United Water New Rochelle
Delaware Interconnection Project
Sizing, Cost, and Financing

August 2006

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Purpose

This document was prepared pursuant to Section VII, paragraph 4 of the Joint Proposal approved by the Commission establishing a four-year rate plan in Case 04-W-1221. In that Case, the Commission ordered that within 60 days of receiving approval of the design plans for the Delaware Interconnection Project (DIP) from the New York State Department of Health, the Company would demonstrate the prudence and reasonableness of both the size and cost of the DIP. The detail that follows presents that demonstration.

Background

United Water New Rochelle ("UWNR" or the "Company") receives all of its water supply from New York City ("NYC") through connections to NYC's Catskill, Delaware (via an interconnection with the Westchester Joint Water Works ("WJWW")), and Croton Aqueducts. The bulk of the water UWNR supplies comes from the Catskill Aqueduct.

As required under the Safe Drinking Water Act ("SDWA") Amendments of 1986, the US Environmental Protection Agency ("EPA") promulgated the Surface Water Treatment Rules ("SWTR") on June 29, 1989. The SWTR specified the criteria under which filtration of surface water source is required as a treatment technique for public water systems supplied by that source. The EPA promulgated the SWTR to reduce the risk of water-borne disease outbreaks from microbial contaminants in public water systems with surface water sources. Water systems could comply with the SWTR either by filtration or by meeting the stringent water quality, disinfection and site-specific avoidance criteria that make filtration unnecessary.

Two of the three NYC supplies, the Catskill and Delaware watersheds, which originate in Delaware, Greene, Schoharie, Sullivan, and Ulster Counties. Water is conveyed from these watersheds via the Catskill and Delaware Aqueducts, respectively, to the Kensico Reservoir where it is blended. Chlorine and fluoride are added at the Kensico Reservoir, which is then conveyed by the Catskill and Delaware Aqueducts to the Hillview Reservoir. In 1997 and in 2002, EPA issued a Filtration Avoidance Determination

("FAD") for the Catskill/Delaware water supplies. In the FAD, EPA determined that the water quality, and NYC's long-term watershed protection program, for the Catskill/Delaware water supply meets the requirements of the SWTR, and subsequent rules, for unfiltered water supply systems. As a result, filtration is not required for the Catskill/Delaware system. However, the FAD required NYC to design and construct an Ultraviolet Light ("UV") disinfection facility in Eastview, NY (Westchester Co.), to provide inactivation of Cryptosporidium. When the UV facility is operational, NYC will continue chlorination in order to maintain 4-log virus inactivation at: 1) Hillview Reservoir, located downstream of UWNR's planned connection to the Delaware aqueduct at Shaft 22; 2) Kensico Reservoir; or 3) Shaft 19, both located upstream of UWNR's planned connection to the Delaware aqueduct at Shaft 22As a result of the SWTR and subsequent rules, the New York State Department of Health ("NYSDOH") initially notified UWNR in 1991 that NYC's third source of supply, the Croton system, located primarily in Westchester and Putnam Counties, did not meet the SWTR. UWNR was required to either provide filtration of this source or find an alternate water source. In 1992, UWNR began planning and design activities related to treatment/replacement of the Croton supply. NYC's Croton Water Supply also does not meet the criteria for filtration avoidance under the SWTR. As a result, NYC began to design a water filtration plant for the Croton Water Supply. Rather than provide its own filtration plant for its Croton Water Supply, UWNR has agreed in a Stipulation Agreement with the NYSDOH to discontinue use of the Croton Aqueduct. According to the Stipulation Agreement, the Croton source of supply will be discontinued once the connection to the Delaware Aqueduct at Shaft 22 in Yonkers is completed. In 1992, the NYSDOH issued a Stipulation exempting UWNR from the filtration requirement under the State Sanitary Code, with a mandatory compliance strategy and schedule for use of the Croton Source until connection of its public water system to NYC's Delaware Aqueduct could be completed.

In June 2002, NYSDOH entered into a revised Stipulation (the "2002 Stipulation," which is attached as Appendix A) with UWNR, requiring UWNR to diligently continue to secure all necessary approvals for construction of the Delaware Pump Station ("DPS"), to be located in the Town of Eastchester ("Eastchester"), and for connection to the Delaware Aqueduct. UWNR would not, however, be required to construct the new pump station until NYC Department of Environmental Protection ("NYCDEP") determined the location of its Croton Filtration Plant. On August 18, 2004, NYSDOH notified UWNR that NYCDEP had selected Van Cortlandt Park in Bronx County as the final location for the Croton Filtration Plant. In accordance with the 2002 Stipulation, UWNR submitted to the NYSDOH a written schedule setting forth deadlines for completion of construction of the new pump station and connection to the Delaware Aqueduct. In addition, UWNR submitted the design of the DPS for NYSDOH's approval on February 1, 2005 and amended on February 6, 2006, and, received approval on July 11, 2006 (which is attached as Appendix B). This approval confirms United Water's design plans and specifications for the pump station and other improvements necessary for the safe and adequate supply of water from the station.

In the approximate 14 years that followed from the 1991 NYSDOH's initial notification that the Croton Supply did not meet the SWTR, the Town of Eastchester vigorously opposed the construction of the DPS at the proposed site in Eastchester.

On November 16, 2005, Justice Francis Nicolai of the New York State Supreme Court, Westchester County, ordered Eastchester's Building Inspector to issue a building permit for the DPS. The two parties negotiated a settlement (the "Settlement"), which was approved by order of Justice Nicolai on December 19, 2005, permitting the DPS to be located in the Town of Eastchester as proposed by UWNR. That order contained additional conditions (at additional costs) that will be discussed later.

UWNR Supply and Demand

UWNR purchases all of the water it supplies from the NYC water system. Currently, approximately ninety percent (90%) of the water supplied by UWNR comes from the Catskill Aqueduct, with the remaining ten percent (10%) from the Delaware and Croton Aqueducts. UWNR may pump source water from one or more of five (5) major pump stations. Those stations and their maximum present pumping capacity are shown in Table 1.

Table 1: Maximum Source Water Pumping Capacity

Pump Station	Pumping Mode	Aqueduct Source	Max. Pump Capacity (mgd)	Connection Size (in.)
Central Avenue	Source	Catskill	27.0	24.0
Little Catskill	Booster or Source	Catskill	4.3	12.0
Croton	Source	Croton	17.5	30.0
Troublesome Brook	Booster or Source	Delaware (via WJWW)	8.0 (2)	(1)
California Road	Booster or Source	Delaware (via WJWW)	5.0 (2)	(1)
Total Supply			**48.8**	

Notes:
(1) Troublesome Brook and California Rd. stations are connected to the Delaware Aqueduct via interconnection to Westchester Joint Water Works (WJWW) 30-in. main.
(2) Discretionary supply not included in supply calculations.

Currently, under normal demand conditions, the Catskill Aqueduct supplies source water using both the Central Avenue and Little Catskill Pump Stations, with the Troublesome Brook and California Road Pump Stations either off or operating in booster mode. Under

peak demand conditions, or when equipment is down for maintenance, source water may be supplied from the Croton Aqueduct, via the Croton Pump Station, and/or from the Delaware Aqueduct, via interconnections with WJWW at the Troublesome Brook and/or California Road Pump Stations. The DPS design demand flows, presented in Table 2, are based on the flows observed during the maximum period of record, which occurred in 2001,

Table 2: Summary of Design Demand Flows

Pressure District	Minimum Hour (mgd)	Average Day (mgd)	Max Day (mgd)	Peak Hour (mgd)	Design Flow (mgd)
New Rochelle High ("NRH")	2.0	3.5	6.1	8.0	6.1
New Rochelle Int. ("NRI")		3.0	5.1	6.7	6.7
New Rochelle Low ("NRL")	7.1	12.5	21.6	28.3	28.3
Emergency Contingency					**1.9**
Total New Rochelle	**9.1**	**19.0**	**32.8**	**43.0**	**43.0**
Pocantico Division	2.1	3.7	6.6	8.5	6.6
Total System	**11.2**	**22.7**	**39.4**	**51.5**	**49.6**

There are several drivers behind sizing the connection to the Delaware Aqueduct at Shaft 22 for 49.6 mgd to meet the total system flows presented in Table 2. They are:

- Compliance with the 2002 Stipulation requires UWNR to eliminate its reliance on the Croton Aqueduct Water Supply and secure a connection to the Delaware Aqueduct.

- On January 3, 2005, NYCDEP notified UWNR that it would be taking the Catskill Aqueduct, UWNR's primary source of supply, out of service from September through May, beginning in 2007. UWNR has historically had its peak demands begin in early May and continue through September. Therefore, any replacement of the Catskill Aqueduct must be capable of meeting the peak demand design value of the UWNR System, 49.6 mgd, as shown in Table 2 and as further detailed in the following bullet items:

    - The DPS will supply 43 mgd to the NRL, NRI and NRH Pressure Districts from the Delaware Aqueduct connection. The design flows for each pressure district within the New Rochelle Division were determined as follows:

        - The NRH Pressure District is the only pressure district with a water storage tank, the Daisy Farm Tank. Since the NRH Pressure District has adequate system storage to meet peak hour demands, the supply pumping has been sized for the maximum day flows observed in 2001.

        - The NRI Pressure District does not have any system storage. Therefore, water supply pumping for the NRI Pressure District must be sized to meet

the peak hour demands observed in 2001 plus the appropriate fire flow demands.

- The NRL Pressure District currently has limited system storage from the Metz Reservoir. However, when the DIP is placed into service, Metz Reservoir will no longer store finished water; it will store water that requires chemical treatment, which will take place at the Ardsley Pump Station. Therefore, water supply pumping for the NRL Pressure District must be sized to meet the peak hour demands observed in 2001 plus the appropriate fire flow demands.

- The remaining 6.6 mgd from the Delaware Aqueduct connection will be sent to the Pocantico Division via the existing Troublesome Brook Pump Station. Because the Pocantico Division is primarily served by the Metz Reservoir and by a number of storage tanks throughout the Pocantico Division, it has sufficient system storage to meet peak hour and fire flow demands. Therefore, the water supply pumping for the Pocantico system is based upon the maximum day flow. In light of these drivers, the connection to the Delaware Aqueduct must be sized to provide the total UWNR system demand of 49.6 mgd.

Project Details

In order to comply with the SWTR and in accordance with the 2002 Stipulation with the NYSDOH, as discussed above, UWNR has agreed to discontinue normal use of the Croton Supply. To compensate for the lost capacity from the Croton supply, provide needed redundancy in source supplies and pumping facilities, address disruptions in its sources of supply, and deal with existing mechanical and operational issues, UWNR has undertaken the Delaware Interconnection Project ("DIP"). The DIP includes the following improvements to UWNR facilities:

- Providing a new source of supply by connecting to an existing tap on the Delaware Aqueduct at Shaft 22 in Yonkers. This will permit UWNR to obtain water from either the Delaware Aqueduct, or Catskill Aqueduct, or both.

- Installing a new 48-inch water transmission main from Shaft 22 to UWNR's existing transmission mains located in St. Eleanora's Lane in Yonkers. Once connected, the existing transmission mains will be used to convey the Delaware Aqueduct water to existing and new pump stations and chemical feed facilities.

- Constructing a new 43-mgd pump station, to be known as the DPS, at the site of the existing California Road Pump Station in Eastchester. The DPS will become the primary pump station serving UWNR's New Rochelle Division and will include chemical feed facilities.

- Performing minor piping and valving modifications to the existing Central Avenue and Troublesome Brook Pump Stations to permit both of these facilities to serve the

UWNR Pocantico Division. The Central Avenue Pump Station ("CAPS"), supplying Catskill Aqueduct water, will be the primary source water pumping station for the Pocantico Division, with the Troublesome Brook Pump Station, supplying Delaware Aqueduct water, serving as an emergency backup to the CAPS. Additionally, CAPS will provide partial backup source water for the New Rochelle Division by pumping Catskill Aqueduct water to the DPS, where chemical will be added before distribution to customers.

- Modifying and upgrading the chemical feed facilities at the Little Catskill Pump Station ("LCPS"). This station will primarily serve as a booster pump station and a chemical feed facility for the Pocantico Division. Source water will normally be pumped from either the Catskill Aqueduct, via CAPS, or the Delaware Aqueduct, via the Troublesome Brook Pump Station, to the Metz Reservoir, which will then supply the LCPS. The existing source water connection to the Catskill Aqueduct will also be maintained at Little Catskill.

In addition to allowing UWNR to discontinue use of the Croton supply, as mandated by the 2002 Stipulation, the proposed improvements will also:

- Provide redundancy in source of supply when either the Catskill or Delaware Aqueducts are taken out of service. NYCDEP has notified UWNR of its intent to shut down the Catskill Aqueduct for extended durations for necessary construction and repair projects. During these shutdowns, a back feed to the Central Avenue Pump Station from the Hillview Reservoir may not be available for UWNR.

- Improve supply pressures throughout the New Rochelle Division during peak demand periods, while also maintaining adequate storage levels in Daisy Farm Tank.

- Provide variable speed pump drives to better control system pressure and improve redundancy in pumping capacity.

- Relocate liquid caustic chemical feed from CAPS to the DPS. The chemical delivery area for the CAPS does not currently meet NYSDEC containment regulations, and UWNR is under a consent agreement with NYSDEC to provide delivery containment.

Delaware Aqueduct Connection (Shaft 22)

The connection to the Delaware Aqueduct at Shaft 22 is sized to convey a maximum flow of 49.6 mgd in order to meet the demands presented in Table 2, above. Under normal conditions (i.e., when both the Catskill and Delaware aqueducts are available to UWNR), water from Shaft 22 will be delivered to the New Rochelle Division only, with the Pocantico system supplied by CAPS.

Delaware Pump Station

The DPS is being constructed adjacent to the existing California Road Pump Station. Once the new pump station is placed into service, the existing California Road Pump

station will be demolished. The Delaware Pump Station will take water supplied from the Delaware Aqueduct at Shaft 22 or from the Catskill Aqueduct via the CAPS, add water treatment chemicals (caustic, hypochlorite, and corrosion inhibitor), and pump the water to distribution in the New Rochelle Division.

The DPS is sized to convey a maximum flow of 43 mgd in order to meet the NRH, NRI and NRL demands. The remaining 6.6 mgd from the Shaft 22 Connection will be delivered to the Pocantico Division as presented in Table 2. Six split-case horizontal centrifugal water supply pumps will be provided at DPS as follows:

- Three (3) pumps dedicated to the NRL Service Area. The pumps will be arranged in lead-lag-standby configuration with operation of two (2) pumps required at the maximum day and peak hour flows.
- One pump dedicated to the NRI Service Area.
- One pump dedicated to the NRH Service Area.
- The sixth pump will be a swing/standby pump and will be capable of pumping to either the NRI or the NRH.

Costs

As shown in Table 3 below, the total cost of the DIP, including the DPS; Shaft 22 connection and raw water piping; transmission and distribution ("T&D") piping modifications and modifications to the Central Avenue, Little Catskill, Croton Pump Stations and Supervisory Control And Data Acquisition ("SCADA") System ("Other Modifications") is projected to be approximately $48 million excluding AFUDC on the new construction.

Table 3: UWNR DIP Cost Summary

	2006 ($1,000)
1. Previous Expenditures	$ 6,774[(1)]
2. Pump Station	$ 23,277
3. Shaft 22 Connection/Pipeline	$ 12,037
4. Other Improvements (2)	$ 5,900
Total	**$ 47,988**

Notes:
(1) These are costs incurred through 12/31/2005 and addressed in Case 04-W-1221.
(2) Central Avenue, Troublesome Brook, Little Catskill and Croton Pump Stations plus Common and Miscellaneous costs

Each of the categories in Table 3 is discussed in greater detail below. The increase in the earlier estimated costs presented in Case 04-W-1221 can be attributed to the following:

1. **Previous Expenditures** – As noted above, the 2006 Previous Expenditures represent all costs incurred through December 31, 2005 and include:

   - Legal fees for continued litigation with the Town of Eastchester;
   - Engineering fees to support the litigation with Eastchester;
   - Engineering of the Shaft 22 Connection/Pipeline;
   - Engineering of Other Improvements; and
   - Building permit fees paid to Eastchester.

2. **Further Cost Definition** – In the Fall of 2005 UWNR and its Engineering, Procurement and Construction ("EPC") Contractor obtained vendor and sub-contractor bids for all major components of the Project and updated the estimates for the remaining items. As a result of this process, UWNR was able to obtain cost assurance for the DPS that resulted in a guaranteed maximum price for the project. However, due to design modifications required by the Stipulation with Eastchester, there is an increase over the previously estimated costs. The major cost increases over earlier estimates relate to the following:

   - Site Work & Piping – The 2006 Site Work & Piping costs are based on the lowest qualified bid, which was approximately $2.0M higher than the 2004 estimated cost. A portion of the increase in the Site Work & Piping costs are also a result of revisions to the DPS stipulated in the Settlement with the Town of Eastchester.
   - Building – The 2006 Building costs are primarily based on the lowest qualified bid for the concrete work. The concrete costs were approximately $1.9M higher than the 2004 estimated cost, while the estimates for the remainder of the building increased marginally. The increase in the Building costs are also a result of revisions to the DPS stipulated in the Settlement.
   - Pumps and Pipes – The 2006 Pumps and Pipes costs are based on the lowest qualified bid for the pumps, chemical systems, HVAC, fire protection system and plumbing sub-contractor. In addition, this category includes estimates for the process mechanical sub-contractor, which is estimated to be $2,000,000. The pumps and pipe costs were approximately $4.6M higher than the 2004 estimated cost. A portion of the increase in the Pumps and Pipes costs are also a result of revisions to the DPS stipulated in the Settlement.

3. **Shaft 22 Connection / Pipeline** – The cost of the Shaft 22 Connection/Pipeline increased by approximately $4.0M as a result of further development of the design and the requirements of the City of Yonkers to install the Pipeline through a utility easement in Schultze Park. In addition, discussions with NYC regarding its requirements to connect to the Delaware Aqueduct at Shaft 22 have also resulted in the increase in the cost. The largest contributors to the cost increase are:

   - Poor soil conditions in Schultze Park resulting in the pipeline and vaults being installed on auger-cast piles;
   - Crossing Scarsdale Road via jacking;
   - The space between the existing pipes that will connect to the pipeline is very limited, and requires that the pipeline connect to them from below;
   - The installation of a 12-inch water main for the City of Yonkers, adjacent to the pipeline; and
   - Restoration of Schultze Park.

4. **Other Improvements** – The Other Improvements cost increased because of further definition of the work. This increase can primarily be attributed to the Croton Pump Station and the SCADA System improvements required to integrate these into the DIP, which total approximately $3.6M.

   The 2004 costs assumed that chemical bulk storage of caustic soda and sodium hypochlorite would be feasible at the Croton Pump Station. However, as the design progressed, it became apparent that bulk storage tanks and a chemical delivery area would not fit at the Croton Pump Station. Therefore, a tote system for caustic soda and onsite generation of sodium hypochlorite became necessary, thus increasing the costs by $2,000,000.

   The existing SCADA System telemetry and control system is obsolete. The human machine interface ("HMI") operator workstation is running software that is several years out of date, with portions of the software no longer functioning. The existing System can no longer be properly maintained, and is operationally insufficient to control and monitor the system. The existing radio system relies primarily on microwave radio communications (928/952MHz), with a few installations using UHF frequencies (450-470MHz). Based upon the radio survey, the microwave system is operating at or beyond its capabilities. This situation is contributing to downtime in the System and frequent loss of radio communications.

   The existing SCADA System's remote telemetry units ("RTUs") are "dumb", i.e., the RTUs do not perform process control functions locally, but act only as input/output devices to transfer status and control information back to the central

data concentrator, where the control algorithms are programmed and executed. Thus, to control a pump in the system based on a level or pressure, the level or pressure must first be transmitted to the central data concentrator via the radio telemetry, where the logic to determine if a pump is to be started or stopped is calculated. Then, the command to run or stop the pump is transmitted back, via radio, to the RTU. This process results in slower response times for control loops and control problems, because radio links are incorporated into the control loop for field equipment.

Therefore, replacement of the SCADA System with "smart" RTUs, which can perform the control strategies at the field RTU directly rather than at the central master processor, and a more robust communications system were required to completely integrate the DIP into the UWNR System. The cost increase related to the replacement of the SCADA System is approximately $1,600,000

Financing

The direct testimony of Michael Pointing in Case No. 04-W-1221 provided substantial detail on the Company's efforts to explore alternative ownership and financing of the DIP. The following is largely drawn from that testimony, updated for a subsequent meeting on the subject with the City of New Rochelle on April 24, 2006.

In light of the Commission's Order in the last case, and because of the potential for financing cost savings, the Company has made a comprehensive effort to explore the possibility of municipal ownership as an alternative to conventional utility financing. The effort has involved several steps and has drawn on the expertise of United Water Management & Services Corp.'s in-house staff, experts identified at State and County Agencies that serve as conduit issuers of tax-exempt debt, and contacts in the underwriting community.

In addition, UWNR contacted staff at the New York State Environmental Facilities Corporation ("NYSEFC"), Westchester County Industrial Development Authority (WCIDA), WJWW, Westchester Water District #1, and the eleven Municipalities within UWNR's service territory.

NYSEFC

United Water's Treasurer and others have had regular telephone contact with officials at the NYSEFC, the conduit issuer of tax-exempt debt used in the past to finance most utility projects in New York State. UWNR sought to ensure that activity in pursuing any municipal financing alternatives would not jeopardize the Company's ability to finance the DIP in a conventional manner. Conversations with NYSEFC staff have been focused on advising it of the DIP's status - especially regarding the implications of the litigation with the Township of Eastchester. The NYSEFC staff has been very helpful and responsive in addressing questions and, generally, encouraged UWNR to explore the prospect of governmental or municipal ownership of the DIP. UWNR was advised that

the NYSEFC only serves as a conduit financing entity and does not itself take title to facilities or projects.

WCIDA

In 2004, UWNR made contact with the Executive Director and Bond counsel of WCIDA. They indicated that the project would likely meet criteria for financing under the WCIDA's Charter. After several subsequent telephone conversations, UWNR was invited to make a presentation at the WCIDA's office in New Rochelle. UWNR submitted a synopsis of issues surrounding the DIP to the WCIDA on June 21st, and on June 22nd the Company made a presentation describing the DIP. Documents requested by the WCIDA's representatives at the June 22nd presentation were forwarded and reviewed by WCIDA. Following that review, the Executive Director advised UWNR that WCIDA involvement in the DIP would likely cause further delays. Apparently, the WCIDA's Charter requires a "30-day notification period" during which any single Municipality within the County can object and effectively block proposed participation by the WCIDA.

WJWW

Following several telephone calls and letters asking for a meeting, UWNR met with officials at the WJWW in July 2004 to explore its capability and interest in funding and owning the DIP. During the meeting WJWW advised UWNR that the WJWW does not have bonding capacity, is funded by its member communities, and therefore, would not be a suitable entity to fund and own the DIP.

County Water District #1

On July 21, 2004 UWNR representatives spoke with several people who currently serve or have served in the past in an official capacity for [Westchester] County Water District #1. They advised UWNR that setting up a Water District requires special legislation, approval by the State Controller, and would likely require a year or so to accomplish with no guarantee of success. Alternatively, it might be possible to fund the DIP under an existing Water District (such as #1 or #3) with a petition on the part of two member communities. The Company was advised that the existing member communities do not have interest in funding or owning the Project.

Municipalities within UWNR's Service Territory

UWNR also solicited interest in municipal ownership by sending a letter during the week of June 7, 2004, to government officials in each of the 11 municipalities falling within the Company's service territory. UWNR has received only one response, dated August 9, 2004, from the City Manager of the City of New Rochelle expressing "interest in creating an Authority, along with other Westchester communities, to finance a major water supply project" (i.e., the DIP). UWNR met with the City of New Rochelle's City Manager on September 23, 2004 (**?**). The discussion during that meeting demonstrated that the City's interest is primarily in rolling fire service charges into the base rates, not owning and financing the DIP project. At the City's request, the parties met again on April 24, 2006

on the subject. Again, fire hydrant charges were discussed at that meeting as a significant concern of the City. UWNR's assessment of the meeting was that the formation of an Authority to own and/or finance the DIP would be difficult in light of the number of municipalities concerned, and that the City had little if any interest in attempting to do so.

The results of these efforts have been disappointing, given the time and effort devoted by several UWNR staff members. There does not seem to be sufficient interest in the project in the local communities. While UWNR is aware of the potential benefit that municipal ownership and financing of the DIP might provide to its customers, it is not in a position to motivate or create a willing and able governmental owner, especially in light of the difficulties presented by the DIP's site and related litigation.

The Company is currently in the application process with the NYSEFC to secure low-cost, tax-exempt financing for the debt component of the DIP. UWNR expects the financing to be approved in 2006, with the funding to occur in mid to late 2007.

Status of Construction

Through July 2006 there has been significant progress made on the project. The project contains multiple components some of which are progressing concurrently, such as the actual pump station construction and the Shaft 22 engineering and NYC DEP approval. Since the issuance of the building permit in December 2005 the excavation which involved a long period of time for blasting has been completed along with the completion of the foundation work in July.

Customer Communication

United Water New Rochelle has developed various means to communicate with customers and keep them informed of the details and progress of the project. Through the creation of a link on the United Water New Rochelle website http://delawarepumpstation.com/, customers can view progress reports of past, current and upcoming construction events. Additionally, the site provides photographs of the construction site, artist's renderings of the completed project, FAQ's and information relating to the reasons for the project. A sample website page showing the progress for July 2006 is included in Appendix D.

When any particular portion of the construction activity occurs that may impact customers in a specific area or possibly a wider base, our customers are notified via letter. These letters are also made available on the website and serve as an additional form of progress report. Finally, there are communications through updates provided in the regular Company newsletter transmittals that accompany customer billings.

Appendix A

STATE OF NEW YORK : DEPARTMENT OF HEALTH

IN THE MATTER OF The provision of an alternative source by United Water New Rochelle	:	STIPULATION

WHEREAS, Title 40 of the Code of Federal Regulations (CFR), Sections 141 71 and 141.72, constituting the Surface Water Treatment Rule (SWTR) promulgated by the United States Environmental Protection Agency (USEPA) under the provisions of the Federal Safe Drinking Water Act (SDWA), and Section 5-1.30 of the State Sanitary Code (SSC), its New York State counterpart promulgated by the New York State Department of Health ("Department") pursuant to the New York Public Health Law (PHL), require that a public water system not in compliance with the filtration avoidance criteria specified in 40 CFR ∋141.72 and SSC 5-1.30(c), shall provide filtration and disinfection by June 30, 1993 for surface sources; and

WHEREAS, United Water New Rochelle ("UWNR") is a supplier of water through its public water system, as defined in SSC Section 5-1.1(at), which uses as its water source the Croton Aqueduct (ACroton Source≡), and which is subject to the provisions of the Section 5-1.30(b) and 40 CFR Sections 141.71 and 171 72; and

WHEREAS, in 1993, the Department issued the New Rochelle Water Company, the predecessor of UWNR, an exemption from the filtration requirement of SCC Section 5-1.30(b) with a mandatory compliance strategy and schedule, as required by SSC Section 5-1.92, for use of the Croton Source until connection of its public water system to New York City's Delaware Aqueduct could be completed; and

WHEREAS, the design of a new pump station and necessary piping to connect the UWNR public water system to New York City's Delaware Aqueduct was completed by March 1, 1994, as required under the exemption; and

WHEREAS, the pump station and piping project was bid, but the Town of Eastchester planning board has yet to allow commencement of construction of the new pump station, resulting in a delay in meeting the exemption schedule; and

WHEREAS, UWNR is now engaged in litigation with the Planning Board of the Town of Eastchester in an effort to secure site plan approval , and

WHEREAS, the exemption from filtration requirements granted to UWNR in 1993 has expired and cannot be extended or renewed.

NOW, THEREFORE, in order to satisfy the SSC's SWTR, UWNR and the Department agree as follows:

1. UWNR shall continue to provide public and consumer notification each calendar quarter UWNR uses the Croton Source. Notification shall be in accordance with the SSC Sections 5-1.51(c) and 5-1.52 Table 13. Each notification shall contain mandatory health effects language in accordance with SSC Section 5-1.78.

2. When using the Croton Source, UWNR shall monitor the turbidity on a daily basis at the entry point to the distribution system. If the two consecutive day average turbidity at the entry point exceeds 5 NTU, UWNR shall collect total coliform samples in the distribution system in accordance with SSC Section 5-1.52, Table 4 note 3. If the monthly average daily turbidity exceeds 1.49 NTU, the UWNR shall collect a total coliform sample from the distribution system, in accordance with SSC Section 5-1.52, Table 11 note 2.

3. UWNR shall ensure a disinfection capability that achieves 99.9 percent inactivation of Giardia Lambia cysts for drinking water taken from the Croton Source. UWNR must monitor the chlorine residual, pH and temperature, at the entry point, each day it uses the Croton Source. UWNR shall also maintain a disinfection capability that achieves 99.9 percent inactivation of Giardia Lambia cysts in water from its Catskill source.

4. UWNR shall diligently continue to secure all necessary approvals for construction of the connection of its public water system to the Delaware Aqueduct and a new pump station; provided, however, UWNR shall not be required to construct the new pump station until New York City determines the location of its Croton Filtration Plant. UWNR reserves the right to continue to review its water supply sources and may update its water supply plan in light of changed circumstances that may enable it to obtain additional supply from other approved sources. Thus, this Stipulation may be modified by mutual agreement of the Department and UWNR in light of any such changed circumstances.

5. (a) If the Croton Filtration Plant to be constructed by New York City is to be located north of UWNR's connection to the Croton Aqueduct and the existing Croton Aqueduct is to continue to be used to deliver treated water, UWNR will not be required to construct the Delaware Aqueduct connection and pump station, but shall, within 30 days of the date that the Department informs UWNR of the site of the Croton Filtration Plant, submit a written plan to the Department to minimize UWNR's use of its Croton Source until the Croton Filtration Plant is operational and treated water is delivered via the existing Croton Aqueduct. The Department will promptly review the plan submitted by UWNR and inform UWNR if the plan, as submitted, is acceptable, or if revisions to the plan are required for the plan to be acceptable. In the event that the Department notifies UWNR that revisions to the plan are required for the plan to be acceptable, within 30 days of the date of such notice, UWNR will submit, to the Department, an amended plan that incorporates the revisions required by the Department.

(b) If the Croton Filtration Plant to be constructed by New York City is to be located south of UWNR's connection to the Croton Aqueduct, or if use of the Croton Aqueduct is to be

eliminated, UWNR shall within 90 days of the date the Department informs UWNR of the site of the Croton Filtration Plant or elimination of use of the Croton Aqueduct, submit to the Department a written schedule setting forth deadlines for completion of construction of the new pump station and connection to the Delaware Aqueduct

6. In the event that UWNR fails to meet any of the deadlines set forth in this Stipulation, UWNR agrees to pay the Department a stipulated penalty in the amount of Two Hundred and Fifty Dollars ($250.00) for each day of noncompliance beyond the specified deadline. However, the Department shall not impose such penalties if (1) UWNR has demonstrated a good faith and diligent effort to comply with the terms of the Stipulation, and (2) circumstances beyond the control of UWNR have caused such noncompliance. Under such circumstances, the Department may authorize an extension of a deadline.

7 It is further stipulated and agreed by UWNR and the Department that there exist valid and sufficient grounds as a matter of law for this Stipulation, and UWNR accepts its terms and conditions.

8. This Stipulation shall be effective when fully executed by both parties

DATED: 5/31/2002

United Water New Rochelle

By: _____

Kevin R. Winn, P.E.
Vice President and Manager

DATED: 6/10/02

New York State Department of Health

By: _____

Ronald Tramontano
Director
Center for Environmental Health

N:\FIELD_UWNRstp4.DOC

Appendix B

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Flanigan Square, 547 River Street, Troy, New York 12180-2216

Antonia C. Novello, M.D., M.P.H., Dr.P.H.
Commissioner

Dennis P. Whalen
Executive Deputy Commissioner

July 11, 2006

[Amended July 19, 2006]

Donald Distante, P.E.
Manager of Engineering
United Water New Rochelle
2525 Palmer Avenue
New Rochelle, NY 10801

RE: Log No. 17404, CWS NY5903444
Approval of Plans and Specifications
Delaware Pump Station
United Water New Rochelle
(C) New Rochelle, Westchester County

Dear Mr. Distante:

We have, this day, approved the plans and specifications submitted by Keith F. Kelly, P.E. of Camp Dresser & McKee, for a new 43 MGD Pump Station serving the Low, Intermediate and High pressure zones of the New Rochelle Division with respective design peak demands of 28.30 MGD, 6.70 MGD and 8.00 MGD; through, installation of three variable frequency drive (VFD) low pumps (14.15 MGD @ 123 feet), one intermediate pump (VFD 6.7 MGD @ 122 feet), one high pump (VFD 8.0 MGD @ 222 feet), one swing VFD pump (6.7 MGD@ 122 feet or 8.0 MGD @ 222 feet), two onsite generated hypochlorite boosters (one is redundant and backup equipment for purchased sodium hypochlorite injection is additionally provided), pH adjustment with sodium hydroxide, corrosion control with dry zinc orthophospate, standby power with a natural gas generator, monitoring and control equipment, and appurtenances. The station pumps and treats Catskill Aqueduct water transferred from the existing Central Avenue Pumping Station and/or the Delaware Aqueduct water through a project for connection and transmission from shaft 22, with minor piping and valving modifications at the existing Central Avenue and Troublesome Brook pump stations for Pocantico Division service, disconnection of the Croton Aqueduct source, and continued use of the Little Catskill pump station. The California Pump Station will be physically disconnected and properly abandoned.

Application for this project was duly made by you and received in this office on February 22, 2005. The project was conceptually endorsed on May 2, 2005; plans were submitted February 7, 2006; responses were provided on April 17, 2006, and a June 27, 2006 replacement sheet submission provided for the final plans.

We call your attention to Standard Conditions a & b and Special Conditions c through i of our DOH form 1017 entitled: "Approval of Plans for Public Water Supply Improvement."

We are enclosing a Certificate of Approval. A set of the approved plans and specifications is being retained in our files, a second set is being sent to the Westchester County Department of Health, and the third set is being returned to your engineer through the Westchester County Department of Health.

Sincerely,

Kenneth W. Caffrey, P.E.
Senior Sanitary Engineer
Bureau of Water Supply Protection

Enclosure
cc: Camp Dresser & McKee, Attn: Keith F. Kelly, P.E.
Westchester County Department of Health, Attn: Paul Kutzy, P.E.
City of New York, Department of Environmental Protection, Attn: Paul Aggarwall, P.E.
City of New York, Department of Environmental Protection, Attn: Paul Smith, P.E.
New York State Public Service Commission, Attn: Tom Dvorsky
New York State Department of Health, Attn: George Philip, P.E.

NEW YORK STATE DEPARTMENT OF HEALTH
Bureau of Water Supply Protection

Approval of Plans for Public Water Supply Improvement

This approval is issued under the provisions of 10 NYCRR, Part 5:

1. Applicant	2. Location of Works (C, V, T)	3. County	4. Water District (Specific Area Served)
UW New Rochelle	(T) Eastchester	Westchester	United Water New Rochelle

5. Type of Project

☐ 1 Source ☒ 3 pumping units ☐ 5 Fluoridation ☐ 7 Distribution
☐ 2 Transmission ☒ 4 Chlorination ☒ 6 Other Treatment ☐ 8 Storage ☐ 9 Other

Remarks: Log #17404 & CWS NY5903444 for installation of a new 43 MGD Pump Station serving the Low, Intermediate and High pressure zones of the New Rochelle Division with respective design peak demands of 28.30 MGD, 6.70 MGD and 8.00 MGD; through, installation of three variable frequency drive (VFD) low pumps (14.15 MGD @ 123 feet), one intermediate pump (VFD 6.7 MGD @ 122 feet), one high pump (VFD 8.0 MGD @ 222 feet), one swing VFD pump (6.7 MGD@ 122 feet or 8.0 MGD @ 222 feet), two onsite generated hypochlorite boosters (one is redundant and backup equipment for purchased sodium hypochlorite injection is additionally provided), pH adjustment with sodium hydroxide, corrosion control with dry zinc orthophospate, standby power with a natural gas generator, monitoring and control equipment, and appurtenances. The station pumps and treats Catskill Aqueduct water transferred from the existing Central Avenue Pumping Station and/or the Delaware Aqueduct water through a project for connection and transmission from shaft 22, with minor piping and valving modifications at the existing Central Avenue and Troublesome Brook pump stations for Pocantico Division service, disconnection of the Croton Aqueduct source, and continued use of the Little Catskill pump station. The California Pump Station will be physically disconnected and properly abandoned.

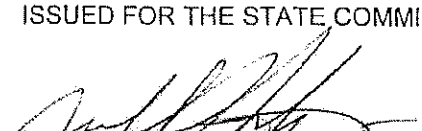
By initiating improvement of the approved supply, the applicant accepts and agrees to abide by and conform with the following:

a. THAT the proposed works be constructed in complete conformity with the plans and specifications approved this day or approved amendments thereto.
b. THAT the proposed works not be placed into operation until such time as a Competed Works Approval is issued in accordance with Part 5 of the New York State Sanitary Code.

See attached for Special Conditions c through i.

ISSUED FOR THE STATE COMMISSIONER OF HEALTH

[Original] July 11, 2006, [Amended July 19, 2006]



, P.E.
Designated Representative

Michael J. Montysko, PE
Chief, Design Section, Bureau of Water Supply Protection

General

6. Type of Ownership ☐ 68 Private–Other ☐ 1 Authority ☐ 30 Interstate ☐ Municipal ☐ Commercial ☐ Private–Institutional ☐ 19 Federal ☐ 40 International ☐ Industrial ☒ 9 Water Works Corp. ☐ 26 Board of Education ☐ 20 State ☐ 18 Indian Reservation		
7. Estimated Total Cost $17,000,000	8. Population Served 139,745	9. Drainage Basin NYC Catskill & Delaware
10. Federal Aid Involved? ☐ 1 Yes ☒ 2 No	11. WSA Project? ☐ 1 Yes ☒ 2 No	

Source

12. ☐ Surface Name: Class: ☐ Ground Name: Class:		13. Est. Source Development Cost
14. Safe Yield	15. Description	

Treatment

16. Type of Treatment ☐ 1 Aeration ☐ 4 Sedimentation ☐ 7 Iron Removal ☐ 10 Softening ☐ 2 Microstrainers ☐ 5 Clarifiers ☒ 8 Chlorination ☒ 11 Corrosion Control ☐ 3 Mixing ☐ 6 Filtration ☐ 9 Fluoridation ☐ 12 Other			
16. Name of Treatment Works Delaware Pump Station	18. Max. Treatment Capacity 43 MGD	19. Grade of Plant Operator Req. IB plus IIB	20. Est. Cost included in 24
21. Description:			

Distribution

22. Type of Project Distribution Mains ☐ 1 Cross Connection ☐ 2 Interconnection ☐ 3 Transmission ☐ 4 Fire Pump Cl_2	23. Type of Storage Elevated _____gals. Underground _____gals.	24. Est. Distribution Cost $17,000,000
25. Anticipated Distribution (This Project) System Demand: Avg. 18.9 MGD Max. 27 MGD		26. Designed for fire flow? ☒ Yes ☐ No
27. Description: See 5. Remarks		

SPECIAL CONDITIONS FOR LOG NO. 17404 CWS NY5903444

UNITED WATER NEW ROCHELLE

New Pump Station with Additions of Onsite Generated Sodium Hypochlorite, Sodium Hydroxide and Phosphate with Demolition of the California Pump Station

(T) Eastchester, Westchester County

c. THAT the proposed works be constructed in compliance with all applicable Federal, State and local regulations.

d. THAT this Approval of Plans for Water Supply Improvement does not obviate any requirement for monitoring, operation or water supply improvement which may be needed at this project site or elsewhere within the water system.

e. THAT the Westchester County Department of Health will be provided copies of all permits and approvals issued for this project as applicable through Federal, State and local regulations.

f. THAT a professional engineer shall supervise the construction of this project and shall implement any changes and/or additions agreed to by the New York State Department of Health and/or the Westchester County Department of Health.

g. THAT minor piping and valving modifications, for the Troublesome Brook Station to backup the Central Avenue Station and for the Central Avenue Station to serve the Pocantico Division and/or pump source water to the Delaware Pump Station, are clearly documented within as built plans.

h. THAT as-built plans will be submitted to the Westchester County Department of Health with drawings that include the makes and model numbers of all installed pumps, blowers, generators, compressors, meters and monitoring devices

i. THAT the engineer of record shall provide manuals and parts lists for installed equipment and shall also provide a set of as-built plans (with equipment manufacturers and model numbers noted) to United Water New Rochelle, Inc. and the water works corporation shall then maintain and update these documents as needed.

j. THAT pipes and valves will be painted and/or provided 6 inch wide bands in accord with "Color Coding for Pipes and Equipment" in specification 09902 and Recommended Standards for Water Works, 2003 edition, section 2.14, with tags, labels and direction arrows to clearly identify lines.

k. THAT free chlorine residuals, pH values and temperatures of influent water to the Delaware Pump Station will be regularly monitored to assure that computed CT values meet requirements for a 4-log virus inactivation and United Water New Rochelle, Inc. will promptly advise the Westchester County Department of Health of any condition which has caused or is expected to cause a computed CT concern.

l. THAT the project for connection and transmission of chlorinated Delaware Aqueduct water from Shaft 22 shall be constructed so that all Aqueduct Water is adequately monitored and treated before being pumped or distributed.

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Flanigan Square, 547 River Street, Troy, New York 12180-2216

Antonia C. Novello, M.D., M.P.H., Dr.P.H.
Commissioner

Dennis P. Whalen
Executive Deputy Commissioner

July 19, 2006

Donald Distante, P.E.
Manager of Engineering
United Water New Rochelle
2525 Palmer Avenue
New Rochelle, NY 10801

RE: Log No. 17404, CWS NY5903444
Amended July 11, 2006, Approval Documents
Delaware Pump Station
United Water New Rochelle
(C) New Rochelle, Westchester County

Dear Mr. Distante:

The attached documents correct descriptions to provide:

a. Three low pressure zone pumps at 123 feet TDH - not two at 124 feet,
b. The intermediate pressure zone pump at 122 feet TDH - not 125 feet,
c. The high pressure zone pump at 222 feet TDH - not 220 feet,
d. The swing pump at 122 and 222 feet TDH - not 125 and 220 feet, and
e. One natural gas generator - not two.

These corrected values reflect the final plans and specifications – not the initial engineering report values.

Sincerely,

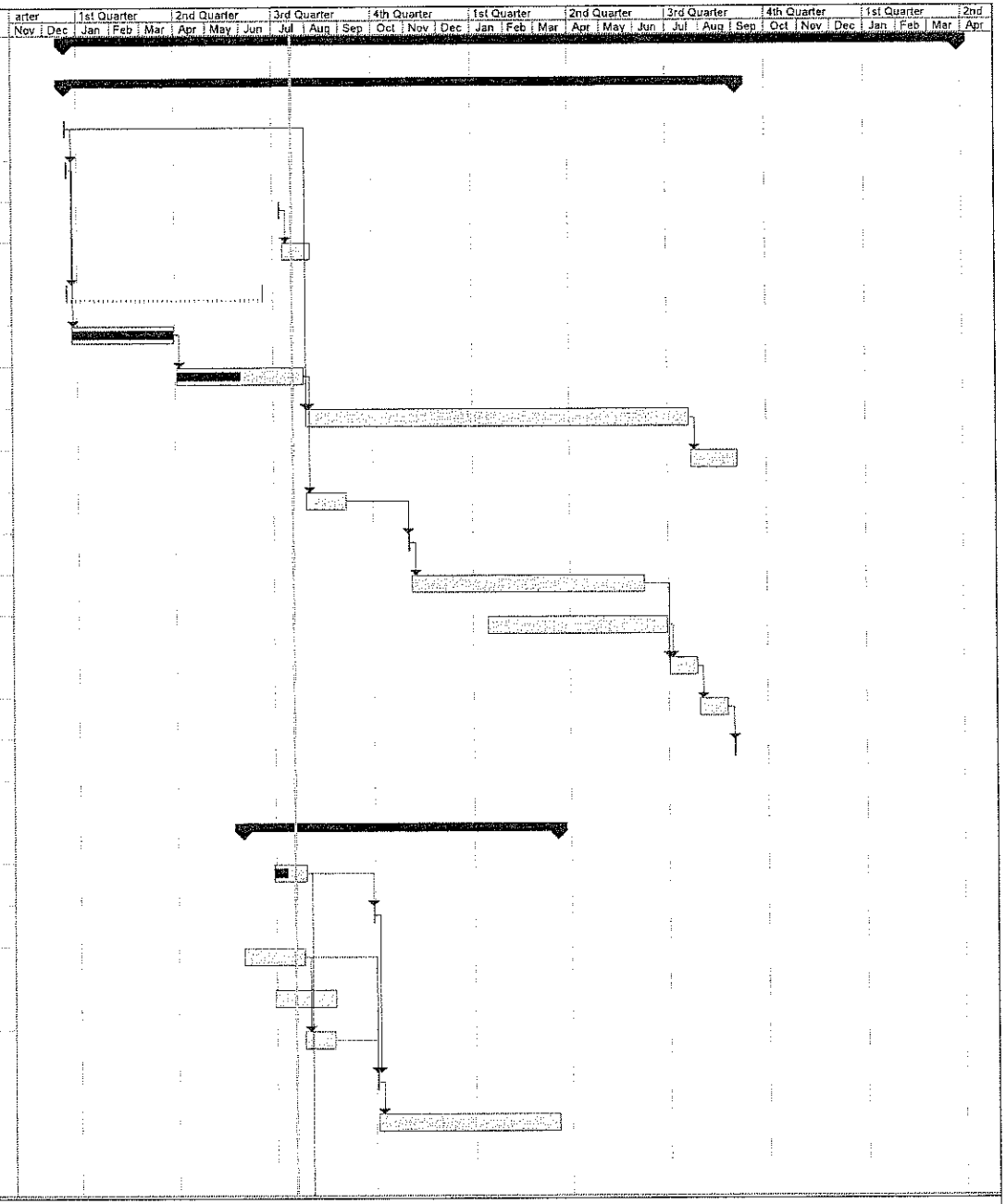
Kenneth W. Caffrey, P.E.
Senior Sanitary Engineer
Bureau of Water Supply Protection

Enclosure

cc: Camp Dresser & McKee, Attn: Keith F. Kelly, P.E.
Westchester County Department of Health, Attn: Paul Kutzy, P.E.
City of New York, Department of Environmental Protection, Attn: Paul Aggarwall, P.E.
City of New York, Department of Environmental Protection, Attn: Paul Smith, P.E.
New York State Public Service Commission, Attn: Tom Dvorsky
New York State Department of Health, Attn: George Philip, P.E.

Appendix C

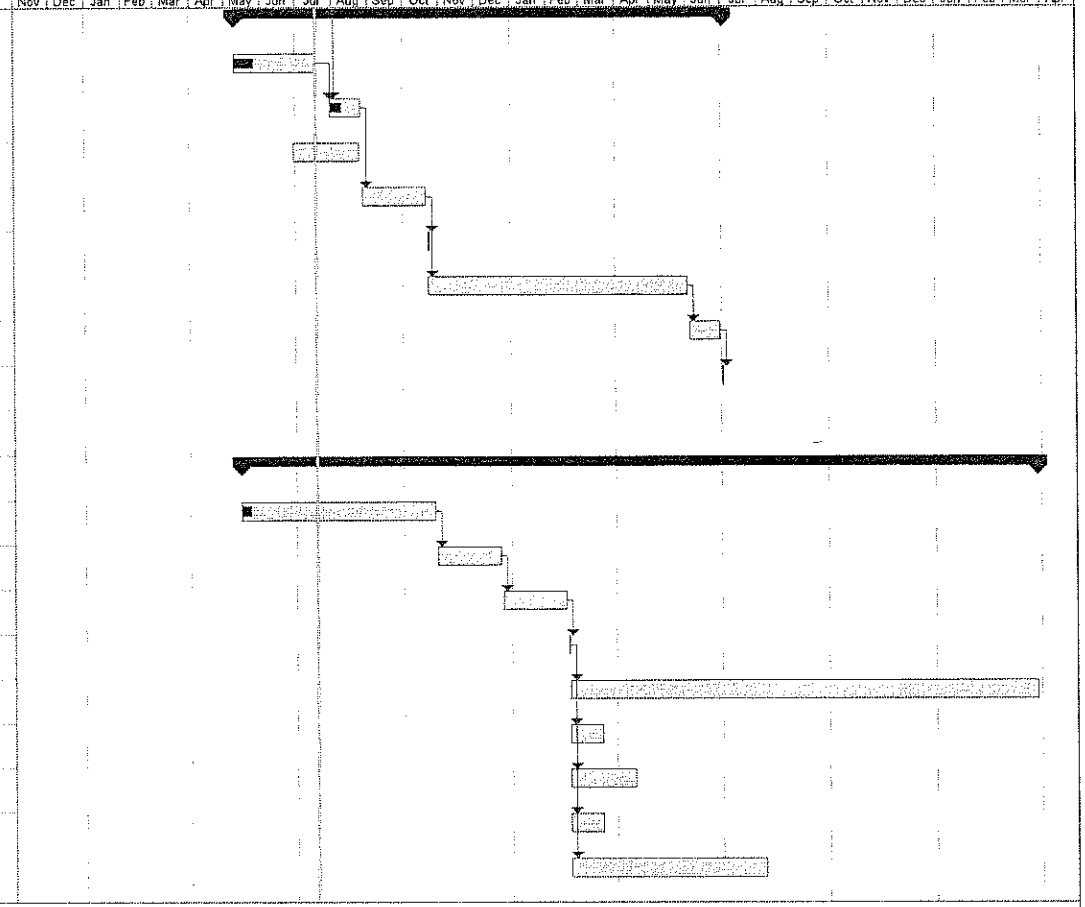
ID	Task Name	Duration	Start	Finish	Predecessors
1	**Delaware Interconnection Project**	**593 days**	**Wed 12/21/05**	**Fri 3/28/08**	
2	**Delaware Pump Station**	**444 days**	**Wed 12/21/05**	**Mon 9/3/07**	
3	Building Permit Issued	1 day	Wed 12/21/05	Wed 12/21/05	
4	Break Ground	1 day	Thu 12/22/05	Thu 12/22/05	3
5	NYS DOH Approval	1 day	Fri 7/7/06	Fri 7/7/06	
6	PSC Prudence Filing	20 days	Mon 7/10/06	Fri 8/4/06	5
7	Substantial Construction	1 day	Thu 12/22/05	Wed 6/21/06	3
8	Excavation	68 days	Tue 12/27/05	Thu 3/30/06	4
9	Foundation	85 days	Mon 4/3/06	Fri 7/28/06	8
10	Electrical	255 days	Mon 7/31/06	Fri 7/20/07	3,9
11	Masonry	31 days	Mon 7/23/07	Mon 9/3/07	10
12	Roof Installation	27 days	Mon 7/31/06	Tue 9/5/06	9
13	Building Closed In	1 day	Fri 11/3/06	Fri 11/3/06	12
14	Install Equipment	155 days	Mon 11/6/06	Fri 6/8/07	13
15	I & C	120 days	Mon 1/15/07	Fri 6/29/07	
16	Startup	20 days	Mon 7/2/07	Fri 7/27/07	15,14
17	Testing	20 days	Mon 7/30/07	Fri 8/24/07	16
18	DPS Operational	1 day	Fri 8/31/07	Fri 8/31/07	17
19					
20	**Shaft 22 Connection**	**208 days**	**Thu 6/1/06**	**Mon 3/19/07**	
21	NYC DEP Eng. Approval	22 days	Thu 6/29/06	Fri 7/28/06	
22	NYC DEP Approval	1 day	Fri 9/29/06	Fri 9/29/06	21
23	Engineering	40 days	Thu 6/1/06	Wed 7/26/06	
24	DOH Approval	40 days	Fri 6/30/06	Thu 8/24/06	
25	Bid	20 days	Thu 7/27/06	Wed 8/23/06	23
26	Break Ground	1 day	Mon 10/2/06	Mon 10/2/06	22,23,25
27	Shaft 22 Connection Complete	120 days	Tue 10/3/06	Mon 3/19/07	26
28					



Project: UWNR DIP Schedule.mpp
Date: Tue 7/18/06

Task | Progress | Summary | External Tasks | Deadline
Split | Milestone | Project Summary | External Milestone

ID	Task Name	Duration	Start	Finish	Predecessors
29	**Shaft 22 Pipeline**	**299 days**	**Wed 5/10/06**	**Mon 7/2/07**	
30	Yonkers Approval	50 days	Wed 5/10/06	Tue 7/18/06	
31	Engineering	20 days	Mon 7/31/06	Fri 8/25/06	30,21
32	DOH Approval	40 days	Fri 6/30/06	Thu 8/24/06	
33	Bid	40 days	Mon 8/28/06	Fri 10/20/06	31
34	Break Ground	1 day	Mon 10/23/06	Mon 10/23/06	33
35	Shaft 22 Pipeline Complete	160 days	Mon 10/23/06	Fri 6/1/07	33
36	Startup/Testing	20 days	Mon 6/4/07	Fri 6/29/07	35
37	Pipeline Operational	1 day	Mon 7/2/07	Mon 7/2/07	36
38					
39	**Phase 4**	**490 days**	**Mon 5/15/06**	**Fri 3/28/08**	
40	Engineering	120 days	Mon 5/15/06	Fri 10/27/06	
41	NYS DOH Approval	40 days	Mon 10/30/06	Fri 12/22/06	40
42	Bid	40 days	Mon 12/25/06	Fri 2/16/07	41
43	Break Ground	1 day	Mon 2/19/07	Mon 2/19/07	42
44	SCADA	289 days	Tue 2/20/07	Fri 3/28/08	43
45	CAPS	20 days	Tue 2/20/07	Mon 3/19/07	43
46	LCAT	40 days	Tue 2/20/07	Mon 4/16/07	43
47	Tbrook	20 days	Tue 2/20/07	Mon 3/19/07	43
48	Croton	120 days	Tue 2/20/07	Mon 8/6/07	43



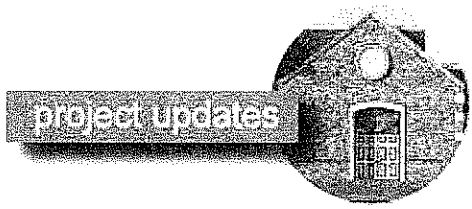
Project: UWNR DIP Schedule.mpp
Date: Tue 7/18/06

Task | Split | Progress | Milestone | Summary | Project Summary | External Tasks | External Milestone | Deadline

Appendix D

United Water

United Water New Rochelle



Project Updates

Most recent scheduling information...

July 2006

- Waterproof foundation walls
- Site utility installation
- Gallery pipe installation
- Building underdrain installation
- Backfill building
- Install chemical storage tanks
- Site excavation dewatering

June 06
July 06
August 06
September 06

Letters to our Neighbors*	
Current:	Archive:
May 17 '06	May 15 '06 Apr 13 '06 Apr 06 '06 Apr 03 '06 Mar 13 '06 Feb 21 '06 Jan 19 '06 Jan 09 '06 Dec 24 '05

Community Currents*	
Current:	Archive:
Aug 2006 Vol.2	Mar 07 '06

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*Requires Adobe Acrobat...