

- Possible Phasing for 20-Year Build-Out

Collection Options	Connection Options	
	Areas B and C - Gravity Only	Areas A, B, and C – Low Pressure and Gravity
	\$6.28	\$8.66
HDD to Pine Grove     \$0.26	\$6.54	\$8.92
FM to E. Pattagansett Rd.     \$1.11	\$7.39	\$9.77
FM to Main Street     \$1.37	\$7.65	\$10.03

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**Weston & Sampson**

## Community Feedback

- Area defined by letter and color
- Parcel Identification (PID) on map
- Information to assess need
- State funding available for areas of need

Saunders Point – East Lyme, CT

| *Weston&Sampson*

*need parcel ID*

## Next Steps

- |    |   |                            |
|----|---|----------------------------|
| 1. | Public Workshops                        | July / August              |
| 2. | Submit Draft Plan for Review            | September                  |
| 3. | Submit Draft Plan to CT DEEP            | September 30 <sup>th</sup> |
| 4. | Town Review Period                      | October / November         |
| 5. | Receive Comments from DEEP              | December 1 <sup>st</sup>   |
| 6. | Submit Final Wastewater Facilities Plan | December 12 <sup>th</sup>  |

| *Weston&Sampson*



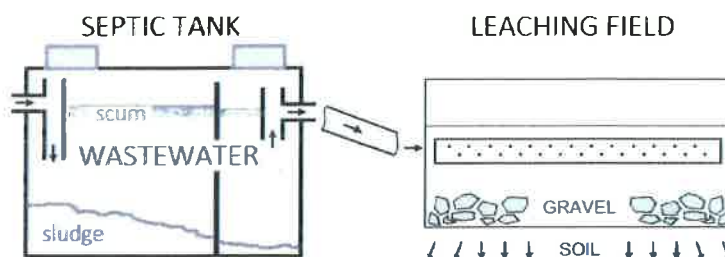
## What are safe ways of handling sewage?

- Private Septic Systems
- Community Septic Systems
- Community Treatment Plants
- Connection to Existing Sewers

### Private Septic Systems

Sewage leaves the home through pipes that are entirely on the individual's property. The sewage flows to a septic tank. The tank is typically divided so that solid material settles to the bottom (**sludge**) and fats and oils float to the top (**scum**). The remaining liquid is called **wastewater**. The wastewater leaves the septic tank and is dispersed into a drainage area called a **leaching field**. The more sewage that needs to be treated at one time, the bigger the septic tank and leaching field need to be in order to comply with public health regulations. Also, existing ground conditions around the constructed leaching field impact the effectiveness of the septic system. To be compliant, surrounding soils must provide proper treatment and drainage.

Private septic systems are typically installed and maintained by individual homeowners. Not all properties have adequate conditions to construct a compliant septic system.



### Community Septic Systems

Sewage leaves the home through pipes in the streets to flow to a large, central septic tank and leaching field. Several homes would be connected to each of these systems. Each community septic system would require land to accommodate a large septic tank and a large leaching field. Additionally, soil conditions of the land must provide a proper treatment that would neither pollute the surrounding environment, nor pose a threat to public health.

### Community Treatment Plants

Where a community septic system is not adequate to treat wastewater from the community, a small wastewater treatment plant may be required. In this scenario, sewage leaves the home through pipes in the streets to flow to a small treatment plant. Land must be acquired to house the treatment plant. Discharge from the community treatment plant, either to groundwater or surface water, would have to comply with CT DEEP regulations.

### Connection to Existing Sewers

Sewage leaves the home through pipes in the streets and would connect to the existing sanitary sewer collection system in East Lyme. The East Lyme sanitary sewer collection system transmits sewage to the New London Wastewater Treatment Plant.

Sanitary sewer collection systems use a combination of different types of infrastructure to transmit flow from one area to another. Most of the infrastructure is subsurface, through roadways or public easements. Sanitary sewer collection systems include:

**Gravity Sewer Pipe** – Pipes installed underground, designed to take advantage of the natural slope of the land to convey wastewater to the wastewater treatment plant by gravity. The size and slope of the pipe determines how much flow it can handle.

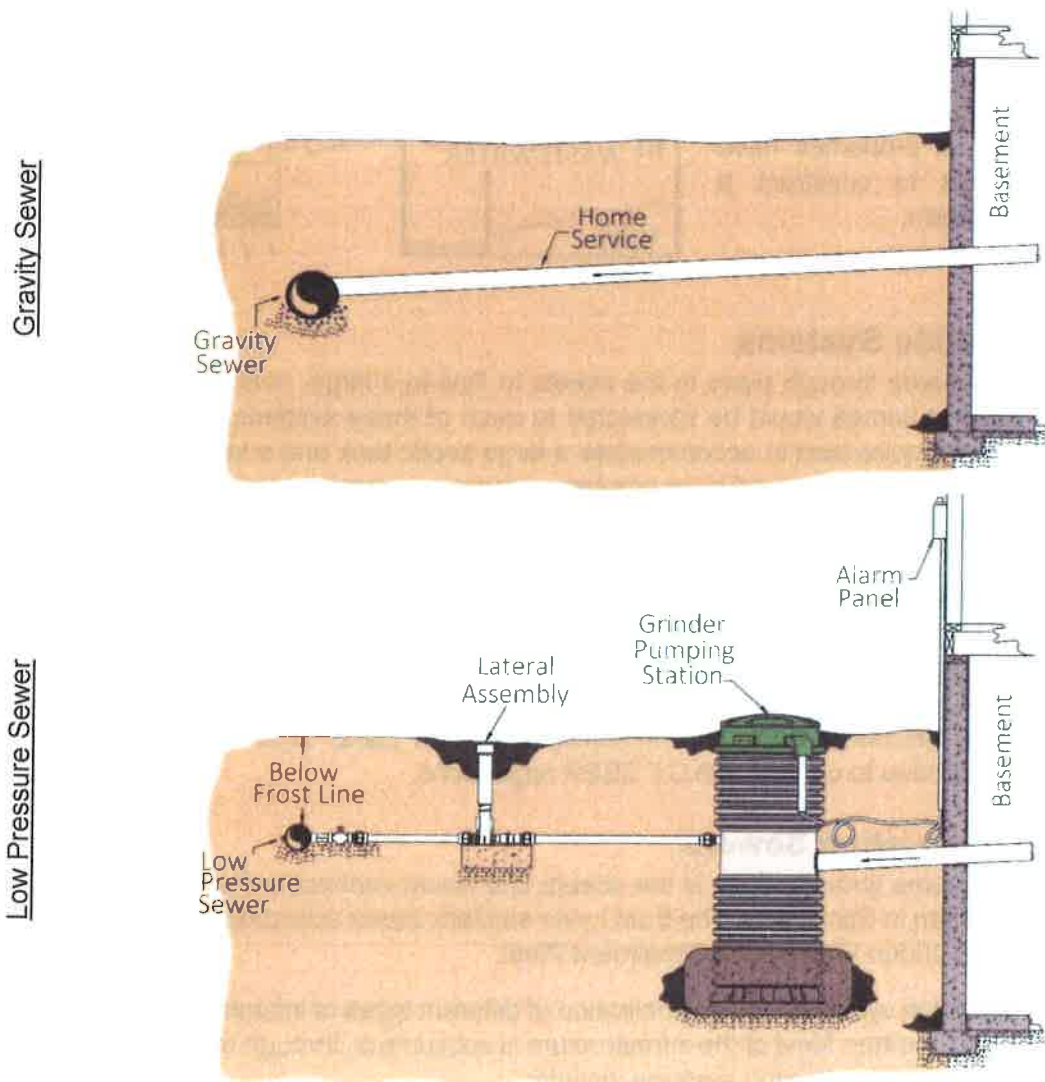
**Manholes** – Structures installed along sewer lines that allow permitted personnel access for maintenance and cleaning.

**Municipal Pumping Stations** – Town owned, and installed strategically at relative low points in a collection system, pumping stations use pumps to lift sewage to a higher level, through a pipe known as a force main.

**Force Mains** – A pressurized pipe installed underground that transmits sewage from a pumping station to another location at a higher elevation, at which point sewage resumes flow by gravity.

**Private Grinder Pumping Station** – Relatively small pump located at a low point on an individual's property that transmits household sewage into a low pressure sewer pipe.

**Low Pressure Sewer Pipes** – Relatively small diameter pipes installed underground that transmits sewage from the grinder pumping station to a gravity sewer.



- A Yellow
- B Green
- C Pink
- D Orange
- E Blue

### Needs Survey

NAME: \_\_\_\_\_

ADDRESS (in Project Area): \_\_\_\_\_

PARCEL ID (see map\*): \_\_\_\_\_

*\* Detailed parcel map to be provided at informational meeting*

(circle)

Is the address above your primary residence? ..... YES NO

Does someone live at the above address year round? ..... YES NO

Is your property connected to the public water system? ..... YES NO

Has your septic tank been pumped? ..... YES NO

When was the last time you pumped your septic tank? \_\_\_\_\_

How frequently do you pump your septic tank? \_\_\_\_\_

When was the last time you repaired your septic system? \_\_\_\_\_

Describe the repair: \_\_\_\_\_

Has wastewater from your system surfaced? ..... YES NO

Has wastewater from a neighboring system surfaced? ..... YES NO

Additional Comments:

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