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# Central and Eastern Europe Local Government and Housing Privatization

Prepared for the Office of Housing and Urban Programs  
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ICMA  
Consortium Report

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**CITY OF SZCZECIN, POLAND**

**FINANCIAL ANALYSIS OF  
INFRASTRUCTURE UPGRADING AND EXPANSION**

**PHASE II REPORT  
PRIVATIZATION, ALTERNATIVES  
AND PREPARATION FOR FINANCING**

**JANUARY 1994**

Prepared For the Office of Housing and Urban Programs  
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**INTERNATIONAL CITY/COUNTY MANAGEMENT ASSOCIATION**  
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## **ABSTRACT**

This report details the results of the ICMA consultants' mission to assist in improving the water and sewer infrastructure of the City of Szczecin, Poland. The report evaluates methods for revamping the Zakład Wodociągów i Kanalizacji w Szczecinie (ZWIK), the City's water and sewer department. The privatization approach is the primary focus of the report. In addition, the consultants assess alternatives to privatization, namely entering into a management contract with a private company, and the establishment of a self-sufficient, quasi-municipal authority. The report also examines the necessity of the City to take steps toward the preparation for financing the improvement of the water and sewer system, as well as the need to implement the appropriate organizational and management changes. A series of recommendations for accomplishing these goals is provided in the report.

## **EXECUTIVE SUMMARY**

The City of Szczecin, with a population of 400,000, lies in the northwest corner of Poland, approximately 80 km northeast of Berlin, Germany and 400 km northwest of Warsaw. Water and wastewater services are provided by the Zaklad Wodociagow i Kanalizacji w Szczecinie (ZWIK), a Budget Enterprise within City government.

The City and ZWIK recognize that the water and sewer infrastructure must be improved to support the public health and safety as well as economic viability. Current plans call for an investment of approximately 2500 billion zlotys (\$128 million) over the next 12 years to effect improvements throughout the system - much of which is concentrated on wastewater collection, pumping and treatment. The City and ZWIK are most interested in determining the best way to finance these improvements without creating a hardship for its customers or an adverse impact on the economic situation.

During Phase I in September 1993, the consulting team met with City and ZWIK officials in Szczecin to perform a preliminary assessment of the City's ability to finance water and sewer infrastructure improvements. Interviews focused on functional areas that usually contribute to the development of financings in the U.S.: Management, planning, budgeting, finance, organization, accounting and revenue generation. The Phase I report recommended that the team focus on the following during its return assignment in late November 1993:

- Privatization: Assessment of the privatization process and further discussion of organizational alternatives.
- Preparation for Financing: Development of an approach to prepare for financing through the World Bank or similar institution
- Management Improvements: Further counselling and information transfer concerning organization and management practices

### **Privatization**

In July 1992, the City requested Invitations for Tenders to form a limited liability company to privatize its water and sewer operations. By the due date of September 30, 1993, the City received four acceptable tenders. During Phase II, the consulting team analyzed these proposals, reviewed the City's approach to the privatization process and discussed alternatives such as management contracts and the Authority structure in the U.S.

To privatize, the City plans to establish a limited liability company to operate the water and sewer systems. The City and ZWIK employees would participate in this Company as minority shareholders with a majority held by an outside investor. The City would retain ownership of the infrastructure and would be responsible for financing improvements to capital assets and for

rate setting. In essence, the Company would only be responsible for operations and maintenance of the water and sewer system.

The Phase I report discussed a number of alternatives to this approach. During Phase II, the consulting team emphasized two alternatives: 1) Management Contract and 2) Quasi-municipal Authority structure. A well-constructed management contract could provide the advantages that the City desires without the complexity and long-term commitment represented by the limited liability company structure. The Authority structure, on the other hand, would establish an independent, self-supporting enterprise allowing the City to delegate most of its responsibilities.

The consulting team recommends that the City adopt a formalized and professional approach to decision-making for the privatization process, considering organizational alternatives at the same time.

### **Recommended Program of Assistance**

Once the City has decided which privatization or organizational alternative it wants to implement, we recommend that a program for assistance be developed to prepare the City to finance capital improvements and to implement management improvements. The organizational decision has implications for either of these latter projects.

### **Preparation for Financing**

Even if ZWIK is privatized according to the current approach, the City will need to finance major capital improvements and demonstrate its credit-worthiness. While the City expects that the current privatization approach will accomplish these ends, the consulting team is not confident that the outside investor will have the resources to implement long-term financing of major capital improvements.

Therefore, the consulting team recommends that the City begin to take steps to prepare for future financing. These initial steps include: Assessment of the financing strategy, understanding of financing alternatives and investigation of legal and financial mechanisms to demonstrate the City's credit-worthiness.

### **Management Improvements**

The consulting team recommends that ZWIK begin implementation of a modern planning, budgeting and performance review system - both to support future financing and to improve management.

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## **I. INTRODUCTION**

The Office of Housing and Urban Programs of the United States Agency for International Development (USAID) contracted with the International City/County Management Association (ICMA) to provide technical assistance to the City of Szczecin.

The long-term objective of assistance to the City of Szczecin is to improve the capacity of the City to:

- Finance expansion of water and sewer systems to accommodate the needs of private investors
- Finance upgrading of water and sewer systems for downtown areas during the course of redevelopment in those areas
- Identify cost effective approaches for improving overall wastewater system performance through improvements to treatment facilities

The scope for initial Szczecin assistance is as follows:

- Develop the outline of a priority investment program to upgrade and expand the water and sewer infrastructure in a cost effective manner.
- Review financial aspects of current operations and rate-setting methods and analyze the ability to meet the financing needs of the City water and sewer system.
- Review current policies and approaches for financing infrastructure extension to serve new developments.
- Identify the major issues for upgrading infrastructure and advise the City on alternative technical and financial approaches.

During September 1993, representatives of ICMA, Mr. Frank Abeyta, Mr. Peter Feiden and Ms. Nancy Barnes, met with officials from the Zakład Wodociągów i Kanalizacji w Szczecinie (ZWIK) - the City's water and sewer department. A translation of the team's Phase I Report was provided to the City in November 1993. That report made preliminary long-term recommendations that the City:

- Select an Organizational Structure while Considering Alternatives to Privatization
- Develop Reliable Baseline Financial Information and Ability to Predict Future Results
- Develop Credible Capital Improvement Program

- Develop Financing Workplan
- Develop Operational Improvements

From November 26 to December 9, 1993, representatives of ICMA, Ms. Nancy Barnes and Mr. Robert Firestine, returned to Szczecin for Phase II assistance focused on:

- Evaluation of the Privatization Process
- Further Investigation of Alternatives to Privatization
- Development of a Workplan to Prepare for Financing
- Input on Operational and Financial management Improvements

The interview schedule for Phase II is provided in Attachment A. The interviews provided useful information that forms the basis for this report. Owing to time constraints, the consulting team was not able to independently confirm some information so our conclusions rely in great measure on the representations of ZWIK management.

## **II. EVALUATION OF PRIVATIZATION APPROACH**

### **A. Perspective on Privatization Approach and Proposals**

The City has studied the privatization approach and has developed a preliminary set of specifications for a limited liability company to operate, maintain and improve the water and wastewater systems. In July, 1993, the City issued an invitation for tenders from the limited liability company. (Please see Appendix G) By the September 30, 1993 deadline, the City received four tenders. The consulting team translated and reviewed each of the tenders. However, the text is not provided in this report in order to respect the proprietary nature of the tenders. The City Council has formed a Commission to study the tenders and recommend a decision.

The appendices provide information that describes the privatization approach and the City's rationale:

- Appendix C: Simulated Financial Scheme for 1994 Activities of the Water & Sewer Limited Liability Company
- Appendix D: Analysis of Privatization Approach by City's Attorney
- Appendix E: City's Principles for Privatizing ZWIK
- Appendix F: City Commission to Evaluate Privatization Proposals
- Appendix K: Concepts for Restructuring Water and Sewer Activities in Szczecin

#### ***1. City's Reasons to Privatize***

The City of Szczecin and ZWIK proffer a number of reasons to restructure Zwik and privatize it as a limited liability company:

##### ***a. Profit Retention***

Currently, ZWIK's operating surplus (its "profits") reverts to the City rather than being reinvested to improve ZWIK operations or upgrade infrastructure. The City uses the funds to subsidize other City functions. ZWIK would prefer to retain all of its profits and control the use of the funds generated.

The retention of profits is essential to allow ZWIK to function as a self-supporting enterprise. Retention of profits is also important from a motivational standpoint. Now, there may be little incentive for ZWIK to implement cost efficiencies - any money saved is diverted to other City functions. If ZWIK retained cost savings, there would be a strong incentive to implement improvements.

However, it is not necessary to form a limited liability company to gain this advantage. The City could establish ZWIK as an enterprise and increase its expenditure budget to enable use of profits for improvements. It is clear that ZWIK would be able to make use of the funds for improvements. For instance, although ZWIK management estimates that approximately 30 kilometers of water distribution piping should be replaced annually to maintain the system, only 5 kilometers of piping were replaced last year.

The City would have to forego the use of the profits to subsidize other functions but this would also be the case in the limited liability company.

*b. Substantial Cash Contribution by Outside Investors*

The City believes that, with the privatized limited liability company, an outside investor will make a substantial cash contribution that would finance service improvements, acquisition of new technology, additional equipment and perhaps some infrastructure improvements. The City also recognizes that it will retain the responsibility for financing major capital improvements such as the wastewater treatment plant.

The consulting team is not convinced that the outside investor's contribution will be as favorable as the City expects. We have considered why an outside investor would be willing to invest in the limited liability company - by what means the outside investor would earn a reasonable return on investment. After all, the City will retain the right to set rates, will limit Company profit to 10% and will require reinvestment of profits for a number of years. All of these constraints represent a risk to the investor - the risk that the initial investment does not provide an adequate return.

We expect that the attraction of the proposed venture for an outside investor is largely the access it promises for future business, either in terms of establishing a foothold in the potentially large market for utility operation in Poland and/or participation in the future capital construction in Szczecin and other Polish cities. These opportunities may outweigh some of the risk.

However, we expect that the outside investor will also take steps to minimize risks and enhance the possibility of a return on investment. These actions may include limiting the amount of the initial capital contribution as much as possible or limiting the amount of investment in on-going operations.

*c. Investors as Financial Intermediaries*

The City hopes that the privatized limited liability company will help the City obtain long-term financing for infrastructure improvement. The City thinks that the outside investor might even borrow long-term capital funds from commercial sources and lend them to the City for capital improvements. The City would then pay the outside investor back. Thus, the outside investor would play the role of financial intermediary for the City, which has not established commercial credit-worthiness.

This concept is somewhat unrealistic as a business proposition. The limited liability company arrangement, as envisioned by the City, already represents risk to the outside investor. If the outside investor acted as a financial intermediary, the risk would only increase. In addition, operating and construction companies often prefer to concentrate on the functions that they know well and are likely to avoid involvement in financial schemes that require skills that are not in their area of specialization.

Having a financial intermediary like this may also be contrary to the best interests of the City. The City would be more dependent on the outside investor and might not take the steps necessary to establish its own credit-worthiness. The consulting team believes that it is vitally important for the City to position itself to be financially independent.

#### *d. Efficient Operations and Modern Management*

The City and ZWIK believe that the outside investor in the limited liability company will bring about more efficient operations and will introduce modern management techniques. The consulting team expects that this can be the case if this goal is adopted and agreed to by the parties to the formation of the Company. However, these goals can also be met by entering a management contract with a firm that has expertise in water and sewer operation.

#### *e. Avoidance of Compensation Tax*

The City and ZWIK expect that the limited liability company approach will help avoid the excess compensation tax. This tax has been strongly criticized by the present governing coalition. Since the 1993 election, it has been commonly expected that this tax will be abolished sooner or later. Recently, the Parliament has voted liquidation of the compensation tax (popiwek) in April 1994 - certainly before the City will be able to privatize ZWIK. If ZWIK is organized as a department of City government and not as a municipal enterprise, it should not have to pay the popiwek.

## **2. City's Specifications for Privatization**

### *a. The City's Preferred Form: a Limited Liability Company*

The City has chosen the limited liability company structure over the joint stock company approach. It is unclear what advantages a limited liability company offers over a joint stock company in the areas of overall operation, financial activities or investor financial contribution, etc. Both the City and its advisors<sup>1</sup> appear to believe that the present law favors the limited liability company approach, although other approaches such as a straightforward management contract would also seem possible. This alternative is discussed elsewhere in this report.

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<sup>1</sup>See Appendix M, a selective translation of "Concepts for Restructuring ZWIK in Szczecin," by four local advisors to the City.

*b. Share Ownership Structure in the New Company*

The City hopes to institute the following structure of share ownership in the proposed Company:

- a majority ownership (probably 50-to-60 percent) by the outside investors,<sup>2</sup> consisting of cash and in-kind contributions in probably equal amounts;
- a minority ownership (probably 20-to-30 percent) by the City, probably consisting almost solely of in-kind existing plant and equipment;
- a minority ownership (at least 10 percent, though perhaps as much as 20 percent) by ZWIK employees -- perhaps through their individual purchase of Company shares, perhaps through the City's purchase at least of some shares on their behalf.

The City expects that such an ownership structure will attract outside capital, limit the City's financial contribution and satisfy at least the ownership concerns of its trade unions. The City can probably negotiate such an agreement with an outside bidder -- as would seem likely in light of the four qualified bids for this contract, as well as the similar solid waste disposal contract now in effect with the German-owned Rethmann Company.

Ownership of some shares is required under Polish law if ownership is transformed. Workers can buy up to 20% of shares for 50% of the price paid by other buyers. However, the difference between this reduced price and market price can not be higher than the average annual income of a Polish worker.

Satisfying the unions will likely be more difficult, however. Ownership is only one of the unions' issues with privatization. The unions are also fearful of higher water and sewer rates as well as future employment opportunity and salary levels in the new Company.

*c. Reinvestment of Profits*

The City's principles for privatization in Appendix E require profit reinvestment for "the first few years of Company operation". Because the number of years are not specified, it is worth noting that the recent privatization contract for solid waste disposal requires a seven year profit reinvestment period.

*d. Possible City Assurance of Modest Company Profits*

The City's principles for privatization include a profit limit of 10% recognizing the new

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<sup>2</sup>This is partly to avoid payment of the tax on excessive salary increases, although this is not a major consideration.

Company's need to attract capital while performing as a public utility whose goal should not be maximizing profit.

This stipulation reduces investor risk by assuring profits for the proposed venture - presuming, of course, that the City sets water and sewer rates to allow generation of the 10% profit. However, given the risks involved, the attraction to the investor may focus more on access to the Polish market for water and sewer operation services.

Assurance of a modest profit gives rise to a concern at the impact of a "regulated" profit on management decision making. With the profit limitation, there may be less incentive to affect productivity or cost efficiencies. After all, once achieved, these improvements might generate a profit in excess of the 10%. It is not clear what would happen if this were the case; Would the City require the excess to be returned to the City? Would the excess be rolled over to future years and, thus, remove the incentive to achieve future efficiencies? It is not clear how the City would apply this profit limitation or what its impact would be on management.

Generally, the consulting team recommends that the City consider carefully how the assurance of profit would work, and the impact that such a provision might have on management decision-making.

#### *e. Employee Retention Period*

The City's principles for privatization state that employees must be retained for at least one year. However, the unions are likely to demand an increase in this period to two years. A two-year retention period was finally agreed to in the new solid waste disposal contract.

The proposed new Company would likely enjoy sufficient flexibility in its personnel decisions once a two-year employee retention period had elapsed. While both City and private sources point to the supposed overstaffing of the present water and sewer service, they agree that significant staff reductions will likely occur from regular retirements and normal attrition. ZWIK employment has remained in the range of 650-660 persons since 1991, with departure rates of 22.8 percent in 1991 and 13.5 percent in 1992.<sup>3</sup> Even if the future departure rate were as low as 10-15 percent annually, any newly privatized Company would have ample opportunity to substantially restructure the inherited work force within its initial few years of operation.

Over the longer term, sufficient shrinkage of the work force might well occur without the need for major group dismissals. Any such dismissals would evoke understandable confrontation with the unions. They would also impose on the City the additional financial cost of the payment of six months' full salary following each employee's termination.

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<sup>3</sup>The figure for the first 10 months of 1993 is less than 10 percent, but this is not comparable to the data of the prior two full years since many retirements would not likely occur until the very end of the year.

*f. City Retains Right to Set Water and Sewer Rates*

The City Council would establish water and sewer rates, taking into consideration the recommendations of the new Company and its supporting calculations.

In Poland's continuing inflationary environment, regular rate increases are a well-established fact. Even in the diminished but still high inflationary conditions of the past two years, continued rate increases will be required to maintain service levels and the infrastructure. (Inflation fell from over 500 percent in 1990, to 73 percent in 1992, 43 percent in 1992, and perhaps 35 percent in 1993 and 1994.)

Recent larger-than-inflation increases in water and sewer rates may well imply some upward flexibility in public willingness to absorb rate increases. Over the past three years, Szczecin's water and sewer rates have generally increased at a pace equal or substantially above that of inflation, as seen in Table 2.1.<sup>4</sup>

It is quite probable that the level of rates will be a contentions issue throughout the life of the proposed privatization contract for water and sewer operations. While the City Council will retain control of the rate structure, the new Company will need to justify rate increases to improve the quality of service, provide new technology and allow capital improvement.

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<sup>4</sup>Only in 1992 were water rate increases temporarily held below that of inflation, though it was necessary to return to the higher pattern of rate increases within two months of the following year.

**TABLE 2.1: Recent Water and Sewer Rates in Szczecin**

	<u>Water Rates</u>			<u>Sewer Rates</u>		
	<u>House-holds</u>	<u>Industry and Commerce</u>	<u>Other Institutions</u>	<u>House-holds</u>	<u>Industry and Commerce</u>	<u>Other Institutions</u>
<b>(A) Basic Rates (in z1/m<sup>3</sup>)</b>						
1990						
January only	194	202	202	107	112	112
February-August	659	689	689	305	319	319
September-December	1030	1080	1080	470	490	490
1991						
January-February	1030	1080	1080	470	490	490
March-April	1610	1610	1610	850	850	850
May-December	2000	3050	2350	900	1400	1100
1992						
January-June	2000	3050	2350	900	1400	1100
July-December	2300	3500	2700	1500	2300	1800
1993						
January-February	2300	3500	2700	1500	2300	1800
March-September	3100	4300	3800	1700	2400	2100
October-December	3700	6200	5800	2500	3500	3300

**(b) Percent Increase: Year-end Comparisons**

1990-1991	94%	183%	118%	91%	186%	124%
1991-1992	15	15	15	67	64	64
1992-1993	61	77	115	67	52	83

### *g. City Ownership of all Infrastructure Assets*

Under the proposed privatization plan, the City would retain ownership of all infrastructure water and sewer assets and the responsibility to finance infrastructure improvements. This will ensure a high degree of City control over long-term capital improvement and the fundamental assets of the water and sewer systems.

The challenge of this approach is in determining which are infrastructure investments and which are repairs or maintenance. The distinction can be difficult to establish. Reportedly, when Gdansk and SAUR negotiated their privatization contract, the clear definition of the borderline between these repairs and investments took a lot of time to negotiate.

### *3. Noteworthy Aspects of Tenders Received*

As stated before, the tenders were translated and reviewed by the consulting team. While the actual text of each tender is not provided in this report owing to the proprietary nature, the consulting team has extracted certain aspects of the tenders that are noteworthy - either as preferable aspects or aspects to avoid.

#### *a. Master Plan*

One firm suggests the development of a Master Plan as a first step. This approach is very sensible in terms of assessing the capital and operations improvement needs in the water and sewer system and in terms of allocating scarce financial resources.

#### *b. Participation in Construction*

One firm suggests that it have the right to construction contracts for 50% of capital improvement without competing against other construction firms. This gives us cause for concern. How would Szczecin know that the firm was charging a fair price or doing quality work - unless these terms are spelled out ahead of time.

#### *c. Qualifications of Firms*

The quality of qualifications between the four firms varies markedly. The consulting team believes that any partner in this limited liability company should have demonstrated expertise and plentiful experience in the management and improvement of municipal water and wastewater systems.

#### *d. Foreign Investors*

A foreign investor is perhaps likely to employ some foreign employees and procure some services from subsidiaries outside of Poland. Some ZWIK and City employees expressed their concern that a foreign investor will effectively "export" Polish jobs. We think that this is a

reasonable concern and one that could be allayed by the terms of the contract with the foreign investor. It would not be unreasonable for the City to require, for instance, that Polish employees be trained to perform the services that may only be available in the foreign country.

*e. City Distribution of Shares to ZWIK Employees*

One tender suggests that the City contribute City assets to provide shares for ZWIK employees. Such an approach may raise substantial issues about equity. Since employees do not have an ownership interest in ZWIK assets now, the assets contributed would be a gift from the City to the employees. If this happened, City employees in other departments which will not be privatized may have a legitimate claim that they have not been treated fairly. The consulting team suggests that the City avoid this problem by following its principle that ZWIK employees be offered the opportunity to buy shares with their own personal financial resources.

*f. System Expansion*

One tender suggests that the water and sewer systems could be expanded to surrounding gminas. This may be a good strategic move for the City and the surrounding gminas. The system would then have a larger customer base over which to spread the costs of capital improvement. The surrounding gminas would have access to a good water and sewer system. This type of arrangement has been implemented in a number of areas of the United States. Often it is accomplished by means of the "Authority" structure that will be discussed in Section III of this report.

*g. Independent Review*

One tender suggests that some independent review of Company recommendations be made to give the City assurance that the recommendations are sound. The consulting team agrees that this approach may be very wise. Having additional input may improve the quality of recommendations and the independent assessment should give the City enhanced comfort in accepting recommendations.

*h. Fee for Contract Rights*

One tender offers to pay a fee to the City in return for the right to a long term limited liability contract. Such an arrangement is much like a U.S. franchise fee that is charged to a company who is given the exclusive right to provide public utility services in a given area. A franchise is a very valuable benefit for an outside company because it effectively establishes a monopoly for the company. It would not be unreasonable of the City to require a franchise fee. This fee should be reasonable and it should be defined in the initial contracts. The fee could replace some of the funds that are now diverted from ZWIK to support other City services.

*i. Ownership of Capital Improvements*

One tender suggests that the Company own any capital improvements that are financed by the Company. The consulting team is wary of this type of arrangement. By retaining ownership of the infrastructure assets, the City maintains control of the water and sewer system. Allowing Company ownership of some assets may erode City control.

*j. Support for City Credit-worthiness*

One tender suggests that the Company approach will help the City establish its credit-worthiness for financing capital improvements. The consulting team agrees, assuming that the Company's outside investor runs the system in a professional and business-like manner.

**B. The Decision-Making Process**

The City hopes to complete negotiations for the proposed contract by the end of June 1994. It is concerned about possible complications of continued inflation, potential changes in state regulations governing any such transactions and the self-government elections scheduled for that month. The City plans to evaluate the tenders received last September, select a firm and negotiate the contract for formation of the limited liability company.

*1. The City's Hope for an Early Contract*

For several reasons the June 1994 timetable appears to be unduly optimistic:

*a. Need for bidder elaboration of proposals*

The tenders received are not specific about the terms and conditions or operating approach that the City can expect. The consulting team does not believe that there is sufficient detail in the tenders to allow the City to pick its final partner. The City needs more specific information to allow sound decision-making. Later in this section, we recommend an approach to decision-making. This approach includes seeking additional information from the bidders. The type questions for acquiring such information is provided below).

*b. Need to work out specific contract details*

After a contractor is selected negotiations will remain on major issues such as relative ownership shares, profit assurances (if any) and reinvestment period, employee retention arrangements, etc., as well as important operating details such as the composition of the investors' cash and in-kind contribution, nature of anticipated repair and rehabilitation (as part of current operation, not capital construction) of the existing facilities, required character of Company financial reporting to the City, etc. These negotiations could be time consuming - as the City found when it negotiated the garbage collection contract with the Rethmann Company (See Appendix N). However, the consulting team suggests that these negotiations will be extremely important

because they will affect the utility well into the future. The City should take care to negotiate terms and conditions that meet its objectives and protect the public interest.

*c. Reaction of employee unions*

The external dynamics of negotiations and interactions with the affected labor unions could substantially delay the setting of a final contract. The prolonged strike of City garbage collectors during the Summer 1993 preparations for privatization of the City's solid waste disposal operations could be a troubling omen for future negotiations on the privatization of water and sewer operations.

Upcoming elections may also serve to make an early privatization politically difficult. Realistically, contractor selection and contract negotiation could, and probably should, take longer than now envisioned by the City. In establishing the current privatization arrangement for the operation of solid waste disposal, roughly two years elapsed between initial tenders and final contract implementation.

**2. *The Need for a Careful and Professional Decision-Making Process***

Our real concern is that the proposed privatization could happen much too quickly. This is a serious and far-reaching decision for the City. The contract for privatizing could have a term of many years. In this situation, it is vital for the City to take especial care in finalizing the approach to privatization, selecting a potential partner and negotiating the terms and conditions of required contracts. If privatization is based on insufficient information, some important decisions could produce adverse long-term consequences.

In the judgment of the consultants, none of the four qualifying proposals provides sufficient detail to permit the City to make an informed selection from among these bidders. While the proposals contain a few intriguing suggestions of the format of future operations, in no case does any bidder even begin to make a convincing argument for its selection as the privatization contractor.

Indeed, in each instance, the essential details would have to be negotiated with the contractor only *after* the City had committed itself to a particular investor. In such a situation, the City would be at a very substantial negotiating disadvantage, since it would already have bargained away its most important offering -- the award of the contract itself -- before it had fully explored the detailed offerings of the prospective contractors.

We recommend that the City adopt a formalized and professional process to accomplish these things. This process should include solicitation of formal proposals in which the bidder's make specific offers to the City based on the City's specifications. The bidders should also offer specific information that substantiates their qualifications to provide the services needed. The bidders, in a competitive atmosphere, should be encouraged to give the City specific information about the features that distinguish their proposals.

### ***3. Suggested Privatization Workplan***

The following is a preliminary workplan for the recommended decision-making process. The workplan has four major phases:

#### **PHASE I: Tender Evaluation and Development of Specifications**

1. Evaluate Tenders and Potential Partners
  - a. Evaluate tenders and develop list of questions and/or concerns for each tender. (Appendix C provides suggestions for a preliminary list of questions, which the City may want to ask investors)
  - b. Conduct focused interviews and Select finalists for Phase II consideration.
2. Develop City's Requirements Further
  - a. Develop more detailed performance specifications and expectations
  - b. Develop and investigate potential negotiation issues
  - c. Develop Selection Criteria for Phase II
  - d. Reach accommodation and understanding with the trade unions.
3. Fine-tune Approach to Privatization

**DELIVERABLES:** Finalized Request for Bids to use in Phase II  
Final Bidders List

#### **PHASE II: Formal Bidding Process and Negotiation Preparation**

1. Request Detailed proposals from the finalist bidders selected in Phase I
2. Develop criteria with which to evaluate proposals
3. Develop preliminary set of negotiation issues
4. Evaluate proposals against criteria and select finalist for negotiation of contract
5. Prepare draft contracts incorporating the City's needs and specifications.
6. Begin to develop plan for transition to new organization and method of operation

**Deliverables:** Criteria for Proposal Evaluation  
Preliminary Negotiation Issue Listing  
Draft Contracts  
Outline of Transition Plan

#### **PHASE III: Negotiate and Execute Contracts; Plan for Transition**

1. Finalize contract version that is acceptable to City
2. Finalize City position on negotiation issues with supporting information
3. Anticipate negotiating position of investor
4. Negotiate contracts
5. Execute agreed-upon contracts
6. Finalize City version of transition plan

**Deliverables:** City Version of Transition Plan  
Executed Contracts

#### **PHASE IV: Implement New Organization**

1. Finalize transition plan with investor input
2. Develop means to provide City with organizational unit(s) to perform its responsibilities in the new arrangement
3. Reach agreement with trade unions
4. Determine any rate changes needed to support operating costs under the new organizational arrangement
5. Complete legal requirements
6. Develop information concerning the transition for the public
7. Announce new organization and timing to employees and public
8. Implement other provisions of transition plan

**Deliverable:** Privatized Water and Sewer Organization

#### ***4. Suggested Questions for Investors***

The following is a list of questions which may be used in order to elicit information from the bidders, in order to facilitate successful decision-making. The proper use of these questions has been explained to the City.

##### **Initial capital**

1. What is the minimum absolute level of initial capital needed to support the new Company? What is the basis of this amount?
2. What is the specific amount of capital that each investor will provide?
3. Will the investors put any restrictions on the usage of their capital contribution?
4. How will the value of the City asset contribution be determined? The depreciated value of these assets bears little relationship to the real value of the assets owing to high inflation in recent years.
5. What rate of return on its capital contribution does the investor expect?
6. What types of assets would be acceptable for the City's contribution?

##### **Additional Company Revenues**

1. Under what circumstances should the Company be permitted to raise revenues from sources other than rates?
2. If the Company finances and constructs an infrastructure asset, will it expect to own that asset? If it does, will it have the right to levy special charges for the use of that asset?
3. Aside from water and sewer rates, will the Company levy any other fees or charges on customers?
4. What control would the City have over any additional fees and charges?

#### **Company Formation Contract**

1. What would the term of the contract be?
2. What promises would the City have to make?
3. What promises would the investor make?
4. Under what circumstances could the contract be terminated?
5. What have been key issues from the municipality standpoint when the investor has negotiated similar contracts?
6. Has the investor failed in the negotiations of similar contracts? If so, why?
7. Can the investor provide sample contracts from other situations similar to Szczecin?

#### **Reinvestment of Profits**

1. For how long a period would profits be reinvested with the City before a distribution is made to investors?
2. What special provisions would the investors wish to place on reinvestment of profits?
3. During the reinvestment period, under what conditions might the Company seek to reduce or eliminate reinvestment?
4. Does the investor expect the Company to be guaranteed a specified after-tax profit? If so, how much should that be, and for how long a period?

#### **Water and Sewer Rate Setting and Revenue Management**

1. How would the investor propose to set water and sewer rates with operation of the proposed Company?
2. Specifically, what role, if any, would the Company play in rate-setting?
3. What role would the investor expect the City to play?
4. How would the investor define adequate rates?
5. What would happen if rate levels under the proposed arrangement do not provide sufficient after-tax profits to the Company?
6. How would the investor assure that rates cover operating costs?
7. Would the Company collect revenues? If so, how would the City assure access to funds to cover financial obligations related to infrastructure capital improvement?
8. What measures would the Company take to safeguard and manage funds?
9. What would the Company do if the City did not approve the rates proposed by the

Company?

### **Efficiency and Performance Standards**

1. How would the investor define efficient operation of the City's water and sewer system?
2. Would the investor be willing to promise to achieve agreed upon efficiency goals?
3. What incentives, if any, would the investors want for improving the operating efficiency of the system?
4. Would the investors expect an incentive bonus for achieving or exceeding efficiency goals? If so, how might that be structured?
5. What penalties does the investor think would be fair if the operating efficiency of the system declined?
6. Would the investor be willing to promise to meet other performance standards?
7. What performance standards would the investors propose?
8. Would the investors expect an incentive for exceeding these performance standards?
9. What penalties does the investor think would be fair if the performance standards were not met?
10. What cost reductions does the investor expect to be able to make?

### **Financial, Accounting and Reporting Systems**

1. How would depreciation be handled? Would the Company set aside a specified amount for depreciation and, if so, how would that amount be established? Would depreciation be subtracted when determining the profits that are reinvested? If so, what would happen to the cash represented by the depreciation?
2. Would the Company prepare annual financial statements including an Income Statement, Balance Sheet and sources and Uses of Funds Statement? Would these statements be audited by an independent, chartered accountant? When would these statements be available? Would the Company generate interim financial reports during the fiscal year?
3. How would the independent chartered accountant be selected? How would the City participate in this selection process?
4. Would the City have access to the Books and records of the Company?
5. What other reports of operations does the investor recommend? How often would these reports be generated? How would the Company ensure the accuracy of these reports?

### **Capital Improvement Program and Financing**

1. What approach does the investor recommend to address the need for capital improvements?
2. How would the investor define capital improvements? How would the investor distinguish between capital improvements, maintenance and extraordinary maintenance?
3. What type of improvements would be considered as operating expenses?
4. How would financing be done for infrastructure capital improvements?
5. What would be the role of the City?

6. What would be the role of the Company?
7. What are all of the sources of funding that would be available?
8. Is grant funding available?
9. If the Company constructed any capital facilities, would it have ownership rights of those facilities? Would the Company expect to be paid a return on this investment?
10. Would the investors be willing to loan money to the City for the purposes of making capital improvements?
11. Would the Company take responsibility for managing capital improvement projects? If so, what services would be provided?
12. Would the investors or the Company expect to construct capital improvements? If so, how would the investors or the Company charge the City for the improvement?
13. Would the investors be willing to bid competitively for contracts to make capital improvements?
14. If the Company managed the capital improvement program, would it competitively bid design and construction projects?

### **Operation of the Water and Sewer System**

1. What operating improvements or programs does the investor expect to make? Why? (e.g. valve and hydrant maintenance program, water treatment enhancements, sewage treatment enhancements, water distribution system flushing program, metering improvements, water conservation program, safety practices, emergency response planning)
2. What person would be the chief executive of the Company with responsibility for day-to-day operations? What are that person's qualifications? Would the investor be willing to have this person interview with the City of Szczecin? Would Szczecin have input to the selection of this executive?
3. Will the existing employees be retained by the Company? For what period of time? Does the investor expect to eliminate employees after this period of time?
4. Will the investor be willing to retrain employees and redeploy them if their jobs are eliminated?
5. Does the investor expect to "import" any employees for the company? If so, what types of employees would these be? What jobs would they perform? About how many of such employees would be brought in? Would they perform functions that are now performed by ZWIK employees?
6. What services would the investor provide to the new Company from its other locations? Could these services be provided by Polish firms? Would the investor plan to train Polish Company employees so that these services could be provided without bringing people from other locations?
7. Does the investor have a standard set of rules and regulations for operating a water and sewer system that it would want to implement in Szczecin? If so, will the investor provide it to the City for its review?
8. Does the investor have a set of operating policies that it would expect to implement in Szczecin? If so, will the investor provide it to the City for its review?

## **Service Area**

1. How would the investors propose to handle capital expansion of the City's water and/or sewer system to neighborhoods that are not presently connected to the City's system(s)? Who should pay for the connection? How would the
2. Under could the Company allow neighboring gminas to connect to the City's system(s)? Who would pay for the connection? Would different rates be calculated for the gminas? How would the rates be different?
3. If any gminas joined the City water and/or sewer system, would the investor suggest that the gminas also participate on the Board of the Company? How might that be done?
4. Does the investor expect that the service area will grow?

## **Interest and Qualifications**

1. Why is the investor interested in participating with the City of Szczecin?
2. How does the investor expect to make money and a fair return on its investment in Szczecin?
3. What of its qualifications does the investor believe are most important to the City of Szczecin? Why?
4. What unique qualifications does the investor have that distinguish it from the competition?
5. To what other communities does the investor provide services similar to those proposed for Szczecin? Please provide a summary of the community name and a brief description of the services provided.
6. Will the investor provide a list of references so that the City of Szczecin can independently confirm the investors assertions in terms of qualifications? Preferably, these references should be municipal officials from other communities that the investor serves.

### III. ALTERNATIVES TO PRIVATIZATION

It is our understanding that the central government encourages privatization both philosophically and through laws and regulations. The City and ZWIK expect that privatization will solve tax issues, provide capital for infrastructure improvement and result in modern, efficient management. The City is eager to privatize.

#### A. Perspective on Privatization: Concerns

- The current privatization approach will essentially provide privatized operation and maintenance of the water and sewer system. The City will still be responsible for financing capital improvements. Therefore, privatization may not provide the expected benefits in terms of financing infrastructure improvement.
- The privatized operation will be accomplished by a company structure in which the City will be a *minority* shareholder. The City expects that this shareholding, combined with ownership of infrastructure assets and rate-setting control, will allow City control over operation of the water and sewer systems. The consulting team is not convinced that this will be the case unless the contracts are very specific as to the roles, responsibilities and expected performance standards of the Partners Group, the Board of Directors of the Company, the Supervising Board and the City.
- The privatized company introduces a level of complexity that may not be necessary. It also introduces a complicated issue in terms of trade union participation in shareholding.
- Even with the privatized operation, the City will still need an organizational unit to oversee the City's interests, pursue financing, review/set rates and administer the contracts. These responsibilities are significant.

#### B. Alternative Approaches

Privatization, as currently conceived by the City, is not the only way to achieve the objectives. There are alternatives that could be considered if the City is willing to take the time. These alternatives may be less complicated and easier to implement. A number of alternative approaches are discussed in Section III.B of the Phase I report. We would like to discuss two of these approaches, which could be further studied at a later stage of consultant work. (The team was not able to review the legal structure, or lack thereof, for these alternatives within the time frame)

##### 1. *Management Contract*

The City could achieve improvements and secure additional services by entering a management

contract with a private company. There are a number of municipalities in the U.S. that have taken this approach. Detailed specifications for services are prepared and competitive bids are requested from qualified firms. Normally, the private company will agree to hire all of the existing employees and retain them for a certain period of time. These contracts have specific performance standards. There are conditions under which the contract can be terminated if the company fails to meet the performance standards.

With a management contract, the City could:

- Retain ownership of infrastructure assets
- Control operations through contract performance standards
- Control rate-setting
- Benefit from improved management performance
- Have professional management to support the demonstration of credit-worthiness

The City would not be locked into the complicated long-term arrangement that would result from the current privatization approach. The City may also be able to avoid some adverse tax provisions. Additional services could be included in the management contract such as development of information for financing efforts; training; improved management reporting; water conservation and public information programs; etc. In essence the contract could provide any and all services that the City chose. Appendix L provides a sample contract to illustrate the practice in the United States. However, even with a management contract, the City would still need to have its own organizational unit to take on the responsibilities that the City retains such as rate-setting, capital financing and asset ownership. The City would also need to address potential conflicts with unions.

## ***2. Quasi-Municipal Authority***

Under this alternative, an independent, self-supporting agency is set up as an arm of government. The City's control would come in terms of appointing responsible people to the Board of Directors or replacing them as need be. Otherwise, the Authority would operate according to the goals, powers and duties specified at its formation.

This independent agency could borrow money, set rates, enter contracts - including professional services or private operation, implement capital improvements, etc. It would also own the infrastructure. The Authority approach is similar to that taken by the City of Boston when it created the Boston Water & Sewer Commission. The consulting team provides a copy of its enabling legislation with this memorandum.

The potential benefits of an Authority are:

- Frequent City involvement is minimized but there is still public control
- Less direct political control
- Enough independence and freedom to achieve effective operation
- Potential to expand service area to other communities surrounding Szczecin
- Profit or a return to investors is not needed
- May be less complicated than the company structure

#### **IV. PREPARATION FOR FINANCING**

One of City's biggest concerns is financing infrastructure capital improvements. While the City has knowledge of some sources of capital, they regard the "privatization" process as the only likely source of capital in the near future. The City needs to address its need to finance capital improvements and should assess its general credit situation.

##### **A. City's Need to Finance**

Whether or not the City of Szczecin implements its current privatization approach, the City will need to finance capital improvements. The following points are pertinent in support of this assertion:

- A professionally qualified private partner, working with the City under a sound contractual arrangement, could enhance the credit-worthiness of the City in water and sewer financing by accomplishing operating, management, financial and control improvements.
- However, under the current privatization approach, the City will retain ownership of the water and sewer infrastructure, will need to finance infrastructure capital improvements and will retain control of rates and charges.
- Even if the private partner pursued financing on behalf of the City, potential investors will need to have assurance that the City will pledge revenues as security for debt and that the appropriate infrastructure capital improvements are made to sustain the water and sewer systems.
- It is wise that the City retain ownership and financing responsibility for the infrastructure. The most likely sources for infrastructure financing are agencies such as the World Bank or the European Bank for Reconstruction and Development. Normally, the World Bank, for instance, finances projects only for government - or publicly owned - agencies.

Because it will have the responsibility for financing capital improvements, the City will need to demonstrate its own credit-worthiness for future financings. At a minimum, the demonstration of credit-worthiness will likely require:

- Establishment of a self-supporting utility with a credible record of historical performance and sound prospects for the future.
- The ability to provide Security for Debt through legal and financial mechanisms such as "full cost" rate setting policy, pledge of revenues, fund management, etc.

## **B. Self-Supporting Utility Status**

Credit-worthiness for long-term utility financing, is often judged in the United States based on the degree to which the utility is self-supporting. This means that total revenue is sufficient to cover all anticipated cash expenditures that will be needed to maintain full operation. Such expenditures include spending not only for regular operation and maintenance of the system but also outlays for (a) regular replacement of major plant and equipment, (b) capital improvements funded from "profits",<sup>5</sup> (c) normal planning and implementation of capital projects,<sup>6</sup> (d) continuing obligations and contracts (if any), and (e) existing debt service requirements (including regular payment of interest and principal and the establishment of sufficient reserves).

For a public utility to be deemed credit-worthy (e.g., to be declared a financially viable entity to which a creditor would willingly lend funds with a reasonable expectation of the timely repayment of principal and interest) the utility must, among other things, demonstrate its financial ability to meet all of its obligations during the period of the prospective loan.

Szczecin's water and sewer utilities do not presently appear to meet this condition of credit-worthiness. Although there is a surplus from regular operation and maintenance activities, it is not clear that current revenues are sufficient to cover necessary replacements of major plant and equipment and all needed capital improvements.<sup>7</sup> It is also not evident that revenues would be available to meet all required debt service in the event that the City embarked upon a significant capital construction program - even if access to adequate amounts of credit were assured.

Rational financing of public utilities such as water and sewer service means that the users should ultimately pay the full costs of the service that they consume. This means that all expenditures for current operations, financing, planning and capital improvement should be covered by

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<sup>5</sup>These are the retained earnings, or surplus, which ZWIK would hope to keep within the water and sewer operation rather than transfer to the general City budget.

<sup>6</sup>These expenses include labor costs of planning and design, plus routine expenses for the materials, supplies and capital purchases that are also used in capital projects.

<sup>7</sup>A City-commissioned study (Appendix M) on the various concepts of privatization contains some quantitative estimates of financial viability of the City's water and sewer activities. Although this study concluded that ZWIK's current operations were in relatively good financial shape through 1992, this was done from the perspective only of the anticipated privatization of water and sewer operations. It therefore did not address the broader concerns of capital replacement financing, longer-term infrastructure planning, or the financing of future major capital construction.

Appendix E also compares estimates of 1994 expenditure under the proposed privatized company (*z o.o.*) with those of a budget enterprise for 1994 and 1993. Thus useful exercise also, however, is not able to explore the full capital-cost implications mentioned above.

customer revenues. Rates should reflect the costs of providing a service, with high-intensity users paying proportionately higher rates, for example.<sup>8</sup>

Under the current privatization approach, the City will retain control of water and sewer rate setting. Therefore, in the event of a financing, the City will have to demonstrate its ability and willingness to set rates at levels that are adequate to maintain the self-supporting status and generate sufficient funds to cover debt service.

### **C. Security for Debt**

In addition to a demonstration that funds will be sufficient to cover financial obligations, the City will also have to be prepared to provide security for debt. In the United States, such security often requires that legal and financial mechanisms be implemented to assure the lender that the debt will be repaid. These legal and financial mechanisms are normally negotiated with the lender and they are formalized in a document called a General Bond Resolution or a Series Resolution. This is a contract between the lender and the borrower. The mechanisms include promises such as "full cost" rate setting policy, pledge of revenues, reserve funds, trustee fund management, etc. (these are common in the United States).

#### **1. Rate Setting Policy**

The borrower promises that rates will be set at levels sufficient to generate the funds needed to make debt service payments.

#### **2. Pledge of Revenues**

The borrower promises the lender that revenues will be used to make debt service payments.

#### **3. Reserve Fund Accounts**

In the United States, some types of financing require a number of reserve funds to be established. Ordinarily, some money from the initial financing is used to establish beginning balances in these accounts. Then, annual contributions are made to build the fund level to a specified amount. Reserves are most often established for specific purposes - all of which help

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<sup>8</sup>Although Szczecin acknowledged this in its mid-1991 addition of a third rating category (other than households and commercial-industrial enterprises), further definitions of user classes might be made based on administrative requirements (including presence of individual versus block meter arrangements), or on differing institutional accounts such as schools and hospitals (might be accorded a different rate than other public institutions), etc.

Moreover, service areas within a city may be designated according to their relative costs of operation, with more distant and/or less densely populated areas incurring higher rates to at least partially compensate for the additional costs of servicing such areas.

to strengthen the utilities financial stability and operating ability:

- *Debt Service Reserve Fund:* This fund normally contains an amount sufficient to make one annual debt service payment. It is held in reserve to cover shortfalls in revenue that may threaten the utility's ability to make the payment.
- *Renewal and Replacement Reserve:* This fund normally contains an amount that approximates the cost of repairing a cataclysmic failure in a key part of the system -- such as the primary transmission main or a major sewer collector.
- *Operations and Maintenance Reserve:*

This fund normally contains an amount that approximates working capital needs for a particular period of time such as month, quarter, year, etc. Then, if revenues are insufficient to pay operating expenses, this fund can be used to effectively "loan" working capital to the utility.

#### **4. Trustee Fund Management**

The utility is not granted ready access to such funds. They are retained by a Trustee - normally a commercial bank - who must follow certain rules in distributing money from the fund accounts.

#### **D. Financing Preparation**

The World Bank Terms of Reference, provided in Appendix M of the Phase I Report, provides a detailed discussion of the steps that should be taken by an agency to prepare for financing. To summarize, the Draft World Bank Terms of Reference specifies that four main tasks be completed to prepare for financing:

1. *Baseline Study:* Describe and assess the present status of the City's water supply, sewerage, wastewater treatment services, systems and facilities and the institutional performance of the company;
2. *Strategic Facilities Upgrading and Expansion Plan:* Define long term and least cost solutions for the future development of the City's water supply, sewerage and wastewater services;
3. *Feasibility Study:* Define and justify a first phase program for urgent investments to upgrade and expand water supply, sewerage and wastewater treatment;
4. *Designs and Tender Documents:* Develop documents for all components proposed for execution as part of first phase investment program.

This is a good model because its steps are very similar to those that a U.S. agency would take to demonstrate its credit-worthiness in private credit markets for a borrowing known as "Revenue Bonds". Appendix J provides Tables of Contents from "Official Statements" that indicate the steps taken by two U.S. agencies to prepare for Revenue Bond issues: the Boston Water and Sewer Commission borrowing of \$100.5 million in March 1993 and the Bristol County Water Authority borrowing of \$10.9 million in 1986. A copy of the Boston Water and Sewer Commission Official Statement was provided to the Mayor of Szczecin and a copy of the Bristol County Official Statement was provided to ZWIK management.

The Phase I Report (Section IV) recommended a preliminary workplan for financing. That workplan is provided in Appendix C to this report. From the current perspective, the consulting team would like to add the following recommendations to the Phase I Report:

- The most important issue for the City to address at this time is the form of organization that will operate, maintain and improve the water and sewer system. The "corporate" organization structure will have implications for any financing that the City undertakes.
- Nonetheless, the City can begin investigating the requirements that it will have to meet for a financing and begin preparation.

## V. MANAGEMENT IMPROVEMENTS

The Phase I report recommended that the consulting team take certain steps to pursue management improvements:

- Analyze the ZWIK organization further to identify potential streamlining opportunities.
- Discuss water conservation programs with ZWIK.
- Collect and share further information on protective measures for lakes, well fields and river intakes.
- Compare ZWIK water quality measures to water quality standards in the US. Prepare to review the comparisons with ZWIK and discuss any special findings.
- Collect descriptions of public information programs to share with ZWIK.
- Identify a U.S. agency that is similar to ZWIK and attempt to establish an on-going technical exchange.
- Encourage a greater effort in the computerization of ZWIK to facilitate the completion of management reports and the financial information that will be required.

Prior to returning to Szczecin in November, the consulting team performed the following:

- Researched and gathered information on Privatization, Organization, Rate Setting, Financial management, Planning, Public Information, Water Conservation, Leak Detection, and Water Quality. A bibliography of this information is provided in Appendix B. Articles with an asterisk have been translated into Polish and distributed to ZWIK management.
- Developed a proposed "Points of Contact" Program and a group of recognized U.S. professionals in water and sewer management who have an interest in technical exchange. Both the proposed program and the participants are described in Appendix I.
- Performed preliminary analysis of financial and water quality information from ZWIK.

During Phase II, the consulting team performed the following

- Conducted a management seminar on:

1. Planning, Budgeting and Performance Review
2. Rate Setting
3. Water Conservation
4. Public Information and Support

During the Management Seminar, related information from Appendix B was distributed to ZWIK management.

- Presented the Boston Water and Sewer Commission Expense Budget, Capital Improvement Budget and Rate Structure Report to the Director of ZWIK and other key managers. These documents provide ZWIK with excellent models for preparing professional budgets. Appendix L provides sample budgeting information from the Boston Water & Sewer budget.

In addition, the Expense Budget document also provides a significant amount of detail for each functional unit in the organization structure that includes goals, job titles and numbers of employees. This information can be invaluable to ZWIK in assessing the functions it performs, personnel deployment and planning goals. In the Management Seminar, this document was used as an example to support the discussion of Planning, Budgeting and Performance Review.

- Met with Water Quality personnel at ZWIK to provide follow-up information as described in Appendix B. In addition, the team provided information on particle counters - a method of water quality testing.
- Met with Finance and Accounting personnel to discuss and resolve anomalies in the financial information that was provided in September.

The focus of Phase II assistance and the time limitations did not allow for an analysis of organizational streamlining opportunities or efforts to encourage additional computerization at ZWIK.

It would be unreasonable to expect ZWIK managers to be able to take brief introductions to concepts or sample reports, modify and expand them to fit the Szczecin situation and implement extensive improvements. The management team needs training and support to be able to adopt some of the new concepts. Support could come from continuing consulting assistance combined with programs designed to expand their experience (Some support may come from the Points of Contact Program mentioned above; seminars or forums in Poland with other utilities who face the same issues may be helpful). More detailed consulting work to affect management improvements should be conducted jointly, where possible, by foreign and Polish experts, including expertise from within ZWIK.

## **VI. RECOMMENDATIONS**

Our objective for both phases of this project has been to identify the organizational structure and financial management improvements that will enhance the City's ability to ensure financial stability and sound management practices at ZWIK. The following steps could help make progress towards these objectives:

### **A. Privatization: Professional Decision-Making**

The consulting team believes that the City will benefit greatly if it gains detailed information on the plans and proposals of each of the four bidders *before* selecting its privatization contractor. Section II of this report suggests a decision-making process and privatization workplan that we believe will result in the best outcome for the City, ZWIK and utility customers.

We also recognize that the City hopes for a relatively quick decision on privatization. Accordingly, continued consulting assistance to the City on the privatization issue could facilitate timely progress.

Consulting assistance would best be deployed to assist the City in:

- Conducting Interviews with firms who made tenders
- Developing Request for Proposal with Specifications
- Evaluation of Formal Proposals
- Negotiation Assistance
- Transition Planning

Suggested Timing: February through August 1994

Estimated Level of Effort: Variable, could require 4-6 weeks of assistance over the suggested time period.

### **B. Alternative Approaches: Is Privatization the Best Approach?**

Section III of this report suggests two alternatives to the City's privatization approach: management Contract or Authority Structure. We encourage the City to consider these alternatives before the final privatization decision is made. Either alternative may represent a less complicated solution, with fewer potential pitfalls. The consulting team could provide further assistance to the City in assessing these alternatives against the privatization approach.

Suggested Timing: February through April 1994

Estimated Level of Effort: Should require no more than two weeks of consulting assistance if the City is willing to consider alternatives seriously.

### **C. Develop a Recommended Program of Assistance for the City and ZWIK**

The privatization or organizational approach that the City selects will affect the further steps that are taken in terms of financing preparation or management improvement: If a professional manager is brought in, it would be reasonable for that manager to effect management improvements. If the Authority structure were chosen instead of the privatization approach, the financing effort would be somewhat different. Therefore, when steps one and two above are completed, we recommend that an overall program of assistance be developed for the City and ZWIK. The steps that follow offer suggestions about what the program of assistance might entail.

Suggested Timing: August 1994 or earlier if the privatization decision is made.

Estimated Level of Effort: A significant amount of groundwork has been completed during this project. It should take no more than two weeks to develop specifications for an overall program of assistance - perhaps less than that.

### **D. Financing Plan: Sources of Financing and Demonstration of Credit Worthiness**

We recommend that the City assess its financing strategy and develop a realistic understanding of the opportunities that do and do not exist. Then, the City should fully understand what the requirements will be to prepare for the financing that is possible. When these requirements are known, the City should develop a financing workplan and begin the steps that will be required. The consulting team could provide assistance to the City in all of these efforts to gain support for a preliminary financing plan.

Suggested Timing: Begin when Privatization/Organizational Decision has been made.

Estimated Level of Effort: Difficult to estimate at this time.

### **E. Management Improvements**

In the near term, programs that broaden the perspective of City and ZWIK managers might prove valuable while the above steps are underway. For instance, visits to U.S. Authorities or privately managed systems might enhance their understanding. We suggest that the following programs be pursued:

- Points of Contact Program
- Seminar/Meeting/Forum of Cities in Poland who are addressing similar issues:

- **Twinning: Visits to U.S. utilities that may relate to Points of Contact Program**

**Suggested Timing:** Coordinate with Steps 1 and 2 above

**Estimated Level of Effort:** Visits to U.S. utilities would involve one to two weeks of planning and perhaps time to escort the Polish officials. The Seminar/Forum program would involve a significant effort. The Points of Contact Program should need very little consulting assistance.

Perhaps the most basic and useful improvement that could be made at ZWIK is the design, development and implementation of an automated planning and budgeting system, along the lines of the Boston Water & Sewer Commission model. Of course, this model would need to be adjusted to fit the Szczecin/Poland situation. This type of system could have several key benefits to Szczecin:

- Provide the Basis for sound, actionable management information
- Provide the basis for development of information that will be required in a financing
- If automated, could improve the productivity and effectiveness of people in administrative and operating areas at ZWIK

**Suggested Timing:** Begin when Privatization/Organizational Decision has been made. It may take several years to achieve the desired benefits.

**Estimated Level of Effort:** The level of effort could be substantial. Continuing, on-site assistance, and perhaps assistance from professional firms would be needed.

**APPENDIX A: Interview Schedule**

## APPENDIX A: Interview Schedule

- November 26, 1993: Mr. Niedzwiedz, Director of ZWIK Mrs. Latka, City Councillor and Director of ZWIK Organization and Legal Department: Scope of Work and Meeting Schedule; Status of Privatization
- November 29, 1993: Mr. Lisewski, Mayor of the City Mr. Czeka, City Treasurer: Status of Privatization
- Mrs. Latka and Mrs. Grocholska, Organization and Legal Department: Project Scheduling
- November 30, 1993 City Council Economic Commission: Presentation of organizational alternatives and privatization in the USA. (This Commission is chaired by Mrs. Latka)
- Mr. Piaszczyński, Director of MZUK: Plans for reaching Privatization Decision, Experience gained in the privatization of Garbage Collection.
- Mr. Bartoczewski, Mr. Kosmowski and Mrs. Nowak from City and ZWIK Planning Departments: Development of Priorities for Capital Improvement Program
- December 1, 1993 Mr. Niedzwiedz, Mrs. Latka and Mrs. Grocholska: Presentation of Boston Water & Sewer Commission Annual Report and key budget documents.
- Mr. Dec, Economic Director and Chief Accountant; Mrs. Kedra, Manager of Accounting and Finance; Mr. Gorczyński, Manager of Accounting and Mr. Konieczny: Presentation of Boston Water and Sewer Expense Budget as a model at the request of Mr. Niedzwiedz and Inquiry concerning tax issues.
- December 2, 1993 Management Seminar: Planning, budgeting, performance review, rate setting, water conservation, public information
- Mr. Piaszczyński, Director of MZUK: Overall concepts of privatization
- Mr. Stankiewicz, Director of Mid-Odra Water Company: Roles and functions of his company.
- December 2, 1993 Mr. Wojcik, ZWIK Production Manager and Staff: Water Quality discussion and delivery of follow-up information requested in September.
- December 3, 1993 Mr. Cizek, Director of the Rethmann Szczecin - the new garbage collection and street cleaning company formed with the City.

Mr. Ogrodnik, Manager of City Investment Office: Administration of City Capital Improvement Plans and sources of funding

Mr. Judek, Attorney consulted by City: Limited Liability Company Approach

Mr. Wojcik, ZWIK Production Manager: Water Quality Regulations

December 6, 1993 Mr. Pieczynski, Chairman of Voivod Environmental Fund: Sources of Funding; U.S. Perspective on Environmental Issues and potential roles of the Voivod in regional planning and regulation

Mrs. Kedra, ZWIK Manager of Finance and Accounting: Review of financial statistics provided.

Mr. Niedzwiedz: Points of Contact Program

December 7, 1993 Mr. Furmanczyk, Manager of Water Distribution: Overview of the Water Distribution and Transmission system

Mrs. Latka, Review of preliminary recommendations

Mrs. Hrabi-Kubiacyk, Mr. Krasowski, Mr. Kalinski and Mr. Smolinski; Representatives of Trade Unions: Discussion of their perspective

December 8, 1993 City Council members: Seminar on Privatization Issues

Mayor Lisewski, Mr. Niedzwiedz, and Mrs. Latka: Presentation of Exit Memorandum

**APPENDIX B: Bibliography of Information Provided to City**

## APPENDIX B: Bibliography of Information Provided to City

### Privatization and Organization

#### 1. Articles

*Public-Private Partnerships: A Federal Overview of Privatization in the United States*, Leonard M. Bechtel, Proceedings of American Water Works Association Meetings

*Too big, too quick and too complex, but a notable achievement: The national Audit Office assesses the privatization process*, Water News, March 1992

*Privatization of Water Authorities in England and Wales*, Michael Carney, Water Information April 1992

*Privatization of Water Services in England and Wales*, Bernard Henderson, Proceedings of American Water Works Association Meetings

*Some Lessons from International Experience in Privatization*, Ivan Cheret, Proceedings of American Water Works Association Meetings

*Claims of bad Water Cause bad Blood in Pennsylvania*, Neela Banerjee, Wall Street Journal, October 12, 1993

*A Parched Town in a Water-Rich State*, Kirk Johnson, New York Times, October 26, 1993

*A Policy Maker's View of a Water System*, Bobbie L. Sterne, Proceedings of American Water Works Association Meetings

*Legislative and Regulatory Development: The Board Role in Formulating and Monitoring Strategies for Success*, Peter A. Korn, Proceedings of American Water Works Association Meetings

*The Role of the Chief Executive in Shaping Public Opinion*, William A. Marrasso, Proceedings of American Water Works Association Meetings

#### 2. Sample Documents

Bristol County Water Authority: Operating Plan, September 1984, Enabling Legislation, November 1986, General Revenue Bond Official Statement

Cambridge Water Board: Sample Meeting Agenda

Boston Water and Sewer Commission: \* Enabling Legislation and \* Sample Meeting Agenda

\* = Will be translated to Polish

### Rates, Financial Management and Planning

#### 1. Articles

*The First Step in Developing New Water Sources - Gaining Host Jurisdiction Support*, David L. Morris II, Proceedings of American Water Works Association Meetings

*Criteria Relevant to Evaluating a Sewer Rate Methodology*, MWRA Advisory Board

- \* *Description of the Accounting Cycle*, Ralph E. Huber, Proceedings of American Water Works Association Meetings

*Accounting Reports*, Paul M. Sachs, Proceedings of American Water Works Association Meetings

*Related Financial Management Functions*, Lawrence G. Shaw, Proceedings of American Water Works Association Meetings

- \* *Introduction to AWWA Manual on Alternative Water Rates*, Christopher P. N. Woodcock, Proceedings of American Water Works Association Meetings

## 2. Sample Documents

- \* Boston Water and Sewer Commission  
Monthly Management Report  
Annual Report  
Proposed Capital Improvement Program 1994-1996  
Supporting Documentation for the 1993 Rate Schedule
- \* Current Expense Budget 1993 (Distinguished Budget Presentation Award given by the Government Finance Officers Association)

## Public Information

### 1. Articles

- \* *The Value of Public Information*, Jeanne McKeever, Proceedings of American Water Works Association Meetings

*A State Perspective on Consumer Education Needs*, G. Wade Miller and Vanessa M. Leiby, Proceedings of American Water Works Association Meetings

*Communicating with the Public: Steps Toward a Successful Strategy*, Peter L. Wolfe, Proceedings of American Water Works Association Meetings

- \* *Effective Customer Service*, Kay Kutchins, Proceedings of American Water Works Association Meetings

### 2. Sample Documents

Anglian Water (England): Public Information Package

## Water Conservation and Leak Detection

### 1. Articles

- \* *Leak Detection and Repair: Boston's Conservation Success Story*, John P. Sullivan, Jr., Proceedings of American Water Works Association Meetings

*Leak Detection and Repair*, Marcis Kempe and David Liston, Proceedings of American Water Works Association Meetings

- \* *Non-Residential Water Conservation in Phoenix: Promoting the Use of "Best Available Technologies"*, Jane H. Ploeser, Proceedings of American Water Works Association Meetings

*Approaches for Water Conservation and Reuse in Industry*, Edward C. Fiss, Robert M. Stein and Robert C. Lasater, Proceedings of American Water Works Association Meetings

## Water Quality

### 1. Articles

*Troubled Water*, Sara Terry, New York Times, September 1993

*European Drinking Water Standards*, Michael Carney, Proceedings of American Water Works Association Meetings

The Safe Drinking Water Newsletter, articles entitled:

*Disinfection By-Product Rules Draft MCLs*

*Groundwater Disinfection Draft Rule Published*

*Corrosion Control Evaluations*

*Biofilm Control*

*Enhanced Surface Water Treatment Rule Monitoring*

*Requirements*

*Water Analysis Report Sheet: Giardia and Cryptosporidium*, Environmental Associates, Ltd., April 1989

*Evaluation and Treatment for Removing Giardia Cysts*, Journal of the American Water Works Association, June 1990

*The epidemiology of Human Cryptosporidiosis and the Water Route of Infection*, D. P. Casemore

*Enhanced Surface Water Treatment Rule*, memo from Phillippe Daniel to Tim MacDonald, May 1993

*Fact Sheet: National Primary Drinking Water Regulation for Lead and Copper*, U.S. Environmental Protection Agency, May 1991

*SOC/IOC Regulations*, Massachusetts Department of Environmental Protection, December 1992

Cambridge Water Department: Water Quality Reports with comparison to U.S. Standards.

\* = Will be translated to Polish

**APPENDIX C: Simulated Financial Scheme of Water & Sewer Limited Liability Company**

## APPENDIX C: Simulated Financial Scheme of Water & Sewer Limited Liability Company

1. Planned total costs (per attached list), including:		315,379,180 th z1
Lease rent equivalent to depreciation on fixed assets, groups 0-4 (irrigation systems, buildings & structures, power equipment, apparatus, equipment)		32,000,000 th z1
Depreciation: fixed assets, groups 5-8 special equipment, technical facilities, tooling (assets-in-kind contributed by the partner)		5,000,000 th z1
2. Cost of auxiliary activities		4,200,000 th z1
3. Cost of primary activities, including:		311,179,180 th z1
Water activities		202,270,000 th z1
Sewer activities		108,909,180 th z1
4. Planned delivered water	42,950 th m <sup>3</sup>	
5. Planned discharged sewage	39,410 th m <sup>3</sup>	
6. Unit cost (per m <sup>3</sup> )		
Water: 202,270,000 th z1 / 42,950 th m <sup>3</sup> )	= 4,709.43 z1	
Sewage: 108,909,180 th z1 / 39,410 th m <sup>3</sup> )	= 2,763.50 z1	
7. Forecast rates (for 1 m <sup>3</sup> ) and projected water and sewer revenues, by user groups		
Water:		
Households:	4,900 z1/m <sup>3</sup> x 29,700 th m <sup>3</sup> =	145,530,000 th z1
Institutions:	5,800 z1/m <sup>3</sup> x 7,350 th m <sup>3</sup> =	42,630,000 th z1
Industry & commerce:	6,200 z1/m <sup>3</sup> x 5,900 th m <sup>3</sup> =	<u>36,580,000 th z1</u>
	Total	224,740,000 th z1
Sewer:		
Households:	2,800 z1/m <sup>3</sup> x 27,620 th m <sup>3</sup> =	77,336,000 th z1
Institutions:	3,300 z1/m <sup>3</sup> x 6,570 th m <sup>3</sup> =	21,681,000 th z1
Industry & commerce:	3,600 z1/m <sup>3</sup> x 5,220 th m <sup>3</sup> =	<u>18,792,000 th z1</u>
	Total	117,809,000 th z1
8. Planned sale of primary services		342,549,000 th z1
Planned sale of auxiliary activities		<u>5,000,000 th z1</u>
Planned sale, total		347,549,000 th z1
9. less: Total cost		315,379,180 th z1
10. Profits (before taxes)		32,169,820 th z1
less: Income tax (40 percent)		12,868,000 th z1
less: VAT on auxiliary activities		900,000 th z1
11. After-tax profits		18,401,832 th z1

Water and sewer rates include the lease rent for fixed assets used by the Company. The rent is fixed by the body which approves rates. For the calculations, depreciation was assumed to amount to 32 bn zl.

Water and sewer rates would be as follows:

Water

	<u>total</u>	<u>lease rent</u>	<u>operational cost</u>
Households	4,900 zl/m <sup>3</sup>	450 zl/m <sup>3</sup>	4,450 zl/m <sup>3</sup>
Institutions	5,800 zl/m <sup>3</sup>	540 zl/m <sup>3</sup>	5.260 zl/m <sup>3</sup>
Industry & commerce	6.200 zl/m <sup>3</sup>	570 zl/m <sup>3</sup>	5.630 zl/m <sup>3</sup>

Sewer

Households	2,800 zl/m <sup>3</sup>	270 zl/m <sup>3</sup>	2,530 zl/m <sup>3</sup>
Institutions	3,300 zl/m <sup>3</sup>	310 zl/m <sup>3</sup>	2,990 zl/m <sup>3</sup>
Industry & commerce	3,600 zl/m <sup>3</sup>	340 zl/m <sup>3</sup>	3,260 zl/m <sup>3</sup>

The user pays the total rate.

The lease rent shall be transferred to the city, to be deposited in a separate bank account and designated for general overhaul and investment.

The city council may set an additional charge to be paid by industry which might result in increase of the investment funds by about 49 bn zl.

**BREAKDOWN OF COSTS (in th z1)**

	<u>1993</u>	<u>Expected in 1994:</u>	
		<u>as budget enterprise (without inflation adjustment)</u>	<u>as z c.o. with inflation adjustment)</u>
1. Depreciation (general)	100,000	100,000	37,100,000
Social activities	100,000	100,000	100,000
Contributions	--	--	5,000,000
Lease rent	--	--	32,000,000
2. Materials	25,700,000	31,000,000	38,750,000
3. Energy	28,200,000	34,000,000	40,800,000
4. Transportation services	794,000	800,000	1,000,000
5. Repair & overhaul services	26,860,000	38,000,000	38,000,000
6. Other material services	11,802,900	16,060,000	20,062,500
Telecommunication	839,000	1,100,000	1,375,000
Public works	1,000,000	1,200,000	1,500,000
Laboratory services	200,000	250,000	300,000
Rental of equipment	219,800	250,000	312,500
Emergency services	3,575,000	4,000,000	5,000,000
Computer services	2,060,800	5,000,000	6,250,000
Emergency workers' meals	40,000	60,000	75,000
Maintenance and repairs	3,627,000	4,000,000	5,000,000
Representation and other	241,300	200,000	250,000
7. Salaries	42,750,700	51,137,376	61,364,850
8. Social benefits	19,129,276	22,961,940	27,554,330
9. Deductions for funds	975,000	1,276,500	1,500,000
10. Taxes and fees	37,255,000	37,930,000	39,837,500
Water and sewer rates	30,000,000	31,000,000	31,000,000
Usufruct	3,450,000	3,400,000	3,740,000
Motor vehicle tax	100,000	100,000	120,000
PFRON	--	--	1,200,000
Business use of street	30,000	30,000	37,500
Waste disposal	675,000	1,200,000	1,320,000
Tax on real estate	3,000,000	2,200,000	2,420,000
11. Banking services	150,000	160,000	192,000
12. Business trips	521,000	700,000	675,000
13. Other nonmaterial services	5,375,400	6,870,000	8,343,000
Training and courses	387,400	500,000	625,000
Innovations & inventions	200,000	300,000	500,000
Meals for personnel	300,000	440,000	528,000
Laundry and uniforms	150,000	200,000	240,000
Rents	500,000	780,000	950,000
Insurance	1,100,000	1,500,000	1,650,000
Survivors' benefits	150,000	150,000	250,000
Other	2,570,000	3,000,000	3,600,000
<b>TOTAL</b>	<b>199,595,276</b>	<b>240,995,816</b>	<b>315,379,180</b>

Excluding lease rent and depreciation from item 5, the total cost would amount to 278.3 bn z1 and would increase by 39.5 percent compared to 1993.

## DRAFT FORM OF THE CONTRACT WITH PROPOSED COMPANY

### Paragraph 1

1. The Company would provide services in field of water supply and sewage discharge as well as O & M and repair of equipment and structures relating to water management.
2. The Company shall perform the above activities and comply with all provisions of this contract and other appropriate laws and regulations.
3. Contracts related to the above activities shall be made by the Company for and on behalf of their own and at their expense.

### Paragraph 2

The Company shall take over all the elements of property for the operation and handling and shall pay certain fees. A separate contract shall be made to govern all details.

### Paragraph 3

Water and sewer rates shall be set by the City Council on the grounds of the calculation submitted by the company. This calculation shall take all costs into consideration. The Company shall submit a cost and sale analysis annually after completing a balance sheet and whenever the Company applies for a change in rates.

### Paragraph 5

1. Fines for environmental pollution due to the lack of a sewage treatment plant shall be paid by the City.
2. Fines for environmental pollution caused by negligence of the Company shall be paid by the Company.

### Paragraph 6

1. Investment within the scope of extending the water and sewer piping system and the construction of a sewage treatment plant and a water treatment plant shall be carried out by the City.
2. Reconstruction of the assets shall be financed as provided in the separate agreement mentioned in Paragraph 2.

### Paragraph 7

1. This contract has been made for an indefinite period of time.
2. This agreement may be terminated by either party in case of 6 months' notice. The termination shall occur on the last day of the business year.

Paragraph 8: This contract shall become effective on .....

**APPENDIX D: Analysis of Privatization Options by City's Attorneys**

## APPENDIX D: Analysis of Privatization Options by City's Attorneys

### "Proposal to Transform ZWIK in Szczecin"

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April, 1993

1. At present, ZWIK is part of the gmina Budget Enterprise that is called MZUK (Municipal Enterprises of the City). It is a department that exists according to the City Council resolution of June 27, 1992, number XXVII (333) 92.

Functioning within the framework of a Budget Enterprise is not a good way to motivate employees or make them more efficient and it is not a motivation for economizing. However, a better system may be created with some privatizing transformations in a way that would protect the interests of the City.

2. Taking into consideration some previous experience in enterprise privatizing, there are two basic forms of transformation:

- a) Joint Stock Company
- b) Limited Liability Company

In each of these forms, the gmina may participate 1) as the only owner, 2) as the owner of the majority of shares with the rest of the shares owned by Zwik employees or 3) owner of the controlling block of shares with employees of ZWIK as the other owners.

Theoretically, there is the possibility for trading the shares of a joint stock company. Still, it seems, in the case of ZWIK, this possibility would not be practical.

3. The most formal approach is the joint stock company. The legal proceedings necessary to set it up are more complex and time consuming than in the case of other companies. In addition to these proceedings, there are requirements for by-laws, permission to set the company up, permission to accept the contents of the by-laws and permission to distribute ownership shares in the form of a notarial deed. Operation of such a company is also very formalized. The majority of decisions are the responsibility of the General Meeting of shareholders, the summoning of which requires obeying certain form. The share value may be comparatively low right now with a minimum value of 10,000 zlotys. Still, it seems that this form would not be suitable for ZWIK.

4) A limited liability company, as it was indicated above, could have the following forms:

- a. Gmina owns all shares

Present financial rules would limit the Company's freedom to establish wages and salaries because of the tax on salaries above a certain limit.

Practice proves that even very slight pay increases can cause a very heavy tax load which must be paid to the central government.

This form would be the least profitable but it would also fully protect the gmina's interests.

- b. Gmina owns a majority of the shares; the rest of the shares are owned by ZWIK employees.

The Company would also be subject to the tax mentioned above which is applied to all companies in which the gmina's capital participation is 50% or more.

- c. Gmina owns part of the shares; the rest of the shares are owned by ZWIK employees.

This form would be the most suitable for ZWIK because of certain required restrictions:

- Requirement to grant the gmina full control of the enterprise and the responsibility for decisions in issues that affect public interests.
- The special compensation tax applies here and causes an adverse tax condition in the same way as in companies in which the gmina possesses at least 50% of the shares.
- Capital barriers exist because the value of ZWIK is so high in comparison to the financial resources of the ZWIK employees that it would not be possible to effect this option. With a gmina non-pecuniary capital contribution, the employee-investors would not be able to contribute enough capital in the form of cash.

Taking all of this into consideration, it would be better to change the structure of activity rather than transforming the enterprise ownership structure. Assets that have been used by the enterprise so far would remain under gmina ownership.

It is suggested that a limited liability company be set up in which the gmina would possess some determined number of shares (30-49%) and the rest of the shares would belong to ZWIK employees or, if necessary, outside investors. Shares would be distributed in return for cash payments with a provision that the City of Szczecin would be able to cover its share with a non-pecuniary contribution.

To ensure adequate cash flow for the Company, however, a majority of the initial capital must be contributed in cash. The economic analysis shows that the minimal cash capital of the Company should amount to 3.5 billion zlotys. This amount is necessary to support the Company during its first month of operation. Further activity would be financed with revenue generated from sales of products and services.

SS

A questionnaire completed by ZWIK employees showed that the employees were prepared to contribute 1.580 million zlotys. In this situation, even if the gmina restricted its capital to cash only, it would be necessary to have outside investors. They might be, among others, banks or construction enterprises.

Establishing the final amount of initial capital depends on the amount and type of capital contributed by the City of Szczecin and the amount of capital that ZWIK employees could contribute. Only after obtaining such data will it be possible to determine the amount of outside capital that will be needed or allowed. The more non-pecuniary assets the City contributes, the more outside cash must be raised.

For instance, with a 30% share for the City from non-pecuniary assets, the proportions would be as follows:

1. City of Szczecin - 1.500.000.000 zł in assets
2. ZWIK employees - 1.580.000.000 zł in cash
3. Outside Investors - 1.920.000.000 zł in cash

The initial capital would amount to 5.000.000.000 zł.

With a 49% City share, the proportions would be as follows:

1. City of Szczecin - 3.430.000.000 zł in assets
2. ZWIK employees - 1.580.000.000 zł in cash
3. Outside Investors - 1.990.000.000 zł in cash

The initial capital would amount to 7.000.000.000 zł.

With a 30% City share in cash, the proportions would be as follows:

1. City of Szczecin - 1.050.000.000 zł in cash
2. ZWIK employees - 1.580.000.000 zł in cash
3. Outside Investors - 870.000.000 zł in cash

The initial capital would amount to 3.500.000.000 zł.

With a 49% City share in cash, the proportions would be as follows:

1. City of Szczecin - 1.715.000.000 zł in cash
2. ZWIK employees - 1.580.000.000 zł in cash
3. Outside Investors - 205.000.000 zł in cash

The initial capital would amount to 3.500.000.000 zł.

The fact that the gmina would not have the arithmetical advantage in terms of initial capital should not cause fears of losing control of the company because the other shares are dispersed between the employees and the outside investor. Experience of commercial companies shows that in such a situation ownership of 30% shares ensures control. Through the requirement to obtain permission of the Board to sell a share, it may be possible to prevent uncontrolled concentrations of capital that would deprive the City of control. Besides, proper provisions of the company contract may restrict a suitable number of votes to the gmina on the Company

**Board of Directors.** The ultimate safeguard to give the gmina control over the Company is the fact that the gmina will still own the assets used by the company.

5. Activities that must be undertaken to set up a limited liability company are:

- a. Entering Company contract
- b. Contributing the entire initial capital
- c. Appointing Company bodies/authorities
- d. Registering in commercial registry

Simultaneously, liquidation of ZWIK will take place.

The Company contract should be prepared in the form of notarial deed. The founders of the company may participate directly when the Company contract is entered or indirectly through their representatives. Because of the large number of partners - including ZWIK employees - appointing representatives of the employees would be more practical than all employees being involved. That authorization should also be notarized.

The following terms should be included in the contract because they are included in the commercial code:

- a. Name of the company and the company domicile - it would be desirable to have the present name which identifies the enterprise.
- b. The purpose of the company
- c. The amount of initial capital
- d. Determination that a partner may have one or more than one share
- e. Distribution and amount of shares covered by particular partners (at present minimal amount of 1 share is 500.000 zł)

The remaining terms of contract depend on the founders. The body that manages the Company is the Board of Directors. It may consist of 1 or more than 1 members appointed through a resolution of the partners with a provision that the contract may foresee some other way - for instance appointing the Board by a Supervising Board. This way of appointing the Board of Directors would be most suitable for the gmina. Then, the controlling body of the Company would be the Supervising Board or Auditing Commission. Regulations of the commercial code foresee a necessity to appoint a controlling body with a limited liability company, the initial capital of which exceeds 250.000.000 zł and the number of partners is more than 50. The Supervising Board consists of at least three members. In order to protect the gmina's interests, it would be suitable to have five members on this board - two of whom would be appointed by City management (one of whom would be the City Council Chairman).

6. The basis of the Company use of the gmina assets may be an agreement to transfer assets to the Company in return for a leasing agreement. The basis for calculating the amount of rent may be the depreciated value of the assets. Some part or all of the rent might remain in the company in a special fund designated for reconstruction of the assets that are retained by the gmina. This would prevent deterioration of these assets. This kind of solution has been

accepted in Gorzow Wielkopolski (town in Poland). In that case, a company was formed from the basis of the water and sewer agency. The contract contains terms requiring good care and correct use of assets as well as putting restrictions on the sale of assets. The issue of stock inventory (spare parts, materials) should be regulated in a separate way because its value is so high that it would not be possible for a newly formed company to buy it. Thus, the stock inventory can not be the subject of the contract that forms the company. A rational solution would be inventorying the stock and transferring it to the company with an obligation for the company to pay the City for the stock used for water and sewer projects on an annual basis. This would also be an addition to the asset balance of the company. If the company used stock for projects in which the City has no interest, the company would have to pay for the stock immediately.

7. To create appropriate authority and control for the Company, and to ensure suitable conditions to carry out the basic tasks, the City of Szczecin should ensure that the Company has the exclusive right to provide or deal with water and sewer services within the territory of the City.

8. Before the Company takes over operations, it will be necessary to establish the way to pay penalties for environmental pollution taking into consideration that possible environmental pollution may result not only from ZWIK activity but also may occur due to lack of treatment plants, the construction of which is the gmina's responsibility.

9. There should be agreement on the way of financing the costs of emergency response, repairs and investments, since the water and sewage pipelines are still gmina property.

10. Because of the fact that there would be two simultaneous things going on (1. Creation of a new legal and organizational form on the one hand and 2. Liquidation of the Budget Enterprise on the other hand), a report of debts and financial obligations should be prepared along with establishing the way of paying back the debts of the liquidated Budget Enterprise and assigning obligations to the Company that won't be satisfied by the Budget Enterprise in the liquidation process.

11. Employee issues are crucial issues to resolve. One should consider both social and financial consequences for MZUK. According to regulations in the Act of the 28 December 1989, particular principles must be used to resolve contracts with employees. Because employees may lose their jobs due to the liquidation which is encouraged by the Acts, the laws require financial compensation to those employees. (Reference: Legislative Gazette of 1990, Number 4, position 19 with later amendments). Employees who lose their jobs due to the liquidation are entitled to financial compensation based upon their years of service and a multiple of their annual wages. Such a right is not granted to employees who start their job with the new Company or those employees who are partners in the Company. Because of that, the newly formed company should employ as many of the existing employees and preserve the benefits and advantages that are afforded to employees prior to the liquidation.

On the basis of a contract with the gmina, the Company may take over the existing ZWIK enterprise on the basis foreseen in Article 23, paragraph 2 of the Labor Code. The Company

would employ all ZWIK employees on the same terms without the need to enter new labor contracts.

12. The solution presented here protects the community interests for which ZWIK works and creates a system that ensures sound operation with efficiency increases.

The development and expansion of the proposals mentioned above are contained in the draft documents provided herein: Company Formation Contract, Asset Transfer Contracts, Usage and Receipt of Stock Inventory and required Resolutions of the City Council.

**APPENDIX E: City's Principles for Privatizing ZWIK**

## **APPENDIX E: City's Principles for Privatizing ZWIK**

### **I. THE PURPOSE OF THE COMPANY**

The basic purpose of the company will be to provide municipal services in the area of water supply and sewer collection.

### **II. ORGANIZATION**

#### **A. Organizational and Legal Form**

Having considered the legislation that exists, the present organizational and legal situation at ZWIK and the ownership of ZWIK, we can only consider the following forms of organization to privatize ZWIK:

- 1) Limited Liability Company
- 2) Joint Stock Company

#### **B. Partners**

It is assumed that the following partners will join the Company:

- 1) The City of Szczecin
- 2) Outside Investors
- 3) ZWIK Employees

With respect to 1): The City of Szczecin, as a communal gmina, intends to secure and protect its interests not only through entering a limited liability company contract, but also through participation in its control and management.

With respect to 2): Participation of outside investors will enable the capital inflow that is needed to develop and modernize the enterprise. Such investors may be enterprises, banks, other institutions and individuals.

With respect to 3): Participation of ZWIK employees in the Company is connected with their interest in participation in management and their willingness to make a financial contribution.

#### **C. Shares**

Independent from the choice of organizational and legal forms of the Company (Joint Stock or Limited Liability), the following division of shares is assumed (stocks):

- |    |                   |    |              |
|----|-------------------|----|--------------|
| 1) | City of Szczecin  | -- | about 40%    |
| 2) | Outside Investors | -- | about 50-60% |
| 3) | ZWIK Employees    | -- | up to 10%    |

With respect to 1): A sizeable contribution by the City will enable it to have control over the Company activities.

With respect to 2): In order to obtain private company status, there must be a majority of private capital (minimum 51%).

With respect to 3): These conclusions were reached based on the results of a questionnaire in April 1993 and the employees' willingness to make a significant financial contribution.

### **III. ECONOMY**

#### **A. Initial Capital of the Company: 70 billion zlotys.**

This amount has been estimated based on interests of outside investors and their proposals concerning the amount of capital they are willing to contribute.

In accordance with the above principles, the distribution of capital shares among particular groups of partners will be as follows:

1)	City of Szczecin	--	28 billion zl
2)	Outside Investors	--	about 42-35 billion zl
3)	ZWIK Employees	--	up to 7 billion zl

With respect to 1): Shares to be contributed in assets.

With respect to 2) and 3): Shares to be contributed in cash.

#### **B. Company Profit Limit: 10%**

This limitation is designed to suit the Company's role as a public utility in which maximization of profits should not be a goal but reasonable profits are necessary to attract capital.

A lower profit rate would not attract private investors.

#### **C. Dividend Reinvestment**

In the first few years of its operation, the Company will allocate all profits to capital improvements of municipal infrastructure and development of the enterprise.

#### **D. Lease of Gmina Assets**

Assets that are managed by ZWIK right now, of which the City would retain ownership, would be leased to the Company.

The lease would be for immovables.

The lease payment will be calculated for determined periods and will be owed by the Company to the City.

A similar solution may be implemented by a form of lease-to-own, if the Company would like to own some enterprise assets in the future.

**E. "Crediting" Capital Improvement and Municipal Jobs**

The City has the obligation to make capital improvements and renew municipal infrastructure.

The Company may make capital investments and other improvements with loans or its own financial means.

If the Company makes such investments, the City may forgive amounts that are due from the Company (for instance, the City might temporarily reduce the lease payment).

**IV. GUARANTEES FOR ZWIK EMPLOYEES**

**A. Trade Unions**

In the newly formed Company, enterprise trade unions will exist and act according to principles that are identical to those that currently exist.

**B. Employment Guarantees**

All employees of the present ZWIK will be guaranteed employment in the Company. For the period of one year, the Company will not make any job reductions that are related to its management. After this period, any possible job reductions will be performed individually -- not collectively.

**C. Salary and Wage Guarantees**

The Company will accept, without change, the salary and wage agreement of the current enterprise ZWIK.

Any amendments of the payment principles will have to be negotiated with the enterprise trade unions according to the existing laws.

**D. Employee Rights Retained**

The Company will assume responsibility for all privileges and rights resulting both from general regulations and executed collective contracts.

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**APPENDIX L: Sample Budgeting Approach -- Boston Water & Sewer Commission**

The value of marginal inventories is 5,000 mln zl, to be left at the disposal of the executive board. The company could use this in case of failure of the system. Due to the lack of assessment of Zwik's property, discussion on the division of the property would be based on book values. Land would not taken into consideration.

**[There follow 2 pages of '92 TOTAL values fixed assets (of buildings, etc.), not shown here, plus a list of assets to be taken over by the company, also not shown here.]**

**[Thus, total assets to be taken over, would be 14.5 percent of total value: 62,090.7 / 426,808.8 = 14.5 percent.]**

How to handle Zwik's property:

Contribution in kind (from executive board): 2,778.4 mln zl

Lease from executive board: 50,418.1 mln zl

Rent of property (tooling, means of transportation): 8,894.2 mln zl.

Net book value of fixed assets to be included in company property: 2,778.4 mln zl.

Opening capital:

A limited liability company (*z.o.o.*) or joint stock company is required to possess sufficient capital to cover anticipated financial obligations. The capital to be contributed by the city (in form of assets-in-kind) is necessary in order to provide the basic means of production. City capital contribution is also needed in order to influence some control over the operation of the company and to help obtain access to bank financing. The assumption should be made that the major share over 51 percent should be owned by private investors. Such a situation helps govern the company effectively.

Contributions may be made in the form of cash or fixed assets, with opening capital proposed to be in the following amounts: 3,000 mln zl from private investors and 2,878 mln zl from the city. Of this total of 5,878 mln zl, the amount of 3,100 mln zl would be in cash **[presumably including 100 mln zl in cash from the city]**.

likely outcome in the present circumstance.)

A joint stock company would be the most formal structure, meaning that legal proceedings to form such a company are the most complicated, compared to those of other types of companies.

Limited liability company might function with the city as owner of all shares, as the largest minority owner, or as the majority owner.

In the first instance (city as owner of all shares), the company would not be free to set salaries, since it is subject to provisions regarding tax on excessive salaries [*podatek od ponadnormatywnych wynagrodzen*]. This tax accrues to the state budget.

In the second case (city as majority shareholder), the company would have to pay this tax on excessive salaries, which applies to all companies where the city shareholdings exceed 50 percent.

In the third instance (city not owning a majority of shares), the city would still have control powers, since the remaining shares would be scattered throughout a number of smaller owners. To secure the interests of the city, it is suggested to appoint a supervisory board of five persons, of which two would be designated by the city executive board. The basis of use of the city's property by the company may be a contract of lease or rent. The contract of lease should specify all matters regarding proper operation of the property and objections to sale by the lessor [i.e., by the company acquiring the lease rights].

The existing Zwik would be liquidated when the new company is formed. Thus, it would be necessary to list all its debts and revenues and to identify ways in which to settle all the financial and legal matters of the existing Zwik prior to its termination.

Rules regarding transfer of property from the city executive board to the new company:

The main elements of Zwik's property are fixed assets and "turnover means". The net value of Zwik's fixed assets at the end of 1992 was 485,357.3 mln zl, of which pipelines, ditches and canals were valued at 364,718.1 mln zl. Buildings and structures constituted 86 percent of fixed asset value, and depreciation 56 percent. Underground structures for water and sewage flow shall not be governed by the company agreement but rather should remain the property of the city.

Reconstruction and building of new elements of the water and sewer system shall be governed by the city executive board, which shall also be responsible for sources of financing. The remaining fixed assets of 62,090.7 mln zl shall be managed by the future company. Zwik also owns some houses and a recreation center that shall be taken into consideration while taking over the fixed assets. The value of "turnover means" at end 1992 was 51,760 mln zl, including inventories of 8,139.8 mln zl.

It is necessary to keep a supply of valves, connectors, pipes, etc., in case of any failure of the water and sewer system.

Fixed assets, buildings, and structures would be transferred to the company as a usufruct [the "perpetual" -- i.e., 99-year -- lease that is common in Poland]. These items essentially are the water and sewer infrastructure.

Inventories should be owned by the city, but they should be used and managed by the company.

As in Variant 2, optional participation of foreign capital should be permitted. The share of a local or a foreign investor ought to be substantial.

Privatization is complicated, especially if much property is involved. Thus, the whole process should be preformed in steps:

- Overall (entire) privatization: This would involve the formulation of one company under any of the above variants.
- Holding structure: Final creation of the following ("economic") bodies:
  - "Mother" company: (*spolka matka*): [This is the strongest entity].
  - Water production and supply company.
  - Sewage company (for disposal and treatment), with option of two separate companies covering the left bank and the right bank.
  - Transportation, warehousing, and workshop company.

The "Mother" company would seek to improve the effectiveness of the water and sewer services, possibly by creating new companies such as a laboratory company or a financial and accountancy company. The "mother" company would not carry out any economic activity on its own, but rather would cooperate with the city executive board to represent the interests of all these subsidiary companies in dealings with banks & other organization, to perform marketing activities, and to provide consulting and supervision.

Legal status of the company:

Regarding the privatization experience, there are two types of companies:

- Joint stock companies (*spolka akcyjna*); and
- Limited liability companies (*spolka z ograniczona odpowiedzialnoscia*)

In each of these, the city may act as:

- Sole owner of the company;
- Majority shareholder, with the rest of the shares to be owned by ZWIK employees; or
- Minority owner of "controlling interest" of shares, with remaining shares being owned by ZWIK employees or by other active investors.

(Theoretically, there could also be a public subscription of shares, though this is not a

Over the period 1989-92, liquidity indices went from 4.573 to 1.605, which was quite satisfactory. The quick ratio went from 3.881 to 1.353. During high inflation, it might fall below 1.0. If the quick ratio were low and the liquidity ratio high, inventories would be high. This generally shows a good ability to cover short-term debts.

From both the liquidity ratio and the quick ratio, ZWIK had good, though slightly deteriorating, financial condition between 1989-92. The operating (cost-level) index (proportion of cost to sales) has an optimal value of 90 to 50 percent. If greater than 90 percent, a company may have trouble achieving proper return on investment. This index went from 0.966 to 0.784 during the period.

Regarding the profitability (net profits) index: the higher, the better, although it is sensitive to changes in sources of financing. This index went from 0.006 to 0.042 during this period. As it was greater than zero, the activities were profitable. Regarding capital profitability, the high is index of productivity of invested capital, the better is the economic condition. This index went from 0.006 to 0.044. It was greater than zero, showing an improving condition.

Over the four-year period, positive stabilization was observed. Overall, the situation of the company by the end of 1992 is good -- proving that it is reasonable to start the privatization process. To keep the company in the current good shape might in the future limit or reduce possibilities of ownership conversion.

The forms and phases of restructuring: The following points should be taken into consideration while changing the current legal status of ZWIK:

- The interest of the executive board (*Zarządu Miasta*) of the city council;
- Increase in effectiveness of property currently possessed by ZWIK;
- National trends in the restructuring of public works;
- Attitude of ZWIK staff toward restructuring; and
- Legal provisions in force regarding restructuring.

Three variants are proposed regarding the restructuring ZWIK:

- Variant 1: Converting ZWIK into a company in which all shares are owned by the city (*jednoosobowa spolka skarbu gmina*);
- Variant 2: Converting ZWIK into a commercial company with prevailing private capital (*Spolka prawa handlowego z przewaga kapitalu prywatnego*);
- Variant 3: Converting ZWIK under the following arrangements for the new company: The new company would rent or lease part of ZWIK's property, especially buildings, machinery and equipment, technical facilities, means of transportation, tooling, instrumentation, and movable property.

The city executive board would contribute boilers, power machinery (electrical equipment), and special machinery and equipment.

Table 3.4  
RELATIVE INDICES

	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>
<u>Liquidity indices</u>				
Current liquidity	4.574	2.564	2.272	1.605
Quick ratio	3.881	2.354	1.799	1.353
Obligations due/liabilities	3.729	1.592	1.411	1.197
<u>Profitability indices</u>				
Net profits	.006	.002	.071	.042
Net sales profitability	.030	.021	.297	.158
Profitability, gross	.059	.141	.396	.300
Profitability, net	.031	.024	.396	.201
Capital profitability, net	.006	.002	.075	.044
Cost level index	.966	.881	.751	.784
Employment profitability	.541	11.779	63.547	61.510
Own capital per employee	43.734	836.165	846.919	931.671
<u>Rotation time indices</u>				
Liability index, days	149.315	81.332	89.162	68.901
Inventory rotation index, days	103.442	17.089	42.233	17.394
Obligation due index, days	556.815	129.511	125.836	82.448
Loan-to-capital ratio	0.000	0.000	0.000	0.000
<u>Indices of ability to meet financial obligations</u>				
Popiwiek share in financial result	.093	.456	0.000	0.000
Interest share in costs	0.000	.001	.000	0.001
How much inventories secured by own funds	26,339.	500,851.	540,557.	600,209.
"Turnover means" index	27,995.	503,703.	556,583	608,401.
Own capital / fixed assets	147.6%	104.2%	108.6%	110.2%
<u>Productivity indices</u>				
Productivity per employee	9.51	94.78	213.75	261.48
Labor cost per employee	2.23	10.80	24.55	47.31
Fixed assets, wear	37.4%	49.1%	48.0%	47.2%
Fixed assets, reconstruction	7.78%	2.26%	10.95%	4.62%
Productivity growth relative to previous year	100.00%	996.44%	225.51%	122.33%
Cost of increasing productivity	1.0	0.13	0.43	0.80
Value of own fixed assets and equipment, per employee	29.63	802.67	779.56	845.70
<u>Cost structure indices</u>				
"Depreciation"	100.00%	100.00%	100.00%	100.00%
Energy	11.83%	27.25%	15.96%	0.06%
Materials	16.32%	21.02%	12.95%	13.69%
Salaries	5.65%	8.45%	13.23%	14.80%
Interest	37.76%	20.98%	23.15%	33.64
Other	0.00%	0.10%	0.06%	0.07%
Change in inventories	28.34%	22.20%	34.66%	37.74%
	0.10%	0.00%	0.00%	0.00%
<u>Other structural indices</u>				
Salary increase, relative	100.00%	131.06%	97.91%	98.31%
Assets structure, primary index	1.64	14.62	6.48	10.53
Liabilities structure, primary index	11.08	39.05	16.00	18.62

Table 3.3  
ABSOLUTE INDICES OF ZWIK (in mln)

	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>
Current assets	10,873	32,902	76,787	51,760
Obligations due	8,865	20,432	47,690	38,583
Inventories	1,647	2,696	16,006	8,140
Cash	362	9,772	13,092	5,037
Fixed assets, gross	28,538	944,264	957,645	1,032,493
Fixed assets, net	17,854	480,959	497,592	544,885
Assets, total	28,727	513,861	574,379	632,519
Liabilities	2,377	12,831	33,791	32,243
Loans	0	0	0	
Current liabilities	2,377	12,831	33,791	32,243
Long-term liabilities	0	0	0	
Liabilities, total	2,377	12,831	33,791	32,243
Profits to be distributed	258	844	32,560	33,359
Own funds	26,092	500,186	508,029	566,917
Capital	26,350	501,030	540,588	600,275
Liabilities and capital, total	28,727	513,861	574,379	632,519
Sales	5,731	56,795	136,435	168,468
Cost for a given year	5,536	50,018	102,428	132,047
Cost of sales	5,536	49,969	102,364	131,949
Materials	313	4,227	13,546	19,541
Salaries, gross	1,344	6,473	15,669	30,479
"Depreciation"	655	13,632	16,343	82
Energy	903	10,513	13,268	18,075
Other	1,569	11,104	35,499	49,834
Bank interest	0	49	64	98
Financial accumulation [?]	265	7,061	40,562	39,634
Financial result	326	7,058	40,562	39,631
Income tax	127	2,630		13,095
Tax on excessive salary increase	30	3,217	0	
Dividends and other taxes	0	0	0	
Net profits	169	1,211	40,562	26,536
Average number of employees	603	599	638	644
Annual investment outlays	2,221	21,382	104,883	47,655

Table 3.2  
INFORMATION ON COSTS AND EFFECTS (in mln)

	<u>1989</u>	<u>1990</u>	<u>1990</u>	<u>1992</u>
1. Sales	5,731	56,795	136,435	168,468
2. Cost for a given year	5,536	50,018	102,428	132,047
3. Cost of sold water	5,536	49,969	102,364	131,949
4. Cost of produced water	5,530	49,969	102,364	131,949
5. Materials	313	4,227	13,546	19,541
6. Salaries, net	1,344	6,473	15,669	30,479
Salaries, gross	2,091	10,493	23,708	44 417
7. "Depreciation"	655	13,632	16,343	82
8. Energy	903	10,513	13,268	18,075
9. Other	1,569	11,104	35,499	49,834
11. Change in inventories	5	0	0	
13. Bank interest	0	49	64	98
15. Effect on other sales	46	611	2,434	417
16. Extraordinary profit or loss	24	(327)	4,122	2,796
17. Accumulation [?]	265	7,061	40,562	39,634
18. Turnover tax	1	3	1	3
19. Surcharges and subsidies	62	0	0	
20. Financial result	326	7,058	40,562	39,631
21. Income tax	127	2,630		13,095
22. Tax on excessive salary increase	30	3,217	0	
23. Other taxes	0	0	0	
24. Taxes, total	157	5,847	0	13,095
25. Net profits	169	1,211	40,562	26,536
26. Number of employees	603	599	638	644
27. Investment outlays	2,221	21,382	104,833	47,655

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This is *podatek od ponadnormatywnych wyplat wynagrodzen*, commonly called "popiwek."

Table 3.1  
BALANCE SHEET DATA (in mln)

	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>
<b>ASSETS</b>				
a. Cash	362	9,774	13,092	5,037
b. Obligations due	8,865	20,432	47,690	38,583
c. Inventories	1,647	2,696	16,006	8,140
d. Total current assets	10,873	39,902	76,787	51,760
e. Fixed assets	28,538	944,264	957,645	1,032,493
including:				
e1. Buildings & structures	23,341	872,082	816,486	841,889
e2. Machinery & equipment	1,217	51,189	62,042	63,647
e3. Means of transport	183	6,913	10,289	11,002
f. Amortization of fixed assets	10,681	463,302	460,041	482,582
including:				
f1. Buildings & structures	9,887	424,576		443,226
f2. Machinery & equipment	693	33,967		38,285
f3. Means of transport	98	4,668		4,576
g. Amortization of intangibles	3	4	13	27
h. Fixed assets, net	17,854	480,959	497,592	544,885
i. Other assets				35,874
ASSETS, TOTAL	28,727	513,861	574,379	632,519
<b>LIABILITIES</b>				
i. Amounts due	2,377	12,831	33,791	32,243
j. Loans	0	0	0	0
k. Total current liabilities	2,377	12,831	33,791	32,243
l. Long-term liabilities	0	0	0	0
Other				
Total liabilities	2,377	12,831	33,791	32,243
m. Profits to be distributed	258	844	32,560	33,359
n. Funds to be established	19,094	373,736	401,160	453,788
o. Enterprise funds	6,998	126,451	106,869	113,129
Total capital	26,350	501,030	540,588	600.275
LIABILITIES AND CAPITAL	28,727	513,861	574,379	632,519

the provision of services. It is also the tax collector and a very careful payer of accounts with the company rendering the services.

A crucial feature of a privatization arrangement is that the local government reserves the right to retain ownership of the fixed assets. Thus, the city's contract with this company may cover only the operation of the system. Private companies may react more quickly to social policy than would state-owned bodies.

In France, private companies are the main suppliers of water. This has been true in Paris since 1782. In France, there is much experience with production and management, utilizing licensing on the basis of tenders, with financing and ownership of assets remaining with the relevant governmental body. In the USA, over 75 local communities have private contracts for provision of water and sewer services. In some cases, private companies operate sewage treatment plants via leasing contracts. In New England, people pay up to 88 percent more under contract systems. In Arizona, local government reduced costs 59 percent as result of contract against those of a fully public company. [No documentation provided.]

In Szczecin, a territorial structure has existed for the water and sewer organization (*Zakład Wodociagow i Kanalizacji*) [ZWIK]. ZWIK services include the supply of potable and household water, the disposal of liquid waste and rainwater and the operation of underground piping and water production equipment. Sometimes repairs and capital improvements to the system are carried out by companies other than ZWIK.

An assessment of ZWIK's structure indicates that it would be possible to divide the organization into four departments:

- Water production and supply facilities (including intakes, treatment, and supply piping);
- Left bank [of the Odra River] sewage treatment;
- Right bank sewage treatment; and
- Transportation, workshops, and materials.

The criteria to permit the proper division of ZWIK include the will of management to take risks, adequate preparation and knowledge, and modification of existing structure for the design and implementation of proper financial and accounting systems.

[The document contains an interpretation of the economic and financial condition of ZWIK for 1989-92, in the form of the following tables:

- 3.1: balance sheet
- 3.2: cost and effect
- 3.3: list of absolute indices (in mln zł)
- 3.4: relative indices (quick ratio, profitability, etc.)

## APPENDIX K: Concepts for Restructuring Water and Sewer Activities in Szczecin<sup>9</sup>

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February 1993

In 1991, public works consumed one-fourth of the entire city budget, 54 percent of city investment, and 13 percent of grants to the city. In that year, all enterprises were converted into "budget units." Among public works, there were utility units the restructuring of which would minimize costs and increase effectiveness. Thus, the need for privatization. The economic condition of these units is good, but their technical condition is not so good.

There are several features of Polish water companies as presently structured. They suffer from the "old way" of overemployment, no real cost analysis, the low significance of profits in financial management. Moreover, there is no incentive for profits to be generated from their investments, which is influenced by the city budget. There are also no innovations in creating new kinds of services.

According to an **[unidentified]** American expert, there are four motives for privatization:

- Greater effectiveness;
- Ideology: reducing excessive state **[central government]** influence in local government affairs;
- Economics: subsidizing of water/sewer services by the city leads to lower profitability; private companies could more effectively use the existing assets; and
- Choice: the population should have a wider choice of public services.

There are three main participants in the public service economy: the consumer, the producer, and the initiator of services -- the latter of which selects the producer of services. The city is initiator if it signs contract with a future producer. The initiator must decide what services should be provided and must establish the expenditure level to be borne by city budget. The local government should arrange but not pay for the producer of services.

There are different proposals for provision of public services, including contracts with private entrepreneurs, licenses granted to private companies (with the right reserved by the local governments to establish prices), and the privatization of existing water companies. In each of these, local government expresses the public demand for services. It is also the supervisor of

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<sup>9</sup>Note of this Appendix: This approximate translation seeks to include material from the original document which relates directly to general conclusions and structures regarding privatization. Thus, certain elaborations are omitted without notice, as are tabular presentations that form the basis of the data presented in the latter part of the material. A few explanatory items, indicated in bracketed bold letters, have been added to this Appendix.

**APPENDIX K: Concepts for Restructuring Water and Sewer Activities in Szczecin**

No dealer, broker, salesperson or other person has been authorized by the Authority or by the Underwriter to give any information or to make any representations, other than as contained in this Official Statement, and if given or made, such other information or representations must not be relied upon as having been authorized by the foregoing. The information set forth herein, other than the initial offering prices on the cover page hereof, information relating to the stabilization of prices and information under the caption "Underwriting", has been obtained from the Authority and other sources that are believed to be reliable, but no representation as to the accuracy or completeness of such information is made by the Underwriter. The information and expressions of opinion contained herein are subject to change without notice, and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the Authority since the date hereof or the earliest date as of which such information is given. This Official Statement is submitted in connection with the sale of the 1986 Series A Bonds and may not be reproduced or used, in whole or in part, for any other purpose. This Official Statement does not constitute an offer to sell or the solicitation of any offer to buy, nor shall there be any sale of the 1986 Series A Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale. The Underwriter may offer and sell the 1986 Series A Bonds to certain dealers and others at prices lower than the offering prices stated on the cover page hereof. The offering prices may be changed from time to time by the Underwriter.

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**NEW ISSUE**

Moody's: Aaa  
Standard & Poor's: A.A.A  
(See "Credit Ratings" herein)

*In the opinion of Bond Counsel, under existing law, interest on the 1986 Series A Bonds, except as described herein under "Tax Exemption" with respect to the alternative minimum tax and environmental tax imposed on corporations and the branch profits tax imposed on certain foreign corporations, will be exempt from federal income taxes and Rhode Island income taxes, but the 1986 Series A Bonds and the income therefrom may be included in the measure of Rhode Island estate taxes and certain Rhode Island corporate and business taxes. See Appendix D and "Tax Exemption" herein.*

**\$19,690,000**

**Bristol County Water Authority  
General Revenue Bonds, 1986 Series A**

**Dated: November 1, 1986**

**Due: November 1, as shown below**

The 1986 Series A Bonds are issuable as fully registered bonds in the denomination of \$5,000 or any integral multiple thereof, with interest payable semiannually on each May 1 and November 1, commencing May 1, 1987. Interest on the 1986 Series A Bonds will be payable by check or draft mailed to the registered owner thereof, provided any registered owner of \$500,000 or more in aggregate principal amount of 1986 Series A Bonds may make arrangements with the Trustee for the payment of interest by wire transfer. The principal or redemption price of the 1986 Series A Bonds will be payable at the principal corporate trust office of the Trustee, Fleet National Bank, Providence, Rhode Island. The 1986 Series A Bonds will be subject to redemption prior to maturity as set forth herein.

The 1986 Series A Bonds will constitute general obligations of the Bristol County Water Authority, which has no taxing power. In addition, the 1986 Series A Bonds will be secured by a lien on and pledge of certain revenue and other moneys of the Authority as described herein. Neither the State of Rhode Island nor any political subdivision thereof, other than the Authority, is obligated to pay the principal of and interest on the 1986 Series A Bonds and neither the faith and credit nor the taxing power of the State or any other political subdivision thereof is pledged to such payment. A municipal bond guaranty insurance policy will be issued by the

**MUNICIPAL BOND INSURANCE ASSOCIATION**

to guarantee the timely payment of the principal of, and interest on, the 1986 Series A Bonds, as described herein

<u>Maturity</u>	<u>Amount</u>	<u>Interest Rate</u>	<u>Price</u>	<u>Maturity</u>	<u>Amount</u>	<u>Interest Rate</u>	<u>Price</u>
1987 .....	\$235,000	3¾%	100%	1995 .....	\$370,000	5.70%	100%
1988 .....	265,000	4%	100	1996 .....	395,000	5.85	100
1989 .....	275,000	4½	100	1997 .....	415,000	6	100
1990 .....	290,000	4¾	100	1998 .....	440,000	6.15	100
1991 .....	305,000	5	100	1999 .....	465,000	6.30	100
1992 .....	315,000	5.20	100	2000 .....	500,000	6½	100
1993 .....	335,000	5.40	100	2001 .....	520,000	6.60	100
1994 .....	350,000	5½	100				

**\$3,235,000 7% Term Bonds due 2006 — Price 99¼%**

**\$10,980,000 7¼% Term Bonds due 2016 — Price 99¼%**

(Accrued interest to be added)

*The 1986 Series A Bonds are offered when, as and if issued and received by the Underwriter, subject to approval of legality by Tillinghast Collins & Graham, Providence, Rhode Island, Bond Counsel, and certain other conditions. Certain legal matters with respect to the Authority will be passed upon by its counsel, Hinckley, Allen, Tobin & Silverstein, Providence, Rhode Island. Certain legal matters are subject to the approval of Palmer & Dodge, Boston, Massachusetts, Counsel to the Underwriter. It is expected that the 1986 Series A Bonds in definitive form will be available for delivery in New York, New York on or about November 25, 1986.*

**Merrill Lynch Capital Markets**

November 13, 1986

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No dealer, broker, salesperson or other person has been authorized by the Boston Water and Sewer Commission or the Underwriters to give any information or to make any representations, other than as contained in this Official Statement, and if given or made, such other information or representations must not be relied upon as having been authorized by any of the foregoing. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the 1993 Series A Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale. The information set forth herein has been furnished by the Boston Water and Sewer Commission and other sources which are deemed to be reliable but is not guaranteed as to accuracy or completeness and is not to be construed as a representation by the Underwriters. The information and expressions of opinion herein are subject to change without notice and neither the delivery of this Official Statement nor any sale of the 1993 Series A Bonds shall, under any circumstances, create any implication that there has been no change in the affairs of the Boston Water and Sewer Commission since the date hereof.

IN CONNECTION WITH THIS OFFERING, THE UNDERWRITERS MAY OVER-ALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICES OR YIELDS OF THE 1993 SERIES A BONDS AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME. THE UNDERWRITERS MAY OFFER AND SELL THE 1993 SERIES A BONDS TO CERTAIN DEALERS AND BANKS ACTING AS AGENTS AT PRICES LOWER THAN THE PUBLIC OFFERING PRICES STATED ON THE COVER PAGE HEREOF AND SAID PUBLIC OFFERING PRICES MAY BE CHANGED FROM TIME TO TIME BY THE UNDERWRITERS.

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For New Hampshire residents: In making an investment decision, investors must rely on their own examination of the issuer and the terms of the offering, including merits and risks involved. These securities have not been recommended by any federal or state securities commission or regulatory authority. Furthermore, the foregoing authorities have not confirmed the accuracy or determined the adequacy of this document. Any representation to the contrary is a criminal offense.

*In the opinion of Bond Counsel under existing law, interest on the 1993 Series A Bonds (including original issue discount properly allocable to the owners thereof) is excluded from gross income of the owners of the 1993 Series A Bonds for federal income tax purposes, assuming continued compliance by the Commission with the Internal Revenue Service Code of 1986. Interest on the 1993 Series A Bonds is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals and corporations. However, interest on the 1993 Series A Bonds will be taken into account in determining adjusted current earnings for the purpose of computing the alternative minimum tax imposed on corporations. The 1993 Series A Bonds, their transfer and the income therefrom, including any profit made on the sale thereof, will be exempt from taxation within the Commonwealth of Massachusetts; however, the 1993 Series A Bonds and the interest thereon may be included in the measure of Massachusetts estate and inheritance taxes and of certain Massachusetts corporate excise and franchise taxes. See "TAX EXEMPTION" herein.*

**\$100,505,000**

**Boston Water and Sewer Commission**  
**General Revenue Bonds, 1993 Series A**  
**(Senior Series)**

Dated: March 1, 1993

Due: November 1, as shown below

The 1993 Series A Bonds will be issued as fully registered bonds in the name of Cede & Co. as nominee of The Depository Trust Company, New York, New York ("DTC"), as securities depository. Purchases of the 1993 Series A Bonds will be made in book-entry form through DTC Participants only in the denomination of \$5,000 or any integral multiple thereof and physical delivery of the 1993 Series A Bonds will be made to purchasers. So long as Cede & Co. is the registered owner of the 1993 Series A Bonds, payments of principal, and semiannual interest (payable November 1 and May 1, commencing November 1, 1993) and premium, if any will be payable by Shawmut Bank, N.A., Boston, Massachusetts, as Paying Agent, to DTC and subsequently, to purchasers by DTC through its Participants. See "THE 1993 SERIES A BONDS—Book-Entry or System." The 1993 Series A Bonds are subject to redemption prior to maturity as more fully described herein.

The 1993 Series A Bonds will constitute general obligations of the Boston Water and Sewer Commission (the "Commission"). The Commission has no taxing power. Neither the City of Boston nor The Commonwealth of Massachusetts (the "Commonwealth") nor any other political subdivision thereof other than the Commission is obligated to pay the principal of and interest and premium, if any, on the 1993 Series A Bonds and neither the faith and credit nor the taxing power of the City of Boston or the Commonwealth or any such other political subdivision thereof is pledged to such payment. The Commission has the power to independently set rates and charges. Such rates and charges are not subject to the regulation or approval of any department, board, or agency of the Commonwealth or of the City of Boston.

<u>Maturity</u>	<u>Amount</u>	<u>Rate</u>	<u>Price or Yield</u>	<u>Maturity</u>	<u>Amount</u>	<u>Rate</u>	<u>Price or Yield</u>
1993	\$1,650,000	2.20%	100.00%	2002	\$2,700,000	4 3/4%	4.80%
1994	1,185,000	2 3/4	100.00	2003	2,825,000	4.90	100.00
1995	60,000	3 1/4	100.00	2004	2,965,000	5	100.00
1996	65,000	3 1/2	100.00	2005	3,110,000	5	5.10
1997	65,000	3.90	100.00	2006	3,265,000	5 1/8	5.20
1998	70,000	4	4.10	2007	3,435,000	5 1/4	5.30
1999	790,000	4 1/4	4.30	2008	3,615,000	5.40	100.00
2000	1,455,000	4.40	4.50	2009	4,000,000	5.40	5.45
2001	1,515,000	4.60	4.65				

\$21,000,000 5 1/4% Term Bonds due 2011 Yield 5.50%

\$46,735,000 5 1/4% Term Bonds due 2019 Yield 5.50%

(Accrued Interest to be added)

The 1993 Series A Bonds are offered when, as and if issued and received by the Underwriters, subject to approval and legality by Palmer & Dodge, Boston, Massachusetts, Bond Counsel, and certain other conditions. Certain legal matters subject to approval of Warner & Stackpole, Boston, Massachusetts, Special Disclosure Counsel and Mintz, Levin, Cohn, Fierman, Glovsky and Popeo, P.C., Boston, Massachusetts, Counsel to the Underwriters. Delivery of the 1993 Series A Bond definitive form to DTC is expected in New York, New York on or about March 30, 1993.

**Merrill Lynch & Co.**

**First Albany Corporation**

**Morgan Stanley & Co.**  
 Incorporated

**Smith Barney, Harris Upham & Co.**  
 Incorporated

March 11, 1993

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**APPENDIX J: Sample "Official Statement" Information**

- Elisa M. Speranza  
Deputy Director Massachusetts Water Resources Authority (MWRA) Policy, Legislative Development and Community Relations
- John F. Shawcross  
Director Capital Engineering and Planning, MWRA  
Water Supply Capital Improvement
- Michael F. Domenica  
Director Sewerage Facilities Development, MWRA  
Combined Sewer Overflows Capital Projects
- Nancy E. Barnes  
Managing Director, Cambridge Water Department:  
Finance, Management
- John P. Sullivan, Jr.  
Chief Engineer, Boston Water and Sewer Commission  
Water & Sewer Operations
- Andrew H. Sims, Jr.  
Executive Director, South Essex Sewerage District  
Wastewater Operations, Management & Safety  
(A person on his staff speaks Polish)
- George E. Block, Jr.  
Director Water Supply Planning and Engineering, Rizzo Associates  
Watershed Protection, Capital Planning and Water Operations
- James Holeva  
Environmental Analyst, Massachusetts Department of Environmental Protection Water  
Supply Division Regulatory Issues
- Richard O. Rafanovic  
General Manager and Chief Engineer, Providence Water Supply Board  
Management and Engineering (From Czechoslovakia)
- Cymie R. Paine  
Chair, Cambridge Conservation Commission  
Environmental Policy

## **APPENDIX I: Points of Contact Program: Water and Wastewater Technical Exchange**

### **Background**

In recent years, the New England Water Works Association and New England Water Environment Association International Committees have considered programs to establish and develop contacts with water systems in other countries.

During September 1993, Nancy Barnes, a member of the NEWWA International Committee, had the opportunity to work on a project for the U.S. Agency for International Development in Poland. The project involves preparing the City of Szczecin, Poland to finance water and sewer infrastructure improvements. During the course of this work, both Ms. Barnes and the Szczecin utility staff enjoyed learning about each other's systems. Szczecin expressed interest in the opportunity to continue that technical exchange.

The Szczecin water and wastewater systems serve a population of 400,000. Only 20% of wastewater is treated. Water sources include a lake, river intakes and wells. They have full conventional water treatment; a water pilot plant for ozone, BAC and GAC; they practice primary wastewater treatment and are converting from lagoons for sludge dewatering to a centrifuge system.

Because of the size of the Szczecin utility and the number of challenges it faces, it may be more effective to have a group of people from the U.S. serve as points of contact rather than to try and find one U.S. utility to participate in the technical exchange.

### **Scope of the Points of Contact Program**

The officers of the Polish Water & Wastewater Association have been identified. The director of the Szczecin utility is regional director of this association. The Points of Contact Program could start with the Szczecin utility and broaden to other Polish cities.

Initially, contacts will involve the exchange of technical and operating information. Szczecin management is welcome to request information about how the U.S. managers approach some facet of operations or management. The U.S. contact will then respond and, ideally, express interest in practices in Szczecin. As the relationship develops, its scope may expand. Time, effort and expense will be applied as resources permit. Initial contacts do not need to be expensive or time consuming.

### **Expected Benefits**

The program provides an opportunity for professional interchange between U.S. and Szczecin managers that may be mutually beneficial. The U.S. managers may be a valuable resource to the Polish utilities as they face the challenges of a new economic system.

**Initial Participants:** The New England Group has prepared resumes and letters of introduction to the Szczecin staff which Ms. Barnes presented to ZWIK management in December 1993. The people who have agreed to participate are:

**APPENDIX I: Points of Contact Program: Water and Wastewater Technical Exchange**

## Public Information

### 1. Articles

- \* *The Value of Public Information*, Jeanne McKeever, Proceedings of American Water Works Association Meetings

*A State Perspective on Consumer Education Needs*, G. Wade Miller and Vanessa M. Leiby, Proceedings of American Water Works Association Meetings

*Communicating with the Public: Steps Toward a Successful Strategy*, Peter L. Wolfe, Proceedings of American Water Works Association Meetings

- \* *Effective Customer Service*, Kay Kutchins, Proceedings of American Water Works Association Meetings

### 2. Sample Documents

Anglian Water (England): Public Information Package

## Water Conservation and Leak Detection

### 1. Articles

- \* *Leak Detection and Repair: Boston's Conservation Success Story*, John P. Sullivan, Jr., Proceedings of American Water Works Association Meetings

*Leak Detection and Repair*, Marcis Kempe and David Liston, Proceedings of American Water Works Association Meetings

- \* *Non-Residential Water Conservation in Phoenix: Promoting the Use of "Best Available Technologies"*, Jane H. Ploeser, Proceedings of American Water Works Association Meetings

*Approaches for Water Conservation and Reuse in Industry*, Edward C. Fiss, Robert M. Stein and Robert C. Lasater, Proceedings of American Water Works Association Meetings

# Listing of Information Provided

## Rates, Financial Management and Planning

### 1. Articles

*The First Step in Developing New Water Sources - Gaining Host Jurisdiction Support*, David L. Morris II, Proceedings of American Water Works Association Meetings

*Criteria Relevant to Evaluating a Sewer Rate Methodology*, MWRA Advisory Board

- \* *Description of the Accounting Cycle*, Ralph E. Huber, Proceedings of American Water Works Association Meetings

*Accounting Reports*, Paul M. Sachs, Proceedings of American Water Works Association Meetings

*Related Financial Management Functions*, Lawrence G. Shaw, Proceedings of American Water Works Association Meetings

- \* *Introduction to AWWA Manual on Alternative Water Rates*, Christopher P. N. Woodcock, Proceedings of American Water Works Association Meetings

Water and Wastewater 1992 Rate Survey, Ernst & Young

### 2. Sample Documents

Boston Water and Sewer Commission

- \* Monthly Management Report
- Annual Report
- Proposed Capital Improvement Program 1994-1996
- Supporting Documentation for the 1993 Rate Schedule
- \* Current Expense Budget 1993  
(Distinguished Budget Presentation Award given by the Government Finance Officers Association)

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**Seminar on Management Topics  
December 2, 1993**

**IV. Public Information**

Public support is very important to ensure the long term viability of the utility system. If the public understands the water and sewer system and the need for capital improvements, they will be more likely to support the utility and more willing to pay increasing water and sewer rates. That is why many U.S. utilities have implemented public information programs that include:

1. Printed messages with bills
2. Articles in newspapers
3. Tours for school children
4. Television programs or videos
5. Open houses

The type of information that is conveyed depends on the objectives of the utility. Some reasons for public information programs include:

1. Water Conservation
2. Water Source Protection
3. Anticipated Rate Increases
4. Need for Capital Improvements
5. Reports of Progress
6. Service Improvements
7. Announcements of New Policies or Procedures

The information should be prepared in a very clear and simple fashion. It should be "User-Friendly": interesting, easy to read and as brief as possible. Pictures and diagrams can help to convey thoughts and make the information more interesting.

Some U.S. utilities do Customer Surveys to find out what the public wants to know. This information can then be used to decide what information should be designed.

once and then dispose of it. There are programs in which experts work with companies to do "Water Use Audits" to identify ways of saving water.

### **3. METERING**

In order to allow customers to understand their usage and the cost of water/sewer use, it is important for household units and companies to have metered usage. Without a meter and periodic readings, the customer can not really understand how much water they are using or see the effect of water conservation measures.

### **4. PUBLIC EDUCATION**

First of all, it is important for the public to know why water conservation is important. When the public understands, they will have the motivation to do what they can do to reduce water usage.

Then, the public needs to understand how they can reduce water usage. This involves explaining how water is used by most people, where the opportunities are for reduction and how the use can be reduced.

Many U.S. communities have designed special brochures to explain these concepts to the public. The brochures are often sent to the customer with the water and sewer bill.

### **5. LEAK DETECTION AND REDUCTION OF SEWER FLOWS**

Many water systems in the United States now do annual or bi-annual leak detection surveys. Special equipment that "listens" for leaks can identify a leak that is hidden below the street. When the leaks are found, they should be fixed.

Household leak detection and repair are also important. Leaking fixtures increase usage and the water bill.

There are also U.S. programs to reduce the amount of water that gets into sewer collection pipelines. A very good way of reducing this water is to separate storm drains from sanitary sewer pipelines. This reduces flow and prevents "surcharging" in a heavy rainfall that can exceed treatment plant capacity.

Infiltration/Inflow programs are also underway. This means finding and repairing or replacing sewer pipes that are allowing water to get into the pipe.

**Seminar on Management Topics  
December 2, 1993**

**III. Water Conservation**

Water Conservation is very important in the USA for the following reasons:

1. Wise use of precious water resources
2. Reduction of environmental stress and pollution
3. Control the capacity needed in water and sewer capital facilities which in turn saves money
4. Opportunity for the public to control usage and, in turn, water bills.

Some samples of US water conservation programs include:

**1. RATE STRUCTURE DESIGN**

- a. **Increasing Block Rates:** The more water a customer uses, the more the customer pays per unit of water.
- b. **Full Cost Rates:** If rates include all of the costs of owning, operating and maintaining the system, the customer can make a rational decision about using the water. The costs should include the costs of operation and of capital improvement; the costs of financing, etc. The costs should, generally, not include costs that have nothing to do with providing water and sewer services.

It is important to bill for water and sewer on the same bill because water usage has a direct impact on the flows in the sewer system to the sewer treatment plant.

**2. FIXTURES THAT USE LESS WATER**

Many household fixtures such as toilets, faucets and shower heads can be changed to fixtures that use less water. Then, the customer uses the fixture but is not inconvenienced. The customer does not have to do anything new or change habits.

In the United States, toilets use the most amount of water. Many states have building code regulations that require low flow toilets for new installations or renovations. These toilets can sometimes use 50% less water.

Many communities have undertaken retrofit programs to install faucet aerators, low flow shower heads and toilet dams in residences to reduce water usage. These programs can reduce usage by up to 20%.

There are water conservation programs for industries as well. For instance some communities will not allow a company to install air-conditioning systems that use water

## **Seminar on Management Topics December 2, 1993**

### **II. Rate Setting**

**Overall Goal:** Rates should be set to cover the full costs of operating, maintaining and improving a water and sewer system within the ability of the public and the economy to bear.

What are the full costs of operating, maintaining and improving a water and sewer system?

1. **Operating and Maintenance Expenses:**
  - a. Labor, materials, equipment, services, utilities, etc.
  - b. Recognition that fixed assets are "used up" during the course of operation: can be referred to as depreciation
  - c. Costs of Outside Professional Services: Legal, Accounting, Engineering, etc. Experts
  
2. **Improvement Expenses:**
  - a. Costs of Capital Projects that are paid for without borrowing money
  - b. Costs of repaying Borrowed Money: Debt Service
  - c. Extra labor and materials if the agency performs capital improvements with its own crews

These cost, when accumulated, provide the revenue requirement.

The way in which the revenue requirement is translated into water and sewer rates is influenced by a number of considerations, that include:

- a. Affordability
- b. Rate Structure: Flat, Increasing or decreasing block rates
- c. Incentives for action such as water conservation
- d. Social Purposes such as discounts for the elderly or people on low incomes
- e. The impact that increasing rates may have on water usage: in economic terms, the elasticity of demand for water.
- f. The impact that rates may have on the overall economic situation in the community.

Rate setting and collection of revenues are some of the most important aspects of good management because they are the source of the funding to provide the resources needed to operate soundly and preserve the system for the future.

## **Seminar on Management Topics December 2, 1993**

### **I. Planning, Budgeting and Performance Review**

Perhaps the most important concept in management is that of planning, budgeting and performance review. This involves the following actions:

1. Evaluate the existing business situation - its strengths and weaknesses
2. Assess Future Requirements and the ability of the business to meet those requirements based on the existing situation
3. Select an overall mission or set of objectives for the agency
4. Determine actions needed throughout the organization to achieve the overall goals
5. Determine the resources needed to take these actions
6. Develop a budget for expenses and capital based on the resources needed
7. Seek and gain approval for goals and budgets
8. Assign responsibilities and due dates
8. Review actual performance against goals and budgets

Basic and important premises in this system are:

1. Participation of managers in the selection of the goals they will be expected to achieve.
2. Delegate of authority to achieve the goals
3. Assignment of responsibility to the manager
4. Periodic reviews, feedback and any necessary adjustments to goals or budgets

In this way, managers clearly understand what they need to achieve and they are well motivated.

The resulting budgets then reflect:

1. Goals and Promised Achievements
2. Resources Required

Why is this approach important?

1. Reasonable Expectations
2. Adequate Resources
3. Effective Allocation of Scarce Resources
4. Clear Direction throughout the Organization

**APPENDIX H: Management Seminar Agenda**

**CITY of SZCZECIN, POLAND**

**Financial Analysis of Infrastructure Upgrading and Expansion**

**Phase II Assistance**

**Seminar on Management Topics**

**Agenda**

**December 2, 1993**

**I. Planning, Budgeting and Performance Review**

**II. Rate Setting**

**III. Water Conservation**

**IV. Public Information and Support**

**Appendix: Listing of Information Provided**

**APPENDIX H: Management Seminar Agenda**

## APPENDIX G: Privatization -- Invitation for Tenders

Translation of notice in *Rzeczpospolita*, 7/19/93:

*Board of the City of Szczecin  
Invitation to tender for a limited liability company  
with the participation of  
Zakład Wodociągów i Kanalizacji w Szczecinie*

Company to be involved in:

- potable and industrial water supply
- sewage collection and treatment, including rain/storm water
- water and sewage technology
- treatment and recycling of sludge
- investment procedure
- construction, repair and maintenance of water and sewage piping system and water wells

1. Requirements

- opening capital at least PZL 7 billion
- City's assets in kind to cover approximately 40% of shares
- partners to contribute cash
- profits to be invested for a certain period of time

2. Bids, including information of financial condition and references, to be submitted to Urząd Miejski, pl. Armii Krajowej, 1 pok. 333, until September 30, 1993 (Call 233 458 for details)

3. Bids to be investigated until October 31, 1993; results given in writing afterwards.

4. Selected bidders to be invited for negotiations

5. The right of withdraw from making a decision or annul the tender reserved

6. Bidders to cover all expenses incurred in connection with bid submitted

7. Company to be established on the grounds of a resolution of the City Council

<b>Zarząd Miasta Szczecina zaprasza firmy posiadające doświadczenie organizacyjno-techniczne do konkursu ofert na utworzenie spółki z o.o.</b>	
<p>Konkurs ofert na utworzenie, na bazie istniejącego Zakładu Wodociągów i Kanalizacji w Szczecinie, spółki z ograniczoną odpowiedzialnością dla świadczenia usług na terenie miasta Szczecina, w szczególności w zakresie:</p> <ul style="list-style-type: none"><li>■ zaopatrzenia ludności w wodę do picia i dla potrzeb gospodarczych,</li><li>■ odbioru i przerobu ścieków oraz odbioru wód opadowych,</li><li>■ technologii wody i ścieków,</li><li>■ przerobu i wykorzystania osadów pościekowych,</li><li>■ obsługi procesów inwestycyjnych,</li><li>■ budowy, remontów oraz konserwacji sieci i instalacji wodnokanalizacyjnych oraz budynków publicznych.</li></ul> <p>1. Założenia podstawowe tworzenia spółki:</p> <ul style="list-style-type: none"><li>■ kapitał zakładowy nie mniejszy niż 7 miliardów złotych,</li><li>■ miasto wnosi udziały rzeczowe - w wysokości około 40% udziałów,</li><li>■ partnerzy zewnętrzni wnoszą gotówkę,</li></ul>	<ul style="list-style-type: none"><li>■ zyski spółki przez lata będą inwestowane w całości w rozwój spółki na terenie Szczecina.</li><li>2. Oferty zawierające dane o kondycji ekonomicznej i referencjach oraz proponowane warunki wejścia do spółki (ubezpieczenia) należy składać w Urzędzie Miejskim, pl. Armii Krajowej 1 - pokój 333, w terminie do dnia 30 września 1993 roku.</li><li>3. Blizsza informacja o konkursie można uzyskać pod numerem telefonu 233-458.</li><li>4. Rozpatrzenie ofert nastąpi w terminie do dnia 31 października 1993 r., a o wynikach oferty zostaną powiadomieni pisemnie.</li><li>5. Wybrani oferenci będą zaproszeni indywidualnie do rokowań odnośnie szczegółowych warunków umowy spółki.</li><li>6. Zastrzega się prawo odstąpienia od rozstrzygnięcia lub też unieważnienia konkursu bez podawania przyczyn.</li><li>7. Wszelkie koszty związane z uczestnictwem w konkursie ofert ponoszą oferenci.</li><li>8. Powołanie spółki nastąpi na mocy uchwały Rady Miejskiej w Szczecinie.</li></ul>

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**APPENDIX G: Privatization – Invitation for Tender**

## APPENDIX F: City Commission to Evaluate Privatization Proposals

The Mayor appointed the Qualifying Commission on October 26, 1993 to review offers made by outside investors to form a company on the basis of ZWIK - the water and sewer agency that now serves Szczecin. The expected purpose of the Company is to provide water and sewer services in the area of Szczecin.

The Commission has the following composition:

Kazimierz Trzcinski: Chairman	Director of City Engineering Department
Ewa Latka	Member of City Council
Andrzej Piotrowski	Member of City Council
Walenty Baranowski	Member of City Council
Stanislaw Lacki	Member of City Council
Andrzej Piaszczyński	Director of MZUK
Pawel Niedzwiedz	Director ZWIK
Marek Kocmiel (10/28/93)	Member of City Council

Union representatives have been invited to attend the Commission meetings and observe the proceedings. These representatives do not have the right to vote on Commission business. The union representatives are as follows:

Boguslaw Krasowski	Representative of Solidarity at ZWIK
Lucyna Wisniewska	Chairman of Independent Trade Union of Water Economy and Environmental Protection Employees of ZWIK
Zbigniew Smolinski	Chairman of Szczecin Solidarity 80 at ZWIK*

\* It is interesting to note that this union was one of the two original Solidarity union branches in 1980. The Gdansk branch expanded and became the national Solidarity union. Szczecin retains its original branch as Solidarity 80.

**APPENDIX F: City Commission to Evaluate Privatization Proposals**

Credit-worthiness will also depend upon the main partners, their assets, status and personal guarantees.

The main stress should be put on the possibility of obtaining low interest capital loans from banks and Polish, foreign or international funds, which would be allocated to municipal capital improvements (as mentioned above). The City of Szczecin would be the guarantor of these loans.

#### ***4. More Effective Management of the Enterprise***

At present, the multi-level management structure of the enterprise has a negative impact on management decision-making power, responsiveness to changes and management effectiveness. It also causes a confusion of responsibilities. This situation should improve after the privatization of water and sewer operations.

### **B. The City - Local Community**

#### ***1. Expansion and Improvement of the Water and Sewer Enterprise Condition.***

Both the City and the Company would benefit as mentioned above.

#### ***2. Capital Improvements and Municipal Improvements are Accomplished with Loans Obtained by the Company.***

The repayment of loans would be accomplished according to contracts with terms agreeable to both parties (one of the proposals was discussed above).

#### ***3. Lease Payment Obligation of the Company***

### **C. Summary**

Besides, when the City 1) has a considerable 40% share of the Company, 2) retains municipal assets and 3) enters particular contracts and agreements, it will fully protect the interests of the local community and it will have full control of Company operations and decision-making.

Szczecin, October 1993

By: Director of ZWIK, Pawel Niedzwiedz, MSc.

## **E. Profit Participation**

Those employees who buy shares in the limited Liability Company will have, as partners, rights to the annual net profit of the Company.

According to principles described earlier, during the first few years of Company operation, net profit will not be distributed to shareholders (a clear clause must be included in the Company contract). Profit will be allocated to enlarge the initial capital (assets) which will enlarge the value of the contributed shares at the same time.

In the case of a Joint Stock Company, profit will be distributed according to existing regulations or by-laws.

Another possible means for partners to benefit financially is to sell shares or stocks.

## **V. BENEFITS RESULTING FROM PRIVATIZATION**

### **A. Enterprise - Company**

#### **1. *Independent Financial Policy***

The Company will not be dependent on an annual budget that is approved by the City. It will be able to freely manage its capital and achieve beneficial financial economies.

It should also be mentioned that the Company interests should be the same as the interests of the City and its inhabitants. This should be manifested in increased effectiveness of operations, labor efficiency and implementation of long term technical and economic policy.

#### **2. *Development and Capital Improvement Strategy***

The Company should use its own means to develop the Company, renew depreciated assets and introduce modern technologies.

The strategy to improve the condition of the Company will be beneficial both for partners (decreased costs, improved economic results, enlargement of asset base, stability of operations) and for the gmina inhabitants (improvement of quality and quantity of services provided, expansion and modernization of municipal infrastructure, environmental protection).

#### **3. *Company Credit-Worthiness***

A company that has the status of a private company, with legal recognition and capital resources, will enhance its credit-worthiness in the eyes of contractors and financial institutions.

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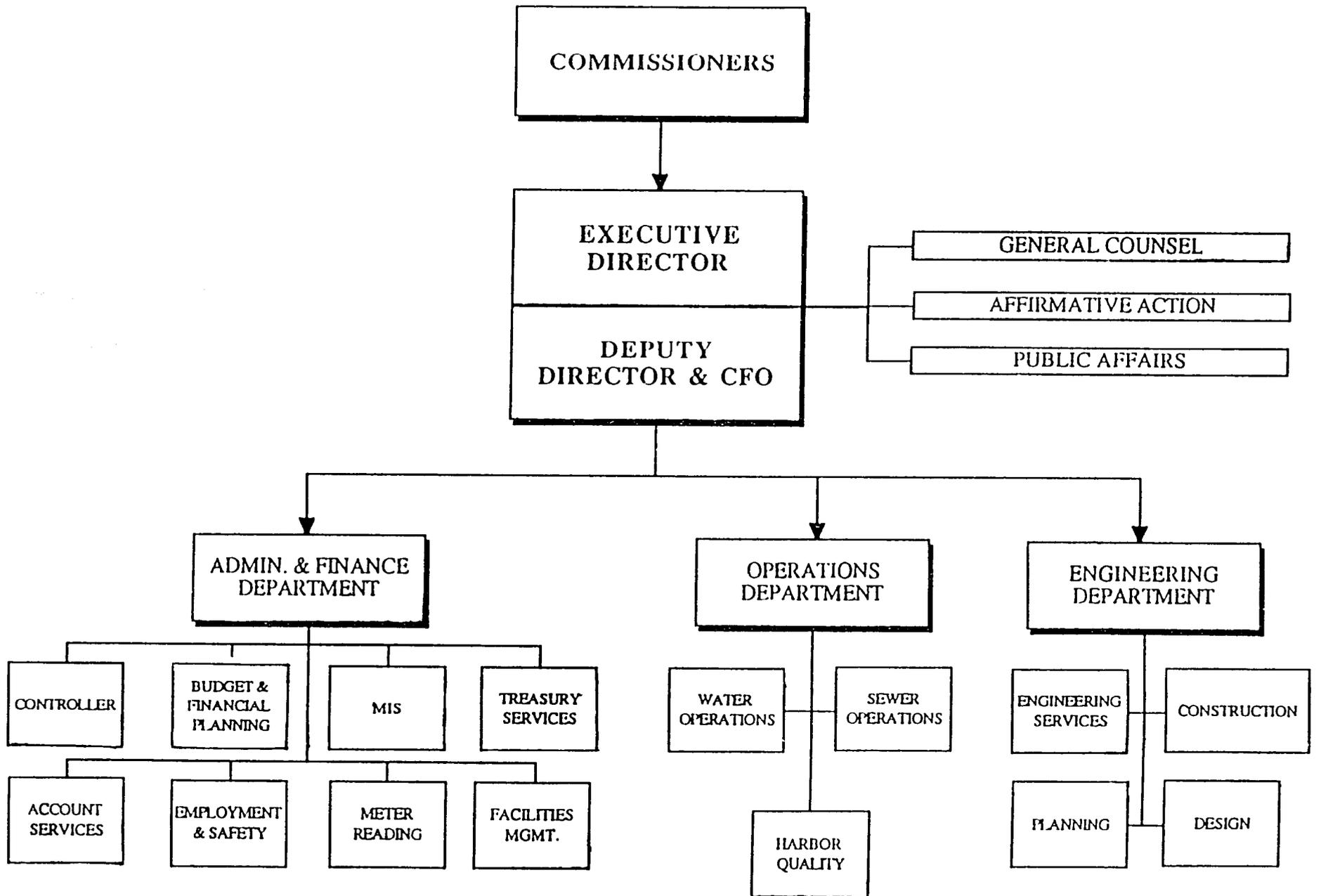
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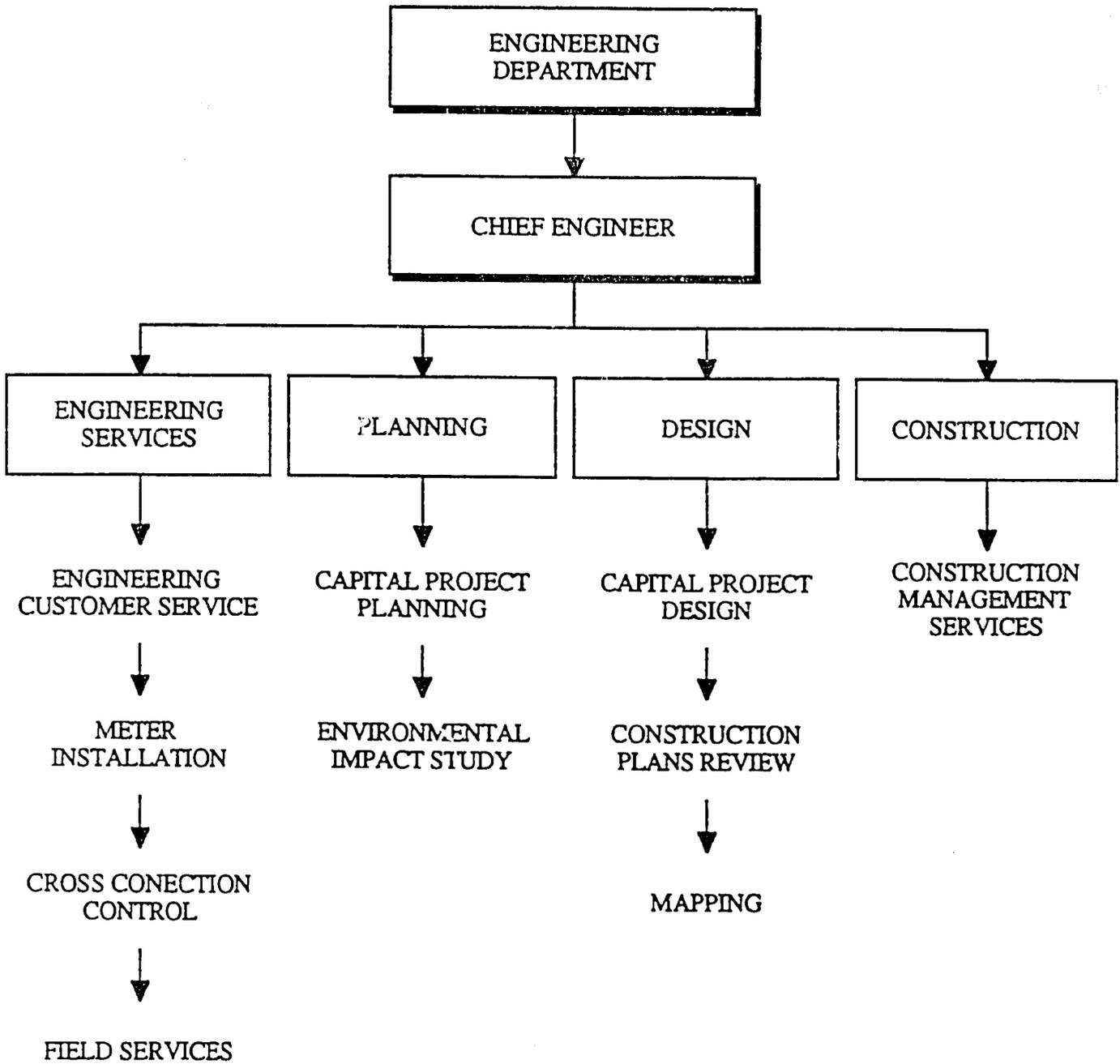
TABLE 2  
1993 CURRENT EXPENSE BUDGET

LINE ITEM SUMMARY

(000'S)

	1993 BUDGET	1992 BUDGET	VARIANCE	INCREA (DECREA
<b>REVENUES</b>				
<b>OPERATING REVENUES</b>				
BILLED CHARGES	\$209,321	\$187,542	\$21,779	1
BILLING ADJ/BAD DEBT/DISC	(32,129)	(22,786)	(9,343)	4
<b>TOTAL OPERATING REVENUES</b>	<b>177,192</b>	<b>164,756</b>	<b>12,436</b>	
<b>OTHER REVENUES</b>				
PRIOR YEAR SURPLUS	5,934	1,086	4,848	44
OTHER INCOME	9,366	9,046	320	2
INVESTMENT INCOME	5,316	4,426	890	-10
STABILIZATION FUND TRANSFER	0	3,000	(3,000)	
<b>TOTAL OTHER REVENUES</b>	<b>20,616</b>	<b>17,558</b>	<b>3,058</b>	<b>1</b>
<b>TOTAL REVENUES</b>	<b>197,808</b>	<b>182,314</b>	<b>15,494</b>	
<b>EXPENSES</b>				
<b>DIRECT EXPENSES</b>				
WAGES AND SALARIES	22,061	21,489	572	
OVERTIME	1,012	1,009	3	
BENEFITS	4,408	4,265	143	
<b>TOTAL LABOR COSTS</b>	<b>27,481</b>	<b>26,763</b>	<b>718</b>	<b>2</b>
SUPPLIES AND MATERIALS	2,235	1,815	420	23
REPAIRS & MAINTENANCE	7,752	7,274	478	6
SEMINARS/TRAINING	121	121	0	0
PROFESSIONAL SERVICES	1,418	1,440	(22)	-1
OTHER SERVICES	975	805	170	21
UTILITIES	437	360	77	21
SPACE/EQUIPMENT RENTAL	1,774	1,833	(59)	-3
INSURANCE	936	856	80	9
DAMAGE CLAIM	350	240	110	45
INVENTORY	385	378	7	1
CAPITAL OUTLAY	861	870	(9)	-1
<b>TOTAL DIRECT EXPENSES</b>	<b>44,725</b>	<b>42,755</b>	<b>1,970</b>	<b>4</b>
<b>FIXED EXPENSES</b>				
MWRA ASSESSMENT	112,202	100,455	11,747	11
RENEWAL & REPLACEMENT	10,537	9,258	1,279	13
DEBT SERVICE	22,640	21,265	1,375	6
ADDITIONS TO RESERVES	4,444	4,249	195	4
WORKING CAPITAL	3,260	4,332	(1,072)	-24
<b>TOTAL FIXED EXPENSES</b>	<b>153,083</b>	<b>139,559</b>	<b>13,524</b>	<b>9</b>
<b>TOTAL EXPENSES</b>	<b>197,808</b>	<b>182,314</b>	<b>15,494</b>	<b>8</b>

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## ENGINEERING DEPARTMENT

### Department and Program Organization

The Engineering Department includes the Chief Engineer's Office and four divisions:

- Engineering Services
- Engineering Planning
- Engineering Design
- Construction

### Mission Statement

The Engineering Department ensures the provision of high quality reliable water, sewer and drainage services by planning, designing and managing the construction of all Commission capital facilities.

### Highlights of 1992 Program Performance for the Engineering Department:

In 1992, the Engineering Department was responsible for a total of 65 Program Goals and New Initiatives. Below are selected 1992 program performance highlights for the Engineering Department.

1. **Track legislative and regulatory initiatives on the state and federal levels which would affect Commission operations and/or ratepayers. Work to educate decision-makers about legislation and regulations which will affect the Commission.**

The Engineering Department continues to track state and federal legislative and regulatory initiatives of potential impact to the Commission and/or ratepayers through work with the New England Water Works Association Legislative Affairs Committee, the New England Water Pollution Control Association, as well as review of Association of Metropolitan Sewerage Agencies, Association of Metropolitan Water Agencies, and American Water Works Association legislative updates. In-house counsel is informed as necessary.

2. **Ensure that the Commission continues to meet all requirements of the Safe Drinking Water Act.**

The Engineering Department continues its efforts to meet SDWA regulations applicable to the Commission, namely the Total Coliform Rule and the Lead and Copper Rule. The public education program for lead in drinking water was completed in December. Three communities, Worcester, Framingham and Lowell, requested and received permission to use the Commission's lead in drinking water brochure as a model in preparing their own.

- 3. Establish an emergency action team and plan to deal with any acute violation of the Safe Drinking Water Act to ensure the Commission's compliance with the Department of Environmental Protection procedures.**

As of January 1992, an emergency action team has been in place to handle any emergencies which will violate the Safe Drinking Water Act.

- 4. Monitor 700 large meters with a low average daily use and make recommendations for meter downsizing for greater usage accountability.**

In FY92, 915 meters were monitored, and 446 meters were recommended for downsizing.

- 5. Test and inspect semi-annually all backflow prevention devices permitted by the Massachusetts Department of Environmental Protection (MDEP) within the City of Boston.**

All MDEP permitted Backflow Devices scheduled for testing and inspection during FY92, have been completed. The total number of tests and inspections for the year was 8,152.

- 6. Investigate the 1,180 miles of the Commission's water distribution system for undetected leakage to reduce the amount of water the Commission must purchase from the MWRA.**

In FY92, Field Services investigated 1,086 miles of the Commission's water distribution system. This survey resulted in the location of 339 undetected leaks wasting a estimated 3.6 million gallons of water per day. All of the leaks detected have been repaired.

- 7. Coordinate Commission's compliance with Federal Safe Drinking Water Act, especially lead and copper rule.**

The lead public education program was completed in early December. This included distribution of a brochure on lead effects to the Commission's 88,000 water customers, medical and welfare organizations, and public schools. Press releases were submitted to daily and weekly newspapers and public service announcements to television and radio stations.

- 8. Monitor, review, and assist with all phases of the Central Artery/Third Harbor Tunnel Project as it affects Commission-owned facilities.**

This project is ongoing with all phases addressed. The Commission has signed agreements for design review and construction monitoring. Work affecting Commission facilities has begun and is being monitored on a daily basis.

**9. Ensure that 99% of all ongoing construction projects managed by the Construction Division are on schedule.**

In FY92, over 96% of all contracts managed by the Construction Division were on schedule (52 out of 54 projects on or ahead of schedule).

**10. In conjunction with the Engineering Field Services division, downsize 100 large meters (1 1/2" and larger), and 60 meters (1" and smaller) per quarter for greater usage accountability.**

In FY92, staff downsized 679 meters 1 1/2" and larger and 376 meters 1" and smaller.

**1993 Department Goals**

- o Assist in constructing and maintaining a structurally sound, efficient system for the delivery of water and sewer services.
- o Ensure that all construction affecting Commission facilities is performed in accordance with Commission standards by providing inspections and overseeing contractor compliance and payment.
- o Provide engineering related services and data to other Commission departments and to the public and private sector, protect the public water supply from contamination through inspection and testing.
- o In conjunction with the Director of Administration and Finance, develop and implement a program to read meters for the Commission's 2,500 largest accounts through centralized automatic meter reading technology.
- o Insure that the Commission's water and wastewater system's integrity is protected and enhanced with respect to the Central Artery/Third Harbor Tunnel Project.
- o Report to Senior Staff on Commission coordination and interaction with the MWRA and its Advisory Board, Central Artery/Tunnel Project and any other major public or private agencies which may impact the Commission.
- o In conjunction with the Office of General Counsel, track federal and state legislative and regulatory initiatives, which would affect Commission operations and/or issues which require additional capital spending or affect the Commission's operating budget.
- o In conjunction with General Counsel, oversee the closure and sale of Calf Pasture Pumping Station. The conveyance should be completed by February, 1993 (resolution is ultimately dependent upon funding by University of Massachusetts).

- o Ensure that the Commission continues to meet all monitoring and reporting requirements of the Safe Drinking Water Act, Clean Water Act (NPDES) and MWRA Municipal Permit.
- o Investigate and develop new and innovative methods of reducing unaccounted-for water. Improve unaccounted-for water percentage from the current level of 25 percent to 20 percent by end of 1995. The annual goal is a reduction of 5 percent in unaccounted-for water.

**List of Programs:**

- Special Engineering Services
- Planning
- Design
- Construction

**Department Budget Summary**

The total 1993 budget for the Engineering Department is \$8,162,869, an increase of \$84,255 or 1% over the 1992 level. Projected increases in Wages and Salaries and Benefits account for the majority of the increase. Major line item costs for the Engineering Department are outlined below.

**Wages and Salaries**

The 1993 budget includes \$5,333,180 in Wages and Salaries, an increase of \$117,969 or 2% over the 1992 level. The proposed 1993 budget includes the attrition of two positions which reduces the total head count from 130 in 1992 to 128 in 1993. This line item includes funding for negotiated and anticipated wages and salaries for the remaining 128 employees, pension costs, and temporary employees.

**Overtime**

The 1993 budget includes \$206,766 for Overtime costs, a decrease of \$26,207, or 11% below the 1992 level. Overtime costs are primarily associated with construction contract inspections as well as meter downsizing.

**Supplies and Materials**

The 1993 budget for Supplies and Materials is \$161,581, a slight increase of \$303, or .2% over the 1992 level. Major expenditures include engineering supplies of \$149,801, office supplies of \$10,533, and miscellaneous supplies of \$1,247. A total of 66% of the budget for engineering supplies is related to meter downsizing efforts in order to increase water usage accountability.

### **Repair and Maintenance**

The 1993 budget is \$1,991,815, representing a decrease of \$8,456 or .4% from the 1992 level. Major costs included in this line item are \$1,450,000 for City of Boston permanent paving, and \$250,000 for temporary patching, sanding and salting of roadways. In addition, \$211,500 is budgeted for permits required by the City of Boston for street openings.

### **Seminars, Training, and Meetings**

The 1993 budget for Seminars, Training and Meetings is \$31,890, which represents an increase of \$290, or 1% over the 1992 budget. This budget includes costs for attendance at various American Water Works Association and New England Water Works Association conferences and training seminars.

### **Professional Services**

The 1993 budget for Professional Services is \$152,150, a decrease of \$40,980 or 21% from the 1992 level. Expenditures in this line item are for water and wastewater analyses to comply with federal, state, and local regulations, funding for the household hazardous waste program, drafting services, and diving inspection services.

### **Other Services**

The 1993 budget of \$94,187 represents an increase of \$27,136 or 41% over the 1992 budget. Included in this line item is funding of \$38,055 for memberships, dues, subscriptions to various professional engineering organizations. Funds for the reproduction of water and sewer maps and miscellaneous printing are budgeted at \$51,590.

### **Capital Outlay**

The total 1993 budget for this line item is \$125,900, which represents a decrease of \$19,700 or 14% from the 1992 level. The majority of these expenses include funding of \$86,000 for replacement vehicles, and \$30,400 for equipment costs necessary to reduce unaccounted- for water.

TABLE 34

## BOSTON WATER AND SEWER COMMISSION

## 1993 CURRENT EXPENSE BUDGET

## ENGINEERING DEPARTMENT

EXPENSE LINE ITEM	1991 ACTUAL	1992 BUDGET	1993 BUDGET	DOLLAR VARIANCE	PERCENT VARIANCE
WAGES AND SALARIES	\$4,866,532	\$5,215,211	\$5,333,180	\$117,969	2.3%
OVERTIME	225,241	232,973	206,766	(26,207)	-11.2%
BENEFITS	49,448	31,500	65,400	33,900	107.6%
SUPPLIES AND MATERIALS	237,776	151,278	161,581	303	0.2%
REPAIRS & MAINTENANCE	1,524,614	2,000,271	1,991,815	(8,456)	-0.4%
SEMINARS/TRAINING/MEETING	20,465	31,600	31,890	290	0.9%
PROFESSIONAL SERVICES	88,978	193,130	162,150	(40,980)	-21.2%
OTHER SERVICES	51,884	67,051	94,187	27,136	40.5%
UTILITIES	0	0	0	0	N/A
SPACE/EQUIPMENT RENTAL	0	0	0	0	N/A
INSURANCE	0	0	0	0	N/A
DAMAGE CLAIM	0	0	0	0	N/A
INVENTORY	0	0	0	0	N/A
CAPITAL OUTLAY	142,030	145,600	125,900	(19,700)	-13.5%
TOTAL DIRECT EXPENSES	<u>\$7,206,968</u>	<u>\$8,078,614</u>	<u>\$8,162,869</u>	<u>\$84,255</u>	<u>1.0%</u>

TABLE 35  
ENGINEERING DEPARTMENT  
PERSONNEL SUMMARY

DIVISION / PROGRAM	1991 BUDGET	1992 BUDGET	DECEMBER		93/92 BUDGET CHANGES COMMENT
			1992 BUDGET	1993 BUDGET	
CHIEF ENGINEER'S OFFICE	5	5	5	5	0
SPECIAL ENGINEERING SERVICES	76	76	71	70	-1 1 FOREMAN ATTRITED
PLANNING	4	4	6	6	0
DESIGN	18	18	21	20	-1 1 DRAFTER ATTRITED
CONSTRUCTION	27	27	27	27	0
	130	130	130	128	-2

**APPENDIX M: Sample Contract for Management Services**

## **SAMPLE**

### **OPERATIONS MAINTENANCE AGREEMENT**

This Agreement describes mutual responsibilities, overall objectives and performance expectations of the operation partnership entered into here by Woodard & Curran Inc. whose address is 41 Hutchins Drive, Portland, Maine, 04102 (W&C) a Maine corporation and \_\_\_\_\_ whose address is \_\_\_\_\_, a \_\_\_\_\_ corporation, (the "Client") and their successors and assigns.

#### **RECITALS**

WHEREAS, the Client is the owner of a water/wastewater treatment facility that is described in Exhibit A to this Agreement; and,

WHEREAS, the Client desires to engage W&C to operate and maintain the Facilities on behalf of the Client and W&C desires to accept such engagement, all upon the terms and conditions hereafter set forth; and,

WHEREAS, the Client is authorized by law to enter into this Agreement.

NOW, THEREFORE, in consideration of the premises and the mutual covenants herein contained, the parties agree as follows:

#### **ARTICLE 1 - SCOPE OF SERVICES**

1.01 Commencing on \_\_\_\_\_, or such other date mutually acceptable in writing to W&C and Client (the "Effective Date"), W&C will provide all routine operation and maintenance of the Client's Facilities on a 7 day per week basis within the design capabilities of the Facilities as described in Exhibit A to this Agreement ("Description of Facilities")

1.02 Within ninety (90) days after the Effective Date of this Agreement, W&C shall implement standard operating procedures and place into operation preventative maintenance and process control programs, including documentation of operation and maintenance procedures conducted at the plant and a written analysis of the condition of all equipment in the Facilities. Such records shall be available for inspection by the Client at all reasonable times.

1.03 W&C will assume responsibility for the expenses incurred in the routine operation and maintenance of the Facilities, including personnel services; and preventive and corrective maintenance including contracted services, materials and supplies including the replacement of parts attributable to normal wear and tear up to an annual aggregate allowance of \_\_\_\_\_ as detailed in the accompanying proposal.

1.04 Subject to existing Client contracts for outside laboratory services, which W&C agrees to honor, W&C will assume complete operation and management of the Client's laboratory. The majority of all analyses required for process control and effluent monitoring will be conducted on-site. Backup will be provided by outside labs as required.

1.05 Additional operation and maintenance services not considered routine, or which are required as a result of flood, fire, Act of God or other force majeure, civil disturbance or other reasons beyond W&C's control, are not covered within the scope of this Agreement. If requested, W&C will assist the Client in obtaining or providing the operation and maintenance so required and W&C will be paid for such assistance in accordance with Section 3.02 of this Agreement.

1.06 W&C will provide employees of W&C, one of which shall be a properly certified Plant Manager, for the staffing of the Facilities. Backup services will be provided by W&C corporate personnel. In addition, W&C will be on call 24 hours per day, 7 days per week for emergency situations. W&C shall provide employees of W&C to provide all services required of W&C by this Agreement and in such situation, W&C shall be deemed to be an independent contractor for purposes of applicable wage, fringe benefit and worker compensation laws.

Anticipating that the Client's existing employees will constitute a majority of the workforce employed by W&C in the operation of the Client's water/wastewater treatment facilities, W&C will, as the successor employer to the bargaining relationship will recognize and bargain with \_\_\_\_\_ as the representative of an appropriate unit in the operation by W&C of the Client's water/wastewater treatment facilities, upon request by the bargaining unit.

1.07 W&C shall communicate with the designated Client liaison as described in Section 2.01 (h) of this Agreement, regarding decisions and other matters related to the operation of the Facilities. In addition, W&C shall advise the Client and serve as the Client's liaison to regulatory agencies and industrial users in matters related to the operation of the Facilities.

1.08 W&C will supervise all regulatory compliance and financial transactions, except for the enforcement of the Client's Sewer Use Ordinance pertaining to the day-to-day operation of the Facilities. Subject to the limitations of this Section, W&C shall operate the Facilities in compliance with state and federal regulatory requirements. W&C will pay all fines imposed for process upsets and violation of permit discharge limits unless the process upsets or violations are attributable to:

- (a) User discharges to the Facilities in violation of the Sewer Ordinance;
- (b) Pollutants which are not within the Design Capabilities of the Facilities, including, but not limited to soluble oil, heavy metals, excessive suspended solids, and excessive organic loadings; and,
- (c) The malfunction or failure of equipment which is not solely due to the negligent acts, errors or omissions of W&C.

1.09 W&C shall exercise the due care in performing its obligations and duties under this Agreement normally and reasonably provided with respect to similar contract services. W&C shall not be liable for any claim, damage, cost or expense (including attorney fees) caused by malfunction or failure of the Facilities or any component thereof or other liability or loss not caused by the negligent acts, errors or omissions of W&C.

1.10 W&C will provide and maintain at all times during the term of this Agreement the following minimum insurance coverages:

- (a) Workers Compensation Insurance in compliance with the statutes of the State of \_\_\_\_\_ which has jurisdiction of W&C employees engaged in the performance of services hereunder to a limit of FIVE HUNDRED THOUSAND DOLLARS (\$500,000.00):

- (b) Comprehensive General Liability Insurance with a minimum combined single limit of FIVE MILLION DOLLARS (\$5,000,000.00), including the broad form property damage endorsement; and,
- (c) Automobile Liability Insurance (owned, non owned or hired units) minimum combined single coverage limit of ONE MILLION DOLLARS (1,000,000.00).

W&C will furnish the Client with Certificates of Insurance as evidenced that policies providing the required coverages and limits are in full force and effect. In addition, W&C shall name the Client as additionally insured on the general liability policy and automobile liability policy. Such policies shall provide that no less than thirty (30) days advance notice of cancellation, termination or alteration shall be sent directly to W&C and the Client.

1.11 W&C will prepare all reports required by state and federal regulatory agencies and will maintain all records deemed useful by W&C and Client to monitor and control the operation of the Facilities.

1.12 All facility records, data, software and information including but not limited to operation reports, laboratory data, budgetary and financial information shall remain the property of the Client. All operating procedure guidelines, preventive maintenance and safety programs, and plant evaluation reports shall upon termination of this Agreement, remain the property of the Client.

1.13 W&C shall indemnify and hold Client, its employees and agents, harmless under this Agreement for all claims, damages, costs or expenses caused by malfunction or failure of the Facilities or any components thereof or other liability or loss including injury, death, or damages to any person or property related in any way to the performance of this Agreement to the extent such claims, damages, costs, expenses, liability or loss are not caused by the negligent acts, errors or omissions of Client. This provision shall survive the termination of this Agreement.

1.14 W&C shall provide such engineering and technical services required to identify, evaluate and prepare preliminary recommendations necessary to ensure the proper operation and maintenance of the facility.

1.15 W&C shall provide additional design engineering and technical services which are in addition to the services detailed in Section 1.14, as and when requested by Client. W&C shall be compensated for such additional engineering and technical services in the manner provided by Section 3.03 of this Agreement. A detailed scope of work and cost estimate will be provided and written authorization to proceed required before work is initiated.

## **ARTICLE II - RESPONSIBILITIES OF THE CLIENT**

- 2.01 As part of this Agreement, Client agrees to assume the following responsibilities:
- (a) Client shall maintain in full force and effect, in accordance with their respective terms, all guarantees, warranties, easements, permits, licenses and other similar approvals and consents received or granted to Client as Owner of all Facilities and component parts thereof;
  - (b) Client shall be responsible for expenditures for all capital replacement provided that W&C will provide justification and review of the related factors for such expenditures.

- (c) Client shall enforce the Sewer Ordinance, including the billing and collection of all fees and rates pertaining to the Facilities;
- (d) Client shall at all times provide access to the Facilities for W&C, its agents and employees;
- (e) Client shall provide W&C the use of all existing equipment owned by the Client, necessary for the operation and maintenance of the Facilities;
- (f) Client shall be responsible for damage and liability to the Facilities or components thereof caused by flood, fire, Acts of God or other force majeure, civil disturbance, or misuse of property caused other than solely by the negligent acts, errors or omissions of W&C.
- (g) Client shall be responsible for all fines imposed for process upsets and violations of discharge limits attributable to the operation and maintenance of the Facilities to the extent outside W&C's responsibility as set forth in Section 1.08;
- (h) Client shall designate an individual to act as liaison with W&C in connection with the performance of services by W&C under this Agreement; and,
- (i) Client shall maintain and repair sewers, clean outs and outfalls and other appurtenances not constituting the Facilities.

2.02 Client shall maintain in full force and effect all existing policies of property and general liability insurance pertaining to the Facilities. Client shall furnish W&C with Certificates of Insurance as evidence that such policies are in full force and effect. Such policies shall provide that no less than thirty (30) days advance notice of cancellation, termination or alteration shall be sent directly to W&C and the Client.

2.03 Client shall indemnify and hold W&C, its employees and agents, harmless under this Agreement for all claims, damages, costs or expenses caused by malfunction or failure of the Facilities or any components thereof or other liability or loss including injury, death, or damages to any person or property related in any way to the performance of this Agreement to the extent such claims, damages, costs, expenses, liability or loss are not caused by the negligent acts, errors or omissions of W&C. This provision shall survive the termination of this Agreement.

### **ARTICLE III - COMPENSATION**

3.01 As compensation for the standard services rendered by W&C pursuant to this Agreement, the Client shall pay to W&C the sum of \$\_\_\_\_\_ per month during the first 12 months of this Agreement, commencing with the Effective Date.

3.02 The monthly compensation provided in Section 1, above, shall be reviewed annually on or before the annual anniversary of the Effective Date and may be adjusted by a mutually acceptable cost of living index to account for inflation or to account for changes in costs incurred by W&C in performing this Agreement due to increases and/or decreases in the Facilities loading.

3.03 Costs for additional personnel required for operation and maintenance provided by W&C pursuant to Section 1.05 shall be billed separately at the actual cost to W&C of labor, including overhead, overtime and materials, plus 10%.

3.04 Costs for additional engineering and other technical services requested by Client pursuant to Section 1.15, above, shall be billed in accordance with the terms and conditions set forth in cost estimate provided pursuant to Section 1.15.

#### **ARTICLE IV - TERM OF AGREEMENT**

4.01 This Agreement shall remain in full force and effect for three (3) years from the Effective date.

4.02 The term of this Agreement may be extended for consecutive terms so mutually agreed by Client and W&C.

#### **ARTICLE V - TERMINATION**

5.01 This Agreement may be terminated upon thirty (30) days written notice given by Client to W&C for default by W&C or in the event a federal or state regulatory agency fines Client, which fine W&C is required to pay by the terms of Section 1.08 above, and in the event of a default by W&C, W&C's failure to appropriately cure the default within such thirty (30) day period.

5.02 This Agreement may be terminated upon (30) days written notice given by W&C to Client for default by Client and Client's failure to appropriately cure the default with such thirty (30) day period.

5.03 This Agreement may be terminated by either W&C or the Client for any reason by giving ninety (90) days written notice to the other party.

#### **ARTICLE VI - MISCELLANEOUS**

6.01 Any temporary or portable equipment which is provided by W&C during the term of this Agreement and which is not deemed part of the Facilities shall remain the property of W&C upon termination of this Contract. W&C shall not make any capital replacements of the Facilities or any component thereof without the prior written approval of the Client.

6.02 This Agreement, together with the written Proposal for Contract Operations dated \_\_\_\_\_, submitted by W&C to Client, represents the entire Agreement of the parties and may only be modified or amended in a writing, signed by both parties.

6.03 Written notices required to be given under this Agreement shall be deemed given when mailed by first class mail, to W&C Attention: W.A. Peterson, Vice President and to Client, \_\_\_\_\_, at the addresses set forth for each in the opening paragraph of this Agreement.

6.04 No waiver, discharge, or renunciation of any claim or right of W&C arising out of breach of this Agreement by Client shall be effective unless in writing signed by W&C and supported by separate consideration.

6.05 This Agreement shall be deemed to have been made in \_\_\_\_\_ and shall be governed by, and construed in accordance with, the laws of the State of \_\_\_\_\_.

6.06 Any dispute arising pursuant to this Agreement shall be submitted to arbitration in accordance with the rules of the American Arbitration Association, the award, of the Arbitrator to be final and binding on the parties.

IN WITNESS THEREOF, W&C, by its duly authorized Officer, and the Client, by its duly authorized Administrator, have executed this Agreement as to the date and year first above written.

DATED at \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_

Attested to:

\_\_\_\_\_

\_\_\_\_\_

Client Name

By: \_\_\_\_\_

WOODARD & CURRAN INC.

By: \_\_\_\_\_

W.A. Peterson, Vice President

**OPERATION AND MAINTENANCE AGREEMENT  
FOR WASTEWATER TREATMENT FACILITIES**

EXHIBIT A

Description of Facilities and Design Capabilities

The Facilities and Design Capabilities of the two wastewater treatment plants and the collection system in \_\_\_\_\_ are as set forth in the original engineering plans and specifications for the Facilities and as such plans and specifications have been subsequently amended or modified.

**APPENDIX N: City's Contract for Privatizing Waste Collection Service**

## Basic Agreement

- I. Parties of this agreement state that the limited liability company created by them is to perform economic activities.

The limited liability company, hereinafter called Rethmann - Szczecin - Recycling Ltd. (the company can legally use the name of the city, e.i Szczecin in its own name; without any legal consequences).

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The company is located in the city of Szczecin and can operate within the Polish State's boundaries

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This agreement is concluded for the unlimited period of time.

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The purpose of the company is to render the following purposes:

- (a) - solid and liquid waste disposal, especially from households, waste products, industrial waste port/harbour waste, etc.
  - (b) economic reuse of waste, consisting in waste collection, its recycling and disposing for further production or energy-related purposes, safe storage and other uses.
  - (c) clean roads; construction and maintenance of waste treatment installation and system construction, maintenance and reclamation of waste storage yards
  - (d) clean roads, streets, buildings, ducts / channels, retention tanks; maintenance of sanitation installation and facilities/premises, and other services related to tidiness keeping
  - (e) services related to prevention and elimination of winter impact on road safety
  - (f) port water and land cleaning
- 

1. The initial capital of the company is: 35.000.000.000 Polish zloty ( 35 billion), and composed of the following equity: 35.000 shares of 1.000.000 zł (1 million zł) each.
  2. Equity shares are equal and indivisible.
  3. Each partner can possess more than one share.
  4. Equity shares may be settled by cash or non-pecuniary contribution.
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Shares composition: ( equity capital)

1. Rethmann Recycling GmbH has the following equity shares: 21.000 shares of 1.000.000 each of the aggregate amount of 21.000.000.000 zł, and they are covered by:
  - pecuniary contribution in the Polish currency, obtained from selling in the bank foreign exchange, with the Polish National Bank's purchase rate of 5.250.000.000.zł.
  - non-pecuniary contribution of the aggregate value of 15.750.000.000. zł ( recycling truck etc)

- II. The City of Szczecin possesses 14.000 shares of 1.000.000 zł, of the aggregate amount of 14.000.000.000 zł, covered by non-pecuniary contribution -(trucks, etc).
- 

The partners agree upon that non-pecuniary assets mentioned above will be transferred to the limited liability company within the duration of 6 months since the date of its registration in the Commercial Register Book, which makes it possible for Rethmann Recycling GmbH to cover up to 75% of its movable assets( trucks,etc).

Experts of the two parties will evaluate the value of their contributions.

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Shares may be sold off but the consent by the Partner's Meeting is required to do this. A written consent is given on the basis of the Board's resolution.

Partners have the priority right with regard to the shares offered for sale-off. Within 30 days since the date of submission of the written offer to the Board, including the information on a potential purchaser and the transaction price, the remaining partners are to get ready to buy the shares.

If many partners become interested in buying shares, they will be entitled to buy stocks pro rate to their own shares. Also, each of the partners may give up his right in favour of other partners. In case when none of the partners makes use of the priority right, the contribution may be sold according to the owner's wish or choice. If the Partners Meeting refuses to give its consent and if it fails to indicate a buyer within the period of three months, or if the indicated buyer does not offer a required price in due time, shares may be sold off to any other physical or legal entities.

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Shareholders agree that the provisions made above do not apply if:

the city sells its shares in the amount not bigger than 3.500 to the employees of the Municipal Sanitary Services Company in Szczecin on the day of the company's registration in the Commercial Register Book, provided that the cession of shares is made within 6 months since the date of the registration.

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During each year of its operation, the equity capital of the Company may increase by a sum not bigger than 35.000.000.000 zł via an increase in the number of shares. An increase of the equity capital within the above mentioned limits do not change the provisions of this agreement.

The time, amount to be increased and the procedure of distribution of shares will be defined by the resolution adopted by the Partners Meeting.

Shareholders are obligated to pay extra charge. An increase will be made pro rate to the own shares, but all in all they cannot exceed present double amount of equity capital. Procedures and time limits, as well as delays and their legal consequences will be specified in the resolution of the Partners Meeting.

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1. The equity capital may be lowered.
  2. Shares of partners may be amortized / remitted.
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1. The structure of the company:

- a. Partners Meeting
- b. Company's Management
- c. Supervisory Board

2. Partners' Meeting is responsible for:

- a. analysing and approving reports, balance sheet and profit and losses bill for the previous year
  - b. taking resolutions on the distribution of profit and methods/procedures of settling losses and the company's management approval of their activities/ fulfilling their duties
  - c. taking resolutions on the forms of sale, lease of the company or its parts
  - d. giving consent for transferring and debiting the shares
  - e. establishing or liquidating company(ies), its branches, entering into partnerships with other economic institutions/organizations.
  - f. adopting annual economic-financial plan of the company, especially its investment plans.
  - g. specifying salaries for the members of the Supervisory Board
  - h. appointing and dismissing members of the Company's Management, chartered accountant to revise/verify financial reports of the company
  - i) adopting of internal by-laws of the company, including all legal actions that need a consent on part of the Partners' Meeting.
- 

1. Resolutions are adopted unanimously by Partners' Meeting, provided Parliamentary Acts the contract state differently. One share constitutes one vote. Partners can vote either for or against the resolution- and only such votes are considered as valid.
2. 3/4 majority of votes is required in the following cases:
  - a. resolutions concerning an appointment or dismissal of members of the Company Management
  - b. resolutions on annual economic-financial plans of the company
  - c. resolutions on giving a consent to guarantee or issue a bank bill in the name of the company
  - d. resolutions on entering into other partnerships

- e. resolutions allowing for shares disposal
  - f. resolutions specifying terms, time periods and the amount of an increased initial capital
  - g. resolutions on additional payments
  - h. resolutions on any changes in the provisions of the contract
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Partners meet on the ordinary and extraordinary sessions in Szczecin, given a two week written notice.

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1. The Management is responsible for:

- a. abiding provisions of the contract
  - b. abiding provisions of the company's statute
  - c. abiding provisions included in the job contracts
  - d. abiding regulations included in the Commercial Code
  - e. obeying and executing the principle of economic management
  - f. executing an annual economic-financial plan of the company
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The management represents the company but it has to obtain a separate permit to initiate legal actions, as stated in the by-laws of the company.

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1. The Supervisory Board consists of five members appointed according to the following procedure:
- a. The City of Szczecin appoints two members, including a chairman.
  - b. Rethmann Recycling Ltd. appoints two members.
  - c. Partners' Meeting appoints one member, from among at least two candidates appointed during the general meeting of the employees.
  - d. By the time one member is appointed by the Partners' Meeting, the fifth one is appointed in the meantime by the City.
2. To make the Supervisory Board's resolution valid it is required that at least three of its members are present during the meeting.

The resolutions are adopted by an ordinary majority of votes. In case of dispute, the chairman's vote is a decisive one.

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The Supervisory Board controls the company all the time. Supervisory functions may be exercised collectively, and in the presence of at least three of its members.

In particular the Supervisory Board is responsible for:

- a. verifying the current balance and the profit-and-loss account as to its compliance with the documents and the actual state
- b. verifying the annual reports of the management and its motions as to the distribution of profits and settlement of losses
- c. submitting the written report to the Partners' Meeting, on the results of the above mentioned studies

- d. making motions to suspend or to dismiss the members of the Management
- e. appointing a plenipotentiary to manage the company if the management fails to represent the company.
- f. negotiating agreements with the members of the Management and the chartered accountants, and specifies their wages.

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The company is allowed to create special purposes funds. The governing rules in this regard will be defined in the resolution of the Partners' Meeting.  
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The trading year is understood as a calendar year. The first trading year begins with the date of registration of the company in the Commercial Register Book and terminates on 31st of December.  
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The company may be liquidated due to reasons indicated by the Commercial Code or if the Management decides so.  
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The Partners declare that the company will employ the workers of the Municipal Sanitary Services Company pro rate to the scope of the taken over services.  
The employment will not be decreased during the period of one year.  
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Following the three account years the partners will estimate the achievement of the company's objectives and will decide upon the continuation of the joint venture.  
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