

**Map, Plan and Report**

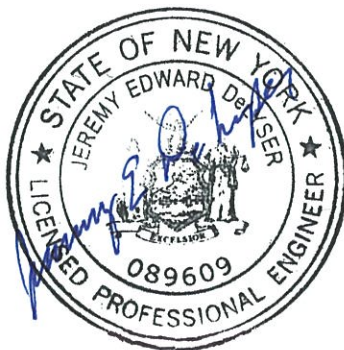
**For the**

**Town of Torrey**

**Proposed Perry Point Water District**

**Torrey, New York**

**March 2016**



**Clark Patterson Lee**  
DESIGN PROFESSIONALS

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## **I. General**

The Town of Torrey has received notice of public interest in establishing a water district. A water district is a special use district required by Town Law where a specific area of the town receives a specific benefit. The cost for receiving this benefit is borne solely by the property owners in that specific area. The purpose of this project is to provide a safe and reliable potable water supply and fire protection to residences in the Proposed Town of Torrey Water Districts.

This report will be the basis of water district formation for the Town of Torrey Perry Point Water District. The Proposed Perry Point Water District is shown in Figure No. 1. The Water District Boundary Map and Legal Description are provided in Appendix A. The new water main will connect to the existing Village of Dresden Water System approximately 200-feet south of the intersection of Milo Street and Margaret Street.

## **II. Project Planning Area**

### **A. Location**

As part of the Town of Torrey Perry Point Water District, water main will be installed along portions of Kings Hill and Perry Point Roads. This will involve approximately 13,500 linear feet of 8 and 12-inch water main, 35 residential units. There are also approximately 21 vacant lots (0.5 EDU each), 4 commercial properties (1.0 EDU each) and the Binghamton Boating Club (18.0 EDU) within the Perry Point District, bringing the EDU count to approximately 67.5 units.

### **B. Environmental Resources Present**

There are farmlands present in the project area. All construction will be taking place in existing road-right of ways or permanent easements and proper construction mitigation and restoration efforts will be implemented based on standard practices common to the industry.

### **C. Growth Areas and Population Trends**

According to the United States Census, the Town of Torrey had a population of 1,307 in 2000 and 1,282 in 2010. These numbers reflect a population that is decreasing at an average of 0.19% per year.

## **III. Existing Facilities**

### **A. Location Map**

There are no existing water service areas in the Town of Torrey with the exception of houses located along the Village of Dresden transmission line, served as out-of-district users by the Village. The power plant and Ferro Corporation, both located south of the Village, have a private 4-inch water service that supplies domestic water and a portion of

their operational needs. The power plant has a raw water intake from Seneca Lake that can be used for process water. The daily average usage of the joint water service is approximately 13,600 gallons per day: power plant 2,200 gpd and Ferro 11,400 gpd.

The Town of Torrey is also in the process of creating Water District No. 1 in the northern portion of Town between NYS Route 14 and Seneca Lake, south of the Town of Benton. The water for the Perry Point area will be supplied by the Village of Penn Yan through the Village of Dresden Water System. The Town of Torrey will negotiate with the Village of Dresden to provide the operation and maintenance services to this District.

## B. Existing Water Supply

The entire area of the proposed water district is presently served by private wells. The Town of Torrey has received several complaints about the quality and quantity of the water in the area. Residents in this area have experienced the following problems:

1. **Insufficient quantity** of water is available for residential wells. Residents must conserve water by alternating shower days, alternating laundry days, or not washing clothes in their residences at all.
2. **Poor water quality** is predominant in the existing well supplies. The water quality requires residents to either boil water for consumption or purchase bottled water for cooking and consumption. Raw water prior to private treatment systems has a brown appearance, and thus is also aesthetically objectionable in addition to the health hazards.
3. **High cost** to operate and maintain existing well supplies. Several residents must purchase chemicals for softening and treatment systems, and must frequently replace their plumbing systems due to corrosion of their fixtures. Several residents currently pay over \$400 per year to operate and maintain their water system, which provides them with poor quality water and insufficient quantities at times.
4. **Fire Protection:** Currently, there is no water system to provide fire protection in the proposed water district. Although, Seneca Lake could be utilized in some areas of the proposed District to provide an adequate supply of water for fire protection if the Fire Department has direct access.

## IV. Need For Project

### A. Health and Safety

The proposed water main project will provide safe potable water to the residents of the Town of Torrey Perry Point Water District and will eliminate the public health risks associated with the quality and quantity of ground water in the area and a potential contamination of the wellhead.

## B. System O & M

A water distribution network will replace highly expensive individual water treatment units; this will reduce the operation and maintenance costs borne by the residents at this time.

## C. Growth

While economic development is viewed as a project benefit, balancing economic development and land protection is necessary, critical, and provided for. Agriculture is important to the Town of Torrey, functioning as a part of the Town's economic base as well as being the foundation for the rural character that the Town wishes to maintain. Thus, there are no anticipated long-term impacts to the Agricultural Districts as a result of the proposed action including no change in use of agricultural/residential lands within any Agricultural Districts.

# V. Alternatives Considered

## A. Description

### 1. Alternative 1 – Null Alternative

Estimated Capital Cost: \$ 0

This alternative proposes to “do nothing”. The residents of the Town of Torrey Perry Point Water District would continue using their existing well treatment systems, some whose annual costs exceed \$400. Costs for the purchase of bottled water and off-site laundry services add an estimated \$500 to \$1,000 per year to the cost of a private well. This could mean escalating health problems and water shortages for the residents of the Town of Torrey Perry Point Water District.

### 2. Alternative 2 – New Water Treatment Plant with 8 & 12-inch Water Main

Estimated Capital Cost: \$ 4,190,000

Costs associated with a new public water treatment plant (WTP) for the residents of the Town of Torrey Perry Point Water District could be in excess of \$2 million. This is far more expensive than connecting to the existing Village of Dresden Water System. The combination of a WTP and water main distribution system would have estimated unit costs of approximately \$3,393 without a USDA Grant and approximately \$3,072 with a \$500,000 USDA Grant.

By constructing a new WTP and distribution system, the Town would then have to add at least two full-time employees to perform operation and maintenance, adding additional long term operational costs to the residents. This alternative is far too expensive to be a feasible option for supplying water to the residents in this area.

3. Alternative 3 – New 8 & 12-inch Water Main (Kings Hill Transmission Main)

Estimated Capital Cost: \$ 1,382,000

The proposed action includes the installation of approximately 13,800 linear feet of 8 and 12-inch water mains in the Town of Torrey Perry Point Water District service area including a transmission main along Kings Hill Road to provide potable water and fire service. The water main distribution system would have estimated unit costs of approximately \$1,588 without a USDA Grant and approximately \$1,266 with a \$500,000 USDA Grant. The proposed connection to the Village of Dresden Water System would be to the existing 6-inch water main along Milo Street, approximately 200-feet south of the intersection of Milo Street and Margaret Street.

4. Alternative 4 – New 8 & 12-inch Water Main (Route 14 Transmission Main)

Estimated Capital Cost: \$ 1,386,000

The proposed action includes the installation of approximately 15,600 linear feet of 8 and 12-inch water mains in the Town of Torrey Perry Point Water District service area including a transmission main along NYS Route 14 to provide potable water and fire service. The water main distribution system would have estimated unit costs of approximately \$1,577 without a USDA Grant and approximately \$1,261 with a \$500,000 USDA Grant. The proposed connection to the Village of Dresden Water System would be to the existing 8-inch transmission main at the intersection of NYS Route 14 and Main Street/NYS Route 54.

5. The estimated costs for Alternatives 2, 3 and 4 are detailed in Appendix B.

B. Design Criteria

The Town of Torrey Proposed Perry Point Water District has been designed to provide safe potable water and fire protection to the Town residents within the proposed Perry Point Water District.

C. Map

The proposed Perry Point Water District area is shown in Figure No. 1.

## D. Environmental Impacts

There are no anticipated negative environmental impacts associated with the project. However, an environmental review will be done for the project. All construction will be done in existing road Right-of-Ways or permanent easements and proper construction mitigation and restoration efforts will be implemented.

## E. Advantages/Disadvantages

Although there are significant costs associated with Alternatives 3 and 4, they are the most viable alternatives as they are consistent with the goals and meets the needs of the Town of Torrey more effectively than the other alternatives.

### 1. Alternative 3

#### a. Advantages are as follows:

- It will eliminate the ongoing health risks associated with the quality and quantity of ground water in the area.
- It will be a step towards creating a system, increasing the reliability of potable water supply and fire flow.

#### b. Disadvantages are as follows:

- The connection to the Village of Dresden's existing 6-inch Milo Street Water Main will restrict the fire flows to just above the required NYSDOH minimum of 500 gpm while maintaining a 20 psi residual pressure (500 to 518 gpm).
- It will limit the potential for further expansion within the Town of Torrey for other residents and businesses.
- A large section of Kings Hill Road has no existing residential or commercial occupied parcels.
- Multiple crossings of the railroad siding and track along Kings Hill Road.

### 2. Alternative 4

#### a. Advantages are as follows:

- It will eliminate the ongoing health risks associated with the quality and quantity of ground water in the area.
- It will be a step towards creating a system, increasing the reliability of potable water supply and fire flow.
- Allows for future expansion within the Town of Torrey for other residents and businesses further to the south along Seneca Lake and State Route 14.
- Fire flows above the minimum of 500 gpm at 20 psi (593 to 783 gpm).

#### b. Disadvantages are as follows:

- A large section of NYS Route 14 has no existing residential or commercial occupied parcels.

## **VI. Recommended Alternative**

The recommended alternative is Alternative 4: New 8 & 12-inch Water Main (Route 14 Transmission Main) for the Proposed Town of Torrey Perry Point Water District.

### **A. Project Design**

#### **1. Water Supply**

The Town of Torrey water main will receive water from the Village of Dresden which purchases water from the Village of Penn Yan. The Town of Torrey will negotiate with the Village of Dresden to provide the operation and maintenance services to this District.

#### **2. Treatment**

The Village of Penn Yan will provide treated water to the Town of Torrey through the Village of Dresden. The treated water will meet all the state and federal drinking water standards.

#### **3. Storage**

An existing 300,000 gallon water storage tank is located on NYS Route 54 in the Town of Torrey. The tank is owned and operated by the Village of Dresden. It serves of the Village of Dresden and a few out-of-district users within the Town of Torrey between the tank location and the Village.

#### **4. Distribution Layout**

The connection of the proposed Town of Torey Perry Point Water District to the Village of Dresden Water Distribution System will be made to the existing Village of Dresden's Main Street 8-inch water main, near the intersection of NYS Route 14 and 54.

#### **5. Water Services**

Water services for each house or business will be installed up to the right-of-way or easement line by the contractor during water main installation. Installation of the service from the right-of-way or easement line to the home will be the responsibility of the homeowner. Each home will have to have an individual water pressure regulator and water meter installed.

#### **6. Hydraulic Analysis**

The hydraulic conditions of the proposed system were calculated using the WaterGEMS® V8i hydraulic modeling software. The hydraulic analysis of the



system includes the evaluation of available pressures and flows for the proposed water main extensions and is included in Appendix C. The results of the modeling are discussed below.

Hydraulic analysis of the system with a connection to the Village of Dresden Water System included the evaluation of available pressures and flows during various demand conditions. It is anticipated, based on 35 residential units and 4 commercial units using 300 gpd, with an additional 4,500 gpd at the Binghamton Boating Club (estimated usage of 75 gallons per day per site with 60 sites) that the water district will have an average daily demand of 16,200 gpd (11.25 gpm), a maximum daily demand of 32,400 gpd (22.5 gpm), and a peak hour demand of 64,800 gpd (45 gpm).

Due to the population trends, it is not anticipated that demands within the water district will increase by more than 20% in the near future.

The hydraulic analysis during average daily demands of the Proposed Water District No. 1 system indicates that adequate flows and pressures are available throughout the proposed system. Static pressures range from 46 psi to 107 psi. Available fire flows during peak demand periods range from 593 gpm to 783 gpm while maintaining a minimum of 20 psi residual pressure in the proposed system.

## B. Proposed Water District Unit Costs

The estimated water district unit costs are based on a potential \$500,000 USDA Rural Development grant and financing through USDA Rural Development at a 2.75% interest rate for a 38 year term. The estimated average annual water cost was estimated based on Village of Dresden Water Rates of a bi-monthly minimum charge of \$28.75 (includes first 1,000 gallons and a \$19/EDU service charge), a \$9.75/1000 gallon water usage fee with an average usage of 60,000 gallons/unit/year.

1. The estimated costs for the proposed project are detailed in Appendix B and summarized as follows:

Total Estimated Capital Cost	\$1,386,000
Estimated USDA Grant	<u>-\$500,000</u>
Net Local Project Costs	\$886,000
Annual Debt Service (38 years, 3.00%)	\$37,875
Estimated Debt Service/Unit (67.5 units)	\$562
Estimated Yearly Water Cost	\$699
<b>Total Estimated Unit Cost</b>	<b>\$1,261</b>

## 2. Definition of a Unit

Each single-family residential dwelling shall be considered to be one unit and will typically have a 1-inch or less service line and a ¾-inch or less meter. Included in this category will be single family houses, mobile homes, and individual apartments. Multiple single family dwellings on the same parcel of land will each be considered an individual unit. Any facility will be considered as a minimum of one unit. Vacant land not within a certified agricultural district will be assessed one-half (0.5) of a unit. The parcels within the project area are detailed in Appendix D with their unit charge.

Non-residential, recreational, educational, commercial, industrial, and agricultural facilities will be assigned an equivalent number of units based following method:

The average daily usage divided by 300 gpd (Average Daily Usage ÷ 300 = number of units).

The Average Daily Use will be based on the Design Standards for Wastewater Treatment Works – Intermediate Sized Sewerage Facilities (New York State Department of Environmental Conservation, 1988), Table 3 – Expected Hydraulic Loading Rates, as provided in Appendix E.

## 3. Other One Time Costs

Water Meter & Touch Pad Purchase Fee	\$145
Water Pressure Regulator Purchase	\$ 75
Service Line	\$ 10/LF (\$500 Average)
Well Separation/ Plumbing Modifications	\$200

## VII. Miscellaneous Information

### A. Options for property owner's well

1. Abandon the well.
2. Keep well but separate it from public water plumbing.
3. Keep well and install backflow prevention.

### B. Service Line Information

1. A service line will be installed to all residences, from the water main to the road Right-of-Way or easement, for connection to the public water system.

### C. Optional Water District Enhancements with Remaining Funds

1. Upsize water main diameters to allow for future growth of the water system and maintain above average fire flows. Specifically the section of Perry Point Road from NYS Route 14 to the Binghamton Boat Club if Ferro Corporation's manufacturing facility is to connect to the Town Water District.
2. Extend water mains to the District Boundaries and through road intersections.
3. Installation of automatic flushing units in place of manual 2-inch blow-offs.
4. Purchase or reimburse the costs of water meters, meter radios, and residential pressure reducing valves for the residents of the District.
5. Purchase of replacement parts (hydrants, valves, water main, fittings and repair materials) and water system maintenance equipment.
6. Consideration will also be given to meter reading improvements, water meter telemetry hardware/software, computer hardware/software and metering upgrades to maximize the efficiency of the operation and maintenance of the proposed Water District.
7. Purchase of spare water meters, meter touch pads, and residential water pressure regulators for the residents of the Water District.

### D. Short Lived Assets

1. There will be no equipment installed that has a useful life of less than 30 years. The water main, either PVC or DIP, fire hydrants, valves and water services should have a useful life of approximately 50 years with routine maintenance. Hydrants and valves may require replacement earlier if they are struck by a snow plow or damaged in an automobile accident.

## VIII. Conclusions

The Town of Torrey is committed to providing safe and reliable potable water supply and fire protection to its residents. This specific project will be instrumental in achieving that goal.

The Town of Torrey should begin discussions and negotiations with the Village of Dresden to provide the operation and maintenance services to this District, as well as the potential of a lower water usage rate. The Town of Torrey should also encourage an existing employee to obtain a NYSDOH Class D operator license to act as a backup operator to the Village of Dresden.

It is recommended that the Town of Torrey seek funding for completion of the project on behalf of the residents.

**FIGURE 1**  
**PROJECT LOCATION MAP**








**APPENDIX A**

**WATER DISTRICT BOUNDARY MAP**  
**AND**  
**LEGAL DESCRIPTION**

Referenced Drawings: None  
Drawing Name: J:\PROJECTS\Torrey\_Town\Plat\WD\T District Form\ACAD\Torrey Point WD 2016 03 31.dwg  
Plotted By: Jeremy Delyser  
Date last plotted: 4/1/2016 7:21 AM  
Date last accessed: 4/1/2016 7:20 AM



REVISIONS					 <div>CLARK PATTERSON LEE DESIGN PROFESSIONALS 205 ST. PAUL STREET, SUITE 500 ROCHESTER, NEW YORK 14604 TEL (800) 274-9000 FAX (585) 232-5836 www.clarkpatterson.com</div>	TOWN OF TORREY  TOWN OF TORREY    YATES COUNTY    NEW YORK STATE	TOWN OF TORREY  TOWN OF TORREY    YATES COUNTY    NEW YORK STATE	DATE: 03/31/16	TOWN OF TORREY PERRY POINT WATER DISTRICT  WATER DISTRICT BOUNDARY MAP	PROJECT NUMBER
NO.	DATE	BY	CHKD	DESCRIPTION				DRAWN: MN		13541.00
								DESIGNED: JED		
								CHECKED: TAC		
								SCALE: 1" = 800'		DRAWING NUMBER
								WD-01		

**TOWN OF TORREY  
PERRY POINT WATER DISTRICT**

All that tract or parcel of land situated in the Town of Torrey, County of Yates, State of New York, and being described as follows:

Beginning at a point being the center line of NYS Route 14 (right-of-way varies) on the Town of Torrey/Village of Dresden municipal boundary line; thence,

1. Easterly, along the Town of Torrey/Village of Dresden municipal boundary line and a northerly line of tax account number 40.03-1-1.111, a distance of 791 feet, more or less, to a point 500 feet northeasterly of and parallel to the center line of NYS Route 14; thence,
2. Southeasterly, through the lands of tax account numbers 40.03-1-1.111, and 29.59-1-3, along a line 500 feet northeasterly of and parallel to the center line of NYS Route 14, a distance of 632 feet, more or less, to the westerly line of tax account number 39.84-1-1; thence,
3. Southerly, along the westerly line of tax account number 39.84-1-1, a distance of 50 feet, more or less to the southwesterly corner of tax account number 39.84-1-1; thence,
4. Easterly, along the southerly line of tax account number 39.84-1-1, a distance of 51 feet, more or less, to a point 500 feet easterly of and parallel to the center line of NYS Route 14; thence,
5. Southeasterly, through the lands of tax account numbers 40.03-1-1.111, across Lampman Hill Road (49.5 feet wide right-of-way), 29.59-1-3, and 52.21-1-2.111, along a line 500 feet northeasterly of and parallel to the center line of NYS Route 14, a distance of 1,699 feet, more or less, to the center line of Kings Hill Road (right-of-way varies); thence,
6. Southerly, along the center line of Kings Hill Road, a distance of 631 feet, more or less, to a point 500 feet northerly of and parallel to the center line of Perry Point Road (right-of-way varies); thence,
7. Easterly, through the lands of tax account number 52.01-1-3.1 and 29.59-1-3, along a line 500 feet northerly of and parallel to the center line of Perry Point Road, a distance of 2,204 feet, more or less, to the western shoreline of Seneca Lake; thence,
8. Southeasterly, along the western shoreline of Seneca Lake, a distance of 7,998 feet, more or less, to an easterly corner of tax account number 52.66-1-1; thence,
9. Southwesterly, along a southerly line of tax account number 52.66-1-1, a distance of 307 feet, more or less, to an angle point; thence,
10. Southerly, along an easterly line of tax account number 52.66-1-1, a distance of 142 feet, more or less, to a southerly corner of tax account number 52.66-1-1; thence,
11. Westerly, along the southerly lines of tax account numbers 52.66-1-1, 52.66-1-4, 52.58-1-3, 52.66-1-5, 52.66-1-6, and 52.57-1-4, a distance of 2,043 feet, more or less, to the southwest corner of tax account number 52.57-1-4; thence,
12. Northerly, along the westerly line of tax account number 52.57-1-4, a distance of 41 feet, more or less, to the southeasterly corner of tax account number 52.03-1-11; thence,



13. Westerly, along the southerly line of tax account number 52.03-1-11, a distance of 76 feet, more or less, to a point 500 feet southerly and westerly of, and parallel to the center line of Perry Point Road; thence,
14. Northwesternly, through the lands of tax account numbers 52.03-1-11, 52.01-1-7.11, and 52.01-1-6, along a line 500 feet southerly and westerly of and parallel to the center line of Perry Point Road, a distance of 4,787 feet, more or less, to the southerly line of tax account number 52.31-1-2; thence,
15. Westerly, along the southerly line of tax account number 52.31-1-2, a distance of 260 feet, more or less, to an angle point; thence,
16. Northwesternly, along the southwesterly line of tax account number 52.31-1-2 and a westerly extension of the southwesterly line of tax account number 52.31-1-2, and through the lands of tax account number 29.59-1-3, a distance of 691 feet, more or less, to the westerly line of tax account number 29.59-1-3; thence,
17. Northwesternly, along the westerly line of tax account number 29.59-1-3, a distance of 12 feet, more or less, to an angle point; thence,
18. Westerly, along the southerly line of tax account numbers 29.59-1-3, 52.31-1-1, and 52.01-1-13, a distance of 645 feet, more or less, to a southwesterly corner of tax account 52.01-1-13; thence,
19. Northerly, along a westerly line of tax account number 52.01-1-13, a distance of 200 feet, more or less, to an angle point; thence,
20. Westerly, along a southerly line of tax account number 52.01-1-13 and the westerly extension of a southerly line of tax account number 52.01-1-13, a distance of 517 feet, more or less, to the center line of NYS Route 14; thence,
21. Northwesternly, along the center line of NYS Route 14, a distance of 334 feet, more or less, to the easterly extension of the southerly line of tax account number 52.01-1-14; thence,
22. Westerly, along the easterly extension of the southerly line of tax account number 52.01-1-14 and the southerly line of tax account number 52.01-1-14, a distance of 657 feet, more or less, to a point 500 feet southwesterly of and parallel to the center line of NYS Route 14; thence,
23. Northwesternly, through the lands of tax account numbers 52.01-1-14, across Swarthout Road (49.5 feet wide right-of-way), 51.02-1-7, 51.49-1-1, and 51.42-1-1.1, along a line 500 feet southwesterly of and parallel to the center line of NYS Route 14, a distance of 3,617 feet, more or less, to the westerly line of tax account number 51.42-1-1.1; thence,
24. Northeasterly, along the westerly line of tax account number 51.42-1-1.1, a distance of 301 feet, more or less, to the Town of Torrey/Village of Dresden municipal boundary line; thence,
25. Easterly, along the Town of Torrey/Village of Dresden municipal boundary line, a distance of 326 feet, more or less, to the center line of NYS Route 14 and the Point of Beginning.

Town of Torrey Perry Point Water District, as described above contains 284.08 acres of land, more or less.

All as shown on a map prepared by Clark Patterson Lee, "Town of Torrey Perry Point Water District - Water District Boundary Map", Drawing Number WD-01, dated March 31, 2016.

## **APPENDIX B**

### **OPINION OF PROBABLE COSTS**

**TOWN OF TORREY  
PERRY POINT WATER DISTRICT  
PRELIMINARY COST ESTIMATE  
March 31, 2016**

Alternate 2 - WTP & Distribution

Project Area Description:

Kings Hill Road: 200-feet south of Milo & Margaret St intersection to Perry Point Rd

Perry Point Road: Kings Hill Rd southeast to end of Perry Point Rd

NYS Route 14: Not Serviced

ITEM	DESCRIPTION	UNIT	ESTIMATED QUANTITY	ESTIMATED UNIT PRICE	ESTIMATED TOTAL
1	Mobilization	LS	1	\$ 54,900.00	\$ 54,900.00
2	Maintenance and Protection of Traffic, Including Signs and Flagmen, Meeting NYSDOT Requirements	LS	1	\$ 54,900.00	\$ 54,900.00
3A	Furnish and Install 8-inch Water Main Complete	LF	7,400	\$ 34.00	\$ 251,600.00
3B	Furnish and Install 12-inch Water Main Complete	LF	5,800	\$ 55.00	\$ 319,000.00
4A	Directional Drilling with 8-Inch HDPE (Creek Crossing)	LF	200	\$ 100.00	\$ 20,000.00
4B	Directional Drilling with 12-Inch HDPE (Creek Crossing)	LF	400	\$ 120.00	\$ 48,000.00
5A	Furnish and Install 8-inch Gate Valves Complete	EA	8	\$ 1,200.00	\$ 9,600.00
5B	Furnish and Install 12-inch Gate Valves Complete	EA	7	\$ 2,400.00	\$ 16,800.00
6	Furnish and Install Hydrant Assemblies Complete	EA	23	\$ 3,700.00	\$ 85,100.00
7A	Furnish and Install 1" Water Services with Meter Pit	EA	38	\$ 1,800.00	\$ 68,400.00
7B	Furnish and Install 2" Water Service with Meter Pit	EA	1	\$ 5,000.00	\$ 5,000.00
8	Connection to Existing Water Mains	EA	1	\$ 3,000.00	\$ 3,000.00
9	Boring with 24-Inch Casing Pipe (Railroad Crossing)	LF	250	\$ 300.00	\$ 75,000.00
10	Asphalt Road Restoration	LF	200	\$ 40.00	\$ 8,000.00
11	Asphalt Driveway Restoration	LF	400	\$ 30.00	\$ 12,000.00
12	Stone Driveway Restoration	LF	800	\$ 15.00	\$ 12,000.00
13	Meter Vault	EA	1	\$ 35,000.00	\$ 35,000.00
14	Rock Excavation	CY	200	\$ 100.00	\$ 20,000.00
15	Compaction Testing	LS	1	\$ 5,000.00	\$ 5,000.00
WTP	Water Treatment Plant	EA	1	\$ 2,000,000.00	\$ 2,000,000.00

**Construction Subtotal = \$ 3,103,300.00 \$ 3,103,300.00**

Contingency (10%) = \$ 310,330.00 \$ 310,330.00

Legal, Engineering, Administration (25%) = \$ 775,825.00 \$ 775,825.00

Total = \$ 4,189,455.00 \$ 4,189,455.00

**Total Estimated Capital Cost = \$ 4,190,000.00 \$ 4,190,000.00**

Less USDA Grant (Maximum 45% or \$500,000) = \$0.00 (\$500,000.00)

Net Local Project Cost = \$ 4,190,000.00 \$ 3,690,000.00

Estimated Debt Service at 2.75% for 38yrs = \$ 179,113.00 \$ 157,739.00

Number of EDU's = 66.5 66.5

**Estimated Debt Service/Unit/Year = \$ 2,694.00 \$ 2,373.00**

Estimated Yearly Water Cost (\$28.75/2 months w/ 1000 gal. + \$9.75/1,000 gal. after 1000 gal., 60,000 gpy) = \$ 699.00 \$ 699.00

Total Unit Cost = \$ 3,393.00 \$ 3,072.00

**Total Estimated Unit Cost = \$ 3,393.00 (No Grant) \$ 3,072.00 (w/ USDA Grant)**

Notes:

- Estimated costs based on contractor installation.
- USDA Interst Rate 2nd Quarter 2016 = 2.875% Market/2.250% Intermediate/1.750% Poverty Rate.
- Town of Torrey MHI \$53,056 qualifies for Intermediate Level interest rate of 2.250% (4/1/2016 current rate), 2.75% used for potential of rate increase.
- Commercial Lot EDU = Boating Club 60 Spots x 0.33 EDU/Spot = 18 EDU + 3 Commercial Lots
- Number of EDU = 35 Residential (@ 1.0 EDU) + 21 Vacant Lot (@ 0.5 EDU) + 21.0 Commercial = 66.5 EDU
- NYS Comptroller threshold for automatic approval of water improvement district unit cost = \$906/year for 2016.
- Village Billing Rates: \$26.75/2 months includes first 1,000 gallons and 1 \$19/EDU Charge, Water Usage Rate \$7.75/1000 gallons = \$579/Year.
- Non-Village Billing Rates: \$28.75/2 months includes first 1,000 gallons and 1 \$19/EDU Charge, Water Usage Rate \$9.75/1000 gallons = \$699/Year.

**TOWN OF TORREY  
PERRY POINT WATER DISTRICT  
PRELIMINARY COST ESTIMATE  
March 31, 2016**

Alternate 3 - Distribution

Project Area Description:

Kings Hill Road: 200-feet south of Milo & Margaret St intersection to Perry Point Rd

Perry Point Road: Kings Hill Rd southeast to end of Perry Point Rd

NYS Route 14: Not Serviced

ITEM	DESCRIPTION	UNIT	ESTIMATED QUANTITY	ESTIMATED UNIT PRICE	ESTIMATED TOTAL
1	Mobilization	LS	1	\$ 14,900.00	\$ 14,900.00
2	Maintenance and Protection of Traffic, Including Signs and Flagmen, Meeting NYSDOT Requirements	LS	1	\$ 14,900.00	\$ 14,900.00
3A	Furnish and Install 8-inch Water Main Complete	LF	7,400	\$ 34.00	\$ 251,600.00
3B	Furnish and Install 12-inch Water Main Complete	LF	5,800	\$ 55.00	\$ 319,000.00
4A	Directional Drilling with 8-Inch HDPE (Creek Crossing)	LF	200	\$ 100.00	\$ 20,000.00
4B	Directional Drilling with 12-Inch HDPE (Creek Crossing)	LF	400	\$ 120.00	\$ 48,000.00
5A	Furnish and Install 8-inch Gate Valves Complete	EA	8	\$ 1,200.00	\$ 9,600.00
5B	Furnish and Install 12-inch Gate Valves Complete	EA	7	\$ 2,400.00	\$ 16,800.00
6	Furnish and Install Hydrant Assemblies Complete	EA	23	\$ 3,700.00	\$ 85,100.00
7A	Furnish and Install 1" Water Services with Meter Pit	EA	38	\$ 1,800.00	\$ 68,400.00
7B	Furnish and Install 2" Water Service with Meter Pit	EA	1	\$ 5,000.00	\$ 5,000.00
8	Connection to Existing Water Mains	EA	1	\$ 3,000.00	\$ 3,000.00
9	Boring with 24-Inch Casing Pipe (Railroad Crossing)	LF	250	\$ 300.00	\$ 75,000.00
10	Asphalt Road Restoration	LF	200	\$ 40.00	\$ 8,000.00
11	Asphalt Driveway Restoration	LF	400	\$ 30.00	\$ 12,000.00
12	Stone Driveway Restoration	LF	800	\$ 15.00	\$ 12,000.00
13	Meter Vault	EA	1	\$ 35,000.00	\$ 35,000.00
14	Rock Excavation	CY	200	\$ 100.00	\$ 20,000.00
15	Compaction Testing	LS	1	\$ 5,000.00	\$ 5,000.00

**Construction Subtotal = \$ 1,023,300.00 \$ 1,023,300.00**

Contingency (10%) = \$ 102,330.00 \$ 102,330.00

Legal, Engineering, Administration (25%) = \$ 255,825.00 \$ 255,825.00

Total = \$ 1,381,455.00 \$ 1,381,455.00

**Total Estimated Capital Cost = \$ 1,382,000.00 \$ 1,382,000.00**

Less USDA Grant (Maximum 45% or \$500,000) = \$0.00 (\$500,000.00)

Net Local Project Cost = \$ 1,382,000.00 \$ 882,000.00

Estimated Debt Service at 2.75% for 38yrs = \$ 59,078.00 \$ 37,704.00

Number of EDU's = 66.5 66.5

**Estimated Debt Service/Unit/Year = \$ 889.00 \$ 567.00**

Estimated Yearly Water Cost (\$28.75/2 months w/ 1000 gal. + \$9.75/1,000 gal. after 1000 gal., 60,000 gpy) = \$ 699.00 \$ 699.00

Total Unit Cost = \$ 1,588.00 \$ 1,266.00

**Total Estimated Unit Cost = \$ 1,588.00 \$ 1,266.00**  
(No Grant) (w/ USDA Grant)

Notes:

1. Estimated costs based on contractor installation.

2. USDA Interst Rate 2nd Quarter 2016 = 2.875% Market/2.250% Intermediate/1.750% Poverty Rate.

3. Town of Torrey MHI \$53,056 qualifies for Intermediate Level interest rate of 2.250% (4/1/2016 current rate), 2.75% used for potential of rate increase.

4. Commercial Lot EDU = Boating Club 60 Spots x 0.33 EDU/Spot = 18 EDU + 3 Commercial Lots

5. Number of EDU = 35 Residential (@ 1.0 EDU) + 21 Vacant Lot (@ 0.5 EDU) + 21.0 Commercial = 66.5 EDU

6. NYS Comptroller threshold for automatic approval of water improvement district unit cost = \$906/year for 2016.

7. Village Billing Rates: \$26.75/2 months includes first 1,000 gallons and 1 \$19/EDU Charge, Water Usage Rate \$7.75/1000 gallons = \$579/Year.

8. Non-Village Billing Rates: \$28.75/2 months includes first 1,000 gallons and 1 \$19/EDU Charge, Water Usage Rate \$9.75/1000 gallons = \$699/Year.

**TOWN OF TORREY  
PERRY POINT WATER DISTRICT  
PRELIMINARY COST ESTIMATE  
March 31, 2016**

Alternate 4 - Distribution  
Project Area Description:  
Kings Hill Road: Not Serviced  
Perry Point Road: NYS Route 14 southeast to end of Perry Point Rd  
NYS Route 14: Perry Point Rd to NYS Route 54 @ Main St

ITEM	DESCRIPTION	UNIT	ESTIMATED QUANTITY	ESTIMATED UNIT PRICE	ESTIMATED TOTAL
1	Mobilization	LS	1	\$ 13,100.00	\$ 13,100.00
2	Maintenance and Protection of Traffic, Including Signs and Flagmen, Meeting NYSDOT Requirements	LS	1	\$ 13,100.00	\$ 13,100.00
3A	Furnish and Install 8-inch Water Main Complete	LF	10,200	\$ 34.00	\$ 346,800.00
3B	Furnish and Install 12-inch Water Main Complete	LF	4,800	\$ 55.00	\$ 264,000.00
4A	Directional Drilling with 8-Inch HDPE (Creek Crossing)	LF	400	\$ 100.00	\$ 40,000.00
4B	Directional Drilling with 12-Inch HDPE (Creek Crossing)	LF	200	\$ 120.00	\$ 24,000.00
5A	Furnish and Install 8-inch Gate Valves Complete	EA	11	\$ 1,200.00	\$ 13,200.00
5B	Furnish and Install 12-inch Gate Valves Complete	EA	5	\$ 2,400.00	\$ 12,000.00
6	Furnish and Install Hydrant Assemblies Complete	EA	26	\$ 3,700.00	\$ 96,200.00
7A	Furnish and Install 1" Water Services with Meter Pit	EA	39	\$ 1,800.00	\$ 70,200.00
7B	Furnish and Install 2" Water Service with Meter Pit	EA	1	\$ 5,000.00	\$ 5,000.00
8	Connection to Existing Water Mains	EA	1	\$ 3,000.00	\$ 3,000.00
9	Boring with 24-Inch Casing Pipe (Railroad Crossing)	LF	80	\$ 300.00	\$ 24,000.00
10	Asphalt Road Restoration	LF	200	\$ 40.00	\$ 8,000.00
11	Asphalt Driveway Restoration	LF	400	\$ 30.00	\$ 12,000.00
12	Stone Driveway Restoration	LF	800	\$ 15.00	\$ 12,000.00
13	Meter Vault	EA	1	\$ 35,000.00	\$ 35,000.00
14	Rock Excavation	CY	300	\$ 100.00	\$ 30,000.00
15	Compaction Testing	LS	1	\$ 5,000.00	\$ 5,000.00

**Construction Subtotal = \$ 1,026,600.00 \$ 1,026,600.00**

Contingency (10%) = \$ 102,660.00 \$ 102,660.00

Legal, Engineering, Administration (25%) = \$ 256,650.00 \$ 256,650.00

Total = \$ 1,385,910.00 \$ 1,385,910.00

**Total Estimated Capital Cost = \$ 1,386,000.00 \$ 1,386,000.00**

Less USDA Grant (Maximum 45% or \$500,000) = \$0.00 (\$500,000.00)

Net Local Project Cost = \$ 1,386,000.00 \$ 886,000.00

Estimated Debt Service at 2.75% for 38yrs = \$ 59,249.00 \$ 37,875.00

Number of EDU's = 67.5 67.5

**Estimated Debt Service/Unit/Year = \$ 878.00 \$ 562.00**

Estimated Yearly Water Cost (\$28.75/2 months w/ 1000 gal. + \$9.75/1,000 gal. after 1000 gal., 60,000 gpy) = \$ 699.00 \$ 699.00

Total Unit Cost = \$ 1,577.00 \$ 1,261.00

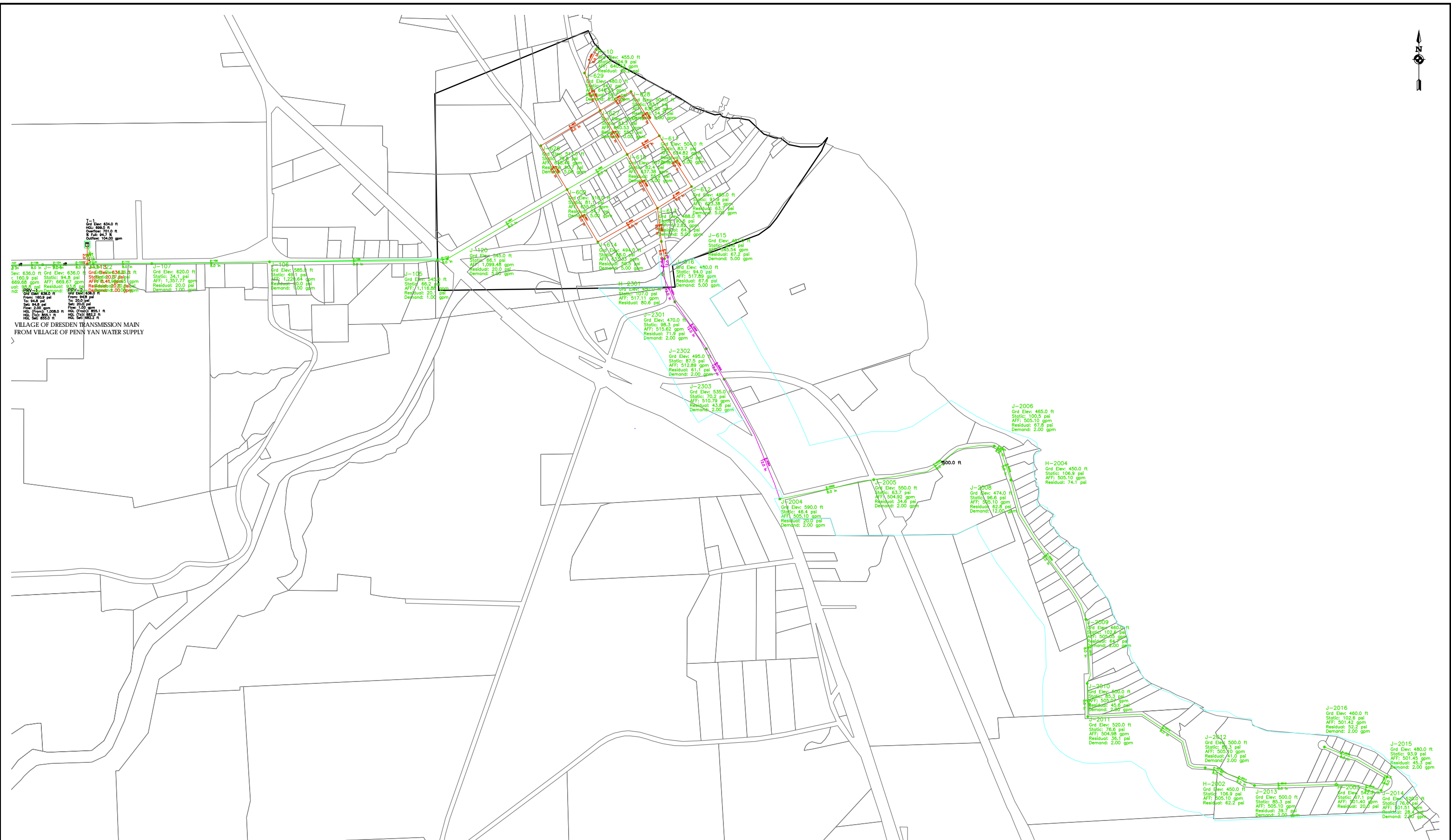
**Total Estimated Unit Cost = \$ 1,577.00 \$ 1,261.00**  
(No Grant) (w/ USDA Grant)

Notes:

1. Estimated costs based on contractor installation.
2. USDA Interst Rate 2nd Quarter 2016 = 2.875% Market/2.250% Intermediate/1.750% Poverty Rate.
3. Town of Torrey MHI \$53,056 qualifies for Intermediate Level interest rate of 2.250% (4/1/2016 current rate), 2.75% used for potential of rate increase.
4. Commercial Lot EDU = Boating Club 60 Spots x 0.33 EDU/Spot = 18 EDU + 4 Commercial Lots
5. Number of EDU = 35 Residential (@ 1.0 EDU) + 21 Vacant Lot (@ 0.5 EDU) + 22.0 Commercial = 67.5 EDU
6. NYS Comptroller threshold for automatic approval of water improvement district unit cost = \$906/year for 2016.
7. Village Billing Rates: \$26.75/2 months includes first 1,000 gallons and 1 \$19/EDU Charge, Water Usage Rate \$7.75/1000 gallons = \$579/Year.
8. Non-Village Billing Rates: \$28.75/2 months includes first 1,000 gallons and 1 \$19/EDU Charge, Water Usage Rate \$9.75/1000 gallons = \$699/Year.

**APPENDIX C**

**HYDRAULIC ANALYSIS**

[illegible]

**CLARK PATTERSON LEE**  
DESIGN PROFESSIONALS  
205 ST. PAUL STREET, SUITE 500  
ROCHESTER, NEW YORK 14604  
TEL (800) 274-9000  
FAX (585) 232-5836  
[www.clarkpattersonlee.com](http://www.clarkpattersonlee.com)

## TOWN OF TORREY

TOWN OF TORREY    COUNTY OF YATES    STATE OF NEW YORK

DATE:	3/31/16
DRAWN:	JED
DESIGNED:	JED
CHECKED:	TAC
SCALE:	1"=1000'

PERRY POINT WATER DISTRICT

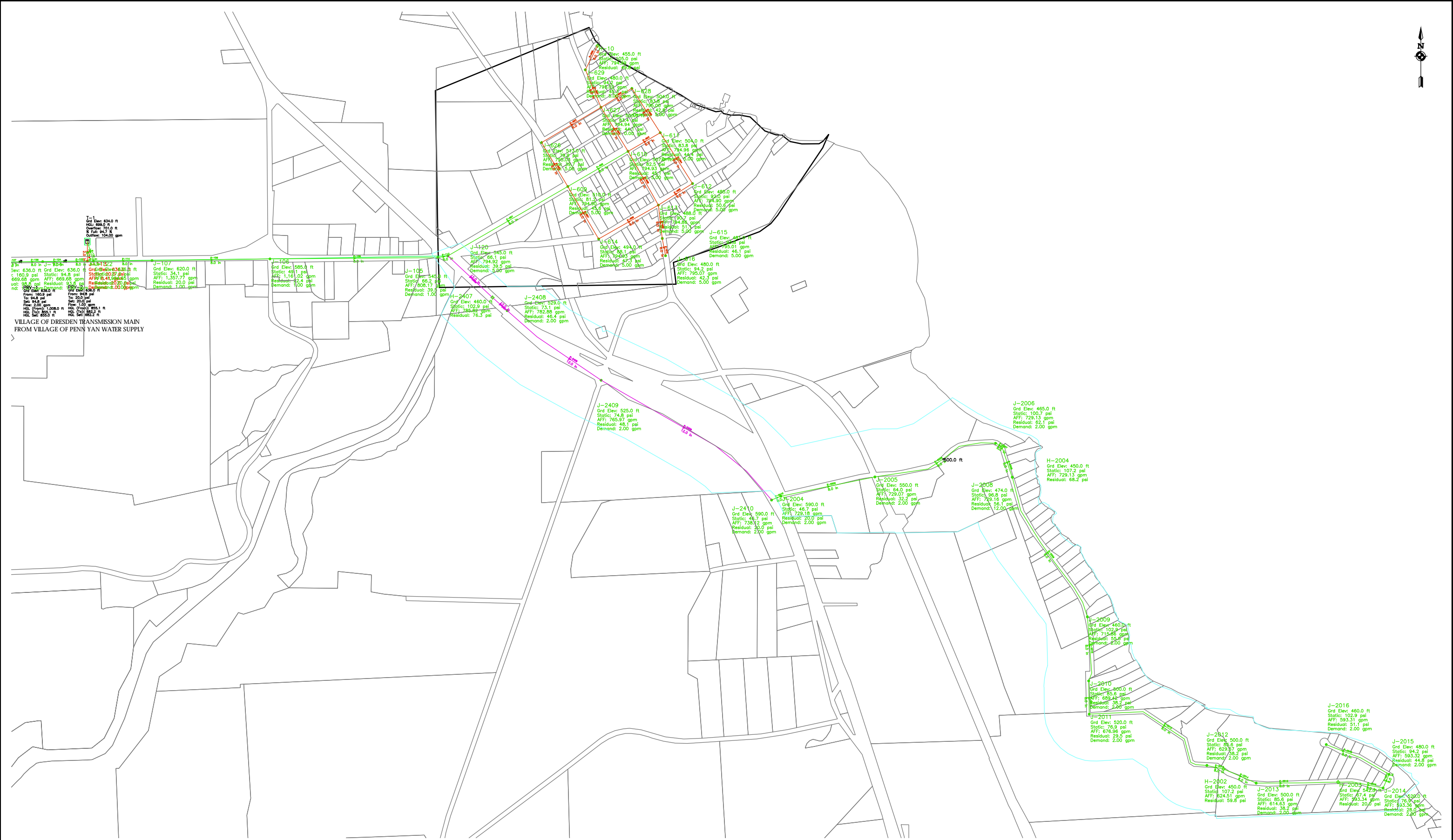
## DRESDEN/TORREY HYDRAULIC MODEL ALTERNATIVE 3 - KINGS HILL ROAD

PROJECT NUMBER

13541.00

DRAWING NUMBER

## ALT-3



REVISIONS				
NO.	DATE	BY	CHKD	DESCRIPTION



**CLARK PATTERSON LEE**  
DESIGN PROFESSIONALS  
205 ST. PAUL STREET, SUITE 500  
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**TOWN OF TORREY**

TOWN OF TORREY COUNTY OF YATES STATE OF NEW YORK

DATE:	3/31/16
DRAWN:	JED
DESIGNED:	JED
CHECKED:	TAC
SCALE:	1"=1000'

**PERRY POINT WATER DISTRICT**  
**DRESDEN/TORREY HYDRAULIC MODEL**  
**ALTERNATIVE 4 - NYS ROUTE 14**

PROJECT NUMBER	13541.00
DRAWING NUMBER	ALT-4



## **APPENDIX D**

### **WATER DISTRICT EQUIVALENT DWELLING UNITS**

Town of Torrey  
Perry Point Water District  
Equivalent Dwelling Units

<b>Tax Account</b>	<b>Owner Name</b>	<b>Mailing Address</b>	<b>Property Address</b>	<b>Use</b>	<b>Unit Charge</b>	<b>Benefit Charge</b>	<b>Assessed Value</b>
40.03-1-1.111	GMMM Greenidge LLC	PO Box 187 Dresden, NY 14441	590 Plant Road	Public Utility Village Water	1.00		\$2,960,000.00
51.42-1-1.1	Friends of the Outlet, Inc.	PO Box 65 Dresden, NY 14441	State Route 14	Recreational (Non-Buildable)	0.00		\$40,500.00
51.49-1-1	Friends of the Outlet, Inc.	PO Box 65 Dresden, NY 14441	State Route 14	Recreational (Non-Buildable)	0.00		\$43,100.00
51.02-1-7	GMMM Lockwood LLC	PO Box 187 Dresden, NY 14441	State Route 14	Public Utility Vacant Land	0.50		\$0.00
52.01-1-14	Alson Z Garman Lois H Garman	769 Hewett Road Penn Yan, NY 14527	State Route 14	Vacant (Ag Exempt)	0.00		\$78,700.00
52.21-1-2.111	Landis Scaping & Design, Inc.	283 State Route 14A Penn Yan, NY 14527	Kings Hill Road	Vacant comm	0.50		\$34,600.00
52.21-1-2.231	Faulkner Truss Co Inc	PO Box 407 Hammondsport, NY 14840	1873 SR 14	Warehouse	1.00		\$167,000.00
52.01-1-35.1	Paul J Weaver Keren G Weaver	645 Oliver Rd Penn Yan, NY 14527	1881 SR 14	Lite Ind Manftr	1.00		\$227,900.00
52.01-1-13	Richmond Lewis Shirley Lewis	1911 State Route 14 Penn Yan, NY 14527	1911 State Route 14	1 Family Res	1.00		\$113,800.00
52.01-1-3.1	Ferro Corporation	1789 Transelco Drive Penn Yan, NY 14527	1789 Transelco Drive	Manufacture Village Water	1.00		\$2,600,000.00
52.31-1-1	Ferro Corporation	1789 Transelco Dr Penn Yan, NY 14527	Perry Point Road	Res vac land	0.50		\$24,000.00
52.31-1-2	Binghamton Boating Club c/o Mark Wagner	440 E Benita Blvd Vestal, NY 13850	1840 Perry Point Road	Camping park	18.00		\$615,800.00

Town of Torrey  
Perry Point Water District  
Equivalent Dwelling Units

<b>Tax Account</b>	<b>Owner Name</b>	<b>Mailing Address</b>	<b>Property Address</b>	<b>Use</b>	<b>Unit Charge</b>	<b>Benefit Charge</b>	<b>Assessed Value</b>
52.01-1-6	James L Lightfoote Jeanine L Lightfoote	1868 Perry Point Road Penn Yan, NY 14527	1868 Perry Point Road	1 Family Res	1.00		\$158,300.00
52.01-1-7.11	Amy L Lundgren	1909 Perry Point Road Penn Yan, NY 14527	Perry Point Road	Vac farmland (Ag Exempt)	0.00		\$137,100.00
52.03-1-11	Ivan Z Eberly Miriam S Eberly	2105 Sr 14 Penn Yan, NY 14527	2105 SR 14	Dairy farm (Ag Exempt)	0.00		\$593,500.00
52.32-1-1	Granzin Trust	1839 Perry Point Road Penn Yan, NY 14527	1839 Perry Point Road	1 Family Res	1.00		\$513,800.00
52.32-1-2	Peter J Komarek Stephanie S Komarek	4390 Wal-Ontario Rd Walworth, NY 14568	1841 Perry Point Road	1 Family Res	1.00		\$405,700.00
52.32-1-3	George R Dowse Pamela H Dowse	3550 Doyle Rd Baldinsville, NY 13027	1847 Perry Point Road	1 Family Res	1.00		\$264,800.00
52.32-1-4	Daunt I Stenzel, Jr Maragaret B Stenzel	1853 Perry Point Road Penn Yan, NY 14527	1853 Perry Point Road	1 Family Res	1.00		\$364,600.00
52.32-1-5	Todd G Cerino Karen M Cerino	47639 Rhyolite Pl Potomac Falls, VA 20165	1857 Perry Point Road	1 Family Res	1.00		\$420,100.00
52.32-1-6	John A Pipher Joan M Pipher	1261 Lowman Rd Lowman, NY 14861	1865 Perry Point Road	1 Family Res	1.00		\$364,400.00
52.32-1-7	Scott C Reinard Lisa Walk Reinard	1871 Perry Point Road Penn Yan, NY 14527	1871 Perry Point Road	1 Family Res	1.00		\$430,700.00
52.32-1-8	Micheal Organic Christina Sellini	82 Bentbrook Circle Webster, NY 14580	1879 Perry Point Road	1 Family Res	1.00		\$400,000.00
52.40-1-1.1	John A Pipher Joan M Pipher	1261 Lowman Rd Lowman, NY 14861	Perry Point Road	Vac w/imprv	0.50		\$6,000.00

Town of Torrey  
Perry Point Water District  
Equivalent Dwelling Units

Tax Account	Owner Name	Mailing Address	Property Address	Use	Unit Charge	Benefit Charge	Assessed Value
52.40-1-1.2	Scott C Reinard Lisa L Walk Reinard	1871 Perry Point Road Penn Yan, NY 14527	Perry Point Road	Res vac land	0.50		\$5,500.00
52.40-1-10	Cheryl R Lonie	1939 Perry Point Road Penn Yan, NY 14527	1939 Perry Point Road	1 Family Res	1.00		\$512,100.00
52.40-1-11	William R Koch Doreen E Koch	1949 Perry Point Road Penn Yan, NY 14527	1949 Perry Point Road	1 Family Res	1.00		\$351,000.00
52.40-1-12	Raymond R Kluger Joyce Kluger	PO Box 246 Dresden, NY 14441	Perry Point Road	Res vac land	0.50		\$9,500.00
52.40-1-13	Lawrence J Martin Susan J Martin	1925 Perry Point Road Penn Yan, NY 14527	Perry Point Road	Vac w/imprv	0.50		\$35,000.00
52.40-1-14	Amy L Lundgren	1909 Perry Point Road Penn Yan, NY 14527	Perry Point Road	Vac w/imprv	0.50		\$33,300.00
52.40-1-16	Louis H Currie Linda C Currie	217 Cloverdale Rd Rochester, NY 14616	Perry Point Road	Res vac land	0.50		\$31,400.00
52.40-1-17.1	Brian D Cusimano Patricia M Cusimano	1060 Hf Five Points Rd Honeoye Falls, NY 14472	Perry Point Road	Res vac land	0.50		\$5,400.00
52.40-1-17.2	Richard J Schmaltz Lois M Schmaltz	1891 Perry Point Road Penn Yan, NY 14527	Perry Point Road	Res vac land	0.50		\$7,200.00
52.40-1-2	Brian D Cusimano Patricia M Cusimano	1060 Hf Five Points Rd Honeoye Falls, NY 14472	1885 Perry Point Road	1 Family Res	1.00		\$304,100.00
52.40-1-3	Richard J Schmaltz Lois M Schmaltz	1891 Perry Point Road Penn Yan, NY 14527	1891 Perry Point Road	1 Family Res	1.00		\$345,100.00
52.40-1-4	Louis H Currie Linda C Currie	217 Cloverdale Rd Rochester, NY 14616	1893 Perry Point Road	1 Family Res	1.00		\$376,500.00

Town of Torrey  
Perry Point Water District  
Equivalent Dwelling Units

Tax Account	Owner Name	Mailing Address	Property Address	Use	Unit Charge	Benefit Charge	Assessed Value
52.40-1-5	William P Krivoshek Rosemary C Ogrinc	3 Boas Ln Wilton, CT 06897	1903 Perry Point Road	Seasonal res	1.00		\$325,700.00
52.40-1-6	Amy L Lundgren	1909 Perry Point Road Penn Yan, NY 14527	1909 Perry Point Road	1 Family Res	1.00		\$339,500.00
52.40-1-7	John T Crist Stephanie M Crist	249 Shady Ln Jersey Shore, PA 17740	1917 Perry Point Road	1 Family Res	1.00		\$428,100.00
52.40-1-8	Lawrence J Martin Susan J Martin	1925 Perry Point Road Penn Yan, NY 14527	1925 Perry Point Road	1 Family Res	1.00		\$430,000.00
52.40-1-9	Raymond R Kluger Joyce A Kluger	PO Box 246 Dresden, NY 14441	1931 Perry Point Road	1 Family Res	1.00		\$422,300.00
52.48-1-1	Mark Krivoshek	16 Yeger Dr Allentown, NJ 08501	Perry Point Road	Res vac land	0.50		\$136,300.00
52.48-1-10	John A Lanni Christine M Lanni	289 14Th St Surf City, NJ 08008	1995 Perry Point Road	1 Family Res	1.00		\$303,800.00
52.48-1-11.1	Gary L McIntee	5245 County Rd 33 Canandaigua, NY 14424	1989 Perry Point Road	Vac w/imprv	0.50		\$150,300.00
52.48-1-11.2	Harrison C Davis	PO Box 11 Lakemont, NY 14857	Perry Point Road	Res vac land (Non-Buildable)	0.00	\$ 1.00	\$1,100.00
52.48-1-12	Jeffrey P Martin Yvonne L Martin	5014 Prairieview Dr Camillus, NY 13031	1999 Perry Point Road	Vac w/imprv	0.50		\$151,700.00
52.48-1-13.112	Kimberly G Holtzman Barbara L Gray	154 Barclay Sq Dr Rochester, NY 14618	2007 Perry Point Road	1 Family Res	1.00		\$451,600.00
52.48-1-15.1	Talza Company Trust	154 Barclay Sq Dr Rochester, NY 14618	2009 Perry Point Road	Res vac land	0.50		\$149,500.00

Town of Torrey  
Perry Point Water District  
Equivalent Dwelling Units

Tax Account	Owner Name	Mailing Address	Property Address	Use	Unit Charge	Benefit Charge	Assessed Value
52.48-1-15.2	Sara Jane Meisner Aaron A Yoder (Land Contract)	35236 Rt 14 Gillett, PA 16925	2005 Perry Point Road	Vac w/imprv	0.50		\$160,400.00
52.48-1-2	Mark P Krivoshik	16 Yeger Dr Allentown, NJ 08501	1959 Perry Point Road	Seasonal res	1.00		\$304,700.00
52.48-1-3	Hood Trust	213 Montauk Cr Port Matilda, PA 16870	1965 Perry Point Road	1 Family Res	1.00		\$535,000.00
52.48-1-4	Joselyn L Busch	1969 Perry Point Road Penn Yan, NY 14527	1969 Perry Point Road	1 Family Res	1.00		\$280,500.00
52.48-1-5	Kaycee Properties Llc	3475 Palmyra Rd Marion, NY 14505	Perry Point Road	Res vac land	0.50		\$153,700.00
52.48-1-6	Harrison C Davis	PO Box 11 Lakemont, NY 14857	1985 Perry Point Road	1 Family Res	1.00		\$373,500.00
52.48-1-9	Alvin L Gauvin Elise C Gauvin	2003 Perry Point Road Penn Yan, NY 14527	2003 Perry Point Road	1 Family Res	1.00		\$539,400.00
52.57-1-1.11	Martin A Gibson Fiona G Gibson	2015 Perry Point Road Penn Yan, NY 14527	2011 Perry Point Road	Res vac land	0.50		\$124,700.00
52.57-1-3	Martin A Gibson Fiona G Gibson	2015 Perry Point Road Penn Yan, NY 14527	2015 Perry Point Road	1 Family Res	1.00		\$859,700.00
52.57-1-4	Martin A Gibson Fiona G Gibson	2015 Perry Point Road Penn Yan, NY 14527	Perry Point Road	Rural vac>10 (Ag Exempt)	0.00		\$279,900.00
52.58-1-3	Gary A King Judith Ann King	105 High Gate Pl Ithica, NY 14850	2129 Perry Point Road	Res vac land	0.50		\$174,900.00
52.58-1-4.11	Lawrence J Saubermann	6 Wenham Ln Pittsford NY 14534	2121 Perry Point Road	1 Family Res	1.00		\$582,900.00

Town of Torrey  
Perry Point Water District  
Equivalent Dwelling Units

Tax Account	Owner Name	Mailing Address	Property Address	Use	Unit Charge	Benefit Charge	Assessed Value
52.58-1-4.2	James M Riesenberger Audrey P Riesenberger	2115 Perry Point Road Penn Yan, NY 14527	2115 Perry Point Road	1 Family Res	1.00		\$429,100.00
52.58-1-5.11	Robert D Constantine Jean L Constantine	2109 Perry Point Road Penn Yan, NY 14527	2109 Perry Point Road	1 Family Res	1.00		\$516,700.00
52.58-1-6	Michael Kieli Katarzyna Kieli	38 Hemlock Ln Painted Post, NY 14870	2137 Perry Point Road	1 Family Res	1.00		\$467,100.00
52.58-1-7.1	Matthew J Canavan Rita Canavan	2103 Perry Point Road Penn Yan, NY 14527	2103 Perry Point Road	1 Family Res	1.00		\$398,700.00
52.58-1-8	Trace J Nevil Colleen M Nevil	109 Armory Blvd Lewisburg, PA 17837	2143 Perry Point Road	1 Family Res	1.00		\$475,000.00
52.58-1-9.11	Martin A Gibson Fiona G Gibson	2015 Perry Point Road Penn Yan, NY 14527	Perry Point Road	Rural vac<10	0.50		\$78,600.00
52.66-1-1	Angela B Pichichero Trust	332 Landing Rd S Rochester, NY 14610	2151 Perry Point Road	1 Family Res	1.00		\$924,600.00
52.66-1-4	Michael E Pichichero Angela Pichichero	332 Landing Rd S Rochester, NY 14610	Perry Point Road	Vac w/imprv	0.50		\$24,400.00
52.66-1-5	Martin A Gibson Fiona G Gibson	2015 Perry Point Road Penn Yan, NY 14527	Perry Point Road	Res vac land (Ag Exempt)	0.00		\$12,000.00
52.66-1-6	Martin A Gibson Fiona G Gibson	2015 Perry Point Road Penn Yan, NY 14526	Perry Point Road	Res vac land (Ag Exempt)	0.00		\$12,000.00

Totals 67.50 \$ 1.00 \$23,977,900.00

## **APPENDIX E**

### **EXPECTED HYDRAULIC LOADING RATES**



**Table 3. Expected Hydraulic Loading Rates**

Type of Facility	Flow Rate Per Person (Gals./Day)	Flow Rate Per Unit (Gals./Day)
<b>Airports</b>		
Per Passenger	3	
Per Employee	15	
<b>Apartments</b>	75	
1 Bedroom		150
2 Bedroom		300
3 Bedroom		450
<b>Bathhouse</b>		
Per Swimmer	10	
<b>Boarding House</b>	75	
<b>Bowling Alley</b>		
Per Lane – No Food Service		75
Per Lane – with Food Service (Add Food Service Value)		
<b>Campgrounds (Recreational Vehicle – Per Site)</b>		
Sewered Sites		100
Central Facilities		
Served Sites, 300-foot Radius		100
Peripheral Sites, 500-foot Radius		75
Subtractions from above		
No Showers		25
Dual Service (Central Facilities and Sewered Facilities overlapping the Central)		25
<b>Campgrounds (Summer Camp)</b>		
Central Facilities	50	
Separate Facilities		
Toilet	10	
Shower	25	
Kitchen	10	
<b>Campground Dumping Stations</b>		
Per Unsewered Site		10
Per Sewered Site		5
<b>Camps, Day</b>	13	
Add for Lunch	3	
Add for Showers	5	
<b>Carwash, Assuming No Recycle</b>		
Tunnel Per Car		80
Rollover Per Car		40
Wandwash Per 5 Minutes Cycle		20
<b>Churches</b>		
Per Seat		3
With Catering (Add Food Service Value)		
<b>Clubs</b>		
Country		
Per Resident Member		75
Per Non-Resident Member		25
Racquet (Per Court Per Hour)		80

**Table 3. Expected Hydraulic Loading Rates**

Type of Facility	Flow Rate Per Person (Gals./Day)	Flow Rate Per Unit (Gals./Day)
<b>Factories</b>		
Per Person/Shift	25	
Add for Showers	10	
<b>Food Service Operations (Per Seat)</b>		
Ordinary Restaurant		35
24-Hour Restaurant		50
Restaurant Along Freeway		70
Tavern (Little Food Service)		20
Curb Service (Drive-In Per Car)		50
Catering or Banquet Facilities	20	
<b>Hair Dresser</b>		
Per Station		170
<b>Hospitals</b>		
Per Bed		175
<b>Hotels</b>		
Per Room		120
Add for Banquet Facilities, Theatre, Night Club, as applicable		
<b>Homes</b>		
1 Bedroom		150
2 Bedroom		300
3 Bedroom		400
4 Bedroom		475
5 Bedroom		550
<b>Institutions (Other Than Hospitals)</b>		
Per Person	125	
<b>Laundromats</b>		
Per Machine		580
<b>Mobile Home Parks</b>		
Less than 5 Units: Use Flow Rates for Homes		
5 to 20 Units: Use Prorated Scale		
20 or More units		
Per Trailer		200
Per Double Wide		300
<b>Motels</b>		
Per Living Unit		100
With Kitchen		150
<b>Office Building</b>		
Per Employee	15	
Per Square Foot		0.1
Dentist – Per Chair/Day		750
<b>Parks (Per Picnicker)</b>		
Restroom Only	5	
Showers and Restroom	10	

**Table 3. Expected Hydraulic Loading Rates**

Type of Facility	Flow Rate Per Person (Gals./Day)	Flow Rate Per Unit (Gals./Day)
<b>Schools (Per Student)</b>		
Boarding	75	
Day	10	
Cafeteria – Add	5	
Showers – Add	5	
<b>Service Stations</b>		
Per Toilet (Not Including Car Wash)		400
<b>Shopping Centers</b>		
Per Square Foot-Food Extra		0.1
Per Employee	15	
Per Toilet		400
<b>Swimming Pools (Per Swimmer)</b>	10	
<b>Sports Stadium</b>	5	
<b>Theatre</b>		
Drive-In (Per Space)		
Movie (Per Seat)		
Dinner Theatre, Individual (Per Seat)	20	
With Hotel	10	

Source:

Design Standards for Wastewater Treatment Works – Intermediate Sized Sewerage Facilities (New York State Department of Environmental Conservation, 1988), Table 3 – Expected Hydraulic Loading Rates