



# **DuPage Water Commission**

600 E. Butterfield Road, Elmhurst, IL 60126-4642  
(630)834-0100 Fax: (630)834-0120

**NOTICE IS HEREBY GIVEN THAT A SPECIAL COMMITTEE OF THE WHOLE MEETING OF THE DuPAGE WATER COMMISSION WILL BE HELD AT 8:00 A.M. ON THURSDAY, SEPTEMBER 9, 2004, AT ITS OFFICES LISTED BELOW. THE AGENDA FOR THE SPECIAL COMMITTEE OF THE WHOLE MEETING IS AS FOLLOWS:**

## **AGENDA**

**DuPAGE WATER COMMISSION  
COMMITTEE OF THE WHOLE  
THURSDAY, SEPTEMBER 9, 2004  
8:00 A.M.**

**600 EAST BUTTERFIELD ROAD  
ELMHURST, IL 60126**

- I. Roll Call
- II. Approval of Minutes
  - Committee of the Whole January 9, 2003
- III. General Manager's Recommendation on Capital Improvement Plan
- IV. Adjournment

Board/Agenda/Commission/COW0409.doc

**MINUTES OF A MEETING OF THE  
COMMITTEE OF THE WHOLE OF THE  
DU PAGE WATER COMMISSION  
HELD ON THURSDAY, JANUARY 9, 2003  
600 E. BUTTERFIELD ROAD  
ELMHURST, ILLINOIS**

The meeting was called to order by Chairman Vondra at 2:30 P.M., with a quorum obtained at 3:00 P.M.

Commissioners in attendance: E. Chaplin, W. Mueller, N. Pollock, A. Poole, J. Tenison, R. Thorn, G. Wilcox and M. Vondra.

Also in attendance: J. Holzwart, R. Martin, E. Nawrocki and R. Skiba

At 3:00 P.M., Chairman Vondra noted the meeting was called to order at 2:30 P.M. in a separate conference room but, because there was no quorum at that location, Nancy Wolfe, an Assistant State's Attorney for DuPage County, answered questions on the Open Meetings Act that were posed by Chairman Vondra, Commissioner Chaplin, and Commission Counsel.

Staff then presented the projects included in the Five Year Capital Improvement Plan and answered questions from the Commissioners. The Commissioners present were in agreement with the plan with the following exceptions:

1. Perform an engineering study regarding proposed Contract TW-3, specifically evaluating the need for and other alternatives to this project.
2. Accelerate the construction of the 30 million gallon reservoir project.
3. Eliminate the taste and odor project, but retain the structural attributes for the taste and odor facilities within the 30 million gallon reservoir project.
4. Accelerate the construction of the storage building and yard.
5. Include a footnote to the effect that funds are available in the emergency reserve for C-factor corrective action.
6. Include a footnote to the effect that the hydraulic analysis reflected in the plan was based upon the original design C-factors and not the present C-factors.

The meeting was adjourned at 5:40 P.M.



# DuPage Water Commission

## MEMORANDUM

TO: Chairman and Commissioners

FROM: Robert L. Martin, P.E.  
General Manager

A handwritten signature in black ink, appearing to read 'R. Martin', is placed over the printed name of Robert L. Martin, P.E.

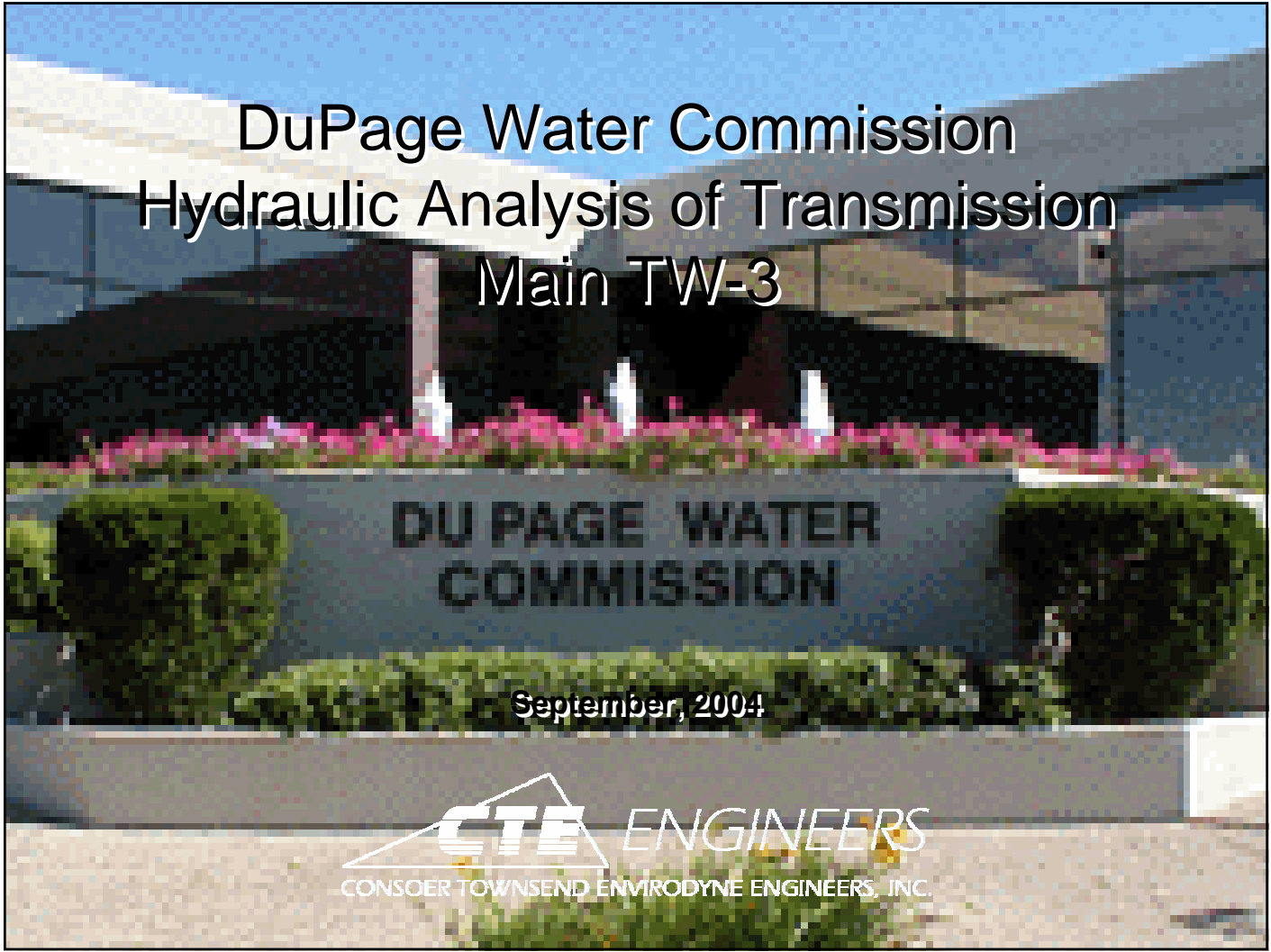
DATE: September 3, 2004

SUBJECT: Hydraulic Analysis of Transmission Main TW-3

Attached is a copy of the Hydraulic Analysis of Transmission Main TW-3 that was prepared by Consoer Townsend Envirodyne Engineers, Inc. This evaluation shows that Transmission Main TW-3 is not needed for normal operation or for providing average day demand during emergency conditions.

It should be noted that previous analyses made for Transmission Main TW-3 included providing maximum day demand during an emergency condition. It is not recommended that maximum day be the level of service to be provided during an emergency.

I will be making a presentation on this matter during the Committee of the Whole meeting.

A photograph of the DuPage Water Commission building, a modern structure with large glass windows and a dark roof. In the foreground, there is a large, dark, rectangular sign with the words "DU PAGE WATER COMMISSION" in white capital letters. The sign is flanked by two large, rounded green bushes. Above the sign, there is a row of pink flowers. The building is set against a clear blue sky.

# DuPage Water Commission Hydraulic Analysis of Transmission Main TW-3

September, 2004

 **ENGINEERS**  
CONSOER TOWNSEND ENVIRODYNE ENGINEERS, INC.

# **HYDRAULIC ANALYSIS OF TRANSMISSION MAIN TW-3**

## **Introduction**

Consoer Townsend Envirodyne Engineers, Inc. (CTE) was retained by the DuPage Water Commission to perform a hydraulic analysis of the proposed transmission main TW-3. Transmission main TW-3 is proposed to run north, from the existing 48-inch diameter transmission main in St. Charles Road, more or less diagonally to the east to connect to existing transmission main TN-1 near standpipe No. 1 in the far northwest corner of the DuPage water system.

The purpose of the hydraulic analysis was to identify and quantify the apparent deficiencies within the existing system.

## **Hydraulic Analysis Results**

Consoer Townsend Envirodyne Engineers, Inc. (CTE) prepared a computerized hydraulic model of the DuPage Water Commission's water transmission/distribution system, which was based on a previous computer model in H2O Net format and converted to the Haestad Methods Watercad, Version 6.5 format for this analysis. The converted computer model was run to confirm its accuracy with the results previously obtained in the H2O Net format. The results obtained using the Haestad Methods Watercad, Version 6.5 format compared very favorably with the results obtained previously.

Then, in order to more accurately reflect the current pipe friction factor "C" values found within the Commission's system, CTE adjusted the model to incorporate a "C" value of 95 for all of the pipes within the model in lieu of the 100/120 values originally utilized.

CTE then ran the computerized hydraulic model utilizing various simulation scenarios as follows:

- A. Hydraulic Simulation – Scenario No. 1: Assume year 2020 maximum day demands.
  - 1. First we ran the model utilizing the original system configuration. The pressure gradients show the highest pressures, 80 to 120 psi, nearest the pumping station, and the lowest pressures of 40 to 60 psi along the western boundary of the system.
  - 2. We then added TS-5, which runs from TS-3 on the south to TSW-2 on the north into the system configuration and again ran the simulation. With the addition of TS-5, the pressure gradients indicated that the area along TS-3 that was at 60 psi got considerably smaller in size, but the pressures throughout the rest of the system remained virtually unchanged.

3. We then added TSW-3, which runs from the junction of TSW-2 and TOB-6, on the east, to a junction point ultimately connecting TW-1 and TW-2 on the west, into the system configuration and again ran the simulation. With the addition of TS-5 and TSW-3 to the original system configuration, the pressure gradients indicate that the pressure in the vicinity of standpipe No. 3 increased from 60 psi to 80 psi. However, the pressure throughout the rest of the system remained virtually unchanged.
4. Then we added TW-1, which runs from the junction with TSW-3 on the north to TS-3 on the south end of the system, into the system configuration and re-ran the simulation. With the addition of TS-5, TSW-3 and TW-1 to the original system configuration, the pressure gradients indicate that the pressure within the southwest corner of the system increased from 60 psi to 80 psi, while the rest of the system remained unchanged.
5. We then added TW-2, which runs from the junction with TSW-3 on the south to the 48-inch diameter main in St. Charles Road on the north (TNW-1), into the system configuration and re-ran the simulation. With the addition of TS-5, TSW-3, TW-1, and TW-2, to the original system configuration, the pressure gradients indicate that there was virtually no change in the pressures throughout the entire system.
6. Then we added TIB-1, which runs from the junction of TSW-2 and TS-3 on the south to TNW-1 on the north, into the system configuration and re-ran the simulation. With the addition of TS-5, TSW-3, TW-1, TW-2 and TIB-1 to the original system configuration, the pressure gradients indicate that there is virtually no change in the pressures throughout the entire system.
7. We then added TW-3, which is currently proposed to run from the junction of TW-2 and the 48-inch diameter main in St. Charles Road on the south to the existing main at Standpipe No. 1 (TN-1), into the system configuration and re-ran the simulation. With the addition of TS-5, TSW-3, TW-1, TW-2, TIB-1 and TW-3 to the original system configuration, the pressure gradients indicate that the 40 psi pressures at the dead ends of the system in the northwest quadrant were mostly eliminated except for a 32 psi pressure in the far northwest corner of the system. The rest of the pressures throughout the entire system remained unchanged.

## Hydraulic Analysis of Transmission Main TW-3

Page 3

- B. Hydraulic Simulation – Scenario No. 2: Assume Year 2020 average day demands with a main break in transmission main TSW-2, between TIB-1 and the DuPage Pumping Station.
1. We first ran the simulation with the addition of TS-5, TSW-3, TW-1, TW-2 and TIB-1 to the original system configuration. The resultant pressure gradients indicate that the pressure along the eastern border decreased from 120 psi to 100 psi from the maximum day demand scenario, which is to be expected since there are fewer pumps running. However, the pressures in the remainder of the system are virtually unchanged.
  2. We then ran the simulation with TW-3 added to the system configuration in addition to TS-5, TSW-3, TW-1, TW-2 and TIB-1 having been added to the original configuration. The resultant pressure gradients indicate that the 40 psi pressure at the northern most dead end of the system along the northwest quadrant is still 40 psi, however, the west dead end approximately in the middle of the quadrant increased to approximately 50 psi. However, the rest of the entire system is unchanged from the previous simulation.
- C. Hydraulic Simulation – Scenario No. 3: Assume Year 2020 average day demands with a main break in TNW-1, just east of Bloomingdale Road.
1. First, we ran the simulation with TS-5, TSW-3, TW-1, TW-2 and TIB-1 added to the original system configuration. The resultant pressure gradients indicate that the pressures throughout the entire system are virtually the same as under the 2020 maximum day demand scenario without the addition of TW-3.
  2. We then added TW-3 to the system configuration, in addition to TS-5, TSW-3, TW-1, TW-2 and TIB-1 having been added to the original system configuration. The resultant pressure gradients indicate that the 40 psi pressure at the northern most dead end of the system in the northwest quadrant is still 40 psi, however, the west dead end approximately in the middle of the quadrant increased to approximately 50 psi. The rest of the pressures throughout the entire system are unchanged from the previous simulation.
- D. Hydraulic Simulation – Scenario No. 4: Assume Year 2020 average day demands with a main break in TN-1 north of TNW-1.
1. We first ran the simulation with TS-5, TSW-3, TW-1, TW-2, and TIB-1 added to the original system configuration. The resultant pressure gradients indicate that the pressures throughout the entire system are very nearly the same as under the 2020 maximum day demand scenario without TW-3 in place.

2. We then added TW-3 to the system configuration in addition to TS-5, TSW-3, TW-1, TW-2 and TIB-1 to the original system configuration. The resultant pressure gradients indicate that the 40 psi pressure at the northern most dead end of the system in the northwest quadrant is still at 39 psi while the west dead end approximately in the middle of the quadrant increased to approximately 50 psi. However, the remainder of the entire system is unchanged from the previous run.
- E. Hydraulic Simulation – Scenario No. 5: Assume Year 2020 average day demands with a main break in TOB-6 north of TNW-1.
1. First, we ran the simulation with TS-5, TSW-3, TW-1, TW-2, and TIB-1 added to the original system configuration. The resultant pressure gradients indicate that the pressures throughout the system are very nearly the same as under the 2020 maximum day demand scenario without TW-3 in the system.
  2. We then re-ran the simulation adding TW-3 into the system configuration. The resultant pressure gradients indicate that the 40 psi pressure at the northern most dead end of the system in the northwest quadrant is still 40 psi while the west dead end approximately in the middle of the quadrant increased to approximately 50 psi. However, the pressures throughout the rest of the system are unchanged.
- F. Hydraulic Simulation – Using Scenario No. 1: Assuming Year 2020 maximum day demands, showing pipeline velocities within the system.
1. We ran the simulation first with TS-5, TSW-3, TW-1, TW-2 and TIB-1 having been added to the original system configuration. The resultant pipeline velocities within TS-5, TSW-3, TW-1, TW-2 and portions of TN-1, along the north portion of Bloomingdale Road, and a couple of lesser areas are 2.0 feet per second or less, which is less than the typically desired velocity of 3.0 to 5.0 feet per second, especially under a maximum day demand scenario.
  2. We then re-ran the same simulation this time with TW-3 added to the system configuration. The resultant pipeline velocities were unchanged from the previous simulation. The addition of TW-3 only adds more footage of pipeline where the velocities are below 2.0 feet per second. In fact, the velocity within TW-2 and TW-3 were shown to be 0.5 feet per second or less, which could create problems with the water quality within these pipes due to the exceptionally long retention times within the pipes.



- G. Hydraulic Simulation – Scenario No. 6: Assume Year 2020 average day demands, showing pipeline velocities within the system.
1. First, we ran the simulation with TS-5, TSW-3, TW-1, TW-2 and TIB-1 having been added to the original system configuration. The resultant pipeline velocities within TS-5, TSW-3, TW-1, TW-2, TIB-1 and portions of TS-3, TN-1 and several other lines are at 2.0 feet per second or less, which is less than the typically desired velocity of 3.0 to 5.0 foot per second.
  2. We then added TW-3 to the system configuration and re-ran the simulation. The resultant pipeline velocities throughout the system are unchanged by the addition of TW-3 from the previous run. Again, the addition of TW-3 only adds additional footage and volume of pipeline where the velocities are below 2.0 feet per second. The velocity within TW-2 and TW-3 are still at 0.5 feet per second or less.
- H. Hydraulic Simulation – Scenario No. 7: Assume Year 2020 maximum day demands with a main break in transmission main TN-1 just north of TNW-1.
1. First, we ran the simulation with the addition of TS-5, TSW-3, TW-1, TW-2 and TIB-1 to the original system configuration. The resultant pressure gradients indicate that the pressure along the north/south leg of TN-1 was at 40 psi or less. Also, the resultant pressure gradients indicate that the pressure at the dead ends of the system along the northwest quadrant is at 40 psi or less. The remainder of the system had pressures of 40 psi or greater.
  2. We then ran the simulation with TW-3 added to the system configuration in addition to TS-5, TSW-3, TW-1, TW-2 and TIB-1 having been added to the original system configuration. The resultant pressure gradients indicate that the pressure along the north/south leg of TN-1 is still at 40 psi or less and the pressure at the dead ends of the system along the northwest quadrant are also still at 40 psi, plus or minus. The remainder of the system was unchanged from the previous run. Thus, the addition of TW-3 essentially had no effect on the pressures throughout the entire system.
- I. Hydraulic Simulation – Scenario No. 8: Assume Year 2020 maximum day demands with a main break in transmission main TOB-6 just north of TNW-1.
1. We first ran the simulation with the addition of TS-5, TSW-3, TW-1, TW-2 and TIB-1 to the original system configuration. The resultant pressure gradients indicate that there is a 40 psi pressure zone immediately north of the main break, as well as at the dead ends of the system along the northwest quadrant. The remainder of the system was at 40 psi or greater.

2. We then ran the simulation with TW-3 added to the system configuration in addition to TS-5, TSW-3, TW-1, TW-2, and TIB-1 having been added to the original system configuration. The resultant pressure gradients indicate that the 40 psi pressure zone immediately north of the main break is unchanged. Also, the pressures at the dead ends of the system along the northwest quadrant are still at 40 psi, plus or minus. The remainder of the system was unchanged from the previous run. Thus, as in the previous simulation, the addition of TW-3 essentially has no effect on the pressures throughout the entire system.

### **Conclusions**

Based on the computer simulations that were performed and the results obtained, the following conclusions can be derived.

1. The addition of TS-5 helped to increase the pressures along TS-3, but had virtually no other effect on the remainder of the system.
2. The addition of TSW-3 helped to increase the pressures at the far west end of the dead end line connecting standpipe No. 3 and also helped to maintain the water levels in standpipe No. 3.
3. The addition of TW-1 which basically provided a second interconnection between standpipe No. 3 and No. 4 helped to increase the pressures in the far southwest corner of the system from approximately 60 psi to 80 psi and also helped to maintain the water levels in standpipe No. 4.
4. The addition of TW-2 provided some redundancy to the western side of the system and eliminated the dead end line at the far west end of St. Charles Road. As far as providing improved pressures throughout the entire system, it had no effect.
5. The addition of TIB-1 basically provided redundancy as an additional interconnection between TSW-2 and TNW-1 at the eastern end of the system. The addition of TIB-1 also had no effect on improving the pressures throughout the entire system.
6. There were no apparent deficiencies found within the existing system without the addition of the proposed TW-3 transmission main.

7. The addition of TW-3 except for providing very minimal improvements to the pressures at the far west ends of the dead end lines along the northwest quadrant, has no apparent beneficial impact on the existing system, even under 2020 maximum day demands as far as providing improved pressure and flow conditions. In fact, when analyzing the pipeline velocities within the system, the addition of TW-3 does not help to improve the pipeline velocities within the system at all. Additionally, the velocity within TW-3, even under year 2020 maximum day demands is at 0.5 feet per second or less, which could create problems with the water quality within the approximately 50,000 feet of pipeline, due to the exceptionally long retention times within the pipe.

Report Prepared By:

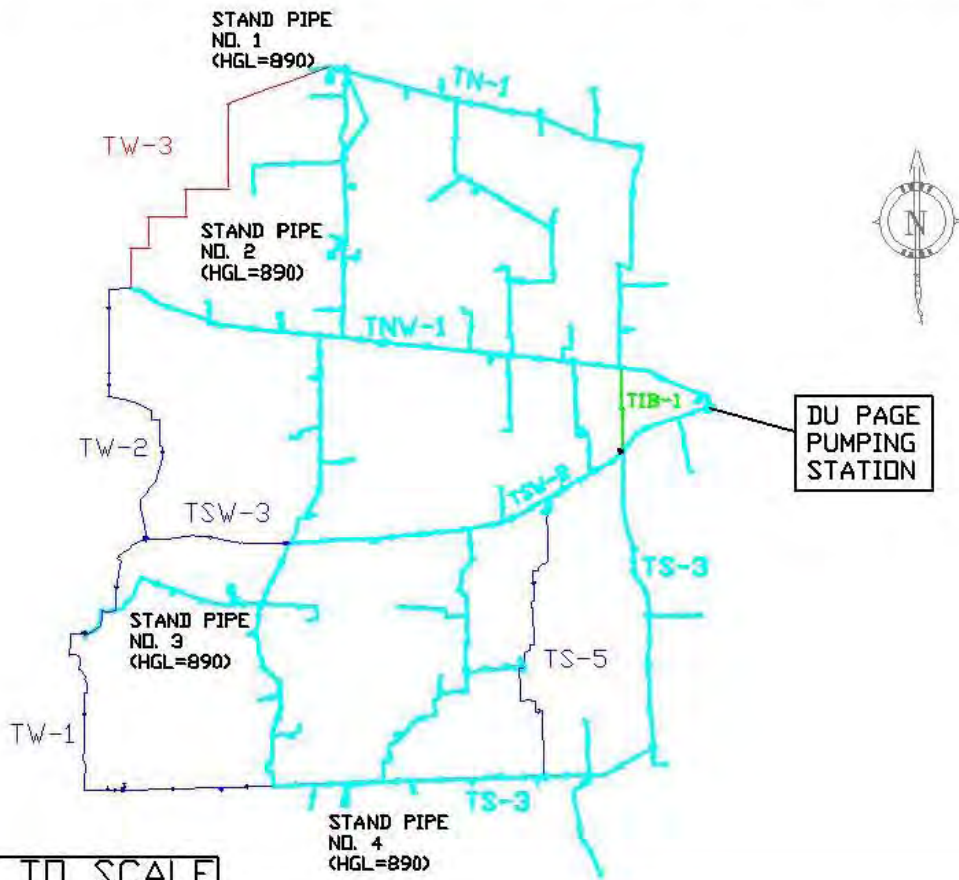
**CONSOER TOWNSEND ENVIRODYNE ENGINEERS, INC.**

---

Willard E. Richards  
Associate

September 2, 2004

# DU PAGE WATER COMMISSION DISTRIBUTION SYSTEM



# Updated Capital Improvement Plan



September 9, 2004

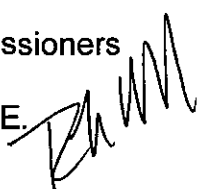
Cover Photo Courtesy of Caterpillar, Inc. Website



# DuPage Water Commission

## MEMORANDUM

TO: Chairman & Commissioners

FROM: Robert L. Martin, P.E.  
General Manager 

DATE: September 3 2004

SUBJECT: Updated Capital Improvement Plan

The following information has been compiled in connection with the capital improvements proposed to be included in an Updated Capital Improvement Plan:

**Tab 1      DWC Customer Storage Capacity with DWC Off-Line vs. 2004 IDNR Allocation**

This table presents the amount and type of water storage the customer utilities currently have compared to their 2004 water usage.

**Tab 2      DWC Customer Storage Capacity with DWC Off-Line vs. 2020 IDNR Allocation**

This table presents the amount and type of water storage the customer utilities currently have compared to their projected 2020 water usage.

**Tab 3      DWC Customer 2004 Well/Generation Survey**

This table presents the well capacity and backup generation capacity the customer utilities currently have.

**Tab 4      DWC Customer Emergency Interconnections List**

This table identifies the emergency interconnections the customer utilities currently have.

**Tab 5      Proposed Electrical Generation Drawings**

These drawings depict the proposed electrical generation facility.

**Tab 6      Advantages of Electrical Generation at DuPage Pump Station**

This list identifies the advantages of constructing backup electrical generation at the DuPage Pumping Station.

**Tab 7      Cost Comparison of Centralized/Decentralized Electrical Generation**

This table presents the estimated cost of installing backup electrical generation at the customer utilities compared to the estimated cost of installing backup electrical generation at the DuPage Pumping Station.

**Tab 8      Cost Comparison of Diesel vs. Natural Gas**

This table presents the estimated cost of diesel fueled electrical generation facilities at the DuPage Pumping Station compared to the estimated cost of natural gas fueled electrical generation facilities at the DuPage Pumping Station.

**Tab 9      Proposed Reservoir Drawing**

This drawing depicts the proposed future reservoir.

**Tab 10     Advantages of Reservoir Construction**

This list identifies the advantages of constructing the 30 million gallon reservoir.



**DWC CUSTOMER STORAGE CAPACITY WITH DWC OFF-LINE  
VS. 2004 IDNR ALLOCATION**

CUSTOMER	LOCATION	TYPE	ELEVATED STORAGE CAPACITY (MG)	GROUND STORAGE CAPACITY (MG)	TOTAL STORAGE CAPACITY (MG)	IDNR 2004 ALLOCATION (IN MGD)	FIRM AGGREGATE STORAGE (MG)	TOTAL DAYS OF STORAGE	ELECTRICAL GENERATION CAPABILITY
ADDISON	300 N. SWIFT RD	ELEVATED	1.50		1.50	4.494	6.75	1.502	
	LOMBARD/GOLDEN GATE	ELEVATED	0.75		0.75				
	666 VISTA AVE	ELEVATED	2.00		2.00				
	1011 W. FULLERTON AVE	GROUND		1.00	1.00				YES
	711 N. ADDISON RD	GROUND		1.50	1.50				YES
ARGONNE						0.758	1.02	1.339	
	TREATMENT PLANT	GROUND		0.07	0.07				YES
	WEST TANK	ELEVATED	0.50		0.50				
	SOUTH TANK	ELEVATED	0.30		0.30				
	EAST TANK	ELEVATED	0.15		0.15				
BENSENVILLE						2.694	3.55	1.318	
	CHURCH RD	ELEVATED	0.50		0.50				
	BELMONT, W OF YORK	ELEVATED	0.50		0.50				
	CHURCH ROAD	GROUND		1.80	1.80				YES
	FOSTER AVENUE	GROUND		0.75	0.75				YES
BLOOMINGDALE						2.759	4.80	1.740	
	236 WINSTON LN	ELEVATED	1.00		1.00				
	161 CARDINAL DR	ELEVATED	0.20		0.20				
	240 GARY AVENUE	GROUND		1.30	1.30				
	240 GARY AVENUE	GROUND		1.30	1.30				YES
	CARRIAGE WAY	GROUND		1.00	1.00				YES
CAROL STREAM						4.463	6.50	1.456	
	TOWER #2-124 BONNIE	ELEVATED	0.25		0.25				
	TOWER #3-333 FULLERTON	ELEVATED	0.50		0.50				
	TOWER #4-1015 LIES	ELEVATED	0.75		0.75				
	TANK #5-300 KUHN RD	GROUND		2.50	2.50				
	124 BONNIE	GROUND		2.50	2.50				
CLARENDON HILLS						0.711	1.25	1.758	
	233 BURLINGTON	ELEVATED	0.25		0.25				
	PARK & RICHMOND	ELEVATED	0.50		0.50				
	261 ANN STREET	UNDERGROUND		0.50	0.50				

**DWC CUSTOMER STORAGE CAPACITY WITH DWC OFF-LINE  
VS. 2004 IDNR ALLOCATION**

CUSTOMER	LOCATION	TYPE	ELEVATED STORAGE CAPACITY (MG)	GROUND STORAGE CAPACITY (MG)	TOTAL STORAGE CAPACITY (MG)	IDNR 2004 ALLOCATION (IN MGD)	FIRM AGGREGATE STORAGE (MG)	TOTAL DAYS OF STORAGE	ELECTRICAL GENERATION CAPABILITY
DARIEN	1220 PLAINFIELD	ELEVATED	0.25		0.25	2.750	2.75	1.000	
	6709 WILMETTE	STANDPIPE	2.00		2.00				
	8600 LEMONT ROAD	ELEVATED	0.50		0.50				
DOWNERS GROVE						6.762	8.00	1.183	
	DOWNERS & OGDEN	ELEVATED	2.00		2.00				
	3301 FINLEY	ELEVATED	1.00		1.00				
	71ST ST & CAMDEN	ELEVATED	1.00		1.00				
	MAIN & SUMMIT	ELEVATED	0.50		0.50				
	MAPLE & BELMONT	ELEVATED	1.50		1.50				
	HIGHLAND & 39TH	ELEVATED	1.00		1.00				
	67TH & MAIN	ELEVATED	1.00		1.00				
ELMHURST						4.669	15.00	3.213	
	ARMITAGE & WALNUT	ELEVATED	0.50		0.50				
	ST CHARLES & RT 83	ELEVATED	0.50		0.50				
	BUTTERFIELD PK	ELEVATED	0.50		0.50				
	LAKE & YORK	GROUND		5.00	5.00				YES
	MYRTLE & PARK	GROUND		5.00	5.00				YES
	LINDEN & ADAMS	GROUND		3.50	3.50				YES
GLENDAL HEIGHTS						3.016	4.20	1.393	
	1933 BRANDON	ELEVATED	1.00		1.00				
	1666 GLEN ELLYN RD	ELEVATED	0.20		0.20				
	210 NORTH AVENUE	GROUND		1.50	1.50				YES
	210 NORTH AVENUE	GROUND		1.00	1.00				YES
	210 NORTH AVE	ELEVATED	0.50		0.50				
GLEN ELLYN						2.930	3.20	1.091	
	438 COTTAGE	ELEVATED	0.50		0.50				
	69 NEWTON	ELEVATED	0.75		0.75				
	69 NEWTON	GROUND		1.00	1.00				YES
	308 WILSON	GROUND		1.00	1.00				YES
	STORAGE FOR IAWC LIBERTY EAST	IAWC			-0.05				
HINSDALE						2.649	4.50	1.699	
	57TH ST & MADISON	ELEVATED	2.00		2.00				
	PARK & MAPLE	GROUND		2.00	2.00				YES
	PARK & MAPLE	GROUND		0.50	0.50				YES

**DWC CUSTOMER STORAGE CAPACITY WITH DWC OFF-LINE  
VS. 2004 IDNR ALLOCATION**

CUSTOMER	LOCATION	TYPE	ELEVATED STORAGE CAPACITY (MG)	GROUND STORAGE CAPACITY (MG)	TOTAL STORAGE CAPACITY (MG)	IDNR 2004 ALLOCATION (IN MGD)	FIRM AGGREGATE STORAGE (MG)	TOTAL DAYS OF STORAGE	ELECTRICAL GENERATION CAPABILITY
ITASCA						1.742	3.50	2.009	
	BAKER/ARDMORE	ELEVATED	0.50		0.50				
	INDUSTRIAL DRIVE	GROUND		0.75	0.75				YES
	PROSPECT/THORNDALE	ELEVATED	1.00		1.00				
	RTE 53 / LAKE ST	GROUND		1.25	1.25				YES
IAWC ARROWHEAD						0.196	0.40	2.041	
	2S 050 BURNING TRAIL, WHEATON	ELEVATED	0.10		0.10				
	2S 050 BURNING TRAIL, WHEATON	GROUND		0.30	0.30				
IAWC COUNTRY CLUB						0.117	0.20	1.709	
	405 GRAND, ELMHURST	GROUND		0.20	0.20				
IAWC DU PAGE/LISLE						0.598	0.91	1.522	
	5150 KINGSTON, LISLE	ELEVATED	0.05		0.05				
	FOUR LAKES, LISLE	ELEVATED	0.15		0.15				
	STORAGE FROM LISLE	LISLE			0.71				
IAWC LOMBARD						0.072	0.07	1.028	
	625 JOYCE, LOMBARD	HYDROPNEUMATIC	0.01		0.01				
	625 JOYCE, LOMBARD	HYDROPNEUMATIC	0.01		0.01				
	STORAGE FROM LOMBARD	LOMBARD			0.05				
IAWC VALLEY VIEW						0.700	0.88	1.257	
	22W 550 BIRCHWOOD, GLEN ELLYN	ELEVATED	0.18		0.18				
	2S 635 LLOYD, GLEN ELLYN	ELEVATED	0.30		0.30				
	22W 550 BIRCHWOOD, GLEN ELLYN	GROUND		0.40	0.40				YES
IAWC LIBERTY RIDGE WEST						0.344	0.38	1.091	
	STORAGE FROM WINFIELD	WINFIELD			0.38				
IAWC LIBERTY RIDGE EAST						0.050	0.07	1.460	
		HYDROPNEUMATIC	0.02		0.02				
	STORAGE FROM GLEN ELLYN	GLEN ELLYN			0.05				
LISLE						3.185	4.79	1.504	
	4500 WESTERN	ELEVATED	0.50		0.50				
	6495 LEXINGTON	ELEVATED	0.50		0.50				
	485 WARRENVILLE	ELEVATED	2.50		2.50				YES
	STORAGE FOR IAWC-DUPAGE/LISLE	IAWC			-0.71				
	4045 FORBES DR.	GROUND		2.00	2.00				YES

**DWC CUSTOMER STORAGE CAPACITY WITH DWC OFF-LINE  
VS. 2004 IDNR ALLOCATION**

CUSTOMER	LOCATION	TYPE	ELEVATED STORAGE CAPACITY (MG)	GROUND STORAGE CAPACITY (MG)	TOTAL STORAGE CAPACITY (MG)	IDNR 2004 ALLOCATION (IN MGD)	FIRM AGGREGATE STORAGE (MG)	TOTAL DAYS OF STORAGE	ELECTRICAL GENERATION CAPABILITY
LOMBARD						4.875	6.15	1.262	
	2020 S. HIGHLAND	ELEVATED	1.00		1.00				
	NORTH AVE/WEST RD	STANDPIPE	1.60		1.60				YES
	1030 S. STEWART	GROUND		3.00	3.00				YES
	20 E. ST. CHARLES	GROUND		0.60	0.60				YES
	STORAGE FOR IAWC-LOMBARD	IAWC			-0.05				
NAPERVILLE						19.674	37.90	1.926	
	NORTHWEST	ELEVATED	0.30		0.30				
	NORTH	ELEVATED	0.50		0.50				
	SOUTH	ELEVATED	0.50		0.50				
	WEST	ELEVATED	0.50		0.50				
	CENTRAL	ELEVATED	0.50		0.50				
	SOUTHWEST	ELEVATED	0.75		0.75				
	NORTHEAST	ELEVATED	2.00		2.00				
	WEST- SW	ELEVATED	0.75		0.75				
	SOUTHEAST	UNDERGROUND		6.00	6.00				YES
	NORTHWEST	UNDERGROUND		5.60	5.60				YES
	SOUTH	UNDERGROUND		2.50	2.50				YES
	WEST	UNDERGROUND		4.00	4.00				YES
	SOUTHWEST	UNDERGROUND		6.00	6.00				YES
	WEST-SW	UNDERGROUND		8.00	8.00				YES
OAK BROOK						4.104	8.00	1.949	
	WINDSOR DR @ I-88	ELEVATED	0.25		0.25				
	TOWER DR @ 22ND ST	ELEVATED	0.25		0.25				
	YORK RD @ I-88	UNDERGROUND		3.50	3.50				YES
	MIDWEST @ I-88	GROUND		4.00	4.00				YES
OAK BROOK TERRACE						0.217	0.50	2.304	
	BUTTERFIELD & RTE 83	ELEVATED	0.50		0.50				
ROSELLE						2.204	1.75	0.794	
	550 E. IRVING PK RD	ELEVATED	0.25		0.25				
	370 SUMMERFIELD	GROUND		1.00	1.00				
	1800 W CENTRAL @ RR	ELEVATED	0.50		0.50				

**DWC CUSTOMER STORAGE CAPACITY WITH DWC OFF-LINE  
VS. 2004 IDNR ALLOCATION**

CUSTOMER	LOCATION	TYPE	ELEVATED STORAGE CAPACITY (MG)	GROUND STORAGE CAPACITY (MG)	TOTAL STORAGE CAPACITY (MG)	IDNR 2004 ALLOCATION (IN MGD)	FIRM AGGREGATE STORAGE (MG)	TOTAL DAYS OF STORAGE	ELECTRICAL GENERATION CAPABILITY
VILLA PARK	HOME AVENUE	ELEVATED	0.50		0.50	2.109	3.80	1.802	
	PLYMOUTH/PRINCETON	ELEVATED	0.50		0.50				
	HOME AVE	GROUND		0.50	0.50				
	WELL NO.1-CENTRAL	GROUND		0.30	0.30				
	CORNELL	GROUND		2.00	2.00				
WESTMONT	55TH & WILMETTE	ELEVATED	0.50		0.50	2.872	4.50	1.567	
	39 E. BURLINGTON	GROUND		1.50	1.50				YES
	39 E. BURLINGTON	GROUND		1.50	1.50				YES
	63RD ST WEST OF CASS	ELEVATED	1.00		1.00				
WHEATON	BRIGHTON & GOLDEN POND	ELEVATED	1.50		1.50	5.830	7.26	1.245	
	MANCHESTER RD.	ELEVATED	1.50		1.50				
	210 REBER STREET	GROUND		0.96	0.96				
	1588 S. PRESIDENT	GROUND		1.30	1.30				
	615 COUNTRYSIDE DR	GROUND		2.00	2.00				
WINFIELD	KLEIN CREEK	ELEVATED	1.00		1.00	1.113	1.62	1.460	
	CENTRAL DUPAGE HOSPITAL	ELEVATED	0.50		0.50				
	0S635 GARFIELD	GROUND		0.50	0.50				YES
	STORAGE FOR CU LIBERTY RIDGE WEST	CUCI			-0.38				
WILLOWBROOK	7344 QUINCY	ELEVATED	3.00		3.00	1.321	4.00	3.028	
	67TH ST & RT 83	ELEVATED	0.50		0.50				
	7760 QUINCY ST	ELEVATED	0.50		0.50				
WOOD DALE	269 W. IRVING PK	ELEVATED	0.10		0.10	1.639	3.35	2.044	
	1417 N. WOOD DALE	ELEVATED	0.50		0.50				
	444 W POTTER	GROUND		1.00	1.00				YES
	444 W POTTER	GROUND		0.50	0.50				YES
	326 E. RICHERT ROAD	GROUND		1.25	1.25				YES

**DWC CUSTOMER STORAGE CAPACITY WITH DWC OFF-LINE  
VS. 2004 IDNR ALLOCATION**

CUSTOMER	LOCATION	TYPE	ELEVATED STORAGE CAPACITY (MG)	GROUND STORAGE CAPACITY (MG)	TOTAL STORAGE CAPACITY (MG)	IDNR 2004 ALLOCATION (IN/MGD)	FIRM AGGREGATE STORAGE (MG)	TOTAL DAYS OF STORAGE	ELECTRICAL GENERATION CAPABILITY
WOODRIDGE						3.134	6.15	1.962	
	2800 WOODRIDGE DR	ELEVATED	0.50		0.50				
	7642 WOODRIDGE DR.	ELEVATED	0.15		0.15				
	1579 W 75TH ST	ELEVATED	1.50		1.50				
	WOODWARD AVE/PETER DR	STANDPIPE	4.00		4.00				
	TOTAL		60.58	97.13	157.70	94.751	157.70 MAXIMUM MINIMUM	1.664 3.213 0.794	

**DWC CUSTOMER STORAGE CAPACITY WITH DWC OFF-LINE  
VS. 2020 IDNR ALLOCATION**

CUSTOMER	LOCATION	TYPE	ELEVATED STORAGE CAPACITY (MG)	GROUND STORAGE CAPACITY (MG)	TOTAL STORAGE CAPACITY (MG)	IDNR 2020 ALLOCATION (IN MGD)	FIRM AGGREGATE STORAGE (MG)	TOTAL DAYS OF STORAGE	ELECTRICAL GENERATION CAPABILITY
ADDISON						5.009	6.75	1.348	
	300 N. SWIFT RD	ELEVATED	1.50		1.50				
	LOMBARD/GOLDEN GATE	ELEVATED	0.75		0.75				
	666 VISTA AVE	ELEVATED	2.00		2.00				
	1011 W. FULLERTON AVE	GROUND		1.00	1.00				YES
	711 N. ADDISON RD	GROUND		1.50	1.50				YES
ARGONNE						0.758	1.02	1.339	
	TREATMENT PLANT	GROUND		0.07	0.07				YES
	WEST TANK	ELEVATED	0.50		0.50				
	SOUTH TANK	ELEVATED	0.30		0.30				
	EAST TANK	ELEVATED	0.15		0.15				
BENSENVILLE						2.858	3.55	1.242	
	CHURCH RD	ELEVATED	0.50		0.50				
	BELMONT, W OF YORK	ELEVATED	0.50		0.50				
	CHURCH ROAD	GROUND		1.80	1.80				YES
	FOSTER AVENUE	GROUND		0.75	0.75				YES
BLOOMINGDALE						3.488	4.80	1.376	
	236 WINSTON LN	ELEVATED	1.00		1.00				
	161 CARDINAL DR	ELEVATED	0.20		0.20				
	240 GARY AVENUE	GROUND		1.30	1.30				
	240 GARY AVENUE	GROUND		1.30	1.30				YES
	CARRIAGE WAY	GROUND		1.00	1.00				YES
CAROL STREAM						5.565	6.50	1.168	
	TOWER #2-124 BONNIE	ELEVATED	0.25		0.25				
	TOWER #3-333 FULLERTON	ELEVATED	0.50		0.50				
	TOWER #4-1015 LIES	ELEVATED	0.75		0.75				
	TANK #5-300 KUHN RD	GROUND		2.50	2.50				
	124 BONNIE	GROUND		2.50	2.50				
CLARENDON HILLS						0.792	1.25	1.578	
	233 BURLINGTON	ELEVATED	0.25		0.25				
	PARK & RICHMOND	ELEVATED	0.50		0.50				
	261 ANN STREET	UNDERGROUND		0.50	0.50				

**DWC CUSTOMER STORAGE CAPACITY WITH DWC OFF-LINE  
VS. 2020 IDNR ALLOCATION**

CUSTOMER	LOCATION	TYPE	ELEVATED STORAGE CAPACITY (MG)	GROUND STORAGE CAPACITY (MG)	TOTAL STORAGE CAPACITY (MG)	IDNR 2020 ALLOCATION (IN MGD)	FIRM AGGREGATE STORAGE (MG)	TOTAL DAYS OF STORAGE	ELECTRICAL GENERATION CAPABILITY
DARIEN	1220 PLAINFIELD	ELEVATED	0.25		0.25	3.254	2.75	0.845	
	6709 WILMETTE	STANDPIPE	2.00		2.00				
	8600 LEMONT ROAD	ELEVATED	0.50		0.50				
DOWNERS GROVE						7.751	8.00	1.032	
	DOWNERS & OGDEN	ELEVATED	2.00		2.00				
	3301 FINLEY	ELEVATED	1.00		1.00				
	71ST ST & CAMDEN	ELEVATED	1.00		1.00				
	MAIN & SUMMIT	ELEVATED	0.50		0.50				
	MAPLE & BELMONT	ELEVATED	1.50		1.50				
	HIGHLAND & 39TH	ELEVATED	1.00		1.00				
	67TH & MAIN	ELEVATED	1.00		1.00				
ELMHURST						4.906	15.00	3.057	
	ARMITAGE & WALNUT	ELEVATED	0.50		0.50				
	ST CHARLES & RT 83	ELEVATED	0.50		0.50				
	BUTTERFIELD PK	ELEVATED	0.50		0.50				
	LAKE & YORK	GROUND		5.00	5.00				YES
	MYRTLE & PARK	GROUND		5.00	5.00				YES
	LINDEN & ADAMS	GROUND		3.50	3.50				YES
GLENDAL HEIGHTS						3.540	4.20	1.186	
	1933 BRANDON	ELEVATED	1.00		1.00				
	1666 GLEN ELLYN RD	ELEVATED	0.20		0.20				
	210 NORTH AVENUE	GROUND		1.50	1.50				YES
	210 NORTH AVENUE	GROUND		1.00	1.00				YES
	210 NORTH AVE	ELEVATED	0.50		0.50				
GLEN ELLYN						3.164	3.20	1.011	
	438 COTTAGE	ELEVATED	0.50		0.50				
	69 NEWTON	ELEVATED	0.75		0.75				
	69 NEWTON	GROUND		1.00	1.00				YES
	308 WILSON	GROUND		1.00	1.00				YES
	STORAGE FOR IAWC LIBERTY EAST	IAWC			-0.05				
HINSDALE						2.739	4.50	1.643	
	57TH ST & MADISON	ELEVATED	2.00		2.00				
	PARK & MAPLE	GROUND		2.00	2.00				YES
	PARK & MAPLE	GROUND		0.50	0.50				YES



**DWC CUSTOMER STORAGE CAPACITY WITH DWC OFF-LINE  
VS. 2020 IDNR ALLOCATION**

CUSTOMER	LOCATION	TYPE	ELEVATED STORAGE CAPACITY (MG)	GROUND STORAGE CAPACITY (MG)	TOTAL STORAGE CAPACITY (MG)	IDNR 2020 ALLOCATION (INMGD)	FIRM AGGREGATE STORAGE (MG)	TOTAL DAYS OF STORAGE	ELECTRICAL GENERATION CAPABILITY
ITASCA	BAKER/ARDMORE INDUSTRIAL DRIVE PROSPECT/THORNDALE RTE 53 / LAKE ST	ELEVATED GROUND ELEVATED GROUND	0.50  1.00	 0.75  1.25	0.50 0.75 1.00 1.25	1.907	3.50	1.835	   YES  YES
IAWC ARROWHEAD	2S 050 BURNING TRAIL, WHEATON 2S 050 BURNING TRAIL, WHEATON	ELEVATED GROUND	0.10	 0.30	0.10 0.30	0.196	0.40	2.041	
IAWC COUNTRY CLUB	405 GRAND, ELMHURST	GROUND		0.20	0.20	0.117	0.20	1.709	
IAWC DU PAGE/LISLE	5150 KINGSTON, LISLE FOUR LAKES, LISLE STORAGE FROM LISLE	ELEVATED ELEVATED LISLE	0.05 0.15		0.05 0.15 0.71	0.644	0.91	1.413	
IAWC LOMBARD	625 JOYCE, LOMBARD 625 JOYCE, LOMBARD STORAGE FROM LOMBARD	HYDROPNEUMATIC HYDROPNEUMATIC LOMBARD	0.01 0.01		0.01 0.01 0.05	0.072	0.07	1.028	
IAWC VALLEY VIEW	22W 550 BIRCHWOOD, GLEN ELLYN 2S 635 LLOYD, GLEN ELLYN 22W 550 BIRCHWOOD, GLEN ELLYN	ELEVATED ELEVATED GROUND	0.18 0.30	  0.40	0.18 0.30 0.40	0.700	0.88	1.257	  YES
IAWC LIBERTY RIDGE WEST	STORAGE FROM WINFIELD	WINFIELD			0.38	0.440	0.38	0.853	
IAWC LIBERTY RIDGE EAST	STORAGE FROM GLEN ELLYN	HYDROPNEUMATIC GLEN ELLYN	0.02		0.02 0.05	0.063	0.07	1.159	
LISLE	4500 WESTERN 6495 LEXINGTON 485 WARRENVILLE STORAGE FOR IAWC-DUPAGE/LISLE 4045 FORBES DR.	ELEVATED ELEVATED ELEVATED IAWC GROUND	0.50 0.50 2.50	    2.00	0.50 0.50 2.50 -0.71 2.00	3.841	4.79	1.247	  YES  YES

**DWC CUSTOMER STORAGE CAPACITY WITH DWC OFF-LINE  
VS. 2020 IDNR ALLOCATION**

CUSTOMER	LOCATION	TYPE	ELEVATED STORAGE CAPACITY (MG)	GROUND STORAGE CAPACITY (MG)	TOTAL STORAGE CAPACITY (MG)	IDNR 2020 ALLOCATION (IN MGD)	FIRM AGGREGATE STORAGE (MG)	TOTAL DAYS OF STORAGE	ELECTRICAL GENERATION CAPABILITY
LOMBARD	2020 S. HIGHLAND NORTH AVE/WEST RD	ELEVATED STANDPIPE	1.00 1.60		1.00 1.60	5.430	6.15	1.133	
	1030 S. STEWART	GROUND		3.00	3.00				YES
	20 E. ST. CHARLES	GROUND		0.60	0.60				YES
	STORAGE FOR IAWC-LOMBARD	IAWC			-0.05				
NAPERVILLE						22.432	37.90	1.690	
	NORTHWEST	ELEVATED	0.30		0.30				
	NORTH	ELEVATED	0.50		0.50				
	SOUTH	ELEVATED	0.50		0.50				
	WEST	ELEVATED	0.50		0.50				
	CENTRAL	ELEVATED	0.50		0.50				
	SOUTHWEST	ELEVATED	0.75		0.75				
	NORTHEAST	ELEVATED	2.00		2.00				
	WEST- SW	ELEVATED	0.75		0.75				
	SOUTHEAST	UNDERGROUND		6.00	6.00				YES
	NORTHWEST	UNDERGROUND		5.60	5.60				YES
	SOUTH	UNDERGROUND		2.50	2.50				YES
	WEST	UNDERGROUND		4.00	4.00				YES
	SOUTHWEST	UNDERGROUND		6.00	6.00				YES
	WEST-SW	UNDERGROUND		8.00	8.00				YES
OAK BROOK						4.585	8.00	1.745	
	WINDSOR DR @ I-88	ELEVATED	0.25		0.25				
	TOWER DR @ 22ND ST	ELEVATED	0.25		0.25				
	YORK RD @ I-88	UNDERGROUND		3.50	3.50				YES
	MIDWEST @ I-88	GROUND		4.00	4.00				YES
OAK BROOK TERRACE						0.293	0.50	1.706	
	BUTTERFIELD & RTE 83	ELEVATED	0.50		0.50				
ROSELLE						2.739	1.75	0.639	
	550 E. IRVING PK RD	ELEVATED	0.25		0.25				
	370 SUMMERFIELD	GROUND		1.00	1.00				
	1800 W CENTRAL @ RR	ELEVATED	0.50		0.50				

**DWC CUSTOMER STORAGE CAPACITY WITH DWC OFF-LINE  
VS. 2020 IDNR ALLOCATION**

CUSTOMER	LOCATION	TYPE	ELEVATED STORAGE CAPACITY (MG)	GROUND STORAGE CAPACITY (MG)	TOTAL STORAGE CAPACITY (MG)	IDNR 2020 ALLOCATION (IN MGD)	FIRM AGGREGATE STORAGE (MG)	TOTAL DAYS OF STORAGE	ELECTRICAL GENERATION CAPABILITY
VILLA PARK	HOME AVENUE	ELEVATED	0.50		0.50	2.206	3.80	1.723	
	PLYMOUTH/PRINCETON	ELEVATED	0.50		0.50				
	HOME AVE	GROUND		0.50	0.50				
	WELL NO.1-CENTRAL	GROUND		0.30	0.30				
	CORNELL	GROUND		2.00	2.00				
WESTMONT	55TH & WILMETTE	ELEVATED	0.50		0.50	3.069	4.50	1.466	
	39 E. BURLINGTON	GROUND		1.50	1.50				YES
	39 E. BURLINGTON	GROUND		1.50	1.50				YES
	63RD ST WEST OF CASS	ELEVATED	1.00		1.00				
WHEATON	BRIGHTON & GOLDEN POND	ELEVATED	1.50		1.50	6.530	7.26	1.112	
	MANCHESTER RD.	ELEVATED	1.50		1.50				
	210 REBER STREET	GROUND		0.96	0.96				
	1588 S. PRESIDENT	GROUND		1.30	1.30				
	615 COUNTRYSIDE DR	GROUND		2.00	2.00				
WINFIELD	KLEIN CREEK	ELEVATED	1.00		1.00	1.341	1.62	1.212	
	CENTRAL DUPAGE HOSPITAL	ELEVATED	0.50		0.50				
	0S635 GARFIELD	GROUND		0.50	0.50				YES
	STORAGE FOR CU LIBERTY RIDGE WEST	CUCI			-0.38				
WILLOWBROOK	7344 QUINCY	ELEVATED	3.00		3.00	1.508	4.00	2.653	
	67TH ST & RT 83	ELEVATED	0.50		0.50				
	7760 QUINCY ST	ELEVATED	0.50		0.50				
WOOD DALE	269 W. IRVING PK	ELEVATED	0.10		0.10	1.894	3.35	1.769	
	1417 N. WOOD DALE	ELEVATED	0.50		0.50				
	444 W POTTER	GROUND		1.00	1.00				YES
	444 W POTTER	GROUND		0.50	0.50				YES
	326 E. RICHERT ROAD	GROUND		1.25	1.25				YES

**DWC CUSTOMER STORAGE CAPACITY WITH DWC OFF-LINE  
VS. 2020 IDNR ALLOCATION**

CUSTOMER	LOCATION	TYPE	ELEVATED STORAGE CAPACITY (MG)	GROUND STORAGE CAPACITY (MG)	TOTAL STORAGE CAPACITY (MG)	IDNR 2020 ALLOCATION (IN MG)	FIRM AGGREGATE STORAGE (MG)	TOTAL DAYS OF STORAGE	ELECTRICAL GENERATION CAPABILITY
WOODRIDGE						4.331	6.15	1.420	
	2800 WOODRIDGE DR	ELEVATED	0.50		0.50				
	7642 WOODRIDGE DR.	ELEVATED	0.15		0.15				
	1579 W 75TH ST	ELEVATED	1.50		1.50				
	WOODWARD AVE/PETER DR	STANDPIPE	4.00		4.00				
	TOTAL		60.58	97.13	157.70	108.162	157.70 MAXIMUM MINIMUM	1.458 3.057 0.639	

DWC CUSTOMER 2004 WELL/GENERATION SURVEY								
	ADDISON		ARGONNE LABS		BENSENVILLE		BLOOMINGDALE	
POPULATION SERVED	36,200		NOT APPLICABLE		20,703		21,963	
SERVICE AREA (SQ.MI.)	9.76		NOT APPLICABLE		6.00		8.00	
ANNUAL PUMPAGE REPORTED (BG)	1.346		0.191		0.875		3	0.885
AVERAGE DAILY PUMPAGE IN MGD (CALCULATED)	3.687		0.523		2.397		2.424	
WATER ACCOUNTABILITY IN PERCENT (AUDITED)	100.00%		NO RESPONSE		NO RESPONSE		100.87%	
NUMBER OF ACTIVE WELLS	7		3		3		3	
2020 IDNR ALLOCATION (MGD)	5.009		0.758		2.858		3.488	
AGGREGATE ACTIVE WELL CAPACITY (MGD)	7.120		2.016		5.4576		3.456	
WELL CAPACITY TO 2020 ALLOCATION (IN PERCENT)	142.14%		265.96%		190.96%		99.08%	
FREQUENCY OF WELL EXERCISING	MONTHLY		MONTHLY		QUARTERLY		QUARTERLY	
ANNUAL COST TO EXERCISE WELLS	NOT CALCULATED	1	NOT CALCULATED	1	NOT CALCULATED	\$1,000.00		
AGGREGATE ACTIVE WELL FIRM CAPACITY (MGD) BACKED UP BY ELECTRIC GENERATION OR OTHER PRIME MOVER	6.040		1.440		0.000		0.000	
WELL CAPACITY BACKED UP BY GENERATION TO 2020 ALLOCATION (IN PERCENT)	120.58%		189.97%		0.00%		0.00%	
CAPITAL EXPENSE TO PURCHASE GENERATORS OR OTHER PRIME MOVERS	NOT CALCULATED	1	NOT CALCULATED	1	\$0.00	\$0.00		
FREQUENCY OF EXERCISING GENERATION FACILITIES	WEEKLY		NO SCHEDULE		2	NOT APPLICABLE	NOT APPLICABLE	
ANNUAL COST TO EXERCISE GENERATION FACILITIES	NOT CALCULATED	1	NOT CALCULATED	1	\$0.00	\$0.00		
PLEASE SEE LAST PAGE FOR NOTES								

DWC CUSTOMER 2004 WELL/GENERATION SURVEY	CAROL STREAM	CLARENDON HILLS	DARIEN	DOWNERS GROVE
POPULATION SERVED	40,500	7,700	22,860	50,000
SERVICE AREA (SQ. MI.)	12.00	2.00	6.00	14.20 1
ANNUAL PUMPAGE REPORTED (BG)	1.420	0.283	0.706	2.196
AVERAGE DAILY PUMPAGE IN MGD (CALCULATED)	3.890	0.776	1.935	6.017
WATER ACCOUNTABILITY IN PERCENT (AUDITED)	97.03%	97.70%	97.00%	98.00%
NUMBER OF ACTIVE WELLS	3	2	5	6
2020 IDNR ALLOCATION (MGD)	5.565	0.792	3.254	7.751
AGGREGATE ACTIVE WELL CAPACITY (MGD)	3.492	2.304	2.448	4.000
WELL CAPACITY TO 2020 ALLOCATION (IN PERCENT)	62.75%	290.91%	75.23%	51.61%
FREQUENCY OF WELL EXERCISING	MONTHLY	QUARTERLY	MONTHLY	MONTHLY
ANNUAL COST TO EXERCISE WELLS	NOT CALCULATED 1	\$350.00	\$6,000.00	\$3,300.00
AGGREGATE ACTIVE WELL FIRM CAPACITY (MGD) BACKED UP BY ELECTRIC GENERATION OR OTHER PRIME MOVER	3.492	0.350	0.648	0.000
WELL CAPACITY BACKED UP BY GENERATION TO 2020 ALLOCATION (IN PERCENT)	62.75%	44.19%	19.91%	0.00%
CAPITAL EXPENSE TO PURCHASE GENERATORS OR OTHER PRIME MOVERS	NOT CALCULATED 1	\$40,000.00	\$50,000.00	\$0.00
FREQUENCY OF EXERCISING GENERATION FACILITIES	WEEKLY	MONTHLY	MONTHLY	NOT APPLICABLE
ANNUAL COST TO EXERCISE GENERATION FACILITIES	NOT CALCULATED 1	\$200.00	\$2,000.00	\$0.00
PLEASE SEE LAST PAGE FOR NOTES				

DWC CUSTOMER 2004 WELL/GENERATION SURVEY	ELMHURST	GLENDAL HEIGHTS	GLEN ELLYN	HINSDALE
POPULATION SERVED	44,732	30,400	27,488	19,000
SERVICE AREA (SQ.MI.)	10.00	5.80	6.50	5.50
ANNUAL PUMPAGE REPORTED (BG)	1.671	0.967	1.038	0.900
AVERAGE DAILY PUMPAGE IN MGD (CALCULATED)	4.577	2.650	2.844	2.467
WATER ACCOUNTABILITY IN PERCENT (AUDITED)	94.66%	97.36%	102.97%	95.18%
NUMBER OF ACTIVE WELLS	3	4	2	4
2020 IDNR ALLOCATION (MGD)	4.906	3.540	3.164	2.739
AGGREGATE ACTIVE WELL CAPACITY (MGD)	4.680	2.300	3.665	6.000
WELL CAPACITY TO 2020 ALLOCATION (IN PERCENT)	95.39%	64.97%	115.83%	219.06%
FREQUENCY OF WELL EXERCISING	MONTHLY	QUARTERLY	BI-MONTHLY	QUARTERLY
ANNUAL COST TO EXERCISE WELLS	NOT REPORTED 1	MINIMAL	NOT REPORTED 1	NOT REPORTED 1
AGGREGATE ACTIVE WELL FIRM CAPACITY (MGD) BACKED UP BY ELECTRIC GENERATION OR OTHER PRIME MOVER	0.000	1.440	3.665	1.692
WELL CAPACITY BACKED UP BY GENERATION TO 2020 ALLOCATION (IN PERCENT)	0.00%	40.68%	115.83%	61.77%
CAPITAL EXPENSE TO PURCHASE GENERATORS OR OTHER PRIME MOVERS	\$0.00	\$55,000.00	NOT REPORTED 1	\$68,000.00
FREQUENCY OF EXERCISING GENERATION FACILITIES	NOT APPLICABLE	MONTHLY	MONTHLY	WEEKLY
ANNUAL COST TO EXERCISE GENERATION FACILITIES	\$0.00	MINIMAL	NOT REPORTED 1	\$1,500.00
PLEASE SEE LAST PAGE FOR NOTES				

DWC CUSTOMER 2004 WELL GENERATION SURVEY					
	IAWC - VALLEY VIEW		ITASCA	LISLE	LOMBARD
POPULATION SERVED	NO RESPONSE		8,302	22,000	42,322
SERVICE AREA (SQ.MI.)	NO RESPONSE		6.00	8.70	10.00
ANNUAL PUMPAGE REPORTED (BG)	0.233	5	0.525	0.983	1.554
AVERAGE DAILY PUMPAGE IN MGD (CALCULATED)	0.639	5	1.439	2.693	4.256
WATER ACCOUNTABILITY IN PERCENT (AUDITED)	NO RESPONSE		93.33%	98.15%	99.43%
NUMBER OF ACTIVE WELLS	2		2	4	4
2020 IDNR ALLOCATION (MGD)	0.700		1.907	3.841	5.430
AGGREGATE ACTIVE WELL CAPACITY (MGD)	1.152		1.728	5.700	5.580
WELL CAPACITY TO 2020 ALLOCATION (IN PERCENT)	164.57%		90.61%	148.40%	102.76%
FREQUENCY OF WELL EXERCISING	NO RESPONSE		MONTHLY	MONTHLY	MONTHLY
ANNUAL COST TO EXERCISE WELLS	NO RESPONSE		\$10,000.00	\$10,000.00	NOT REPORTED 1
AGGREGATE ACTIVE WELL FIRM CAPACITY (MGD) BACKED UP BY ELECTRIC GENERATION OR OTHER PRIME MOVER	1.152		1.728	3.200	1.040
WELL CAPACITY BACKED UP BY GENERATION TO 2020 ALLOCATION (IN PERCENT)	164.57%		90.61%	83.31%	19.15%
CAPITAL EXPENSE TO PURCHASE GENERATORS OR OTHER PRIME MOVERS	NO RESPONSE		\$50,000.00	RENTED WHEN NECESSARY	NOT REPORTED 1
FREQUENCY OF EXERCISING GENERATION FACILITIES	NO RESPONSE		MONTHLY	NOT APPLICABLE	MONTHLY
ANNUAL COST TO EXERCISE GENERATION FACILITIES	NO RESPONSE		\$5,500.00	NOT APPLICABLE	NOT REPORTED 1
PLEASE SEE LAST PAGE FOR NOTES					



DWC CUSTOMER 2004 WELL/GENERATION SURVEY				
	NAPERVILLE	OAK BROOK	OAKBROOK TERRACE	ROSELLE
POPULATION SERVED	142,000	8,703	1,200	23,115
SERVICE AREA (SQ.MI.)	46.00	14.00	1.00	6.00
ANNUAL PUMPAGE REPORTED (BG)	6.106	1.571	0.050	0.850
AVERAGE DAILY PUMPAGE IN MGD (CALCULATED)	16.729	4.304	0.138	2.328
WATER ACCOUNTABILITY IN PERCENT (AUDITED)	96.48%	81.86%	99.30%	89.20%
NUMBER OF ACTIVE WELLS	10	3	0	0
2020 IDNR ALLOCATION (MGD)	22.432	4.585	0.293	2.739
AGGREGATE ACTIVE WELL CAPACITY (MGD)	14.250	6.480	0.000	0.000
WELL CAPACITY TO 2020 ALLOCATION (IN PERCENT)	63.53%	141.33%	0.00%	0.00%
FREQUENCY OF WELL EXERCISING	3 TIMES/YEAR	QUARTERLY	NOT APPLICABLE	NOT APPLICABLE
ANNUAL COST TO EXERCISE WELLS	\$75,000.00	\$5,000.00	\$0.00	\$0.00
AGGREGATE ACTIVE WELL FIRM CAPACITY (MGD) BACKED UP BY ELECTRIC GENERATION OR OTHER PRIME MOVER	0.000	0.000	0.000	0.000
WELL CAPACITY BACKED UP BY GENERATION TO 2020 ALLOCATION (IN PERCENT)	0.00%	0.00%	0.00%	0.00%
CAPITAL EXPENSE TO PURCHASE GENERATORS OR OTHER PRIME MOVERS	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE
FREQUENCY OF EXERCISING GENERATION FACILITIES	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE
ANNUAL COST TO EXERCISE GENERATION FACILITIES	\$0.00	\$0.00	\$0.00	\$0.00
PLEASE SEE LAST PAGE FOR NOTES				

DWC CUSTOMER 2004 WELL GENERATION SURVEY								
	VILLA PARK		WESTMONT		WHEATON		WILLOWBROOK	
POPULATION SERVED	22,517		24,565		54,000		9,100	
SERVICE AREA (SQ.MI.)	4.00		5.00		11.20		1	3.50
ANNUAL PUMPAGE REPORTED (BG)	0.722		1.007		1.980		0.395	
AVERAGE DAILY PUMPAGE IN MGD (CALCULATED)	1.979		2.759		5.425		1.082	
WATER ACCOUNTABILITY IN PERCENT (AUDITED)	98.85%		99.89%		NOT REPORTED		1	98.03%
NUMBER OF ACTIVE WELLS	2		5		6		0	
2020 IDNR ALLOCATION (MGD)	2.206		3.069		6.530		1.508	
AGGREGATE ACTIVE WELL CAPACITY (MGD)	2.386		6.912		12.528		0.000	
WELL CAPACITY TO 2020 ALLOCATION (IN PERCENT)	108.16%		225.22%		191.85%		0.00%	
FREQUENCY OF WELL EXERCISING	MONTHLY		6	SEMI-ANNUALLY	QUARTERLY		NOT APPLICABLE	
ANNUAL COST TO EXERCISE WELLS	NOT REPORTED		1	\$2,000.00	NOT REPORTED		\$0.00	
AGGREGATE ACTIVE WELL FIRM CAPACITY (MGD) BACKED UP BY ELECTRIC GENERATION OR OTHER PRIME MOVER	0.000		2.160		3.744		0.000	
WELL CAPACITY BACKED UP BY GENERATION TO 2020 ALLOCATION (IN PERCENT)	0.00%		70.38%		57.34%		0.00%	
CAPITAL EXPENSE TO PURCHASE GENERATORS OR OTHER PRIME MOVERS	NOT APPLICABLE		NOT REPORTED		1	NOT REPORTED	1	NOT APPLICABLE
FREQUENCY OF EXERCISING GENERATION FACILITIES	NOT APPLICABLE		MONTHLY		BI-WEEKLY		NOT APPLICABLE	
ANNUAL COST TO EXERCISE GENERATION FACILITIES	\$0.00		\$200.00		NOT REPORTED		1	\$0.00
PLEASE SEE LAST PAGE FOR NOTES								

DWC CUSTOMER 2004 WELL/GENERATION SURVEY				
	WINFIELD	WOOD DALE	WOODRIDGE	
POPULATION SERVED	8,868	15,353	32,834	
SERVICE AREA (SQ.MI.)	2.85	4.00	8.90	
ANNUAL PUMPAGE REPORTED (BG)	0.313	0.559	1.172	
AVERAGE DAILY PUMPAGE IN MGD (CALCULATED)	0.858	1.530	3.212	
WATER ACCOUNTABILITY IN PERCENT (AUDITED)	99.65%	105.00%	94.05%	
NUMBER OF ACTIVE WELLS	2	3	4	
2020 IDNR ALLOCATION (MGD)	1.341	1.894	4.331	
AGGREGATE ACTIVE WELL CAPACITY (MGD)	3.398	3.672	5.760	
WELL CAPACITY TO 2020 ALLOCATION (IN PERCENT)	253.42%	193.88%	132.99%	
FREQUENCY OF WELL EXERCISING	MONTHLY	QUARTERLY	MONTHLY	
ANNUAL COST TO EXERCISE WELLS	\$750.00	NOT REPORTED	NOT REPORTED	1
AGGREGATE ACTIVE WELL FIRM CAPACITY (MGD) BACKED UP BY ELECTRIC GENERATION OR OTHER PRIME MOVER	3.398	2.448	0.000	
WELL CAPACITY BACKED UP BY GENERATION TO 2020 ALLOCATION (IN PERCENT)	253.39%	129.25%	0.00%	
CAPITAL EXPENSE TO PURCHASE GENERATORS OR OTHER PRIME MOVERS	NOT REPORTED	NOT REPORTED	NOT APPLICABLE	1
FREQUENCY OF EXERCISING GENERATION FACILITIES	MONTHLY	MONTHLY	NOT APPLICABLE	
ANNUAL COST TO EXERCISE GENERATION FACILITIES	\$2,000.00	NOT REPORTED	\$0.00	1
PLEASE SEE LAST PAGE FOR NOTES				

DWC CUSTOMER 2004 WELL GENERATION SURVEY	
	SUMMARIES
POPULATION SERVED	736,425
SERVICE AREA (SQ.MI.)	219
ANNUAL PUMPAGE REPORTED (BG)	38.50
AVERAGE DAILY PUMPAGE IN MGD (CALCULATED)	88.56
WATER ACCOUNTABILITY IN PERCENT (AUDITED)	97.25%
NUMBER OF ACTIVE WELLS	92
2020 IDNR ALLOCATION (MGD)	106.630
AGGREGATE ACTIVE WELL CAPACITY (MGD)	116.485
WELL CAPACITY TO 2020 ALLOCATION (IN PERCENT)	109.24%
FREQUENCY OF WELL EXERCISING ANNUAL COST TO EXERCISE WELLS	
AGGREGATE ACTIVE WELL FIRM CAPACITY (MGD) BACKED UP BY ELECTRIC GENERATION OR OTHER PRIME MOVER	37.637
WELL CAPACITY BACKED UP BY GENERATION TO 2020 ALLOCATION (IN PERCENT)	35.30%
CAPITAL EXPENSE TO PURCHASE GENERATORS OR OTHER PRIME MOVERS	
FREQUENCY OF EXERCISING GENERATION FACILITIES	
ANNUAL COST TO EXERCISE GENERATION FACILITIES	
PLEASE SEE LAST PAGE FOR NOTES	NOTES:    1 DATA NOT AVAILABLE FROM CUSTOMER-OTHER SOURCES UTILIZED IF AVAILABLE 2 FACILITY CLOSES UPON POWER FAILURE 3 DATA FROM MOST RECENT CONSUMER CONFIDENCE REPORT ON FILE 4 ONE WELL RUNS CONTINUOUSLY FOR IRRIGATION PURPOSES APRIL TO OCTOBER 5 DATA FROM MOST RECENT DWC ANNUAL REPORT 6 WELLS EXERCISED IN SUMMER MONTHS ONLY

# **DWC CUSTOMER EMERGENCY INTERCONNECTIONS LIST**

LAST UPDATE: May 1, 2003

<b>CUSTOMER</b>	<b>CONNECTED WITH</b>	<b>DIRECTION (ONE/TWO WAY)</b>	<b>LOCATION OF INTERCONNECTION</b>	<b>SIZE</b>	<b>SOURCE OF DATA</b>
ADDISON	NO EMERGENCY INTERCONNECTIONS				J. CHRYSOGELOS 7/28/94
BENSENVILLE	ELK GROVE	TWO WAY	MARK ST WEST OF RT 83	12"	P. BOURKE 8/1/94
	ELK GROVE	TWO WAY	EASTERN SOUTH OF DEVON	12"	
	ELMHURST	TWO WAY	GRAND AVE 1 BLK WEST OF YORK	12"	
	WOOD DALE	TWO WAY	IRVING PARK AND PINE	12"	
BLOOMINGDALE	NO EMERGENCY INTERCONNECTIONS				K. O'DEA 7/29/94
CAROL STREAM	GLENDAL HEIGHTS	TWO WAY	SCHMALE RD AND KEHOE BLVD	8"	R. HOFFRAGE 7/28/94
	HANOVER PARK	TWO WAY	ARMY TRAIL AND MERIMAC	8"	
CLARENDON HILLS	UTILITIES INCORP	TO UTILITIES INCORP	HOLMES AND 56TH STREET	6"	J. HAYES 7/28/94
	WESTMONT	TWO WAY	5 SOUTH ELM STREET	6"	
	WESTMONT	TWO WAY	RICHMOND AVE AND CHICAGO AVE	10"	
DARIEN	DOWNERS GROVE	TWO WAY	QUEENS COURT AND 75TH ST	6"	R. ROGERS 8/1/94
	DOWNERS GROVE	TWO WAY	ELIZABETH AND ROHRER	8"	
	DOWNERS GROVE	TWO WAY	FAIRVIEW SOUTH OF 75TH ST	12"	
	DOWNERS GROVE	TWO WAY	75TH ST WEST OF FAIRVIEW	12"	
	DU PAGE CTY-HINSWOOD	TWO WAY	CASS AND FRONTAGE	8"	
	DU PAGE CTY-HINSWOOD	TWO WAY	BAILEY NORTH OF FRONTAGE	12"	
	WILLOWBROOK	TWO WAY	67TH AND HIGH ROAD	8"	
	WOODRIDGE	TWO WAY	LEMONT AND 75TH ST	14"	
	WOODRIDGE	TWO WAY	ALDEN AND BREWER	8"	
	WOODRIDGE	TWO WAY	BELLER AND 83RD	12"	
	WOODRIDGE	TWO WAY	GRAND VIEW AND 83RD	12"	
	WOODRIDGE	TWO WAY	PARKVIEW AND 83RD	12"	
	WOODRIDGE	TWO WAY	BELLER AND LEMONT	12"	
	WOODRIDGE	TWO WAY	LEMONT NORTH OF 87TH	12"	
	WOODRIDGE	TWO WAY	LEMONT AND OLD FIELD RD	16"	
	WOODRIDGE	TWO WAY	87TH NORTH OF COVENTRY	6"	
	WOODRIDGE	TWO WAY	87TH AND HAVENS	6"	
	WOODRIDGE	TWO WAY	WEST OF CARLYN ON FRONTAGE	12"	

**DWC CUSTOMER EMERGENCY INTERCONNECTIONS LIST**

LAST UPDATE: May 1, 2003

<b>CUSTOMER</b>	<b>CONNECTED WITH</b>	<b>DIRECTION (ONE/TWO WAY)</b>	<b>LOCATION OF INTERCONNECTION</b>	<b>SIZE</b>	<b>SOURCE OF DATA</b>
DOWNERS GROVE	DARIEN	TWO WAY	QUEENS COURT AND 75TH ST	6"	D. CONLEY 7/28/94
	DARIEN	TWO WAY	ELIZABETH AND ROHRER	12"	
	DARIEN	TWO WAY	FAIRVIEW SOUTH OF 75TH ST	12"	
	DARIEN	TWO WAY	75TH ST WEST OF FAIRVIEW	12"	
	DARIEN	TWO WAY	NORTH OF SHERWOOD-WEST OF QUEENS	6"	
	LIBERTY PARK HOME ASSOC.	TWO WAY	WILLIAMS AND 41ST ST	6"	
	LOMBARD	TWO WAY	FINLEY RD NORTH OF BROOK DR	12"	
	OAK BROOK	TWO WAY	FAIRVIEW AND 36TH ST	12"	
	OAK BROOK	TWO WAY	31ST AND FAIRFIELD	12"	
	WESTMONT	TWO WAY	525 CUMNOR/CUMNOR-SOUTH OF OGDEN	12"	
	WESTMONT	TWO WAY	CUMNOR AND NAPERVILLE (MAPLE)	6"	
	WESTMONT	TWO WAY	724 BUCK CT (DEERPATH-SOUTH WHITEFAWN	6"	
	WESTMONT	TWO WAY	ROSLYN AVE AND CHICAGO AVE (120 TRAUBE	6"	
	WOODRIDGE	TWO WAY	64TH ST WEST BELMONT	8"	
	WOODRIDGE	TWO WAY	71ST ST WEST OF DEVEREUX	12"	
	WOODRIDGE	TWO WAY	MIDHURST NORTH OF WESTFIELD	12"	
ELMHURST	BENSENVILLE	TWO WAY	GRAND AVE 1 BLK WEST OF YORK	12"	D. STREICHER 7/28/94
	BERKELEY	TO BERKELEY	BUTTERFIELD AND HIGH STREET	6"	
	IAWC COUNTRY CLUB	TO IAWC	DIVERSEY AND YORK	4"	
	OAK BROOK	TWO WAY	16TH STREET AND SPRING ROAD	12"	
	VILLA PARK	TWO WAY	ST. CHARLES AND VILLA AVE	12"	
GLENDAL HEIGHTS	CAROL STREAM	TWO WAY	SCHMALE RD AND KEHOE BLVD		J. MESCH 5/26/94
GLEN ELLYN	LOMBARD	TWO WAY	FINLEY RD AND ANN ST	8"	K. BAJOR 7/29/94
	WHEATON	TWO WAY	OTT AND EVERGREEN	8"	
HINSDALE	BURR RIDGE	FUTURE	63RD AND MADISON	12"	O. LANDRY 7/28/94
	OAK BROOK	TWO WAY	MADISON AND GLENDAL	6"	
	OAK BROOK	TWO WAY	YORK AND SPRING	6"	
	WESTERN SPRINGS	TWO WAY	BITTERSWEET AND TOLLWAY	6"	

**DWC CUSTOMER EMERGENCY INTERCONNECTIONS LIST**

LAST UPDATE: May 1, 2003

<b>CUSTOMER</b>	<b>CONNECTED WITH</b>	<b>DIRECTION (ONE/TWO WAY)</b>	<b>LOCATION OF INTERCONNECTION</b>	<b>SIZE</b>	<b>SOURCE OF DATA</b>
IAWC ARROWHEAD	NO EMERGENCY INTERCONNECTIONS				K. SHIVELY 7/28/94
IAWC COUNTRY CLUB	ELMHURST	TO CITIZENS	DIVERSEY AND YORK	4"	K. SHIVELY 7/28/94
IAWC DU PAGE/LISLE	LISLE LISLE	TWO WAY TWO WAY	KINGSTON AND GAMBLE MAIN AND JONQUIL	8" 6"	K. SHIVELY 7/28/94
IAWC LOMBARD	NO EMERGENCY INTERCONNECTIONS				K. SHIVELY 7/28/94
IAWC VALLEY VIEW	NO EMERGENCY INTERCONNECTIONS				K. SHIVELY 7/28/94
IAWC LIBERTY RIDGE W	NO EMERGENCY INTERCONNECTIONS				C. BOSTICK 4/30/03
ITASCA	WOOD DALE	TWO WAY	GEORGE AND PROSPECT	8"	J. KINDERMAN 7/29/94
LISLE	IAWC DUPAGE/LISLE IAWC DUPAGE/LISLE	TWO WAY TWO WAY	KINGSTON AND GAMBLE MAIN AND JONQUIL	8" 6"	G. HARRISON 7/28/94
LOMBARD	DOWNERS GROVE GLEN ELLYN OAK BROOK VILLA PARK	TWO WAY TWO WAY TO OAK BROOK TWO WAY	FINLEY ROAD NORTH OF BROOK DRIVE FINLEY RD AND ANN ST 1500' W OF MEYERS ON BUTTERFIELD ADDISON AND WASHINGTON	12" 6" 8" 6"	A. PODESTA 7/28/94
NAPERVILLE	BOLINGBROOK	TO BOLINGBROOK	WEHRLI RD AND RYCE RD	8"	A. PANECK 7/18/94
OAK BROOK	DOWNERS GROVE DOWNERS GROVE ELMHURST HINSDALE HINSDALE LOMBARD WESTMONT OAKBROOK TERRACE OAKBROOK TERRACE	TWO WAY TWO WAY TWO WAY TWO WAY TWO WAY TO OAK BROOK TWO WAY TWO WAY TWO WAY	31ST AND FAIRFIELD FAIRVIEW AND 36TH ST 16TH STREET AND SPRING ROAD OGDEN AND ADAMS YORK AND GLENDALE 1500' W OF MEYERS ON BUTTERFIELD 35TH AND ST. STEPHENS GREEN TRANS AM PLAZA NORTH OF 22ND STREET SOUTHLANE DR. EAST OF SUMMIT AVE.	10" 12" 12" 8" 6" 12" 12" 10" 8"	M. MERANDA 7/28/94       C. BOSTICK 4/30/03 C. BOSTICK 4/30/03

**DWC CUSTOMER EMERGENCY INTERCONNECTIONS LIST**

LAST UPDATE: May 1, 2003

CUSTOMER	CONNECTED WITH	DIRECTION (ONE/TWO WAY)	LOCATION OF INTERCONNECTION	SIZE	SOURCE OF DATA
OAKBROOK TERRACE	OAK BROOK	TWO WAY	TRANS AM PLAZA NORTH OF 22ND STREET	10"	C. BOSTICK 4/30/03
	OAK BROOK	TWO WAY	SOUTHLANE DR. EAST OF SUMMIT AVE.	8"	C. BOSTICK 4/30/03
ROSELLE	ELK GROVE	FUTURE			M. SCHULZ 7/15/94
	HANOVER PARK	TWO WAY	1800 W CENTRAL @ RR	12"	
	SCHAUMBURG	TWO WAY	NORTH GARDEN AVE. @ RR	8"	C. BOSTICK 4/30/03
	SCHAUMBURG	TWO WAY	NORTH CHANCELLOR AVE. @ RR	12"	C. BOSTICK 4/30/03
VILLA PARK	LOMBARD	TWO WAY	ADDISON AND WASHINGTON	6"	T. VENCHUS 7/29/94
	ELMHURST	TWO WAY	ST. CHARLES AND VILLA AVE	6"	
WESTMONT	CLARENDON HILLS	TWO WAY	5 SOUTH ELM STREET	6"	T. DRINKWATER 7/28/94
	CLARENDON HILLS	TWO WAY	RICHMOND AND CHICAGO AVE	10"	
	DOWNERS GROVE	TWO WAY	525 CUMNOR/CUMNOR-SOUTH OF OGDEN	12"	
	DOWNERS GROVE	TWO WAY	CUMNOR AND NAPERVILLE (MAPLE)	6"	
	DOWNERS GROVE	TWO WAY	724 BUCK CT (DEERPATH-SOUTH WHITEFAWN	6"	
	DOWNERS GROVE	TWO WAY	ROSLYN AVE AND CHICAGO AVE (120 TRAUBE	6"	
	OAK BROOK	TWO WAY	35TH AND ST. STEPHENS GREEN	8"	
	WILLOWBROOK	TWO WAY	61ST AND BENTLEY	8"	
WHEATON	GLEN ELLYN	TWO WAY	OTT AND EVERGREEN	4"	R. SCHNURSTEIN 7/28/94
	GLEN ELLYN	TWO WAY	LORRAINE AND HARWARDEN	4"	
	WINFIELD	TWO WAY	MANCHESTER AND ETHEL	8"	
WILLOWBROOK	BURR RIDGE	TWO WAY	MADISON AND JOLIET RD	12"	P. MODAFF 7/28/94
	DARIEN	TWO WAY	67TH AND HIGH ROAD	8"	
	DU PAGE CTY-FARMINGDALE	TWO WAY	79TH AND FARMINGDALE	8"	
	DU PAGE CTY-FARMINGDALE	TWO WAY	LOCUST AND SAWYER	6"	
	WESTMONT	TWO WAY	61ST AND BENTLEY	10"	
WOOD DALE	BENSENVILLE	TWO WAY	IRVING PARK AND PINE	6"	F. VOGT 7/28/94
	ELK GROVE VILLAGE	TWO WAY	MARK ST AND CARL BLVD	12"	
	ITASCA	TWO WAY	GEORGE AND PROSPECT	8"	

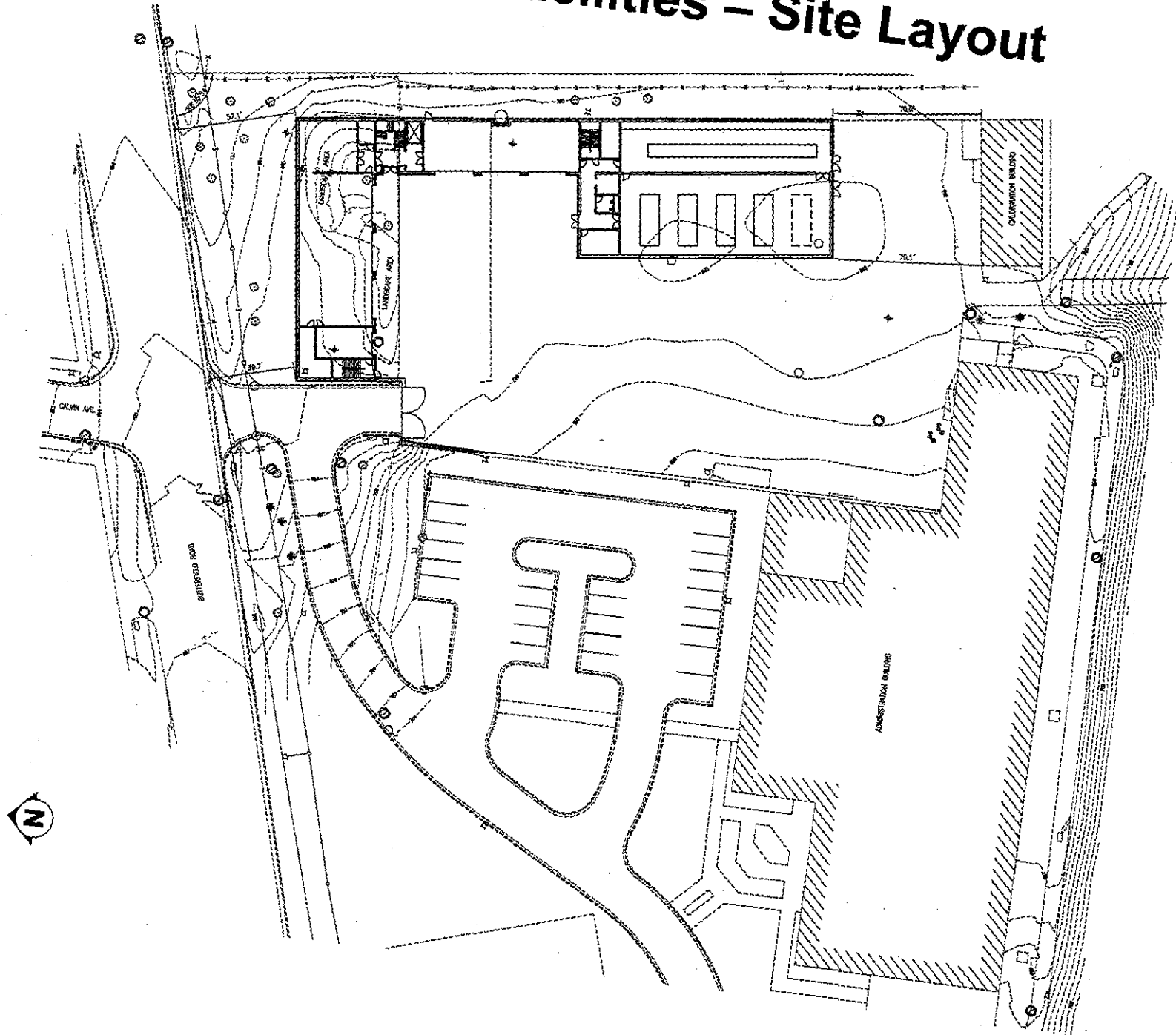


**DWC CUSTOMER EMERGENCY INTERCONNECTIONS LIST**

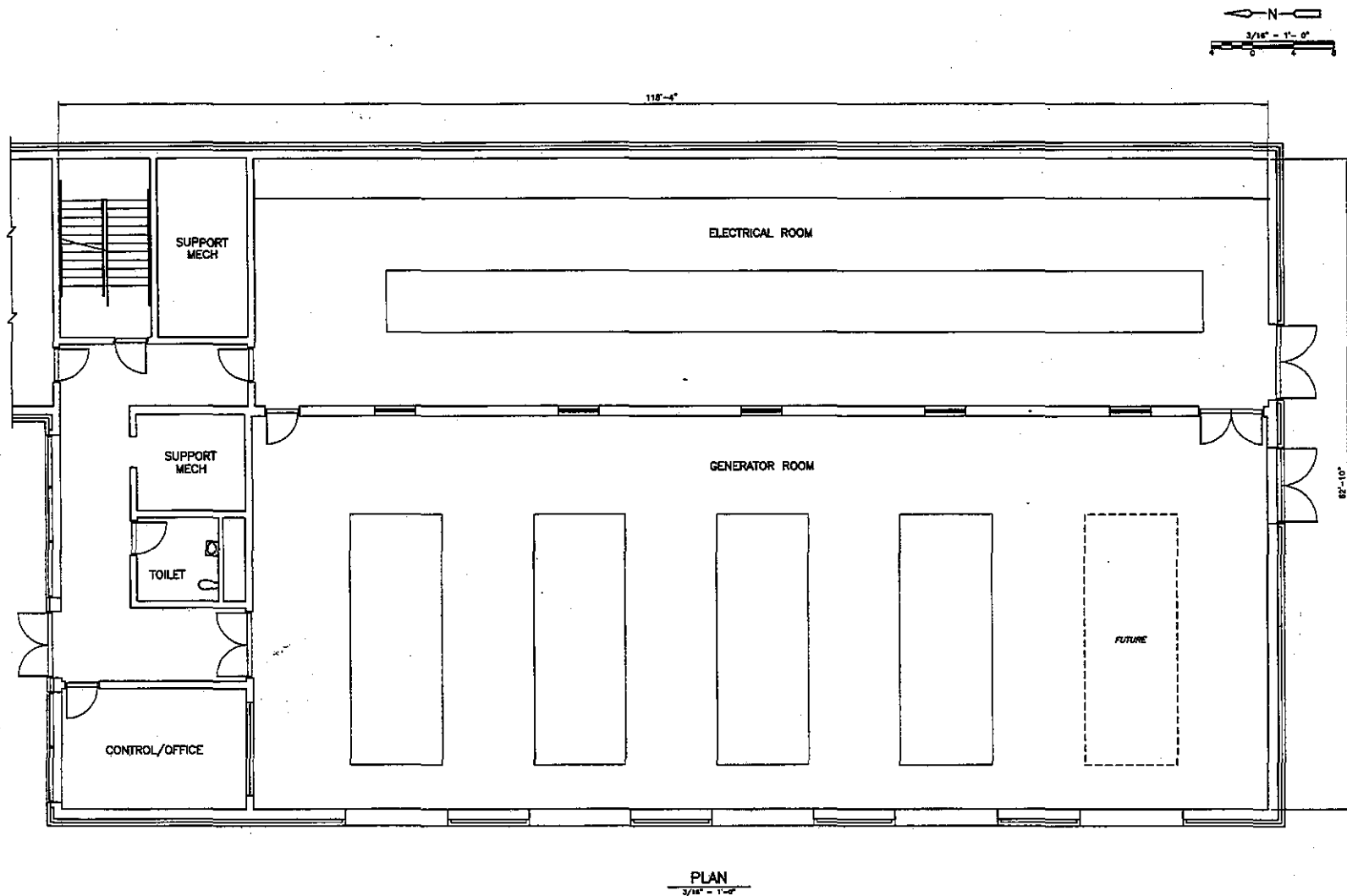
LAST UPDATE: May 1, 2003

<b>CUSTOMER</b>	<b>CONNECTED WITH</b>	<b>DIRECTION (ONE/TWO WAY)</b>	<b>LOCATION OF INTERCONNECTION</b>	<b>SIZE</b>	<b>SOURCE OF DATA</b>
WOODRIDGE	BOLINGBROOK	TWO WAY	83RD AND LEEWOOD	12"	T. FOWLER 7/28/94
	BOLINGBROOK	TWO WAY	MENDING WALL DRIVE AND	6"	
	DARIEN	TWO WAY	LEMONT AND 75TH ST	14"	
	DARIEN	TWO WAY	ALDEN AND BREWER	8"	
	DARIEN	TWO WAY	BELLER AND 83RD	12"	
	DARIEN	TWO WAY	GRAND VIEW AND 83RD	12"	
	DARIEN	TWO WAY	PARKVIEW AND 83RD	12"	
	DARIEN	TWO WAY	BELLER AND LEMONT	12"	
	DARIEN	TWO WAY	LEMONT NORTH OF 87TH	12"	
	DARIEN	TWO WAY	LEMONT AND OLD FIELD RD	16"	
	DARIEN	TWO WAY	87TH NORTH OF COVENTRY	6"	
	DARIEN	TWO WAY	87TH AND HAVENS	6"	
	DARIEN	TWO WAY	WEST OF CARLYN ON FRONTAGE	12"	
	DOWNERS GROVE	TWO WAY	64TH ST WEST BELMONT	8"	
	DOWNERS GROVE	TWO WAY	71ST ST WEST OF DEVEREUX	12"	
	DOWNERS GROVE	TWO WAY	MIDHURST NORTH OF WESTFIELD	12"	
	DU PAGE CTY - GREENE RD	TWO WAY	GREENE RD NORTH 75TH ST	10"	

# Power Generation Facilities – Site Layout



# Power Generation Facilities – Building Layout



# Electrical Generation Facts

<b>Number of Generators</b>	<b>4</b>
<b>Capacity</b>	<b>2 megawatts each, for a total of 8 megawatts</b>
<b>Sized</b>	<b>Average Day Flow</b>
<b>Fuel</b>	<b>Diesel</b>
<b>Building Location</b>	<b>Service Yard</b>
<b>Building Construction</b>	<b>Brick and block to match existing</b>
<b>Engineers Estimate</b>	<b>\$12,000,000</b>

# **Advantages of DWC Electrical Generation**

- **Less expensive than installation of generators at customer utilities**
- **Commission is responsible for providing water to utilities within DuPage County**
- **No guarantee of readiness of generators at individual utilities**
- **Generators should be exercised with an electrical load. It is easier for the Commission to exercise generators at the DuPage Pump Station than it would for the customer utilities because they need to waste the well water**

# **Advantages of DWC Electrical Generation**

- **Customer utility has lower water quality (water will have higher hardness and in some cases high iron and radium levels)**
- **Commission will reduce energy cost between 10 and 20 percent with the ability to reduce electrical loads when requested by the electrical utility**
- **Commission going to emergency electrical operation will be seamless and avoids 25 customer utilities scrambling to activate their wells**
- **Customer utilities will have to install chlorination systems**
- **Some utilities have insufficient well capacity or no wells**

# Power Generation Facilities – Centralized or Decentralized

<b>Community</b>	<b>Backed Up Well Capacity</b>	<b>2020 IDNR Flow Allocation</b>	<b>Back Up Deficit</b>	<b>Cost for Back Up</b>
<b>Addison</b>	<b>6.04 mgd</b>	<b>5.01 mgd</b>	<b>None</b>	<b>\$0</b>
<b>Argonne Labs</b>	<b>1.44 mgd</b>	<b>0.76 mgd</b>	<b>None</b>	<b>\$0</b>
<b>Bensenville</b>	<b>0</b>	<b>2.86 mgd</b>	<b>2.86 mgd</b>	<b>\$480,000</b>
<b>Bloomingtondale</b>	<b>0</b>	<b>3.49 mgd</b>	<b>3.49 mgd</b>	<b>\$580,000</b>
<b>Carol Stream</b>	<b>3.49 mgd</b>	<b>5.57 mgd</b>	<b>2.08 mgd</b>	<b>\$350,000</b>
<b>Clarendon Hills</b>	<b>0.35 mgd</b>	<b>0.79 mgd</b>	<b>0.44 mgd</b>	<b>\$75,000</b>
<b>Darien</b>	<b>.065 mgd</b>	<b>3.25 mgd</b>	<b>2.60 mgd</b>	<b>\$435,000</b>
<b>Downers Grove</b>	<b>0</b>	<b>7.75 mgd</b>	<b>7.75 mgd</b>	<b>\$1,300,000</b>
<b>Elmhurst</b>	<b>0</b>	<b>4.91 mgd</b>	<b>4.91 mgd</b>	<b>\$820,000</b>

# Power Generation Facilities – Centralized or Decentralized

<b>Community</b>	<b>Backed Up Well Capacity</b>	<b>2020 IDNR Flow Allocation</b>	<b>Back Up Deficit</b>	<b>Cost for Back Up</b>
<b>Glendale Heights</b>	<b>1.44 mgd</b>	<b>3.54 mgd</b>	<b>2.10 mgd</b>	<b>\$350,000</b>
<b>Glen Ellyn</b>	<b>3.67 mgd</b>	<b>3.16 mgd</b>	<b>None</b>	<b>\$0</b>
<b>Hinsdale</b>	<b>1.69 mgd</b>	<b>2.74 mgd</b>	<b>1.05 mgd</b>	<b>\$175,000</b>
<b>IAWC – Valley View</b>	<b>1.15 mgd</b>	<b>0.70 mgd</b>	<b>None</b>	<b>\$0</b>
<b>Itasca</b>	<b>1.73 mgd</b>	<b>1.91 mgd</b>	<b>0.18 mgd</b>	<b>\$30,000</b>
<b>Lisle</b>	<b>3.20 mgd</b>	<b>3.84 mgd</b>	<b>0.64 mgd</b>	<b>\$110,000</b>
<b>Lombard</b>	<b>1.04 mgd</b>	<b>5.43 mgd</b>	<b>4.39 mgd</b>	<b>\$730,000</b>
<b>Naperville</b>	<b>0</b>	<b>22.43 mgd</b>	<b>22.43 mgd</b>	<b>\$3,700,000</b>
<b>Oak Brook</b>	<b>0</b>	<b>4.59 mgd</b>	<b>4.59 mgd</b>	<b>\$765,000</b>



# Power Generation Facilities – Centralized or Decentralized

Community	Backed Up Well Capacity	2020 IDNR Flow Allocation	Back Up Deficit	Cost for Back Up
Oak Brook Terrace	0	0.29 mgd	0.29 mgd	\$50,000
Roselle	0	2.74 mgd	2.74 mgd	\$460,000
Villa Park	0	2.21 mgd	2.21 mgd	\$370,000
Westmont	2.16 mgd	3.07 mgd	0.91 mgd	\$150,000
Wheaton	3.74 mgd	6.53 mgd	2.79 mgd	\$465,000
Willowbrook	0	1.51 mgd	1.51 mgd	\$250,000
Winfield	3.40 mgd	1.34 mgd	None	\$0
Wood Dale	2.45 mgd	1.89 mgd	None	\$0
Woodridge	0	4.33 mgd	4.33 mgd	\$720,000

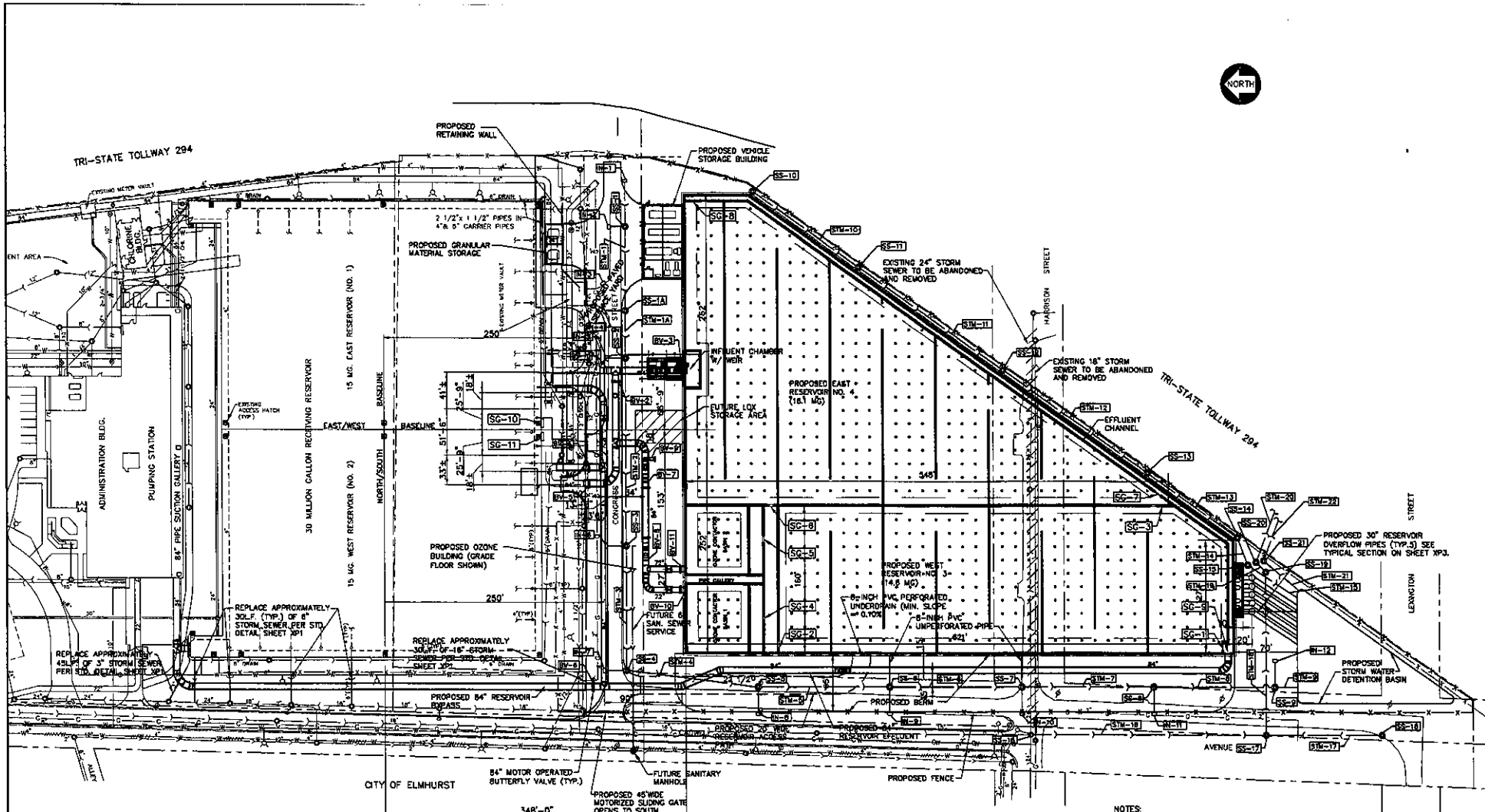
# **Power Generation Facilities – Diesel- or Natural Gas-Fueled**

	<b>Diesel (Base) 4 – 2000 kW</b>	<b>Natural Gas 3 – 3000 kW</b>	<b>Diesel (Alt.<sup>1</sup>) 3 – 3000 kW</b>
<b>Project Costs</b>	<b>\$12,000,000</b>	<b>\$18,000,000</b>	<b>\$14,500,000</b>
<b>Operating Costs</b>	<b>\$1,400,000/yr</b>	<b>\$1,200,000/yr</b>	<b>\$1,400,000/yr</b>
<b>Payback Period</b>	<b>NA</b>	<b>22 years<sup>2</sup> 16 years<sup>3</sup></b>	<b>NA</b>

- 1. Allows both diesel and natural gas alternatives to be bid.**
- 2. Natural gas cost: \$4.00 per MMBtu**
- 3. Natural gas cost: \$3.00 per MMBtu**

# **Power Generation Facilities – Centralized or Decentralized**

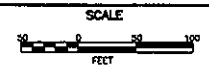
- **Decentralized generation cost: \$12,400,000**
- **Centralized generation cost: \$12,000,000**



NOTES:  
1. BOTH THE 36-INCH (STM-20) AND THE 12-INCH (STM-22) STORM SEWERS DISCHARGE TO THE EXISTING 54-INCH DIAMETER TOLL AUTHORITY CULVERT PIPE.  
2. SEE SHEET XP2 FOR SCHEDULE OF BUTTERFLY VALVES, SLIDE GATES, STORM INLETS, STORM SEWERS AND STORM SEWER MANHOLES.

REVISIONS			
NO.	DATE	DESCRIPTION	APPROVED

DESIGNED	P.J.H.
DRAWN	L.R.L.
CHECKED	W.E.R.
DATE	AUGUST, 2004



DUPAGE WATER COMMISSION  
CONCRETE RESERVOIRS



YARD PIPING

SHEET 1503  
OF 3  
SHEETS  
CTE PROJECT NO. 40675

# **Reservoir Facts**

- **Capacity: 30.7 million gallons**
- **Construction: reinforced poured-in-place concrete**
- **Taste & Odor: structurally constructed for future T&O facilities**
- **Engineers Estimate: \$30,000,000**

# **Advantages of DWC Reservoir Construction**

- **Increases on-site storage from 30 million gallons to 60.7 million gallons**
- **Increases total Commission storage capacity to 93.2 million gallons, equal to an average day demand**
- **Allows customer utilities eight additional hours to activate their wells during an interruption of service from Chicago, based on average day demand**
- **Reduces the pumpage from the Lexington Pump Station more expensive electrical energy periods (9:00 to 18:00, Monday through Friday). Estimated savings approximately \$6,200 per month**



# DuPage Water Commission

## MEMORANDUM

TO: Chairman & Commissioners

FROM: Robert L. Martin, P.E.  
General Manager

A handwritten signature in black ink, appearing to read 'RL Martin', is written over the printed name and title.

DATE: September 3, 2004

SUBJECT: Draft Capital Improvement Plan

Attached is a draft "Summary of Estimated New Construction Costs" and "Summary of Revenues, Expenditures and Fund Balances". These summaries assume all capital projects will be paid for from cash on hand. For that reason the reservoir and standpipe pumping station projects have been deferred until sufficient funds can be accumulated.

# SUMMARY OF ESTIMATED NEW CONSTRUCTION COSTS

DESCRIPTION (BASED ON FY 04-05 COSTS)	FY 04-05	FY 05-06	FY 06-07	FY 07-08	FY 08-09	TOTAL
<b>DISTRIBUTION SYSTEM IMPROVEMENTS</b>						
Contract TW-3; St. Charles Road - Engineering (1)						0
Contract TW-3; St. Charles Road - Construction (1)						0
Contract TIB-1; Route 83 - Engineering	1,000,000	500,000				1,500,000
Contract TIB-1; Route 83 - Construction (2)	8,000,000	7,000,000				15,000,000
<b>DU PAGE PUMP STATION IMPROVEMENTS</b>						
30 Million Gallon Reservoir; Storage Building & T&O Building - Engineering (3)	375,000					375,000
30 Million Gallon Reservoir; Storage Building & T&O Building - Construction (2,3)						0
Generator Facility - Engineering	1,000,000	500,000	500,000			2,000,000
Generator Facility - Construction		7,250,000	7,250,000			14,500,000
Pump #10-Engineering					40,000	40,000
Pump #10-Installation					400,000	400,000
<b>LEXINGTON PUMP STATION IMPROVEMENTS</b>						
Generator Facility - Engineering		1,000,000	500,000	500,000		2,000,000
Generator Facility - Construction			7,250,000	7,250,000		14,500,000
<b>STANDPIPE IMPROVEMENTS</b>						
Install Pumps at Standpipes-Tank Site #2,3,4 Engineering (4)						0
Install Pumps at Standpipes-Tank Site #2,3,4 Construction (2,4)						0
Pipe Storage at Tanksite #4 Engineering	30,000	100,000				130,000
Pipe Storage at Tanksite #4 Construction	100,000	1,200,000				1,300,000
	<u>10,505,000</u>	<u>17,550,000</u>	<u>15,500,000</u>	<u>7,750,000</u>	<u>440,000</u>	<u>51,745,000</u>
<b>INFLATION FACTOR 2% PER YEAR</b>	100.0%	102.0%	104.0%	106.1%	108.2%	102.9%
	<u>10,505,000</u>	<u>17,901,000</u>	<u>16,126,000</u>	<u>8,224,000</u>	<u>476,000</u>	<u>53,232,000</u>

Note (1) - Suspended.

Note (2) - Includes legal, property acquisition (if any) and soil testing services.

Note (3) - Deferred until FY 10-11. Completed FY 12-13. Estimated costs are as follows:

FY 10-11 \$ 7,700,000  
FY 11-12 \$15,250,000  
FY 12-13 \$ 7,750,000

Note (4) - Deferred until FY 11-12. Completed FY 14-15. Estimated costs are as follows:

FY 11-12 \$ 110,000  
FY 12-13 \$ 1,460,000  
FY 13-14 \$ 1,460,000  
FY 14-15 \$ 1,460,000

REVISED: SEPTEMBER 4, 2004



**DU PAGE WATER COMMISSION - 5 YEAR PROJECTION**  
**SUMMARY OF REVENUES, EXPENDITURES AND FUND BALANCES**  
**MAY 1, 2002 TO APRIL 30, 2009**

ACCOUNT TITLE	ALL FUNDS FY 02-03 ACTUAL	ALL FUNDS FY 03-04 ACTUAL	ASSUMPTION OR % CHGE FY 05-09 ONLY	ALL FUNDS FY 04-05 PROJECTION	ALL FUNDS FY 05-06 FORECAST	ALL FUNDS FY 06-07 FORECAST	ALL FUNDS FY 07-08 FORECAST	ALL FUNDS FY 08-09 FORECAST
<b>REVENUES</b>								
O & M PAYMENTS	42,819,534	42,485,698	CALCULATED	45,597,799	47,496,509	48,231,400	48,632,815	49,030,289
SALES TAXES USED FOR O & M COSTS	0	0	CALCULATED	0	0	0	0	0
FIXED COST PAYMENTS (% PAID BY SALES TAX)	10,164,758	8,916,329	50.0%	7,143,969	7,144,469	7,145,094	7,145,344	7,144,719
SUBSEQUENT CUSTOMER DIFFERENTIAL/EMERGENCY SUPPLY	994,590	783,326	1.0%	791,159	799,071	807,062	815,133	823,284
SALES TAXES USED FOR CONSTRUCTION AND BOND PAYMENTS	30,704,457	31,620,982	2.0%	32,253,402	32,898,470	33,556,439	34,227,568	34,912,119
INTEREST INCOME	5,808,624	2,321,233	EXTRAPOLATED	2,349,518	2,381,445	2,191,793	2,054,875	2,015,461
OTHER INCOME	569,493	102,058	0.0%	0	0	0	0	0
<b>TOTAL REVENUE</b>	<b>91,061,456</b>	<b>86,229,626</b>		<b>88,135,847</b>	<b>90,719,964</b>	<b>91,931,788</b>	<b>92,875,735</b>	<b>93,925,872</b>
<b>OPERATING EXPENDITURES</b>								
WATER PURCHASES (3% ANNUAL RATE INCREASES)	39,037,395	39,013,675	CALCULATED	41,615,189	44,644,069	46,361,315	48,134,322	49,996,139
20% CREDIT THRU OCTOBER 2004	(7,807,479)	(7,802,735)	CALCULATED	(4,611,512)	0	0	0	0
5 YEAR CAPITAL PLAN MAJOR REPAIRS	2,041,455	4,810,523	CALCULATED	2,572,000	3,126,000	0	0	0
OTHER OPERATING EXPENSES (EXCL BOND INTEREST/DEPRC)	9,045,146	10,036,387	5.0%	10,738,677	11,275,611	11,839,392	12,431,362	13,052,930
REVENUE BOND PRINCIPAL AND INTEREST COSTS	17,832,908	20,727,699	CALCULATED	14,287,938	14,288,937	14,290,188	14,290,687	14,289,438
G.O. BOND PRINCIPAL AND INTEREST COSTS	13,122,650	13,112,650	CALCULATED	13,122,150	13,124,150	13,117,900	13,117,650	13,116,900
CAPITAL EQUIPMENT	95,583	84,608	5.0%	88,838	93,280	97,944	102,841	107,983
<b>TOTAL OPERATING EXPENDITURES AND COMMITMENTS</b>	<b>73,367,658</b>	<b>79,982,807</b>		<b>77,813,280</b>	<b>86,552,047</b>	<b>85,706,739</b>	<b>88,076,862</b>	<b>90,563,390</b>
5 YEAR CAPITAL PLAN NEW CONSTRUCTION	5,448,800	3,432,005	CALCULATED	10,505,000	17,901,000	16,126,000	8,224,000	476,000
5 YEAR CONSTRUCTION PLAN RSRVR/STND (DELAY)-CATCH-UP	0	0	CALCULATED	0	0	0	0	0
OTHER MINOR RELATED OUTLAYS	333,799	0	4.0%	250,000	260,000	270,400	281,216	292,465
DU PAGE COUNTY SALES TAX GRANT	0	75,000,000	PA93-0226	0	0	0	0	0
PRIOR SERVICE PENSION COSTS	3,805,524	(1,200,332)	BOARD POLICY	0	0	0	0	0
WATER QUALITY LOANS	10,000,000	0	BOARD POLICY	0	0	0	0	0
<b>TOTAL CASH OUTLAYS AND COMMITMENTS</b>	<b>92,955,781</b>	<b>157,214,480</b>		<b>88,568,280</b>	<b>104,713,047</b>	<b>102,103,139</b>	<b>96,582,078</b>	<b>91,331,855</b>
<b>NET TRANSACTIONS</b>	<b>(1,894,325)</b>	<b>(70,984,854)</b>		<b>(432,433)</b>	<b>(13,993,083)</b>	<b>(10,171,351)</b>	<b>(3,706,343)</b>	<b>2,594,017</b>
UNRESTRICTED NET ASSETS - BEGINNING	127,243,034	122,617,476	CALCULATED	70,205,835	69,773,402	55,780,319	45,608,968	41,902,625
RELEASE OF REV BOND DSR (SURETY BOND)	0	17,837,213		0	0	0	0	0
CONVERTED (TO) - FROM RESTRICTED OR CAPITAL NET ASSETS	(2,731,233)	736,000		0	0	0	0	0
<b>UNRESTRICTED OPERATING NET ASSETS - ENDING</b>	<b>122,617,476</b>	<b>70,205,835</b>		<b>69,773,402</b>	<b>55,780,319</b>	<b>45,608,968</b>	<b>41,902,625</b>	<b>44,496,642</b>
<b>HELD FOR EMERGENCY REPAIRS-TARGET (1)</b>	<b>28,100,000</b>	<b>11,700,000</b>	<b>3.0%</b>	<b>12,000,000</b>	<b>12,400,000</b>	<b>12,800,000</b>	<b>13,200,000</b>	<b>13,600,000</b>
O&M RATE STABILIZATION RESERVE	45,005,162	44,223,355		41,375,781	31,627,589	23,339,866	12,999,121	546,030
CONSTRUCTION RESERVE	49,512,314	14,282,480		16,397,621	11,752,730	9,469,102	15,703,504	30,350,612
<b>UNRESTRICTED NET ASSETS - ENDING</b>	<b>122,617,476</b>	<b>70,205,835</b>		<b>69,773,402</b>	<b>55,780,319</b>	<b>45,608,968</b>	<b>41,902,625</b>	<b>44,496,642</b>
<b>O &amp; M RATE</b>	<b>1.34</b>	<b>1.38</b>		<b>1.43</b>	<b>1.43</b>	<b>1.44</b>	<b>1.44</b>	<b>1.44</b>
<b>FIXED COST RATE</b>	<b>0.32</b>	<b>0.29</b>		<b>0.22</b>	<b>0.22</b>	<b>0.21</b>	<b>0.21</b>	<b>0.21</b>
<b>TOTAL RATE</b>	<b>1.66</b>	<b>1.67</b>		<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>

NOTE (1) - TO MAX OF 20,000,000

REVISED: SEPTEMBER 4, 2004