



Environmental Engineers/Consultants

LOMBARDO ASSOCIATES, INC.

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Following is a list of common acronyms used throughout the text:

BOD Biochemical Oxygen Demand DMR Discharge Monitoring Report

EDU Equivalent Dwelling Unit – such as a 3 bedroom house

ENR Enhanced Nutrient Removal

GP Grinder Pump gpd Gallons per day gpm Gallons per minute

GLV Grand List Value – based upon 2016 Valuation

GWTF Groundwater Treatment Facility

Hybrid Combination gravity and low-pressure sewer system

MBR Membrane Bioreactor mg/L Milligrams per liter ng/L Nanograms per liter

OWTS On-site wastewater treatment system – such as a septic system

Pen Peninsula Sub-Area

PRB Permeable Reactive Barrier

NP-HD Non-Peninsula High Density Sub-Area
NP-LD Non-Peninsula Low Density Sub-Area

SFR Single Family Residence

ST Septic Tank

ST-D-PRB Septic Tank effluent to Drainfield with Permeable Reactive Barrier

Collection and Treatment System

STE Septic tank effluent

STEG Septic tank effluent gravity
STEP Septic tank effluent pumped
TMDL Total Maximum Daily Load

TN Total Nitrogen TP Total Phosphorous

USEPA United States Environmental Protection Agency

WPCA Water Pollution Control Authority

WW Wastewater

WWTF Wastewater Treatment Facility
WWTP Wastewater Treatment Plant

μg/L Micrograms per liter





APRIL 2020 CANDLEWOOD LAKE DRAINAGE AREA WASTEWATER MANAGEMENT STUDY

NEWSLETTER – STATUS SUMMARY

Project Documents/Reports can be viewed online at BrookfieldWPCA.org/Candlewood

Dear Brookfield Residents:

In spring 2019, the Brookfield Water Pollution Control Authority (WPCA) was awarded a Clean Water Grant and selected environmental engineers, Lombardo Associates, Inc., to study the need for a Wastewater Management Facilities Plan for the Brookfield Candlewood Lake drainage area. See page 4 for an illustration of the Study Area. The plan documents can be viewed at https://BrookfieldWPCA.org/Candlewood.

PROPERTY AREAS INCLUDED IN THE STUDY:

801 Peninsula Properties

- Candlewood Shores
- Arrowhead Point
- Hickory Hills
- Candlewood Orchards

220 Non-Peninsula High-Density Area Properties

Properties along Candlewood Lake Road

488 Non-Peninsula Low-Density Area Properties

• Properties east of Candlewood Lake Road

The detailed Plan found that current wastewater practices are compromising Candlewood Lake water quality, causing detrimental water supply quality, and public health concerns in the area.

- » Water quality concerns frequent algae bloom occurrences in Candlewood Lake, as illustrated on page 3
- **» Water supply problems** impacting 700+ properties on the Peninsula with high nitrogen and PFAS levels in the water supply

» Public health concerns:

- 28% of properties are too small for code-compliant septic systems
- More than half of the septic systems are over 50 years old
- One in four properties experienced malfunctioning septic systems in the last 10 years

The environmental engineers recommend the properties in the Peninsula area be connected to the Brookfield sewer system which discharges to the Danbury Wastewater Treatment Plant. This sewer plan will improve both the Candlewood Lake water quality and the local drinking water supplies. See page 4 for a preliminary layout of the recommended sewer system. The septic influence of the non-peninsula properties is of less immediate concern and can be considered later.

The least expensive option is to install a sewer collection system on the Peninsula with a combination gravity and low pressure septic tank effluent collection arrangement. This plan will require 5 small neighborhood pump stations. This proposed sewer strategy includes keeping the existing septic tanks and transporting wastewater to the Brookfield collection system. See illustration on page 2.

Approximately 45% of the properties on the Peninsula will require pumps. Wastewater from other properties will flow by gravity. Pump maintenance and septic tank pumping will be the responsibility of the Brookfield WPCA. Connecting the properties on the Peninsula to the Brookfield sewer system will require no changes to existing plumbing system within a home. For properties where a pump must be installed, a 20-amp 115V circuit is required, at WPCA's expense.

COSTS

The estimated cost for the sewer system and for the Danbury Wastewater Treatment Plant connection is approximately \$18.25 million in 2020 dollars for a Peninsula only system.

- » If grants are not available to help fund the sewer project, property sewer assessments will be about 8.1% of the Grand List Value (GLV) for each property, payable over 20 years
- **»** Without grants, for an average property GLV value of approximately \$276,000, the sewer assessment would be \$22,400 in 2020 dollars and, assuming 3% inflation per year, approximately \$26,000 in 2025.

Upon sewer connection, sewer assessments would be paid by property owners financed with a long term bond or loan provided by the Town of Brookfield.

The Brookfield WPCA will aggressively pursue federal and state grant funding for the project. The Brookfield WPCA also has programs to assist qualified property owners who are unable to pay for their assessments.

If you have any questions, please contact the Brookfield WPCA at (203) 775 – 7319 x 1000.

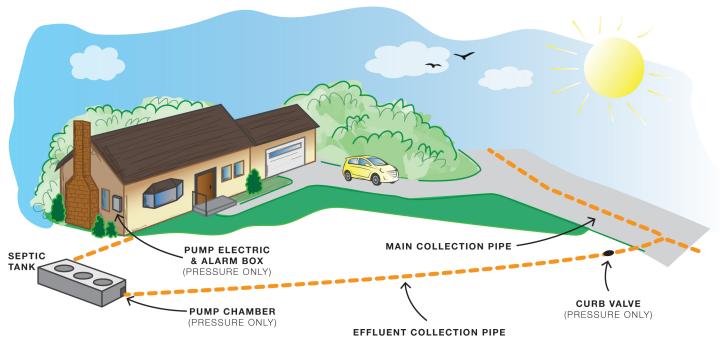
Nelson Malwitz, Chairman

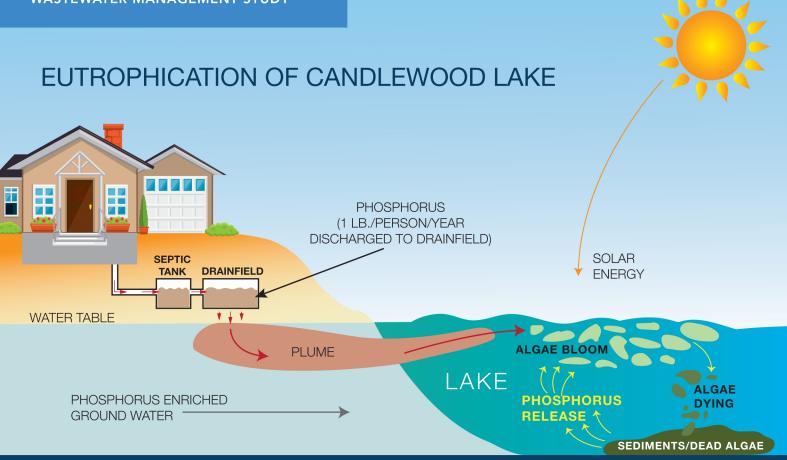
Brookfield Water Pollution Control Authority (WPCA) 53A Commerce Road, Unit 1, Brookfield, CT 06804



Septic Tank Effluent Sewer System

Each property will include an on-site septic tank for solids removal. Effluent flows by gravity or is pumped to a collection system and conveyed to the treatment plant.





Candlewood Lake Water Quality

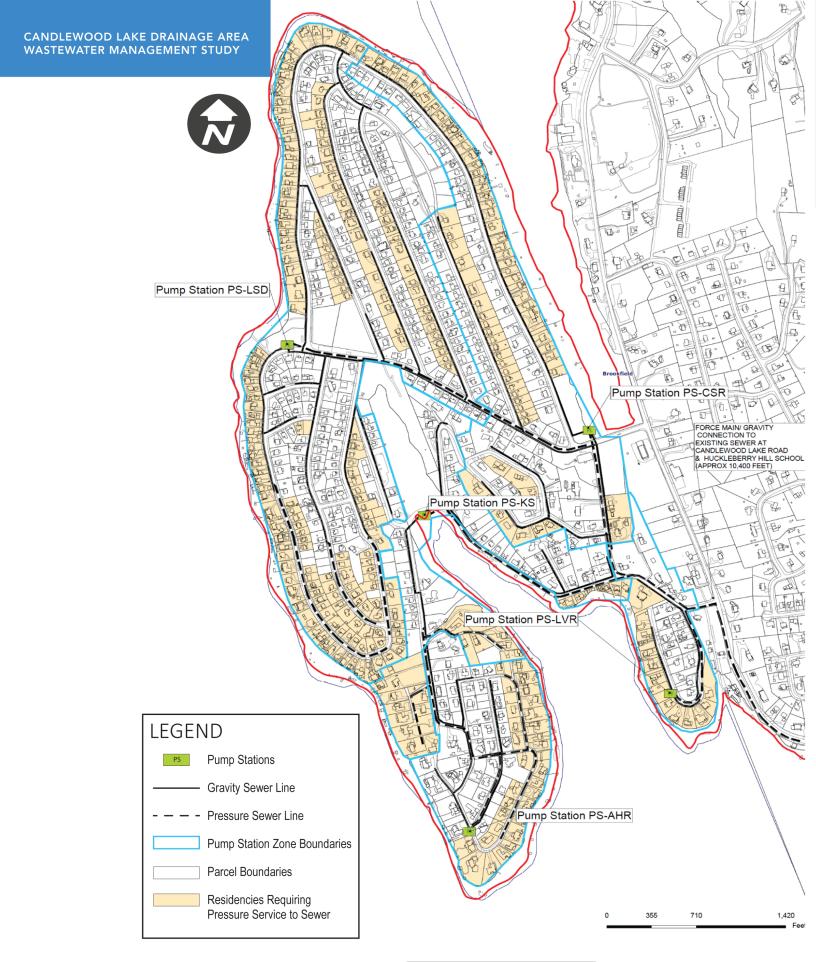
- Detailed 2019 testing found approximately 1+% of septic system phosphorus is not removed by soil and that certain site soil conditions can cause approximately 10+% of septic phosphorus to discharge to Candlewood Lake.
- This nutrient phosphorus has been discharging into and accumulating in Candlewood Lake for over 70 years.
- The aging process of lakes, eutrophication, is accelerated by phosphorus from human activity wastewater discharges being a large contributor.

Project Conclusions

- 1. Over 70 years of septic discharges have resulted in:
 - Accumulation of phosphorus in lake sediments with associated phosphorus release
 - Discharge of nitrogen in the lake contributing to algae blooms
- 2. Focus should be on significantly reducing septic phosphorus contributions and sediment phosphorus release

Recommendations

- 1. Connect Peninsula area to Brookfield sewer system that discharges to Danbury Wastewater Treatment Plant (WWTP)
- 2. As sewering alone is insufficient to protect/restore lake water quality, participate in developing and implementing multi-town watershed program to reduce sediments phosphorus release



Environmental Engineers/Consultants

LOMBARDO ASSOCIATES, INC.

1 INTRODUCTION

This Report presents the project's

- ✓ Wastewater Management Options Identification, Analysis and Recommendations
- ✓ Financing and Implementation Plan

for the Study Area of Brookfield Candlewood Lake Drainage Area and adjacent Areas of Concern. The purpose of this Report is to present solutions for addressing the Task 2 Wastewater Systems Needs Definition Report. This Report includes recommendations (1) to sewer the communities that lie in the Brookfield peninsula complete with a proposed design and (2) designs for adding sewers to the off peninsula high density portions of the Study and (3) demonstrate the efficacy of phosphorus removal systems for the low density areas that lie in the Lake watershed.

Study Area

The Study area, shown in Figure 1-1, consists of three (3) subareas, with two (2) areas proposed to be sewered:

- Peninsula (Pen) (consisting of Candlewood Shores, Arrowhead Point, Hickory Hills and Candlewood Orchards Water Districts) 704 developed properties proposed to be sewered with wastewater design flow estimated at 148,000 gpd.
- Non-Peninsula High Density (NP-HD) -202 developed properties proposed to be sewered with design flow estimated at 78,000 gpd.
- Non-Peninsula Low Density (NP-LD) 432 developed properties. Demonstrate the efficacy of phosphorus removal systems for the low-density area.

1.1 BRIEF PROJECT HISTORY

The Brookfield Water Pollution Control Authority (WPCA) commissioned this Engineering Plan to address the wastewater management issues and needs for the approximate 1,300 developed properties in the WPCA Areas of Concern (AoC) adjacent and near to Candlewood Lake and the Brookfield portion of the Candlewood Lake drainage area. This initiative is due to the concern that Study Area wastewater systems may be adversely impacting the quality of Candlewood Lake.

The Candlewood Lake Brookfield Contributing Area Wastewater Management Plan Project consists of several tasks that in total will:

- ✓ Evaluate existing conditions, in particular wastewater management practices.
- ✓ Determine wastewater systems public health and environmental impacts (in particular on Candlewood Lake's water quality)
- ✓ Develop cost effective, technically reliable solutions to address problem systems
- ✓ Develop an Implementation Plan to mitigate any negative impacts

The Task 1 Community Profile and Data Review Report contains three sections:

- Study Area Profile land use, property, and population data; water supply and water quality information; and current wastewater management practices.
- Description of Natural Resources descriptions of soils and bedrock, topography, floodplains and wetlands, and water resources.



History and water quality conditions of Candlewood Lake summary

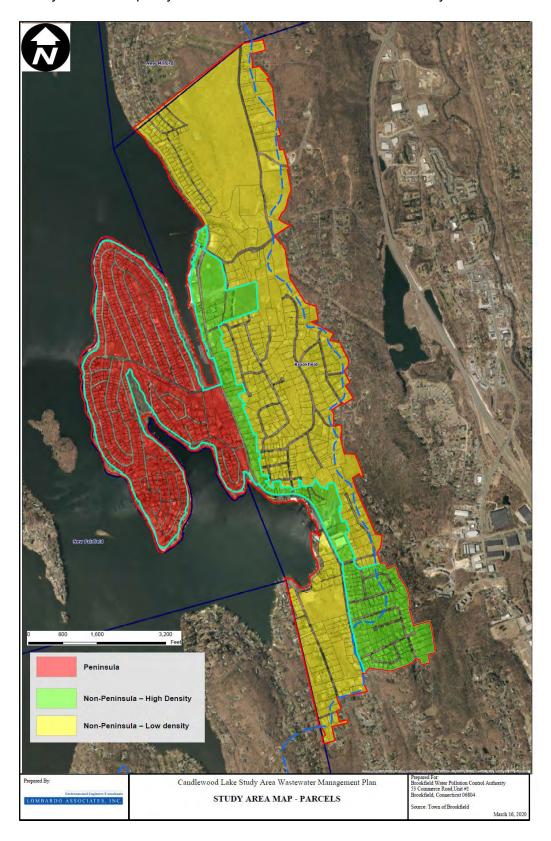


Figure 1-1 Peninsula and Non-Peninsula Study Area Sections

Key project findings to date that are included in the Task 1 report are:

- √ 87% of properties are residential; 73% are more than 50 years old, most with the original septic system.
- ✓ More than 28% of lots are less than 10,000 square feet.
- ✓ Drinking water quality data strongly suggests that septic discharges are adversely influencing drinking water quality of Arrowhead and Candlewood Shores which serve 60% of the AoC parcels.

Figure 1-2 illustrates how wastewater from septic systems infiltrates to the groundwater/water supply wells and a body of water such as Candlewood Lake.

- Nitrate nitrogen levels in the Arrowhead and Candlewood Shores (CS) water supplies are very close to exceeding the US EPA drinking water standard of 10 parts per million (ppm) for nitrate-nitrogen. As of 2018, Arrowhead was 7.9 ppm and Candlewood Shores was 7.5 ppm. In 2017, CS violated the nitrate-N drinking water public health limit.
- Wastewater design conditions in the study area are challenging due to steep slopes and shallow bedrock.
- Candlewood Lake is phosphorus limited i.e. phosphorus levels controls water quality.
- Candlewood Lake has frequently experienced cyanobacteria/blue-green algae blooms in recent years that can be a health hazard to pets and humans.

The Task 1 Report provided the foundation for the Task 2 of the Study in which:

- Phosphorus removal in septic systems was field tested at three septic drainfields and fourteen groundwater wells
- Wastewater needs were defined on a property by property basis

The Task 2 Wastewater Systems Needs Definition Report recommended that the Peninsula and NP-HD areas be sewered based upon the following determinations of adverse impacts due to current/historical septic system practices. Appendix A provides details on these causes.

- 1. Negative Impact on Candlewood Lake see Figure 1-3
- 2. Negative Impact on Groundwater Drinking Water Aquifer
- 3. Insufficient Space on individual lots for Code compliant Septic Systems
- 4. Malfunctioning Septic Systems

In addition to sewering the Peninsula and NP-HD areas, the Task 2 report recommended that the WPCA:

- Evaluate the effectiveness of individual property phosphorus removal options of alum addition to septic tanks and iron dissolution methods for their applicability to the lowdensity areas.
- Perform Candlewood Lake Sewer Impact studies near the Peninsula to document Lake water quality improvements associated with implementing the recommended sewering effort.



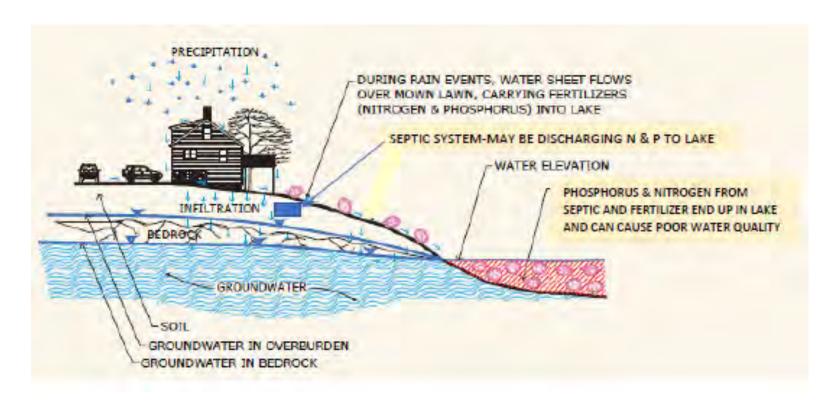


Figure 1-2 Study Area Geohydrology Cross-Section

Eutrophication of Candlewood Lake

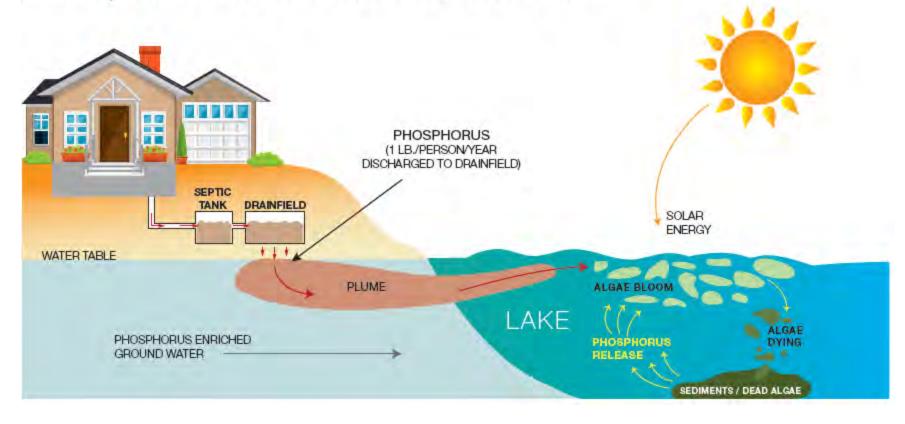


Figure 1-3 Septic System Impacts on Candlewood Lake

2 PENINSULA AND NON-PENINSULA -SEWER OPTIONS

2.1 Introduction

The technically viable options to address the wastewater needs for the Peninsula and Non-Peninsula-High Density (NP-HD) areas are to sewer the areas and discharge the wastewater to:

Option 1	Existing Brookfield sewer system that discharges to the Danbury WWTP
Option 2	Existing sewer in New Milford that connects to the New Milford WWTP
Option 3	A to-be-created in-Brookfield viable treatment and disposal system

Section 3 presents an analysis of the treatment-disposal options. **Section 4** presents an analysis for the Non-Peninsula–Low Density (NP-LD) On-Site Wastewater Treatment (OWTS) options.

DESCRIPTIONS OF PROPERTIES REQUIRING WASTEWATER SYSTEMS

- Table 2-1 presents the number of undeveloped, developed residential and non-residential parcels, their associated wastewater design flows, and Grand List Values (2016 Valuation) for the three areas of Peninsula, NP-HD and NP-LD.
- Table 2-2 lists all the non-residential properties in the Peninsula, NP-HD and NP-LD areas, along with their estimated wastewater design flows.

Wastewater design flows were based upon an average of 200 gallons per day (gpd) of wastewater flow from each residential parcel. This is consistent with actual average water use of approximately 100 gallons per day (gpd) that is experienced in the Study Area and use of a peaking factor of 2.

	Total P	Properties	Devel Prope	loped erties	WW Des	sign Flow	Grand List Value (2016)			
Area	Total	Un developed	Total	Non- SFR	Total	Non-SFR	Area Total	Non-SFR		
Peninsula	810	106	704	4	146,700	6,700	\$224,541,000	\$1,748,000		
Non-Pen, High Density Area	220	18	202	17	81,600	44,600	\$56,058,000	\$15,941,000		
Subtotal	1,030	124	906	21	228,300	51,300	\$280,599,000	\$17,689,000		
Non-Pen, Low Density Area	488	56	432	4	85,900	280	\$106,774,000	\$1,055,000		
Total	1,518	180	1,338	25	314,200	51,580	387,373,000	18,744,000		

Table 2-1 Study Area – GLV all properties

2.2 SEWER TYPES AND FEASIBLE OPTIONS

Sewer system types are:

- 1. Total wastewater
 - a. Gravity
 - b. Pumped in a low-pressure system with grinder pumps (GP) or
 - c. Hybrid/combined gravity/pressure system.

- d. Vacuum system in which wastewater moves through the collection system based upon a vacuum created at a central vacuum pump station. A typical vacuum sewer system consists of vacuum valve at each property and a central vacuum pump station.
- 2. Septic tank effluent (STE) whereby septic tanks remain to retain solids and liquid is transported to a treatment plant.
 - a. Gravity, referred to as STEG
 - b. Pumped in a low-pressure system with septic tank effluent pumps (STEP) or
 - c. Hybrid/combined gravity/pressure system.

Based upon an examination of the development patterns of the study area, highly variable topography, soils and geology, vacuum sewers are not technically feasible nor cost-effective. Also, a complete gravity sewer system is not practical nor cost-effective due to deep excavations that would be required. For an entirely low-pressure sewer system all properties would have individual pumps.

Consequently, the technically viable sewer options are:

Total Wastewater

- 1. Low pressure collection system using grinder pumps (GP), see Figure 2-1 or
- 2. **Hybrid Low Pressure** using GPs with conventional gravity and pump stations as needed.

Septic Tank Effluent

- **1. Low pressure** collection system using septic tank effluent pumps (STEP), see Figure 2-2 or
- 2. Hybrid Low pressure using STEPs with STE gravity and pump stations as needed.

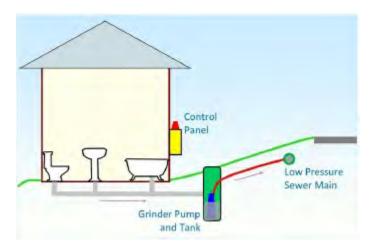


Figure 2-1 Grinder Pump Illustration

Septic Tank Effluent Sewer System

Each property will include an on-site septic tank for solids removal. Effluent flows by gravity or is pumped to a collection system and conveyed to the treatment plant.



Figure 2-2 STEP - STEG Illustration

Table 2-2 Study Area Non-SFR Developed Properties*

Table 2-2 Study Area Non-SFR Developed Properties"									
#	Area	Property Location	Owner Name	Business Name	Land Use Type	Land Use Category	Building Style	Design WW Flow (gpd)	% of Total
1	4	330 CANDLEWOOD LAKE RD	ASHLEYS AUTO LLC	LAKEVILLE TOWING	Auto Repair	Commercial	Serv Station	277	0.6%
2	PENINSULA	18 BAYVIEW DR	BROOKFIELD VOLUNTEER FIRE DEPARTMENT CAN		Vol Fire Dep	Fire Department	Fire Station	150	0.3%
3	EN	292 CANDLEWOOD LAKE RD	LAKE SHORE LOUNGE INC	DOWN THE HATCH	Rest/Club	Restaurant	Restaurant	6,000	12.8%
4	4	55 LONGVIEW DR	CANDLEWOOD SHORES TAX DISTRICT		Mun Bldg Com	Municipal	Office Bldg	230	0.5%
							eninsula Only	6,657	14.2%
5		353 CANDLEWOOD LAKE RD	GARMEL LLC	POWDERHORN AGENCY	Office Bldg	Commercial	Office Bldg	312	0.7%
6		371 CANDLEWOOD LAKE RD	ILIRIA LLC	LAKESHORE REALTY / MANGIA MANGIA PIZZA	Nbhd Ctr	Commercial	Retail	551	1.2%
7		22 NORTH PLEASANT RISE	ABILITY BEYOND DISABILITY INC		Charitable Res	Commercial	Ranch	129	0.3%
8		19 PLEASANT RISE CIR	DATAHR REHABILITATION INSTITUTE INC		Charitable Res	Commercial	Ranch	129	0.3%
9		202 CANDLEWOOD LAKE RD	DANBURY SLOVAK GYMNASTIC UNION SOKOL		Fratnl Org	Commercial	Clubs/Lodges	231	0.5%
10	AREAS	227 CANDLEWOOD LAKE RD	RIC RAC ON THE LAKE INC		Marinas Md 94	Marina	Marina Bldg	4,640	9.9%
11	YTISN	413 CANDLEWOOD LAKE RD	CANDLEWOOD VENTURES LLC	waqua	Marinas Md 96	Marina	Clubs/Lodges	1,080	2.3%
12	IGH DE	474 CANDLEWOOD LAKE RD	CANDLEWOOD VENTURES LLC	SEA RAY MARINE MAX	Marinas Md 94	Marina	Marina Bldg	2,000	4.3%
13	NON-PENINSULA, HIGH DENSITY AREAS	213 CANDLEWOOD LAKE RD	OHARA HOLDINGS LLC	CANDLEWOOD EAST MARINA	Marinas Md 94	Marina	Marina Bldg	4,700	10.0%
14	ENINS	204 CANDLEWOOD LAKE RD	OHARA HOLDINGS LLC		Country Club	Commercial	Clubs/Lodges	6,844	14.6%
15	NON-P	430 CANDLEWOOD LAKE RD	FIRSTLIGHT CT HOUSATONIC		Accessory Bldgs	Commercial	Off/Res Garage	218	0.5%
16		430 CANDLEWOOD LAKE RD	FIRSTLIGHT CT HOUSATONIC LLC		Accessory Bldgs	Commercial	Off/Res Garage		0.0%
17		501 CANDLEWOOD LAKE RD	BROOKFIELD TOWN OF		Mun Bldg Com	Municipal	Commercial	2,000	4.3%
18		460 CANDLEWOOD LAKE RD	BROOKFIELD TOWN OF	Brookfield Town Park	Mun Park Bld	Municipal	Clubs/Lodges	2,000	4.3%
19		439 CANDLEWOOD LAKE RD	439 CANDLEWOOD REALTY HOLDING LLC		Rest/Club	Restaurant	Restaurant	6,000	12.8%
20		506 CANDLEWOOD LAKE RD	LAKE VIEW PROPERTIES LLC	CANDLEWOOD INN	Rest/Club	Restaurant	Restaurant	9,000	19.2%
					Subtotal - I	Non-Peninsula	, High Density	39,834	85.2%
21	N-PEN. DENSITY	39 CARMEN HILL RD	VERTICAL BRIDGE TOWERS		Cell Site	Commercial	Commercial	120	0.3%
21	IG MOT -NON		STEVENS JEFFREY H		Comm Garage	Commercial	Comm Garage	163	0.3%
					Subtotal -	Non-Peninsul	a, Low Density	283	0.6%

^{*}Non Single-Family Residence (SFR)

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Total

46,774 100%

2.3 Peninsula Sewer System

Low Pressure Sewer System

In a low-pressure sewer system, all 704 developed properties would have a wastewater pump – either grinder pump or septic tank effluent pump -that would discharge to a common sewer in the street.

Hybrid Low Pressure – Gravity Sewer System

For a hybrid system (either total wastewater or septic tank effluent), each parcel connects to the sewer from their septic tank by:

- **Gravity** where the house is upgradient (uphill) of the proposed sewer. For total wastewater, this option requires piping through the existing septic tank to accommodate gravity flow from the house to the collection system.
- Pumped where the house is downgradient (downhill) of the proposed sewer. For total
 wastewater a grinder pump is placed in the septic tank. For septic tank effluent,
 modifications to the existing septic tank are made or adding a chamber to accommodate
 a septic tank effluent pump (STEP).

Figures 2-3 and 2-4 illustrate preliminary Peninsula sewer system layout using the hybrid approach. The layout is applicable for total wastewater GP/conventional gravity or septic tank effluent STEP/STEG. Conventional gravity sewers would be a minimum 8" diameter with manholes spaced approximately every 300-ft and wherever there is a change of alignment. STEG sewer systems use a minimum 4-inch diameter pipe with cleanouts every 300-ft and a small number of conventional manholes.

For sewer segments where a gravity line is not proposed in the street due to technical/cost reasons, all properties in that segment would have a pump.

For the Peninsula hybrid gravity/low pressure wastewater collection system:

- 320 properties or 45.5% of properties on the Peninsula will require a pump
- 384 properties or 54.5% of properties on the Peninsula will have a gravity connection to one of the five (5) neighborhood pump stations that are required.

Figure 2-3 and 2-4 also illustrate the pump station zones and how they are interconnected. Table 2-3 lists the proposed Pump Station (PS) properties, owners and discharge locations. 4 of the 5 pump stations discharge to a pressure line that ultimately leaves the Peninsula. The AHR PS discharges to the KS pump station. The pump stations abbreviations/nomenclature are:

All proposed pump stations are on undeveloped land.



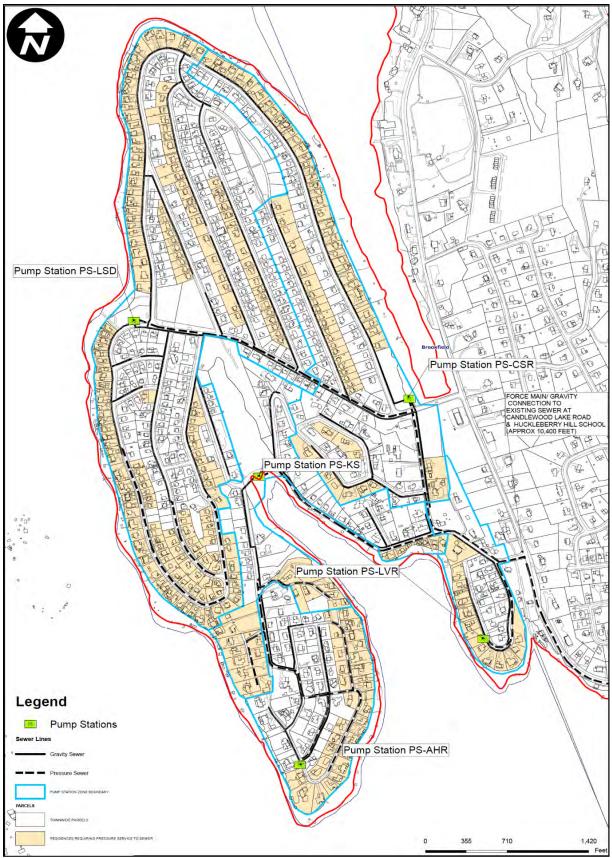


Figure 2-3 Proposed Peninsula Area Sewer System

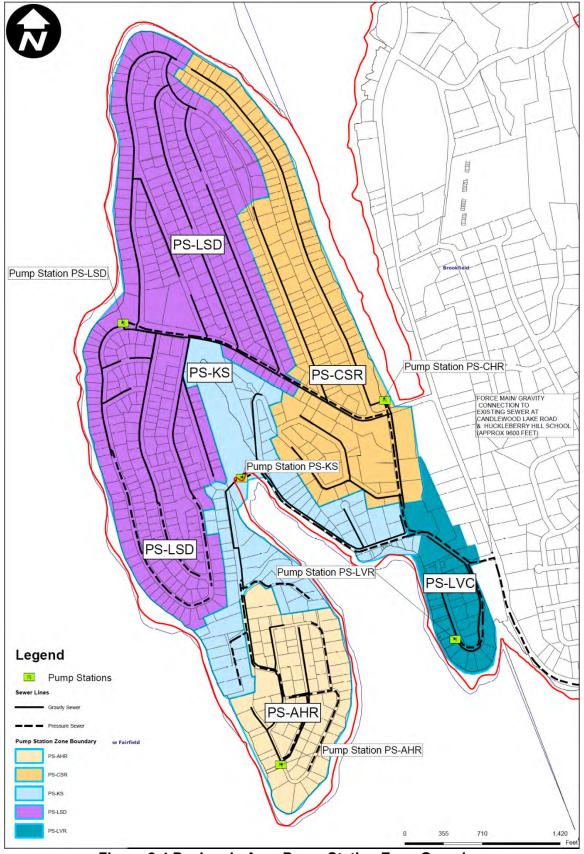


Figure 2-4 Peninsula Area Pump Station Zone Overview

Table 2-3 Peninsula Pump Station Site Details

				Pump Sta	tion Locations & Servi	ice Amounts			
	PS Name	Service Area	Discharges to	Location Address	Location Owner	C/O / Status	Tax Map MBL#	Service Amounts (EDU)	Service Amounts (GPD)
	PS-AHR	AHR	PS-KS	20 Arrowhead Road	STEPHEN J & PATRICIA M MELLAS	undeveloped	A10006	70	14,000
Area	PS-CSR	CSR	Main LVC FM @Kellogg St. & Lakeview Rd.	16 North Lake Shore Dr	CANDLEWOOD SHORES TAX DISTRICT	C/O SCALZO PROPERTY MANAGEMENT - undeveloped	B08150	147	29,400
ninsula	PS-KS	KS		430 CANDLEWOOD LAKE RD	First Light	First Light	A05051	65	13,000
Pen	PS-LVR	LVR		19 Lakeview Dr	Christopher Vauthy	Undeveloped	B09113	32	6,400
	PS-LSD	LSD	PS-CSR FM line	176 North Lake Shore Dr	CANDLEWOOD SHORES TAX DISTRICT	C/O SCALZO PROPERTY MANAGEMENT -	A08076	387	77,380

2.4 Non-Peninsula High Density Area Sewer System

2.4.1 ENTIRE NP-HD AREA

Low Pressure Sewer System

In a low-pressure sewer system, the 202 gravity discharge developed properties would have a wastewater pump that would discharge to a common sewer in the street. One property in the north end of this area consists of 24 condos that have a common system. The individual condo properties would remain on gravity and a single pump would transfer wastewater to the low-pressure sewer system. The total number of pumped properties would be 179 under this option.

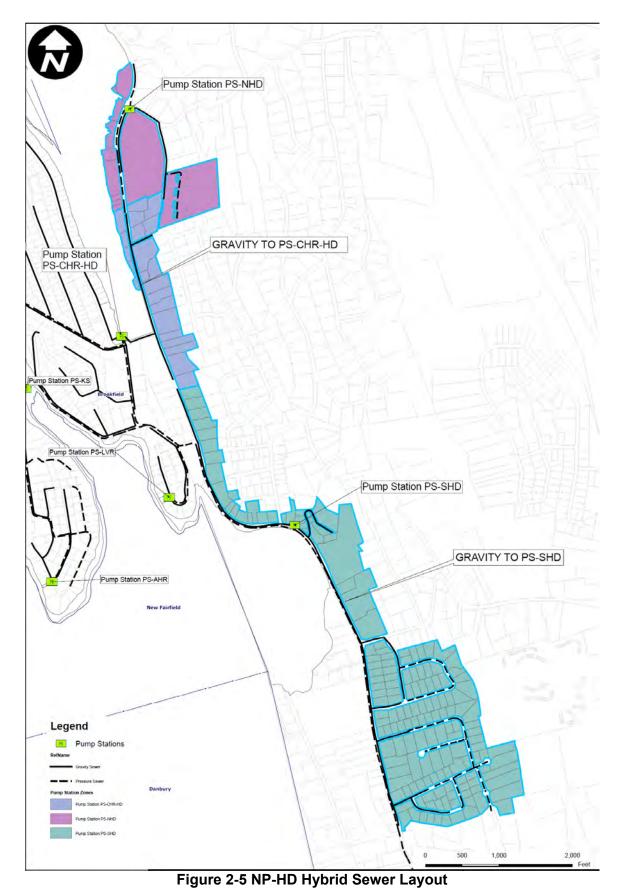
Hybrid Low Pressure – Gravity Sewer System

A hybrid low pressure – gravity system for the NP-HD area would be configured as described in Section 2.3 for the Peninsula area. Figure 2-5 presents the Non-Peninsula High Density area sewer system layout for a hybrid sewer system approach. Figure 2-6 presents the potential force main routes to connect to the existing Brookfield sewer system which connects to the Danbury Wastewater Treatment Plant (WWTP) on Candlewood Lake Road at the Huckleberry Hills School (approximately 10,400 feet from the Peninsula) or to in-Brookfield sites via North Mountain Road to the Laurel Road sites (approximately 8,300 feet from the Peninsula) and Federal Road sites (additional 4,000 feet from the Peninsula).

Sewering the NP-HD subareas reduces the distance from the PEN + NP-HD sewered areas to candidate treatment/discharge locations:

- From 10,400 feet to 3,800 feet to connect to existing sewer at Huckleberry Hills School.
- > from 8,300 feet to 6,000 feet to Laurel Road sites.







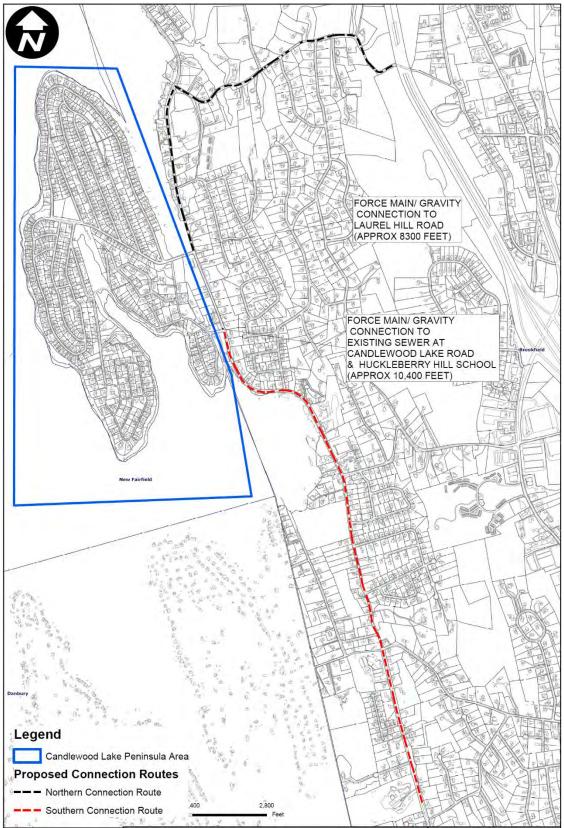


Figure 2-6 Proposed Sewer System Connections to Danbury or Laurel Road Site

For the hybrid gravity/low pressure wastewater collection system:

- 85 properties or 42% of properties in the non-Peninsula high density area will require a pump
- 117 properties or 58% of properties in the non-Peninsula high density area will have a gravity connection to one of the two (2) neighborhood pump stations that are required.

Table 2-4 lists the proposed PS properties, owners and discharge locations for the NP-HD area.

Table 2-4 Non-Peninsula-HD Pump Station Site Details

					Pump Station	Locations & Service	e Amounts			
		PS Name	Service Area	Discharges to	Location Address	Location Owner	C/O / Status	Tax Map MBL#	Service Amounts (EDU)	Service Amounts (GPD)
ninsula	sity Area	PS-HDN	NP-HDN	PS-CSR	501 CANDLEWOOD LAKE RD	Town of Brookfield	Ballfield	B07028	33	6,600
Non-Pe	High Den	PS-HDS	NP-HDS	FM to Danbury Conn. Point	263 CANDLEWOOD LAKE RD	BROOKFIELD TOWN OF		B09177	150	30,000

2.5 SEWER OPTIONS COMPARISON

Table 2-5 presents a comparison of the four sewer options for the Peninsula and Non-Peninsula High Density areas. The hybrid septic tank effluent STEP/STEG option is the most cost-effective option on the Peninsula area and the all-STEP option is the most cost-effective option for the Non-Peninsula HD areas. For the NP-HD area, the difference between the hybrid and all-STEP options is due to the considerable length of required overlapping gravity sewer and force main. The Sewer Assessment is computed by dividing the estimated capital cost by the Total Grand List Value. The difference in the preliminary sewer assessment % for NP-HD versus the Peninsula properties is that the Peninsula properties have an average GLV that is 15% higher than NP-HD properties and that the sewer cost per parcel for the Peninsula is 13% lower due to its higher density.

Table 2-5 Peninsula & Non-Peninsula HD Sewer Options – Cost Estimates

	Total Grand	Hyb	orid	All Low F	Pressure	WWTF	Options		ost with EG Sewer	Prelim Sew Assessm	ver nent (%
Item	List Value (2016)	STEP / STEG	Gravity	STEP	Grinder	Danbury Conn.	In- Brookfield	Danbury Conn.	In- Brookfield	of 2016 Danbury Conn.	,
Total Capital Costs, Peninsula	\$224,541,000	Total \$17,499,000	Total \$23,481,000	Total \$19,091,000	Total \$22,301,000	\$734,000	\$5,421,000	\$18,233,000	\$22,920,000	8.1%	10.21%
Total Capital Costs, Non-Peninsula HD	\$56,058,000	\$6,325,000	\$8,687,000	\$5,523,000	\$6,074,000	\$408,000	\$245,000	\$5,931,000	\$5,768,000	10.6%	10.29%
Yellow shaded option	is least cost	Cost es	timates are +	-/- 20 %							

Appendix B Table B-1 provides a detailed sewer system cost estimate for the STEP/STEG hybrid sewer option. Appendix B Table B-2 provides a detailed sewer system cost estimate for the GP/Conventional gravity option. All cost estimates are +/- 20%.



2.6 SEWER SYSTEM RECOMMENDATION

To minimize long term Operations & Maintenance costs and to maximize the number of properties with a gravity connection, the recommended sewer system is:

Peninsula

Hybrid Septic Tank Effluent low-pressure & gravity

In the future, if there is a need for a sewer in the Non-Peninsula High Density area, the recommended sewer system is:

Non-Peninsula High Density Area Hybrid Septic Tank Effluent low-pressure & gravity

Table 2-5 presents the cost estimate and proposed assessment for the recommended Peninsula sewer with Danbury treatment system option. Figure 2-3 presents the recommended sewer system layout.

2.7 FORCE MAIN

The force main is the sewer length from the Peninsula & Non-Peninsula High Density Area to the candidate treatment / disposal locations of:

- Danbury WWTP connection at the Huckleberry Hill Elementary School on 100 Candlewood Lake Road. The connection is approximately 10,400 feet from the Peninsula discharge point, or 3,800 feet from the southern point of the NP-HD service area. The highest elevation along the Candlewood Road route is approximately 555 feet just north of the intersection of Candlewood Road and Pleasant Rise, 6,000 feet from the Peninsula. The surface elevation at the Peninsula discharge is approximately 460 feet, with a 400-foot surface elevation at the School.
- New Milford WWTP connection at Federal Road at New Milford The Brookfield border. Connection is approximately 14,800 feet from the Peninsula discharge point or 12,500 feet from the northern point of the NP-HD service area. The highest elevation along the Candlewood Road North Mountain Road route is approximately 530 feet at the intersection of North Mountain Road and Woodcreek Road
- In-Brookfield Candidate Sites connection at 98 Laurel Hill Road and 20 North Mountain Road. Connection is approximately 8,300 feet from the Peninsula discharge point or 6,000 feet from the northern point of NP-HD service area. The highest elevation along the Candlewood Road North Mountain Road route is approximately 530 feet at the intersection of North Mountain Road and Woodcreek Road, 7,100 feet from the Peninsula. The surface elevation at the Peninsula discharge is approximately 460 feet, with a 290-foot surface elevation at the 98 Laurel Hill Road site.

Costs associated with the Danbury WWTP Connection option are included in the Section 2.5 cost analysis and Appendix Tables B-1 and B-2. Table B-1 includes force main to Huckleberry Hill Elementary School.



3 WASTEWATER TREATMENT - DISPOSAL OPTIONS

3.1 CONNECTION TO DANBURY WWTP

DANBURY HAS INDICATED THAT IT HAS THE CAPACITY AND IS INTERESTED IN accepting THE ADDITIONAL WASTEWATER FROM THE CANDLEWOOD LAKE DRAINAGE AREA Based upon a March 5, 2020 meeting between the chairman of the Brookfield WPCA with Brookfield First Selectman and Danbury Mayor. The Danbury Wastewater Treatment Plant (WWTP) connect fee has historically been \$1,000 per equivalent dwelling unit (i.e. 200 gpd), which is approximately \$5/gpd of capacity.

3.2 CONNECTION TO NEW MILFORD WWTP

New Milford has indicated that it has the capacity and is interested in receiving wastewater from the Candlewood Lake Drainage Area. An April 25, 2020 meeting with the Chairman of the Brookfield WPCA and Chairman of the WPCA of New Milford has been scheduled.

Appendix C presents the Fact Sheets from the Danbury and New Milford Discharge Permits.

3.3 DEVELOPMENT OF IN-BROOKFIELD WWTP AND DISPOSAL SYSTEM

For an in-Brookfield wastewater treatment and disposal system to be viable, the following are needed, in order of priority:

1. Disposal

- a. CT DEEP will consider issuing a direct discharge permit, otherwise:
- b. Technically viable sites with sufficient capacity to disperse treated wastewater need to be identified as well as an assurance that the needed site(s) can be procured.
- c. Land is also needed for the wastewater treatment system. An alternative approach is to use the same land for treatment and disposal.

2. Treatment

The expected CT DEEP direct or groundwater discharge permit requirements for the critical constituents are estimated at:

Total Nitrogen < 10 mg/L

Total Phosphorus < 1 mg/L

Which can be achieved with one of the following treatment systems:

- a. Conventional advanced wastewater treatment or
- b. Innovative/Alternative (I/A) Wastewater Treatment System
 - i. Producing effluent meeting permit requirements prior to disposal
 - ii. Achieving effluent requirements within the disposal system, such as with a permeable reactive barrier

Appendix D presents a detailed analysis of favorable candidate sites for an in-Brookfield WWTP. As noted therein, an in-Brookfield WWTP is not cost-effective as compared to connecting to the Danbury WWTP.



4 NON-PENINSULA LOW DENSITY AREA – WASTEWATER OPTIONS

The Non-Peninsula-Low Density (NP-LD) area of the of the Brookfield Candlewood drainage area has 421 developed residential properties (see Figure 1-1). The wastewater management recommendation for the NP-LD area at the present time is reliant on individual on-site wastewater treatment systems (OWTS). The degree to which wastewater improvements are made by adding phosphorus and possibly nitrogen removal to an OWTS should be evaluated (if deemed needed), after completion of the Peninsula and NP-HD areas wastewater improvement project and water quality impact studies. With a strategy to maximize removal of phosphorus discharges in the Candlewood Lake drainage area, development/demonstration of OWTS phosphorus removal techniques is suggested. To implement this suggestion will require permitting from CT DEEP.

Potential OWTS Phosphorous Removal Solutions

The following is a brief description of phosphorus removal techniques that could be integrated with OWTS. It is noted that, at the present time, CT DoH does not permit these OWTS enhancements and a permit from CT DEEP would be required. Based upon previous discussions, CT DEEP may permit the implementation of OWTS phosphorus removal systems via the WPCA.

- Alum addition to the wastewater stream into the septic tank resulting in phosphorus removal in the septic tank. This option consists of an alum chemical feed system and the need for more frequent septic tank sludge removal, with every two (2) years being sufficient.
- 2. Iron addition via electrochemistry removes phosphorus by the precipitation of iron-phosphate minerals. Natural iron electrodes are installed in a tank after a treatment system and a small current is applied to the electrodes. The iron then dissolves into the sewage stream where it reacts with phosphorus to form highly stable and insoluble iron-phosphate minerals. This technique requires a wastewater treatment system in addition to the iron electrodes for phosphorus removal.
- 3. **Iron addition via placement in drainfield soils** By adding iron oxides to drainfield soils, iron-phosphate minerals are precipitated via anaerobic and aerobic processes. This would enhance the processes that are occurring in Brookfield Candlewood Lake watershed soils.
- 4. **Iron addition via Reductive Iron Dissolution** Iron is added to the wastewater stream via solubilizing solid iron in anaerobic conditions by Reductive Iron Dissolution (RID), which produces ferrous (Fe²⁺) and mineralizes phosphate as vivianite. Upon aeration, ferrous converts to ferric iron (Fe³⁺), which mineralizes with phosphate to produce strengite. A RID system consists of a placing the RID unit between the existing septic tank and drainfield.

Recommendations

Due to their simplicity and low cost, the following phosphorus removal systems are recommended for use in the NP-LD area:

- ✓ Alum addition to septic tank
- ✓ Iron addition to drainfields when drainfields are being repaired / new installations



5 RECOMMENDED WASTEWATER MANAGEMENT SYSTEMS

Based upon the analysis performed in previous chapters, the recommended Wastewater Management Facilities Plan for the Study Area consists of:

I. Sewer Option

Sewer the Peninsula with a hybrid septic tank effluent gravity and low-pressure system. Wastewater design flow of 150,000 gpd with an average flow of 80,000 gpd which includes an allowance of ~10% for growth/additional flows from current conditions.

- II. Connection to the Brookfield sewer system that discharges to the Danbury WWTP would be at the Huckleberry Hills School at 100 Candlewood Lake Road, approximately 10,400 feet from the southern edge of the proposed Peninsula sewer area.
- III. Demonstrate the efficacy of low-cost individual on-site wastewater treatment systems for phosphorus removal.
- IV. Implement Candlewood Lake water quality impact studies to document the improvements associated with the sewering efforts.

The estimated cost for the sewer system and for the Danbury Wastewater Treatment Plant connection is approximately \$18.25 million in 2020 dollars for a Peninsula only system.

If grants are not available to help fund the sewer project, property sewer assessments will be about 8.1% of the Grand List Value (GLV) for each property, payable over 20 years.

Without grants, for an average property GLV value of approximately \$276,000, the sewer assessment would be \$22,400 in 2020 dollars and, assuming 3% inflation per year for a 5-year implementation, approximately \$26,000 in 2025.

Appendix E lists all the properties on the peninsula and their estimated 2020 \$ sewer assessment.

6 IMPLEMENTATION PLAN - SCHEDULE

Figure 6-1 presents the steps and preliminary estimated schedule for implementation of the recommended sewer project. It is noted that the schedule is preliminary as it will depend upon the timing of approvals and grant requests, as well as delays caused by Covid-19.

	Proposed Brookfield Candl	ew	voo	d L	.ak	e '	Wa	teı	rsh	ed	S	ew	Proposed Brookfield Candlewood Lake Watershed Sewer Implementation Schedule														
Activity#	Description	N	lay-	20	J	un	-20	,	Jul	-20	1	Aug	j-20	s	ер	-20	О	ct-	-20	N	ov	-20	D	ec	:-20	Ja	n-21
1	Public Meeting on Project Findings & Recommendations																										
	Public Hearing																										
2	WPCA Adoption of Facilities Plan																										
3	Presentation to & Authorization by Board of Selectmen																										
4	Planning Commission Section 8-24 approval																										П
		J	an-	21	M	lar	-21	N	/lay	<i> </i> -21	ıŢ,	Jul	-21	S	ep.	-21	N	οv	-21	J	an	-22	N	laı	r-22	Ma	ay-22
5	DEEP Approvals & Agreement with Danbury WWTP																										
6	Presentation to & Authorization by Board of Selectmen for Financing																										
7	Finance Committee Review & Bond Counsel																										
8	Public Hearing																										
9	Town Bonding Referendum						-																				
		Α	ug-	22	С)ct	-22)ec	:-22	2 ,	Jan	-23	Α	pr-	23	J	un-	-23	Α	шg	-23	C	Oct	-23	De	ec-23
10	Design																										
11	Permitting																										
		Α	pr-	24	J	lul-	-24	A	\ug	j-2 4	1	Oct	-24	D	ec.	-24	M	lar-	-25	N	lay	-25	,	Jul	-25	Se	p-25
12	Construction																										
	Public Hearing on Assessments																				$\ \ $						

Figure 6-1 Brookfield Candlewood Lake Sewer Program Implementation Schedule

APPENDIX A BASIS OF SEWER RECOMMENDATIONS

The Task 2 Wastewater Needs Definition Report recommended that the Peninsula and NP-HD area be sewered based upon the following determinations of adverse impacts due to current and historical septic system practices:

1. Negative Impact on Candlewood Lake – septic system phosphorus and nitrogen contributions over the past 70+ years have accelerated the eutrophication of the Lake. The nutrient loads need to be significantly reduced in order to protect the quality of the Lake as an economic resource. The water quality of the Lake is at the "tipping point" after which its usefulness will decrease significantly. Candlewood Lake has experienced Harmful Algae Blooms (HAB) and invasive aquatic plants that adversely affect the Lake's use – much of which is caused by human activity – predominately septic systems.

The Candlewood Lake water quality data that has been collected for many years indicates that sediments are a significant source of phosphorus and nitrogen. The sediments are likely from dead algae that have accumulated during the past 70 +/- years. Sediments release phosphorus and nitrogen when the bottom waters become anaerobic (devoid of oxygen) usually caused by oxygen demand from sediment organic matter (i.e. dead algae). During spring and fall turnover bottom waters mix with surface waters and fuel algae blooms in the upper Lake waters where light penetrates. Section 4, in particular Tables 4-3 and 4-5, of the Task 1 Community Profile Report presents the historical data that supports this conclusion.

2. Negative Impact on Groundwater Drinking Water Aquifer – The water supply in the Peninsula is recipient of its wastewater. Drinking water quality is significantly adversely impacted by septic discharges with nitrate-nitrogen levels exceeding current drinking water standards. There are also high levels of PFAS species, PFOA and PFOS. These standards for drinking water are expected to become more stringent. Based upon the data and analysis in the Task 2 Report, it is clear that septic discharges represent a significant percentage of the Peninsula water supply. While a new water supply could address this matter, it will not address the other negative impacts of septic system use on the Lake and septic system difficulties associated with the challenging site conditions.

3. Insufficient Space

Lot Size - 28% of the lots are < 10,000 sf; 50% of the lots are < 15,000 sf **Zoning** - 7,000 sf

Health Code Compliance – approximately 25% of developed properties have insufficient space to accommodate a CT Department of Health (DoH) code compliant septic system. **Brookfield Board of Health Opinion** – In its letter of January 2018 presented on the next page, the Brookfield Health Department recommended a sewer system for the Peninsula.

4. **Malfunctioning Septic System** - approximately 27% of property owners who have returned the septic system questionnaire have reported a problem. Approximately 42% of developed property owners returned the questionnaire.





TOWN OF BROOKFIELD

BROOKFIELD, CT 06804

January 24, 2018

John Siclari
Director, Brookfield Water Pollution Control Authority
Brookfield Town Hall
100 Pocono Road
Brookfield, CT 06804

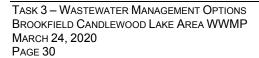
Re: Sanitary sewers for Brookfield's Candlewood Shores Lake communities

John:

The Brookfield Health Department recommends the Brookfield Water Pollution Control Authority (WPCA) take the necessary steps to provide sanitary sewers to the Candlewood Shores peninsula including the Candlewood Shores Tax District (CSTD), Arrowhead Point, Hickory Hills and Candlewood Orchards. The area has been highlighted in red as an "area of concern," on the WPCA's sewer map for several years now and with good reason. The small average lot size, the age of most of the homes, the fact that the vast majority of the homes were built for seasonal use and are now occupied year-round, and the environmental sensitivity associated with managing the relatively large volume of sewage on the relatively densely populated peninsula surrounded by Candlewood Lake must all be considered moving forward.

Average lot size on the peninsula is less than three-tenths of an acre. Due to the relatively restrictive sized lots, repairing septic systems often requires exceptions to technical standards of the Connecticut Public Health Code. In some of these repair instances, the final permits issued are required to state that the systems are undersized for the total number of bedrooms in the homes. Housing stock in the Shores is generally between 40 and 70 years old and homes still served by their original septic systems are likely near the end of their useful life, while many of the rest are on their second system. Most of the original septic systems were designed for seasonal use only and today most of the homes are occupied throughout the year. This means that many of the original systems are undersized relative to use expectancy. State and local health officials have recognized a significant rise in blue-green algal blooms in recent years. These blooms have the potential for causing harm to humans and wildlife. Nutrients such as phosphorus and nitrogen both sourced from septic system drain fields, along with landscape fertilizers, feed these blooms. Home values are tied to the recreational value of the lake which is impacted by water quality. Though sewage management is only one of several concerns regarding take water quality, it is not the least important, especially when considering several of the factors cited above.

Health Department - 100 Pocono Rd., Brookfield, CT 06804 (203) 775-7315



Environmental Engineers/ Consultants



TOWN OF BROOKFIELD

BROOKFIELD, CT 06804

John Siclari Director, Brookfield WPCA January 24, 2018 Page 2

The Health Department does not make this recommendation lightly. Four other neighboring municipalities, including the City of Danbury, all with homes bordering Candlewood Lake and therefore within the lake watershed, must also consider long term sewage management moving forward. The company that owns the lake, First Light, is determined to eliminate all septic systems that are on their property as some are, and this presents another concern for the Towns. At a recent seminar sponsored by First Light, an engineer for the company highlighted five Connecticut lakes that have been ordered by the State to sewer their lake communities. Now is the time for Brookfield to take up sanitary sewer expansion on behalf of our largest lake communities, those within the Candlewood Shores area, and on behalf of the lake itself.

Do not hesitate to call us at the number below with any questions or concerns moving forward.

Sincerely,

Paul Avery, R.S. Town Sanitarian Dr. Raymond Sullivan Director of Health

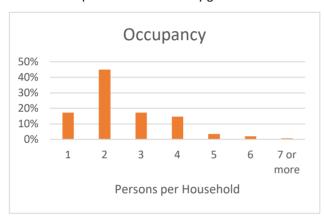
Steve Dunn, Brookfield First Selectman
 Alice Dew, Brookfield Land Use Director.



Septic Survey Candlewood Lake Watershed Properties – Brookfield, CT

There are 1371 properties in the Brookfield study area within the watershed of Candlewood Lake. Of these, approximately 70 are lots have an address only for tax purposes, leaving about 1300 improved properties eligible for the survey. The survey instrument can be viewed at https://brookfieldwpca.org/survey

The survey was active for four months from mid-November 2019 until mid-March 2020. It was sent out by mail with a self-addressed stamped reply envelope. The survey was also available online. A total of 575 unique submissions were received from improved properties—250 by mail and the remaining 325 electronically. That is a 42% return which pollsters consider very good. The results are statically significant allowing appropriate conclusions.



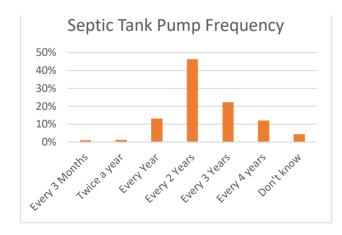
The survey showed that the occupancy of lake area properties is typically by two persons. The average is 2.4 persons per single family unit. The properties at 7+ are condos, hotel and group homes.

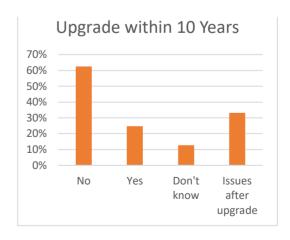
Of these properties 82% on the peninsula and 87% overall are occupied all four seasons. The remainder are used summer or two-seasons only. This is evidence of the transition from the use of properties from summer cottages back in the 50s, to year-round residences in the 90s. Currently the trend is to transition to high end residences in 2000s and beyond.

There was a question that asked: Laundry or shower in a separate septic location?

Of all respondents, over 15% indicated that they have a separate system for laundry. This is indicative of a significant inadequacy of soils to handle a septic system serving the remainder of the household. Separate systems have historically been added as a low-cost solution when the primary septic system capacity falls short.

The survey found that lightly less than half of all owners pump the septic system every other year. In general, septic systems are being serviced in appropriate frequency.

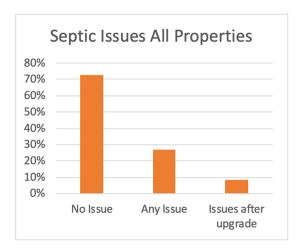


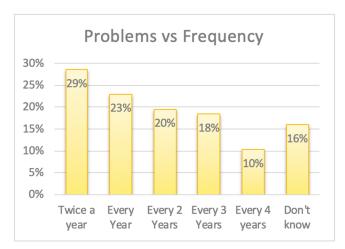


When queried if their septic system was upgraded within the last 10 years, one-quarter of the study area owners indicated **Yes**. And of those, more than 1/3 indicated there remain ongoing issues. This is a high rate of remediation. It also shows that septic repairs are often not effective due to low depth to rock and otherwise poor soil conditions for on-site wastewater treatment systems (OWTS).

Owners were asked if there were any issues with their system specifically with a history of slow drains, backups, smell, wetness, sewage on the surface or in a ditch and if the issues still exist. Over one-quarter, 27%, report one or more of these problems. This is a relatively high incidence of septic system issues for any jurisdiction.

Further, of those reporting septic system service due to a problem, one in three (33%) of those report an issue persists, that is 8% of the total septic system count.





It was interesting to correlate those reporting issues with the frequency of pumping. It indicates those that pump more frequently do so because it is needed.

Comments

At the presentation of the survey to property owners, it was promised the results would be assembled for statistical analysis only. That is the case and this is the report. But anecdotal feedback from the community was that some declined to participate because they did not want to indicate to the Town their septic system was troubled. If that is even partially true, then these results are optimistic. It is likely that a greater underlying wastewater problem than indicated by this survey.

One question that was not asked has to do with the observations of brown spots in the area of the septic drainfields. The system might not have slow drains, backups, smell, wetness, sewage on the surface or in a ditch, but brown spots indicate septic surface breakthrough distressing the lawn. That is observed on many properties.

Septic Technology Overview

A well-designed septic system will remove organic matter and eliminate bacteria. This is what it is designed to do. However, even if working properly, every septic system will still pass nutrients and what is referred to as "forever" chemicals. To what extent is this the issue?

The water supplies to the communities in the Candlewood Lake Brookfield watershed are provided by deep wells situated above the land where the community wastewater is serviced by septic systems. Part of the Clean Water Fund Study for Task 2 was to determine if there is septic influence in the drinking water. Drinking water contamination would also indicate if there is septic influence from ground water flow into the lake. Wells suppling Candlewood Shores and Arrowhead Point communities were tested.

It was found that the occurrence of e-coli and phosphorus was low. These contaminates are both generally removed by the soil as flow trickles down to the deep-water supply wells. However, that is not the case for nitrogen which is not bound by the soils. Levels of nitrogen approach and sometimes exceed the EPA actionable

limit of 10 ppm (parts per million). Of course, nitrogen from septic contamination is not only in the drinking water, but also a nutrient from septic systems feeding the Lake.

Another indicator is the finding of a persistent artificial sweetener in the water supply. Even more concerning is the presence of PFAS (polyfluoroalkyl substances) in the drinking water. These are considered "emerging" pollutants. Searching the Internet on "PFAS" will uncover a myriad of articles, papers and opinions. The response to PFAS contamination is determined by each state. So far, Connecticut has adopted the Federal EPA limits for a total PFAS allowed in drinking water. The EPA "lifetime" limit is 70 ppt (parts per trillion). That means someone can safely drink water with 70 ppt total PFAS all their life. Other states have set far more stringent limits at 10-20 ppt. At this writing Connecticut is still evaluating the issue. The wells in the Candlewood peninsula exceed the new lower limits adopted elsewhere. Testing shows PFAS contaminates are in both the deep well drinking water and the lake. See the data for the Candlewood peninsula taken from Appendix A1 of the Task 2 Report included below.

Summary and Conclusions

Task 2 of the Candlewood Lake Wastewater Management Plan shows there is clear evidence of contamination of the ground water from septic systems. For example, the drinking water is high in both nitrogen and PFAS. The tap water is also high in artificial sweetener Acesulfame K. This compound is not degraded in septic systems and can only come from septic discharge.

While phosphorus is normally retained by the soils, separate studies show that large rain events release both retained phosphorus and nitrogen into the lake. Limnologists, scientists that study biological, chemical, and physical features of lakes and other bodies of fresh water, agree that septic flow is a primary reason the quality of lakes generally decline due to the accumulation of nutrients.

Further, there is a high incidence of performance issues with septic systems in the form of slow drains, backups, smell, wetness, sewage on the surface or in a ditch. When problems are identified and septic systems serviced, about one in four continue to have issues. This is due to the geology of the peninsula—low depth to bedrock and soils that have poor drainage causing channeling of septage outflow.

No one argues that intercepting septic flow from entering the ground around the lake will not improve the lake. Candlewood is the largest lake in Connecticut and an important economic engine for Brookfield and the region. Like any other resource, the lake needs to be maintained.

Two stories:

Lake Kenosia. This is a small lake on the west side of Danbury. There is a trailer park adjacent to the lake that was on a septic system. In 2016 the area was put on the Danbury sewer system. In one year, Lake Kenosia turned from green to blue. The visual depth, that is the clarity, doubled.

Lake Hopatcong (huh-pat'-cong):

This is the largest lake in New Jersey. Last year (2019) the lake failed. The most likely cause is from decades of accumulated septic discharges in the heavily settled area around this popular lake. Many are large expensive properties in the watershed. News articles at the time reported that the algae bloom was so bad, officials warned against even touching the water. Vacation rentals cancelled, business shuttered with no customers, and homes with mortgages relying on rental income went into foreclosure. No one wishes this situation at Candlewood Lake.

Task 3 of the Wastewater Management Plan report recommends a sewer system be installed within the Brookfield peninsula. It also outlines a detailed sewer system plan to address the cleanup both the water supply and the lake.

The Candlewood Lake Brookfield Wastewater Management Study is partially sponsored by a Clean Water Fund Grant by Connecticut DEEP. For all the study reports see https://brookfieldwpca.org/candlewood.

DATA

A.1 Drinking Water Aquifer

Table 2-1 presents the results of water supply sampling with Table 2-2 presenting the drinking water quality data from the water suppliers annual reports. The Chain of Custodies and laboratory reports for the drinking water sampling program are presented in Appendix I.

Septic system influence is strongly suggested by the nitrate-N and PFOA/PFOS concentrations. While determining the amount of the water supplies that is wastewater derived is beyond the scope of this project, the phosphorus concentrations suggest very high levels of septic wastewater phosphorus removal by soils. In accordance with CT guidance, PFOA/PFOS was sampled for twice to confirm concentrations.

Table 2-1 Drinking Water Supply Quality Data

	Car	ndlewood L	ake Water Sup	plies - Drinkir	ng Water An	alysis		
Water Source			Candlewood Shores	Arrowhead	Aquarion Western	1	Lake	
Sampling Date			14-Aug-19	22-Aug-19	16-Sep-19	16-Sep-19	23-D	ec-19
	Units	RL				@ 76SLSD	@ 76SLSD	@ 74 NLSD
Alkalinity	mg/L as CaCO ₃	2	166	180				
Chloride	mg/L	10	94	93			33.1	35.1
pН	SU		7.1	7.5				
Nitrate-N	mg/L	0.100	6.99	6.85			0.67	0.99
TP	mg/L	0.010	0.015	0.017				
ortho-P	mg/L	0.005	0.016	0.018			<0.01	<0.01
Boron (1)	mg/L	0.030	0.054	0.038	ND	ND	<0.05	<0.05
Acesulfame K (2)	ppt-ng/L	100	532	1,040	204	102		
Sucralose ⁽³⁾	ppt-ng/L	1,000			1,900	ND		
Saccharin ⁽³⁾	ppt-ng/L	100			ND	ND		
PFOA	ppt-ng/L	1.72	24.6	8.14				
PFOS	ppt-ng/L	1.72	28.3	5.73				
PFOA/PFOS Total	ppt-ng/L	1.72	52.9	13.87				
			04-Sep-19	04-Sep-19	04-Sep-19	04-Sep-19		
PFOA	ppt-ng/L	1.72	20.3	8.69	10.7	3.71		
PFOS	ppt-ng/L	1.72	24.7	7.5	13.1	2.14		
PFOA/PFOS Total	ppt-ng/L	1.72	45.0	16.19	23.8	5.85		
(1) Sampled 4 Sept 201	19 (2) Level of Q	uantification	n (LOQ) ND=Non	Detect				

Table 2-2 Study Area Water Supply Quality from Annual Reports

	Water System	100	NO ₃ -N) Conc. ng/L)	772	n (Na) Conc. mg/L)	Chloride (CI) Conc. (mg/L)			
No.		MCL	Latest Actual	NL	Latest Actual	NL	Latest Actual		
1	Aquarion - Candlewood Acres		0.7		16.2		7		
2	Aquarion of Western Brookfield		3.5		53		53		
3	Arrowhead Point HO Ass'n		7.9		24.8		100		
4	Candlewood Lake Club		1.3		6.46		8.4		
5	Candlewood Orchards	10	0	28	9.9	250	3.4		
6	Candlewood Shores Tax District		7.5		31		31		
7	Food establishments on well -TNC								
8	Hickory Hills - Aquarion		0.5		8.1		7.1		
9	Woodcreek Village Condo Ass'n		0.7		18.7		129		
	MCL = Maximum Contaminant Level								
	NL = State of Connecticut customer notifican potentially affect those on a sodiur			vels of so	odium, coupled	with die	etary intake,		

APPENDIX B DETAILED SEWER COST COMPARISONS

Table B-1 Detailed Cost Estimate for Peninsula Area Sewer Options

						Peninsula Se	wer Opti	ons					
			Hyb	rid					All Low P	Pressure			
Item		STEP / STI	EG	Grir	nder / Conv	. Gravity		STEP		Grinder			
	Qty	Unit Cost	Total	Qty	Unit Cost	Total	Qty	Unit Cost	Total	Qty	Unit Cost	Total	
Septic Tanks - Replace	78	\$6,000	\$468,000	0	\$6,000	\$0	78	\$6,000	\$468,000	0	\$6,000	\$0	
Septic Tank Repair / Abandon / Convert to Grinder	78	\$1,000	\$78,000	704	\$2,000	\$1,408,000	78	\$1,000	\$78,000	704	\$2,000	\$1,408,000	
House Connections (LF)	14,080	\$40	\$563,200	14,080	\$40	\$563,200	14,080	\$40	\$563,200	14,080	\$40	\$563,200	
House Lateral Unpaved - Gravity (LF)	14,200	\$36	\$511,200	0	\$40	\$0	0	\$36	\$0	0	\$40	\$0	
House Lateral Paved - Gravity (LF)	5,325	\$36	\$191,700	0	\$40	\$0	0	\$36	\$0	0	\$40	\$0	
House Lateral Unpaved - Pressure (LF)	13,960	\$36	\$502,560	28,160	\$40	\$1,126,400	28,160	\$36	\$1,013,760	0	\$40	\$0	
House Lateral Paved-Pressure (LF)	5,235	\$36	\$188,460	10,560	\$40	\$422,400	10,560	\$36	\$380,160	10,560	\$40	\$422,400	
Pressure Connection Valve Assemblies	349	\$500	\$174,500	349	\$500	\$174,500	704	\$500	\$352,000	704	\$500	\$352,000	
Street Sewer (LF)	39,800	\$55	\$2,189,000	39,800	\$80	\$3,184,000	0	\$55	\$0	80	\$45	\$3,600	
Force Main (LF)	25,100	\$45	\$1,129,500	25,100	\$45	\$1,129,500	56,700	\$45	\$2,551,500	56,700	\$45	\$2,551,500	
Cleanouts	292	\$500	\$146,000	84	\$500	\$41,833	292	\$500	\$146,000	292	\$500	\$146,000	
Manholes	10	\$4,500	\$45,000	162	\$4,500	\$729,000	10	\$4,500	\$45,000	10	\$4,500	\$45,000	
House Pump Station (EA)	349	\$7,000	\$2,443,000	349	\$10,000	\$3,490,000	704	\$7,000	\$4,928,000	704	\$10,000	\$7,040,000	
Area Pump Station (EA)	5	\$180,000	\$900,000	5	\$200,000	\$1,000,000	0	\$180,000	\$0	0	\$200,000	\$0	
Asphalt cut, remove / replace (SY)	23,440	\$60	\$1,406,400	23,440	\$60	\$1,406,400	23,440	\$60	\$1,406,400	23,440	\$60	\$1,406,400	
Subtotal			\$10,937,000			\$14,675,000			\$11,932,000			\$13,938,000	
Miscellaneous		10%	\$1,094,000		10%	\$1,468,000		10%	\$1,193,000		10%	\$1,394,000	
Contingency		20%	\$2,187,000		20%	\$2,935,000		20%	\$2,386,000		20%	\$2,788,000	
Admin, Legal, Engin. Services		30%	\$3,281,000		30%	\$4,403,000		30%	\$3,580,000		30%	\$4,181,000	
Total Capital Costs, Peninsula			\$17,499,000			\$23,481,000			\$19,091,000			\$22,301,000	

Note: Force main costs associated with the Danbury system connection option are included. Costs estimates are +/- 20%.

Table B-2 Detailed Cost Estimate for Non-Peninsula High Density Area Sewer Options

						Non-Penins	ula HD Sev	wer				
			Hyl	orid			All Low Pressure					
Item	STEP	/ STEG - O	ption 1	Grinder / Conv.		Gravity		STEP			Grinde	•
	Qty	Unit Cost	Total	Qty	Unit Cost	Total	Qty	Unit Cost	Total	Qty	Unit Cost	Total
Septic Tanks - Replace	21	\$6,000	\$126,000	0	\$6,000	\$0	21	\$6,000	\$126,000	0	\$6,000	\$0
Septic Tank Repair / Abandon / Convert to Grinder	21	\$1,000	\$21,000	179	\$2,000	\$358,000	21	\$1,000	\$21,000	179	\$2,000	\$358,000
House Connections (LF)	3,580	\$40	\$143,000	3,580	\$40	\$143,000	3,580	\$40	\$143,000	3,580	\$40	\$143,000
House Lateral Unpaved - Gravity (LF)	7,160	\$36	\$258,000	0	\$40	\$0	0	\$36	\$0	0	\$40	\$0
House Lateral Paved - Gravity (LF)	2,685	\$36	\$97,000	0	\$40	\$0	0	\$36	\$0	0	\$40	\$0
House Lateral Unpaved - Pressure (LF)	4,560	\$36	\$164,000	11,720	\$40	\$469,000	11,720	\$36	\$422,000	0	\$40	\$0
House Lateral Paved - Pressure (LF)	1,710	\$36	\$62,000	4,395	\$40	\$176,000	4,395	\$36	\$158,000	4,395	\$40	\$176,000
Pressure Connection Valve Assemblies	114	\$500	\$57,000	114	\$500	\$57,000	179	\$500	\$90,000	179	\$500	\$90,000
Street Sewer (LF)	19,267	\$55	\$1,060,000	19,267	\$80	\$1,541,000	0	\$55	\$0	0	\$45	\$0
Force Main (LF)	14,775	\$45	\$665,000	14,775	\$45	\$665,000	24,367	\$45	\$1,097,000	24,367	\$45	\$1,097,000
Cleanouts (#)	139	\$500	\$70,000	139	\$500	\$70,000	139	\$500	\$70,000	139	\$500	\$70,000
Manholes (#)	4	\$4,500	\$18,000	79	\$4,500	\$356,000	4	\$4,500	\$18,000	4	\$4,500	\$18,000
House Pump Station (#)	114	\$7,000	\$798,000	114	\$10,000	\$1,140,000	179	\$7,000	\$1,253,000	179	\$10,000	\$1,790,000
Area Pump Station (#)	2	\$180,000	\$360,000	2	\$200,000	\$400,000	0	\$180,000	\$0	0	\$200,000	\$0
Asphalt cut, remove / replace (SY)	900	\$60	\$54,000	900	\$60	\$54,000	900	\$60	\$54,000	900	\$60	\$54,000
Subtotal			\$3,953,000			\$5,429,000			\$3,452,000			\$3,796,000
Miscellaneous		10%	\$395,000		10%	\$543,000		10%	\$345,000		10%	\$380,000
Contingency		20%	\$791,000		20%	\$1,086,000		20%	\$690,000		20%	\$759,000
Admin, Legal, Engin. Services		30%	\$1,186,000		30%	\$1,629,000		30%	\$1,036,000		30%	\$1,139,000
Total Capital Costs			\$6,325,000			\$8,687,000	\$5,523,000				\$6,074,000	

Note: These costs are additional costs and assume that the Peninsula system is being implemented. One property has 24 condominium units. Costs estimates are +/- 20%.

Table B-3 Cost Estimates – Unit Prices

	STEP/STEG	Conv. Grav. / Grinder	All STEP	All Grinder	Comparison - Langan D&P Estimate
Septic Tanks - Replace	\$6,000	\$6,000	\$6,000	\$6,000	n/a
Septic Tank Repair / Abandon / Convert to Grinder	\$1,000	\$2,000	\$1,000	\$2,000	n/a
House Connections - 6" PVC (LF)	\$40	\$40	\$40	\$40	
House Lateral Unpaved - 6" PVC Conv. 4" PVC STEG Gravity (LF)	\$36	\$40	\$36	n/a	\$40
Pressure Connection Valve Assemblies	\$500	\$500	\$500	\$500	n/a
Street Sewer - 8" PVC Conv. 4" PVC STEG Gravity (LF)	\$55	\$80	\$55	\$45	\$70 - \$200 for 8" pipe, 0-20' deep
Force Main 3" PVC SCH 80 (LF)	\$45	\$45	\$45	\$45	\$45
Cleanouts, PVC (EA)	\$500	\$500	\$500	\$500	n/a
Manholes - 0'- 8' Deep	\$4,500	\$4,500	\$4,500	\$4,500	\$4,000 - \$5,000
House Pump Station, Grinder / STEP (EA)	\$7,000	\$10,000	\$7,000	\$10,000	n/a
Area Pump Station (EA)	\$180,000	\$200,000	n/a	n/a	\$213,500
Asphalt cut, remove / replace - 16" Subbase, 4" Binder Course (SY)	\$60	\$60	\$60	\$60	\$160 / Ton Binder, \$50/CY Subbase (Approx. \$56/SY)
Miscellaneous Additional Work / Traffic Control / Erosion Control		30% of Const		Approx. 30% of Const. Cost	

APPENDIX C DANBURY & NEW MILFORD WWTPS PERMITS FACT SHEETS

DANBURY WWTP PERMIT FACT SHEET

DATA TRACKING AND TECHNICAL FACT SHEET

Permittee: City of Danbury

PERMIT, ADDRESS, AND FACILITY DATA PERMIT #: CT0100145 APPLICATION #: 200702097 FACILITY ID. 034-001 Mailing Address: City of Danbury Location Address: Street: 155 Deer Hill Road Street: Newtown Road City: Danbury ST: CT Zip: 06810 City: Danbury ST: CT Zip: 06810 Contact Name: Walter Royals (Veolia Water) Contact Name: David Day Phone No.: 203-797-4539 203-748-9116 Phone No.: DMR/MOR contact information: Walter Royals, Veolia Water (203) 748-9116 walter.royals@veoliawatema.com PERMIT INFORMATION DURATION 5 YEAR X 10 YEAR 30 YEAR TYPE New_ Reissuance X Modification CATEGORIZATION POINT (X) NON-POINT () GIS# NPDES (X) PRETREAT () GROUND WATER(UIC) () GROUND WATER (OTHER) () NPDES MAJOR(MA) X NPDES SIGNIFICANT MINOR or PRETREAT SIU (SI) NPDES or PRETREATMENT MINOR (MI) ____ COMPLIANCE SCHEDULE YES X NO POLLUTION PREVENTION _ TREATMENT REQUIREMENT_ WATER QUALITY REQUIREMENT OTHER OWNERSHIP CODE Municipal (town only) X Private __ Federal __ State __ Other public_ DEP STAFF ENGINEER Stacy Pappano PERMIT FEES DSN Number Discharge Code Annual Fee 111000g 001 \$3,005.00 FOR NPDES DISCHARGES Drainage Basin Code: Water Quality Classification Goal: B 6606 Segment: 6606-00-3 NATURE OF BUSINESS GENERATING DISCHARGE Municipal Sanitary Sewage Treatment

PROCESS AND TREATMENT DESCRIPTION (by DSN)

Secondary treatment with denitrification and seasonal disinfection

RESOURCES USED TO DRAFT PERMIT

	Pederal Effluent Limitation Guideline 40CFR 133 Secondary Treatment Category
_	Performance Standards
– <u>X</u>	Federal Development Document name of category Department File Information
_X	Connecticut Water Quality Standards
X	Anti-degradation Policy
	Coastal Management Consistency Review Form
	Other - Explain

BASIS FOR LIMITATIONS, STANDARDS OR CONDITIONS

- X Secondary Treatment (Section 22a-430-4(r) of the Regulations of Connecticut State Agencies)
- X Case-by-Case Determination (See Other Comments)
- X In order to meet in-stream water quality (See General Comments)
- X Anti-degradation policy

GENERAL COMMENTS

The City of Danbury ("Danbury") operates a municipal water pollution control facility ("the facility") located at Newtown Road, Danbury. The facility is designed to treat and discharge up to 15.5 million gallons a day of effluent into Limekiln Brook. The facility currently uses advanced biological treatment, including denitrification and seasonal chlorine disinfection with dechlorination to treat effluent before being discharged. Pursuant to Conn. Gen. Stat. § 22a-430, the Department of Energy and Environmental Protection ("the Department") has issued Danbury a permit for the discharge from this facility. Danbury has submitted an application to renew its permit. The Department has made a tentative determination to approve Danbury's application and has prepared a draft permit consistent with that determination.

The most significant changes from the current permit are the addition of: chronic aquatic toxicity testing, limits on e. coli and limits on total phosphorus along with a compliance schedule for implementation of improvements to meet those new limits.

SPECIFIC REQUIREMENTS OR REVISIONS

The Department reviewed the application for consistency with Connecticut's Water Quality Standards and determined that with the limits in the draft permit, including those discussed below, that the draft permit is consistent with maintenance and protection of water quality in accordance with the Tier I Anti-degradation Evaluation and Implementation Review provisions of such Standards.

The need for inclusion of water quality based discharge limitations in this permit was evaluated consistent with Connecticut Water Quality Standards and criteria, pursuant to 40 CFR 122.44(d), Danbury discharge monitoring data was evaluated for consistency with the available aquatic life criteria (acute and chronic) and human health (fish consumption only) criteria. In addition to this review, the statistical procedures outlined in the EPA Technical Support Document for Water Quality-based Toxics Control (EPA/505/2-90-001) were employed to calculate the need for such limits. Comparison of monitoring data (see attached) and its inherent variability with the calculated water quality based limits indicates a statistical probability of exceeding such limits. Therefore, water quality based

limits for lead are included in the draft permit.

Permit limits for copper, zinc, chlorine, and ammonia were derived from the Total Maximum Daily Load (TMDL) established by the Department for segment of Limekiln Brook not meeting water quality standards, pursuant to the requirements of Section 303(d) of the Federal Clean Water Act. The TMDL includes a waste load allocation (WLA) to the Danbury Water Pollution Control Facility ("WPCF") for each of the aforementioned parameters. These permit limits were calculated from the waste load allocations consistent with EPA's Technical Support Document for Water Quality-based Toxics Control (EPA/505/2-90-001). Limits are expressed in the permit as concentrations for all parameters based on the long-term average treatment plant performance required to consistently meet the wasteload allocation for each parameter. Mass limits were converted to concentration units by dividing the calculated mass limit by the critical treatment plant flow used to develop the TMDL (13.15cfs for WLA that apply year round and 14.06cfs for WLA that apply during the winter only). Past monitoring data submitted by the Danbury WPCF was used to estimate expected variability in effluent quality (coefficient of variation (CV) = 0.3 for copper and zinc; CV = 1.2 for ammonia). Limits for ammonia included in the previous permit were more restrictive than TMDL/WLA – based limits for the period June through September. These limits were retained in this permit as required by the anti-backsliding provisions in section 22a-430-4(l)(4)(A) of the Regulations of Connecticut State Agencies.

The draft permit also includes performance-based limits for chlorine reflecting the expected operation of the dechlorination system from May 1" through and including September 30th each year. The Department considers compliance with the performance-based limits for chlorine sufficient to meet the WLA for chlorine established in the TMDL.

Another condition is included in this permit:

Minimum Levels (ML) are established for several parameters noted with an asterisk in Table C of the draft permit that require the use of sensitive analytical methods and clean sampling techniques for monitoring effluent quality.

A compliance schedule is included for the reduction of phosphorus in the effluent as follows:

Currently, the facility discharges into a portion of Limekiln Brook that has been identified on Connecticut's List of Waters Not Meeting Water Quality Standards. Nutrient enrichment is a contributing cause of the impairment to this portion of Limekiln Brook. To address this impairment, the Department developed an interim nutrient management strategy for freshwater non-tidal streams. The strategy focuses on phosphorus, since phosphorus is the primary limiting nutrient in freshwater systems. The draft permit includes a compliance schedule that will reduce phosphorus in the effluent from the facility in two steps. The initial step, beginning in 2013, is for Danbury to meet a limit applicable during April through and including October. The limit, calculated over the season, is 0.6mg/l per month and in addition, during this season, Danbury's average monthly discharge cannot exceed 0.6 mg/l for two consecutive months. The Department anticipates that Danbury will continue chemical treatment to meet this initial limit. The second step provides Danbury nine years to plan, design and construct additional facility improvements to meet a more stringent water quality standard based limit discussed below.

This compliance schedule should provide environmental benefits. Currently, the facility has a varying seasonal limit on phosphorus in its effluent. As such, the initial technology-based limit noted above, will result in a meaningful reduction in the amount of phosphorus being discharged into Limekiln Brook by the facility. Providing this level of phosphorus removal now and allowing an extended schedule to meet a more stringent water quality standards based limits provides an environmental benefit significantly above that had the Department not imposed any interim limit and required the more stringent limit to be met within one permit cycle.

This environmental benefit will also be achieved in a timely manner. Danbury is part of a coalition of towns that have reached agreement on a schedule that will result in environmental improvements. The benefits of this agreement mean that real reductions in the amount of phosphorus discharged into Limekiln Brook will not be delayed by administrative hearings and possibly other legal action.

The Department also notes that the proposed compliance schedule is site specific; it is based upon and limited to the particular circumstances present in this situation. It is not, and is not intended to be, a blueprint for any other facility. Rather, the Department will assess the need for and propose the use of a compliance schedule based on the particular circumstances of each situation. In this situation, for reasons discussed in this fact sheet, the proposed

compliance schedule is warranted.

The lower water quality standard based limits for phosphorus was calculated in the following manner:

A nutrient watershed analysis was conducted for the Limekiln Brook watershed that indicated significant phosphorus loading contributions from the Danbury WPCF into the river. The seasonal (April 1st through October 31st) nutrient loading from this facility discharging to the watershed was reduced to achieve an enrichment factor of 8.4 or lower throughout the brook. An EF is representative of the amount of anthropogenic phosphorus loading to river and streams. It is calculated by dividing the current total seasonal phosphorus load by a modeled total phosphorus load under complete forested conditions at a particular point along the river. The goal of an 8.4 enrichment factor represents a threshold at which a significant change is seen in the algal communities indicating highly enriched conditions and impacts to aquatic life uses.

The current enrichment factor at the Danbury WPCF discharge is 89.8. The final proposed seasonal load allocation for Danbury WPCF is 7.55 lbs/day. This load equates to a proposed treatment performance limit of 0.10 mg/l multiplied by the current seasonal average flow of 9.05 MGD.

This limit is consistent with the narrative policy statements in the CT WQS (Paragraph 19, page 6 and SURFACE WATER CLASSIFICATIONS AND CRITERIA, CLASS B DESIGNATED USES AND CRITERIA, page 12) and where the facility discharges its effluent is expected to result in the attainment and maintenance of all designated uses for that portion of Limekiln Brook. If the Department develops numeric criteria in the future, or it is found that the current limit is not sufficient to achieve designated uses, the facility may need to meet a more stringent limit.

Translating the average performance level of 7.55 lbs/day into enforceable permit limits requires consideration of effluent variability and frequency of monitoring in order to comply with federal permitting regulations. The procedure used is as follows:

- 1. Consider the permit performance level (0.10 mg/l) to be equivalent to the Long Term Average (LTA)
- Calculate the Maximum Daily Limit by multiplying the LTA by the 99th percentile LTA Multiplier appearing in Table 5-2 of the Technical Support Document (page 103 of EPA/505/2-90-001) corresponding to a CV (co-efficient of variation) of 0.6% to account for effluent variability:

Maximum Daily Limit: 0.10 mg/l * 3.11 = 0.311 mg/l

3. Calculate the Average Monthly Limit by multiplying the LTA by the 95th percentile LTA Multiplier appearing in Table 5-2 of the Technical Support Document corresponding to a CV of 0.6% to account for effluent variability and either n=4 samples/month or n=10 samples/month as appropriate for the facility to account for the precision of estimating the true monthly average based on an average for the days the effluent was sampled:

Average Monthly Limit: 0.10 mg/l * 1.38 = 0.138 mg/l

Summary of Limits for Danbury: Average Daily Load = 7.55 lbs/day Total Seasonal Load = (7.55 lbs/day * 214 Days/Season) = 1,615.7 Maximum Daily Limit = 0.31 mg/l Average Monthly Limit = 0.14 mg/l

(With respect to the foregoing summary of limits, it should be noted that compliance with the Maximum Daily Limit or the Average Monthly Limit during the time the seasonal load limit is calculated will not ensure compliance with the Total Seasonal Load limit. For example, if the Permittee discharged phosphorus at the maximum permitted by either the Maximum Daily Limit or the Average Monthly Limit throughout the time that the seasonal load is calculated, the Permittee would exceed the Total Seasonal Load limit. For this reason, the Permittee must monitor compliance with the Total Seasonal Load limit independent of its compliance with the Maximum Daily Limit and the Average Monthly Limit.

NEW MILFORD WWTP PERMIT FACT SHEET

DATA TRACKING AND TECHNICAL FACT SHEET

Permittee: Town of New Milford

PERMIT, ADDRESS, AND FACILITY DATA

PERMIT #: CT0100391 APPLICATION #: 2017033	250 PACH ITV ID + 005-001
AFFLICATION #: 201703.	
Mailing Address:	Location Address:
Street: 123 West Street - P.O. Box 178	Street: 123 West Street
City: New Milford ST: CT Zip: 06776	City: New Milford ST: CT Zip: 06776
Contact Name: Mike Ducey	Contact Name: Mike Ducey
Phone No.: 860-355-1049	Phone No.: 860-355-1049
	DMR Contact email address: mducey@nmwpca.org
PERMIT INFORMATION DURATION 5 YEAR X 10 YEAR	30 YEAR
TYPE New_ Reissuance X Modi	ification
CATEGORIZATION POINT (X) NON-POINT	() GIS#
NPDES (X) PRETREAT () GROUND WA	TER (UIC) () GROUND WATER (OTHER) ()
NPDES MAJOR (MA) <u>X</u> NPDES SIGNIFICANT MINOR <u>or</u> PRETREA NPDES <u>or</u> PRETREATMENT MINOR (MI) _	, , , , , , , , , , , , , , , , , , , ,
COMPLIANCE SCHEDULE YES NO X POLLUTION PREVENTION TREATMENT REQU WATER QUALITY REQUIREMENT OTHER	UIREMENT_
OWNERSHIP CODE Private Federal State Municipal (town or	nly) X Other public
DEP STAFF ENGINEER Syed Bokhari DAT	E DRAFTED: June 30, 2017
PERMIT FEES	
Discharge Code DSN Number Annual Fee	
I11000c 001-1 \$2367.50	
APPLICATION FEE PAID X YES 4/7/2017 PROCESSING FEE PAID X YES 6/12/2017 ANNUAL FEE PAID X YES 7/6/2018	
PUBLIC NOTICE Date of Public Notice: December 24, 2018	
Date Permit Cleared Public Notice: <u>January 24, 2019</u>	
Date Public Notice Fees Paid: January 29, 2019	

FOR NPDES DISCHARGES

Drainage Basin Code: 6000

Water Quality Classification Goal: B Segment: Housatonic River - 17/18

NATURE OF BUSINESS GENERATING DISCHARGE

Municipal Sanitary Sewage Treatment

PROCESS AND TREATMENT DESCRIPTION (by DSN)

001-1: Secondary biological treatment and seasonal phosphorous removal and UV disinfection

RESOURCES USED TO DRAFT PERMIT Federal Effluent Limitation Guideline 40CFR 133 Secondary Treatment Category	
Performance Standards	
Federal Development Document	
name of category X Department File Information	
X Connecticut Water Quality Standards	
X Anti-degradation Policy	
_ Coastal Management Consistency Review Form	
Other - Explain	
BASIS FOR LIMITATIONS, STANDARDS OR CONDITIONS X Secondary Treatment (Section 22a-430-4(r) of the Regulations of Connecticut State Agencies)	
Case-by-Case Determination (See Other Comments)	
In order to meet in-stream water quality (See General Comments)	
Anti-degradation policy	
GENERAL COMMENTS The Town of New Milford ("Permittee") operates a municipal water pollution control facility ("the facility") located at 123 West Street, New Milford, CT 06776. The facility is designed to treat and discharge up to 2.0 mili gallons a day of effluent into Housatonic River. The facility currently uses secondary treatment with UV disinfect to treat effluent before being discharged. Pursuant to Conn. Gen. Stat. § 22a-430, the Department of Energy and Environmental Protection has issued the town a permit for the discharge from this facility. The town has submitted an application to renew its permit. The Department has made a tentative determination to approve the town's application and has prepared a draft permit consistent with that determination.	tio d
Aluminum monitoring to be consistent with the most recent CT Water Quality Standards and Iron monitoring to consistent with EPA's National Recommended Water Quality Criteria have been carried over from the current	be

SUMMARY OF COMMENTS RECEIVED DURING THE PUBLIC NOTICE PERIOD AND THE DEPARTMENT'S RESPONSES

X The Department has received no written comments on the proposed action.
Staff has reviewed the written comments and responded to the comments, no significant permit changes have been made.
☐ The Department has received and Staff has reviewed written comments on the proposed action and made

significant changes as follows:

SPECIFIC REQUIREMENTS OR REVISIONS

The Department reviewed the application for consistency with Connecticut's Water Quality Standards and determined that with the limits in the draft permit, including those discussed below, that the draft permit is consistent with maintenance and protection of water quality in accordance with the Tier I Anti-degradation Evaluation and Implementation Review provisions of such Standards.

The need for inclusion of water quality based discharge limitations in this permit was evaluated consistent with Connecticut Water Quality Standards and criteria, pursuant to 40 CFR 122.44(d). Discharge monitoring data was evaluated for consistency with the available aquatic life criteria (acute and chronic) and human health (fish consumption only) criteria, considering the zone of influence allocated to the facility where appropriate. In addition to this review, the statistical procedures outlined in the EPA Technical Support Document for Water Quality-based Toxics Control (EPA/505/2-90-001) were employed to calculate the need for such limits. Comparison of the attached monitoring data and its inherent variability with the calculated water quality based limits indicates a low statistical probability of exceeding such limits. Therefore, no water quality based limits were included in the permit at this time.

A limit has been included in this permit to cap the phosphorus load this discharge is permitted for:

Phosphorus Permitting Approach

Phosphorus is a naturally occurring element that is essential to support plant growth. When present in excessive amounts, phosphorus can impair both aquatic life and recreational use of Connecticut's water resources. Excess nutrient enrichment is a serious threat to water quality in Connecticut. Excessive loading of phosphorus to surface waters as a result of discharges from wastewater treatment plants or non point sources such as runoff from urban and agricultural lands, can lead to algal blooms, including blooms of naxious blue green algae, reduction in water clarity, and in extreme cases depletion of axygen, fish kills, and other impairments to aquatic life. Currently, 21 water body segments have been identified on Connecticut's List of Waters Not Meeting Water Quality Standards where nutrient enrichment is a contributing cause of the impairment.

The Connecticut Water Quality Standards (WQS) do not include numeric criteria for nutrients but rather incorporate narrative standards and criteria for nutrients. These narrative policy statements direct the Connecticut Department of Environmental Protection to impose discharge limitations or other reasonable controls on point and non point sources to support maintenance or attainment of designated uses. In the absence of numeric criteria for phosphorus, the Department has developed an interim nutrient management strategy for freshwater non-tidal streams based on the narrative policy statements in the WQS to meet the pressing need to issue NPDES permits and be protective of the environment. The strategy includes methods that focus on phosphorus because it is the primary limiting nutrient in freshwater systems. These methods were approved by the United States Environmental Protection (EPA) in their letter dated October 26, 2010 as an interim strategy to establish water quality based phosphorus limits in non-tidal freshwater for industrial and municipal water pollution control facilities (WPCFs) national pollutant discharge elimination system (NPDES) permits.

The method in the interim strategy uses best available science to identify phosphorus enrichment levels in waste receiving rivers and streams that adequately support aquatic life uses. The methodology focuses on algal communities as the key aquatic life nutrient response variable and phosphorus enrichment factors that represent significant changes in communities based on data collected statewide. Ongoing work is currently being conducted to refine the approach through additional data collection and by expanding the methodology to include non-waste receiving streams. It is expected that the ongoing work will lead to numeric nutrient criteria for all freshwater rivers and streams in the next WQS review cycle. The current approach provides for a major statewide advancement in the level of phosphorus control that is expected to meet all freshwater designated uses. The adaptive nature of Connecticut's strategy allows for revisions to permit limits in future permit cycles without delaying action that we know needs to be taken today.

The current approach follows a watershed based framework incorporating many of the elements from the U.S. EPA Watershed –Based National Pollutant Discharge Elimination System (NPDES) Permitting Technical Guidance (2007). Consistent with the 2007 Guidance, the approach "explicitly considers the impact of multiple pollutant

sources and stressors, including nonpoint source contributions, when developing point source permits". Expected current conditions are based on the probability of excess phosphorus export from land cover and municipal and industrial facilities in the upstream drainage basin. Connecticut's policy for phosphorus management is translated into a numeric expression through geo-spatial and statistical analyses that determines the maximum acceptable seasonal phosphorus mass load per unit area of watershed contributing flow to the point of assessment.

The goal of the interim strategy is to achieve or maintain an enrichment factor (EF) of 8.4 or below throughout a watershed. An EF is representative of the amount of anthropogenic phosphorus loading to river and streams. It is calculated by dividing the current total seasonal phosphorus load by a modeled total phosphorus load under complete forested conditions at a particular point along the river. An enrichment factor is representative of the amount of anthropogenic phosphorus loading to rivers and streams. The goal of an 8.4 enrichment factor represents a threshold at which a significant change is seen in the algal communities indicating highly enriched conditions and impacts to aquatic life uses.

The analysis was conducted using benthic algae collected in rivers and streams throughout CT under varying enrichment conditions. The approach targets the critical 'growing' season (April through October) when phosphorus is more likely to be taken up by sediment and biomass because of low flow and warmer conditions. During winter months aquatic plants are dormant and flows are higher providing constant flushing of phosphorus through aquatic systems with a less likely chance that it will settle out into the sediment. Limiting the phosphorus export from industrial and municipal facilities offers a targeted management strategy for achieving aquatic life designated uses within a waterbody. The export of some phosphorus from facilities and other land sources is considered normal use of the land recognizing that humans are part of the environment.

A seasonal load was established by the Department for each facility discharging to non-tidal waters based on the current degree of enrichment of the receiving water body at the point of discharge and the facilities contribution to the total watershed enrichment at the point of discharge.

New Milford POTW Permit Requirements

A nutrient watershed analysis was conducted for the Housatonic River watershed below facilities discharging phosphorus into the river. The facilities discharging to the river include Housatonic River Main Stem Watershed: New Milford WPCF. The seasonal (April 1st through October 31st) nutrient loading from each facility discharging to the watershed was reduced to achieve an enrichment factor of 8.4 or lower throughout the river.

The current enrichment factor at the New Milford WPCF discharge is 5.3. The final proposed seasonal load allocation for New Milford WPCF is 5.76 lbs/day.

Federal regulations at 40 CFR 122.44(d) indicate that permit issuers are required to determine whether a given point source discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a narrative or numeric criteria within a State water quality standard after consideration of existing controls on point and non-point sources of pollution. If a discharge is found to cause an excursion of a numeric or narrative state water quality criterion, NPDES regulations implementing section 301(b)(1)(C) of the Clean Water Act provide that a permit must contain effluent limits as necessary to achieve state water quality standards. The limit in the permit and the strategy are consistent with the narrative policy statements in the CT WQS and are expected to result in the attainment and maintenance of all designated uses for the water body when the strategy is fully implemented. If the Department develops numeric criteria in the future, or it is found that the current limit under the strategy is not sufficient to achieve designated uses, the goal will be modified and the WPCF will be expected to meet the more stringent water quality goal.

Summary of Limits for New Milford WPCF:
Average Daily Load = 5.76 lbs/day
Total Seasonal Load = (5.76 lbs/day * 214 Days/Season) = 1232.64

APPENDIX D IN-BROOKFIELD WWTP AND DISPOSAL SYSTEM OPTIONS

Options Analysis

Within the Brookfield Candlewood drainage area, no feasible options exist due to:

- Direct discharge of treated wastewater to Candlewood Lake is not considered cost effective compared to discharging to the Danbury WWTP or in-Brookfield location. Such plans would also have significant permitting challenges.
- There are no significant reuse opportunities in the Candlewood Lake drainage area.
- As the soils/surficial geology of the Brookfield Candlewood drainage area are predominately glacial till, a site larger than 20 acres would be required. Groundwater mounding is a major restriction on subsurface discharge in glacial till areas and often is the determining factor in a site's disposal capacity. Therefore, there are no undeveloped properties in the Brookfield Candlewood drainage area that would be viable candidates.

Within Brookfield Still River watershed:

- As the soils/surficial geology of some areas within the watershed are sand or sand/gravels (areas west of the Still River), those areas would have high disposal capacities and groundwater mounding is not expected to limit site capacities.
- A number of undeveloped sites, many of which are owned by the CT DoT, with favorable soils / surficial geology and sufficient area exist in the northwestern portion of the Brookfield Still River watershed as described below.

D.1 In-Brookfield Candidate Sites

Table D-1 presents candidate sites and their characteristics. Figures D-1 and D-2 show the locations of the North Mountain Road and Elbow Hill Road Candidate Sites, respectively.

Figure D-3 shows the historical location of water supply wells near the Candidate Sites. Based upon a brief, initial survey, some of the wells will have been abandoned. Also, water supply distribution pipes are in Federal Way near the candidate sites. Consequently, nearby water supply wells should not deter the viability of the candidate sites.

For preliminary screening purposes, the soils of the candidate sites are described below.



Table D-1 In-Brookfield Wastewater Treatment/Disposal Candidate Locations

	Candidate Properties for an in-Brookkfield Wastewater Treatment System (ST-Drainfield-PRB) Candlewood Lake Study Area Requires 400,000+ sf; Dean Pocono Rd requires 20,000+ sf													
	Cand	lewood L	ake Study A			<u> </u>		Rd requ	ires 20,000+	sf				
					on via N	orth Mour	ntain Road	1	1					
Parcel Address	Owner	MBL	Account Number	Distance to Northern Peninsula (ft)	Approx. Usable Acreage	Approx. Usable (sf)	Cum Total (sf)	Approx. Site Surface Elev. (ft)	Approx. Elev Nearby Surface Water / Bedrock (ft)	Surficial Geology	Comments			
1044 Federal Road	CT DoT	C05018	10410000	10,400	2.815	122,620	122,620	250	234	Sands and	Wetland reduction of usable acreage by 50% included			
1044 Federal Road (S)	CT DoT	C05018	10410000	10,120	0.5	21,780	144,400	240	234	Gravels (S/G)				
6 Production Drive	CT DoT	C050161	7011000	10,120	1.25	54,450	198,850	240	234	(3, 3)				
1055 Federal Road	Brookfield North LLC	C04012	8609000	10,400	12.5	544,500	743,350	240	224	Sand over lying fines				
20 N. Mountain Rd	CT DoT	C06017	7507000	5,676	0.82	35,720	779,070	267	250	Sand				
98 Laurel Hill Road	CT DoT	C07034	3071000	6,150	7.13	310,580	1,089,650	285	266	S/G	Depth to rock may reduce usable area			
				Conne	ction vi	Elbow Hi	II Road			!				
Parcel Address	Owner	MBL	Account Number	Distance to Southern Peninsula (ft)	Approx. Usable Acreage	Approx. Usable (sf)	Cum Total (sf)	Approx. Site Surface Elev. (ft)	Approx. Elev Nearby Surface Water / Bedrock (ft)	Surficial Geology	Comments			
23 Elbow Hill Rd	ANTHONY PETRELLESE JR	D10014	8546000		2.87	125,020	125,020	315						
21 Elbow Hill Rd	22 Elbow Hill Rd LLC	D10013	5083000	3,500	0.87	37,900	162,920	326	297	Sand				
20 ELBOW HILL RD	ROGG MARCUS	D10022	10542000	-,	1.08	47,040	209,960	322]					
19A ELBOW HILL RD	MININO HOMES INC	D10019	5085000		2.03	88,430	298,390	315						

Candidate Properties for an in-Brookkfield Wastewater Treatment System (ST-Drainfield-PRB) Candlewood Lake Study Area Requires ~ 400,000+ sf; Dean Pocono Rd requires 20,000+ sf **Connection via North Mountain Road** Distance to Approx. **Cum Total** Surficial Northern Usable Soils - Types and Profile descriptions Parcel Address Peninsula Geology (sf) (sf) (ft) Charlton - For Hinckley profile see 1055 Federal Road 1044 Federal Road 10.400 122.620 122.620 Sands Ap-0 to 4 inches; fine sandy loam and 38E Hinckley gravelly sandy loam & Bw1-4 to 7 inches; fine sandy loam 73 Charlton-Chatfield complex Gravels 1044 Federal Road (S) 10,120 21.780 144.400 Bw2-7 to 19 inches; fine sandy loam (S/G) C—27 to 65 inches; gravelly fine sandy loam 10,120 54.450 198.850 6 Production Drive Ap—0 to 8 inches; fine sandy loam Bw1—8 to 14 inches; fine sandy loam 29B-Agawam fine sandy loam & Bw2-14 to 24 inches; fine sandy loam 2C—24 to 60 inches; stratified very gravelly coarse sand to fine sand Sand over Ap—0 to 8 inches; gravelly sandy loam 1055 Federal Road 10,400 544,500 743,350 lying fines Bw1—8 to 20 inches; very gravelly loamy sand Bw2—20 to 27 inches; very gravelly sand 38C—Hinckley gravelly sandy loam C1—27 to 42 inches; stratified cobbly coarse sand to extremely gravelly sand C2—42 to 60 inches; stratified cobbly coarse sand to extremely gravelly sand 20 N. Mountain Rd 5,676 35.720 779,070 29A—Agawam fine sandy loam Sand 308- Udorthents A—0 to 5 inches; loam 308 Udorthents, smoothed & C1—5 to 21 inches; gravelly loam S/G 305—Udorthents-Pits complex, gravelly C2—21 to 80 inches; very gravelly sandy loam 98 Laurel Hill Road 6,150 310,580 1,089,650 **Connection via Elbow Hill Road** Distance to Approx. Cum Total | Surficial Southern **Parcel Address** Usable Soils - Types and Profile descriptions Peninsula (sf) Geology (sf) (ft) 23 Elbow Hill Rd 125,020 125,020 29C—Agawam fine sandy loam & 38C—Hinckley gravelly sandy loam 21 Elbow Hill Rd 37,900 162,920 3.500 Sand see above 47,040 209,960 38C—Hinckley gravelly sandy loam 20 ELBOW HILL RD 29C—Agawam fine sandy loam & 38C—Hinckley gravelly sandy loam 19A ELBOW HILL RD 88.430 298,390





Figure D-1 North Mountain Road Candidate Sites

Figure D-2 Elbow Hill Road Candidate Sites

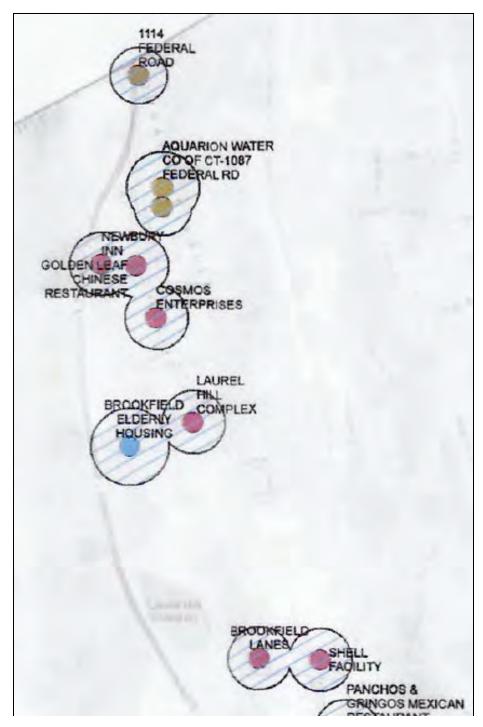


Figure D-3 Water Supply Wells Near Candidate Sites

D.2.1 In-Brookfield Candidate Sites - Soils

The candidate site soils and descriptions of their profiles are presented in Figures C-4 through C-7. All of the soils at these sites are very favorable for a disposal system or innovative treatment/disposal system using a permeable reactive barrier.



Figure D-4 Soil Types and Characteristics – 1055 Federal Road

29B—Agawam fine sandy loam, 3 to 8 percent slopes

Ap—0 to 8 inches; fine sandy loam Bw1—8 to 14 inches; fine sandy loam Bw2—14 to 24 inches; fine sandy loam

2C-24 to 60 inches; stratified very gravelly coarse sand to fine sand

Depth to bedrock: very deep Drainage class: well drained

Hydrologic group: B

38C—Hinckley gravelly sandy loam, 3 to 15 percent slopes

Ap—0 to 8 inches; gravelly sandy loam

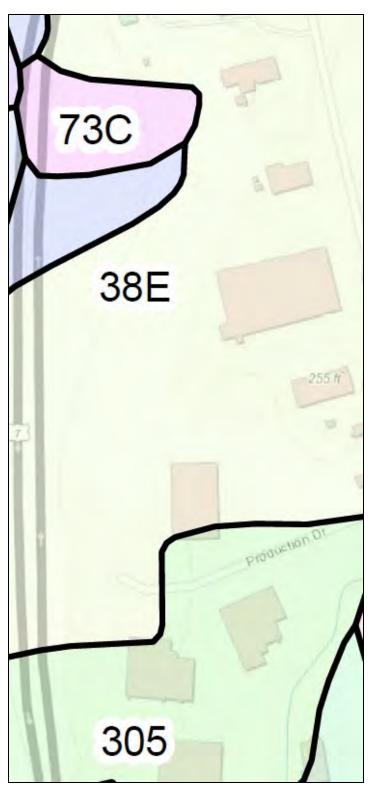
Bw1—8 to 20 inches; very gravelly loamy sand Bw2—20 to 27 inches; very gravelly sand

C1—27 to 42 inches; stratified cobbly coarse sand to extremely gravelly sand C2—42 to 60 inches; stratified cobbly coarse sand to extremely gravelly sand

Depth to bedrock: very deep

Drainage class: excessively drained

Hydrologic group: A



73C—Charlton–Chatfield complex, 3 to 15 percent slopes, very rocky

Ap—0 to 4 inches; fine sandy loam Bw1—4 to 7 inches; fine sandy loam Bw2—7 to 19 inches; fine sandy loam Bw3—19 to 27 inches; gravelly fine sandy loam C—27 to 65 inches; gravelly fine sandy loam

Depth to bedrock: very deep Drainage class: well drained

Hydrologic group: B

Figure D-5 Soil Types and Characteristics – 1044 Federal Road



Figure D-6 Soil Types and Characteristics - 98 Laurel Hill Road

308—Udorthents, smoothed

A—0 to 5 inches; loam

C1—5 to 21 inches; gravelly loam

C2—21 to 80 inches; very gravelly sandy loam

Depth to bedrock: very deep

Drainage class: moderately well drained

Hydrologic group: B

305—Udorthents-Pits complex, gravelly

A—0 to 5 inches; loam

C1—5 to 21 inches; gravelly loam

C2—21 to 80 inches; very gravelly sandy loam

Depth to bedrock: very deep

Drainage class: moderately well drained

Hydrologic group: B



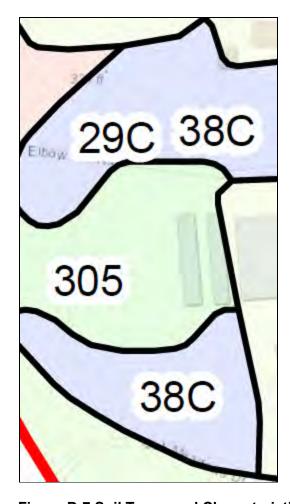


Figure D-7 Soil Types and Characteristics – Elbow Hill Road Sites

D.2 Treatment Technology That Achieves Effluent Requirements Within Disposal System

In a Septic Tank (ST) – Drainfield (D) – Permeable Reactive Barrier (PRB) System (ST-D-PRB),

- ✓ Septic tanks remain on individual properties with septic tank effluent (STE) being transported to an Equalization Tank for discharge to the drainfield at a D-PRB site;
- ✓ Drainfield A typical septic drainfield is designed in accordance with CT DoH/DEEP design guidance/regulations;
- ✓ PRB (Permeable Reactive Barrier) also referred to as Groundwater Treatment Facility (GWTF) - An in-situ groundwater treatment system that mitigates the spread of contaminants that have been difficult to remove with other methods. It consists of materials that remove nitrogen and phosphorus from the drainfield treated STE via biological denitrification, and phosphorus precipitation with iron, respectively. Alternately, phosphorus removal can occur by adding alum to the equalization tank, and periodic sludge removal.

Figure D-8 presents a schematic representation of a Drainfield – PRB system (see US EPA,https://www.epa.gov/sites/production/files/2015-04/documents/a citizens guide to permeable reactive barriers.pdf)



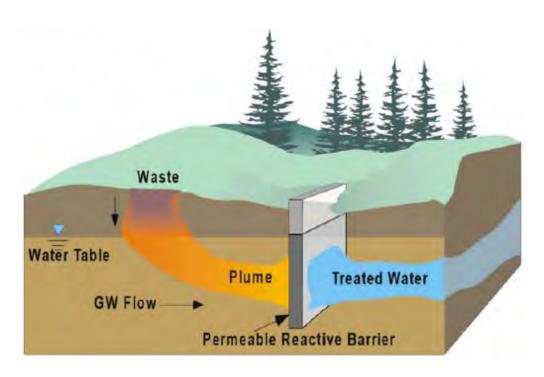


Figure D-8 Schematic Representation of Drainfield - PRB

For the ST-D-PRB option to be technically viable, site(s) with sufficient acreage and soils/surficial geology conditions need to be identified, evaluated and if deemed viable, procured. For preliminary planning purposes, a preliminary estimate is that a minimum of 400,000+ sf (9.2 acres) of land with favorable soils/surficial geology is needed.

D.3 Costs

For evaluation purposes, the following two in-Brookfield options have been evaluated for the 98 Laurel Hill Road site, which appears to have very favorable hydro-geologic capabilities.

- I. WWTP with nitrogen and phosphorus removal and subsurface discharge. A preliminary capital cost placeholder budget of \$10,000,000 is estimated for this option that would require approximately 6 acres of active land use. Buffer/setback requirements would increase land area requirements.
- II. Conventional drainfield and Permeable Reactive Barrier for nitrogen and phosphorus removal. A preliminary capital cost placeholder budget of \$3,000,000 is estimated for this option that would require approximately 6 8 acres of active land use. Buffer/setback requirements would increase land area requirements. Annual O&M costs would be significantly lower than other options.

The Danbury WWTP connection is more cost-effective than an in-Brookfield wastewater treatment and disposal system.



APPENDIX E PROPERTY LIST AND PRELIMINARY SEWER ASSESSMENT

The below Tables present the properties within the proposed Peninsula and Non-Peninsula High Density areas sewer areas with their Grand List Value (GLV) and preliminary estimated sewer assessment based upon 8.12% of their GLV.

	LAI_ID	Penin	Loc_Cat	PS-Zone	Map / Block #	Assessor's Account #	Property Location	Water Supply System	Land Use Category	Grand List Value (2016 Valuation)	Preliminary Sewer Assessment
L	1	1	1	PS-LSD	A08090	04657000	18 BERKSHIRE DR	Candlewood Shores Tax District	Residential	\$189,000	\$15,300
3	5	1	1	PS-CHR PS-LSD	B08127 A07196	01778000 04170000	29 CANDLEWOOD SHORES RD 65 CLEARVIEW DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Vacant / Open Space	\$210,000 \$23,000	\$17,100 \$1,900
1	6	1	1	PS-LSD	A07190 A07200	04170000	61 CLEARVIEW DR	Candlewood Shores Tax District	Vacant / Open Space	\$23,000	\$1,900
5	7	1	1	PS-LSD	A07204	04153000	57 CLEARVIEW DR	Candlewood Shores Tax District	Vacant / Open Space	\$23,000	\$1,900
5	12	1	1	PS-LVC	B09123	03294000	25A LAKEVIEW RD	Candlewood Orchards	Vacant / Open Space	\$72,000	\$5,800
7 3	13 14	1	1	PS-CHR PS-CHR	A08216 A08222	05729000 05472000	37 LAUREL DR 25 LAUREL DR	Hickory Hills Hickory Hills	Residential Residential	\$224,000 \$210,000	\$18,200 \$17,100
9	15	1	1	PS-AHR	A10013	01832000	38 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$814,000	\$66,100
0	16	1	1	PS-AHR	A10001	01317000	4 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$1,176,000	\$95,500
1	17	1	1	PS-AHR	A09024	02555000	2 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$926,000	\$75,200
2	18 19	1	1	PS-KS PS-AHR	A09030 A10005	03426000 03338000	96 KELLOGG ST 18 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential Residential	\$282,000 \$741,000	\$22,900 \$60,200
4	20	1	1	PS-AHR	A10005	02004000	20 ARROWHEAD RD	Arrowhead Point HO Ass'n Arrowhead Point HO Ass'n	Vacant / Open Space	\$153,000	\$12,400
5	21	1	1	PS-AHR	A10012	05023000	36 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$899,000	\$73,000
6	22	1	1	PS-AHR	A10007	05380000	22 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$1,008,000	\$81,800
7	23	1	1	PS-KS	B09159 B09161	01989000	23 KELLOGG ST	Candlayuaad Orchards	Residential	\$224,000	\$18,200
8 9	25	1	1	PS-KS PS-KS	B09151	01829000 05705000	19 KELLOGG ST 25 KELLOGG ST	Candlewood Orchards Hickory Hills	Residential Residential	\$292,000 \$289,000	\$23,700 \$23,500
0	26	1	1	PS-KS	B09153	02677000	25A KELLOGG ST	Hickory Hills	Vacant / Open Space	\$34,000	\$2,800
1	27	1	1	PS-KS	B09152	01968000	27 KELLOGG ST	Hickory Hills	Residential	\$331,000	\$26,900
2	28	1	1	PS-KS	B09162	04410000	17 KELLOGG ST	Candlewood Orchards	Residential	\$328,000	\$26,600
3 4	29 30	1	1	PS-LVC PS-LVC	B09116 B09124	03575000 04019000	25 LAKEVIEW RD 23A LAKEVIEW RD	Candlewood Orchards Candlewood Orchards	Residential Vacant / Open Space	\$605,000 \$64,000	\$49,100 \$5,200
5	31	1	1	PS-LVC	B09105	05918000	12 LAKEVIEW RD	Candlewood Orchards	Residential	\$243,000	\$19,700
6	32	1	1	PS-LVC	B09106	05484000	14 LAKEVIEW RD	Candlewood Orchards	Residential	\$183,000	\$14,900
7	33	1	1	PS-LVC	B09110	01443000	13 LAKEVIEW RD	Candlewood Orchards	Residential	\$595,000	\$48,300
8 9	34 35	1	1	PS-LVC PS-KS	B09111 B09155	01924000 03192000	15 LAKEVIEW RD 23G KELLOGG ST	Candlewood Orchards Hickory Hills	Residential Vacant / Open Space	\$753,000 \$7,000	\$61,100 \$600
0	36	1	1	PS-KS	B09153	10132000	23C KELLOGG ST	Hickory Hills	Vacant / Open Space	\$9,000	\$700
1	37	1	1	PS-LVC	B09165	03264000	10 KELLOGG ST		Residential	\$289,000	\$23,500
2	38	1	1		B09137	01070000	336 CANDLEWOOD LAKE RD		Residential	\$158,000	\$12,800
3 4	39 40	1	1	PS-KS PS-KS	B09144 B09143	01064000 02141000	22 KELLOGG ST 2 HICKORY HILL RD	Hickory Hills Hickory Hills	Residential	\$213,000	\$17,300 \$14,400
5	41	1	1	PS-KS PS-CHR	A08190	02141000	25 HICKORY HILL RD	nickory nilis	Residential Residential	\$177,000 \$269,000	\$14,400
6	42	1	1	PS-CHR	A08194	05097000	21 LAUREL DR	Hickory Hills	Residential	\$130,000	\$10,600
7	43	1	1	PS-CHR	A08189	02947000	35 CANDLEWOOD SHORES RD		Residential	\$175,000	\$14,200
8 9	44	1	1	PS-CHR	A08191	01119000	29 HICKORY HILL RD	Hickory Hills	Residential	\$171,000	\$13,900
0	48	1	1	PS-LSD PS-LSD	A07023 A07022	01655000 03642000	166 NORTH LAKE SHORE DR 164 NORTH LAKE SHORE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$552,000 \$909,000	\$44,800 \$73,800
1	49	1	1	PS-LSD	A09093	00642000	79 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$207,000	\$16,800
2	50	1	1	PS-LSD	A09096	03701000	75 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$263,000	\$21,400
3	51	1	1	PS-LSD	A09098	03622000	6 LONGVIEW DR	Candlewood Shores Tax District	Residential	\$190,000	\$15,400
4 5	52 53	1	1	PS-LSD PS-LSD	A09094 A09095	03741000 05916000	77 SOUTH LAKE SHORE DR 4 LONGVIEW DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$241,000 \$229,000	\$19,600 \$18,600
6	54	1	1	PS-LSD	A09092	05605000	81 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$203,000	\$16,500
7	55	1	1	PS-LSD	A09091	00796000	2 LONGVIEW DR	Candlewood Shores Tax District	Residential	\$150,000	\$12,200
8	56	1	1	PS-LSD	A09072	01918000	46 BERKSHIRE DR	Candlewood Shores Tax District	Residential	\$170,000	\$13,800
9	57 58	1	1	PS-LSD PS-LSD	A09079 A09085	01421000 00577000	9 LONGVIEW DR 7 LONGVIEW DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$167,000 \$171,000	\$13,600 \$13,900
1	59	1	1	PS-LSD	A09089	04674000	3 LONGVIEW DR	Candlewood Shores Tax District	Residential	\$333,000	\$27,000
2	60	1	1	PS-LSD	A09087	05033000	5 LONGVIEW DR	Candlewood Shores Tax District	Residential	\$136,000	\$11,000
3	61	1	1	PS-LSD	A09076	04523000	15 LONGVIEW DR	Candlewood Shores Tax District	Residential	\$150,000	\$12,200
4 5	62	1	1	PS-LSD PS-LSD	A09075 A09074	03014000	17 LONGVIEW DR 42 BERKSHIRE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$224,000 \$337,000	\$18,200 \$27,400
6	64	1	1	PS-LSD	A09073	02204000	48 BERKSHIRE DR	Candlewood Shores Tax District	Residential	\$134,000	\$10,900
7	65	1	1	PS-LSD	A09082	09800000		Candlewood Shores Tax District	Residential	\$213,000	\$17,300
8	66	1	1	PS-LSD	A09081	03298000	52 BERKSHIRE DR	Candlewood Shores Tax District	Residential	\$164,000	\$13,300
9 0	67 68	1	1	PS-LSD PS-LSD	A09086 A09088	00576000	58 BERKSHIRE DR 60 BERKSHIRE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Vacant / Open Space Residential	\$18,000 \$186,000	\$1,500 \$15,100
1	69	1	1	PS-LSD	A09177	01942000	92 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$229,000	\$18,600
2	70	1	1	PS-KS	A09041	04577000	86 KELLOGG ST	Candlewood Shores Tax District	Vacant / Open Space	\$99,000	\$8,000
3	71	1	1	PS-LSD	A09011	03885000	82 SOUTH LAKE SHORE DR		Residential	\$633,000	\$51,400
4 5	72 73	1	1	PS-LSD PS-LSD	A09012 A09013	03780000	84 SOUTH LAKE SHORE DR 86 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential Residential	\$688,000 \$640,000	\$55,900 \$52,000
6	74	1	1	PS-KS	A09178	00533000	88 KELLOGG ST	Arrowhead Point HO Ass'n	Residential	\$683,000	\$55,500
7	75	1	1	PS-KS	A09019	03092000	8 MORTON RD	Arrowhead Point HO Ass'n	Residential	\$815,000	\$66,200
8	76	1	1	PS-LSD	A08083	00898000	49 LONGVIEW DR	Candlewood Shores Tax District	Vacant / Open Space	\$18,000	\$1,500
9	77 78	1	1	PS-LSD PS-LSD	A08092 A09006	04332000 05501000	22 BERKSHIRE DR 72 SOUTH LAKE SHORE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$176,000 \$669,000	\$14,300 \$54,300
1	79	1	1	PS-LVC	B09174	04064000	7 LAKEVIEW RD	Candlewood Orchards	Residential	\$359,000	\$29,200
2	80	1	1	PS-LVC	B09104	00505000	18 LAKEVIEW RD	Candlewood Orchards	Residential	\$202,000	\$16,400
3	81	1	1	PS-LVC	B09129	00848000	32 LAKEVIEW RD	Candlewood Orchards	Vacant / Open Space	\$10,000	\$800
4 5	82 84	1	1	PS-LSD	B09135 A08159	03303000 08833000	4 KELLOGG ST 63 CANDLEWOOD SHORES RD		Residential Residential	\$205,000 \$213,000	\$16,600 \$17,300
6	85	1	1	PS-LVC	B09094	02493000	28 LAKEVIEW RD	Candlewood Orchards	Residential	\$307,000	\$24,900
7	86	1	1	PS-KS	A09031	00578000	94 KELLOGG ST	Arrowhead Point HO Ass'n	Residential	\$285,000	\$23,100
8	87	1	1	PS-CHR	B08124	02598000	13 HICKORY HILL RD	Hickory Hills	Residential	\$211,000	\$17,100
9 0	88 89	1	1	PS-KS PS-CHR	A09069 B09142	05909000 03815000	57 KELLOGG ST 4 HICKORY HILL RD	Hickory Hills	Vacant / Open Space Residential	\$22,000 \$178,000	\$1,800 \$14,500
1	90	1	1	PS-AHR	B10003	00302000	44 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$783,000	\$63,600
2	91	1	1	PS-LSD	A09110	01041000	18 LONGVIEW DR	Candlewood Shores Tax District	Residential	\$197,000	\$16,000
3	92	1	1	PS-LSD	A09077	04129000	13 LONGVIEW DR	Candlewood Shores Tax District	Residential	\$244,000	\$19,800
4	93	1	1	<u> </u>	B09126	10140000	21A LAKEVIEW RD		Vacant / Open Space	\$31,000	\$2,500

	LAI_ID	Penin	Loc_Cat	PS-Zone	Map / Block #	Assessor's Account #	Property Location	Water Supply System	Land Use Category	Grand List Value (2016 Valuation)	Preliminary Sewer Assessment
85	94	1	1	PS-LVC	B09118	05034000	29 LAKEVIEW RD	Candlewood Orchards	Residential	\$434,000	\$35,200
86	95	1	1	PS-AHR	A09122	00464000	16 CHESTER ST	Arrowhead Point HO Ass'n	Residential	\$222,000	\$18,000
87	96	1	1	PS-CHR	B09166	01969000	6 HICKORY HILL RD	Hickory Hills	Residential	\$205,000	\$16,600
88	97	1	1	PS-AHR	B09167	02886000 09054000	52 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$657,000	\$53,300
89 90	98 99	1	1	PS-AHR PS-AHR	B09168 A09149	03674000	54 ARROWHEAD RD 62 ARROWHEAD RD	Arrowhead Point HO Ass'n Arrowhead Point HO Ass'n	Residential Residential	\$598,000 \$659,000	\$48,600 \$53,500
90	100	1	1	PS-AHR PS-LVC	B08114	03900000	18A KELLOGG ST	Arrownead Pollit HO ASS II	Residential	\$219,000	\$17,800
92	101	1	1	PS-LVC PS-LSD	A09015	00454000	90 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$948,000	\$77,000
93	131	1	1	PS-CHR	A07238	04391000	72 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$490,000	\$39,800
94	132	1	1	PS-CHR	A07237	01078000	70 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$499,000	\$40,500
95	134	1	1	PS-CHR	A07239	03210000	74 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$456,000	\$37,000
96	135	1	1	PS-LSD	A07260	10111000	60A CLEARVIEW DR	Candlewood Shores Tax District	Water Supply Land	\$10,000	\$800
97	137	1	1	PS-LSD	A06011	03252000	102 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$533,000	\$43,300
98	140	1	1	PS-CHR	A07261	10112000	54A CLEARVIEW DR	Candlewood Shores Tax District	Water Supply Land	\$10,000	\$800
99	143	1	1	PS-CHR	A07195	03789000	67 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$168,000	\$13,600
100 101	144 147	1	1	PS-LSD PS-CHR	A06013 A06012	03099000 04645000	80 CLEARVIEW DR 100 NORTH LAKE SHORE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$228,000 \$500,000	\$18,500 \$40,600
101	151	1	1	PS-CHR PS-CHR	A07254	00181000	71 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$172,000	\$14,000
103	196	1	1	PS-CHR	A07240	05668000	76 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$473,000	\$38,400
104	197	1	1	PS-CHR	A07197	04316000	65 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$182,000	\$14,800
105	201	1	1	PS-LSD	A07037	01599000	28 TWILIGHT LN	Candlewood Shores Tax District	Residential	\$277,000	\$22,500
106	202	1	1	PS-LSD	A07038	01703000	26 TWILIGHT LN	Candlewood Shores Tax District	Residential	\$179,000	\$14,500
107	203	1	1	PS-LSD	A06014	03665000	105 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$269,000	\$21,800
108	204	1	1	PS-LSD	A07079	02321000	117 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Vacant / Open Space	\$71,000	\$5,800
109	205	1	1	PS-LSD	A07078	04132000	60 MOUNTAINVIEW DR	Candlewood Shores Tax District	Residential	\$212,000	\$17,200
110 111	206	1	1	PS-CHR PS-LSD	A07249 A07012	04875000 02508000	98 NORTH LAKE SHORE DR 144 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential Residential	\$514,000	\$41,700 \$45,800
111	207	1	1	PS-LSD PS-LSD	A07012 A07014	02508000	144 NORTH LAKE SHORE DR 148 NORTH LAKE SHORE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential	\$564,000 \$612,000	\$45,800
113	208	1	1	PS-LSD PS-LSD	A07014 A07013	00169000	146 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$595,000	\$48,300
114	210	1	1	PS-LSD	A07013	04544000	160 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$561,000	\$45,600
115	211	1	1	PS-LSD	A07063	05480000	37 TWILIGHT LN	Candlewood Shores Tax District	Residential	\$236,000	\$19,200
116	212	1	1	PS-LSD	A07186	04171000	75 CLEARVIEW DR	Candlewood Shores Tax District	Vacant / Open Space	\$20,000	\$1,600
117	235	1	1	PS-CHR				Candlewood Shores Tax District	Vacant / Open Space		\$0
118	236	1	1	PS-CHR	A07229	05254000	50 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$573,000	\$46,500
119	237	1	1	PS-CHR	A07228	01875000	48 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$416,000	\$33,800
120 121	238	1	1	PS-CHR PS-CHR	A07210 A07211	04156000 01866000	45 CLEARVIEW DR	Candlewood Shores Tax District	Residential Residential	\$342,000	\$27,800 \$18,400
121	240	1	1	PS-CHR PS-CHR	A07211 A07203	02386000	49 NORTH LAKE SHORE DR 59 NORTH LAKE SHORE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential	\$226,000 \$185,000	\$15,000
123	241	1	1	PS-CHR	A07205	00930000	57 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$173,000	\$14,000
124	242	1	1	PS-CHR	A07207	04249000	55 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Vacant / Open Space	\$91,000	\$7,400
125	243	1	1	PS-CHR	A07232	00001000	58 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$408,000	\$33,100
126	244	1	1	PS-CHR	A07233	01208000	60 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$502,000	\$40,800
127	245	1	1	PS-CHR	A07234	02752000	62 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$550,000	\$44,700
128	246	1	1	PS-CHR	A07236	04573000	68 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$498,000	\$40,400
129 130	247	1	1	PS-CHR PS-CHR	A07256 A07191	00471000 04407000	66 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$544,000	\$44,200
131	248 249	1	1	PS-CHR PS-CHR	A07191 A07252	00891000	73 NORTH LAKE SHORE DR 81 NORTH LAKE SHORE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$197,000 \$273,000	\$16,000 \$22,200
132	250	1	1	PS-CHR	A07232	01487000	88 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$439,000	\$35,600
133	251	1	1	PS-CHR	A07209	00862000	51 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Vacant / Open Space	\$94,000	\$7,600
134	252	1	1	PS-CHR	A07208	10036000	49 CLEARVIEW DR	Candlewood Shores Tax District	Residential	\$239,000	\$19,400
135	253	1	1	PS-CHR	A07206	10035000	53 CLEARVIEW DR	Candlewood Shores Tax District	Residential	\$222,000	\$18,000
136	254	1	1	PS-CHR	A07201	05473000	61 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$197,000	\$16,000
137	255	1	1	PS-CHR	A07244	04666000	84 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$592,000	\$48,100
138 139	256 257	1	1	PS-CHR PS-CHR	A07243 A07242		82 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential Residential	\$379,000	\$30,800 \$47,100
140	257	1	1	PS-LSD	A07242 A07138		80 NORTH LAKE SHORE DR 31 SKYLINE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential	\$580,000 \$174,000	\$47,100 \$14,100
141	259	1	1	PS-CHR	A07138	02221000	40 CLEARVIEW DR	Candlewood Shores Tax District	Residential	\$174,000	\$14,700
142	260	1	1	PS-CHR	A07141	05194000	42 CLEARVIEW DR	Candlewood Shores Tax District	Residential	\$185,000	\$15,000
143	261	1	1	PS-LSD	A07145	04163000	46 CLEARVIEW DR	Candlewood Shores Tax District	Residential	\$227,000	\$18,400
144	262	1	1	PS-CHR	A07143	05793000	44 CLEARVIEW DR	Candlewood Shores Tax District	Residential	\$185,000	\$15,000
145	263	1	1	PS-LSD	A07140	01197000	33 SKYLINE DR	Candlewood Shores Tax District	Residential	\$168,000	\$13,600
146	264	1	1	PS-LSD	A07142	03657000	35 SKYLINE DR	Candlewood Shores Tax District	Residential	\$186,000	\$15,100
147 148	265 266	1	1	PS-CHR PS-CHR	A07230 A07231	04600000 03182000	52 NORTH LAKE SHORE DR 56 NORTH LAKE SHORE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$362,000 \$403,000	\$29,400 \$32,700
148	267	1	1	PS-CHR PS-CHR	A07231 A07199	03182000	63 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$182,000	\$14,800
150	268	1	1	PS-CHR	A07253	00889000	79 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$227,000	\$18,400
151	269	1	1	PS-CHR	A07213	03467000	47 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$176,000	\$14,300
152	286	1	1	PS-LSD	A06010	00830000	106 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$584,000	\$47,400
153	287	1	1	PS-LSD	A06009	03024000	108 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$979,000	\$79,500
154	288	1	1	PS-LSD	A06008	05287000	112 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$823,000	\$66,800
155	289	1	1	PS-LSD	A06007	04761000	114 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$809,000	\$65,700
156 157	290 291	1	1	PS-LSD PS-LSD	A06005 A06006	05182000 05513000	118 NORTH LAKE SHORE DR 116 NORTH LAKE SHORE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$830,000 \$1,368,000	\$67,400 \$111,100
157	291	1	1	PS-LSD PS-LSD	A07061	00810000	35 TWILIGHT LN	Candlewood Shores Tax District	Residential	\$1,368,000	\$111,100
159	293	1	1	PS-LSD	A07057	02637000	31 TWILIGHT LN	Candlewood Shores Tax District	Residential	\$167,000	\$13,600
160	294	1	1	PS-LSD	A07019	00294000	158 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$691,000	\$56,100
161	295	1	1	PS-LSD	A07300	03196001	NORTH LAKE SHORE DR	Candlewood Shores Tax District	Vacant / Open Space	\$0	\$0
162	296	1	1	PS-LSD	A07182	04172000	81 CLEARVIEW DR	Candlewood Shores Tax District	Vacant / Open Space	\$20,000	\$1,600
163	297	1	1	PS-LSD	A07152	00874000	45 SKYLINE DR	Candlewood Shores Tax District	Water Supply Land	\$112,000	\$9,100
164	298	1	1	PS-LSD	A07156	00066000	49 SKYLINE DR	Candlewood Shores Tax District	Residential	\$180,000	\$14,600
165	299 300	1	1	PS-LSD	A07158	02871000	51 SKYLINE DR	Candlewood Shores Tax District	Residential	\$145,000	\$11,800
166 167	300	1	1	PS-LSD PS-LSD	A07167 A07096		61 SKYLINE DR 52 SKYLINE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$178,000 \$221,000	\$14,500 \$17,900
168	302	1	1	PS-LSD PS-LSD	A07096 A07117		31 MOUNTAINVIEW DR	Candlewood Shores Tax District	Residential	\$353,000	\$28,700
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188		LAI_ID	Penin	Loc_Cat	PS-Zone	Map / Block #	Assessor's Account #	Property Location	Water Supply System	Land Use Category	Grand List Value (2016 Valuation)	Preliminary Sewer Assessment
196		303		1			03531000	35 MOUNTAINVIEW DR	Candlewood Shores Tax District	Residential		
17												
175 10												
12												
198												
19												
13											_	
132 1	177	311	1	1	PS-LSD	A07077	02436000	58 MOUNTAINVIEW DR	Candlewood Shores Tax District	Residential	\$254,000	\$20,600
14	-		1	1					Candlewood Shores Tax District	Residential		
18												
18												
142 1												
184 1											, .,	
185 15 1												
186 100 1												
188 322 1				1							_	
189 232 1	187	321	1	1	PS-CHR	A07248	02350000	96 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$522,000	\$42,400
190 343 1			1	1						Residential	\$214,000	
195												
1966 1											_	
199 237 1 1 PS-150 A07080 00550000 137 NORTH LAKE SHORE DR Candiewood Shores Tao Obstrict Residential \$234,000 \$23,300 \$												
1948 1	-											
195 339 1 1 PS-ISD A070R2 02324000 28 MOUNTAINVEW DR Cardiewood Shores Tax District Residential \$154,000 \$513,000 131,00												
196 330 1 1 FS-LOD A07086 DISEASON TO ELEANORY DET Condienced Shores Tax District Residential \$316,000 \$514,300 S14,300												
188 332				1			01614000				_	\$14,300
199 333 1 1 PS-150 A07085 0.110500 109 NORTH LAKE SFORE DR Candlewood Shores Tan District Residential \$244,000 \$513,800												
200 338												
202 33.5												
336 1 1 1 FS-LSD A07072 00452000 32 MOUNTAINVIEW DR Candlewood Shores Tax District Residential \$197,000 516,000 036,00											_	
233 1												
238 1												
250 339												
207 341 1												
388 3.42 1 1 PS-LSD A07980 0338000 72 CLEAFWIEW DR Candlewood Shores Tax District Residential \$13,500 \$13,500 200 344 1 1 PS-LSD A07166 0235000 \$95 KVINE DR Candlewood Shores Tax District Residential \$222,000 \$18,000 212 345 1 1 PS-LSD A07165 0325000 \$5 KVINE DR Candlewood Shores Tax District Residential \$220,000 \$18,000 212 346 1 1 PS-LSD A07165 0432000 \$6 CLEARVIEW DR Candlewood Shores Tax District Residential \$250,000 \$15,600 214 348 1 1 PS-LSD A0799 0438000 \$5 KVINE DR Candlewood Shores Tax District Residential \$15,000 \$13,200 215 349 1 1 PS-LSD A0799 04380000 \$5 KVINE DR Candlewood Shores Tax District Residential \$15,000 \$13,200 217 351 1	206	340	1	1	PS-LSD	A07258	00488000	129 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$228,000	\$18,500
200 343 1		341	1	1				56 SKYLINE DR	Candlewood Shores Tax District	Residential	\$174,000	\$14,100
1344 1												
11												
346											_	
13 1 1 PS-LIN A07127 02127000 89 NORTH LAKE SHORE R Residential 518,000 513,20												
14 348 1									culture wood Shores Tax Bistrict			
150			1				02641000		Candlewood Shores Tax District			
351	215	349	1	1	PS-LSD	A07099	04387000	55 MOUNTAINVIEW DR	Candlewood Shores Tax District	Residential	\$164,000	\$13,300
18									Candlewood Shores Tax District			
19												
202 35.4 1												
221 355												
223 356												
357 1		25.0	1	1	BC 1.CB				0 11 101 7 81111	5 11 11 1	4070.000	
248 388			1	1								
226 360			1	1							\$206,000	
361 1												
228 362 1												
229 363 1												
364 1												
365 1												
232 366 1 1 PS-LSD A07114 03560000 32 SKYLINE DR Candlewood Shores Tax District Residential \$327,000 \$26,600 233 367 1 1 PS-LSD A07116 04228000 30 SKYLINE DR Candlewood Shores Tax District Residential \$16,000 \$13,500 235 369 1 1 PS-LSD A07110 04011000 36 SKYLINE DR Candlewood Shores Tax District Residential \$129,000 \$10,500 236 370 1 1 PS-LSD A07106 05492000 40 SKYLINE DR Candlewood Shores Tax District Residential \$129,000 \$15,000 237 371 1 1 PS-LSD A071018 00400000 38 SKYLINE DR Candlewood Shores Tax District Residential \$185,000 \$15,000 238 372 1 1 PS-LSD A07015 02807000 150 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$712,000 \$46,000 240												
233 367 1 1 PS-LSD A07116 04228000 30 SKYLINE DR Candlewood Shores Tax District Residential \$166,000 \$13,500 234 368 1 1 PS-LSD A07110 01772000 34 SKYLINE DR Candlewood Shores Tax District Residential \$253,000 \$20,500 235 369 1 1 PS-LSD A07110 04011000 36 SKYLINE DR Candlewood Shores Tax District Residential \$129,000 \$10,500 236 370 1 1 PS-LSD A07108 00400000 40 SKYLINE DR Candlewood Shores Tax District Residential \$185,000 \$15,000 237 371 1 1 PS-LSD A07105 02807000 150 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$218,000 \$17,700 239 373 1 1 PS-LSD A07016 04392000 152 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$566,000 \$45,800 241												
235 369 1	233	367	1		PS-LSD	A07116	04228000		Candlewood Shores Tax District	Residential		\$13,500
236 370 1 1 PS-LSD A07106 05492000 40 SKYLINE DR Candlewood Shores Tax District Residential \$18,000 \$15,000 237 371 1 1 PS-LSD A07108 00400000 38 SKYLINE DR Candlewood Shores Tax District Residential \$218,000 \$17,700 238 372 1 1 PS-LSD A07015 02807000 150 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$566,000 \$46,000 239 373 1 1 PS-LSD A07016 04392000 152 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$576,000 \$57,800 240 374 1 1 PS-LSD A07006 03935000 132 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$564,000 \$49,800 241 375 1 1 PS-LSD A07005 05376000 130 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$598,000 \$48,600												
371 1												
238 372 1 1 PS-LSD A07015 02807000 150 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$566,000 \$46,000 239 373 1 1 PS-LSD A07016 04392000 152 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$712,000 \$57,800 240 374 1 1 PS-LSD A07004 01257000 128 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$564,000 \$45,800 241 375 1 1 PS-LSD A07005 03935000 132 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$564,000 \$48,600 242 376 1 1 PS-LSD A07030 0493000 141 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$598,000 \$48,600 244 378 1 1 PS-LSD A07030 04930000 141 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$220,000 \$17,900												
239 373 1 1 PS-LSD A07016 04392000 152 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$712,000 \$57,800 240 374 1 1 PS-LSD A07004 01257000 128 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$564,000 \$45,800 241 375 1 1 PS-LSD A07006 03935000 132 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$561,000 \$49,600 242 376 1 1 PS-LSD A07030 05376000 130 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$59,800 \$48,600 243 377 1 1 PS-LSD A07030 04930000 141 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$220,000 \$17,900 244 378 1 1 PS-LSD A07236 01600000 30 TWILIGHT LAKE SHORE DR Candlewood Shores Tax District Residential \$129,000 \$12,300												
240 374 1 1 PS-LSD A07004 01257000 128 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$564,000 \$45,800 241 375 1 1 PS-LSD A07005 03935000 132 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$561,000 \$49,600 242 376 1 1 PS-LSD A07005 05376000 130 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$598,000 \$48,600 243 377 1 1 PS-LSD A07030 04930000 30 TWILIGHT LN Candlewood Shores Tax District Residential \$220,000 \$17,900 244 378 1 1 PS-LSD A07035 01600000 30 TWILIGHT LN Candlewood Shores Tax District Residential \$199,000 \$16,200 245 379 1 1 PS-LSD A07035 0808000 32 TWILIGHT LN Candlewood Shores Tax District Residential \$143,000 \$11,600 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>												
241 375 1 1 PS-LSD A07006 03935000 132 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$611,000 \$49,600 242 376 1 1 PS-LSD A07005 05376000 130 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$598,000 \$48,600 243 377 1 1 PS-LSD A07030 0493000 141 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$220,000 \$17,900 244 378 1 1 PS-LSD A07036 01600000 30 TWILIGHT LN Candlewood Shores Tax District Residential \$152,000 \$12,300 245 379 1 1 PS-LSD A07259 05606000 139 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$199,000 \$16,200 246 380 1 1 PS-LSD A07035 00808000 32 TWILIGHT LN Candlewood Shores Tax District Residential \$143,000 \$11,600												
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245 379 1 1 PS-LSD A07259 05606000 139 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$199,000 \$16,200 246 380 1 1 PS-LSD A07035 0808000 32 TWILIGHT LN Candlewood Shores Tax District Residential \$143,000 \$11,600 247 381 1 1 PS-LSD A07031 02052000 137 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$145,000 \$11,800 248 382 1 1 PS-LSD A07032 03397000 135 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$236,000 \$19,200 249 383 1 1 PS-LSD A07033 00995000 133 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$249,000 \$20,200 250 384 1 1 PS-LSD A07034 05840000 131 NORTH LAKE SHORE DR Candlewood Shores Tax District Vacant / Open Space \$76,000 \$6,200 </td <td></td>												
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251 385 1 1 PS-LSD A07002 04469000 122 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$780,000 \$63,300												
	252	386	1	1	PS-LSD	A07001	05371000	120 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$741,000	

	LAI_ID	Penin	Loc_Cat	PS-Zone	Map / Block #	Assessor's Account #	Property Location	Water Supply System	Land Use Category	Grand List Value (2016 Valuation)	Preliminary Sewer Assessment
253	387	1	1	PS-CHR	A07189	05268000	75 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$159,000	\$12,900
254	388	1	1	PS-LSD	A07190	04177000	71 CLEARVIEW DR	Candlewood Shores Tax District	Vacant / Open Space	\$19,000 \$25,000	\$1,500
255 256	389 390	1	1	PS-LSD PS-LSD	A07159 A07157	04184001 04181000	62 CLEARVIEW DR 60 CLEARVIEW DR	Candlewood Shores Tax District Candlewood Shores Tax District	Vacant / Open Space Vacant / Open Space	\$25,000	\$2,000 \$1,900
257	391	1	1	PS-LSD	A07157	00875000	47 SKYLINE DR	Candlewood Shores Tax District	Water Supply Land	\$86,000	\$7,000
258	392	1	1	PS-LSD	A07153	04175000	54 CLEARVIEW DR	Candlewood Shores Tax District	Water Supply Land	\$72,000	\$5,800
259	393	1	1	PS-LSD	A07150	02912000	43 SKYLINE DR	Candlewood Shores Tax District	Residential	\$178,000	\$14,500
260	394	1	1	PS-LSD	A07148	03618000	41 SKYLINE DR	Candlewood Shores Tax District	Residential	\$152,000	\$12,300
261 262	395 396	1	1	PS-LSD PS-LSD	A07144 A07146	05820000 04356000	37 SKYLINE DR 39 SKYLINE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$162,000 \$174,000	\$13,200 \$14,100
263	397	1	1	PS-LSD	A07146 A07104	04488000	42 SKYLINE DR	Candlewood Shores Tax District	Residential	\$218,000	\$17,700
264	398	1	1	PS-CHR	A07179	03791000	87 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$173,000	\$14,000
265	399	1	1	PS-CHR	A07181	05305000	85 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$200,000	\$16,200
266	628	1	1	PS-AHR	A10015	05148000	42 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$786,000	\$63,800
267 268	629	1	1	PS-KS	B09176	04352000 05759000	23F KELLOGG ST 10 LAUREL DR	Hickory Hills	Vacant / Open Space	\$7,000	\$600
269	630 632	1	1	PS-KS PS-LVC	A08201 B09109	05759000	11 LAKEVIEW RD	Hickory Hills Candlewood Orchards	Residential Residential	\$171,000 \$732,000	\$13,900 \$59,400
270	633	1	1	15276	B09184	10331000	21B LAKEVIEW RD	canalewood or analys	Vacant / Open Space	\$32,000	\$2,600
271	634	1	1	PS-CHR	B08125	02597000	17 HICKORY HILL RD	Hickory Hills	Vacant / Open Space	\$46,000	\$3,700
272	636	1	1	PS-AHR	A10014	02158000	40 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$887,000	\$72,000
273	637	1	1	PS-LVC	B09108	05917000	9 LAKEVIEW RD	Candlewood Orchards	Residential	\$492,000	\$40,000
274 275	639 640	1	1	PS-CHR PS-CHR	A07219 A07133	01725000 01074000	37 NORTH LAKE SHORE DR 36 CLEARVIEW DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$172,000 \$160,000	\$14,000 \$13,000
276	641	1	1	PS-CHR	A07133	03452000	34 CLEARVIEW DR	Candlewood Shores Tax District	Residential	\$175,000	\$14,200
277	642	1	1	PS-CHR	A07129	04429000	32 CLEARVIEW DR	Candlewood Shores Tax District	Residential	\$184,000	\$14,900
278	643	1	1	PS-LSD	A07026	02516000	149 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$188,000	\$15,300
279	644	1	1	PS-LSD	A07027	03675000	147 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$209,000	\$17,000
280 281	645 646	1	1	PS-LVC PS-LVC	B09186 B09102	10333000 05490000	35A LAKEVIEW RD 20 LAKEVIEW RD	Candlewood Orchards	Vacant / Open Space Residential	\$5,000 \$224,000	\$400 \$18,200
282	647	1	1	PS-LVC PS-LVC	B09102	10336000	9A KELLOGG ST	Candlewood Orchards	Vacant / Open Space	\$27,000	\$2,200
283	648	1	1		B09136	03797000	330 CANDLEWOOD LAKE RD		Commercial	\$238,000	\$19,300
284	649	1	1	PS-KS	A09173	05564000	6 CIPOLLA LN	Hickory Hills	Residential	\$204,000	\$16,600
285	650	1	1	PS-KS	B08121	02676000	7 CIPOLLA LN	Hickory Hills	Residential	\$189,000	\$15,300
286 287	651 652	1	1	PS-AHR PS-AHR	A10027 A09140	02718000 00676000	5 CHESTER ST 28 CHESTER ST	Arrowhead Point HO Ass'n Arrowhead Point HO Ass'n	Vacant / Open Space Vacant / Open Space	\$97,000 \$56,000	\$7,900 \$4,500
288	653	1	1	PS-AHR	A10023	04292000	11 CHESTER ST	Arrowhead Point HO Ass'n	Residential	\$520,000	\$42,200
289	654	1	1	PS-AHR	A09120	04234000	5 MYRON AVE	Arrowhead Point HO Ass'n	Residential	\$222,000	\$18,000
290	655	1	1	PS-AHR	A09143	03380000	60 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$508,000	\$41,200
291	656	1	1	PS-AHR	A09138	04695000	58 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$692,000	\$56,200
292 293	657 658	1	1	PS-KS PS-KS	A08294 A08300	10486000 10486001	50 KELLOGG ST KELLOGG ST	Hickory Hills	Residential Vacant / Open Space	\$271,000 \$0	\$22,000 \$0
294	659	1	1	PS-CHR	B08167	10454000	9 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Vacant / Open Space	\$22,000	\$1,800
295	660	1	1	PS-CHR	A08261	03213000	23 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$179,000	\$14,500
296	661	1	1	PS-CHR	A08263	00931000	21 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$229,000	\$18,600
297	662	1	1	PS-CHR	A08265	03361000	17 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$270,000	\$21,900
298 299	663 664	1	1	PS-CHR PS-CHR	B08151 B08169	01657000 10456000	15 NORTH LAKE SHORE DR 13 NORTH LAKE SHORE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$185,000 \$226,000	\$15,000 \$18,400
300	665	1	1	PS-CHR PS-CHR	B08168	10455000	11 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Vacant / Open Space	\$22,000	\$1,800
301	666	1	1	PS-KS	A09182	00141000	92 KELLOGG ST	Arrowhead Point HO Ass'n	Vacant / Open Space	\$9,000	\$700
302	667	1	1	PS-LSD	A08140	03908000	21 BAYVIEW DR	Candlewood Shores Tax District	Residential	\$152,000	\$12,300
303	668	1	1	PS-LSD	A09014	03119000	88 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$822,000	\$66,700
304 305	669 670	1	1	PS-LSD PS-LSD	A09080 A09097	00654000 00802000	50 BERKSHIRE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$144,000	\$11,700
306	671	1	1	PS-LSD PS-LSD	A09097 A08119	04654000	73 SOUTH LAKE SHORE DR 29 BERKSHIRE DR	Candlewood Shores Tax District	Residential	\$155,000 \$155,000	\$12,600 \$12,600
307	672	1	1	PS-LSD	A08119		3 BAYVIEW DR	Candlewood Shores Tax District	Residential	\$196,000	\$15,900
308	673	1	1	PS-LSD	A08148	00851000	5 BAYVIEW DR	Candlewood Shores Tax District	Vacant / Open Space	\$36,000	\$2,900
309	674	1	1	PS-LSD	A08147	02525000	7 BAYVIEW DR	Candlewood Shores Tax District	Residential	\$184,000	\$14,900
310 311	675 676	1	1	PS-LSD PS-LSD	A08146 A08141	00852000 01307000	9 BAYVIEW DR 19 BAYVIEW DR	Candlewood Shores Tax District Candlewood Shores Tax District	Fire Department Residential	\$80,000 \$161,000	\$6,500 \$13,100
311	677	1	1	PS-LSD PS-LSD	A08141 A08061		2 LILAC LN	Candlewood Shores Tax District	Residential	\$198,000	\$13,100
313	678	1	1	PS-KS	A08196		17 LAUREL DR	Hickory Hills	Residential	\$193,000	\$15,700
314	680	1	1	PS-CHR	A08247	01953000	30 CLEARVIEW DR	Candlewood Shores Tax District	Residential	\$220,000	\$17,900
315	681	1	1	PS-CHR	A08274	05498000	34 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$411,000	\$33,400
316 317	682 683	1	1	PS-CHR PS-CHR	A08275 A08276	00831000 09799000	32 NORTH LAKE SHORE DR 30 NORTH LAKE SHORE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Vacant / Open Space	\$560,000 \$21,000	\$45,500 \$1,700
318	684	1	1	PS-CHR PS-CHR	A08276 A08245		28 CLEARVIEW DR	Candlewood Shores Tax District	Residential	\$167,000	\$1,700
319	685	1	1	PS-CHR	A08243	02044000	26 CLEARVIEW DR	Candlewood Shores Tax District	Residential	\$170,000	\$13,800
320	686	1	1	PS-CHR	A08241	05816000	24 CLEARVIEW DR	Candlewood Shores Tax District	Residential	\$180,000	\$14,600
321	687	1	1	PS-CHR	A08239	02125000	22 CLEARVIEW DR	Candlewood Shores Tax District	Residential	\$176,000	\$14,300
322 323	688 689	1	1	PS-CHR PS-CHR	A08233 A08231	04554000 04553000	16 CLEARVIEW DR 14 CLEARVIEW DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$200,000 \$200,000	\$16,200 \$16,200
324	690	1	1	PS-CHR PS-CHR	A08231		12 CLEARVIEW DR	Candlewood Shores Tax District	Residential	\$163,000	\$13,200
325	691	1	1	PS-CHR	A08227		10 CLEARVIEW DR	Candlewood Shores Tax District	Residential	\$175,000	\$14,200
326	692	1	1	PS-AHR	B09179	02109000	46 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$755,000	\$61,300
327	693	1	1	PS-LSD	A07124	04502000	24 SKYLINE DR	Candlewood Shores Tax District	Residential	\$186,000	\$15,100
328	694	1	1	PS-LSD	A07128		21 SKYLINE DR	Candlewood Shores Tax District	Residential	\$171,000	\$13,900
329 330	695 696	1	1	PS-LSD PS-LSD	A07130 A07132	00507000 05172000	23 SKYLINE DR 25 SKYLINE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$192,000 \$159,000	\$15,600 \$12,900
331	697	1	1	PS-CHR	A07132 A07222	05428000	36 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$392,000	\$31,800
332	698	1	1	PS-CHR	A07223		38 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$450,000	\$36,500
333	699	1	1	PS-CHR	A07224		40 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$386,000	\$31,300
334	700	1	1	PS-CHR	A07225	01697000	42 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$352,000	\$28,600
335 336	701 702	1	1	PS-LSD PS-CHR	A07126 A07221		22 SKYLINE DR 33 CLEARVIEW DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$177,000 \$214,000	\$14,400 \$17,400
220	/02			1 3-CHN	70/221	0-100000	OO CLEMINAIEAA DII	Canale WOOD SHOLES TAX DISTRICT	residential	7217,UUU	ٱ1, 4 00

	LAI_ID	Penin	Loc_Cat	PS-Zone	Map / Block #	Assessor's Account #	Property Location	Water Supply System	Land Use Category	Grand List Value (2016 Valuation)	Preliminary Sewer Assessment
337	703	1	1	PS-CHR	A07220	04161000	35 CLEARVIEW DR	Candlewood Shores Tax District	Residential	\$265,000	\$21,500
338	704	1	1	PS-CHR	A07216	04187000	39 CLEARVIEW DR	Candlewood Shores Tax District	Vacant / Open Space	\$86,000	\$7,000
339 340	705 706	1	1	PS-CHR PS-CHR	A07217 A07134	03347000 02650000	41 NORTH LAKE SHORE DR 27 SKYLINE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$190,000 \$159,000	\$15,400 \$12,900
341	707	1	1	PS-LSD	A07134 A08164	02453000	13 MOUNTAINVIEW DR	Candlewood Shores Tax District	Residential	\$173,000	\$14,000
342	708	1	1	PS-LSD	A08171	00331000	10 SKYLINE DR	Candlewood Shores Tax District	Residential	\$199,000	\$16,200
343	709	1	1	PS-LSD	A08173	04546000	8 SKYLINE DR	Candlewood Shores Tax District	Residential	\$161,000	\$13,100
344	710	1	1	PS-LSD	A08175	04793000	6 SKYLINE DR	Candlewood Shores Tax District	Residential	\$179,000	\$14,500
345 346	711 712	1	1	PS-LSD PS-LSD	A08177 A08174	05321000	4 SKYLINE DR 1 MOUNTAINVIEW DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Vacant / Open Space	\$169,000 \$24,000	\$13,700 \$1,900
347	713	1	1	PS-LSD	A08174 A08180	04643000	57 CANDLEWOOD SHORES RD	Candlewood Shores Tax District	Residential	\$204,000	\$16,600
348	714	1	1	PS-LSD	A08181	01867000	55 CANDLEWOOD SHORES RD		Residential	\$164,000	\$13,300
349	715	1	1	PS-LSD	A08182	02129000	51 CANDLEWOOD SHORES RD		Residential	\$244,000	\$19,800
350	716	1	1	PS-LSD	A08183	04346000	49 CANDLEWOOD SHORES RD		Residential	\$184,000	\$14,900
351 352	717 718	1	1	PS-LSD PS-LSD	A08184 A08185	03197000 04651000	47 CANDLEWOOD SHORES RD 45 CANDLEWOOD SHORES RD		Residential Residential	\$175,000 \$176,000	\$14,200 \$14,300
353	719	1	1	PS-LSD	A08186	04031000	43 CANDLEWOOD SHORES RD		Residential	\$183,000	\$14,900
354	720	1	1	PS-LSD	A08168	02799000	9 MOUNTAINVIEW DR	Candlewood Shores Tax District	Residential	\$178,000	\$14,500
355	721	1	1	PS-LSD	A08280	05049000	3 MOUNTAINVIEW DR	Candlewood Shores Tax District	Residential	\$168,000	\$13,600
356	722	1	1	PS-LSD	A08169	03432000	12 SKYLINE DR	Candlewood Shores Tax District	Residential	\$173,000	\$14,000
357 358	723 724	1	1	PS-LSD PS-CHR	A08170 A08235	03630000 05006000	7 MOUNTAINVIEW DR 18 CLEARVIEW DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$184,000 \$192,000	\$14,900 \$15,600
359	725	1	1	PS-CHR	A08224	04297000	2 CLEARVIEW DR	Candlewood Shores Tax District	Residential	\$166,000	\$13,500
360	726	1	1	PS-CHR	A08225	02806000	40 CANDLEWOOD SHORES RD	Candlewood Shores Tax District	Residential	\$188,000	\$15,300
361	727	1	1	PS-LSD	A08226	00497000	42 CANDLEWOOD SHORES RD	Candlewood Shores Tax District	Residential	\$242,000	\$19,700
362 363	728 729	1	1	PS-LSD PS-LSD	A08236 A08238	05641000 03479000	9 SKYLINE DR 11 SKYLINE DR	Candlewood Shores Tax District	Residential	\$173,000 \$149,000	\$14,000 \$12.100
363 364	729	1	1	PS-LSD PS-CHR	A08238 A08254	03479000	25 CLEARVIEW DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$149,000	\$12,100
365	731	1	1	PS-CHR	A08268	05190000	9 CLEARVIEW DR	Candlewood Shores Tax District	Residential	\$176,000	\$14,300
366	732	1	1	PS-CHR	A08269	04679000	7 CLEARVIEW DR	Candlewood Shores Tax District	Residential	\$168,000	\$13,600
367	733	1	1	PS-CHR	A08270	05357000	5 CLEARVIEW DR	Candlewood Shores Tax District	Residential	\$170,000	\$13,800
368 369	734 735	1	1	PS-CHR PS-CHR	A08271 A08259	05650000	3 CLEARVIEW DR	Candlewood Shores Tax District	Residential	\$171,000	\$13,900
370	736	1	1	PS-CHR PS-CHR	A08259 A08251	00932000 05375000	25 NORTH LAKE SHORE DR 33 NORTH LAKE SHORE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$274,000 \$137,000	\$22,200 \$11,100
371	737	1	1	PS-LSD	A08284	05143000	41 CANDLEWOOD SHORES RD	Candlewood Shores Tax District	Residential	\$163,000	\$13,200
372	738	1	1	PS-CHR	A08188	04747000	37 CANDLEWOOD SHORES RD	Candlewood Shores Tax District	Vacant / Open Space	\$59,000	\$4,800
373	739	1	1	PS-KS	A08197	02099000	15 LAUREL DR		Residential	\$297,000	\$24,100
374 375	740 741	1	1	PS-CHR PS-CHR	A08272 A08249	70500000	1 CLEARVIEW DR 35 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential Vacant / Open Space	\$165,000 \$92,000	\$13,400 \$7,500
376	742	1	1	PS-CHR	A08255	00399000	29 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$185,000	\$15,000
377	743	1	1	PS-CHR	A08252	01426000	27 CLEARVIEW DR	Candlewood Shores Tax District	Residential	\$146,000	\$11,900
378	744	1	1	PS-CHR	A08253	03112000	31 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Vacant / Open Space	\$82,000	\$6,700
379 380	745 746	1	1	PS-KS PS-KS	A08200 A08199	02660000 04599000	7 LAUREL DR 9 LAUREL DR	Hickory Hills Hickory Hills	Residential Residential	\$221,000 \$238,000	\$17,900 \$19,300
381	747	1	1	PS-LSD	A08199 A08161	02959000	20 SKYLINE DR	Candlewood Shores Tax District	Residential	\$113,000	\$9,200
382	748	1	1	PS-LSD	A08163	04189000	18 SKYLINE DR	Candlewood Shores Tax District	Residential	\$201,000	\$16,300
383	749	1	1	PS-LSD	A08165	05384000	16 SKYLINE DR	Candlewood Shores Tax District	Residential	\$153,000	\$12,400
384	750	1	1	PS-LSD	A08166	01994000	11 MOUNTAINVIEW DR	Candlewood Shores Tax District	Residential	\$160,000	\$13,000
385 386	751 752	1	1	PS-LSD PS-LSD	A08167 A08246	02529000 02286000	14 SKYLINE DR 19 SKYLINE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$168,000 \$154,000	\$13,600 \$12,500
387	753	1	1	PS-LSD	A08244	04026000	17 SKYLINE DR	Candlewood Shores Tax District	Residential	\$171,000	\$13,900
388	754	1	1	PS-LSD	A08176	02023000	50 CANDLEWOOD SHORES RD	Candlewood Shores Tax District	Residential	\$195,000	\$15,800
389	755	1	1	PS-LSD	A08179	02604000	46 CANDLEWOOD SHORES RD	Candlewood Shores Tax District	Residential	\$161,000	\$13,100
390	756	1	1	PS-LSD	A08178		48 CANDLEWOOD SHORES RD	Candlewood Shores Tax District	Vacant / Open Space	\$23,000	\$1,900
391 392	757 758	1	1	PS-LSD PS-LSD	A08230 A08228		3 SKYLINE DR 1 SKYLINE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$214,000 \$177,000	\$17,400 \$14,400
393	759	1	1	PS-LSD	A08232		5 SKYLINE DR	Candlewood Shores Tax District	Residential	\$161,000	\$13,100
394	760	1	1	PS-LSD	A08242	04540000	15 SKYLINE DR	Candlewood Shores Tax District	Residential	\$164,000	\$13,300
395	761	1	1	PS-LSD	A08240	04591000	13 SKYLINE DR	Candlewood Shores Tax District	Residential	\$183,000	\$14,900
396 397	762 763	1	1	PS-CHR PS-CHR	A08267 A08266		11 CLEARVIEW DR 13 CLEARVIEW DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$174,000 \$199,000	\$14,100 \$16,200
398	764	1	1	PS-CHR PS-CHR	A08266	04531000	15 CLEARVIEW DR	Candlewood Shores Tax District	Residential	\$199,000	\$13,200
399	765	1	1	PS-CHR	A08262		17 CLEARVIEW DR	Candlewood Shores Tax District	Residential	\$149,000	\$12,100
400	766	1	1	PS-CHR	A08260	00300000	19 CLEARVIEW DR	Candlewood Shores Tax District	Residential	\$177,000	\$14,400
401	767	1	1	PS-CHR	A08256	04764000	23 CLEARVIEW DR	Candlewood Shores Tax District	Residential	\$161,000	\$13,100
402 403	768 769	1	1	PS-CHR PS-CHR	A08258 A08250	02950000 02988000	21 CLEARVIEW DR 29 CLEARVIEW DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$186,000 \$206,000	\$15,100 \$16,700
404	770	1	1	PS-KS	A08230	00085000	11 LAUREL DR	Hickory Hills	Residential	\$177,000	\$14,400
405	771	1	1	PS-LSD	A08234	04958000	7 SKYLINE DR	Candlewood Shores Tax District	Residential	\$177,000	\$14,400
406	772	1	1	PS-CHR	A08237	02061000	20 CLEARVIEW DR	Candlewood Shores Tax District	Residential	\$184,000	\$14,900
407 408	776 777	1	1	PS-CHR PS-CHR	B08166 B08170	10453000 10457000	7 NORTH LAKE SHORE DR 32 CANDLEWOOD SHORES RD		Residential Residential	\$241,000 \$266,000	\$19,600 \$21,600
408	777	1	1	PS-CHR PS-CHR	B08170 B08156	00345000	28 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$266,000	\$21,600
410	779	1	1	PS-CHR	B08154	05542000	22 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$333,000	\$27,000
411	780	1	1	PS-CHR	B08155	01668000	24 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$313,000	\$25,400
412	781	1	1	PS-CHR	B08150	01605000	16 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Vacant / Open Space	\$219,000	\$17,800
413 414	782 783	1	1	PS-CHR PS-CHR	B08153 B08152	05543000 00912000	20 NORTH LAKE SHORE DR 18 NORTH LAKE SHORE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Vacant / Open Space Residential	\$218,000 \$355,000	\$17,700 \$28,800
414	802	1	1	PS-CHR PS-CHR	A08207	00912000	16 LAUREL DR	Hickory Hills	Residential	\$247,000	\$20,100
416	803	1	1	PS-KS	A08206	04815000	2 LAUREL DR	Hickory Hills	Residential	\$193,000	\$15,700
417	804	1	1	PS-KS	A08204		4 LAUREL DR	Hickory Hills	Residential	\$244,000	\$19,800
418 419	805 806	1	1	PS-CHR PS-CHR	A08192 A08209	04746000 02953000	31 HICKORY HILL RD 22 LAUREL DR	Hickory Hills	Residential Residential	\$191,000 \$193,000	\$15,500 \$15,700
419	806	1	1	PS-CHR PS-CHR	A08209 A08215		28 LAUREL DR	Hickory Hills	Residential	\$193,000	\$15,700
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	LAI_ID	Penin	Loc_Cat	PS-Zone	Map / Block #	Assessor's Account #	Property Location	Water Supply System	Land Use Category	Grand List Value (2016 Valuation)	Preliminary Sewer Assessment
421	808	1	1	PS-KS	A08214	04046000	42 KELLOGG ST		Residential	\$294,000	\$23,900
422	809	1	1	PS-CHR	B08126	05727000	21 HICKORY HILL RD	Hickory Hills	Residential	\$354,000	\$28,700
423	810	1	1	PS-KS	A08208	01828000	48 KELLOGG ST		Residential	\$266,000	\$21,600
424	811	1	1	PS-KS	A08210	04500000	46 KELLOGG ST		Residential	\$268,000	\$21,800
425	812	1	1	PS-CHR	A08211	04731000	24 LAUREL DR		Residential	\$200,000	\$16,200
426	813	1	1	PS-KS	A08212	02456000	44 KELLOGG ST	te to tell	Marina	\$9,000	\$700
427	814	1	1	PS-CHR	A08193	04536000	33 HICKORY HILL RD	Hickory Hills	Residential	\$172,000	\$14,000
428	815	1	1	PS-KS	A08203	02907000	6 LAUREL DR	Hickory Hills	Residential	\$161,000	\$13,100
429 430	816 817	1	1	PS-KS PS-KS	A08202 A09167	05610000 04501000	8 LAUREL DR 40 KELLOGG ST	Hickory Hills	Residential Residential	\$176,000 \$266,000	\$14,300 \$21,600
431	818	1	1	PS-CHR	A08213	05550000	26 LAUREL DR		Residential	\$185,000	\$15,000
432	819	1	1	PS-KS	A09171	04020000	8 CIPOLLA LN	Hickory Hills	Residential	\$197,000	\$16,000
433	820	1	1	PS-KS	A09171	01192000	30 KELLOGG ST	Hickory Hills	Residential	\$222,000	\$18,000
434	821	1	1	PS-KS	A09174	01049000	32 KELLOGG ST	Hickory Hills	Residential	\$205,000	\$16,600
435	822	1	1	PS-KS	A09170	04096000	34 KELLOGG ST	Hickory Hills	Residential	\$235,000	\$19,100
436	823	1	1	PS-KS	A09168	03764000	38 KELLOGG ST	,	Residential	\$234,000	\$19,000
437	824	1	1	PS-AHR	A09155	03995000	68 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$569,000	\$46,200
438	825	1	1	PS-AHR	A09150	05001000	64 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$686,000	\$55,700
439	826	1	1	PS-AHR	A09033	03016000	16 TAYLOR ST	Arrowhead Point HO Ass'n	Residential	\$216,000	\$17,500
440	827	1	1	PS-AHR	A09034	02531000	91 KELLOGG ST	Arrowhead Point HO Ass'n	Residential	\$281,000	\$22,800
441	828	1	1	PS-AHR	A09035	03295000	18 TAYLOR ST	Arrowhead Point HO Ass'n	Residential	\$232,000	\$18,800
442	829	1	1	PS-AHR	A09027	02432000	10 TAYLOR ST	Arrowhead Point HO Ass'n	Vacant / Open Space	\$78,000	\$6,300
443	830	1	1	PS-AHR	A09037	00742000	22 TAYLOR ST	Arrowhead Point HO Ass'n	Residential	\$300,000	\$24,400
444	831	1	1	PS-AHR	A09028	05272000	97 KELLOGG ST	Arrowhead Point HO Ass'n	Residential	\$241,000	\$19,600
445	832	1	1	PS-AHR	A09032	03085000	95 KELLOGG ST	Arrowhead Point HO Ass'n	Residential	\$228,000	\$18,500
446	833	1	1	PS-AHR	A09154	03737000	72 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$264,000	\$21,400
447	834	1	1	PS-AHR	A09153	05872000	74 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$242,000	\$19,700
448	835	1	1	PS-AHR	A09151	04109000	78 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$204,000	\$16,600
449	836	1	1	PS-AHR	A09152	04307000	76 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$202,000	\$16,400
450	837	1	1	PS-AHR	A09181	00185000	17 CHESTER ST	Arrowhead Point HO Ass'n	Residential	\$317,000	\$25,700
451	838	1	1	PS-AHR	A09125	03746000	33 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$244,000	\$19,800
452	839	1	1	PS-AHR	A09139	00665000	15 TAYLOR ST	Arrowhead Point HO Ass'n	Residential	\$207,000	\$16,800
453	840	1	1	PS-AHR	A09029	00148000	24 CHESTER ST	Arrowhead Point HO Ass'n	Residential	\$182,000	\$14,800
454	841	1	1	PS-AHR	A09136	00545000	29 CHESTER ST	Arrowhead Point HO Ass'n	Residential	\$224,000	\$18,200
455	842	1	1	PS-AHR	A09142	04212000	45 ARROWHEAD RD	Arrowhead Point HO Ass'n	Vacant / Open Space	\$139,000	\$11,300
456	843	1	1	PS-AHR	A09141	04214000	31 CHESTER ST	Arrowhead Point HO Ass'n	Residential	\$246,000	\$20,000
457	844	1	1	PS-AHR	A09146	01106000	51 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$277,000	\$22,500
458	845	1	1	PS-AHR	A09148	02838000	49 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$240,000	\$19,500
459	846	1	1	PS-AHR	A09144	02454000	55 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$229,000	\$18,600
460	847	1	1	PS-AHR	A09145	00678000	32 CHESTER ST	Arrowhead Point HO Ass'n	Residential	\$208,000	\$16,900
461	848	1	1	PS-AHR	A09130	03999000	7 TAYLOR ST	Arrowhead Point HO Ass'n	Residential	\$276,000	\$22,400
462	849	1	1	PS-AHR	A09128	01259000	19 CHESTER ST	Arrowhead Point HO Ass'n	Residential	\$278,000	\$22,600
463	850	1	1	PS-AHR	A09132	05103000	23 CHESTER ST	Arrowhead Point HO Ass'n	Residential	\$156,000	\$12,700
464	851	1	1	PS-AHR PS-AHR	A09129 A09133	05102000	37 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$445,000	\$36,100
465 466	852 853	1	1	PS-AHR PS-AHR	A09133	04609000 01747000	41 ARROWHEAD RD 43 ARROWHEAD RD	Arrowhead Point HO Ass'n Arrowhead Point HO Ass'n	Residential	\$219,000 \$251,000	\$17,800 \$20,400
467	854	1	1	PS-AHR	A09137	04700000	18 CHESTER ST	Arrowhead Point HO Ass'n	Residential Residential	\$201,000	\$16,300
468	855	1	1	PS-AHR	A09131	02670000	20 CHESTER ST	Arrowhead Point HO Ass'n	Residential	\$244,000	\$19,800
469	856	1	1	PS-KS	A09054	01590000	78 KELLOGG ST	Candlewood Shores Tax District	Residential	\$147,000	\$13,800
470	857	1	1	PS-KS	A09052	01914000	80 KELLOGG ST	Candlewood Shores Tax District	Residential	\$181,000	\$14,700
471	858	1	1	PS-KS	A09046	01180000	82 KELLOGG ST	Candlewood Shores Tax District	Vacant / Open Space	\$101,000	\$8,200
472	859	1	1	PS-AHR	A09047	02609000	83 KELLOGG ST	Arrowhead Point HO Ass'n	Residential	\$354,000	\$28,700
473	860	1	1	PS-KS	A09160	03184000	12 CANDLEWOOD HARBOR	Arrowhead Point HO Ass'n	Residential	\$453,000	\$36,800
474	861	1	1	PS-KS	A09159		11 CANDLEWOOD HARBOR	Arrowhead Point HO Ass'n	Residential	\$381,000	\$30,900
475	862	1	1	PS-KS	A09157		7 CANDLEWOOD HARBOR	Arrowhead Point HO Ass'n	Residential	\$238,000	\$19,300
476	863	1	1	PS-KS	A09158		9 CANDLEWOOD HARBOR	Arrowhead Point HO Ass'n	Vacant / Open Space	\$110,000	\$8,900
477	864	1	1	PS-KS	A09156	03307000	5 CANDLEWOOD HARBOR	Arrowhead Point HO Ass'n	Residential	\$203,000	\$16,500
478	865	1	1	PS-KS	A09185	01177000	81 KELLOGG ST		Residential	\$531,000	\$43,100
479	866	1	1	PS-KS	A09163	02869000	6 CANDLEWOOD HARBOR		Residential	\$598,000	\$48,600
480	867	1	1	PS-KS	A09164		4 CANDLEWOOD HARBOR	Arrowhead Point HO Ass'n	Residential	\$162,000	\$13,200
481	868	1	1	PS-KS	A09161		8 CANDLEWOOD HARBOR	Arrowhead Point HO Ass'n	Residential	\$450,000	\$36,500
482	869	1	1	PS-AHR	A09036	04585000	89 KELLOGG ST	Arrowhead Point HO Ass'n	Residential	\$207,000	\$16,800
483	870	1	1	PS-KS	A09169	00482000	36 KELLOGG ST		Residential	\$200,000	\$16,200
484	871	1	1	PS-AHR	A09039	04394000	85 KELLOGG ST	Arrowhead Point HO Ass'n	Residential	\$203,000	\$16,500
485	872	1	1	PS-AHR	A10024	05588000	10 CHESTER ST	Arrowhead Point HO Ass'n	Residential	\$322,000	\$26,100
486	873	1	1	PS-AHR	A10025		6 CHESTER ST	Arrowhead Point HO Ass'n	Residential	\$207,000	\$16,800
487	874	1	1	PS-AHR	A10026	00341000	9 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$404,000	\$32,800
488	875	1	1	PS-AHR	A10016	04290000	27 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$349,000	\$28,300
489	876	1	1	PS-AHR	A10017	01603000	23 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$284,000	\$23,100
490	877	1	1	PS-AHR	A10018	04735000	19 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$239,000	\$19,400
491	878	1	1	PS-AHR	A10019	05671000	15 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$219,000	\$17,800
492	879	1	1	PS-AHR	A10021	02005000	1 CHESTER ST	Arrowhead Point HO Ass'n	Residential	\$339,000	\$27,500
493	880	1	1	PS-CHR	B08117	01224000	7 HICKORY HILL RD	Hickory Hills	Residential	\$175,000	\$14,200
494 405	881	1	1	PS-CHR	B08118	01536000	9 HICKORY HILL RD	Hickory Hills	Residential	\$178,000	\$14,500
495	882	1	1	PS-CHR	B08123	01006000	10 HICKORY HILL RD	Hickory Hills	Residential	\$220,000	\$17,900
496	883	1	1	PS-CHR	B08122	03357000	30 LAUREL DR	Hickory Hills	Residential	\$201,000	\$16,300
497	884	1	1	 	B09138	03644000	342 CANDLEWOOD LAKE RD 370 CANDLEWOOD LAKE RD		Vacant / Open Space	\$48,000	\$3,900
498	886	1	1	DC CITE	B08109	00452000		Hickory Hills	Residential	\$470,000	\$38,200
499 500	887 888	1	1	PS-CHR PS-CHR	B08116 B08119	03540000 03541000	1 CRANBERRY LN 2 CRANBERRY LN	Hickory Hills Hickory Hills	Residential Residential	\$245,000 \$237,000	\$19,900 \$19,200
500	889	1		PS-CHR PS-CHR	B08119 B08111	03541000	4 CRANBERRY LN	Hickory Hills	Residential	\$367,000	\$19,200 \$29,800
501	890	1	1	PS-CHR PS-KS	B09146	03542000	1 CIPOLLA LN	Hickory Hills	Residential	\$367,000	\$29,800
503	891	1	1	PS-KS	B09146 B09151	03097000	28 KELLOGG ST	Hickory Hills	Residential	\$375,000	\$30,500
504	892	1	1	PS-KS	B09151	03097000	4 CIPOLLA LN	Hickory Hills	Residential	\$181,000	\$14,700
504	332	-		. 5 1(3	202130	22121000	0.0	. Heroty Timb	nesidential	Y-01,000	Y = 7,7 UU

	LAI_ID	Penin	Loc_Cat	PS-Zone	Map / Block #	Assessor's Account #	Property Location	Water Supply System	Land Use Category	Grand List Value (2016 Valuation)	Preliminary Sewer Assessment
505	893	1	1	PS-KS	B09147	01933000	3 CIPOLLA LN	Hickory Hills	Residential	\$194,000	\$15,800
506	894	1	1	PS-KS	B09148	05673000	5 CIPOLLA LN	Hickory Hills	Residential	\$196,000	\$15,900
507	895	1	1	PS-KS	B09145	02878000	24 KELLOGG ST	Hickory Hills	Residential	\$399,000	\$32,400
508	896	1	1	PS-CHR	B08115	03134000	3 HICKORY HILL RD	Hickory Hills	Residential	\$241,000	\$19,600
509	897	1	1	PS-LVC	B09141	00473000	20 KELLOGG ST		Residential	\$268,000	\$21,800
510	898	1	1	PS-LVC	B09140	03721000	14 KELLOGG ST		Residential	\$198,000	\$16,100
511	899	1	1	PS-LVC	B09092	02139000	9 KELLOGG ST	Candlewood Orchards	Residential	\$249,000	\$20,200
512	900	1	1	PS-LVC	B09122	01553000	13 KELLOGG ST		Residential	\$1,010,000	\$82,000
513	901	1	1	PS-LVC	B09093	05835000	2 LAKEVIEW RD	Candlewood Orchards	Residential	\$179,000	\$14,500
514	902	1	1	PS-LVC	B09095	05836000	2A LAKEVIEW RD	Candlewood Orchards	Residential	\$219,000	\$17,800
515	903	1	1	PS-LVC	B09096	03374000	26 LAKEVIEW RD	Candlewood Orchards	Residential	\$273,000	\$22,200
516	904	1	1	PS-LVC	B09097	02124000	4 LAKEVIEW RD	Candlewood Orchards	Residential	\$220,000	\$17,900
517	905	1	1	PS-LVC	B09100	03293000 01249000	22 LAKEVIEW RD	Candlewood Orchards Candlewood Orchards	Residential	\$193,000	\$15,700
518 519	906 907	1	1	PS-LVC PS-LVC	B09098 B09099	03564000	24 LAKEVIEW RD 6 LAKEVIEW RD	Candlewood Orchards Candlewood Orchards	Residential Residential	\$246,000 \$185,000	\$20,000 \$15,000
520	908	1	1	PS-LVC	B09103	02007000	8 LAKEVIEW RD	Candlewood Orchards	Residential	\$244,000	\$19,800
521	909	1	1	PS-LVC	B09112	03720000	17 LAKEVIEW RD	Candlewood Orchards	Residential	\$633,000	\$51,400
522	910	1	1	PS-LVC	B09113	05485000	19 LAKEVIEW RD	Candlewood Orchards	Vacant / Open Space	\$164,000	\$13,300
523	911	1	1	PS-LVC	B09114	05714000	21 LAKEVIEW RD	Candlewood Orchards	Vacant / Open Space	\$162,000	\$13,200
524	912	1	1	PS-LVC	B09115	02073000	23 LAKEVIEW RD	Candlewood Orchards	Residential	\$579,000	\$47,000
525	913	1	1	PS-LVC	B09117	03292000	27 LAKEVIEW RD	Candlewood Orchards	Residential	\$556,000	\$45,100
526	914	1	1	PS-LVC	B09185	10335000	29A LAKEVIEW RD	Candlewood Orchards	Vacant / Open Space	\$44,000	\$3,600
527	915	1	1	PS-LVC	B09119	02492000	31 LAKEVIEW RD		Residential	\$425,000	\$34,500
528	916	1	1	PS-LVC	B09120	01665000	33 LAKEVIEW RD		Residential	\$429,000	\$34,800
529	917	1	1	PS-LVC	B09172	10145000	37 LAKEVIEW RD	100 1 0000	Vacant / Open Space	\$46,000	\$3,700
530	918	1	1	PS-KS	B09175	01063000	23E KELLOGG ST	Hickory Hills	Vacant / Open Space	\$9,000	\$700
531 532	919 920	1	1	PS-KS PS-KS	B09156 B09160	05903000 03384000	23D KELLOGG ST 21 KELLOGG ST	Hickory Hills	Vacant / Open Space Residential	\$10,000 \$340,000	\$800 \$27.600
532	920	1	1	PS-KS PS-KS	B09160 B09158	03384000	21 KELLOGG ST 23A KELLOGG ST	Candlewood Orchards Hickory Hills	Vacant / Open Space	\$340,000	\$600
534	921	1	1	PS-KS PS-LSD	A07049	04197000	17 TWILIGHT LN	Candlewood Shores Tax District	Vacant / Open Space	\$49,000	\$4,000
535	923	1	1	PS-LSD	A07048	04616000	15 TWILIGHT LN	Candlewood Shores Tax District	Residential	\$198,000	\$16,100
536	924	1	1	PS-LSD	A07046	00884000	13 TWILIGHT LN	Candlewood Shores Tax District	Residential	\$255,000	\$20,700
537	925	1	1	PS-LSD	A07047	00925000	22 MOUNTAINVIEW DR	Candlewood Shores Tax District	Residential	\$223,000	\$18,100
538	926	1	1	PS-LSD	A07045	03244000	18 MOUNTAINVIEW DR	Candlewood Shores Tax District	Residential	\$184,000	\$14,900
539	927	1	1	PS-LSD	A07051	04198000	19 TWILIGHT LN	Candlewood Shores Tax District	Vacant / Open Space	\$49,000	\$4,000
540	928	1	1	PS-LSD	A07121	03661000	25 MOUNTAINVIEW DR	Candlewood Shores Tax District	Residential	\$201,000	\$16,300
541	929	1	1	PS-LSD	A07025	05869000	151 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$178,000	\$14,500
542	930	1	1	PS-LSD	A07040	02284000	22 TWILIGHT LN	Candlewood Shores Tax District	Residential	\$189,000	\$15,300
543	931	1	1	PS-LSD	A07041	05825000	20 TWILIGHT LN	Candlewood Shores Tax District	Residential	\$184,000	\$14,900
544	932	1	1	PS-LSD	A07042	01881000	18 TWILIGHT LN	Candlewood Shores Tax District	Residential	\$165,000	\$13,400
545 546	933	1	1	PS-LSD PS-LSD	A07043 A07044	04299000 04862000	16 TWILIGHT LN	Candlewood Shores Tax District	Residential	\$169,000	\$13,700
547	934 935	1	1	PS-LSD PS-LSD	A07044 A08001	00895000	14 TWILIGHT LN 172 NORTH LAKE SHORE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$244,000 \$493,000	\$19,800 \$40,000
548	936	1	1	PS-LSD	A07024	00880000	170 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$682,000	\$55,400
549	937	1	1	PS-LSD	A08154	01872000	3 TWILIGHT LN	Candlewood Shores Tax District	Residential	\$188,000	\$15,300
550	938	1	1	PS-LSD	A08156	05469000	1 TWILIGHT LN	Candlewood Shores Tax District	Residential	\$230,000	\$18,700
551	939	1	1	PS-LSD	A08151	05137000	14 MOUNTAINVIEW DR	Candlewood Shores Tax District	Residential	\$183,000	\$14,900
552	940	1	1	PS-LSD	A08152	02765000	5 TWILIGHT LN	Candlewood Shores Tax District	Residential	\$203,000	\$16,500
553	941	1	1	PS-LSD	A08138	03838000	25 BAYVIEW DR	Candlewood Shores Tax District	Residential	\$152,000	\$12,300
554	942	1	1	PS-LSD	A08079	00897000	57 LONGVIEW DR	Candlewood Shores Tax District	Residential	\$227,000	\$18,400
555	943	1	1	PS-LSD	A08080	00904000	4 BERKSHIRE DR	Candlewood Shores Tax District	Residential	\$226,000	\$18,400
556	944	1	1	PS-LSD	A08058	04583000	7 DOGWOOD LN	Candlewood Shores Tax District	Residential	\$174,000	\$14,100
557	945	1	1	PS-LSD	A08059	05178000	5 DOGWOOD LN	Candlewood Shores Tax District	Residential	\$190,000	\$15,400
558 550	946 947	1	1	PS-LSD PS-LSD	A08060		3 DOGWOOD LN	Candlewood Shores Tax District	Residential	\$155,000	\$12,600
559 560	947	1	1	PS-LSD PS-LSD	A08062 A08057		1 DOGWOOD LN 4 LILAC LN	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$177,000 \$173,000	\$14,400 \$14,000
561	949	1	1	PS-KS	A08037 A08135		5 BERKSHIRE DR	Candlewood Shores Tax District	Water Supply Land	\$173,000	\$14,000
562	950	1	1	PS-LSD	A08051		52 LONGVIEW DR	Candlewood Shores Tax District	Vacant / Open Space	\$27,000	\$2,200
563	951	1	1	PS-LSD	A08052		8 LILAC LN	Candlewood Shores Tax District	Residential	\$201,000	\$16,300
564	952	1	1	PS-LSD	A08053		17 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$215,000	\$17,500
565	953	1	1	PS-LSD	A08055		6 LILAC LN	Candlewood Shores Tax District	Residential	\$175,000	\$14,200
566	954	1	1	PS-LSD	A08054		15 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$182,000	\$14,800
567	955	1	1	PS-LSD	A08056	04518000	9 DOGWOOD LN	Candlewood Shores Tax District	Residential	\$185,000	\$15,000
568	956	1	1	PS-LSD	A08063	03619000	13 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$229,000	\$18,600
569	957	1	1	PS-LSD	A08064	03383000	11 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$208,000	\$16,900
570 571	958	1	1	PS-LSD	A08065		9 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$267,000	\$21,700
571 572	959 960	1	1	PS-LSD PS-LSD	A08066 A08067	05491000 00982000	8 DOGWOOD LN 7 SOUTH LAKE SHORE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$177,000 \$236,000	\$14,400 \$19,200
573	961	1	1	PS-LSD PS-LSD	A08067	05418000	5 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$402,000	\$19,200
574	962	1	1	PS-LSD	A08068	05633000	6 DOGWOOD LN	Candlewood Shores Tax District	Residential	\$182,000	\$14,800
575	963	1	1	PS-LSD	A08072	05475000	4 DOGWOOD LN	Candlewood Shores Tax District	Residential	\$247,000	\$20,100
576	964	1	1	PS-LSD	A08070		3 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$237,000	\$19,200
577	965	1	1	PS-LSD	A08071	01960000	1 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$214,000	\$17,400
578	966	1	1	PS-LSD	A08073	03653000	69 CANDLEWOOD SHORES RD	Candlewood Shores Tax District	Vacant / Open Space	\$64,000	\$5,200
579	967	1	1	PS-LSD	A08087		45 LONGVIEW DR	Candlewood Shores Tax District	Residential	\$243,000	\$19,700
580	968	1	1	PS-LSD	A08085		47 LONGVIEW DR	Candlewood Shores Tax District	Residential	\$162,000	\$13,200
581	969	1	1	PS-LSD	A08081		55 LONGVIEW DR	Candlewood Shores Tax District	Municipal	\$342,000	\$27,800
582	970	1	1	PS-LSD	A08082	01907000	10 BERKSHIRE DR	Candlewood Shores Tax District	Residential	\$187,000	\$15,200
583	971	1	1	PS-LSD	A08139		23 BAYVIEW DR	Candlewood Shores Tax District	Residential	\$154,000	\$12,500
584	972	1	1	PS-KS	A09018		6 MORTON RD	Arrowhead Point HO Ass'n	Residential	\$828,000	\$67,200
585 586	973 974	1	1	PS-LSD PS-LSD	A08137 A08004	00855000 05448000	27 BAYVIEW DR 12 SOUTH LAKE SHORE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Vacant / Open Space Residential	\$19,000 \$673,000	\$1,500 \$54,600
587	974	1	1	PS-LSD PS-LSD	A08004 A08005	01126000	14 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$640,000	\$52,000
588	976	1	1	PS-LSD	A08003		16 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$641,000	\$52,000
500	570			13 130	700000	33273000	20 000 TH LAKE SHOKE DI	Canalewood Shores Tax Distillet	residential	₽ 0 ₹1,000	732,000

	LAI_ID	Penin	Loc_Cat	PS-Zone	Map / Block #	Assessor's Account #	Property Location	Water Supply System	Land Use Category	Grand List Value (2016 Valuation)	Preliminary Sewer Assessment
589	977	1	1	PS-LSD	A08007	03475000	18 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$932,000	\$75,700
590	978	1	1	PS-LSD	A08008	05539000	20 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$714,000	\$58,000
591	979	1	1	PS-LSD	A08009	02159000	22 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$770,000	\$62,500
592 593	980 981	1	1	PS-LSD PS-LSD	A08010 A08011	02873000 04895000	24 SOUTH LAKE SHORE DR 26 SOUTH LAKE SHORE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$650,000 \$689,000	\$52,800 \$55,900
594	982	1	1	PS-LSD PS-LSD	A08011	03641000	30 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$630,000	\$55,900
595	983	1	1	PS-LSD	A08014	03506000	32 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$579,000	\$47,000
596	984	1	1	PS-LSD	A08049	04529000	3 LILAC LN	Candlewood Shores Tax District	Residential	\$187,000	\$15,200
597	985	1	1	PS-LSD	A08089	00636000	43 LONGVIEW DR	Candlewood Shores Tax District	Residential	\$154,000	\$12,500
598	986	1	1	PS-LSD	A08003	03985000	10 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$700,000	\$56,800
599	987	1	1	PS-LSD	A08002	00935000	176 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Vacant / Open Space	\$139,000	\$11,300
600	988	1	1	PS-LSD	A08074	04385000	153 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$200,000	\$16,200
601	989	1	1	PS-LSD	A08076	10617000	8 TWILIGHT LN	Candlewood Shores Tax District	Municipal	\$13,000	\$1,100
602 603	990 991	1	1	PS-LSD PS-LSD	A08084 A08086	04088000 03643000	12 BERKSHIRE DR 14 BERKSHIRE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$167,000 \$196,000	\$13,600 \$15,900
604	992	1	1	PS-LSD	A08150	00883000	9 TWILIGHT LN	Candlewood Shores Tax District	Residential	\$246,000	\$20,000
605	993	1	1	PS-LSD	A08158	03185000	54 CANDLEWOOD SHORES RD	Candlewood Shores Tax District	Residential	\$335,000	\$27,200
606	994	1	1	PS-LSD	A08015	02937000	34 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$582,000	\$47,300
607	995	1	1	PS-LSD	A08038	05693000	42 LONGVIEW DR		Residential	\$232,000	\$18,800
608	996	1	1	PS-LSD	A08040	00638000	44 LONGVIEW DR		Residential	\$181,000	\$14,700
609	997	1	1	PS-LSD	A08036	04652000	40 LONGVIEW DR	Candlewood Shores Tax District	Residential	\$153,000	\$12,400
610	998	1	1	PS-LSD	A08024	05615000	54 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$777,000	\$63,100
611	999	1	1	PS-LSD	A08023	04028000	52 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$664,000	\$53,900
612 613	1000 1001	1	1	PS-LSD PS-KS	A08113 A08116	00863000 00850000	35 BERKSHIRE DR 4 BAYVIEW DR	Candlewood Shores Tax District	Residential	\$195,000	\$15,800 \$1,100
613	1001	1	1	PS-KS PS-LSD	A08116 A08121	01865000	4 BAYVIEW DR 27 BERKSHIRE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Vacant / Open Space Residential	\$14,000 \$166,000	\$1,100 \$13,500
615	1002	1	1	PS-LSD PS-LSD	A08121 A08123	00394000	25 BERKSHIRE DR	Candlewood Shores Tax District	Residential	\$159,000	\$13,300
616	1003	1	1	PS-LSD	A08125	01663000	23 BERKSHIRE DR	Candlewood Shores Tax District	Residential	\$158,000	\$12,800
617	1005	1	1	PS-LSD	A08127	05636000	21 BERKSHIRE DR	Candlewood Shores Tax District	Residential	\$167,000	\$13,600
618	1006	1	1	PS-LSD	A08129	03600000	19 BERKSHIRE DR	Candlewood Shores Tax District	Residential	\$170,000	\$13,800
619	1007	1	1	PS-LSD	A08130	01451000	17 BERKSHIRE DR	Candlewood Shores Tax District	Residential	\$137,000	\$11,100
620	1008	1	1	PS-LSD	A08131	00878000	15 BERKSHIRE DR	Candlewood Shores Tax District	Residential	\$203,000	\$16,500
621	1009	1	1	PS-LSD	A08128	72450000	18 BAYVIEW DR	Candlewood Shores Tax District	Fire Department	\$370,000	\$30,000
622	1010	1	1	PS-LSD	A08124	00873000	12 BAYVIEW DR	Candlewood Shores Tax District	Residential	\$252,000	\$20,500
623 624	1011 1012	1	1	PS-LSD	A08120	00864000	8 BAYVIEW DR	Candlewood Shores Tax District	Vacant / Open Space	\$9,000	\$700 \$0
625	1012	1	1	PS-LSD PS-LSD	A08118 A08117	00869000	31 BERKSHIRE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Vacant / Open Space Residential	\$224,000	\$18,200
626	1013	1	1	PS-LSD	A08016	01770000	36 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$619,000	\$50,300
627	1015	1	1	PS-LSD	A08017	03404000	38 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$753,000	\$61,100
628	1016	1	1	PS-LSD	A08018	00643000	40 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$699,000	\$56,800
629	1017	1	1	PS-LSD	A08019	05111000	42 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$559,000	\$45,400
630	1018	1	1	PS-LSD	A08020	02965000	44 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$728,000	\$59,100
631	1019	1	1	PS-LSD	A08041	05691000	27 SOUTH LAKE SHORE DR		Residential	\$156,000	\$12,700
632	1020	1	1	PS-LSD	A08039	01193000	29 SOUTH LAKE SHORE DR		Residential	\$202,000	\$16,400
633 634	1021 1022	1	1	PS-LSD PS-LSD	A08037 A08042	05660000 03616000	35 SOUTH LAKE SHORE DR 46 LONGVIEW DR		Residential	\$174,000	\$14,100
635	1022	1	1	PS-LSD PS-LSD	A08042	04838000	48 LONGVIEW DR		Residential Residential	\$200,000 \$220,000	\$16,200 \$17,900
636	1023	1	1	PS-LSD	A08093	03792000	39 LONGVIEW DR	Candlewood Shores Tax District	Residential	\$172,000	\$14,000
637	1025	1	1	PS-LSD	A08095	01804000	37 LONGVIEW DR	Candlewood Shores Tax District	Residential	\$157,000	\$12,700
638	1026	1	1	PS-LSD	A08097	09058000	35 LONGVIEW DR	Candlewood Shores Tax District	Residential	\$157,000	\$12,700
639	1027	1	1	PS-LSD	A08094	05804000	24 BERKSHIRE DR	Candlewood Shores Tax District	Residential	\$152,000	\$12,300
640	1028	1	1	PS-LSD	A08099	00637000	33 LONGVIEW DR	Candlewood Shores Tax District	Residential	\$190,000	\$15,400
641	1029	1	1	PS-LSD	A08096	02736000	26 BERKSHIRE DR	Candlewood Shores Tax District	Residential	\$183,000	\$14,900
642	1030	1	1	PS-LSD PS-LSD	A08098		28 BERKSHIRE DR	Candlewood Shores Tax District	Residential	\$180,000	\$14,600 \$11,700
643 644	1031 1032	1	1	PS-LSD PS-LSD	A08100 A08027		30 BERKSHIRE DR 45 SOUTH LAKE SHORE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$144,000 \$192,000	\$11,700 \$15,600
645	1032	1	1	PS-LSD	A08027		43 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$191,000	\$15,500
646	1034	1	1	PS-LSD	A08031		41 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$211,000	\$17,100
647	1035	1	1	PS-LSD	A08033		37 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$191,000	\$15,500
648	1036	1	1	PS-LSD	A08022		50 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$847,000	\$68,800
649	1037	1	1	PS-LSD	A08021		46 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$714,000	\$58,000
650	1038	1	1	PS-LSD	A08101		31 LONGVIEW DR	Candlewood Shores Tax District	Residential	\$296,000	\$24,000
651	1039	1	1	PS-LSD	A08032		39 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$167,000	\$13,600
652 653	1040 1041	1	1	PS-LSD PS-LSD	A08034 A08028	01630000 04822000	38 LONGVIEW DR 34 LONGVIEW DR	Candlewood Shores Tax District	Residential Vacant / Open Space	\$183,000 \$83,000	\$14,900 \$6,700
654	1041	1	1	PS-LSD PS-LSD	A08028 A08030		36 LONGVIEW DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential	\$83,000	\$6,700 \$17,600
655	1042	1	1	PS-LSD	A08030	03033000	38 BERKSHIRE DR	Candlewood Shores Tax District	Residential	\$217,000	\$17,500
656	1043	1	1	PS-LSD	A08110	02606000	25 LONGVIEW DR	Candlewood Shores Tax District	Residential	\$146,000	\$11,900
657	1045	1	1	PS-LSD	A08107	02997000	34 BERKSHIRE DR	Candlewood Shores Tax District	Residential	\$159,000	\$12,900
658	1046	1	1	PS-LSD	A08108	00323000	36 BERKSHIRE DR	Candlewood Shores Tax District	Residential	\$147,000	\$11,900
659	1047	1	1	PS-LSD	A08105	00776000	27 LONGVIEW DR	Candlewood Shores Tax District	Residential	\$132,000	\$10,700
660	1048	1	1	PS-LSD	A08104	00778000	29 LONGVIEW DR	Candlewood Shores Tax District	Residential	\$139,000	\$11,300
661	1049	1	1	PS-LSD	A08102	04678000	2 HARVARD DR	Candlewood Shores Tax District	Residential	\$168,000	\$13,600
662	1050	1	1	PS-LSD	A08103	03902000	4 HARVARD DR	Candlewood Shores Tax District	Residential	\$258,000	\$20,900
663	1051	1	1	PS-LSD	A08106	05208000	3 HARVARD DR	Candlewood Shores Tax District	Residential	\$164,000	\$13,300
664 665	1052 1053	1	1	PS-LSD PS-LSD	A08111 A08025		23 LONGVIEW DR 47 SOUTH LAKE SHORE DR	Candlewood Shores Tax District Candlewood Shores Tax District	Residential Residential	\$141,000 \$173,000	\$11,400 \$14,000
666	1053	1	1	PS-LSD PS-LSD	A08023		28 LONGVIEW DR	Candlewood Shores Tax District	Residential	\$175,000	\$12,700
667	1055	1	1	PS-LSD	A08112		21 LONGVIEW DR	Candlewood Shores Tax District	Residential	\$194,000	\$15,800
668	1056	1	1	PS-LSD	A09005		68 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$737,000	\$59,800
669	1057	1	1	PS-LSD	A09004		64 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$870,000	\$70,600
670	1058	1	1	PS-LSD	A09107		16 LONGVIEW DR	Candlewood Shores Tax District	Residential	\$171,000	\$13,900
671	1059	1	1	PS-LSD	A09090		1 LONGVIEW DR	Candlewood Shores Tax District	Residential	\$253,000	\$20,500
672	1060	1	1	PS-LSD	A09003	00404000	62 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$625,000	\$50,800

1906 3		LAI_ID	Penin	Loc_Cat	PS-Zone	Map / Block #	Assessor's Account #	Property Location	Water Supply System	Land Use Category	Grand List Value (2016 Valuation)	Preliminary Sewer Assessment
15 1		1061						56 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential		
1004 1												
15												
1565 1 1 P-315 ABSINED GERSSON 7.200111.455.5100F.00 Condensed short in Dente Residential \$33,000 51,500 61,500												
1988 1												
1889 1 1 1 P-1510 309183 31.0000000 31.0000000 31.0000000 31.0000000 31.0000000 31.0000000 31.0000000 31.0000000 31.0000000 31.0000000 31.0000000 31.00000000 31.0000000000000 31.000000000000000000000000000000000000	679	1067	1	1	PS-LSD	A09100	00310000	69 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$193,000	\$15,700
Bear 1970 1 1 P-150 201101 1 20110 201101 2011												
1977 1 1 P-150 APPEND C775/T00 F SULPILLADE SIGNED RE Canadinaced Survey Tac Education C714,000 541,000											,,	
1972 1 Pi-LED ADDITION SECTION SECTION SECTION SECTION Continued Sec												
1974 1 1 P-150												
1975 1	685	1073	1	1	PS-LSD	A09106	02059000	63 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$201,000	\$16,300
1976 1												
1977 1 3 P\$-150 A00000 0145000 F\$-00000 F\$-000000 F\$-00000 F\$-000000 F\$-0000000 F\$-0000000 F\$-00000000 F\$-000000000 F\$-0000000000000 F\$-000000000000000000000000000000000000												
1976 1 1 P\$-520 A00000 O322000 A52000 A52000 A00000 A000000 A00000 A000000 A00000 A000000 A00000 A00000 A00000 A00000 A00000 A00000 A000000 A00000 A000000 A00000 A000000 A000000 A000000 A000000 A000000 A000000 A000000 A000000 A000000 A0000000 A0000000 A00000000												
1972 1 1 P\$-150 A0000 C005800 S0000 S0000 A0000 A00000 A00000 A0000 A00000 A0000 A00000 A0000 A00000 A00000 A00000 A00000 A0												
1983 1												
1	692	1080	1	1	PS-LSD	A09009	01247000	78 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$730,000	\$59,300
1												
1968 1											, ,	
1												
1086 1												
10,000 1,0	698	1086	1	1		A09112	00881000	20 LONGVIEW DR	Candlewood Shores Tax District		\$54,000	
1	699	1087	1				00751000		Candlewood Shores Tax District	Residential	\$138,000	
1												
1991 1 Ps-150 A088921 CORRESPOND 41 LONGVIEW DR Candiewood Shrore's Tax District Residential \$159,000 \$12,700 \$100 1 Ps-150 A08132 CORRESPOND Candiewood Shrore's Tax District Residential \$252,000 \$250,000												,
1092 1												
1094 1												
1095 1	705	1093	1	1	PS-LSD	A08133	01698000	22 BAYVIEW DR	Candlewood Shores Tax District	Residential	\$234,000	\$19,000
1096												
1997 1	-											
1008 1												
1099 1												
1101 1												
1102			1	1					Candlewood Shores Tax District	Residential		
1103												
1104												
1105												
1107												
1108	718	1106	1	1	PS-LSD	A08157	05658000	52 CANDLEWOOD SHORES RD	Candlewood Shores Tax District	Residential	\$146,000	\$11,900
1109												
1110												
1111												
1112												
1114	724	1112	1	1	PS-KS	A09056	02209000	74 KELLOGG ST	Candlewood Shores Tax District	Residential	\$165,000	\$13,400
1115		1113	1	1	PS-KS	A09058	05685000	72 KELLOGG ST	Candlewood Shores Tax District	Residential	\$178,000	\$14,500
1116			1	1								
1117												
1118												
1120							01109000			Residential		
1121 1												
1148												
1149 1												
1150 1												
1152 1									Candlewood Shores Tax District	Residential		
1153 1												
1154												
1155 1												
742 1156 1 1 PS-CHR A07137 03722000 38 CLEARVIEW DR Candlewood Shores Tax District Residential \$180,000 \$14,600 743 1157 1 1 PS-CHR A07226 01034000 44 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$402,000 \$32,600 744 1158 1 1 PS-CHR A07227 01060000 46 NORTH LAKE SHORE DR Candlewood Shores Tax District Residential \$366,000 \$29,700 745 1169 1 1 PS-LSD A07120 04659000 27 MOUNTAINVIEW DR Candlewood Shores Tax District Residential \$197,000 \$16,000 746 1170 1 1 PS-LSD A07119 03187000 29 MOUNTAINVIEW DR Candlewood Shores Tax District Residential \$197,000 \$16,000 747 1171 1 1 PS-LSD A07211 03955000 162 NGYLINE DR Candlewood Shores Tax District Residential \$230,000 \$18,700												
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	756	1392	1	1	PS-KS	A09022	00534000	100 KELLOGG ST	Arrowhead Point HO Ass'n	Residential	\$952,000	\$77,300

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	LAI_ID	Penin	Loc_Cat	PS-Zone	Block #	Account #	Property Location	Water Supply System	Land Use Category	Value (2016 Valuation)	Sewer Assessment
757	1393	1	1	PS-KS	A09020	00766000	98 KELLOGG ST	Arrowhead Point HO Ass'n	Vacant / Open Space	\$169,000	\$13,700
758	1394	1	1	PS-AHR	A09175	01791000	3 ARROWHEAD RD		Residential	\$444,000	\$36,100
759	1395	1	1	PS-AHR	A10002	01790000	10 ARROWHEAD RD	Arrowhead Point HO Ass'n	Vacant / Open Space	\$151,000	\$12,300
760	1398	1	1	PS-AHR	A10004	00342000	16 ARROWHEAD RD	Arrowhead Point HO Ass'n	Vacant / Open Space	\$151,000	\$12,300
761	1399	1	1	PS-AHR	A10003	02812000	12 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$869,000	\$70,600
762	1400	1	1	PS-AHR	A09023	00535000	104 KELLOGG ST	Arrowhead Point HO Ass'n	Residential	\$434,000	\$35,200
763	1401	1	1	PS-AHR	A09025	10185000	1 ARROWHEAD RD	Arrowhead Point HO Ass'n	Vacant / Open Space	\$168,000	\$13,600
764	1402	1	1	PS-AHR	A09026	03351000	6 MYRON AVE	Arrowhead Point HO Ass'n	Residential	\$176,000	\$14,300
765	1403	1	1	PS-LSD	A07018	05015000	156 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$758,000	\$61,500
766 767	1404 1405	1	1	PS-LSD PS-KS	A07017 A09017	05504000 04899000	154 NORTH LAKE SHORE DR 4 MORTON RD	Candlewood Shores Tax District Arrowhead Point HO Ass'n	Residential Residential	\$683,000 \$990,000	\$55,500 \$80,400
768	1405	1	1	PS-KS	A09017 A09179	00767000	10 MORTON RD	Arrowhead Point HO Ass'n	Residential	\$1,008,000	\$80,400
769	1409	1	1	PS-KS PS-CHR	A09179 A08221	05402000	29 LAUREL DR	Hickory Hills	Residential	\$1,008,000	\$14,900
770	1410	1	1	PS-CHR	A08221	00468000	31 LAUREL DR	Hickory Hills	Residential	\$258,000	\$20,900
771	1411	1	1	PS-CHR	A08220	03546000	14 HICKORY HILL RD	Hickory Hills	Residential	\$216,000	\$17,500
772	1412	1	1	PS-CHR	A08218	05036000	33 LAUREL DR	Hickory Hills	Residential	\$200,000	\$16,200
773	1416	1	1	PS-CHR	A08219	03594000	16 HICKORY HILL RD	Hickory Hills	Residential	\$231,000	\$18,800
774	1417	1	1	PS-CHR	A08223	02920000	20 HICKORY HILL RD	Hickory Hills	Residential	\$314,000	\$25,500
775	1422	1	1	PS-AHR	A09134	03321000	56 ARROWHEAD RD	Arrowhead Point HO Ass'n	Residential	\$656,000	\$53,300
776	1423	1	1	PS-AHR	B09180	00140000	50 ARROWHEAD RD	Arrowhead Point HO Ass'n	Vacant / Open Space	\$85,000	\$6,900
777	1438	1	1	PS-CHR	B08132	00916000	19 CANDLEWOOD SHORES RD	Candlewood Shores Tax District	Vacant / Open Space	\$132,000	\$10,700
778	1439	1	1	PS-CHR	A07193	00182000	69 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Vacant / Open Space	\$19,000	\$1,500
779	1440	1	1	PS-CHR	A07235	02795000	64 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$518,000	\$42,100
780	1441	1	1	PS-LSD	A07103	02539000	51 MOUNTAINVIEW DR	Candlewood Shores Tax District	Residential	\$181,000	\$14,700
781	1442	1	1	PS-LSD	A08075	00893000	157 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Vacant / Open Space	\$65,000	\$5,300
782	1443	1	1	PS-CHR	A08288	10271000	30A NORTH LAKE SHORE DR	Candlewood Shores Tax District	Vacant / Open Space	\$56,000	\$4,500
783	1444	1	1		B08112	03899000	346 CANDLEWOOD LAKE RD		Residential	\$148,000	\$12,000
784	1445	1	1		B08113	01529000	350 CANDLEWOOD LAKE RD		Residential	\$268,000	\$21,800
785	1446	1	1	PS-CHR	B08110	00927000	15 CANDLEWOOD SHORES RD	Hickory Hills	Vacant / Open Space	\$117,000	\$9,500
786	1449	1	1		B09128	04104000	292 CANDLEWOOD LAKE RD		Restaurant	\$798,000	\$64,800
787	1451	1	1	PS-CHR	A08187	10100000	39 CANDLEWOOD SHORES RD	Candlewood Shores Tax District	Residential	\$370,000	\$30,000
788	1452	1	1	PS-AHR	A09180	00677000	30 CHESTER ST	Arrowhead Point HO Ass'n	Vacant / Open Space	\$56,000	\$4,500
789	1453	1	1	PS-KS	A09162	01177001	61 KELLOGG ST		Residential	\$723,000	\$58,700
790	1454	1	1	PS-KS	A09183	01177003	63 KELLOGG ST		Residential	\$718,000	\$58,300
791 792	1455 1456	1	1	PS-KS PS-AHR	A09184 A10022	01177002 01601000	65 KELLOGG ST 9 CHESTER ST	A h and Britat HO Andr	Vacant / Open Space	\$198,000 \$96,000	\$16,100
792	1456	1	1	PS-AHR PS-AHR	A10022 A10028	00341001	3 MYRON AVE	Arrowhead Point HO Ass'n Arrowhead Point HO Ass'n	Vacant / Open Space Vacant / Open Space	\$96,000	\$7,800 \$9,300
794	1457	1	1	PS-AFIK PS-LVC	B09149	04280000	12 KELLOGG ST	Arrownead Point HO ASS II	Residential	\$205,000	\$16,600
795	1459	1	1	PS-LVC PS-LSD	A08012	01699000	28 SOUTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$615,000	\$49,900
796	1461	1	1	PS-KS	A08012	10800000	3 LAUREL DR	Candlewood Shores Tax District	Vacant / Open Space	\$23,000	\$1,900
797	1464	1	1	PS-CHR	A08283	01776000	31 CANDLEWOOD SHORES RD	Hickory Hills	Residential	\$377,000	\$30,600
798	1465	1	1	PS-AHR	A09126	03045000	1 TAYLOR ST	Arrowhead Point HO Ass'n	Residential	\$219,000	\$17,800
799	1472	1	1	PS-CHR	A07255	05098000	53 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$158,000	\$12,800
800	1473	1	1	PS-CHR	B08136	00859000	1 NORTH LAKE SHORE DR		Residential	\$260,000	\$21,100
801	1474	1	1	PS-CHR	B08172	10459000	36 CANDLEWOOD SHORES RD		Residential	\$239,000	\$19,400
802	1480	1	1	PS-CHR	A07241	03290000	78 NORTH LAKE SHORE DR	Candlewood Shores Tax District	Residential	\$543,000	\$44,100
803	1483	1	1	PS-LSD	A07176	03209000	89 CLEARVIEW DR		Residential	\$157,000	\$12,700
804	1484	1	1	PS-LSD	A07174	00389000	91 CLEARVIEW DR		Residential	\$271,000	\$22,000
805	1485	1	1	PS-LSD	A07173	04499000	93 CLEARVIEW DR		Residential	\$191,000	\$15,500
806	1486	1	1	PS-CHR	A07175	04078000	91 NORTH LAKE SHORE DR		Residential	\$240,000	\$19,500
807	1487	1	1	PS-LSD	A07172	05177000	95 CLEARVIEW DR		Residential	\$234,000	\$19,000
808	1488	1	1	PS-CHR	A07251	01642000	93 NORTH LAKE SHORE DR		Vacant / Open Space	\$24,000	\$1,900
809	1489	1	1	PS-CHR	A07171	01638000	95 NORTH LAKE SHORE DR		Vacant / Open Space	\$105,000	\$8,500
810	1490	1	1	PS-CHR	A07250	01637000	97 NORTH LAKE SHORE DR		Residential	\$203,000	\$16,500
811	1491	1	1	PS-LSD	A07170	03918000	97 CLEARVIEW DR		Residential	\$183,000	\$14,900
812	1492	1	1	PS-CHR	A07169	04931000	99 NORTH LAKE SHORE DR		Residential	\$200,000	\$16,200
813	1493	1	1	PS-LSD	A07168	01423000	99 CLEARVIEW DR		Residential	\$180,000	\$14,600
814	1496 1526	1	1	PS-LSD	A08045 B09127	04225000	25 SOUTH LAKE SHORE DR		Residential Residential	\$325,000	\$26,400
815	1526	1	1		803171	00032000	5 KELLOGG ST	<u> </u>	Kesidentiai	\$511,000	\$41,500