

## WASTEWATER UTILITY PLANT ACCOUNTS

The wastewater utility plant accounts have been designed utilizing an account matrix. The matrix employs a list of object accounts which in effect act as control accounts. The object accounts are further segregated by the matrix into classifications by functions or subaccount. The instructions for segregating the object accounts to the function subaccount are contained in Accounting Instruction 32. Listed below are the object account descriptions.

### 351. Organization

This account shall include all fees paid to federal or state governments for the privilege of incorporation and expenditures incident to organizing the corporation, partnership or other enterprise and putting it into readiness to do business. A sample of items to be included in this account are listed below.

1. Actual cost of obtaining certificates authorizing an enterprise to engage in the public utility business.
2. Fees and expenses for incorporation.
3. Fees and expenses for mergers or consolidations.
4. Office expenses incident to organizing the utility.
5. Stock and minute books and corporate seal.

Note A:--This account shall not include any discounts upon securities issued or assumed; nor shall it include any costs incident to negotiating loans, selling bonds or other evidences of debt, or expenses in connection with the authorization, issuance and sale of capital stock.

Note B:--Exclude from this account and include in the appropriate expense account the cost of preparing and filing papers in connection with the extension of the term of incorporation unless the first organization costs have been written off. Where charges are made to this account for expenses incurred in mergers, consolidations or reorganizations, amounts previously included herein or in similar accounts in the books of the companies concerned shall be excluded from this account.

### 352. Franchises

A. This account shall include amounts paid to the federal government, to a state or to a political subdivision thereof in consideration for franchises, consents or certificates, running in perpetuity or for a specified term of more than one year, together with necessary and reasonable expenses incident to procuring such franchises, consents or certificates of permission and approval, including expenses of organizing and merging separate corporations, where statutes require solely for the purpose of acquiring franchise.

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B. If a franchise or certificate is acquired by assignment, the charge to this account in respect thereof shall not exceed the amount paid therefor by the utility to the assignor, nor shall it exceed the amount paid by the original grantee, plus the expense of acquisition to such grantee. Any excess of the amount actually paid by the utility over the amount specified shall be charged to account 426 - Miscellaneous Nonutility Expenses.

C. When any franchise has expired, the book cost thereof shall be credited hereto and charged to account 426 - Miscellaneous Nonutility Expenses, or to account 110.1 - Accumulated Amortization of Utility Plant in Service, as appropriate.

D. Records supporting this account shall be kept so as to show separately the book cost of each franchise.

Note:--Annual or other periodic payments under franchises shall not be included herein but in the appropriate expense account.

### 353. Land and Land Rights

This account shall include the cost of land and land rights used in connection with wastewater collection, pumping, treatment and disposal, reclaimed water treatment and distribution and general plant operations (See Accounting Instruction 24). A sample of items to be included in this account are listed below:

1. Bulkheads buried, not requiring maintenance or replacement.
2. Cost, first, of acquisition including mortgages and other liens assumed (but not subsequent interest thereon).
3. Condemnation proceedings, including court and counsel costs.
4. Consents and abutting damages, payment for.
5. Conveyancers' and notaries' fees.
6. Fees, commissions, and salaries to brokers, agents, and others in connection with the acquisition of the land or land rights.
7. Leases, cost of voiding upon purchase to secure possession of land.
8. Removing, relocating, or reconstructing property of others, such as buildings, highways, railroads, bridges, cemeteries, churches, telephone and power lines, etc., in order to acquire quiet possession.
9. Retaining walls unless identified with structures.
10. Special assessments levied by public authorities for public improvements on the basis of benefits for new

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roads, new bridges, new sewers, new curbing, new pavements, and other public improvements, but not taxes levied to provide for the maintenance of such improvements.

11. Surveys in connection with the acquisition, but not amounts paid for topographical surveys and maps where such costs are attributable to structures or plant equipment erected or to be erected or installed on such land.
12. Taxes assumed, accrued to date of transfer of title.
13. Title, examining, clearing, insuring and registering in connection with the acquisition and defending against claims relating to the period prior to the acquisition.
14. Appraisals prior to closing title.
15. Cost of dealing with distributees or legatees residing outside of the state or county, such as recording power of attorney, recording will or exemplification of will, recording satisfaction of state tax.
16. Filing satisfaction of mortgage.
17. Documentary stamps.
18. Photographs of property at acquisition.
19. Fees and expenses incurred in the acquisition of sewer rights, and grants.
20. Cost of fill to extend bulkhead line over land under water, where riparian rights are held, which is not occasioned by the erection of a structure.
21. Sidewalks and curbs constructed by the utility on public property.
22. Labor and expenses in connection with securing rights of way, where performed by company employees and company agents.

### 354. Structures and Improvements

This account shall include the cost in place of structures and improvements used in connection with wastewater collection, pumping, treatment and disposal, reclaimed water treatment and distribution and general plant operations (See Accounting Instruction 25). A sample of items to be included in this account are listed below:

1. Architects' plans and specifications including supervision.
2. Boilers, furnaces, piping, wiring, fixtures, and machinery for heating, lighting, signaling, ventilating and air conditioning systems, plumbing, vacuum cleaning systems, incinerator and smoke pipe, flues, etc.

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3. Bulkheads, including dredging, riprap fill, piling, decking, concrete fenders, etc., when exposed and subject to maintenance and replacement.
4. Commissions and fees to brokers, agents, architects and others.
5. Conduit (not to be removed) with its contents.
6. Damages to abutting property during construction.
7. Drainage systems.
8. Elevators, cranes, hoists, etc., and the machinery for operating them.
9. Excavation, including shoring, bracing, bridging, refill and disposal of excess excavated material, cofferdams around foundations, pumping water from cofferdam during construction, test borings.
10. Fences and fence curbs (not including protective fences isolating items of equipment, which should be charged to the appropriate equipment account).
11. Fire protection systems when forming a part of a structure.
12. Flagpole.
13. Floor covering (permanently attached).
14. Foundations and piers for machinery, constructed as a permanent part of a building or other item listed herein.
15. Grading and clearing when directly occasioned by the building of a structure.
16. Intrasite communication system, poles, pole fixtures, wires and cables.
17. Landscaping, lawns, shrubbery, etc.
18. Leases, voiding upon purchase, to secure possession of structures.
19. Leased property, expenditures on.
20. Lighting fixtures and outside lighting systems.
21. Marquee, permanently attached to building.
22. Painting, first cost.
23. Permanent paving, concrete, brick, flagstone, asphalt, etc., within the property lines.
24. Partitions, including movable.
25. Permits and privileges.
26. Power boards for services to a building.
27. Refrigerating systems for general use.
28. Retaining walls except when identified with land.
29. Roadways.
30. Roofs.
31. Scales, connected to and forming a part of a structure.
32. Water and wastewater systems, for general use.
33. Sidewalks, culverts, curbs and streets constructed by the utility on its property.



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- 34. Sprinkling systems.
- 35. Stacks -- brick, steel, or concrete, when set on foundation forming part of general foundation and steelwork of a building.
- 36. Steel inspection during construction.
- 37. Storage facilities constituting a part of a building.
- 38. Storm doors and windows.
- 39. Temporary heating during construction (net cost).
- 40. Temporary water connection during construction (net cost).
- 41. Temporary shanties and other facilities used during construction (net cost).
- 42. Topographical maps.
- 43. Vaults constructed as part of a building.
- 44. Watchmen's sheds and clock systems (net cost when used during construction only).
- 45. Water meters and supply system for a building or for general company purposes.
- 46. Water supply piping, hydrants and wells.
- 47. Yard surfacing, gravel, concrete, or oil (First cost only).
- 48. Tunnels, intake and discharge when constructed as part of a structure including sluice gates and those constructed to house.

### 355. Power Generation Equipment

A. This account shall include the cost installed of any equipment used for the production of power principally used in pumping operations.

B. Subaccounts shall be maintained hereunder for the cost of equipment used for each type of power generating equipment.

### 360. Collecting Sewers - Force

This account shall include all sewers which are used to lift sewage from a low elevation to a higher elevation. The force sewer will include that pipe between the discharge outlet of the lift station and the receiving manhole.

### 361. Collecting Sewers - Gravity

This account shall include the installed cost of all gravity collecting sewers, interceptor, branch, trunk, lateral including service wye, and manholes and lampholes. Manholes shall be included as a separate unit of property.

### 362. Special Collecting Structures

Inverted siphon shall be included in this account but so

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distinctly noted; also any other special designed structures unusual to the wastewater system should be included herein but specifically noted as to what they do.

### 363. Services to Customers

This account shall include the installed cost of service sewers, from collection sewer to the customer's property or curb line. A sample of items to be included in this account are listed below:

1. Jointing and jointing material.
2. Manhole or clean-out.
3. Municipal inspection and permits
4. Pavement disturbed.
5. Protection of street openings.
6. Tapping saddle.
7. Service connection wye shall be included in account 363 instead of account 361 when company owns service sewers to customers property line.

### 364. Flow Measuring Devices

A. This account shall include the cost of flow measuring and recording equipment and initial testing used for measuring the quantity of wastewater or wastewater effluent delivered by customers, whether actually in service or held in reserve.

B. When flow measuring equipment is permanently retired from service, the amount at which it is included herein shall be credited to this account.

C. The records covering flow measuring equipment shall be so kept that the utility can furnish information as to the number of devices of each type and size in service and in reserve, as well as the location of each device included in this account.

### 365. Flow Measuring Installations

A. This account shall include the cost of labor employed, materials used and expenses incurred in connection with the original installation of customers' flow measuring equipment. A sample of items to be included in this account are listed below:

1. Floats, connections, flumes, or wires.
2. Special manhole, boxes, or other separate housing.

B. When a flow measuring installation is permanently retired from service, the cost thereof shall be credited to this account.

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### 366. Reuse Services

A. This account shall include the cost installed of reclaimed water service pipes and accessories leading to the customers' premises.

B. A complete reclaimed water service begins with the connection on the main and extends to but does not include the connection with the customer's meter. A stub service extends from the main to the property line, or the curb stop (curb stop cock).

C. Services which have been used but have become inactive shall be retired from utility plant in service immediately if there is no prospect for future use.

#### Items

1. Corporation stops or tees.
2. Gate valves and boxes.
3. Goose necks.
4. Jointing and jointing material.
5. Municipal inspection or permits.
6. Pavements disturbed.
7. Pipes.
8. Placing pipes and accessories.
9. Protection of street openings.
10. Service or curb boxes.
11. Service or curb stops (curb stop cocks).
12. Tapping main.
13. Tapping saddle.

### 367. Reuse Meters and Meter Installations

A. This account shall include the cost of meters, devices and appurtenances attached thereto, used for measuring the quantity of reclaimed water delivered to users, whether actually in service or held in reserve. It shall also include the cost of labor employed, materials used and expenses incurred in connection with the original installation of a customer's meters and devices and appurtenances attached thereto.

B. When a meter and/or meter installation is permanently retired from service, the amount at which it is included herein shall be credited to this account.

C. The records covering meters shall be so kept that the utility can furnish information as to the number of meters of each type and size in service and in reserve as well as the location of each meter included in this account.

D. A sample of items to be included in this account are listed

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below:

1. Meters, including badging and initial testing.
2. Remote meter registers.
3. Installation labor (first installation only).
4. Meter coupling.
5. Meter bars.
6. Meter yokes.
7. Meter fittings, connections and shelves.
8. Meter vaults or boxes.
9. Stops.

Note A:--This account shall not include meters for recording the output of a supply or treatment plant, or those located on mains. It includes only those meters to record reclaimed water delivered to customers, including company use and for those used elsewhere in the system if a type available for general use.

Note B:--The utility shall maintain a statistical record to show separately the number of each type and size of meter or group of types and sizes as carried in the continuing property record. Underlying records shall be kept so that the utility can determine readily for each such classification the number of company-owned meters in service (subdivided between active and inactive) and the number of meters carried herein but not in service, the latter to include meters undergoing repairs; and the number of meters in service owned by customers.

### 370. Receiving Wells

This account shall include the cost of constructing wells at pumping stations or at other junction points along the collecting system, used for intercepting wastewater for clearing and screening, transfer to a pumping well or otherwise further convey it along the collecting system to the treatment plant or point of final discharge. This account shall include any chemical feed apparatus and holding basins associated with the receiving well.

### 371. Pumping Equipment

This account shall include the cost installed of pumping equipment driven by electric power or diesel engines. A sample of items to be included in this account are listed below:

1. Motors or engines for driving pumps.
2. Pumps, including settings, gearing, shafting and belting.
3. Sewage piping within station, including valves.
4. Auxiliary equipment for motors and pumps such as oiling systems, cooling systems, condensers, etc.

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5. Electrical power lines and switching.
6. Foundations, frames, and bed plates.
7. Hoist units.

### 374. Reuse Distribution Reservoirs

This account shall include the cost in place of reservoirs, tanks and appurtenances used in storing reclaimed water for distribution. A sample of items to be included in this account are listed below:

1. Bridges and culverts.
2. Clearing land.
3. Dams.
4. Embankments.
5. Fences.
6. Foundations.
7. Gates and gate houses.
8. Landscaping.
9. Lighting systems.
10. Piping system within reservoirs.
11. Retaining walls.
12. Roads and paths.
13. Rust-proofing apparatus.
14. Sewer drain or storm sewer.
15. Spillways and channels.
16. Standpipes.
17. Tanks.
18. Towers.
19. Valves.

### 375. Reuse Transmission and Distribution System

A. This account shall include the cost installed of reclaimed water transmission and distribution mains and appurtenances. A sample of items to be included in this account are listed below:

1. Air chambers.
2. Blow-offs and overflows.
3. Bridges and culverts.
4. Electrolysis control equipment.
5. Gauges and recorders.
6. Jointing and jointing material.
7. Manholes.
8. Meters and appurtenances.
9. Municipal inspection or permits.
10. Pavement disturbed, including cutting and replacing pavement, pavement base and sidewalks.
11. Pipes.
12. Fire mains.
13. Fire Hydrants.

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B. Records supporting this account shall be so kept as to show separately the cost of mains of different sizes and types and of each tunnel, bridge, or river crossing.

### 380. Treatment and Disposal Equipment

This account shall include the cost installed of apparatus equipment and other facilities used for the treatment of wastewater, disposal of sewage wastes and the treatment of effluent for reuse. A sample of items to be included in this account are listed below:

1. Aeration chambers.
2. Chemical equipment.
3. Disinfection facilities.
4. Filters.
5. Imhoff tank.
6. Land fill equipment and appurtenances.
7. Monitoring equipment.
8. Oxidation pond or lagoon.
9. Sedimentation equipment.
10. Septic tank.
11. Screen unit.
12. Sludge system.
13. Trucks, tractors, or other equipment used primarily for sludge or other waste disposal.
14. Package mechanical treatment plant.
15. Sedimentation basin.
16. Sludge digestion equipment.
17. Sludge filtration or dewatering equipment.

### 381. Plant Sewers

This account shall include the cost installed of plant yard piping and appurtenances, and facilities required to dispose of treatment plant liquid effluent into the outfall sewer line. A sample of items to be included in this account are listed below:

1. Unit to unit sections of yard piping.
2. Valves and vaults.
3. Pipe tunnels and galleries.
4. Filter and filter backwash piping.

### 382. Outfall Sewer Lines

This account shall include the installed cost of sewer line carrying effluent from treatment facility to point of discharge. Includible in this account would be headwall or outlet.

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### 389. Other Plant and Miscellaneous Equipment

This account shall include the cost installed of all other intangible, collection system pumping, treatment and disposal, reclaimed water treatment and reclaimed water distribution plant not provided for in the foregoing accounts.

### 390. Office Furniture and Equipment

A. This account shall include the cost of office furniture and equipment owned by the utility and devoted to utility service, and not permanently attached to buildings, except the cost of such furniture and equipment which the utility elects to assign to other plant accounts on a functional basis. A sample of items to be included in this account are listed below:

1. Book cases and shelves.
2. Desk, chairs, and desk equipment.
3. Drafting room equipment.
4. Electronic data processing equipment.
5. Filing, storage and other cabinets.
6. Floor covering.
7. Library and library equipment.
8. Mechanical office equipment such as accounting machines, typewriters, etc.
9. Safes.
10. Tables.

B. If the utility has equipment includible in this account at more than one location, separate records shall be maintained for each location.

### 391. Transportation Equipment

This account shall include the cost of transportation vehicles used for utility purposes. A sample of items to be included in this account are listed below:

1. Airplanes.
2. Automobiles.
3. Bicycles.
4. Electrical vehicles.
5. Motor trucks.
6. Motorcycles.
7. Repair cars or trucks.
8. Tractors and trailers.
9. Other transportation vehicles.

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### 392. Stores Equipment

A. This account shall include the cost of equipment used for the receiving, shipping, handling and storage of materials and supplies.

B. If the utility has equipment includible in this account at more than one location, separate records shall be maintained for each location. A sample of items to be included in this account are listed below:

1. Chain falls.
2. Counters.
3. Cranes (portable).
4. Elevating and stacking equipment (portable).
5. Hoists.
6. Lockers.
7. Scales.
8. Shelving.
9. Storage bins.
10. Trucks, hand and power driven.
11. Wheelbarrows.

### 393. Tools, Shop and Garage Equipment

This account shall include the cost of tools, implements, and equipment used in construction, repair work, general shops and garages and not specifically provided for or includible in other accounts. A sample of items to be included in this account are listed below:

1. Air compressors.
2. Anvils.
3. Automobile repair shop equipment.
4. Battery charging equipment.
5. Belts, shafts and countershafts.
6. Boilers.
7. Cable pulling equipment.
8. Concrete mixers.
9. Drill presses.
10. Derricks.
11. Electric equipment.
12. Engines.
13. Forges.
14. Furnaces.
15. Foundations and settings specially constructed for and not expected to outlast the equipment for which provided.
16. Gas producers.
17. Gasoline pumps, oil pumps and storage tanks.
18. Greasing tools and equipment.



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19. Hoists.
20. Ladders.
21. Lathes.
22. Machine tools.
23. Motor driven tools.
24. Motors.
25. Pipe threading and cutting tools.
26. Pneumatic tools.
27. Pumps.
28. Riveters.
29. Smithing equipment.
30. Tool racks.
31. Vises.
32. Welding apparatus.
33. Work benches.

### 394. Laboratory Equipment

A. This account shall include the cost installed of laboratory equipment used for general laboratory purposes and not specifically provided for or includible in other departmental or functional plant accounts. A sample of items to be included in this account are listed below:

1. Autoclaves.
2. Barometers.
3. Cameras.
4. Centrifuge.
5. Distilling apparatus.
6. Furnaces.
7. Microscopes.
8. Ovens.
9. Pitometers.
10. Rain gauges.
11. Refrigerators.
12. Scales.
13. Sterilizers.
14. Stop watches.
15. Testing machines.
16. Therometers.
17. Voltmeters.
18. Other bacteriological, electric, chemical hydraulic or research equipment.

B. If the utility has equipment includible in this account at more than one location, separate records shall be maintained for each location.

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### 395. Power Operated Equipment

This account shall include the cost of power operated equipment used in construction of repair work exclusive of equipment includible in other accounts. Include, also, the tools and accessories acquired for use with such equipment and the vehicle on which such equipment is mounted. A sample of items to be included in this account are listed below:

1. Air compressors, including driving unit and vehicle.
2. Back filling machines.
3. Boring machines.
4. Bulldozers.
5. Cranes and joists.
6. Diggers.
7. Engines.
8. Pile drivers.
9. Pipe cleaning machines.
10. Pipe coating or wrapping machines.
11. Tractors - Crawler type.
12. Trenchers.
13. Other power operated equipment.

Note:--It is intended that this account include only such large units as are generally self-propelled or mounted on moveable equipment.

### 396. Communication Equipment

This account shall include the cost installed of telephone, telegraph and wireless equipment for general use in connection with utility operations. A sample of items to be included in this account are listed below:

1. Antennae.
2. Booths.
3. Cables.
4. Distribution boards.
5. Extension cords.
6. Gongs.
7. Handsets, manual and dial.
8. Insulators.
9. Intercommunicating sets.
10. Loading coils.
11. Operators desks.
12. Poles and fixtures used wholly for telephone and telegraph wires.
13. Radio transmitting and receiving sets.
14. Remote control equipment and lines.
15. Sending keys.
16. Storage batteries.

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17. Switchboards.
18. Teleautograph circuit connections.
19. Telegraph receiving sets.
20. Telephone and telegraph circuits.
21. Testing instruments.
22. Towers.
23. Underground conduit used wholly for telephone or telegraph wires and cable wires.

### 397. Miscellaneous Equipment

This account shall include the cost of equipment, apparatus, etc., used in utility operations, and which is not includible in any other account. A sample of items to be included in this account are listed below:

1. Hospital and infirmary equipment.
2. Kitchen equipment.
3. Recreation equipment.
4. Radios.
5. Restaurant equipment.
6. Soda fountains.
7. Operator's cottage furnishings.
8. Electric signs advertising the corporate name or symbol, plant or facility name, or otherwise serving only the general purpose of acquainting the public with the facilities and services of the utility.
9. Other miscellaneous equipment.

Note:--Miscellaneous equipment of the nature indicated above wherever practicable shall be included in the utility plant accounts on a functional basis.

### 398. Other Tangible Plant

This account shall include the cost of tangible utility plant not provided for elsewhere.

**PUBLIC UTILITY CODE (66 PA.C.S.) - VALUATION OF ACQUIRED WATER  
AND WASTEWATER SYSTEMS FOR RATEMAKING PURPOSES**

**Act of Apr. 14, 2016, P.L. 76, No. 12**

**Cl. 66**

Session of 2016

No. 2016-12

HB1326

**AN ACT**

Amending Title 66 (Public Utilities) of the Pennsylvania Consolidated Statutes, in rates and distribution systems, providing for valuation of acquired water and wastewater systems for ratemaking purposes.

The General Assembly of the Commonwealth of Pennsylvania hereby enacts as follows:

Section 1. Title 66 of the Pennsylvania Consolidated Statutes is amended by adding a section to read:

**§ 1329. Valuation of acquired water and wastewater systems.**

(a) Process to establish fair market value of selling utility.--Upon agreement by both the acquiring public utility or entity and the selling utility, the following procedure shall be used to determine the fair market value of the selling utility:

(1) The commission will maintain a list of utility valuation experts from which the acquiring public utility or entity and selling utility will choose.

(2) Two utility valuation experts shall perform two separate appraisals of the selling utility for the purpose of establishing its fair market value.

(3) Each utility valuation expert shall determine fair market value in compliance with the Uniform Standards of Professional Appraisal Practice, employing the cost, market and income approaches.

(4) The acquiring public utility or entity and selling utility shall engage the services of the same licensed engineer to conduct an assessment of the tangible assets of the selling utility. The assessment shall be incorporated into the appraisal under the cost approach required under paragraph (3).

(5) Each utility valuation expert shall provide the completed appraisal to the acquiring public utility or entity and selling utility within 90 days of execution of the service contract.

(b) Utility valuation experts.--

(1) The utility valuation experts required under subsection (a) shall be selected as follows:

(i) one shall be selected by the acquiring public utility or entity; and

(ii) one shall be selected by the selling utility.

(2) The utility valuation experts shall not:

(i) derive any material financial benefit from the sale of the selling utility other than fees for services rendered; or

(ii) be an immediate family member of a director, officer or employee of either the acquiring public utility, entity or selling utility within a 12-month period of the date of hire to perform an appraisal.

(3) Fees paid to utility valuation experts may be included in the transaction and closing costs associated with acquisition by the acquiring utility or entity. Fees eligible for inclusion may be of an amount not exceeding 5% of the fair

market value of the selling utility or a fee approved by the commission.

(c) Ratemaking rate base.--The following apply:

(1) The ratemaking rate base of the selling utility shall be incorporated into the rate base of:

(i) the acquiring public utility during the acquiring public utility's next base rate case; or

(ii) the entity in its initial tariff filing.

(2) The ratemaking rate base of the selling utility shall be the lesser of the purchase price negotiated by the acquiring public utility or entity and selling utility or the fair market value of the selling utility.

(d) Acquisitions by public utility.--The following apply:

(1) If the acquiring public utility and selling utility agree to use the process outlined in subsection (a), the acquiring public utility shall include the following as an attachment to its application for commission approval of the acquisition filed pursuant to section 1102 (relating to enumeration of acts requiring certificate):

(i) Copies of the two appraisals performed by the utility valuation experts under subsection (a).

(ii) The purchase price of the selling utility as agreed to by the acquiring public utility and selling utility.

(iii) The ratemaking rate base determined pursuant to subsection (c) (2).

(iv) The transaction and closing costs incurred by the acquiring public utility that will be included in its rate base.

(v) A tariff containing a rate equal to the existing rates of the selling utility at the time of the acquisition and a rate stabilization plan, if applicable to the acquisition.

(2) The commission shall issue a final order on an application submitted under this section within six months of the filing date of an application meeting the requirements of subsection (d) (1).

(3) If the commission issues an order approving the application for acquisition, the order shall include:

(i) The ratemaking rate base of the selling utility, as determined under subsection (c) (2).

(ii) Additional conditions of approval as may be required by the commission.

(4) The tariff submitted pursuant to subsection (d) (1) (v) shall remain in effect until such time as new rates are approved for the acquiring public utility as the result of a base rate case proceeding before the commission. The acquiring public utility may collect a distribution system improvement charge during this time, as approved by the commission under this chapter.

(5) The selling utility's cost of service shall be incorporated into the revenue requirement of the acquiring public utility as part of the acquiring utility's next base rate case proceeding. The original source of funding for any part of the water or sewer assets of the selling utility shall not be relevant to determine the value of said assets.

(e) Acquisitions by entity.--An entity shall provide all the information required by subsection (d) (1) to the commission as an attachment to its application for a certificate of public convenience filed pursuant to section 1102.

(f) Postacquisition projects.--The following apply:

(1) An acquiring public utility's postacquisition improvements that are not included in a distribution improvement charge shall accrue allowance for funds used during construction after the date the cost was incurred until the asset has been in service for a period of four years or until

the asset is included in the acquiring public utility's next base rate case, whichever is earlier.

(2) Depreciation on an acquiring public utility's postacquisition improvements that have not been included in the calculation of a distribution system improvement charge shall be deferred for book and ratemaking purposes.

(g) Definitions.--The following words and phrases when used in this section shall have the meanings given to them in this section unless the context clearly indicates otherwise:

"Acquiring public utility." A water or wastewater public utility subject to regulation under this title that is acquiring a selling utility as the result of a voluntary arm's-length transaction between the buyer and seller.

"Allowance of funds used during construction." An accounting practice that recognizes the capital costs, including debt and equity funds that are used to finance the construction costs of an improvement to a selling utility's assets by an acquiring public utility.

"Entity." A person, partnership or corporation that is acquiring a selling utility and has filed or whose affiliate has filed an application with the commission seeking public utility status pursuant to section 1102.

"Fair market value." The average of the two utility valuation expert appraisals conducted under subsection (a)(2).

"Rate-making rate base." The dollar value of a selling utility which, for postacquisition ratemaking purposes, is incorporated into the rate base of the acquiring public utility or entity.

"Rate stabilization plan." A plan that will hold rates constant or phase rates in over a period of time after the next base rate case.

"Selling utility." A water or wastewater company located in this Commonwealth, owned by a municipal corporation or authority that is being purchased by an acquiring public utility or entity as the result of a voluntary arm's-length transaction between the buyer and seller.

"Utility valuation expert." A person hired by an acquiring public utility and selling utility for the purpose of conducting an economic valuation of the selling utility to determine its fair market value.

Section 2. This act shall take effect in 60 days.

APPROVED--The 14th day of April, A.D. 2016.

TOM WOLF

## **APPENDIX C**

### **OWNED PROPERTY & EASEMENTS OF VALUE**

- **30 Charter Oak Drive-easement-ROW-DELCORA signed 12-2014**
- **City of Chester**
- **Marcus Hook PS Deed**



DELAWARE COUNTY REGIONAL WATER QUALITY CONTROL AUTHORITY  
P.O. Box 999 • Chester, PA 19016-0999

December 9, 2014

Samantha Reiner  
Township Manager  
Township of Edgmont  
P. O. Box 267  
Gradyville, PA 19039

RE: Sanitary Sewer Easement and Right-of-Way Agreement  
30 Charter Oak Drive

Dear Ms. Reiner:

Enclosed is the above mentioned agreement signed and notarized by DELCORA. Please send us a copy once fully executed and recorded. Thank you.

Sincerely,

  
Barbara A. Nescio-Bonnett  
Office Manager

enclosure

cc: File

ADMINISTRATION

☐ 610-876-5523

☐ FAX: 610-876-2728

CUSTOMER SERVICE/BILLING

☐ 610-876-5526

☐ FAX: 610-876-1460

PURCHASING & STORES

☐ 610-876-5523

☐ FAX: 610-497-7959

PLANT & MAINTENANCE

☐ 610-876-5523

☐ FAX: 610-497-7950





# TOWNSHIP OF EDGMONT

1000 Gradyville Road  
PO Box 267  
Gradyville, Pennsylvania 19039  
610-459-1662 phone 610-459-3760 fax

*Orig: Adm. Dept.*  
**RECEIVED**  
DEC 05 2014  
BY: *2014-1204*

December 2, 2014

Robert A. Powell  
Manager, Business Development and Strategic Planning  
Delcora  
P.O. Box 999  
Chester, PA 19016-0999


## **Re: Sanitary Sewer Easement and Right of Way Agreement**

Dear Rob:

Please have the enclosed Easement and Right of Way Agreement signed, notarized and returned to me as soon as possible.

Feel free to give me a call with any questions.

Very truly yours,

  
Samantha Reiner  
Township Manager

Enclosure

Record and Return To:  
Edgmont Township  
P.O. Box 267  
Gradyville, PA 19039

Folio No. 19-00-00037-78

**DELCORA and EDMONT TOWNSHIP**

**SANITARY SEWER EASEMENT AND  
RIGHT OF WAY AGREEMENT – 30 CHARTER OAK DRIVE**

**THIS SANITARY SEWER EASEMENT AND RIGHT OF WAY AGREEMENT** (the "**Easement Agreement**"), made this \_\_\_\_\_ day of \_\_\_\_\_, 2014, among **DELAWARE COUNTY REGIONAL WATER QUALITY CONTROL AUTHORITY ("DELCORA")**, a body corporate and politic formed under the Municipality Authorities Act of 1945, as amended and reenacted, having an address of 100 E 5th St, Chester, PA 19013, **EDMONT TOWNSHIP** (the "**Township**"), a Pennsylvania Township of the Second Class, and having an address of 1000 Gradyville Road, P.O. Box 267, Gradyville, Pennsylvania 19039, and **ROBERT E. AND LAURI LEMBO GRAJEWSKI**, (collectively the "**Owner**"), having an address of 30 Charter Oak Drive, Newtown Square, Pennsylvania 19073.

**WITNESSETH:**

**WHEREAS**, the Owner owns a tract of land situate in Edgmont Township, Delaware County, Pennsylvania, as acquired by deed recorded on July 24, 2003 in Book 2861, Page 2284, in the Office of the Recorder of Deeds of Delaware County, Pennsylvania (the "**Property**"); said Property being commonly known and referred to as **30 Charter Oak Drive**, Edgmont Township, Delaware County, Pennsylvania and being identified as tax folio number **19-00-00037-78**;

**WHEREAS**, the Township, in cooperation with DELCORA is in the process of constructing public sewer facilities to serve the eastern portion of the Township, including the Property (the "**Public Sewer System**");

**WHEREAS**, as a part of the Public Sewer System DELCORA and the Township desire to obtain a perpetual sanitary sewer easement and right of way upon, across, over, under and through the Property of the Owner to connect the future Edgmont Township pump station no. 1 ("**EPS-1**") to an existing sanitary sewer easement and sanitary sewer infrastructure which, together with EPS-1, will become a part of the Public Sewer System serving the Property, among others; and

**WHEREAS**, the Owner has agreed to grant DELCORA and the Township the perpetual sanitary sewer easement and right of way under and subject to the terms of this Easement Agreement.

**NOW, THEREFORE**, in consideration of the mutual covenants hereinafter contained, and in consideration of the payment of **FORTY THOUSAND DOLLARS (\$40,000.00)** to the Owner, and other good and valuable consideration as set forth herein, the receipt and sufficiency of which is hereby acknowledged by the Owner, the Township and the Owner, each intending to be legally bound hereby, do hereby agree as follows:

1. **RECITALS**: The foregoing recitals and Exhibits, if any, are incorporated herein as if each was fully set forth below.
2. **SEWER LINES AND EASEMENT AREA**: The term "**Sewer Lines**" when used in this Easement Agreement shall be construed in the broadest sense and shall refer, without limitation, to sanitary sewer pipe, conduit, manholes, drains, markers, service connections and other appurtenances to be constructed by DELCORA for the Township as part of Public Sewer System, meeting the specifications of the consulting engineers of DELCORA and the Township, as approved by DELCORA and the Township and necessary or desired for the connection of the Sewer Lines to the Public Sewer System, all of which shall be located within the sanitary sewer easement (the "**Easement Area**") on Owner's property, as depicted and shown on the plan entitled *30 CHARTER OAK DR. EASEMENT PLAN*, prepared by Bradford Engineering Associates, Inc., dated April 1, 2014, last revised October 15, 2014, and marked as **Exhibit "A"** hereto and made a part hereof.
3. **GRANT OF EASEMENT**: Owner hereby sells, transfers conveys, gives and grants to DELCORA and the Township and their respective successors and assigns, the free and uninterrupted right, liberty and privilege, in perpetuity:
  - A. To install, construct, reconstruct, replace, remove, enlarge, inspect, operate, repair, make connections with and to and maintain perpetually the Sewer Lines, together with their accessories and appurtenances, as DELCORA and the Township may from time to time require, upon, across, over, under and through the Easement Area, provided that DELCORA and Edgmont Township shall place and maintain all such permanent Sewer Lines below the surface of the ground;
  - B. To make connections to and to otherwise accept, transport, convey, carry away and dispose of sanitary sewage through said Sewer Lines, regardless of the source of such sewage; and
  - C. To have and to hold the same perpetually to DELCORA and the Township and their respective successors and assigns, together with the right and privilege at any

and all times, hereafter, to enter the Easement Area, or any part thereof, provided that DELCORA and/or the Township (as the case may be) gives to the Owner reasonable advance notification of the intent to exercise the rights and privileges granted under this Easement Agreement; all upon the condition that DELCORA and/or the Township, as the case may be, will at all times during the exercise of said rights and privileges, cause every reasonable means to be used to protect from injury or damage all property, including lawns, trees (except those trees removed in connection with the exercise of the rights and privileges hereunder), shrubbery, fences, buildings, walls, or any existing improvement thereto, and will at all times after doing any work in connection with the exercise of said rights and privileges, cause the said Easement Area to be restored to the condition in which the same was found before such work was undertaken, including replacement and/or repair of damaged property, to the extent reasonably possible under the circumstances and consistent with the rights and privileges herein granted.

**4. COVENANTS OF THE OWNER:**

A. The Owner does hereby release, remise, waive, quitclaim and discharge DELCORA and the Township, and their several directors, appointed and elected officials, agents, servants, contractors, employees successors and assigns from any claim or right to damages, additional consideration or other emolument of value for the rights, liberties and privileges given and granted to DELCORA and/or the Township under this Easement Agreement and also on account of the construction, location and impact of EPS-1 and represents and affirms to DELCORA and the Township that the consideration paid to Owner in exchange for this Easement Agreement has been fully negotiated and is fair, reasonable and complete.

B. The Owner does hereby covenant that they are lawfully seized and possessed of a good and marketable title in fee simple to the aforesaid tract of land and that Owner has a good and lawful right to grant the rights and privileges herein granted to DELCORA and the Township, and Owner further covenants that Owner will execute any additional assurances of the rights and privileges herein granted.

C. The Owner does hereby agree that the terms of this Easement Agreement are and shall be confidential and Owner agrees not to disclose the terms hereof, except as necessary to obtain the consent to this Easement Agreement from any mortgagee or other holder of an interest in the Property. Except as specifically permitted, disclosure of the terms hereof by the Owner shall be deemed a material breach of this Easement Agreement.

D. The Owner does hereby expressly consent to any transfer, conveyance, pledge, lease, or assignment by DELCORA and/or the Township of any part or portion of the said Sewer Lines and/or Easement Area, without restriction or condition.

E. The Owner does hereby covenant that on and after the date of this Easement Agreement, that no structure or other obstruction is located in the Easement

Area and that none shall be erected or installed in the aforesaid Easement Area and that the same shall remain free from trees and other vegetation which in the reasonable opinion of DELCORA or the Township may interfere with the rights and privileges granted hereunder (collectively the "**Prohibited Obstructions**"). Notwithstanding anything else in this Easement Agreement to the contrary, neither DELCORA nor the Township shall be responsible for any damage to any Prohibited Obstruction in, of or to the Easement Area, which occurs after the date of this Easement Agreement. In addition, Owner agrees that Owner shall not interfere with the exercise of the rights and privileges by DELCORA and/or the Township under this Easement Agreement.

F. The provisions of this Easement Agreement shall run with the land and be binding upon and inure to the benefit of DELCORA, the Township, and their respective successors and assigns, and the Owner, and their heirs, executors, administrators, successors and assigns.

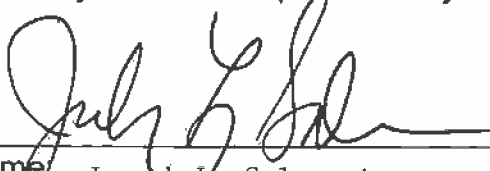
G. Owner shall, obtain the written consent of any mortgagee or other holder of an interest in the Property necessary or required by DELCORA and/or the Township to consent to the grant of the rights and privileges hereunder, substantially in the form as attached hereto, prior to the payment of the recited consideration.

H. Costs of recording shall be paid by DELCORA and/or the Township.

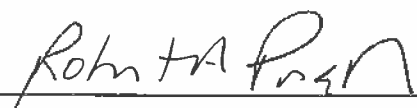
**[SIGNATURE PAGE TO FOLLOW]**

IN WITNESS WHEREOF, the parties hereto have caused this Easement Agreement to be duly executed on the day and year first above written.

**DELCORA,**  
A Pennsylvania Municipal Authority


By:   
Name: Joseph L. Salvucci  
Title: Executive Director

Attest:

  
Robert A. Powell  
Business Development & Strategic  
(Authority Seal) Planning Manager

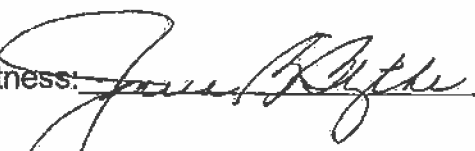
**EDGMONT TOWNSHIP**

Attest:   
Township Secretary

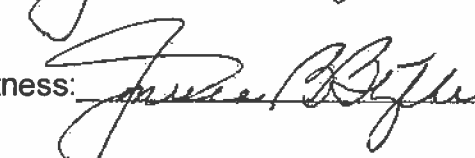
By:   
Name:  
Title:

(Township Seal)

**OWNER**

Witness: 

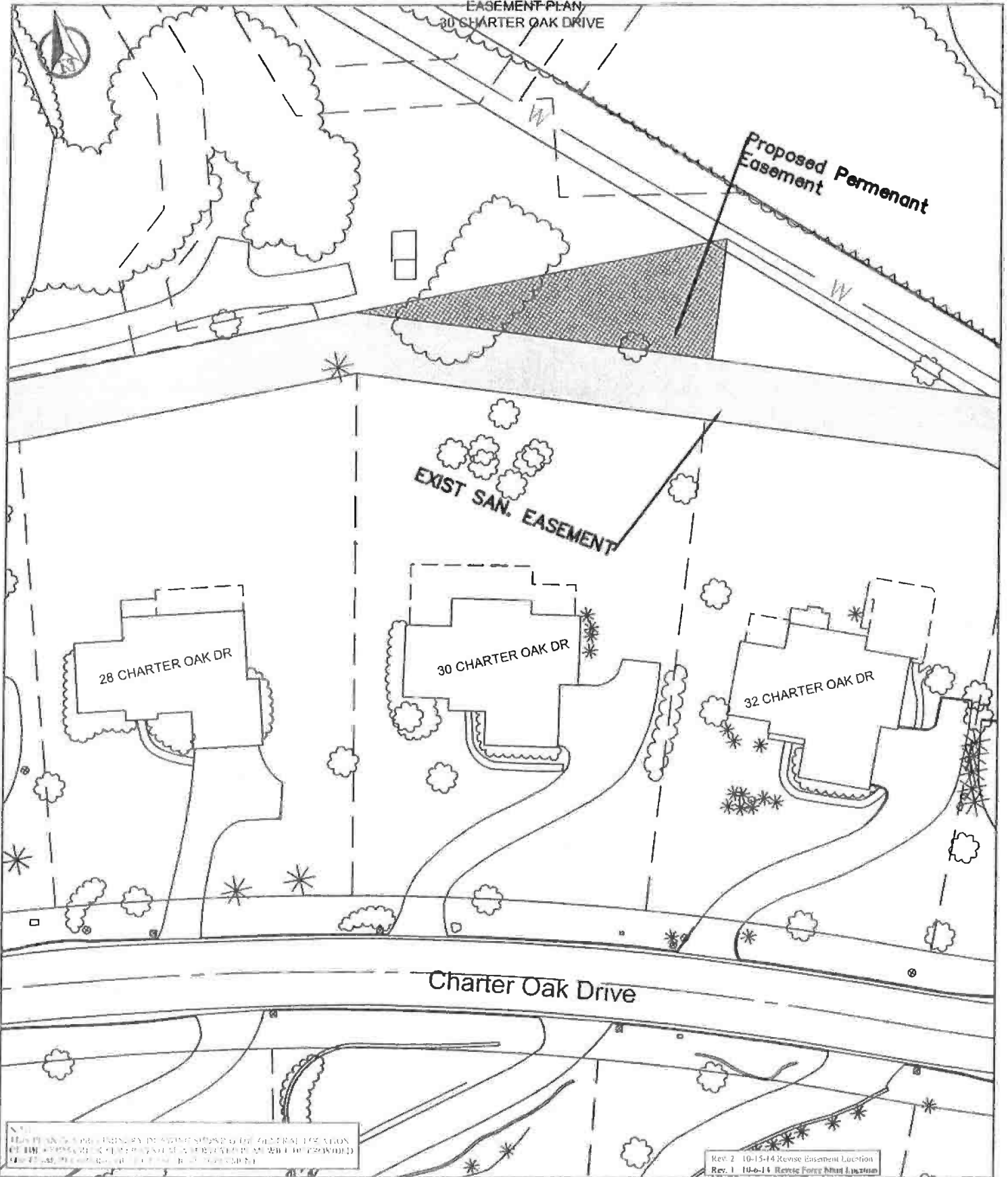
 (Seal)  
ROBERT E. GRAJEWSKI

Witness: 

 (Seal)  
LAURI LEMBO GRAJEWSKI

**EXHIBIT "A"**  
**EASEMENT AREA**

EXHIBIT "A"  
EASEMENT PLAN  
30 CHARTER OAK DRIVE



THIS PLAN IS A PRELIMINARY DESIGN SUBMITTED FOR THE GENERAL INFORMATION OF THE PROPERTY OWNER. IT IS NOT TO BE USED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF THE ENGINEER.

Rev. 2 10-15-14 Reverse Easement Location  
Rev. 1 10-6-14 Reverse Easement Location

**Bradford Engineering Associates, Inc.**  
Civil Engineers  
2710 Concord Road, Suite 3  
Phone: (610) 497-6200  
Aston, PA 19014  
Fax: (610) 744-5627

CLIENT  
**DELCORA  
EDGMONT TOWNSHIP CRUM CREEK SEWER PROJECT**

TITLE  
**30 CHARTER OAK DR  
EASEMENT PLAN**

APPROVED	SCALE 1"=40'	W.O. No. 106-10
DRAWN	DATE 4-1-14	DWG. No. ESMT
CHECKED		
DESIGN ENGINEER		

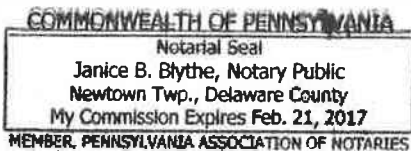


**OWNER ACKNOWLEDGEMENT**

COMMONWEALTH OF PENNSYLVANIA :  
COUNTY OF Delaware : SS  
:

On this 7<sup>th</sup> day of November, 2014 before me a notary public, duly commissioned in and for said County and Commonwealth, personally appeared the within named Owner, ROBERT E. GRAJEWSKI and LAURI LEMBO GRAJEWSKI, known to me (or satisfactorily proven) to be the persons whose names are subscribed to the within instrument and acknowledged execution of the same for the purpose therein contained, and desired the same to be recorded as such.

WITNESS my hand and notarial seal the day and year aforesaid.



Janice Blythe  
Notary Public

(Seal)

Commission Expires

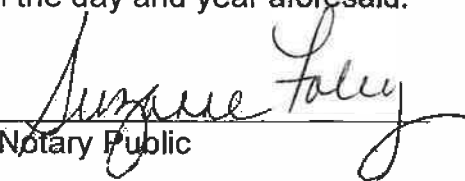
February 21<sup>st</sup> 2017

**DELCORA AND TOWNSHIP ACKNOWLEDGMENTS**

COMMONWEALTH OF PENNSYLVANIA :  
: SS  
COUNTY OF DELAWARE :

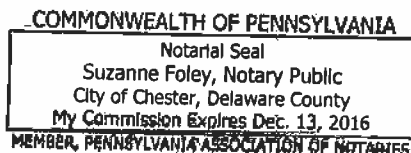
On this 8<sup>th</sup> day of December, 2014, before me, a notary public, duly commissioned in and for said County and Commonwealth, personally appeared Joseph L. Selucci who acknowledged himself to be the Vice/Chairman of the Delaware County Regional Water Quality Control Authority ("DELCORA"), a body corporate and politic, and that he as such Vice/Chairman, being authorized to do so, executed the foregoing instrument for the purposes therein contained by signing the name of DELCORA by himself as Vice/Chairman, and desiring that the same might be recorded as such.

Witness my hand and notarial seal the day and year aforesaid.

  
Notary Public

(Seal)

Commission Expires



COMMONWEALTH OF PENNSYLVANIA :  
 : ss  
COUNTY OF DELAWARE :

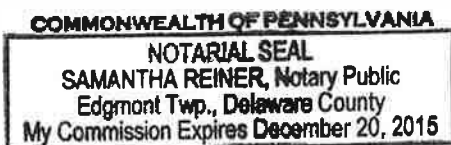
On this 28<sup>th</sup> day of November, 2014, before me, a notary public, duly commissioned in and for said County and Commonwealth, personally appeared RONALD GRAVINA who acknowledged himself to be the ~~Vice~~/Chairman of the Edgmont Township, a Pennsylvania Township of the Second Class, and that he as such ~~Vice~~/Chairman, being authorized to do so, executed the foregoing instrument for the purposes therein contained by signing the name of Edgmont Township by himself as Vice/Chairman, and desiring that the same might be recorded as such.

Witness my hand and notarial seal the day and year aforesaid.

Samantha Reiner  
Notary Public

(Seal)

Commission Expires



Loan Number \_\_\_\_\_

**CONSENT OF MORTGAGEE (LIEN HOLDER)**

The undersigned, Mortgagee, \_\_\_\_\_ ("**Mortgagee**") with respect to the Property in which the Sewer Lines and rights and privileges in the foregoing Easement (the "**Easement**") are a part, by mortgage dated \_\_\_\_\_, and recorded in the Office of the Recorder of Deeds, in and for Delaware County, in book \_\_\_\_\_, at page \_\_\_\_\_ (the "**Mortgage**"), hereby consents to the foregoing grant of Easement by ROBERT E. GRAJEWSKI and LAURI LEMBO GRAJEWSKI, husband and wife to DELCORA and Edgmont Township, and their respective successors and assigns, and joins in the execution hereof solely as Mortgagee and hereby does agree that in the event of the foreclosure of said Mortgage, or other sale of said Property described in said Mortgage under judicial or non-judicial proceedings, the same shall be sold subject to said Easement.

**MORTGAGEE**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

Attest: \_\_\_\_\_

(Mortgagee Seal)

**MORTGAGEE (LIEN HOLDER) CONSENT ACKNOWLEDGMENT**

STATE OF \_\_\_\_\_ :  
COUNTY OF \_\_\_\_\_ : ss  
\_\_\_\_\_ :

BEFORE ME, the undersigned authority, personally appeared \_\_\_\_\_, the \_\_\_\_\_ of \_\_\_\_\_ (the "**Bank**"), known to me to be the person and Officer whose name is subscribed to the foregoing instrument and who acknowledged to me that he/she executed the same for the purposes and consideration therein expressed, in the capacity therein stated, as the act and deed of said Bank and desiring that the same might be recorded as such.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Notary Public

(Seal)

My Commission Expires

# This Indenture, Made the

eleventh day of June  
one thousand nine hundred and seventy-six (1976) in the year of our Lord

**Between**

THE CITY OF CHESTER, a PENNSYLVANIA CORPORATION,  
(hereinafter called the Grantor) of the one part, and

DELAWARE COUNTY REGIONAL WATER QUALITY CONTROL AUTHORITY  
(Hereinafter called the Grantee), of the other part,

of the other part, **Witnesseth,** That the said Grantor

for and in consideration of the sum of TWELVE THOUSAND DOLLARS (\$12,000.00)

lawful money of the United States of America, unto —it — well and truly paid by the said  
Grantee  
at and before the sealing and delivery of these presents, the receipt whereof is hereby acknowl-  
edged, have —granted, bargained, sold, aliened, enfeoffed, released and confirmed and by these  
presents Doth

grant, bargain, sell, alien, enfeoff, release and confirm unto the said Grantee, its successors

and assigns,

west corner of lands of Delcora containing the existing pumping station; thence extending along lands of the Chester and Delaware Railroad Company South 72 degrees, 11 minutes 9 seconds West 27.20 feet to a point; thence extending along lands of the City of Chester of which this was a part and along Area C and Area D hereinafter described North 16 degrees, 48 minutes 51 seconds West 198.47 feet to the first mentioned point and place of beginning.

CONTAINING 5,392 square feet of land.

BEING the same premises which Luther Mendenhall and Kate B., his wife, by Indenture bearing date the 9th day of March, A.D. 1922, and recorded in the Office of the Recorder of Deeds &c., in and for the County of Delaware, aforesaid, in Deed Book 502 page 98, granted and conveyed unto City of Chester, in fee.

RESERVING unto the grantor herein the right of ingress and regress to and from Second Street through that part of the above premises described as follows:

BEGINNING at a point on the Southeasterly side of Second Street (60 feet wide) at the distance of 397.10 feet measured North 73 degrees, 11 minutes, 9 seconds East, along same, from its intersection with the Northeasterly side of Penn Street (60 feet wide); thence extending from said beginning point, along the said Southeasterly side of Second Street, North 73 degrees, 11 minutes, 9 seconds East, 27.20 feet to a point in line of lands of Delcora Second and Dock Street Pumping Station Site; thence extending along said lands South 16 degrees, 48 minutes, 51 seconds East 85 feet to a point; thence extending South 24 degrees, 32 minutes West 19.98 feet to a point; thence extending South 73 degrees, 11 minutes, 9 seconds West 14 feet to a point; thence extending North 16 degrees, 48 minutes, 51 seconds West 100 feet to the first mentioned point and place of beginning.

TOGETHER with the right of ingress and regress to said premises above described along and through a certain piece of ground adjoining to the Southwest and described according to the above described plan as follows: BEGINNING at a point on the Southeasterly side of Second Street (60 feet wide) at the distance of 374.31 feet measured North 73 degrees, 11 minutes, 9 seconds East, along same, from its intersection with the Northeasterly side of Penn Street (60 feet wide); thence extending from said beginning point, along the said Southeasterly side of Second Street, 22.80 feet to a point in line of the above described premises; thence extending partly along same South 16 degrees, 48 minutes, 51 seconds East 198.47 feet to a point in line of lands of Chester and Delaware Railroad Company; thence extending along said lands South 72 degrees, 11 minutes, 9 seconds West 10 feet to a point; thence

**Together** with all and singular buildings and improvements \_\_\_\_\_  
ways, waters, water-courses, rights, liberties, privileges, hereditaments and appurtenances whatso-  
ever thereunto belonging, or in any wise appertaining, and the reversions and remainders, rents,  
issues and profits thereof; and all the estate, right, title, interest, property, claim and demand  
whatsoever of it \_\_\_\_\_

or otherwise howsoever, of, in, and to the same and every part thereof. \_\_\_\_\_ in law, equity,

**To have and to hold** the said lot or piece of ground above  
described with the buildings and improvements thereon erected \_\_\_\_\_

\_\_\_\_\_ hereditaments and premises hereby granted, or mentioned and  
intended so to be, with the appurtenances, \_\_\_\_\_ unto the said  
Grantee, its successors \_\_\_\_\_

\_\_\_\_\_ and assigns to and for the only proper use and  
behooof of the said Grantee, its successors \_\_\_\_\_  
\_\_\_\_\_ and assigns forever \_\_\_\_\_

**And** the said Grantor, for itself and its successors and assigns \_\_\_\_\_

covenant, promise and agree, to and with the said Grantee, its successors \_\_\_\_\_  
\_\_\_\_\_ and assigns, by these presents, that \_\_\_\_\_ it \_\_\_\_\_ the said

Grantor, its successors and assigns, has \_\_\_\_\_

not done, committed, or knowingly or willingly suffered to be done or committed, any act, matter  
or thing whatsoever whereby the premises hereby granted, or any part thereof, is, are, shall or may  
be impeached, charged or incumbered, in title, charge, estate, or otherwise howsoever.

**In Witness Whereof**, the party of the first part hath hereunto set  
its Common or Corporate Seal affixed the day and year aforesaid.

THE CITY OF CHESTER

SEALED AND DELIVERED  
IN THE PRESENCE OF US:

By\*

Mayor

Attest\*

City Clerk

Received, the day of the date of the above Indenture, of the within named Grantee



On this, the day of 1976, before me the subscriber, a Notary Public for the Commonwealth of Pennsylvania, residing in the County of Delaware, the undersigned officer, personally appeared

of known to me (or satisfactorily proven) to be the person described in the foregoing instrument, and acknowledge that he executed the same in the capacity therein stated and for the purposes therein contained.

In Witness Whereof, I hereunto set my hand and official seal.

On this, the eleventh day of June 1976, before me the subscriber, a Notary Public, the undersigned officer, personally appeared JOHN H. NACRELLI who acknowledged himself ~~himself~~ to be the Mayor of The City of Chester a corporation, and that he as such Mayor, being authorized to do so, executed the foregoing instrument for the purposes therein contained by signing the name of the corporation by himself ~~himself~~ as Mayor.

In Witness Whereof, I hereunto set my hand and official seal.

Catherine Phillips  
The address of the within-named Grantee is 100 East Fifth Street

Chester, Pa. 19013  
On behalf of the Grantee

FILE ABSTRACT COMPANY OF PA  
TA# 189,966

DEC. 10, 1976

NOTARY PUBLIC  
RECEIVED

JUN 22 1976

REGISTRATION DEPT.

THE CITY OF CHESTER  
(a Pennsylvania Corporation)

T O

DELAWARE COUNTY REGIONAL  
WATER QUALITY CONTROL  
AUTHORITY

Premises:

2nd St., 397.10' East of  
Penn St., Chester City  
Del. Co., Pa.

471 John C. Clark Company, Philadelphia 772A

*Charles C. Clark, Jr.*

**NOTARY PUBLIC**

# This Indenture, Made the

6th                      day of                      JUNE                      in the year of our  
**Lord one thousand nine hundred and SEVENTY-SEVEN (1977)**

**Between** BOROUGH OF MARCUS HOOK, DELAWARE COUNTY, PENNSYLVANIA,  
 a Municipal Corporation organized and existing under the Laws of  
 the Commonwealth of Pennsylvania (hereinafter called "Grantor"),  
 of the one part

A N D

DELAWARE COUNTY REGIONAL WATER QUALITY CONTROL AUTHORITY, a Municipal  
 Authority organized and existing under the Laws of the Commonwealth  
 of Pennsylvania (hereinafter called "Grantee"), of the other part,

**Witnesseth,** That the said Grantor

for and in consideration of the sum of Seventy-nine Thousand Five Hundred Dollars

lawful money of the United States of America, unto it well and truly paid by the said

Grantee at and before the sealing and delivery  
 of these presents, the receipt whereof is hereby acknowledged, has granted, bargained, sold,  
 aliened, enfeoffed, released and confirmed, and by these presents does grant, bargain, sell,  
 alien, enfeoff, release and confirm unto the said Grantee, its successors  
 and assigns,

ALL THAT CERTAIN tract of land situate in the Borough of  
 Marcus Hook, Delaware County, Pennsylvania bounded and described  
 in accordance with a plan prepared by Betz Environmental Engineers,  
 Plymouth Meeting, Pennsylvania dated October 31, 1975 as follows:

BEGINNING at the Northwesterly corner of land of the Borough  
 of Marcus Hook containing the existing pumping station said corner  
 being on the Southeasterly right of way line of the South Chester  
 Branch of the Philadelphia, Baltimore, and Washington Railroad  
 (now Penn Central) and being at the distance of 167.45 feet  
 measured North 60 degrees, 00 minutes East along said railroad  
 right of way line from a point being the Northwesterly corner of  
 lands of the Borough of Marcus Hook containing the existing sewage  
 treatment plant site, said last mentioned point being at the distance  
 of 584.55 feet measured North 60 degrees, 00 minutes East along said  
 railroad right of way line from its point of intersection with the  
 centerline of Penn Avenue (60 feet wide), thence from said beginning  
 corner extending along said railroad right of way line North 60  
 degrees, 00 minutes East 100.00 feet to a point, thence leaving said

North 30 degrees, 00 minutes West 150.00 feet to the first mentioned corner the point and place of beginning.

CONTAINING 15,000 square feet or 0.344 acres of land.

BEING the same premises which Reading Company Railroad, by deed dated May 31, 1910 as recorded in Deed Book No. R-14 Page 47, granted and conveyed to the Borough of Marcus Hook.

AND ALSO, Grantor does grant, bargain, sell, release and confirm unto the Grantee, its successors and assigns, at all times, the free and uninterrupted use, liberty, right and privilege, for the construction, operation and maintenance of a sanitary sewer force main, together with free ingress, egress and regress, an easement or right-of-way through the lands of Grantor as shown on a plan of said easement or right-of-way prepared by Betz Environmental Engineers, Inc., dated October 31, 1975, the same being attached hereto and made a part hereof, and marked Exhibit "A", described as follows:

SANITARY SEWER FORCE MAIN RIGHT OF WAY

ALSO ALL THAT CERTAIN 20 feet wide permanent right of way for the construction and maintenance of a sanitary sewer force main through lands of the Borough of Marcus Hook containing the existing sewage treatment plant situate in the Borough of Marcus Hook at the Borough of Trainer as follows:

BEGINNING at a point on the Northeasterly side of the hereinbefore described pumping station site, said point being at the distance of 123.50 feet measured South 30 degrees, 00 minutes East along said pumping station site from a point on the Southeasterly right of way line of the South Chester Branch of the Philadelphia, Baltimore, and Washington Railroad, said last mentioned point being at the distance of 100 feet measured North 60 degrees, 00 minutes East along said railroad right of way line from the Northwestern corner of lands of the Borough of Marcus Hook containing the existing pumping station site (being the beginning point of the hereinbefore described Pumping Station Site), thence from said beginning point extending in and through lands of the Borough of Marcus Hook containing the existing sewage treatment plant and through a portion of Marcus Hook Creek the following (3) courses and distances: (1) North 60 degrees, 00 minutes East 11.58 feet to a point, (2) North 15 degrees, 00 minutes East 63.64 feet to a point and (3) North 60 degrees, 00 minutes East 246.41 feet to a point in the title line and along lands of B. P. Oil Corporation and in and through the bed of Marcus Hook Creek South 45 degrees, 18 minutes, 32 seconds East 20.73 feet to a point, thence extending in and through lands of the Borough of Marcus Hook containing the existing sewage treatment plant and recrossing a portion of Marcus Hook Creek the following (3) courses and distances: (1) South 60 degrees, 00 minutes West 243.59 feet to a point, (2) South 15 degrees, 00 minutes West 63.63 feet to a point and (3) South 60 degrees, 00 minutes West 19.82 feet to a point in line of lands of the hereinbefore described pumping station site, thence extending along the Northeasterly side of the pumping station site North 30 degrees, 00 minutes West 20.00 feet to the first mentioned point and

BEGINNING at a point in line of other lands now of the said Borough of Marcus Hook and upon right of way of Philadelphia Electric Company and at the distance of 4 feet Southeastwardly of the Southeasterly right of way line of the South Chester Branch of the Philadelphia, Baltimore and Washington Railroad Company; thence by said other lands of the herein grantee, South 30 degrees, 00 minutes East 20 feet; South 60 degrees, 00 minutes West 255.0 feet to a point of curve; thence on an arc of a curve to the left in a Southwesterly direction and having a radius of 80 feet, the arc distance of 40.07 feet to a point of reverse curve; thence on an arc of a curve to the right in a Southwesterly direction and having a radius of 148.0 feet the arc distance of 148.24 feet to another point of reverse curve; thence on an arc of a curve to the left in a Southwesterly direction and having a radius of 80 feet the arc distance of 40.07 feet to a point of tangency; South 60 degrees, 00 minutes West 94.08 feet to a point in line of lands of Chester and Delaware River Railroad Company; thence by said lands, North 17 degrees, 34 minutes, 20 seconds East 29.64 feet; thence parallel with said Southeasterly right of way line of South Chester Branch of the Philadelphia, Baltimore and Washington Railroad Company, and 4 feet therefrom, North 60 degrees, 00 minutes East 72.10 feet to a point of curve; thence on an arc of a curve to the right in a Northeasterly direction and having a radius of 100 feet the arc distance of 50.08 feet to a point of reverse curve; thence on an arc of a curve to the left in a Northeasterly direction and having a radius of 128.0 feet the arc distance of 128.21 feet to another point of reverse curve, thence on an arc of a curve to the right in a Northeasterly direction and having a radius of 100.0 feet the arc distance of 50.08 feet to a point of tangency; thence parallel with said Southwesterly right of way line of the South Chester Branch of the Philadelphia, Baltimore and Washington Railroad Company and 4 feet therefrom, North 60 degrees, 00 minutes East 255.0 feet to the point or place of beginning.

BOOK 2612 PAGE 575

**And** the said Grantor, for itself, its successors and assigns,  
*Does by*  
these presents, covenant, grant and agree, to and with the said Grantee, its successors  
and assigns, that it the said Grantor, its successors and assigns  
*all and singular*  
the hereditaments and premises herein above described and granted, or mentioned and intended  
so to be, with the appurtenances, unto the said Grantee, its successors  
and assigns, against it the said Grantor, its successors and assigns,  
and against all and every person or persons whomsoever lawfully claiming or to claim  
the same or any part thereof,  
it shall and will


Received, the day of the date of the above Indenture, of the above-named

Commonwealth of Pennsylvania

County of Delaware

On this, the 6th day of JUNE, 19 77, before me, the sub-  
scriber, a notary public in and for the State and the undersigned officer,  
personally appeared Joseph Bonavita County aforesaid who acknowledged himself (himself)  
to be the Secretary of Borough of Marcus Hook,  
a municipal corporation, and that he as such Secretary, being authorized to do so, executed  
the foregoing instrument for the purposes therein contained by signing the name of the corporation  
by himself (himself) as Secretary.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal.

  
Jean Irving

Notary Public, Del. Co., Media, Pa.

My Commission Expires March 17, 1981

The of the within named Grantee

is .....

On behalf of said Grantee

BOROUGH OF MARCUS HOOK

T O

DELCORA

Premises:  
Marcus Hook Pumping Station  
at Penn Central RR Site  
Marcus Hook Boro., Pa.

652

John C. Clark Co., Phila.

1974

JUL 6 2 00 PM '77

Penna. Realty Transfer Tax Affidavit filed

#### **DIGITAL FILES**

- **UNIFORM SYSTEM OF ACCOUNTS**
- **DOCUMENTS**

# **UNIFORM SYSTEM OF ACCOUNTS FOR CLASS A WASTEWATER UTILITIES**

**1996**



**NATIONAL ASSOCIATION OF  
REGULATORY UTILITY COMMISSIONERS**

1101 Vermont Avenue NW  
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\$26.00





NATIONAL ASSOCIATION  
OF  
REGULATORY UTILITY  
COMMISSIONERS

1996  
Uniform System of Accounts  
For  
Class A  
Wastewater Utilities

Pursuant to action by the National Association of Regulatory Utility Commissioners, this System of Accounts is recommended to the Commissions represented in the membership of this Association for consideration and for adoption in their respective jurisdictions with such modifications only as they may deem necessary in the public interest.

## PREFACE

The 1996 Water and Wastewater Uniform systems of Accounts were proposed by the Subcommittee on Accounts of the Committee on Finance and Technology of the National Association of Regulatory Utility Commissioners (NARUC). The NARUC Executive Committee unanimously approved these uniform systems of accounts at its Summer Committee Meeting held in Los Angeles, California, July 22-25, 1996. We would like to express our appreciation to Marshall Willis of the Florida Public Service Commission for his participation in this project and the many hours spent in the rewrite of these uniform systems of accounts.

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**Summary of Proposed Revisions to the  
NARUC Uniform System of Accounts for  
Class A, B & C Water and Wastewater Utilities**

<u>Proposed Changes</u>	<u>Water</u>	<u>Wastewater</u>
1. Change the term "sewer" to "wastewater" where applicable to conform with the terminology currently used by the industry.	A B C	A B C
2. Increased the Class A, B & C revenue levels to account for inflation since the levels were last changed in 1984. This was done based on the same index used to set the levels in the 1984 revision. New levels are:  <div style="margin-left: 40px;"> Class A: \$1,000,000 and more,  Class B: \$200,000 to \$999,999, and  Class C: Less than \$200,000. </div>	A B C	A B C
3. Included a monetary level for capitalizing versus expensing for all Classes as follows:  <div style="margin-left: 40px;"> Class A: \$750  Class B: \$400  Class C: \$150 </div>	A B C	A B C
4. Added definitions, accounting instructions and subaccounts to provide for the accounting for regulatory assets and liabilities.	A B	A B
5. Added a new water plant account to separately account for backflow prevention devices.	A B C	
6. Added new wastewater plant accounts to separately account for reuse facilities used to produce reclaimed water.		A B
7. Added new wastewater expense accounts to separately account for the operation of reuse facilities to produce reclaimed water.		A B

<u>Proposed Changes</u>		<u>Water</u>	<u>Wastewater</u>
8.	Added new wastewater revenue accounts to separately account for revenue from reclaimed water sales.		A B
9.	Added a new water expense account to separately account for Water Conservation Expenses.	A B	
10.	Requires the use of subaccounts to Accounts 271 - CIAC and 272 - Amortization of CIAC to separately account for any CIAC gross-up funds received by a utility. Also adds definitions for gross-up of CIAC.	A B C	A B C
11.	Added a new account to separately account for revenues collected by a utility prior to service being initiated to guarantee or reserve plant capacity.	A B C	A B C
12.	Added a new water expense account to separately account for water testing expenses.	A B C	
13.	Removed confusing language in Account 218 - Proprietary Capital - which indicated that the system provided language concerning the use of earned surplus accounts, which it does not.	A B C	A B C
14.	Added a new wastewater plant account to separately account for power generation equipment.		A B C
15.	Added additional accounts for Contractual Services to separately account for billing and professional services.	C	C

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## DEFINITIONS

When used in this system of accounts:

1. "Accounts" means the accounts prescribed in this system of accounts.
2. "Actually issued," as applied to securities issued or assumed by the utility, means those which have been sold to bona fide purchasers for a valuable consideration, those issued as dividends on stock, and those which have been issued in accordance with contractual requirements direct to trustees of sinking funds.
3. "Actually outstanding," as applied to securities issued or assumed by the utility, means those which have been actually issued and are neither retired nor held by or for the utility; provided, however, that securities held by trustees shall be considered as actually outstanding.
4. "Amortization" means the gradual extinguishment of an amount in an account by distributing such amount over a fixed period, over the life of the asset or liability to which it applies, or over the period during which it is anticipated the benefit will be realized.
5. A. "Associated companies" means companies or persons that, directly or indirectly, through one or more intermediaries, control, or are controlled by, or are under common control with, the accounting company.  
  
B. "Control" (including the terms "controlling," "controlled by," and "under common control with") means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a company, whether such power is exercised through one or more intermediary companies, or alone, or in conjunction with, or pursuant to an agreement, and whether such power is established through a majority or minority ownership or voting of securities, common directors, officers, or stockholders, voting trusts, associated companies, contract or any other direct or indirect means.
6. "Book cost" means the amount at which property is recorded in these accounts without deduction of related provisions for accrued depreciation, amortization, or for other purposes.
7. "Commission", unless otherwise indicated by the context, means the commission prescribing this system of accounts.
8. "Composite depreciation rate" is a percentage based on the weighted average service life of a number of units of plant, each of which may have a different individual life expectancy. Composite

## DEFINITIONS

depreciation rates may be determined for (a) a single depreciable plant account, (b) a single rate for several depreciable accounts or (c) a single composite rate may be determined for all depreciable plant of the utility.

9. "Cost" means the amount of money actually paid for property or service. When the consideration given is other than cash, the value of such consideration shall be determined on a cash basis.
10. "Cost of removal" means the cost of demolishing, dismantling, tearing down or otherwise removing utility plant, including the cost of transportation and handling incidental thereto.
11. "Debt expense" means all expenses in connection with the issuance and initial sale of evidences of debt, such as fees for drafting mortgages and trust deeds; fees and taxes for issuing or recording evidences of debt; cost of engraving and printing bonds and certificates of indebtedness; fees paid trustees; specific costs of obtaining governmental authority; fees for legal services; fees and commissions paid underwriters, brokers, and salesmen or marketing such evidences of debt; fees and expenses of listing on exchanges; and other like costs.
12. "Depreciation", as applied to depreciable utility plant, means the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of utility plant in the course of providing service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand, and requirements of public authorities.
13. "Discount", as applied to the securities issued or assumed by the utility, means the excess of the par (stated value of no-par stocks) or face value of the securities plus interest or dividends accrued at the date of the sale over the cash value of the consideration received from their sale.
14. "Gross-up of contributions in aid of construction" is the method by which a utility extracts, from developers or others, a sum of money sufficient to pay all or a portion of the tax obligation due to the change in the federal tax law in 1987 which resulted in contributions made to utilities in aid of construction (CIAC) being considered ordinary income instead of contributions of capital. Because the sum extracted to pay the tax is also considered income subject to tax, the term tax-on-tax has been used to describe the additional sum of money that must be extracted in order to pay the tax on the initial amount.

## DEFINITIONS

Common gross-up methods include the full gross-up method and the net present value method. Under the full gross-up method, a sum sufficient to meet the full tax obligation, including the tax-on-tax, is extracted. Under the net present value method, the sum extracted is the net present value of the estimated future stream of tax benefits resulting from the depreciation deductions for the contributed asset to be taken on the tax returns of the utility.

15. "Investment advances" means advances, represented by notes or by book accounts only, with respect to which it is mutually agreed or intended between the creditor or debtor that they shall be settled by the issuance of securities or shall not be subject to current settlement.
16. "Minor items of property" means the associated parts or items of which retirement units are composed.
17. "Multiple family dwelling" means a residential structure or group of structures which is capable of separately housing more than one family unit.
18. "Net salvage value" means the salvage value of property retired less the cost of removal.
19. "Nominally issued", as applied to securities issued or assumed by the utility means those which have been signed, certified, or otherwise executed, and placed with the proper officer for sale and delivery, or pledged, or otherwise placed in some special fund of the utility, but which have not been sold, or issued direct to trustees of sinking funds in accordance with contractual requirements.
20. "Nominally outstanding", as applied to securities issued or assumed by the utility, means those which, after being actually issued, have been reacquired by or for the utility under circumstances which require them to be considered as held alive and not retired; provided, however, that securities held by trustees shall be considered as actually outstanding.
21. "Original cost", as applied to utility plant, means the cost of such property to the person first devoting it to the public service.
22. "Person" means an individual, a corporation, a partnership, an association, a joint stock company, a business trust, or any organized group of persons whether incorporated or not, or any receiver or trustee.
23. "Plant sewer" means any sewer, pipe, aquaduct canal, or other conduit the primary purpose of which is to convey treatment plant fluids from one unit to another within the treatment plant.



## DEFINITIONS

24. "Plant discharge sewers" means any sewer, pipe, aquaduct canal, or other conduit the primary purpose of which is to convey treatment plant effluent to its point of discharge.
25. "Premium", as applied to the securities issued or assumed by the utility, means the excess of the cash value of the consideration received from their sale over the sum of their par (stated value of no-par stocks) or face value and interest or dividends accrued at the date of sale.
26. "Property retired", as applied to utility plant, means property which has been removed, sold, abandoned, destroyed, or which for any cause has been permanently withdrawn from service.
27. "Reclaimed water" means water that has received at least secondary treatment and basic disinfection and is reused after flowing out of a wastewater treatment plant.
28. "Regulatory Assets and Liabilities" are assets and liabilities that result from rate actions of regulatory agencies. Regulatory assets and liabilities arise from specific revenues, expenses, gains or losses that would have been included in determination of net income in one period under the general requirements of the Uniform System of Accounts but for it being probable that; 1) such items will be included in a different period(s) for purposes of developing the rates the utility is authorized to charge for its utility services; or 2) in the case of regulatory liabilities, that refunds to customers, not provided for in other accounts, will be required. Regulatory assets and liabilities can also be created in reconciling differences between the requirements of generally accepted accounting principles, regulatory practice and tax laws.
29. "Replacing" or "replacement", when not otherwise indicated in the context, means the construction or installation of utility plant in place of property of retired, together with the removal of the property retired.
30. "Research and development" means expenditures incurred by public utilities which represent research and development costs in the experimental or laboratory sense. The term includes generally all such costs incident to the development of an experimental or pilot model, a plant process, a product, a formula, an invention, or similar property, and the improvement of already existing property of the type mentioned.
31. "Retained earnings" means the accumulated net income of the utility less distributions to stockholders and transfers to other capital accounts, and other adjustments (See account 439 - Adjustments to Retained Earnings).

## DEFINITIONS

32. "Retirement units" means those items of utility plant which, when retired, with or without replacement, are accounted for by crediting the original costs.
33. "Reuse" means the deliberate application of reclaimed water, in compliance with Federal and State environmental rules and regulations, for a beneficial purpose.
35. "Salvage value" means the amount received for property retired, less any expenses incurred in connection with the sale or in preparing the property for sale, or, if retained, the amount at which the material recoverable is chargeable to materials and supplies, or other appropriate account.
36. "Service life" means the time between the date utility plant is includible in utility plant in service, or utility plant leased to others, and the date of its retirement. If depreciation is accounted for on a production basis rather than on a time basis, then service life should be measured in terms of the appropriate unit of production.
37. "Service value" means the difference between the original cost and net salvage value of utility plant.
38. "Straight-line remaining life method", as applied to depreciation accounting, means the plan under which the service value of property is charged to operating expenses (and to clearing accounts if used), and credited to the accumulated depreciation account through equal annual charges during its service life. "Remaining life" implies that estimates of future life and salvage will be reexamined periodically and that depreciation rates will be corrected to reflect any changes in these estimates.
39. "Straight-line method" as applied to depreciation accounting means the plan under which the service value of property is charged to operating expenses (and to clearing accounts if used), and credited to the accumulated depreciation account through equal annual charges during its service life. Estimates of the service life and salvage will be reexamined periodically and depreciation rates will be corrected to reflect any changes in the estimates.
40. "Utility", as used herein and when not otherwise indicated in the context, means any public utility to which this system of accounts is applicable.

## ACCOUNTING INSTRUCTIONS

### 1. General - Classification of Utilities

A. For the purpose of applying the system of accounts prescribed by the Commission, wastewater utilities are divided into three classes, as follows:

Class A - Utilities having annual wastewater operating revenues of \$1,000,000 or more.

Class B - Utilities having annual wastewater operating revenues of \$200,000 or more but less than \$1,000,000.

Class C - Utilities having annual wastewater operating revenues of less than \$200,000.

B. This system of accounts applies to Class A utilities. The system of accounts applicable to Class B and C utilities are issued separately.

C. The class to which any utility belongs shall originally be determined by the average of its annual wastewater operating revenues for the last three consecutive years. Subsequent changes in classification shall be made when the average annual wastewater operating revenues for the three immediately preceding years exceed the upper limit or are less than the lower limit, of the annual wastewater operating revenues of the classification previously applicable to the utility. For a utility with both water and wastewater operations, the classification shall be based on the operation with the highest annual revenues.

### 2. General - Records

A. Each utility shall keep its books of account, and all other books, records, and memoranda which support the entries in such books of accounts so as to be able to furnish readily full information as to any item included in any account. Each entry shall be supported by such detailed information as will permit a ready identification, analysis, and verification of all facts relevant thereto.

B. The books and records referred to herein include not only accounting records in a limited technical sense, but all other records, such as minute books, stock books, reports, correspondence, memoranda, etc., which may be useful in developing the history of, or facts regarding, any transaction.

C. No utility shall destroy any such books or records unless the destruction thereof is permitted by rules and regulations of the Commission.

## ACCOUNTING INSTRUCTIONS

D. In addition to prescribed accounts, clearing accounts, temporary or experimental accounts, and subdivisions of any account, may be kept, provided the integrity of the prescribed accounts is not impaired.

E. All amounts included in the accounts prescribed herein for utility plant and operating expenses shall be just and reasonable and any payments or accruals by the utility in excess of just and reasonable charges shall be included in account 426 - Miscellaneous Nonutility Expenses.

F. The arrangement or sequence of the accounts prescribed herein shall not be controlling as to the arrangement or sequence in report forms which may prescribed by the Commission.

### 3. General - Numbering System

A. The account numbering scheme used herein consists of a system of three digit numbers as follows:

100-199	Assets and Other Debits
200-299	Equity, Liabilities and Other Credits
350-389	Wastewater Plant Accounts
400-434	Income Accounts
435-439	Retained Earnings Accounts
521-549	Wastewater Operating Revenue Accounts
700-799	Wastewater Operation and Maintenance Expenses

B. The utility plant and operation and maintenance expense accounts are further subdivided using a suffix of one decimal place as explained in following instructions.

C. In certain instances, numbers have been skipped in order to allow for possible later expansion or to permit better coordination with the numbering system for other utility departments.

D. The numbers prefixed to account titles are solely for convenience of reference and are not a part of the titles. Each utility may adopt such scheme of account numbers as it deems appropriate; provided, however, that it shall keep readily available a list of the account numbers and subdivisions of accounts which it uses and a reconciliation of such numbers and subdivisions with the account numbers and titles provided herein. Further, the records must be kept to permit classification or summarization of each accounting period according to the prescribed accounts.

## ACCOUNTING INSTRUCTIONS

### 4. General - Accounting Period

Each utility shall keep its books on a monthly basis so that for each month all transactions applicable thereto, as nearly as may be ascertained, shall be entered in the books of the utility. Amounts applicable or assignable to specific utility departments shall be segregated monthly. Each utility shall close its books at the end of each calendar year unless otherwise authorized by the Commission.

### 5. General - Submittal of Questions

To maintain uniformity of accounting, utilities shall submit questions of doubtful interpretation to the Commission for consideration and decision.

### 6. General - "Item" Lists

List of "items" appearing in the texts of the accounts or elsewhere herein are for the purpose of more clearly indicating the application of the prescribed accounting. The lists are intended to be representative, but not exhaustive. The appearance of an item in a list warrants the inclusion of the item in the account mentioned only when the text of the account also indicates inclusion inasmuch as the same item frequently appears in more than one list. The proper entry in each instance must be determined by the texts of the accounts.

### 7. General - Extraordinary Items

It is the intent that net income shall reflect all items of profit and loss during the period with the sole exception of prior period adjustments as described in Accounting Instruction 8. Those items related to the effects of events and transactions which have occurred during the period and which are not typical or customary business activities of the company shall be considered extraordinary items. Commission approval must be obtained to treat an item as extraordinary. Such request must be accompanied by complete detailed information (See accounts 433 and 434).

### 8. General - Prior Period Items

A. All prior period adjustments to retained earnings shall be approved by the Commission. Generally the only type of transactions which will be considered as a prior period adjustment are:

## ACCOUNTING INSTRUCTIONS

(1) Correction of an error in the financial statements of a prior period; or

(2) Adjustments that result from realization of income tax benefits of preacquisition loss carry forwards of purchased subsidiaries.

B. Prior period adjustments, when approved, shall be charged or credited to account 439 - Adjustments to Retained Earnings, and are not considered in income of the period. Prior period adjustments shall be recorded net of all state and federal income tax effects.

C. Changes in depreciation or amortization estimates or methods are considered changes in accounting estimates rather than accounting errors; and therefore are not subject to prior period adjustments. Any adjustments made to the accumulated amortization or depreciation balances of the utility due to a change in estimate or method shall be offset by a charge or credit to either: an income account; account 186.2 - Other Deferred Debits; or account 253 - Other Deferred Credits, as directed by the Commission.

### 9. General - Unaudited Items

Whenever a financial statement is required by the Commission, if it is known that a transaction has occurred which affects the accounts but the amount involved in the transaction and its effect upon the accounts cannot be determined with absolute accuracy, then the amount shall be estimated and such estimated amount included in the proper accounts. A complete description of the transactions shall accompany the financial statement. Utilities are not required to anticipate minor items which would not appreciably affect the accounts.

### 10. General - Allocation of Salaries and Expenses of Employees

Charges to utility plant or to a salaries expense account shall be based upon the actual time engaged in either plant construction or providing operation services. In the event actual time spent in the various activities is not available or practicable, salaries should be allocated upon the basis of a study of the time engaged during a representative period. Charges should not be made to the accounts based upon estimates or in an arbitrary fashion.

### 11. General - Payroll Distribution

Underlying accounting data shall be maintained so that the distribution of the costs of labor charged to the various accounts will be available. The utility may utilize clearing accounts in its accounting process; however, the use of clearing accounts does

## ACCOUNTING INSTRUCTIONS

not relieve the utility from the responsibility of providing a distribution of the costs of labor or from being able to substantiate its labor charged with sufficient source documents.

### 12. General - Operating Reserves

Accretions to operating reserve accounts made by charges to operating expenses shall not exceed a reasonable provision for the expense. Material balances in such reserve accounts shall not be diverted from the purpose for which provided, unless the permission of the Commission is first obtained.

### 13. General - Records for Each Plant

Separate records shall be maintained by utility plant accounts of the book cost of each plant owned including additions by the utility to plant leased from others and of the cost of operating and maintaining each plant owned or operated.

### 14. General - Accounting for Other Departments

If the utility also operates other utility departments, such as electric, water, gas, etc., it shall keep such accounts for the other departments as may be prescribed by proper authority and in the absence of prescribed accounts, it shall keep such accounts as are proper or necessary to reflect the results of operating each other department.

### 15. General - Transactions with Associated Companies

Each utility shall keep its accounts and records so as to be able to furnish accurately and expeditiously statements of all transactions with associated companies. The statements may be required to show the general nature of the transactions, the amounts involved therein and the amounts included in each account prescribed herein with respect to such transactions. Transactions with associated companies shall be recorded in the appropriate accounts for transactions of the same nature. Nothing herein contained, however, shall be construed as restraining the utility from subdividing accounts for the purposes of recording separately transactions with associated companies.

### 16. General - Contingent Assets and Liabilities

Contingent assets represent a possible source of value to the utility contingent upon the fulfillment of conditions regarded as uncertain. Contingent liabilities include items which may under certain conditions become obligations of the utility but which are neither direct nor assumed liabilities at the date of the balance

## ACCOUNTING INSTRUCTIONS

sheet. The utility shall be prepared to give a complete statement of material contingent assets and liabilities (including cumulative dividends on preference stock) in its annual report and at such other times as may be requested by the Commission.

### 17. Utility Plant - Classification of Utility Plant at Effective Date of System of Accounts

A. The utility plant accounts provided herein are substantially the same in context as those contained in the prior system of accounts, except that some changes have been made in classification, rearrangement and regrouping of certain accounts. A few account titles have been changed. Subject to these changes, the balances in the various plant accounts, as determined under the prior system of accounts, shall be carried forward. Any remaining balance of plant which has not yet been classified, pursuant to the requirements of the prior system, shall be classified in accordance with the following instructions.

B. The cost to the utility of its unclassified plant shall be ascertained by analysis of the utility's records. Adjustments shall not be made to record in utility plant accounts amounts previously charged to operating expenses or to income deductions in accordance with the uniform system of accounts in effect at the time or in accordance with the discretion of management as exercised under a uniform system of accounts, or under accounting practices previously followed.

C. The detailed utility plant accounts (351 to 398, inclusive) shall be stated on the basis of cost to the utility of plant constructed by it and the original cost, estimated if not known, of plant acquired as an operating unit or system. The difference between the original cost, as above, and the cost to the utility of utility plant after giving effect to any accumulated depreciation or amortization, and contributions in aid of construction applicable to the property acquired, if recorded by the accounting utility at the time of acquisition, shall be recorded in account 114 - Utility Plant Acquisition Adjustments. The original cost utility plant shall be determined by analysis of the utility's records or those of predecessor vendor companies with respect to utility plant previously acquired as operating units or systems and the difference between the original cost so determined, less accumulated depreciation and amortization and contributions in aid of construction recorded by the accounting utility, and the cost to the utility, with necessary adjustments for retirements for date of acquisition, shall be entered in account 114 - Utility Plant Acquisition Adjustments. Any difference between the cost of



## ACCOUNTING INSTRUCTIONS

utility plant and its book cost, when not properly includible in other accounts, shall be recorded in account 116 - Other Utility Plant Adjustments.

### 18. Utility Plant - To be Recorded at Cost

A. All amounts included in the accounts for utility plant acquired as an operating unit or system, shall be stated at the cost incurred by the person who first devoted the property to utility service. All other utility plant shall be included in the accounts at the cost incurred by the utility except as otherwise provided in the texts of the intangible plant accounts. Where the term "cost" is used in the detailed plant accounts, it shall have the meaning stated in this paragraph (See Definition 9).

B. When the consideration given for property is other than cash, the value of such consideration shall be determined on a cash basis. In the entry recording such transaction, the actual consideration shall be described with sufficient particularity to identify it. The utility shall be prepared to furnish the Commission the particulars of its determination of the cash value of the consideration if other than cash.

C. When property is purchased under a plan involving deferred payments, no charge shall be made to the utility plant accounts for interest, insurance, or other expenditures occasioned solely by such form of payment.

D. Utility plant accounts shall be charged with construction costs (estimated, if not known) of the utility plant contributed by others or constructed by the utility using contributed cash or its equivalent. For contributed utility plant, the accumulated depreciation or amortization account shall be charged with the estimated amount of depreciation or amortization applicable to the property at the time it was contributed to the utility. Account 271 - Contributions in Aid of Construction shall be credited with the net of the amounts charged to the plant and the accumulated depreciation or amortization accounts. For plant constructed using contributed cash or its equivalent, account 271 - Contributions in Aid of Construction shall be credited with the amount of the cash or its equivalent contribution.

### 19. Utility Plant - Components of Construction Cost

The cost of construction properly includible in the utility plant accounts shall include, where applicable, the direct and overhead costs as listed and defined hereunder:

(1) "Contract work" includes amounts paid for work performed under contract by other companies, firms, or individuals, costs incident to the award of such contracts, and inspection of such

## ACCOUNTING INSTRUCTIONS

work.

(2) "Labor" includes the pay and expenses of employees of the utility engaged on construction work, and related workmen's compensation insurance, payroll taxes and similar items of expense. It does not include the pay and expenses of employees which are distributed to construction through clearing accounts nor the pay and expenses included in other items hereunder.

(3) "Materials and supplies" includes the purchase price at the point of free delivery plus customs duties, excise taxes, the cost of inspection, loading and transportation, the related stores expenses, and the cost of fabricated materials from the utility's shop. In determining the cost of materials and supplies used for construction, proper allowance shall be made for unused materials and supplies, for materials recovered from temporary structures used in performing the work involved, and for discounts allowed and realized in the purchase of materials and supplies.

Note: -- The cost of individual items of equipment of less than \$750 or of short life, including small portable tools and implements, shall not be charged to utility plant accounts unless the correctness of the accounting therefor is verified by current inventories. The cost shall be charged to the appropriate operating expense or clearing accounts, according to the use of such items, or, if such items are consumed directly in construction work, the cost shall be included as part of the cost of the construction unit.

(4) "Transportation" includes the cost of transporting employees, materials and supplies, tools, purchased equipment, and other work equipment (when not under own power) to and from points of construction. It includes amounts paid to others as well as the cost of operating the utility's own transportation equipment (See item 5 following).

(5) "Special machine service" includes the cost of labor (optional), materials and supplies, depreciation, and other expenses incurred in the maintenance, operation and use of special machines, such as pile drivers, derricks, ditchers, scrapers, material unloaders, and other labor saving machines; also expenditures for rental, maintenance and operation of machines of others. It does not include the cost of small tools and other individual items of small value or short life which are included in the cost of materials and supplies (See item 3, above). When a particular construction job requires the use for an extended period of time of special machines, transportation or other equipment, the net book cost thereof, less the appraised or salvage value at time of release from the job, shall be included in the cost of construction.

## ACCOUNTING INSTRUCTIONS

(6) "Shop service" includes the proportion of the expense of the utility's shop department assignable to construction work except that the cost of fabricated materials from the utility's shop shall be included in "materials and supplies".

(7) "Protection" includes the cost of protecting the utility's property from fire or other casualties and the cost of preventing damages to others, or to the property of others, including payments for discovery or extinguishment of fires, cost of apprehending and prosecuting incendiaries, witness fees in relation thereto, amounts paid to municipalities and others for fire protection, and other analogous items of expenditures in connection with construction work.

(8) "Injuries and damages" includes expenditures or losses in connection with construction work on account of injuries to persons and damages to the property of others; also the cost of investigation of and defense against actions for such injuries and damages. Insurance recovered or recoverable on account of compensation paid for injuries to persons incident to construction shall be credited to the account or accounts to which such compensation is charged. Insurance recovered or recoverable on account of property damages incident to construction shall be credited to the account or accounts charged with the cost of damages.

(9) "Privileges and permits" includes payments for and expenses incurred in securing temporary privileges, permits or rights in connection with construction work, such as for the use of private or public property, streets, or highways, but it does not include rents, or amounts chargeable as franchises (See account 302 - Franchises).

(10) "Rents" includes amounts paid for the use of construction quarters and office space occupied by construction forces and amounts properly includible in construction costs for such facilities jointly used.

(11) "Engineering and supervision" includes the portion of the pay and expenses of engineers, surveyors, draftsmen, inspectors, superintendents and their assistants applicable to construction work.

(12) "General administration capitalized" includes the portion of the pay and expenses of the general officers and administrative and general expenses applicable to construction work.

## ACCOUNTING INSTRUCTIONS

(13) "Engineering services" includes amounts paid to other companies, firms or individuals engaged by the utility to plan, design, prepare estimates, supervise, inspect, or give general advice and assistance in connection with construction work.

(14) "Insurance" includes premiums paid or amounts provided or reserved as self-insurance for the protection against loss and damages in connection with construction, by fire or other casualty, injuries to or death of persons other than employees, damages to property of others, defalcations of employees and agents, and the nonperformance of contractual obligations of others. It does not include workmen's compensation or similar insurance on employees included as "labor" in item 2, above.

(15) "Legal expenditures" includes the general legal expenditures incurred in connection with construction and the court and legal costs directly related thereto, other than legal expenses included in protection, item 7, and in injuries and damages, item 8.

(16) "Taxes" includes taxes on physical property (including land) during the period of construction and other taxes properly includible in construction costs before the facilities become available for service.

(17) "Allowance for funds used during construction" includes the net cost for the period of construction of borrowed funds used for construction purposes and a reasonable rate on other funds when so used. No allowance for funds used during construction shall be included in these accounts upon expenditures for construction projects which have been abandoned.

Note:--When only a part of a plant or project is placed in operation or is completed and ready for service but the construction work as a whole is incomplete, that part of the cost of the property placed in operation, or ready for service, shall be treated as "Utility Plant in Service" and allowance for funds used during construction thereon as a charge to construction shall cease. Allowance for funds used during construction on that part of the cost of the plant which is incomplete may be continued as a charge to construction until such time as it is placed in operation or is ready for service, except as limited in item 17, above.

(18) "Earnings and expenses during construction." The earnings and expenses during construction shall constitute a component of construction costs.

## ACCOUNTING INSTRUCTIONS

(a) The earnings shall include revenues received or earned by plants during the construction period. The revenues shall also include rentals for lands, buildings, etc., and miscellaneous receipts not properly includible in other accounts.

(b) The expenses shall consist of the cost of operating the wastewater plant, and other costs incident to the wastewater costs for which construction is credited under paragraph (a), above, including the cost of repairs and other expenses of operating and maintaining lands, buildings, and other property, and other miscellaneous and like expenses not properly includible in other accounts.

### 20. Utility Plant - Overhead Construction Costs

A. All overhead construction costs, such as engineering, supervision, general office salaries and expenses, construction engineering and supervision by others than the accounting utility, legal expenses, insurance, injuries and damages, relief and pensions, taxes and allowance for funds used during construction, shall be charged to particular jobs or units on the basis of the amounts of such overheads reasonably applicable thereto, so that each job or unit shall bear its equitable proportion of such costs and that the entire costs of the unit, both direct and overhead, shall be deducted from the plant accounts at the time the property is retired.

B. As far as practicable, the determination of payroll charges includible in construction overheads shall be based on time card distributions thereof. Where this procedure is impractical, special studies shall be made periodically of the time of supervisory employees devoted to construction activities so that only such overhead costs as have a definite relation to construction shall be capitalized. The addition to direct construction costs of arbitrary percentages or amounts to cover assumed overhead costs is not permitted.

C. The records supporting the entries for overhead construction costs shall be so kept as to show the total amount of each overhead for each year, the nature and amount of each overhead expenditure charged to each construction work order and to each utility plant account, and the basis of distribution of such costs.

### 21. Utility Plant - Purchased or Sold

A. When utility plant constituting an operating unit or system is acquired by purchase, merger, consolidation, liquidation, or

## ACCOUNTING INSTRUCTIONS

otherwise, the costs of acquisition, including expenses incidental thereto properly includible in utility plant, shall be charged to account 104 - Utility Plant Purchased or Sold.

B. The accounting for the acquisition shall then be completed as follows:

(1) The original cost of plant, estimated if not known, shall be credited to account 104 - Utility Plant Purchased or Sold, and concurrently charged to the appropriate utility plant in service accounts and account 102 - Utility Plant Leased to Others and account 103 - Property Held for Future Use, and account 105 - Construction Work in Progress, as appropriate.

(2) The requirements for accumulated depreciation and amortization applicable to the original cost of the properties purchased, if required by the Commission to be recorded by the accounting utility determined with due regard to operating practices of the purchaser and his plans regarding such property, and giving consideration also to the effect on such requirements of any rehabilitation expenditures (see Paragraph C), shall be charged to account 104 - Utility Plant Purchased or Sold, and concurrently credited to the appropriate account for accumulated depreciation or amortization.

(3) The cost to the utility of any property includible in account 121 - Nonutility Property, shall be transferred thereto.

(4) The amount of contributions in aid of construction applicable to the property acquired, and which the purchaser may be required to record, shall be charged to account 104 - Utility Plant Purchased or Sold, and concurrently credited to account 271 - Contributions in Aid of Construction.

(5) The amount of accumulated amortization applicable to contributed property, and which the purchaser may be required to record, shall be credited to account 104 - Utility Plant Purchased or Sold and concurrently debited to account 272 - Accumulated Amortization of Contributions in Aid of Construction, according to the regulatory treatment of the Commission.

(6) The amount remaining in account 104 - Utility Plant Purchased or Sold, shall then be closed to account 114 - Utility Plant Acquisition Adjustments.

## ACCOUNTING INSTRUCTIONS

C. If property acquired in the purchase of an operating unit or system is in such physical condition when acquired that it is necessary substantially to rehabilitate it in order to bring the property up to the standards of the utility, the cost of such work, except replacements, shall be accounted for as a part of the purchase price of the property.

D. When any property acquired as an operating unit or system includes duplicate or other plant, which will be retired by the accounting utility in the reconstruction of the acquired property or its consolidation with previously owned property, the accounting for such property shall be presented to the Commission.

E. In connection with the acquisition of utility plant, the utility shall procure, if possible, all existing records relating to the property acquired, or certified copies thereof, and shall preserve such records in conformity with regulations or practices governing the preservation of records of its own construction.

F. When utility plant constituting an operating unit or system is sold, conveyed, or transferred to another by sale, merger, consolidation, or otherwise, the book cost of the property sold or transferred to another shall be credited to the appropriate utility plant accounts, including amounts carried in account 114 - Utility Plant Acquisition Adjustments, and the amounts (estimated if not known) carried with respect thereto in the accounts for accumulated depreciation and amortization and in account 252 - Advances for Construction, and account 271 - Contributions in Aid of Construction, shall be charged to such accounts and the contra entries made to account 104 - Utility Plant Purchased or Sold. Unless otherwise ordered by the Commission, the difference, if any between (a) the net amount of debits and credits and (b) the consideration received for the property (less commissions and other expenses of making the sale) shall be included in account 414 - Gains (Losses) From Disposition of Utility Property (See account 104 - Utility Plant Purchased or Sold).

Note:--In cases where existing utilities merge or consolidate because of financial or operating reasons or statutory requirements rather than as a means of transferring title of purchased properties to a new owner, the accounts of the constituent utilities, with the approval of the Commission, may be combined. In the event original cost has not been determined, the resulting utility shall proceed to determine such cost as outlined herein.

## ACCOUNTING INSTRUCTIONS

### 22. Utility Plant - Accounting for Capital and Operating Leases

A. For each lease entered into, the utility shall maintain sufficient documents and other background information as necessary to determine whether the lease is a capital or operating lease. This information includes but is not limited to:

- (1) Evidence or documents of ownership;
- (2) Signed copies of the lease agreement;
- (3) Estimated life of the leased property;
- (4) Evidence as to the value of the leased property;
- (5) Evidence as to the lessor's implicit interest rate (if available);
- (6) Evidence as to the lessee's borrowing rate; and
- (7) The amount and disposition of executory costs (taxes, maintenance and insurance).

B. Leases shall be accounted for by the utility as described in Statement of Financial Accounting Standards Nos. 13 (as amended) and 71 published by the Financial Accounting Standards Board; however, the Commission may elect to approve the entries made to the utilities accounts in recording the effect of utility leases.

C. Capitalized leases shall be recorded in the appropriate plant in service account(s) which describe the type of asset leased. These records shall be maintained in sufficient detail such that the utility will be able to report the number, general nature, and residual balances of all capitalized leased assets as well as any related leasehold amortization balances and the balance of any leasehold obligations.

### 23. Utility Plant - Expenditures on Leased Property

A. The cost of substantial initial improvements (including repairs, rearrangements, additions and betterments) made in the course of preparing for utility property leased for a period of more than one year, and the cost of subsequent substantial additions, replacements, or betterments to such property, shall be charged to the utility plant account appropriate for the class of property leased. If the service life of the improvements is terminable by action of the lease, then the cost, less net salvage, of the improvements shall be spread over the life of the lease by charges to account 407.1 - Amortization of Limited Term Plant. However, if the service life is not terminated by action of the lease, but by depreciation proper, then the cost of the improvements, less net salvage, shall be accounted for as depreciable plant.



## ACCOUNTING INSTRUCTIONS

B. If improvements made to property leased for a period of more than one year are of relatively minor cost, or if the lease is for a period of not more than one year, the cost of the improvements shall be charged to the account in which the rent is included either directly or by amortization thereof.

### 24. Utility Plant - Land and Land Rights

A. The accounts for land and land rights include the cost of land owned in fee by the utility and rights, interests, and privileges held by the utility in land owned by others, such as leaseholds, easements, water and water power rights, diversion rights, submersion rights, rights of way, and other like interests in land. Do not include in the accounts for land, land rights, and rights of way costs incurred in connection with first clearing and grading of land and rights of way and the damage costs associated with the construction and installation of plant. Such costs shall be included in the appropriate plant accounts directly benefited.

B. Where special assessments for public improvements provide for deferred payments, the full amount of the assessments shall be charged to the appropriate land account and the unpaid balance shall be carried in an appropriate liability account. Interest on unpaid balances shall be charged to the appropriate interest account. If any part of the cost of public improvements is included in the general tax levy, the amount thereof shall be charged to the appropriate tax account.

C. Separate entries shall be made for the acquisition, transfer or retirement of each parcel of land, and each land right (except rights of way for collection lines), or water rights, having a life of more than one year. A record shall be maintained showing the nature of ownership; full legal description; area; map reference; purpose for which used; city; county; and tax district in which situated; from whom purchased or to whom sold; payment given or received; other costs; contract date and number; date of recording of deed; and book and page of record. Entries transferring or retiring land or land rights shall refer to the original entry recording its acquisition.

D. Any difference between the amount received from the sale of land or land rights, less agents' commissions and other costs incident to the sale, and the book cost of such land or rights, shall be included in account 414 - Gains (Losses) from Disposition of Utility Property, unless a reserve therefore has been authorized and provided or, less otherwise authorized or required by the

## ACCOUNTING INSTRUCTIONS

Commission. Appropriate adjustments of the accounts shall be made with respect to any structures or improvements located on land sold.

E. The cost of buildings and other improvements (other than public improvements) shall not be included in the land accounts. If at the time of acquisition of any interest in land, such interest extends to buildings or other improvements (other than public improvements), which are then devoted to wastewater operations, the land and improvements shall be separately appraised and the cost allocated to land and buildings or improvements on the basis of the appraisals. If the improvements are removed or wrecked without being used in operations, the cost of removing or wrecking shall be charged and the salvage credited to the account in which the cost of the land is recorded.

F. When the purchase of land for utility operations requires the purchase of more land than needed for such purposes, the charge to the specific land account shall be based upon the cost of the land purchased, less the fair market value of that portion of the land which is not to be used in utility operations. The portion of the cost measured by the fair market value of the land not to be used shall be included in account 103 - Property Held for Future Use, or account 121 - Nonutility Property, as appropriate.

G. Provision shall be made for amortizing amounts carried in the accounts for limited term interests in land so as to apportion equitably the cost of each interest over the life thereof (See account 110.1 - Accumulated Amortization of Utility Plant in Service, and account 407.1 - Amortization of Limited Term Plant).

### 25. Utility Plant - Structures and Improvements

A. The accounts for structures and improvements include the cost of all buildings and facilities to house, support, or safeguard property or persons, including all fixtures permanently attached to and made a part of buildings and which cannot be removed therefrom without cutting into the walls, ceilings, or floors, or without in some way impairing the buildings, and improvements of a permanent character on or to land. Also include those costs incurred in connection with the first clearing and grading of land and rights of way, and the damage costs associated with construction and installation of plant.

B. The cost of specially provided foundation, not intended to outlast the machinery for apparatus for which provided, and the cost of angle irons, castings, etc., installed at the base of any item of equipment, shall be charged to the same account as the cost of the machinery, apparatus, or equipment.

## ACCOUNTING INSTRUCTIONS

C. Minor buildings and structures, such as valve towers, patrolmen's towers, telephone stations, etc., which are used directly in connection with or form a part of a collection plant, treatment plant, etc., shall be considered a part of that facility constructed or operated and the cost thereof accounted for accordingly.

D. The cost of disposing of materials excavated in connection with construction of structures shall be considered as a part of the cost of such work, except as follows: (a) When such material is used for filling, the cost of loading, hauling, and dumping shall be equitably apportioned between the work in connection with which the removal occurs and work in connection with which the material is used; (b) When such material is sold, the net amount realized from such sales shall be credited to the work in connection with which the removal occurs. If the amount realized from the sale of excavated materials exceeds the removal costs and the costs in connection with the sale, the excess shall be credited to the land account in which the site is carried.

E. Lighting or other fixtures temporarily attached to building for purposes of display or demonstration shall not be included in the cost of the building, but in the appropriate equipment account.

### 26. Utility Plant - Equipment

A. The cost of equipment chargeable to the utility plant accounts, unless otherwise indicated in the text of an equipment account, includes the net purchase price thereof, sales taxes, investigation and inspection expenses necessary to such purchase, expenses of transportation when borne by the utility, labor employed, materials and supplies consumed, and expenses incurred by the utility in unloading and placing the equipment in readiness to operate. Also include those costs incurred in connection with the first clearing and grading of land and rights of way and the damage costs associated with construction and installation of plant.

B. Exclude from equipment accounts hand and other portable tools, which are likely to be lost or stolen or which have a value of less than \$750 or short life, unless the correctness of the accounting therefor as utility plant is verified by current inventories. Special tools acquired and included in the purchase price of equipment shall be included in the appropriate plant account. Portable drills and similar tool equipment when used in connection with the operation and maintenance of a particular plant or department, such as pumping, transmission and distribution, etc., or in "stores", shall be charged to the plant account appropriate for their use.

## ACCOUNTING INSTRUCTIONS

C. The equipment accounts shall include angle irons and similar items which are installed at the base of an item of equipment, but piers and foundations which are designed to be as permanent as the buildings which house the equipment, or which are constructed as a part of the buildings and which cannot be removed without cutting into the walls, ceilings or floors without in some way impairing the building, shall be included in the building accounts.

D. The equipment accounts shall include the necessary costs of testing or running a plant or part thereof during an experimental or test period prior to becoming available for service. The utility shall furnish the Commission with full particulars of and justification for any test or experimental run extending beyond a period of thirty days.

E. The cost of efficiency or other tests made subsequent to the date equipment becomes available for service shall be charged to the appropriate expense accounts, except that tests to determine whether equipment meets the specifications and requirements as to efficiency, performance, etc., guaranteed by manufacturers, made after operations have commenced and within the period specified in the agreement or contract of purchase, may be charged to the appropriate utility plant account.

### 27. Utility Plant - Additions and Retirements

A. For the purpose of avoiding undue refinement in accounting for additions to and retirements and replacements of utility plant, all property shall be considered as consisting of (1) retirement units and (2) minor items of property. Each utility shall use such list of retirement units as is in use by it at the effective date hereof or as may be prescribed by the Commission, with the option, however, of using smaller units, provided the utility's practice in this respect is consistent.

B. The addition and retirement of retirement units shall be accounted for as follows:

- (1) When a retirement unit is added to the utility plant, the cost thereof shall be added to the appropriate utility plant account, except that when units are acquired in the acquisition of any utility plant constituting an operating system, they shall be accounted for as provided in Instruction 21.

## ACCOUNTING INSTRUCTIONS

- (2) When a retirement unit is retired from utility plant, with or without replacement, the book cost thereof shall be credited to the utility plant account in which it is included, determined in the manner set forth in paragraph D, below. If the retirement unit is of a depreciable class, the book cost of the unit retired and credited to utility plant shall be charged to the accumulated depreciation applicable to such property. The cost of removal and the salvage shall be charged or credited, as appropriate, to such depreciation account.

C. The addition and retirement of minor items of property shall be accounted for as follows:

- (1) When a minor item of property which did not previously exist is added to plant and a substantial addition results, the cost thereof shall be accounted for in the same manner as for the addition of a retirement unit, as set forth in paragraph B(1), above, otherwise the charge shall be to the appropriate maintenance expense account.
- (2) When a minor item of property is retired and not replaced, the book cost thereof shall be credited to the utility plant account in which it is included; and, in the event the minor item is a part of a depreciable plant, the account for accumulated depreciation shall be charged with the book cost and cost of removal and credited with the salvage. If, however, the book cost of the minor item retired and not replaced has been or will be accounted for when such unit is retired, no separate credit to the property account is required.
- (3) When a minor item of depreciable property is replaced independently of the retirement unit of which it is a part, the cost of replacement shall be charged to the maintenance expense account appropriate for the item, except that if the replacement effects a substantial betterment (the primary aim of which is to make the property affected more useful, more efficient, of greater durability, or of greater capacity), the excess cost of the replacement over the estimated cost at current prices of replacing without betterment shall be charged to the appropriate utility plant account.

## ACCOUNTING INSTRUCTIONS

D. The book cost of the utility plant retired shall be the amount at which such property is included in the utility plant accounts, including all components of construction costs. The book cost shall be determined from the utility's records and if this cannot be done, it shall be estimated. When it is impracticable to determine the book cost of each unit, due to the relatively large number or small cost thereof, an appropriate average book cost of the units, with due allowance for any differences in size and character, shall be used as the book cost of the units retired.

E. The book cost of land retired shall be credited to the appropriate land account. If the land is sold, the difference between the book cost and the sale price of the land (less commissions and other expenses of making the sale) shall be included in account 414 - Gains (Losses) from Disposition of Utility Property, unless otherwise authorized or required by the Commission. If the land is not used in utility service but is retained by the utility, the book cost shall be charged to account 103 - Property Held for Future Use, or account 121 - Nonutility Property, as appropriate.

F. The book cost less net salvage of depreciable utility plant retired shall be charged in its entirety to account 108.1 - Accumulated Depreciation of Utility Plant in Service. Any amounts which, by approval or order of the Commission, are charged to account 182 - Extraordinary Property Losses, shall be credited to account 108.1 - Accumulated Depreciated of Utility Plant in Service.

G. The accounting for the retirement of amounts included in account 352 - Franchises and the items of limited term interest in land included in the accounts for land and land rights shall be as provided for in the text of account 110.1 - Accumulated Amortization of Utility Plant in Service, account 407.1 - Amortization of Limited Term Plant and account 407.3 - Amortization of Other Utility Plant.

H. In some instances the unexpected early retirement of a major unit of property, which would eliminate or seriously deplete the existing depreciation reserve, may require accounting treatment which differs from that described in paragraph B above. In such instances the Commission may authorize or order the loss on retirement (less any tax savings) to be charged to income in the current year or transferred to account 186 - Miscellaneous Deferred Debits, and amortized in future periods. Such accounting treatment shall be used only when specifically authorized or directed by the Commission.

## ACCOUNTING INSTRUCTIONS

### 28. Utility Plant - Work Order and Property Record System Required

A. Each utility shall record all construction and retirements of utility plant by means of work orders or job orders. Separate work orders may be opened for additions to and retirements of utility plant or the retirements may be included with the construction work order, provided, however, that all items relating to the retirements shall be kept separate from those relating to construction and provided, further, that any maintenance costs involved in the work shall likewise be segregated.

B. Each utility shall keep its work order system so as to show the nature of each addition to or retirement of utility plant, the total cost thereof, the source or sources of costs, and the utility plant account or accounts to which charged or credited. Work orders covering jobs of short duration may be cleared monthly.

C. Each utility shall maintain records in which, for each plant account, the amounts of the annual additions and retirements are classified so as to show the number and the cost of the various retirement units or other appropriate record units included therein.

### 29. Utility Plant - Transfers of Property

A. When property is transferred from one utility plant account to another, from one utility department to another, such as from water to wastewater, from one operating division or area to another, to or from accounts 101 - Utility Plant in Service, 102 - Utility Plant Leased to Others and 103 - Property Held for Future Use, the transfer shall be recorded by transferring the original cost thereof from the one account, department, or location to the other. Any related amounts carried in the accounts for accumulated depreciation or amortization shall be transferred in accordance with the segregation of such accounts.

B. When depreciable property is transferred from the utility plant accounts to account 121 - Nonutility Property, the transfer shall be accomplished by crediting the utility plant accounts and charging the accumulated depreciation with the book cost of the item transferred; the accumulated depreciation shall then be credited and account 121 - Nonutility Property, concurrently charged with the market value of the property transferred. If the property is sold within a relatively short time, a debit or credit shall be made to the accumulated depreciation to adjust the estimated salvage to the amount actually realized.

## ACCOUNTING INSTRUCTIONS

### 30. Utility Plant - Common Plant

A. If the utility is engaged in more than one utility service such as water, wastewater, electric and gas, and any of its utility plant is used in common for several utility services or for other purposes to such an extent and in such manner that it is impracticable to segregate it by utility services currently in the accounts, such property with the approval of the Commission, may be designated and classified as "common utility plant".

B. Utility plant designated as common utility plant shall be classified according to the detailed utility plant accounts appropriate for the property.

C. The utility shall be prepared to show at any time and to report to the Commission annually, or more frequently, if required, and by utility plant accounts (351 to 398) the following: (1) the book cost of common utility plant (2) the allocation of such cost to the respective departments using the common utility plant and (3) the basis of the allocation.

D. The accumulated provision for depreciation and amortization of the utility shall be segregated so as to show the amount applicable to the property classified as common utility plant.

E. The expenses of operation, maintenance, rent, depreciation and amortization of common utility plant shall be recorded in the accounts prescribed herein but designated as common expenses, and the allocation of such expenses to the departments using the common utility plant shall be supported in such manner as to reflect readily the basis of allocation used.

### 31. Utility Plant - Multiple Use

Land, rights of way and structures used jointly for several functions, such as supply, and transmission and distribution purposes, shall be classified according to the major use thereof.

### 32. Utility Plant - Plant Account Matrix

A. Class A utilities (as defined in Instruction 1) are required to subdivide the plant accounts into "functional" operations. Each object account shall be subdivided as shown in the plant account matrix shown on page 98. The subaccounts are to be designated by adding a suffix of one decimal place to the three digit account number.



## ACCOUNTING INSTRUCTIONS

B. The "functional" operations for the wastewater system are listed below along with the designated suffix:

- .1 Intangible plant
- .2 Collection plant
- .3 System pumping plant
- .4 Treatment and disposal plant
- .5 Reclaimed water treatment plant
- .6 Reclaimed water distribution plant
- .7 General Plant

### 33. Operating Income - Depreciation Expense

A. Depreciation charges shall be computed using either the straight-line remaining life method (See definition 38) or the straight-line method (See definition 39), according to which method has been approved by the Commission. Composite depreciation rates (See definition 8) may be used with prior Commission approval. When at all possible, separate depreciation charges shall be computed for both contributed plant and for plant generating investment tax credits including progress payment investment tax credits.

B. When the straight-line remaining life method is used, the rates shall be reviewed periodically and adjusted as required, so that the depreciation accrual will bear a reasonable relationship to the remaining life, the estimated net future salvage, cost of plant in service and to the balance of accumulated depreciation accrued in prior periods.

C. When the straight-line method is used, the rates shall be reviewed periodically and adjusted as required, so that the depreciation accrual will bear a reasonable relationship to the service life, the estimated net salvage, and the cost of plant in service.

D. Amortization of contributions in aid of construction (CIAC), if recognized by the Commission, shall be credited to account 403 - Depreciation Expense. The concurrent debit is to account 272 - Accumulated Amortization of CIAC. The resulting balance in the depreciation expense account will be net of CIAC amortization. CIAC shall be amortized over a period equal to the estimated service life of the related contributed asset. A group composite or overall composite rate, which ever is applicable, may be used for CIAC that can not be directly related to a particular plant asset.

### 34. Operating Income - Income Taxes

A. Current income tax provision:

- (1) The utility shall initially debit account 409 - Income

## ACCOUNTING INSTRUCTIONS

Taxes, and credit account 236 - Accrued Taxes, to record its estimated current income tax liability. As the exact amounts of taxes become known, the current tax accruals shall be adjusted by debits or credits to these accounts unless such adjustments are properly includible in account 214 - Appropriated Retained Earnings or account 215 - Unappropriated Retained Earnings, so that these accounts as nearly as can be ascertained shall include the actual taxes payable by the utility.

- (2) The accruals for income taxes shall be apportioned among utility departments and to Other Income and Deductions so that, as nearly as practicable, each tax shall be included in the expenses of the utility department or Other Income and Deductions, and shall be related to the income which gave rise to the tax. Adjustments to account 214 - Appropriated Retained Earnings or account 215 - Unappropriated Retained Earnings, shall be recorded net of tax.

### B. Interperiod Tax Allocation - Depreciation:

- (1) The Federal Economic Recovery Tax Act of 1981 (ERTA).

ERTA provides that a utility claiming accelerated depreciation (Accelerated Cost Recovery System (ACRS)) must use a normalized method of accounting for federal income taxes on its regulated books of account and for ratemaking purposes. A utility must use the same depreciation method and service lives in computing federal income tax expense when establishing cost of service for ratemaking purposes as is used in its regulated books of account, or if it uses a different method, it must make adjustments to a reserve to reflect the deferral of taxes resulting from such differences. Similarly, in order to claim investment tax credits, a utility must defer the entire balance of investment tax credits on its books of account and amortize the balance over the life of the related property.

## ACCOUNTING INSTRUCTIONS

### C. Comprehensive Interperiod Income Tax Allocation - Other Than Depreciation.

- (1) Certain regulatory bodies have required comprehensive interperiod income tax allocation of all material book-tax timing differences other than depreciation differences. They have reasoned that where there are timing differences between the period in which transactions affect taxable income and the periods in which they enter into the determination of pretax accounting income, the income tax effects of such transactions are to be recognized in the periods in which the differences between book accounting income and taxable income arise and in the period in which the differences reverse using the deferred tax method. In general, comprehensive interperiod tax allocation should be followed whenever transactions enter into the determination of pretax accounting income for the period even though some transactions may affect the determination of taxes payable in a different period, as further qualified below.
- (2) Utilities are not required to utilize comprehensive interperiod income tax allocation until the deferred income taxes are included as an expense in the rate level by the regulatory authority having rate jurisdiction over the utility. Where comprehensive interperiod tax allocation accounting is not practiced, the utility shall include as a note to each financial statement, prepared for public use, a footnote explanation setting forth the utility's accounting policies with respect to interperiod tax allocation and describing the treatment by regulatory authorities having rate jurisdiction for ratemaking purposes of the tax timing differences.
- (3) Should the utility be subject to more than one agency having rate jurisdiction, its accounts shall appropriately reflect the ratemaking treatment (deferral or flow through) of each jurisdiction.
- (4) Once comprehensive interperiod tax allocation has been initiated either in whole or in part it shall be practiced on a consistent basis and shall not be changed or discontinued without prior Commission approval.

## ACCOUNTING INSTRUCTIONS

### EXAMPLE

The following example shows how the various transactions are recorded:

- a. A utility purchases depreciable plant at a cost of \$10,000. The plant has a 10 year life with no salvage.
- b. The utility's federal taxable income from utility operations, before the effect of depreciation is \$30,000 (46% tax rate).
- c. ACRS depreciation for each year is \$800, \$1400, \$1200, \$1000, \$1000, \$1000, \$900, \$900, \$900, \$900.
- d. Book depreciation for each year using half year convention in year placed in service is: \$500, \$1000, \$1000, \$1000, \$1000, \$1000, \$1000, \$1000, \$1000, \$500.
- e. Investment tax credit is \$800 ( $\$10,000 \times 8\%$ ) in order to use 100% of the \$10,000 cost for ACRS depreciation.
- f. Deferred taxes are calculated by subtracting tax depreciation from book depreciation and multiplying by the tax rate. If tax depreciation is greater than book, debit Account 410 and credit Account 282. If book depreciation is greater than tax, debit account 282 and credit account 410.

	Account Number	Account Title	Debit	Credit
<hr/>				
Year 1				
1-a	409.10	Income Taxes, Utility Operating Income	\$12,632	
	236.1	Accrued Taxes, Utility Operating Income		\$12,632
		To record taxes estimated be payable for period (.46(\$30,000 - \$800)) - \$800		
1-b	410.10	Deferred Income Taxes	138	
	282	Accumulated Deferred Income Taxes - Liberalized Depreciation		138
		To record deferral of a portion of taxes based on the difference between straight-line depreciation		

# ACCOUNTING INSTRUCTIONS

Account Number	Account Title	Debit	Credit
	and ACRS depreciation (.46(\$500-\$800). NOTE:--The deferred tax balance of \$138 would either be deducted from rate base or be included in capital structure at zero cost.		
1-c 412.10	Investment Tax Credits Deferred to Future Periods, Utility Operations	800	
255.1	Accumulated Deferred Investment Tax Credits, Utility Operations		800
	To record the investment tax credits realized and deferred to future years in accordance with provisions of either the "General Rule"/Option 1 Treatment or the "Special Rule for Ratable Flow - through"/Option 2 Treatment (\$10,000 x 8%).		
1-d 255.1	Accumulated Deferred Investment Tax Credits, Utility Operations	40	
412.30	Investment Tax Credits Restored to Nonoperating Income, Utility Operations		40
	To record ratable amortization over the book depreciable life of the investment tax credits deferred to future periods (.50 (\$800 (1/10))). NOTE:--The net balance of deferred investment tax credits (\$800 - \$40) would be either deducted from rate base or included in capital structure at zero cost. This treatment is followed by utilities subject to the "General Rule"/Option 1 Treatment.		
1-e 255.1	Accumulated Deferred Investment Tax Credits, Utility Operations	40	
412.11	Investment Tax Credits Restored to Operating Income, Utility Operations.		40
	To record ratable flow-through over the asset's book depreciable life of investment tax credits deferred		

# ACCOUNTING INSTRUCTIONS

Account Number	Account Title	Debit	Credit
	to future periods (.50(\$800 (1/10))). NOTE:--The net balance of deferred ITC (\$800- \$40) would earn the overall rate of return. This treatment is followed by utilities subject to "Special Rule for Ratable Flow-through"/Option 2 Treatment.		
Year 2			
2-a 409.10	Income Taxes, Utility Operating Income	\$13,156	
236.1	Accrued Taxes, Utility Operating Income		\$13,156
	To record taxes estimated to be payable for period .46(\$30,000 - \$1,400).		
2-b 410.10	Deferred Income Taxes	184	
282	Accumulated Deferred Income Taxes-Liberalized Depreciation		184
	To record deferral of a portion of taxes based on the difference between straight-line depreciation and ACRS depreciation (.46(\$1000- \$1400)). NOTE:--The cumulative balance of deferred taxes (\$138 + \$184) would be either deducted from rate base or included in capital structure at zero cost.		
2-c 255.1	Accumulated Deferred Investment Tax Credits, Utility Operations	80	
412.30	Investment Tax Credits Restored to Nonoperating Income, Utility Operations		80

## ACCOUNTING INSTRUCTIONS

Account Number	Account Title	Debit	Credit
<p>To record ratable amortization over the asset's book depreciable life of the ITC deferred to future periods (\$800 (1/10)). NOTE:--The net balance of deferred ITC (\$800 - (\$40 + \$80)) would be either deducted from rate base or included in capital structure at zero cost. This treatment is followed by utilities subject to the "General Rule"/Option 1 Treatment.</p>			
2-d 255.1	Accumulated Deferred Investment Tax Credits, Utility Operations	80	
412.11	Investment Tax Credits Restored to Operating Income, Utility Operations		80
<p>To record ratable flow-through over the asset's book depreciable life of investment tax credits deferred to future period (\$800(1/10)). NOTE:--The net balance of deferred ITC (\$800 - (\$40 + \$80)) would earn the overall rate of return. This treatment is followed by utilities subject to the "Special Rule for Ratable Flow-Through"/Option 2 Treatment.</p>			
Year 3			
3-a 409.10	Income Taxes, Utility Operating Income	13,248	
236.1	Accrued Taxes, Utility Operation Income		13,248
<p>To record taxes estimated to be payable for the period (.46(\$30,000-\$1,200)).</p>			
3-b 410.10	Deferred Income Taxes	92	
282	Accumulated Deferred Income Taxes - Liberalized Depreciation		92
<p>To record deferral of a portion of taxes based on the difference between straight-line depreciation and</p>			

## ACCOUNTING INSTRUCTIONS

	Account Number	Account Title	Debit	Credit
		ACRS depreciation $((\$1,000 - \$1,200) \cdot .46)$ . The cumulative balance of deferred taxes $(\$138 + \$184 + \$92)$ would be either deducted from rate base or included in capital structure at zero cost.		
3-c	255.1 412.30	"General Rule"/Option 1 Treatment utilities would record the same entry as in Year 2 for amortization of ITC. The net balance deducted from rate base or included in capital structure at zero cost would be $(\$800 - (\$40 + 2 (\$80)))$ .	80	80
3-d	255.1 412.11	"Special Rule for Ratable Flow- Through"/Option 2 Tréatment utilities would record the same entries recorded in Year 2 for ratable flow-through of ITC. The net ITC balance earning the overall rate of return would be \$600.	80	80
Year 4				
4-a	409.10 236.1	Income Taxes, Utility Operating Income Accrued Taxes, Utility Operating Income	13,340	13,340
		To record taxes estimated to be payable for the period $(.46(\$30,000 -$ $\$1,000))$ .		
4-b	410.10 282	No entry would be made related to deferred taxes because book and tax depreciation are equal. The cumulative balance of \$414 would continue to be deducted from rate base or included in capital structure at zero cost.		
4-c	255.1 412.30	"General Rule"/Option 1 Treatment utilities. Same entry as Year 2 Net deferred balance either deducted	80	80



# ACCOUNTING INSTRUCTIONS

Account Number	Account Title	Debit	Credit
	from rate base or included in capital structure at zero cost would be $(\$800 - (\$40 + 3(\$80)))$ .		
4-d 255.1 412.11	"Special Rule for Ratable Flow-Through"/Option 2 Treatment utilities. Same entry as Year 2. Net balance earning the overall rate of return would be \$520.	80	80
Year 5			
5-a 409.10 236.1	Same entry as Year 4.	13,340	13,340
5-b 410.10 282	See Year 4.		
5-c 255.1 412.30	"General Rule"/Option 1 Treatment utilities. Same entry as Year 2. Net ITC balance deducted from rate base or included in capital structure is \$440.	80	80
5-d 255.1 412.11	"Special Rule for Ratable Flow-Through"/Option 2 Treatment utilities. Same entry as Year 2. Net ITC balance earning overall rate of return is \$440.	80	80
Year 6			
6-a 409.10 236.1	Same entry as Year 4.	13,340	13,340
6-b 410.10 282	See Year 4.		
6-c 255.1 412.30	"General Rule"/Option 1 Treatment utilities same entry as Year 2. Net ITC balance deducted from rate base or included in capital structure at zero cost is \$360.	80	80

# ACCOUNTING INSTRUCTIONS

	Account Number	Account Title	Debit	Credit
6-d	255.1 412.11	"Special Rule for Ratable Flow-Through"/Option 2 Treatment utilities. Same entry as Year 2. Net ITC balance earning the overall rate of return is \$360.	80	80
Year 7				
7-a	409.10 236.1	Income Taxes, Utility Operating Income Accrued Taxes, Utility Operating Income	13,386	13,386
		To record taxes estimated to be payable for the period (.46(\$30,000 - \$900)).		
7-b	282 410.10	Accumulated Deferred Income Taxes - Liberalized Depreciation Deferred Income Taxes To record reversal of taxes deferred in prior years (\$1000 - \$900).46); NOTE:--The net deferred tax balance deducted from rate base or included in capital structure at zero cost is \$368.	46	46
7-c	255.1 412.30	"General Rule"/Option 1 Treatment utilities. Same entries as Year 2. Net ITC balance deducted from rate base or included in capital structure at zero cost is \$280.	80	80
7-d	255.1 412.11	"Special Rule for Ratable Flow-Through"/Option 2 Treatment utilities. Same entry as Year 2. NOTE:--Net ITC balance earning the overall rate of return is \$280.	80	80
Year 8				
8-a	409.10 236.1	Same entry as Year 7.	13,386	13,386

# ACCOUNTING INSTRUCTIONS

	Account Number	Account Title	Debit	Credit
8-b	282 410.10	Same entry as Year 7. NOTE:--Net balance deducted from rate base or included in capital structure at zero cost is \$322.	46	46
8-c	255.1 412.30	"General Rule"/Option 1 Treatment utilities. Same entry as Year 2. NOTE:--Net ITC balance deducted from rate base or included in capital structure at zero cost is \$200.	80	80
8-d	255.1 412.11	"Special Rule for Ratable Flow- Through"/Option 2 Treatment utilities. Same entry as Year 2. NOTE:--Net ITC balance earning the overall rate of return is \$200.	80	80
Year 9				
9-a	409.10 236.1	Same entry as Year 7.	13,386	13,386
9-b	282 410.10	Same entry as Year 7. NOTE:-- Net balance of deferred taxes deducted from rate base or included in capital structure at zero cost is \$276.	46	46
9-c	255.1 412.30	"General Rule"/Option 1 Treatment utilities. Same entry as Year 2. NOTE:--Net balance ITC deducted from rate base or included in capital structure at zero cost is \$120.	80	80
9-d	255.1 412.11	"Special Rule for Ratable Flow- Through"/Option 2 Treatment utilities. Same entry as Year 2. NOTE:--Net balance ITC earning overall rate of return is \$120.	80	80

# ACCOUNTING INSTRUCTIONS

Account Number	Account Title	Debit	Credit
Year 10			
10-a 409.10 236.1	Same entry as Year 7.	13,386	13,386
10-b 282 410.10	Same entry as Year 7. NOTE:-- Net balance deferred taxes deducted from rate base or included in capital structure at zero cost is \$230.	46	46
10-c 255.1 412.30	"General Rule"/Option 1 Treatment utilities. Same entry as Year 2. NOTE:--Net balance ITC deducted from rate base or included in capital structure at zero cost is \$40.	80	80
10-d 255.1 412.11	"Special Rule for Ratable Flow- Through"/Option 2 Treatment utilities. Same entry as Year 2. NOTE:--Net balance ITC earning overall rate of return is \$40.	80	80
Year 11			
11-a 409.10 236.1	Income Taxes, Utility Operating Income Accrued Taxes, Utility Operating Income	13,800	13,800
	To record taxes estimated to be payable for period (.46(\$30,000)).		
11-b 282 410.10	Accumulated Deferred Income Taxes Liberalized Depreciation Deferred Income Taxes	230	230
	To record reversal of taxes deferred in prior years ((\$500 - 0).46). NOTE:--There is no longer a deferred tax balance to be deducted from rate base or included in capital structure at zero cost.		

## ACCOUNTING INSTRUCTIONS

	Account Number	Account Title	Debit	Credit
11-c	255.1 412.30	"General Rule"/Option 1 Treatment utilities. Same entry as Year 1. NOTE:--There is no longer an ITC balance to be deducted from rate base or included in capital structure at zero cost.	40	40
11-d	255.1 412.11	"Special Rate for Ratable Flow- Through"/Option 2 Treatment utilities. Same entry as Year 1. NOTE:--There is no longer an ITC balance to earn the overall rate of return.	40	40

### 35. Operating Income - Clearing Accounts

The purpose of a clearing account is to temporarily accumulate in one account costs of a specific type which affect more than a single account, and which subsequently will be apportioned among utility plant accounts, operating expense accounts and other appropriate accounts.

The use of clearing accounts is optional. In addition to the payroll clearing account, a utility may use such additional clearing accounts as it finds useful. However, all operating expenses must be recorded in the accounts prescribed by this manual and the utility remains responsible for providing the underlying source documents as if all entries were made directly without the use of a clearing account.

### 36. Operating Income - Accrual Accounting

Monthly accounting using the accrual method is required. During the accounting period, certain amounts may have been earned although collection is not to be made until the subsequent period, and certain expenses may have been incurred, although payment is not to be made until a subsequent period. At the end of the accounting period the revenues and expenses shall be recognized by charging the appropriate expense account and corresponding liability or receivable account.

A reversing entry will be necessary at the beginning of the subsequent period.

## ACCOUNTING INSTRUCTIONS

### 37. Operating Income - Operation and Maintenance Expense Account Matrix

A. Class A and B utilities (as defined in general instruction 1) are required to subdivide the operation and maintenance expenses into functions. Each object account shall be subdivided by the functions as shown in the matrix schedule which proceeds the Operation and Maintenance Expense Accounts (page 138). The function will be designated by adding an additional one digit suffix to the basic object account.

B. The "functional" operations for the wastewater system are listed with the designated suffix:

- .1 Collection expenses - operations
- .2 Collection expenses - maintenance
- .3 Pumping expenses - operations
- .4 Pumping expenses - maintenance
- .5 Treatment and disposal expenses - operations
- .6 Treatment and disposal expenses - maintenance
- .7 Customer accounts expense
- .8 Administrative and general expenses
- .9 Reclaimed water treatment expenses - operations
- .10 Reclaimed water treatment expenses - maintenance
- .11 Reclaimed water distribution expenses - operation
- .12 Reclaimed water distribution expenses - maintenance

### 38. Operating Income - Regulatory Assets and Liabilities

Regulatory debits and credits will often be used to reconcile differences between the requirements of Generally Accepted Accounting Principles, regulatory practice and federal, state, and local tax laws. For example, when there is a change in a federal, state or local income tax rate, Statement of Financial Accounting Standards No. 109, Accounting for Income Taxes, (SFAS 109) requires that adjustments be made to existing debit and credit deferred tax balances through the income statement in the year in which the change is known or can be reasonably estimated. However, the Tax Reform Act of 1986 requires the effect of a federal income tax rate change to be recognized over a different period. Some state tax codes piggy-back the provisions of the federal tax code. Regulatory agencies may require that SFAS 109 be implemented in a revenue neutral method or they may accept the period of time and method required by tax law for the adjustment of deferred income tax balances. These different requirements can be accommodated through the use of Account 186.3 - Regulatory Assets, Account 253.1 - Regulatory Liabilities, Account 407.4 - Amortization of Regulatory Assets and Account 407.5 - Amortization of Regulatory Liabilities. By debiting and crediting these accounts, as appropriate, the difference between the existing deferred tax balances and the re-stated deferred tax balances can be flowed through the income statement as required by SFAS 109, without affecting the revenue requirement or violating the normalization

## **ACCOUNTING INSTRUCTIONS**

requirements of the Internal Revenue Code. Further, the differences can be retained on the balance sheet so there is also no effect on either rate base or the utility's allowed rate of return.

## BALANCE SHEET ACCOUNTS

### Assets and Other Debits

#### Utility Plant

- 101. Utility Plant in Service
- 102. Utility Plant Leased to Others
- 103. Property Held for Future Use
- 104. Utility Plant Purchased or Sold
- 105. Construction Work in Progress
- 106. Completed Construction not Classified
- 108. Accumulated Depreciation
  - 108.1 Accumulated Depreciation of Utility Plant in Service
  - 108.2 Accumulated Depreciation of Utility Plant Leased to Others
  - 108.3 Accumulated Depreciation of Property Held for Future Use
- 110. Accumulated Amortization
  - 110.1 Accumulated Amortization of Utility Plant in Service
  - 110.2 Accumulated Amortization of Utility Plant Leased to Others
- 114. Utility Plant Acquisition Adjustments
- 115. Accumulated Amortization of Utility Plant Acquisition Adjustments
- 116. Other Utility Plant Adjustments

#### Other Property and Investments

- 121. Nonutility Property
- 122. Accumulated Depreciation and Amortization of Nonutility Property
- 123. Investment in Associated Companies
- 124. Utility Investments
- 125. Other Investments
- 126. Sinking Funds
- 127. Other Special Funds

#### Current and Accrued Assets

- 131. Cash
  - 131.1 Cash on Hand
  - 131.2 Cash in Bank
- 132. Special Deposits
- 133. Other Special Deposits
- 134. Working Funds
- 135. Temporary Cash Investments
- 141. Customer Accounts Receivable
- 142. Other Accounts Receivable
- 143. Accumulated Provision for Uncollectible Accounts--Cr.
- 144. Notes Receivable
- 145. Accounts Receivable from Associated Companies
- 146. Notes Receivable from Associated Companies
- 151. Plant Material and Supplies



## BALANCE SHEET ACCOUNTS

- 152. Merchandise
- 153. Other Material and Supplies
- 161. Stores Expense
- 162. Prepayments
- 171. Accrued Interest and Dividends Receivable
- 172. Rents Receivable
- 173. Accrued Utility Revenues
- 174. Miscellaneous Current and Accrued Assets

### Deferred Debits

- 181. Unamortized Debt Discount and Expense
- 182. Extraordinary Property Losses
- 183. Preliminary Survey and Investigation Charges
- 184. Clearing Accounts
- 185. Temporary Facilities
- 186. Miscellaneous Deferred Debits
  - 186.1 Deferred Rate Case Expense
  - 186.2 Other Deferred Debits
  - 186.3 Regulatory Assets
- 187. Research and Development Expenditures
- 190. Accumulated Deferred Income Taxes
  - 190.1 Federal
  - 190.2 State
  - 190.3 Local

### Equity Capital and Liabilities

#### Equity Capital

- 201. Common Stock Issued
- 202. Common Stock Subscribed
- 203. Common Stock Liability for Conversion
- 204. Preferred Stock Issued
- 205. Preferred Stock Subscribed
- 206. Preferred Stock Liability for Conversion
- 207. Premium on Capital Stock
- 209. Reduction in Par or Stated Value of Capital Stock
- 210. Gain or Resale or Cancellation of Reacquired Capital Stock
- 211. Other Paid-In Capital
- 212. Discount on Capital Stock
- 213. Capital Stock Expense
- 214. Appropriated Retained Earnings
- 215. Unappropriated Retained Earnings
- 216. Reacquired Capital Stock
- 218. Proprietary Capital (for proprietorships and partnerships only)

#### Long-Term Debt

- 221. Bonds
- 222. Reacquired Bonds

## BALANCE SHEET ACCOUNTS

- 223. Advances from Associated Companies
- 224. Other Long-Term Debt

### Current and Accrued Liabilities

- 231. Accounts Payable
- 232. Notes Payable
- 233. Accounts Payable to Associated Companies
- 234. Notes Payable to Associated Companies
- 235. Customer Deposits
- 236. Accrued Taxes
  - 236.1 Accrued Taxes, Utility Operating Income
    - 236.11 Accrued Taxes, Taxes Other Than Income
    - 236.12 Accrued Taxes, Income Taxes
  - 236.2 Accrued Taxes, Other Income and Deductions
- 237. Accrued Interest
  - 237.1 Accrued Interest on Long-Term Debt
  - 237.2 Accrued Interest on Other Liabilities
- 238. Accrued Dividends
- 239. Matured Long-Term Debt
- 240. Matured Interest
- 241. Miscellaneous Current and Accrued Liabilities

### Deferred Credits

- 251. Unamortized Premium on Debt
- 252. Advances for Construction
- 253. Other Deferred Credits
  - 253.1 Regulatory Liabilities
  - 253.2 Other Deferred Liabilities
- 255. Accumulated Deferred Investment Tax Credits
  - 255.1 Accumulated Deferred Investment Tax Credits, Utility Operations
  - 255.2 Accumulated Deferred Investment Tax Credits, Nonutility Operations

### Operating Reserves

- 261. Property Insurance Reserve
- 262. Injuries and Damages Reserve
- 263. Pensions and Benefits Reserve
- 265. Miscellaneous Operating Reserves

### Contributions in Aid of Construction

- 271. Contributions in Aid of Construction
- 272. Accumulated Amortization of Contributions in Aid of Construction

## BALANCE SHEET ACCOUNTS

### Accumulated Deferred Income Taxes

- 281. Accumulated Deferred Income Taxes - Accelerated Amortization
- 282. Accumulated Deferred Income Taxes - Liberalized Depreciation
- 283. Accumulated Deferred Income Taxes - Other

## BALANCE SHEET ACCOUNTS

### Utility Plant

#### 101. Utility Plant in Service

A. This account is the control account for plant accounts 351 through 398.

B. This account shall include the original cost of utility plant, included in the plant accounts prescribed herein and in similar accounts for other utility departments, owned and used by the utility in its utility operations, and having an expected life in service of more than one year from date of installation, including such property owned by the utility but held by nominees. Separate subaccounts shall be maintained hereunder for each utility department and/or division.

C. The cost of additions to and betterments of property leased from others, which are includible in this account, shall be recorded in subdivisions separate and distinct from those relating to owned property (See Accounting Instruction 22).

#### 102. Utility Plant Leased to Others

A. This account shall include the original cost of utility plant owned by the utility, but leased to others as operating units or systems, where the lessee has exclusive possession.

B. The property included in this account shall be classified according to the detailed accounts prescribed for utility plant in service and this account shall be maintained in such detail as though the property were used by the owner in its utility operations.

#### 103. Property Held for Future Uses

A. This account shall include the original cost of property owned and held for future use in utility service under a definite plan for such use. There shall be included herein property acquired but never used by the utility in utility service, but held for such service in the future under a definite plan, and property previously used by the utility in utility service, but retired from such service and held pending its reuse in the future, under a definite plan, in utility service.

B. In the event that property recorded in this account shall no longer be needed or appropriate for future utility operations, the company shall notify the Commission of such condition and request

## BALANCE SHEET ACCOUNTS

approval of journal entries to remove such property from this account.

C. Gains or losses from the sale of land and land rights or other disposition of such property previously recorded in this account and not placed in utility service shall, unless otherwise authorized or required by the Commission, be recorded directly in account 414 - Gains (Losses) from Disposition of Utility Property. However, when determined to be significant by the Commission the gain or loss shall be transferred to account 253 - Other Deferred Credits, or account 186 - Miscellaneous Deferred Debits. Such deferred amounts shall then be amortized to account 414 - Gains (Losses) from Disposition of Utility Property, unless otherwise authorized or required by the Commission.

D. The property included in this account shall be classified according to the detailed accounts prescribed for utility plant in service and the account shall be maintained in such detail as though the property were in service. Separate subaccounts shall be maintained hereunder for each utility department for which plant is held for future use.

Note--Materials and supplies, and meters held in reserve, and normal spare capacity of plant in service shall not be included in this account.

### 104. Utility Plant Purchased or Sold

A. This account shall be charged with the cost of utility plant acquired as an operating unit or system by purchase, merger, consolidation, liquidation, or otherwise, and shall be credited with the selling price of like property transferred to others pending the distribution to appropriate accounts in accordance with Accounting Instruction 21.

B. Within six months from the date of acquisition or transfer of property recorded herein, the utility shall file with the Commission the proposed journal entries to clear from this account the amounts recorded herein.

C. When an existing wastewater system or operating unit is acquired the utility shall be obligated to obtain, from the party acquired from, all existing records, including records of plant construction dates and costs, and records of accumulated depreciation applicable to such properties.

## BALANCE SHEET ACCOUNTS

### 105. Construction Work in Progress

A. This account shall include the total of balances of work orders for utility plant in process of construction but not ready for service at the date of the balance sheet.

B. Work orders shall be cleared from this account as soon as practicable after completion of the job. Further, if a project, such as pumping station or treatment plant, is designed to consist of two or more units which may be placed in service at different dates, any expenditures which are common to and which will be used in the operation of the project as a whole shall be included in utility plant in service upon the completion and the readiness for service of the first unit. Any expenditures which are identified exclusively with units of property not yet in service shall be included in this account.

C. Expenditures on research and development projects for construction of utility facilities are to be included in a separate subdivision in this account. Records must be maintained to show separately each project along with complete detail of the nature and purpose of the research and development project together with the related costs.

### 106. Completed Construction Not Classified

At the end of the year or such other date as a balance sheet may be required by the Commission, this account shall include the total of the balances of work orders for utility plant which has been completed and placed in service but which work orders have not been classified for transfer to the detailed utility plant accounts.

Note:--For the purpose of reporting to the Commission, the classification of utility plant in service by accounts is required. The utility shall also report the balance in this account tentatively classified as accurately as practicable according to prescribed account classifications. The purpose of this provision is to avoid any significant omissions in reported amounts of utility plant in service.

### 108. Accumulated Depreciation

A. This account shall reflect the depreciation accumulated on plant used in wastewater utility service.

B. The utility shall maintain separate subaccounts corresponding with the depreciable plant accounts, in which the accumulated depreciation total is segregated.

## BALANCE SHEET ACCOUNTS

C. The following subaccounts shall be maintained:

108.1 Accumulated Depreciation of Utility Plant in Service

A. This account shall be credited with the following:

(1) Amounts charged to account 403 - Depreciation Expense, to account 416 - Costs and Expenses of Merchandising, Jobbing and Contract Work, or to clearing accounts for current depreciation expense (excludes contributed plant).

(2) Amounts of depreciation applicable to utility properties acquired as operating units or systems (See Accounting Instruction 21).

(3) Amounts charged to account 182 - Extraordinary Property Losses, when authorized by the Commission.

(4) Amounts equal to those concurrently charged to account 272 - Accumulated Amortization of Contributions in Aid of Construction, if such amortization is recognized by the Commission.

Note:--See Accounting Instruction 8 and account 439 regarding adjustments for past accrued depreciation.

B. At the time of retirement of depreciable utility plant in service, this account shall be charged with the book cost of the property retired plus the cost of removal, and shall be credited with the salvage value and any other amounts recovered, such as insurance. When retirement, cost of removal and salvage are entered originally in retirement work orders, the net total of such work orders may be included in a separate sub-account hereunder. Upon completion of the work order, the proper distribution to subdivisions of this account shall be made as provided in the following paragraph.

C. When transfers of plant are made from one utility plant account to another, or from or to another utility department, or from or to nonutility property, the accounting for the related accumulated depreciation shall be as provided in Accounting Instruction 29.

## BALANCE SHEET ACCOUNTS

D. The utility is restricted in its use of this accumulated depreciation account to the purposes set forth above. It shall not divert any portion of this account or make any other use thereof without authorization by the Commission.

### 108.2 Accumulated Depreciation of Utility Plant Leased to Others

A. This account shall be credited with amounts charged to account 413 - Income from Utility Plant Leased to Others, for current depreciation expense of property included in account 102 - Utility Plant Leased to Others. Include, also, credits for depreciation applicable to leased plant acquired as operating units or systems, to leased plant donated to the utility or for losses transferred to account 182 - Extraordinary Property Losses.

B. The requirements of account 108.1 - Accumulated Depreciation of Utility Plant in Service, regarding retirements chargeable thereto and of subsidiary data to be maintained shall be applicable likewise to this account.

C. The utility is restricted in its use of this accumulated depreciation account to the purposes set forth above. It shall not divert any portion of this account or make any other use thereof without authorization by the Commission.

Note:--See Accounting Instruction 8 and account 439 regarding adjustments for past accrued depreciation.

### 108.3 Accumulated Depreciation of Property Held for Future Use

A. This account shall be credited with amounts charged to account 426 - Miscellaneous Nonutility Expenses, for depreciation expense on property included in account 103 - Property Held for Future Use. Include, also, the balance of accumulated depreciation on property which may be transferred to account 103 - Property Held for Future Use, from other property accounts.

B. The utility is restricted in its use of accumulated depreciation to the purposes set forth above. It shall not transfer any portion of this



## BALANCE SHEET ACCOUNTS

account or make other use thereof without authorization by the Commission.

Note:--Normally, this account will not be used for current depreciation provisions because, as provided herein, the service life during which depreciation is computed commences with the date property is includible in utility plant in service. However, if special circumstances indicate the propriety of current accruals for depreciation, such charges shall be made to account 426 - Miscellaneous Nonutility Expenses.

### 110. Accumulated Amortization

- A. This account shall reflect the amortization accumulated on plant used in wastewater utility service.
- B. The utility shall maintain separate subaccounts corresponding with the amortizable plant accounts, in which the accumulated amortization total is segregated.
- C. The following subaccounts shall be maintained:

#### 110.1 Accumulated Amortization of Utility Plant in Service

- A. This account shall be credited with amounts charged to account 407.1 - Amortization of Limited Term Plant, for the current amortization of limited term utility investments. It shall be credited also with amounts which may be charged to account 407.3 - Amortization of Other Utility Plant, or to account 426 - Miscellaneous Nonutility Expenses, to amortize intangible or other utility plant which does not have a definite or terminable life and is not subject to charges for depreciation expense.
- B. When any property to which this account applies is sold, relinquished, or otherwise retired from service, this account shall be charged with the amount previously credited in respect to such property. The book cost of the property so retired less the amount chargeable to this account and less the net proceeds realized at retirement shall be included in account 414 - Gains (Losses) from Disposition of Utility Property, unless otherwise authorized or required by the Commission.
- C. The utility is restricted in its use of accumulated amortization to the purposes set forth

## BALANCE SHEET ACCOUNTS

above. It shall not divert any portion of this account or make any other use thereof without authorization of the Commission.

Note:--See Accounting Instruction 8 and account 439 regarding adjustments for past accrued amortization.

### 110.2 Accumulated Amortization of Utility Plant Leased to Others

A. This account shall be credited with amounts charged to account 413 - Income from Utility Plant Leased to Others, for the current amortization of limited-term or other investments subject to amortization included in account 102 - Utility Plant Leased to Others.

B. When any property to which this account applies is sold, relinquished or otherwise retired from service, this account shall be charged with the amount previously credited in respect to such property. The book cost of the property so retired less the amount chargeable to this account and less the net proceeds realized at retirement shall be included in account 414 = Gains (Losses) from Disposition of Utility Property, unless otherwise authorized or required by the Commission.

C. Records shall be maintained so as to show separately the balance applicable to each class of property which is being amortized.

D. The utility is restricted in its use of the accumulated provision for amortization to the purposes set forth above. It shall not transfer any portion of this account or make any other use thereof without authorization by the Commission.

Note:--See Accounting Instruction 8 and account 439 regarding adjustments for past accrued amortization.

### 114. Utility Plant Acquisition Adjustments

A. This account shall include the difference between (a) the cost to the accounting utility of utility plant acquired as an operating unit or system by purchase, merger, consolidation, liquidation, or otherwise, and (b) the original cost, estimated, if not known, of such property, less the amount or amounts credited by the accounting utility at the time of acquisition to accumulated

## BALANCE SHEET ACCOUNTS

depreciation, accumulated amortization and contributions in aid of construction with respect to such property.

B. This account shall be subdivided so as to show the amounts included herein for each property acquisition and the amounts applicable to each utility department and to utility plant in service and utility plant leased to others (See Accounting Instruction 21).

C. The amounts recorded in this account with respect to each property acquisition shall be amortized, or otherwise disposed of, as the Commission may approve or direct.

### 115. Accumulated Amortization of Utility Plant Acquisition Adjustments

This account shall be credited or debited with amounts which are includible in account 406 - Amortization of Utility Plant Acquisition Adjustments, or account 426 - Miscellaneous Nonutility Expenses, for the purpose of providing for the extinguishment of amounts in account 114 - Utility Plant Acquisition Adjustments.

### 116. Other Utility Plant Adjustments

A. This account shall include the difference between the original cost, estimated if not known, and the book cost of utility plant to the extent that such difference is not properly includible in account 114 - Utility Plant Acquisition Adjustments (See Accounting Instruction 17C).

B. Amounts included in this account shall be classified in such manner as to show the origin of each amount and shall be disposed of as the Commission may approve or direct.

Note:--The provisions of this account shall not be construed as approving or authorizing the recording of appreciation of utility plant.

## Other Property and Investments

### 121. Nonutility Property

A. This account shall include the book cost of land, structures, equipment or other tangible or intangible property owned by the utility, but not used in utility service and not properly includible in account 103 - Property Held for Future Use.

## BALANCE SHEET ACCOUNTS

B. This account shall be subdivided so as to show the amount of property used in operations which are nonutility in character but nevertheless constitute a distinct operating activity of the company (such as plant merchandising and repair where such activity is not classed as utility) and the amount of miscellaneous property not used in operations. The records in support of each subaccount shall be maintained so as to show an appropriate classification of the property.

Note:--For transfers from utility plant accounts (see Accounting Instruction 29B).

### 122. Accumulated Depreciation and Amortization of Nonutility Property

This account shall included the accumulated depreciation and amortization applicable to property other than utility plant.

### 123. Investment in Associated Companies

A. This account shall include the book cost of investments in securities issued or assumed by associated companies (See definition 5) and investment advances to such companies, including interest accrued thereon when such interest is not subject to current settlement. Include also the offsetting entry to the recording of amortization of discount or premium on interest bearing investments (See account 419 - Interest and Dividend Income).

B. The account shall be maintained in such manner as to show the investment in securities of, and advances to, each associated company together with full particulars regarding any of such investments that are pledged.

Note A:--Securities and advances of associated companies owned and pledged shall be included in this account, but such securities, if held in special deposits or in special funds, shall be included in the appropriate deposit or fund account. A complete record of securities pledged shall be maintained.

Note B:--Securities of associated companies held as temporary cash investments are includible in account 135 - Temporary Cash Investments.

Note C:--Balances in open accounts with associated companies, which are subject to current settlement, are includible in account 145 - Accounts Receivable from Associated Companies.

Note D:--The utility may write down the cost of any security in recognition of a decline in the value thereof. Securities shall be

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written off or written down to a nominal value if there is no reasonable prospect of substantial value. Fluctuations in market value shall not be recorded but a permanent impairment in the value of securities shall be recognized in the accounts. When securities are written off or written down, the amount of the adjustment shall be charged to account 426 - Miscellaneous Nonutility Expenses, or to an appropriate account for provisions for loss in value established as a separate subdivision of this account.

### 124. Utility Investments

This account shall include book cost of investments in securities issued or assumed by nonassociated companies for the purpose of insuring adequate wastewater service.

### 125. Other Investments

A. This account shall include the book cost of investments in securities issued or assumed by nonassociated companies, investment advances to such companies, and any investments not accounted for elsewhere. Include also the offsetting entry to the recording of amortization of discount or premium on interest bearing investments (See account 419 - Interest and Dividend Income).

B. The cost of capital stock of the utility reacquired by it under a definite plan for resale pursuant to authorization by the Board of Directors may, if permitted by statutes, be included in a separate subdivision of this account (see also account 210 - Gain on Resale or Cancellation of Reacquired Capital Stock, and account 216 - Reacquired Capital Stock).

C. The records shall be maintained in such manner as to show the amount of each investment and the investment advances to each person.

Note A--Securities owned and pledged shall be included in this account, but securities held in special deposits or in special funds shall be included in appropriate deposit or fund accounts. A complete record of securities pledged shall be maintained.

Note B--Securities held as temporary cash investments shall not be included in this account.

Note C--See Note D of account 123.

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### 126. Sinking Funds

This account shall include the amount of cash and book cost of investments held in sinking funds. A separate account, with appropriate title, shall be kept for each sinking fund. Transfers from this account to account 133 - Other Special Deposits, may be made as necessary for the purpose of paying matured sinking-fund obligations, or obligations called for redemption but not presented, or the interest thereon.

### 127. Other Special Funds

This account shall include the amount of cash and book cost of investments which have been segregated in special funds for insurance, employee pensions, savings, relief, hospital, and other purposes not provided for elsewhere. A separate account, with appropriate title, shall be kept for each fund.

Note--Amounts deposited with a trustee under the terms of an irrevocable trust agreement for pensions or other employee benefits shall not be included in this account.

### Current and Accrued Assets

Current and accrued assets are cash, those assets which are readily convertible into cash or are held for current use in operations or construction, current claims against others, payment of which is reasonably assured, and amounts accruing to the utility which are subject to current settlement, except such items for which accounts are provided. There shall not be included in the group of accounts designated as current and accrued assets any item, the amount of collectability of which is not reasonably assured, unless an adequate provision for possible loss has been made therefor. Items of current character but of doubtful value may be written down and for record purposes carried in these accounts at nominal value.

### 131. Cash

A. This account shall include the amount of cash on hand or on deposit in banks.

B. The following subaccounts shall be maintained:

131.1 Cash on Hand.

131.2 Cash in Bank.

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### 132. Special Deposits

This account shall include special deposits with fiscal agents or others for the payment of interest and/or dividends.

### 133. Other Special Deposits

This account shall include deposits with fiscal agents or others for purposes other than the payment of interest and dividends. Such deposits may include cash deposited with federal, state, or municipal authorities as a guaranty for the fulfillment of obligations; cash deposited with trustees to be held until mortgaged property is sold, destroyed, or otherwise disposed of is replaced; cash realized from the sale of the accounting utility's securities and deposited with trustees to be held until invested in property of the utility. Entries to this account shall specify the purpose for which the deposit is made.

Note:--Assets available for general corporate purposes shall not be included in this account. Further, deposits for more than one year, which are not offset by current liabilities, shall not be charged to this account but to account 127 - Other Special Funds.

### 134. Working Funds

This account shall include cash advanced to officers, agents, employees, and others as petty cash or working funds.

### 135. Temporary Cash Investments

A. This account shall include the book cost of investments, such as demand and time loans, bankers' acceptances, United States Treasury certificates, marketable securities, certificates of deposit, and other similar investments, acquired for the purpose of temporarily investing cash.

B. This account shall be so maintained as to show separately temporary cash investments in securities of associated companies and of others. Records shall be kept of any pledged investments.

### 141. Customer Accounts Receivable

A. This account shall include amounts due from customers for utility service. This account shall not include amounts due from associated companies.

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B. This account shall be maintained so as to show separately amounts due from each type of utility service.

### 142. Other Accounts Receivable

A. This account shall include amounts due the utility upon open accounts, plus merchandising, jobbing and contract work, other than amounts due from associated companies and from customers for utility services.

B. This account shall be maintained so as to show separately amounts due on subscriptions to capital stock and from officers and employees, but the amount shall not include amounts advanced to officers or others as working funds (See account 134 - Working Funds).

### 143. Accumulated Provision for Uncollectible Accounts--Cr.

A. This account shall be credited with amounts provided for losses on accounts receivable which may become uncollectible, and also with collections on accounts previously charged hereto. Concurrent charges shall be made to account 770 - Bad Debt Expense, for amounts applicable to utility operations, and to corresponding accounts for other operations. Records shall be maintained so as to show the write-offs of accounts receivable for each utility department.

B. This account shall be subdivided to show the provision applicable to the following classes of accounts receivable:

Utility Customers  
Merchandising, Jobbing and Contract Work  
Officers and Employees  
Other

Note A:--Accretions to this account shall not be made in excess of a reasonable provision against losses of the character provided for.

Note B:--If provisions for uncollectible notes receivable or for uncollectible receivables from associated companies are necessary, separate subaccounts therefor shall be established under the account in which the receivable is carried.



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### 144. Notes Receivable

This account shall include the book cost, not includible elsewhere, or all collectible obligations in the form of notes receivable and similar evidences (except interest coupons) of money due on demand or within one year from the date of issue, except, however, notes receivable from associated companies (See account 135 - Temporary Cash Investments, and account 146 - Notes Receivable from Associated Companies).

Note:--The face amount of notes receivable discounted, sold or transferred, without releasing the utility from liability as endorser thereon, shall be credited to a separate subdivision of this account and appropriate disclosure shall be made in financial statements of any contingent liability arising from such transactions.

### 145. Accounts Receivable from Associated Companies

See account 146.

### 146. Notes Receivable from Associated Companies

These accounts shall include notes and drafts upon which associated companies are liable, and which mature and are expected to be paid in full not later than one year from date of issue, together with any interest thereon, and debit balances subject to current settlement in open accounts with associated companies. Items which do not bear a specified due date but which have been carried for more than twelve months and items which are not paid within twelve months from due date shall be transferred to account 123 - Investment in Associated Companies.

Note A:--On the balance sheet, accounts receivable from an associated company may be set off against accounts payable to the same company.

Note B:--The face amount of notes receivable discounted, sold or transferred without releasing the utility from liability as endorser thereon, shall be credited to a separate subdivision of this account and appropriate disclosure shall be made in financial statements of any contingent liability arising from such transaction.

### 151. Plant Material and Supplies

A. This account shall include the cost of fuel on hand and materials purchased primarily for use in the utility business for

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construction, operation and maintenance purposes. It shall include also the book cost of materials recovered in connection with construction, maintenance or the retirement of property, such as materials being credited to construction maintenance or accumulated depreciation, respectively, and included herein as follows:

(1) Reusable materials consisting of large individual items shall be included in this account at original cost, estimated if not known. The cost of repairing such items shall be charged to the maintenance account appropriate for the previous use.

(2) Reusable materials consisting of relatively small items, the identity of which (from the date of original installation to the final abandonment or sale thereof) cannot be ascertained without undue refinement in accounting, shall be included in this account at current prices for such items. The cost of repairing such items shall be charged to the appropriate expense account as indicated by previous use.

(3) Scrap and nonusable materials included in this account shall be carried at the estimated net amount realizable therefrom. The difference between the amounts realized for scrap and nonusable materials sold and the net amount at which the materials were carried in this account, as far as practicable, shall be adjusted to the accounts credited when the materials were charged to this account.

B. Materials and supplies issued shall be credited hereto and charged to the appropriate construction, operating expense, or other account on the basis of a unit price determined by the use of cumulative average, first-in-first-out, or such other method of inventory accounting as conforms with accepted accounting standards consistently applied.

### Items

- (1) Invoice price of materials less cash or other discounts.
- (2) Freight, switching or other transportation charges when practicable to include as part of the cost of particular materials to which they relate.
- (3) Customs, duties and excise taxes.
- (4) Costs of inspection and special tests prior to acceptance.
- (5) Insurance and other directly assignable charges.

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Note--Where expenses applicable to materials purchased cannot be directly assigned to a particular purchase, they shall be charged to account 161 - Stores Expense.

C. If the utility desires to maintain a separate account for fuel, it should be handled as a separate subaccount of this account.

### 152. Merchandise

This account shall include the book cost of materials and supplies held primarily for merchandising, jobbing and contract work. The principles prescribed in accounting for utility materials and supplies shall be observed in respect to items carried in this account.

### 153. Other Materials and Supplies

This account shall include the book cost of materials and supplies held primarily for nonutility purposes. The principles prescribed in accounting for utility materials and supplies shall be observed in respect to items carried in this account.

### 161. Stores Expense

A. This account shall include the cost of supervision, labor and expenses incurred in the operation of general storerooms, including purchasing, storage, handling and distribution of materials and supplies.

B. This account shall be cleared by adding to the cost of materials and supplies issued a suitable loading charge which will distribute the expense equitably over stores issues. The balance in the account at the close of the year shall not exceed the amount of stores expenses reasonably attributable to the inventory of materials and supplies.

#### Items

#### Labor:

1. Inspecting and testing materials and supplies when not assignable to specific items.
2. Unloading from shipping facility and putting in storage.
3. Supervision of purchasing and stores department to extent assignable to materials handled through stores.
4. Getting materials from stock and in readiness to go out.
5. Inventorying stock received or stock on hand by stores employees but not including inventories by general department employees as part of internal or general audits.

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6. Purchasing department activities in checking materials needs, investigating sources of supply, analyzing prices, preparing and placing orders, and related activities to extent applicable to materials handled through stores. (Optional. Purchasing department expenses may also be included in administrative and general expenses).
7. Maintaining stores equipment.
8. Cleaning and tidying storerooms and stores offices.
9. Keeping stock records, including recording and posting of material receipts and issues and maintaining inventory record of stock.
10. Collecting and handling scrap materials in stores.

### Supplies and Expenses:

11. Adjustments of inventories of materials and supplies but not including large differences which can readily be assigned to important classes of materials and can be equitably distributed among the accounts to which such classes of materials have been charged since the previous inventory.
12. Cash and other discounts not practically assignable to specific materials.
13. Freight, express, etc., when not assignable to specific items.
14. Heat, light and power for storerooms and stores offices.
15. Brooms, brushes, sweeping compounds and other supplies used in cleaning and tidying storerooms and stores offices.
16. Injuries and damages.
17. Insurance on materials and supplies and on stores equipment.
18. Losses due to breakage, leakage, evaporation, fire or other causes, less credits for amounts received from insurance, transportation companies or others in compensation of such losses.
19. Postage, printing, stationery and office supplies.
20. Rent of storage space and facilities.
21. Communication service.
22. Excise and other similar taxes not assignable to specific materials.
23. Transportation expense on inward movement of stores and on transfer between storerooms but not including charges on materials recovered from retirements which shall be accounted for as part of cost of removal.

Note:--A physical inventory of each class of materials and supplies shall be made every year.

### 162. Prepayments

- A. This account shall include the amounts representing prepayments of insurance, rents, interest and miscellaneous items,

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and shall be kept or supported in such manner as to disclose the amount of each class of prepayment.

B. This account shall include the amounts of taxes paid in advance of the period in which they are chargeable to income, except amounts chargeable to wastewater plant under construction and minor amounts which may be charged direct to the final accounts. As the term expires for which the taxes are paid, this account shall be credited at monthly intervals and the appropriate account charged (Note also 408.10, 408.11, 408.12, 408.13, 409.10, 409.11, 409.12, 408.20, 409.20, 409.30).

### 171. Accrued Interest and Dividends Receivable

This account shall include the amount of interest on bonds, mortgages, notes, commercial paper, loans, open accounts, deposits, etc., the payment of which is reasonably assured and the amount of dividends declared or guaranteed on stocks owned.

Note A:--Interest which is not subject to current settlement shall not be included herein but in the account in which is carried the principal on which the interest is accrued.

Note B:--Interest and dividends receivable from associated companies shall be included in account 145 - Accounts Receivable from Associated Companies.

### 172. Rents Receivable

This account shall include rents receivable or accrued on property rented or leased by the utility to others.

Note:--Rents receivable from associated companies shall be included in account 145 - Accounts Receivable from Associated Companies.

### 173. Accrued Utility Revenues

At the option of the utility, with approval of the Commission, the estimated amount accrued for service rendered, but not billed at the end of any accounting period, may be included herein. In case accruals are made for unbilled revenues, they shall be made likewise for unbilled expenses, such as for the purchase of energy.

### 174. Miscellaneous Current and Accrued Assets

This account shall include the book cost of all other current and accrued assets, appropriately designated and supported so as to show the nature of each asset included herein.

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### Deferred Debits

#### 181. Unamortized Debt Discount and Expense

A. This account shall include the total of the debit balances in the discount, expense, and premium accounts for all classes of long-term debt, determined as provided in the following paragraphs of this account.

B. A discount, expense, and premium account shall be maintained for each class and series of long-term debt (including receivers' certificates) issued or assumed by the utility, in which shall be recorded the discount, expense, and premium associated with the issuance and sale of each such class and series of debt. In stating the balance sheet, the total of the debit balances remaining in those accounts having debit balances shall be reported under this account and the total of the credit balances remaining in those accounts having credit balances shall be reported under account 251 - Unamortized Premium on Debt. Accounts with debit balances shall not be set off against accounts with credit balances.

C. The discount, expense, and premium shall be amortized over the life of the respective issues under a plan which will distribute the amounts equitably over the life of the securities. The amortization shall be on a monthly basis, and the amounts thereof shall be charged to account 428 - Amortization of Debt Discount and Expense, or credited to account 429 - Amortization of Premium on Debt, as may be appropriate. The utility may, however, accelerate the writing off of discount and expense where the amounts are insignificant unless otherwise ordered by the Commission.

D. When any long-term debt is reacquired or redeemed without being converted into another form of long-term debt and when the transaction is not in connection with a refunding operation, the difference between the amount paid upon reacquirement and the face value plus the unamortized premium or less the unamortized discount and expense, as the case may be, applicable to the debt redeemed, retired and cancelled, shall be included in account 421 - Nonutility Income, or account 426 - Miscellaneous Nonutility Expenses, as appropriate unless otherwise ordered by the Commission.

E. When the redemption of one issue or series of bonds or other long-term obligations is financed by another issue or series before the maturity date of the first issue, account 421 - Nonutility Income, or account 426 - Miscellaneous Nonutility Expenses, shall be credited or debited, as appropriate, with any unamortized discount, expense, or premium on the first issue and any premium

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paid or discount earned on the redemption. If the utility desires to amortize any of the discount, expense, or premium associated with the issuance or redemption of the first issue over a period subsequent to the date of redemption, the permission of the Commission must be obtained; provided, however, that special permission of the Commission shall not be necessary, if the utility proceeds with a plan of disposition of the discount, expense, and redemption premiums associated with the refunded bonds, as follows:

(1) A special charge is recorded in the year of refunding in account 428 - Amortization of Debt Discount and Expense, equal to the saving in income taxes arising from the refunding transactions;

(2) There is charged to account 426 - Miscellaneous Nonutility Expenses, in the year of refunding, any amounts of unamortized discount and expenses or redemption premiums relating to bonds or other long-term obligations previously refunded by the refunded bonds under immediate consideration, such amounts, sometimes being referred to as "grandfather items"; and,

(3) The utility proceeds to amortize by equal monthly charges, from the date of refunding, the remainder of the charges associated with the refunded bonds, over a period not longer than that in which the saving in net annual interest and amortization charges equals the remainder of charges to be amortized, after taking into consideration the estimated additional taxes on income attributable to the saving in net annual interest and amortization charges.

F. Discount, expense, or premium on debt shall not be included as part of the cost of constructing or acquiring any property, tangible or intangible, except under the provisions of account 420 - Allowance for Funds Used During Construction.

### 182. Extraordinary Property Losses

A. When authorized or directed by the Commission, this account shall include extraordinary losses, net of income taxes, on property abandoned or otherwise retired from service which are not provided for by accumulated depreciation or amortization and which could not reasonably have been foreseen and provided for, and extraordinary losses, such as unforeseen damages to property, which could not reasonably have been anticipated and which are not covered by insurance or other provisions.

B. The entire cost, less net salvage, of depreciable property retired shall be charged to accumulated depreciation. If all, or a portion, of the loss is to be included in this account, accumulated

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depreciation shall then be credited and this account charged with the amount properly chargeable hereto.

### 183. Preliminary Survey and Investigation Charges

A. This account shall be charged with all expenditures for preliminary surveys, plans, investigations, etc., made for the purpose of determining the feasibility of projects under contemplation. If construction results, this account shall be credited and the appropriate utility plant account charged. If the work is abandoned, the charge shall be to account 426 - Miscellaneous Nonutility Expenses, or to the appropriate operating expense account unless otherwise ordered by the Commission (See account 775 - Miscellaneous Expenses).

B. The records supporting the entries to this account shall be so kept that the utility can furnish complete information as to the nature and the purpose of the survey, plans, or investigations and the nature and amounts of the several charges.

Note--The amount of preliminary survey and investigation charges transferred to utility plant shall not exceed the expenditures which may reasonably be determined to contribute directly and immediately and without duplication to utility plant.

### 184. Clearing Accounts

A. This caption shall include undistributed balances in clearing accounts at the date of the balance sheet. Balances in clearing accounts shall be substantially cleared not later than the end of the accounting year unless items held therein relate to a future period.

B. Use of the following subaccounts is recommended. This list is intended to be representative but not exhaustive.

- 184.1 Building Service Expenses--Clearing
- 184.2 Electronic Data Processing Expenses--Clearing
- 184.3 Laboratory Expenses--Clearing
- 184.4 Payroll--Clearing
- 184.5 Shop Expenses--Clearing
- 184.6 Tools and Work Equipment Expenses--Clearing
- 184.7 Transportation Expenses--Clearing
- 184.8 Charges by Associated Companies--Clearing



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### 185. Temporary Facilities

This account shall include amounts shown by work orders for plant installed for temporary use in utility service for periods of less than one year. Such work orders shall be charged with the cost of temporary facilities and credited with payments received from customers and net salvage realized on removal of the temporary facilities. Any net credit or debit resulting shall be cleared to account 536 - Other Wastewater Revenues.

### 186. Miscellaneous Deferred Debits

A. This account shall include all debits not elsewhere provided for, such as miscellaneous work in progress, losses on disposition of property net of income taxes, deferred by authorization of the Commission, and unusual or extraordinary expenses and regulatory assets resulting from rate making actions, not included in other accounts, which are in process of amortization, and items the proper final disposition of which is uncertain.

B. The records supporting the entries to this account shall be so kept that the utility can furnish full information as to each deferred debit, including justification for inclusion of such amounts in this account.

C. The following subaccounts shall be maintained as a minimum unless otherwise authorized by the Commission. The utility may add additional subaccounts, if desired (such as deferred tank painting expense).

- 186.1 Deferred Rate Case Expense
- 186.2 Other Deferred Debits
- 186.3 Regulatory Assets

#### 186.1 Deferred Rate Case Expense

This account shall include all deferred debits associated with the cost of conducting rate cases before the commission.

#### 186.2 Other Deferred Debits

This account shall include all deferred debits not properly includable in any other subaccount of account 186.

#### 186.3 Regulatory Assets

A. This account shall include the amounts of regulatory-created assets, not included in other accounts, resulting from the ratemaking actions of regulatory agencies. (See Definition 28.)

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B. The amounts included in this account are to be established by those charges which would have been included in net income determination in the current period under the general requirements of the Uniform System of Account but for it being probable that such items will be included in a different period(s) for purposes of developing the rates that the utility is authorized to charge for its utility services. When specific identification of the particular source of a regulatory asset cannot be made, such as in plant phase-ins, rate moderation plans or rate levelization plans, Account 407.5 - Amortization of Regulatory Liabilities shall be credited. The amounts recorded in this account are generally to be charged, concurrently with the recording of the amount in rates, to the same account that would have been charged if included in income when incurred, except all regulatory assets established through the use of Account 407.5 shall be charged to Account 407.4 - Amortization of Regulatory Assets, concurrent with the recovery of the amounts in rates.

C. If rate recovery of all or part of an amount included in this account is disallowed, the disallowed amount shall be charged to Account 426 - Miscellaneous Nonutility Expenses, or Account 434 - Extraordinary Deductions, in the year of the disallowance.

### 187. Research and Development Expenditures

A. This account shall include the cost of all expenditures coming within the meaning of Definition 30 of the Uniform System of Accounts, except those properly includible in account 105 - Construction Work in Progress.

B. Costs that are minor or of a general or recurring nature shall be transferred from this account to account 775 - Miscellaneous Expenses.

C. In certain instances a utility may incur large and significant research expenditures which are nonrecurring and which would distort the annual research and development charges for the period. In such a case the portion, net of income taxes, of such amounts that cause the distortion may be amortized to account 775 - Miscellaneous Expenses, over a period not to exceed five years unless otherwise authorized by the Commission.

D. The entries in this account must be so maintained as to show separately each project along with complete detail of the nature and purpose of the research and development project together with the related costs.

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### 190. Accumulated Deferred Income Taxes

A. This account shall be debited and account 411.10 - Provision for Deferred Income Taxes - Credit, Utility Operating Income, or account 411.20 - Provision for Deferred Income Taxes - Credit, Other Income and Deductions, as appropriate, shall be credited with an amount equal to that by which income taxes payable for the year are higher because of the inclusion of certain items in income for tax purposes, which items for general accounting purposes will not be fully reflected in the utility's determination of annual net income until subsequent years.

B. This account shall be credited and account 410.10, 410.11, 410.12 - Deferred Federal, State or Local Income Taxes, or account 410.20 - Provision for Deferred Income Taxes, Other Income and Deductions, as appropriate, shall be debited with an amount equal to that by which income taxes payable for the year are lower because of prior payment of taxes as provided by paragraph A above, because of differences in timing for tax purposes of particular items of income or income deductions from that recognized by the utility for general accounting purposes. Such credit to this account and debit to account 410.10, 410.11, 410.12, or 410.20 shall, in general, represent the effect on taxes payable in the current year of the smaller amount of book income recognized for tax purposes as compared to the amount recognized in the utility's current accounts with respect to the item or class of items for which deferred tax accounting by utility was authorized by the Commission.

C. Vintage year records with respect to entries to this account, as described above, and the account balance, shall be so maintained as to show the factor of calculation with respect to each annual amount of the item or class of items for which deferred tax accounting by the utility is utilized.

D. The utility is restricted in its use of this account to the purpose set forth above. It shall not make use of the balance in this account or any portion thereof except as provided in the text of this account, without prior approval of the Commission. Any remaining deferred tax account balance with respect to an amount for any prior year's tax deferral, the amortization of which or other recognition in the utility's income accounts has been completed, or other disposition made shall be debited to account 410.1, 410.11, 410.12 Deferred Federal, State or Local Income Taxes, Other Income and Deductions, as appropriate, or otherwise

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disposed of as the Commission may authorize or direct (See Accounting Instruction 34).

E. The following subaccounts shall be maintained:

- 190.1 Accumulated Deferred Federal Income Taxes
- 190.2 Accumulated Deferred State Income Taxes
- 190.3 Accumulated Deferred Local Income Taxes

### Equity Capital

#### 201. Common Stock Issued

A. This account shall include the par value or the stated value of stock without par value if such stock has a stated value, and, if not, the cash value of the consideration received for such nonpar stock, of each class of capital stock actually issued, including the par or stated value of capital stock in account 125 - Other Investments, and account 216 - Reacquired Capital Stock.

B. When the actual cash value of the consideration received is more or less than the par or stated value of any stock having a par or stated value, the difference shall be credited or debited, as the case may be, to the premium or discount account for the particular class and series.

C. When capital stock is retired, this account shall be charged with the amount at which such stock is carried herein.

D. A separate ledger account, with a descriptive title, shall be maintained for each class and series of stock. The supporting records shall show the shares nominally issued, actually issued, and nominally outstanding.

Note:--When a levy or assessment, except a call for payment on subscriptions, is made against holders of capital stock, the amount collected upon such levy or assessment shall be credited to account 207 - Premium on Capital Stock; provided, however, that the credit shall be made to account 212 - Discount on Capital Stock, to the extent of any remaining balance of discounts on the issue of stock.

#### 202. Common Stock Subscribed

A. This account shall include the amount of legally enforceable subscriptions to capital stock of the utility. They shall be credited with the par or stated value of the stock subscribed, exclusive of accrued dividends, if any. Concurrently, a debit shall be made to subscriptions to capital stock, included as a separate subdivision of account 142 - Other Accounts Receivable, for the agreed price and any premium shall be credited to the appropriate premium account. When property executed stock certificates have been issued representing the shares subscribed,

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this account shall be debited, and the appropriate capital stock account credited, with the par or stated value of such stock.

B. The records shall be kept in such manner as to show the amount of subscriptions to each class and series of stock.

### 203. Common Stock Liability for Conversion

A. This account shall include the par value or stated value, as appropriate, of capital stock which the utility has agreed to exchange for outstanding securities of other companies in connection with the acquisition of properties of such companies under terms which allow the holders of the securities of the other companies to surrender such securities and receive in return therefor capital stock of the accounting utility.

B. When the securities of the other companies have been surrendered and capital stock issued in accordance with the terms of the exchange, this account shall be charged and accounts 201 - Common Stock Issued, or 204 - Preferred Stock Issued, as the case may be, shall be credited.

C. The records shall be kept so as to show separately the stocks of each class and series for which a conversion liability exists.

### 204. Preferred Stock Issued

See account 201 for the description of this account.

### 205. Preferred Stock Subscribed

See account 202 for the description of this account.

### 206. Preferred Stock Liability for Conversion

See account 203 for the description of this account.

### 207. Premium on Capital Stock

A. This account shall include in a separate subdivision for each class and series of stock, the excess of the actual cash value of the consideration received on original issues of capital stock over the par or stated value and accrued dividends of such stock, together with assessments against stockholders representing payments required in excess of par or stated values.

B. Premium on capital stock shall not be set off against expenses. Further, a premium received on an issue of a certain class or series of stock shall not be set off against expenses of another issue of the same class or series.

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C. When capital stock which has been actually issued is retired, the amount in this account applicable to the shares retired shall be transferred to account 210 - Gain on Resale or Cancellation of Reacquired Capital Stock.

### 209. Reduction in Par or Stated Value of Capital Stock

This account shall include the balance of credits arising from a reduction in the par or stated value of capital stock.

### 210. Gain on Resale or Cancellation of Reacquired Capital Stock

This account shall include the balance of credits arising from the resale or cancellation of reacquired capital stock (See account 216 - Reacquired Capital Stock).

### 211. Other Paid-In Capital

This account shall include the balance of all other credits for paid-in capital which are not properly includible in the foregoing accounts.

### 212. Discount on Capital Stock

A. This account shall include in a separate subdivision for each class and series of capital stock all discount on the original issuance and sale of capital stock, including additional capital stock of a particular class or series as well as first issues.

B. When capital stock which has been actually issued is retired, the amount in this account applicable to the shares retired shall be written off to account 210 - Gain on Resale or Cancellation of Reacquired Capital Stock, provided, however, that the amount shall be charged to account 439 - Adjustments to Retained Earnings, to the extent that it exceeds the balance in account 210.

C. The utility may amortize the balance in this account by systematic charges to account 426 - Miscellaneous Nonutility Expenses.

### 213. Capital Stock Expense

A. This account shall include in a separate subdivision for each class and series of stock all commissions and expenses incurred in connection with the original issuance and sale of capital stock, including additional capital stock of a particular class or series as well as first issues. Expense applicable to capital stock shall not be deducted from premium on capital stock.

B. When capital stock which has been actually issued by the utility is retired, the amount in this account applicable to the

## BALANCE SHEET ACCOUNTS

shares retired shall be written-off to account 210 - Gain on Resale or Cancellation of Reacquired Capital Stock.

C. The utility may amortize the balance carried in this account by systematic charges to account 426 - Miscellaneous Nonutility Expenses.

Note:--Expenses in connection with the reacquisition or resale of the utility's capital stock shall not be included herein.

### 214. Appropriated Retained Earnings

This account shall include the amount of retained earnings which has been appropriated or set aside for specific purposes. Separate subaccounts shall be maintained under such titles as will designate the purpose for which each appropriation was made.

### 215. Unappropriated Retained Earnings

This account shall include the balance, either debit or credit, of unappropriated retained earnings. It shall not include items includible in any of the accounts for paid-in capital.

### 216. Reacquired Capital Stock

A. This account shall include in a separate subdivision for each class and series of capital stock the cost of capital stock actually issued by the utility and reacquired by it and not retired or cancelled, except, however, stock which is held by trustees in sinking or other funds.

B. When reacquired capital stock is retired or cancelled, the difference between its cost, including commissions and expenses paid in connection with the reacquisition, and its par or stated value plus any premium and less any discount and expenses applicable to the shares retired, shall be debited or credited, as appropriate, to account 210 - Gain on Resale or Cancellation of Reacquired Capital Stock.

C. When reacquired capital stock is resold by the utility, the difference between the amount received on the resale of the stock, less expenses incurred in the resale, and the cost of the stock included in this account shall be accounted for as outlined in paragraph B.

Note A:--See account 125 - Other Investments, for permissive accounting treatment of stock reacquired under a definite plan for resale.

## BALANCE SHEET ACCOUNTS

Note B:--The accounting for reacquired stock shall be as prescribed herein unless otherwise specifically required by statute.

### 218. Proprietary Capital (for proprietorships and partnerships only)

A. This account shall be credited with the investment of a sole proprietor, or partners, in an unincorporated wastewater utility.

B. At the end of each calendar year the net income or loss for the year shall be entered in this account.

C. Accounting adjustments not properly attributable to operations of the current period shall be charged or credited to this account.

Note A:--When the utility is owned by a partnership, a separate account shall be kept to show the net equity of each member therein and the transactions affecting the interest of each such partner.

Note B:--This account may be restricted to the amount considered by the proprietor to be the permanent investment in the business, subject to change only by additional investment by the proprietor or the withdrawal of portions thereof not representing net income. When this option is taken, earned surplus accounts shall be maintained.

## Long-Term Debt

### 221. Bonds

This account shall include, in a separate subdivision for each class and series of bonds, the face value of the actually issued and unmatured bonds which have not been retired or canceled; also, the face value of such bonds issued by others the payment of which has been assumed by the utility.

### 222. Reacquired Bonds

A. This account shall include the face value of bonds actually issued or assumed by the utility and reacquired by it and not paid, retired, or cancelled. The account for reacquired debt shall not include securities which are held by trustees in sinking or other funds.

B. When bonds are reacquired, the difference between face value, adjusted for unamortized discount, expense or premium and the amount paid upon reacquisition, shall be debited or credited as appropriate, to account 421 - Nonutility Income, or account 426 - Miscellaneous Nonutility Expenses (See, however, account 181, paragraph E, as to refunding operations).



## BALANCE SHEET ACCOUNTS

### 223. Advances from Associated Companies

A. This account shall include the face value of notes payable to associated companies and the amount of open book accounts representing advances from associated companies. It does not include notes and open accounts, representing indebtedness, subject to current settlement which are includible in account 233 - Accounts Payable to Associated Companies, or account 234 - Notes Payable to Associated Companies.

B. The records supporting the entries to these accounts shall be so kept that the utility can furnish complete information concerning each note and open account.

### 224. Other Long-Term Debt

A. This account shall include, until maturity, all long-term debt not otherwise provided for. This covers such items as receiver's certificates, real estate mortgages executed or assumed, assessments for public improvements, notes and unsecured certificates of indebtedness not owned by associated companies, receipts outstanding for long-term debt, and other obligations maturing more than one year from date of issuance and assumption.

B. Separate subaccounts shall be maintained for each class of obligation, and records shall be maintained to show separately for each class all details as to date of obligation, date of maturity, interest dates and rates, security for the obligation, etc.

Note:--Miscellaneous long-term debt reacquired shall be accounted for in accordance with the procedure set forth in account 222 - Reacquired Bonds.

### Current and Accrued Liabilities

Current and accrued liabilities are those obligations which have either matured or which become due within one year from the date thereof; except, however, bonds, receiver's certificates and similar obligations which shall be classified as long-term debt until date of maturity; accrued taxes, such as income taxes, which shall be classified as accrued liabilities even though payable more than one year from date; compensation awards, which shall be classified as current liabilities regardless of date due; and minor amounts payable in installments which may be classified as current liabilities. If a liability is due more than one year from date of issuance or assumption by the utility, it shall be credited to a long-term debt account appropriate for the transaction, except, however, the current liabilities previously mentioned.

## BALANCE SHEET ACCOUNTS

### 231. Accounts Payable

This account shall include all amounts payable by the utility within one year, which are not provided for in other accounts.

### 232. Notes Payable

This account shall include the face value of all notes, drafts, acceptance, or other similar evidences of indebtedness, payable on demand or within a time not exceeding one year from date of issue, to other than associated companies.

### 233. Accounts Payable to Associated Companies

This account shall include all amounts payable by the utility to associated companies which are not provided for in other accounts.

Note--Exclude from this account amounts which are includible in account 223 - Advances from Associated Companies.

### 234. Notes Payable to Associated Companies

This account shall include amounts owing to associated companies on notes, drafts, acceptance, or other similar evidences of indebtedness, payable on demand or within a time not exceeding one year from date of issue or creation.

Note--Exclude from this account notes which are includible in account 223 - Advances from Associated Companies.

### 235. Customer Deposits

This account shall include all amounts deposited with the utility by customers as security for the payment of bills.

### 236. Accrued Taxes

A. This account shall be credited with the amount of taxes accrued during the accounting period with corresponding debits being made to the appropriate accounts for tax charges. Such credits may be based upon estimates, but from time to time during the year as the facts become known, the amount of the periodic credits shall be adjusted so as to include as nearly as can be determined in each year the taxes applicable thereto. Any amount representing a prepayment of taxes applicable to a period subsequent to the date of the balance sheet, shall be shown under account 162 - Prepayments.

B. If accruals for taxes are found to be insufficient or excessive, correction therefor shall be made through current tax

## BALANCE SHEET ACCOUNTS

accruals. However, if such corrections are so large as to seriously distort current expenses, see Accounting Instruction 8.

C. Accruals for taxes shall be based upon the net amounts payable after credit for any discounts, but shall not include any amounts for interest on tax deficiencies or refunds. Interest received on refund shall be credited to account 419 - Interest and Dividend Income, and interest paid on deficiencies shall be charged to account 427.5 - Interest Expense - Other.

D. The records supporting the entries to this account shall be kept so as to show for each class of taxes, the amount accrued, the basis for the accrual, the accounts to which charged, and the amount of tax paid.

E. The following subaccounts may be maintained:

- 236.1 Accrued Taxes, Utility Operating Income
  - 236.11 Accrued Taxes, Taxes Other Than
  - 236.12 Accrued Taxes, Income Taxes
- 236.2 Accrued Taxes, Other Income and Deductions

### 237. Accrued Interest

A. This account shall include the amount of interest accrued but not matured on all liabilities of the utility not including, however, interest which is added to the principal of the debt on which incurred. Supporting records shall be maintained so as to show the amount of interest accrued on each obligation.

B. The following subaccounts may be maintained:

- 237.1 Accrued Interest on Long-Term Debt
- 237.2 Accrued Interest on Other Liabilities

### 238. Accrued Dividends

This account shall include the amount of dividends which have been declared but not paid. Dividends shall be credited to this account when they become a liability.

### 239. Matured Long-Term Debt

This account shall include the amount of long-term debt (including any obligation for premiums) matured and unpaid, without specific agreement for extension of the time of payment, and bonds called for redemption but not presented.

## BALANCE SHEET ACCOUNTS

### 240. Matured Interest

This account shall include the amount of matured interest on long-term debt or other obligations of the utility at the date of the balance sheet unless such interest is added to the principal of the debt on which incurred.

### 241. Miscellaneous Current and Accrued Liabilities

This account shall include the amount of all other current and accrued liabilities not provided for elsewhere appropriately designated and supported so as to show the nature of each liability.

#### Deferred Credits

### 251. Unamortized Premium on Debt

This account shall include the total of the credit balances in the discount, expense and premium accounts, for all classes of long-term debt, including receivers' certificates (See account 181 - Unamortized Debt Discount and Expense).

### 252. Advances for Construction

This account shall include advances by or in behalf of customers for construction which are to be refunded either wholly or in part. When a person is refunded the entire amount to which he is entitled according to the agreement or rule under which the advance was made, the balance, if any, remaining in this account shall be credited to account 271 - Contributions in Aid of Construction.

### 253. Other Deferred Credits

A. This account shall include, gains on disposition of property, net of income taxes, deferred by authorization of the Commission, advance billings and receipts and other deferred credit items, not provided elsewhere, including amounts which cannot be entirely cleared or disposed of until additional information has been received.

B. The following subaccounts shall be maintained as a minimum unless otherwise authorized by the Commission. The utility may add additional subaccounts, if desired.

253.1 Regulatory Liabilities

253.2 Other Deferred Liabilities

## BALANCE SHEET ACCOUNTS

### 253.1 Regulatory Liabilities

A. This account shall include the amounts of regulatory liabilities, not included in other accounts, imposed on the utility by the ratemaking actions of regulatory agencies. (See Definition 28.) . The amounts to be included in this account are to be established by those credits which would have been included in net income determinations in the current period under the general requirements of the Uniform System of Accounts but for it being probable that: 1) such items will be included in a different period(s) for purposes of developing rates that the utility is authorized to charge for its utility services; or 2) refunds to customers, not provided for in other accounts, will be required. When specific identification of the particular source of the regulatory liability cannot be made or when the liability arises from revenues collected pursuant to tariffs on file with a regulatory agency, account 407.4 - Amortization of Regulatory Assets, shall be debited. The amounts recorded in this account generally are to be credited to the same account that would have been credited if included in income when earned except: 1) all regulatory liabilities established through the use of account 407.4 shall be credited to account 407.5 - Amortization of Regulatory Liabilities; and 2) in the case of refunds, a cash account or other appropriate account should be credited when the obligation is satisfied.

B. If it is later determined that the amounts recorded in this account will not be returned to customers through rates or refunds, such amounts shall be credited to Account 421 - Nonutility Income, in the year such determination is made.

C. The records supporting the entries to this account shall be so kept that the utility can furnish full information as to the nature and amount of each regulatory liability included in this account, including justification for inclusion of such amounts in this account.

### 253.2 Other Deferred Liabilities

This account shall include all deferred liabilities not properly includable in any other subaccount of account 253.

### 255. Accumulated Deferred Investment Tax Credits

A. This account shall be credited with all investment tax credits deferred by companies which have elected to follow deferral accounting, partial or full, rather than recognizing in the income statement the total benefits of the tax credit as realized. After such election, a company may not transfer amounts from this account, except as authorized herein and in accounts 412.11

## BALANCE SHEET ACCOUNTS

Investment Tax Credits Restored to Operating Income, 412.20  
Investment Tax Credits - Net, Nonutility Operations, and 412.30 -  
Investment Tax Credits Restored to Nonoperating Income, Utility  
Operations, or with approval of the Commission.

B. Where the company's accounting provides that investment tax credits are to be passed on to customers, this account shall be debited and account 412.11 credited with a proportionate amount determined in relation to the book depreciable life of all utility property or utility property to which the tax credits are related or such lesser period of time as allowed by a regulatory agency having rate jurisdiction. If, however, the deferral procedure provides that investment tax credits are not to be passed on to customers, the proportionate restorations to income shall be credited to account 412.30.

C. Subdivisions of this account by department shall be maintained for deferred investment tax credits that are related to nonutility or other operations. Contra entries affecting such account subdivisions shall be appropriately recorded. Use of deferral or nondeferral accounting procedures adopted for nonutility or other operations are to be followed on a consistent basis.

D. Separate records for each utility department, and nonutility or other operations shall be maintained identifying the properties giving rise to the investment tax credits for each year with the appropriate service life of such properties and any unused balances of such credits. Such records are not necessary unless the tax credits are deferred.

E. The following subaccounts shall be maintained:

- 255.1 Accumulated Deferred Investment Tax Credits, Utility  
Operations
- 255.2 Accumulated Deferred Investment Tax Credits, Nonutility  
Operations
- Operating Reserves

### 261. Property Insurance Reserve

A. This account shall include amounts reserved by the utility for self-insurance against losses through accident, fire, flood, or other hazards to its own property or property leased from others. The accruals to this account are to be charged to account 757 - Insurance-General Liability, or other appropriate account to cover such risks credited to this account. A schedule of risks covered by this reserve shall be maintained, giving a description of the property involved, the character of the risks covered and the rates used.

## BALANCE SHEET ACCOUNTS

B. Charges shall be made to this account for losses covered by self-insurance. Details of these charges shall be maintained according to the year the casualty occurred which gave rise to the loss.

### 262. Injuries and Damages Reserve

A. This account shall be credited with amounts to be charged to account 758 - Insurance - Workman's Compensation, or other appropriate accounts, to meet the probable liability, not covered by insurance, for deaths or injuries to employees and others, and for damages to property neither owned nor held under lease by the utility.

B. When liability for any injury or damage is admitted by the utility either voluntarily or because of the decision of a court or other lawful authority, such as a workmen's compensation board, the admitted liability shall be charged to this account and credited to the appropriate liability account. Details of these charges shall be maintained according to the year the casualty occurred which gave rise to the loss.

Note--Recoveries or reimbursements for losses charged to this account shall be credited hereto; the cost of repairs to property of others if provided for herein, shall be charged to this account.

### 263. Pensions and Benefits Reserve

A. This account shall include provisions made by the utility and amounts contributed by employees, for pensions, accident and death benefits, savings, relief, hospital and other provident purposes, where the funds represented by the reserve are included in the assets of the utility either in general or in segregated fund accounts.

B. Amounts paid by the utility for the purposes for which this reserve is established shall be charged hereto.

C. A separate account shall be kept for each kind of reserve included herein.

Note--If employee pension or benefit plan funds are not included among the assets of the utility but are held by outside trustees, payments into such funds, or accruals therefor shall not be included in this account unless required payments are made on a periodic and timely basis to the outside trustees of the various funds.

## BALANCE SHEET ACCOUNTS

### 265. Miscellaneous Operating Reserves

- A. This account shall include all operating reserves maintained by the utility which are not provided for elsewhere.
- B. This account shall be maintained in such manner as to show the amount of each separate reserve and the nature and amounts of the debits and credits thereto.

Note:--This account includes only such reserves as may be created for operating purposes and does not include any reservations of income the credits for which should be carried in account 214 - Appropriated Retained Earnings.

### Contributions in Aid of Construction

### 271. Contributions in Aid of Construction

- A. This account shall include:
1. Any amount or item of money, services or property received by a utility, from any person or governmental agency, any portion of which is provided at no cost to the utility, which represents an addition or transfer to the capital of the utility, and which is utilized to offset the acquisition, improvement or construction costs of the utility's property, facilities, or equipment used to provide utility services to the public.
  2. Amounts transferred from account 252 - Advances for Construction, representing unrefunded balances of expired contracts or discounts resulting from termination of contracts in accordance with the Commission's rules and regulations.
  3. Compensation received from governmental agencies and others for relocation of sewer mains or other plants.
  - 4) Any amount of money received by a utility, any portion of which is provided at no cost to the utility, which represents an addition or transfer to the capital of the utility and which is utilized to offset the federal, state or local income tax effect of taxable contributions in aid of construction, taxable amounts transferred from Account 252 - Advances for Construction, and taxable compensation received from governmental agencies and others for relocation of water mains or other plants shall be reflected in a sub-account of this account.
- B. The credits to this account shall not be transferred to any other account without the approval of the Commission.



## **BALANCE SHEET ACCOUNTS**

C. The records supporting the entries to this account shall be so kept that the utility can furnish information as to the purpose of each donation, the conditions, if any, upon which it was made, the amount of donations from (a) states, (b) municipalities, (c) customers, and (d) others, and the amount applicable to each utility department.

Note:--There shall not be included in this account advances for construction which are ultimately to be repaid wholly or in part (See account 252 - Advances for Construction).

### **272. Accumulated Amortization of Contributions in Aid of Construction**

A. This account shall reflect the amortization accumulated on account 271 - Contributions in Aid of Construction, if recognized by the Commission.

B. Specifically, balances in account 271 which represent contributions of depreciable plant shall be amortized by charges to this account over a period equal to the estimated service life of the related contributed asset. A group or overall composite rate may be used for contributed balances that cannot be directly related to a plant asset.

C. The concurrent credit for the amortization recorded in this account shall be made to account 403 - Depreciation Expense.

D. If a regulatory body allows the amortization of any portion of the monies collected to pay the tax obligation caused by the receipt of CIAC, such amortization shall also be reflected in a sub-account of this account. Specifically, balances in account 271 which represent monies collected for the gross-up of CIAC (See Definition 14.) shall be amortized by charges to this account over a period determined by the regulatory body.

### **Accumulated Deferred Income Taxes**

Before using the deferred tax accounts provided below, refer to Accounting Instruction 34 (B) and (C). Interperiod Income Tax Allocation - Depreciation and Comprehensive Interperiod Income Tax Allocation - Other.

Public utilities shall use the accounts provided below for prior accumulations of deferred taxes on income for additional provisions. Prior to any use of these accounts, the utility must file with the Commission, for the purpose of obtaining authorization, its proposed plan of accounting for deferred taxes on income. The utility shall not use these accounts unless such use has been authorized by the Commission. If deferred tax accounting is initiated with respect to any property such accounting shall not be discontinued on that property without prior

## BALANCE SHEET ACCOUNTS

approval of the Commission.

The utility is restricted in its use of these accounts to the purposes set forth therein. It shall not make any transfers from these accounts or make any use thereof except as provided in the text of the accounts without prior approval of the Commission. It shall not transfer the balance in these accounts or any portion thereof to retained earnings except as provided in the text of this account without prior approval of the Commission.

Upon the disposition by sale, exchange, transfer, abandonment, or premature retirement of plant on which there is a related balance in these accounts, the deferred tax account shall be debited with an amount equal to the related income tax expense, if any, arising from such disposition and account 411 - Provision for Deferred Income Taxes-Credit, shall be credited. When the remaining balance, after consideration of any related income tax expenses, is not significant, the deferred tax account shall be debited and account 411 credited with such balance. If after consideration of any related income tax expense, and the remaining amount is significant, then the Commission shall authorize or direct how such amount shall be accounted for at the time approval for the disposition of accounting is granted. When plant is disposed of by transfer to a wholly owned subsidiary, the related balance in the deferred tax account shall also be transferred. When the disposition relates to retirement of an item or items under a group method of depreciation where there is no tax effect in the year of retirement, no entries are required in the deferred tax account if it can be determined that the related balances would be necessary to be retained to offset future group item tax deficiencies.

Note:--Public utilities having more than one utility department and/or nonutility property and which have deferred taxes on income with respect thereto shall classify such deferrals in the accounts provided elsewhere so as to allow ready identification of items relating to each utility department and to Other Income and Deductions.

### 281. Accumulated Deferred Income Taxes - Accelerated Amortization

A. This account shall include tax deferral resulting from adoption of the principles of Comprehensive Interperiod Income Tax Allocation - Other described in Accounting Instruction 34 (c) of this system of accounts that relate to property for which the utility have availed itself of the use of accelerated (5-year) amortization of (1) certified defense facilities as permitted by Section 168 of the Internal Revenue Code and (2) certified pollution control facilities as permitted by Section 169 of the Internal Revenue Code.

## BALANCE SHEET ACCOUNTS

B. This account shall be credited and accounts 410.10, 410.11, 410.12 - Deferred Federal, State or Local Income Taxes, and 410.20 - Other Income and Deductions, as appropriate, shall be debited with tax effects related to property described in paragraph A above where taxable income is lower than pretax accounting income due to differences between the periods in which revenues and expense transactions affect taxable income and the periods in which they enter into the determination of pretax accounting income.

C. This account shall be debited and accounts 411.10 - Provision for Deferred Income Taxes - Credit, Utility Operating Income, or 411.20 - Provision for Deferred Income Taxes-Credit, Other Income and Deductions, as appropriate, shall be credited with tax effects related to property described in paragraph A above where taxable income is higher than pretax accounting income due to differences between the periods in which revenues and expenses transactions affect taxable income and the periods in which they enter into the determination of pretax accounting income.

D. Records with respect to entries to this account, as described above, and the account balance, shall be so maintained as to show the factors of calculation and the separate amounts applicable to the plant additions of each vintage year for each class, group, or unit. The underlying calculations to segregate and associate deferred tax amounts with the respective vintage years may be based on reasonable methods of approximation, if necessary, consistently applied.

### 282. Accumulated Deferred Income Taxes - Liberalized Depreciation

A. This account shall include the tax deferrals resulting from adoption of the principle of comprehensive interperiod income tax allocation described in Accounting Instruction 34 of this system of accounts which are related to all property other than accelerated amortization property.

B. This account shall be credited and accounts 410.10, 410.11, 410.12 - Deferred Federal, State and Local Income Taxes, or 410.20 - Provision for Deferred Income Taxes, Other Income and Deductions, as appropriate, shall be debited with tax effects related to property described in paragraph A above where taxable income is lower than pretax accounting income due to differences between the periods in which revenue and expense transactions affect taxable income and the periods in which they enter into the determination of pretax accounting income.

C. This account shall be debited and accounts 411.10 - Provision for Deferred Income Taxes - Credit, Utility Operating Income, or 411.20 - Provision for Deferred Income Taxes - Credit, Other Income and Deductions, as appropriate, shall be credited with tax effects related to property described in paragraph A above where taxable income is higher than pretax accounting income due to differences

## BALANCE SHEET ACCOUNTS

between the periods in which revenue and expense transactions affect taxable income and the periods in which they enter into the determination of pretax accounting income.

D. Records with respect to entries to this account, as described above, and the account balance, shall be so maintained as to show the factors of calculation and the separate amounts applicable to the plant additions of each vintage year for each class, group, or unit. The underlying calculations to segregate and associate deferred tax accounts with the respective vintage years may be based on reasonable methods of approximation, if necessary, consistently applied.

### 283. Accumulated Deferred Income Taxes - Other

A. This account shall include all credit tax deferrals resulting from the adoption of the principles of comprehensive interperiod income tax allocation described in Accounting Instruction 34 of this system of accounts other than those deferrals which are includible in accounts 281 - Accumulated Deferred Income Taxes - Accelerated Amortization, and 282 - Accumulated Deferred Income Taxes - Liberalized Depreciation.

B. This account shall be credited and the subaccounts of account 410 - Provision for Deferred Income Taxes, as appropriate, shall be debited with tax effects related to items described in paragraph A above where taxable income is lower than pretax accounting income due to differences between the periods in which revenue and expense transactions affect taxable income and the periods in which they enter into the determination of pretax accounting income.

C. This account shall be debited and accounts 411.10 - Provision for Deferred Income Taxes - Credit, Utility Operating Income or 411.20 - Provision for Deferred Income Taxes - Credit, Other Income and Deductions, as appropriate, shall be credited with tax effects related to items described in paragraph A above where taxable income is higher than pretax accounting income due to differences between the periods in which revenues and expense transactions affect taxable income and the periods in which they enter into the determination of pretax accounting income.

D. Records with respect to entries to this account, as described above, and the account balance, shall be so maintained as to show the factors of calculation with respect to each annual amount of the item or class of items.

E. For ratemaking purposes, the balance in accounts 281, 282, and 283 - Accumulated Deferred Income Taxes - Accelerated Amortization, Liberalized Depreciation, and Other, net of any balance in account 190 - Accumulated Deferred Income Taxes, shall either be deducted from rate base by all companies having a net credit balance of deferred taxes or shall be included in capital

## **BALANCE SHEET ACCOUNTS**

structure as zero cost funds. The treatment shall be determined by the regulatory body having jurisdiction over the regulated operations of the utility. Where regulated operations are subject to the jurisdiction of more than one regulatory body, each regulatory body shall establish the ratemaking treatment of those deferrals related to operations under its jurisdiction.

# WASTEWATER UTILITY PLANT ACCOUNTS

	<u>.1</u>	<u>.2</u>
	Intangible Plant	Collection Plant
351. Organization	351.1	XXXXXXXXXX
352. Franchises	352.1	XXXXXXXXXX
353. Land and Land Rights	XXXXXXXXXX	353.2
354. Structures and Improvements	XXXXXXXXXX	354.2
355. Power Generation Equipment	XXXXXXXXXX	355.2
360. Collection Sewers - Force	XXXXXXXXXX	360.2
361. Collection Sewers - Gravity	XXXXXXXXXX	361.2
362. Special Collecting Structures	XXXXXXXXXX	362.2
363. Services to Customers	XXXXXXXXXX	363.2
364. Flow Measuring Devices	XXXXXXXXXX	364.2
365. Flow Measuring Installations	XXXXXXXXXX	365.2
366. Reuse Services	XXXXXXXXXX	XXXXXXXXXX
367. Reuse Meters and Meter Installations	XXXXXXXXXX	XXXXXXXXXX
370. Receiving Wells	XXXXXXXXXX	XXXXXXXXXX
371. Pumping Equipment	XXXXXXXXXX	XXXXXXXXXX
374. Reuse Distribution Reservoirs	XXXXXXXXXX	XXXXXXXXXX
375. Reuse Transmission and Distribution System	XXXXXXXXXX	XXXXXXXXXX
380. Treatment and Disposal Equipment	XXXXXXXXXX	XXXXXXXXXX
381. Plant Sewers	XXXXXXXXXX	XXXXXXXXXX
382. Outfall Sewer Lines	XXXXXXXXXX	XXXXXXXXXX
389. Other Plant and Misc. Equipment	389.1	389.2
390. Office Furniture and Equipment	XXXXXXXXXX	XXXXXXXXXX
391. Transportation Equipment	XXXXXXXXXX	XXXXXXXXXX
392. Stores Equipment	XXXXXXXXXX	XXXXXXXXXX
393. Tools, Shop and Garage Equipment	XXXXXXXXXX	XXXXXXXXXX
394. Laboratory Equipment	XXXXXXXXXX	XXXXXXXXXX
395. Power Operated Equipment	XXXXXXXXXX	XXXXXXXXXX
396. Communication Equipment	XXXXXXXXXX	XXXXXXXXXX
397. Miscellaneous Equipment	XXXXXXXXXX	XXXXXXXXXX
398. Other Tangible Plant	XXXXXXXXXX	XXXXXXXXXX

# WASTEWATER UTILITY PLANT ACCOUNTS

<u>.3</u>	<u>.4</u>	<u>.5</u>	<u>.6</u>	<u>.7</u>
System Pumping Plant	Treatment and Disposal Plant	Reclaimed Water Treatment Plant	Reclaimed Water Distribution Plant	General Plant
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	352.6	XXXXXXXXXX
353.3	353.4	353.5	353.6	353.7
354.3	354.4	354.5	354.6	354.7
355.3	355.4	355.5	355.6	XXXXXXXXXX
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	366.6	XXXXXXXXXX
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	367.6	XXXXXXXXXX
370.3	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
371.3	XXXXXXXXXX	371.5	371.6	XXXXXXXXXX
XXXXXXXXXX	XXXXXXXXXX	374.5	XXXXXXXXXX	XXXXXXXXXX
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	375.6	XXXXXXXXXX
XXXXXXXXXX	380.4	380.5	XXXXXXXXXX	XXXXXXXXXX
XXXXXXXXXX	381.4	381.5	XXXXXXXXXX	XXXXXXXXXX
XXXXXXXXXX	382.4	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
389.3	389.4	389.5	389.6	XXXXXXXXXX
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	390.7
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	391.7
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	392.7
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	393.7
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	394.7
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	395.7
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	396.7
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	397.7
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	398.7

## WASTEWATER UTILITY PLANT ACCOUNTS

The wastewater utility plant accounts have been designed utilizing an account matrix. The matrix employs a list of object accounts which in effect act as control accounts. The object accounts are further segregated by the matrix into classifications by functions or subaccount. The instructions for segregating the object accounts to the function subaccount are contained in Accounting Instruction 32. Listed below are the object account descriptions.

### 351. Organization

This account shall include all fees paid to federal or state governments for the privilege of incorporation and expenditures incident to organizing the corporation, partnership or other enterprise and putting it into readiness to do business. A sample of items to be included in this account are listed below.

1. Actual cost of obtaining certificates authorizing an enterprise to engage in the public utility business.
2. Fees and expenses for incorporation.
3. Fees and expenses for mergers or consolidations.
4. Office expenses incident to organizing the utility.
5. Stock and minute books and corporate seal.

Note A:--This account shall not include any discounts upon securities issued or assumed; nor shall it include any costs incident to negotiating loans, selling bonds or other evidences of debt, or expenses in connection with the authorization, issuance and sale of capital stock.

Note B:--Exclude from this account and include in the appropriate expense account the cost of preparing and filing papers in connection with the extension of the term of incorporation unless the first organization costs have been written off. Where charges are made to this account for expenses incurred in mergers, consolidations or reorganizations, amounts previously included herein or in similar accounts in the books of the companies concerned shall be excluded from this account.

### 352. Franchises

A. This account shall include amounts paid to the federal government, to a state or to a political subdivision thereof in consideration for franchises, consents or certificates, running in perpetuity or for a specified term of more than one year, together with necessary and reasonable expenses incident to procuring such franchises, consents or certificates of permission and approval, including expenses of organizing and merging separate corporations, where statutes require solely for the purpose of acquiring franchise.



## WASTEWATER UTILITY PLANT ACCOUNTS

B. If a franchise or certificate is acquired by assignment, the charge to this account in respect thereof shall not exceed the amount paid therefor by the utility to the assignor, nor shall it exceed the amount paid by the original grantee, plus the expense of acquisition to such grantee. Any excess of the amount actually paid by the utility over the amount specified shall be charged to account 426 - Miscellaneous Nonutility Expenses.

C. When any franchise has expired, the book cost thereof shall be credited hereto and charged to account 426 - Miscellaneous Nonutility Expenses, or to account 110.1 - Accumulated Amortization of Utility Plant in Service, as appropriate.

D. Records supporting this account shall be kept so as to show separately the book cost of each franchise.

Note:--Annual or other periodic payments under franchises shall not be included herein but in the appropriate expense account.

### 353. Land and Land Rights

This account shall include the cost of land and land rights used in connection with wastewater collection, pumping, treatment and disposal, reclaimed water treatment and distribution and general plant operations (See Accounting Instruction 24). A sample of items to be included in this account are listed below:

1. Bulkheads buried, not requiring maintenance or replacement.
2. Cost, first, of acquisition including mortgages and other liens assumed (but not subsequent interest thereon).
3. Condemnation proceedings, including court and counsel costs.
4. Consents and abutting damages, payment for.
5. Conveyancers' and notaries' fees.
6. Fees, commissions, and salaries to brokers, agents, and others in connection with the acquisition of the land or land rights.
7. Leases, cost of voiding upon purchase to secure possession of land.
8. Removing, relocating, or reconstructing property of others, such as buildings, highways, railroads, bridges, cemeteries, churches, telephone and power lines, etc., in order to acquire quiet possession.
9. Retaining walls unless identified with structures.
10. Special assessments levied by public authorities for public improvements on the basis of benefits for new

## WASTEWATER UTILITY PLANT ACCOUNTS

- roads, new bridges, new sewers, new curbing, new pavements, and other public improvements, but not taxes levied to provide for the maintenance of such improvements.
11. Surveys in connection with the acquisition, but not amounts paid for topographical surveys and maps where such costs are attributable to structures or plant equipment erected or to be erected or installed on such land.
  12. Taxes assumed, accrued to date of transfer of title.
  13. Title, examining, clearing, insuring and registering in connection with the acquisition and defending against claims relating to the period prior to the acquisition.
  14. Appraisals prior to closing title.
  15. Cost of dealing with distributees or legatees residing outside of the state or county, such as recording power of attorney, recording will or exemplification of will, recording satisfaction of state tax.
  16. Filing satisfaction of mortgage.
  17. Documentary stamps.
  18. Photographs of property at acquisition.
  19. Fees and expenses incurred in the acquisition of sewer rights, and grants.
  20. Cost of fill to extend bulkhead line over land under water, where riparian rights are held, which is not occasioned by the erection of a structure.
  21. Sidewalks and curbs constructed by the utility on public property.
  22. Labor and expenses in connection with securing rights of way, where performed by company employees and company agents.

### 354. Structures and Improvements

This account shall include the cost in place of structures and improvements used in connection with wastewater collection, pumping, treatment and disposal, reclaimed water treatment and distribution and general plant operations (See Accounting Instruction 25). A sample of items to be included in this account are listed below:

1. Architects' plans and specifications including supervision.
2. Boilers, furnaces, piping, wiring, fixtures, and machinery for heating, lighting, signaling, ventilating and air conditioning systems, plumbing, vacuum cleaning systems, incinerator and smoke pipe, flues, etc.

## WASTEWATER UTILITY PLANT ACCOUNTS

3. Bulkheads, including dredging, riprap fill, piling, decking, concrete fenders, etc., when exposed and subject to maintenance and replacement.
4. Commissions and fees to brokers, agents, architects and others.
5. Conduit (not to be removed) with its contents.
6. Damages to abutting property during construction.
7. Drainage systems.
8. Elevators, cranes, hoists, etc., and the machinery for operating them.
9. Excavation, including shoring, bracing, bridging, refill and disposal of excess excavated material, cofferdams around foundations, pumping water from cofferdam during construction, test borings.
10. Fences and fence curbs (not including protective fences isolating items of equipment, which should be charged to the appropriate equipment account).
11. Fire protection systems when forming a part of a structure.
12. Flagpole.
13. Floor covering (permanently attached).
14. Foundations and piers for machinery, constructed as a permanent part of a building or other item listed herein.
15. Grading and clearing when directly occasioned by the building of a structure.
16. Intrasite communication system, poles, pole fixtures, wires and cables.
17. Landscaping, lawns, shrubbery, etc.
18. Leases, voiding upon purchase, to secure possession of structures.
19. Leased property, expenditures on.
20. Lighting fixtures and outside lighting systems.
21. Marquee, permanently attached to building.
22. Painting, first cost.
23. Permanent paving, concrete, brick, flagstone, asphalt, etc., within the property lines.
24. Partitions, including movable.
25. Permits and privileges.
26. Power boards for services to a building.
27. Refrigerating systems for general use.
28. Retaining walls except when identified with land.
29. Roadways.
30. Roofs.
31. Scales, connected to and forming a part of a structure.
32. Water and wastewater systems, for general use.
33. Sidewalks, culverts, curbs and streets constructed by the utility on its property.

## WASTEWATER UTILITY PLANT ACCOUNTS

- 34. Sprinkling systems.
- 35. Stacks -- brick, steel, or concrete, when set on foundation forming part of general foundation and steelwork of a building.
- 36. Steel inspection during construction.
- 37. Storage facilities constituting a part of a building.
- 38. Storm doors and windows.
- 39. Temporary heating during construction (net cost).
- 40. Temporary water connection during construction (net cost).
- 41. Temporary shanties and other facilities used during construction (net cost).
- 42. Topographical maps.
- 43. Vaults constructed as part of a building.
- 44. Watchmen's sheds and clock systems (net cost when used during construction only).
- 45. Water meters and supply system for a building or for general company purposes.
- 46. Water supply piping, hydrants and wells.
- 47. Yard surfacing, gravel, concrete, or oil (First cost only).
- 48. Tunnels, intake and discharge when constructed as part of a structure including sluice gates and those constructed to house.

### 355. Power Generation Equipment

A. This account shall include the cost installed of any equipment used for the production of power principally used in pumping operations.

B. Subaccounts shall be maintained hereunder for the cost of equipment used for each type of power generating equipment.

### 360. Collecting Sewers - Force

This account shall include all sewers which are used to lift sewage from a low elevation to a higher elevation. The force sewer will include that pipe between the discharge outlet of the lift station and the receiving manhole.

### 361. Collecting Sewers - Gravity

This account shall include the installed cost of all gravity collecting sewers, interceptor, branch, trunk, lateral including service wye, and manholes and lampholes. Manholes shall be included as a separate unit of property.

### 362. Special Collecting Structures

Inverted siphon shall be included in this account but so

## WASTEWATER UTILITY PLANT ACCOUNTS

distinctly noted; also any other special designed structures unusual to the wastewater system should be included herein but specifically noted as to what they do.

### 363. Services to Customers

This account shall include the installed cost of service sewers, from collection sewer to the customer's property or curb line. A sample of items to be included in this account are listed below:

1. Jointing and jointing material.
2. Manhole or clean-out.
3. Municipal inspection and permits
4. Pavement disturbed.
5. Protection of street openings.
6. Tapping saddle.
7. Service connection wye shall be included in account 363 instead of account 361 when company owns service sewers to customers property line.

### 364. Flow Measuring Devices

A. This account shall include the cost of flow measuring and recording equipment and initial testing used for measuring the quantity of wastewater or wastewater effluent delivered by customers, whether actually in service or held in reserve.

B. When flow measuring equipment is permanently retired from service, the amount at which it is included herein shall be credited to this account.

C. The records covering flow measuring equipment shall be so kept that the utility can furnish information as to the number of devices of each type and size in service and in reserve, as well as the location of each device included in this account.

### 365. Flow Measuring Installations

A. This account shall include the cost of labor employed, materials used and expenses incurred in connection with the original installation of customers' flow measuring equipment. A sample of items to be included in this account are listed below:

1. Floats, connections, flumes, or wires.
2. Special manhole, boxes, or other separate housing.

B. When a flow measuring installation is permanently retired from service, the cost thereof shall be credited to this account.

## WASTEWATER UTILITY PLANT ACCOUNTS

### 366. Reuse Services

- A. This account shall include the cost installed of reclaimed water service pipes and accessories leading to the customers' premises.
- B. A complete reclaimed water service begins with the connection on the main and extends to but does not include the connection with the customer's meter. A stub service extends from the main to the property line, or the curb stop (curb stop cock).
- C. Services which have been used but have become inactive shall be retired from utility plant in service immediately if there is no prospect for future use.

#### Items

1. Corporation stops or tees.
2. Gate valves and boxes.
3. Goose necks.
4. Jointing and jointing material.
5. Municipal inspection or permits.
6. Pavements disturbed.
7. Pipes.
8. Placing pipes and accessories.
9. Protection of street openings.
10. Service or curb boxes.
11. Service or curb stops (curb stop cocks).
12. Tapping main.
13. Tapping saddle.

### 367. Reuse Meters and Meter Installations

- A. This account shall include the cost of meters, devices and appurtenances attached thereto, used for measuring the quantity of reclaimed water delivered to users, whether actually in service or held in reserve. It shall also include the cost of labor employed, materials used and expenses incurred in connection with the original installation of a customer's meters and devices and appurtenances attached thereto.
- B. When a meter and/or meter installation is permanently retired from service, the amount at which it is included herein shall be credited to this account.
- C. The records covering meters shall be so kept that the utility can furnish information as to the number of meters of each type and size in service and in reserve as well as the location of each meter included in this account.
- D. A sample of items to be included in this account are listed

## WASTEWATER UTILITY PLANT ACCOUNTS

below:

1. Meters, including badging and initial testing.
2. Remote meter registers.
3. Installation labor (first installation only).
4. Meter coupling.
5. Meter bars.
6. Meter yokes.
7. Meter fittings, connections and shelves.
8. Meter vaults or boxes.
9. Stops.

Note A:--This account shall not include meters for recording the output of a supply or treatment plant, or those located on mains. It includes only those meters to record reclaimed water delivered to customers, including company use and for those used elsewhere in the system if a type available for general use.

Note B:--The utility shall maintain a statistical record to show separately the number of each type and size of meter or group of types and sizes as carried in the continuing property record. Underlying records shall be kept so that the utility can determine readily for each such classification the number of company-owned meters in service (subdivided between active and inactive) and the number of meters carried herein but not in service, the latter to include meters undergoing repairs; and the number of meters in service owned by customers.

### 370. Receiving Wells

This account shall include the cost of constructing wells at pumping stations or at other junction points along the collecting system, used for intercepting wastewater for clearing and screening, transfer to a pumping well or otherwise further convey it along the collecting system to the treatment plant or point of final discharge. This account shall include any chemical feed apparatus and holding basins associated with the receiving well.

### 371. Pumping Equipment

This account shall include the cost installed of pumping equipment driven by electric power or diesel engines. A sample of items to be included in this account are listed below:

1. Motors or engines for driving pumps.
2. Pumps, including settings, gearing, shafting and belting.
3. Sewage piping within station, including valves.
4. Auxiliary equipment for motors and pumps such as oiling systems, cooling systems, condensers, etc.

## WASTEWATER UTILITY PLANT ACCOUNTS

5. Electrical power lines and switching.
6. Foundations, frames, and bed plates.
7. Hoist units.

### 374. Reuse Distribution Reservoirs

This account shall include the cost in place of reservoirs, tanks and appurtenances used in storing reclaimed water for distribution. A sample of items to be included in this account are listed below:

1. Bridges and culverts.
2. Clearing land.
3. Dams.
4. Embankments.
5. Fences.
6. Foundations.
7. Gates and gate houses.
8. Landscaping.
9. Lighting systems.
10. Piping system within reservoirs.
11. Retaining walls.
12. Roads and paths.
13. Rust-proofing apparatus.
14. Sewer drain or storm sewer.
15. Spillways and channels.
16. Standpipes.
17. Tanks.
18. Towers.
19. Valves.

### 375. Reuse Transmission and Distribution System

A. This account shall include the cost installed of reclaimed water transmission and distribution mains and appurtenances. A sample of items to be included in this account are listed below:

1. Air chambers.
2. Blow-offs and overflows.
3. Bridges and culverts.
4. Electrolysis control equipment.
5. Gauges and recorders.
6. Jointing and jointing material.
7. Manholes.
8. Meters and appurtenances.
9. Municipal inspection or permits.
10. Pavement disturbed, including cutting and replacing pavement, pavement base and sidewalks.
11. Pipes.
12. Fire mains.
13. Fire Hydrants.



## WASTEWATER UTILITY PLANT ACCOUNTS

B. Records supporting this account shall be so kept as to show separately the cost of mains of different sizes and types and of each tunnel, bridge, or river crossing.

### 380. Treatment and Disposal Equipment

This account shall include the cost installed of apparatus equipment and other facilities used for the treatment of wastewater, disposal of sewage wastes and the treatment of effluent for reuse. A sample of items to be included in this account are listed below:

1. Aeration chambers.
2. Chemical equipment.
3. Disinfection facilities.
4. Filters.
5. Imhoff tank.
6. Land fill equipment and appurtenances.
7. Monitoring equipment.
8. Oxidation pond or lagoon.
9. Sedimentation equipment.
10. Septic tank.
11. Screen unit.
12. Sludge system.
13. Trucks, tractors, or other equipment used primarily for sludge or other waste disposal.
14. Package mechanical treatment plant.
15. Sedimentation basin.
16. Sludge digestion equipment.
17. Sludge filtration or dewatering equipment.

### 381. Plant Sewers

This account shall include the cost installed of plant yard piping and appurtenances, and facilities required to dispose of treatment plant liquid effluent into the outfall sewer line. A sample of items to be included in this account are listed below:

1. Unit to unit sections of yard piping.
2. Valves and vaults.
3. Pipe tunnels and galleries..
4. Filter and filter backwash piping.

### 382. Outfall Sewer Lines

This account shall include the installed cost of sewer line carrying effluent from treatment facility to point of discharge. Includible in this account would be headwall or outlet.

## WASTEWATER UTILITY PLANT ACCOUNTS

### 389. Other Plant and Miscellaneous Equipment

This account shall include the cost installed of all other intangible, collection system pumping, treatment and disposal, reclaimed water treatment and reclaimed water distribution plant not provided for in the foregoing accounts.

### 390. Office Furniture and Equipment

A. This account shall include the cost of office furniture and equipment owned by the utility and devoted to utility service, and not permanently attached to buildings, except the cost of such furniture and equipment which the utility elects to assign to other plant accounts on a functional basis. A sample of items to be included in this account are listed below:

1. Book cases and shelves.
2. Desk, chairs, and desk equipment.
3. Drafting room equipment.
4. Electronic data processing equipment.
5. Filing, storage and other cabinets.
6. Floor covering.
7. Library and library equipment.
8. Mechanical office equipment such as accounting machines, typewriters, etc.
9. Safes.
10. Tables.

B. If the utility has equipment includible in this account at more than one location, separate records shall be maintained for each location.

### 391. Transportation Equipment

This account shall include the cost of transportation vehicles used for utility purposes. A sample of items to be included in this account are listed below:

1. Airplanes.
2. Automobiles.
3. Bicycles.
4. Electrical vehicles.
5. Motor trucks.
6. Motorcycles.
7. Repair cars or trucks.
8. Tractors and trailers.
9. Other transportation vehicles.

## WASTEWATER UTILITY PLANT ACCOUNTS

### 392. Stores Equipment

A. This account shall include the cost of equipment used for the receiving, shipping, handling and storage of materials and supplies.

B. If the utility has equipment includible in this account at more than one location, separate records shall be maintained for each location. A sample of items to be included in this account are listed below:

1. Chain falls.
2. Counters.
3. Cranes (portable).
4. Elevating and stacking equipment (portable).
5. Hoists.
6. Lockers.
7. Scales.
8. Shelving.
9. Storage bins.
10. Trucks, hand and power driven.
11. Wheelbarrows.

### 393. Tools, Shop and Garage Equipment

This account shall include the cost of tools, implements, and equipment used in construction, repair work, general shops and garages and not specifically provided for or includible in other accounts. A sample of items to be included in this account are listed below:

1. Air compressors.
2. Anvils.
3. Automobile repair shop equipment.
4. Battery charging equipment.
5. Belts, shafts and countershafts.
6. Boilers.
7. Cable pulling equipment.
8. Concrete mixers.
9. Drill presses.
10. Derricks.
11. Electric equipment.
12. Engines.
13. Forges.
14. Furnaces.
15. Foundations and settings specially constructed for and not expected to outlast the equipment for which provided.
16. Gas producers.
17. Gasoline pumps, oil pumps and storage tanks.
18. Greasing tools and equipment.

## WASTEWATER UTILITY PLANT ACCOUNTS

19. Hoists.
20. Ladders.
21. Lathes.
22. Machine tools.
23. Motor driven tools.
24. Motors.
25. Pipe threading and cutting tools.
26. Pneumatic tools.
27. Pumps.
28. Riveters.
29. Smithing equipment.
30. Tool racks.
31. Vises.
32. Welding apparatus.
33. Work benches.

### 394. Laboratory Equipment

A. This account shall include the cost installed of laboratory equipment used for general laboratory purposes and not specifically provided for or includible in other departmental or functional plant accounts. A sample of items to be included in this account are listed below:

1. Autoclaves.
2. Barometers.
3. Cameras.
4. Centrifuge.
5. Distilling apparatus.
6. Furnaces.
7. Microscopes.
8. Ovens.
9. Pitometers.
10. Rain gauges.
11. Refrigerators.
12. Scales.
13. Sterilizers.
14. Stop watches.
15. Testing machines.
16. Thermometers.
17. Voltmeters.
18. Other bacteriological, electric, chemical hydraulic or research equipment.

B. If the utility has equipment includible in this account at more than one location, separate records shall be maintained for each location.

## WASTEWATER UTILITY PLANT ACCOUNTS

### 395. Power Operated Equipment

This account shall include the cost of power operated equipment used in construction of repair work exclusive of equipment includible in other accounts. Include; also, the tools and accessories acquired for use with such equipment and the vehicle on which such equipment is mounted. A sample of items to be included in this account are listed below:

1. Air compressors, including driving unit and vehicle.
2. Back filling machines.
3. Boring machines.
4. Bulldozers.
5. Cranes and joists.
6. Diggers.
7. Engines.
8. Pile drivers.
9. Pipe cleaning machines.
10. Pipe coating or wrapping machines.
11. Tractors - Crawler type.
12. Trenchers.
13. Other power operated equipment.

Note:--It is intended that this account include only such large units as are generally self-propelled or mounted on moveable equipment.

### 396. Communication Equipment

This account shall include the cost installed of telephone, telegraph and wireless equipment for general use in connection with utility operations. A sample of items to be included in this account are listed below:

1. Antennae.
2. Booths.
3. Cables.
4. Distribution boards.
5. Extension cords.
6. Gongs.
7. Handsets, manual and dial.
8. Insulators.
9. Intercommunicating sets.
10. Loading coils.
11. Operators desks.
12. Poles and fixtures used wholly for telephone and telegraph wires.
13. Radio transmitting and receiving sets.
14. Remote control equipment and lines.
15. Sending keys.
16. Storage batteries.

## WASTEWATER UTILITY PLANT ACCOUNTS

17. Switchboards.
18. Teleautograph circuit connections.
19. Telegraph receiving sets.
20. Telephone and telegraph circuits.
21. Testing instruments.
22. Towers.
23. Underground conduit used wholly for telephone or telegraph wires and cable wires.

### 397. Miscellaneous Equipment

This account shall include the cost of equipment, apparatus, etc., used in utility operations, and which is not includible in any other account. A sample of items to be included in this account are listed below:

1. Hospital and infirmary equipment.
2. Kitchen equipment.
3. Recreation equipment.
4. Radios.
5. Restaurant equipment.
6. Soda fountains.
7. Operator's cottage furnishings.
8. Electric signs advertising the corporate name or symbol, plant or facility name, or otherwise serving only the general purpose of acquainting the public with the facilities and services of the utility.
9. Other miscellaneous equipment.

Note:--Miscellaneous equipment of the nature indicated above wherever practicable shall be included in the utility plant accounts on a functional basis.

### 398. Other Tangible Plant

This account shall include the cost of tangible utility plant not provided for elsewhere.

## **INCOME ACCOUNTS**

### **Utility Operating Income**

- 400. Operating Revenues
- 401. Operating Expenses
- 403. Depreciation Expense
- 406. Amortization of Utility Plant Acquisition Adjustment
- 407. Amortization Expense
  - 407.1 Amortization of Limited Term Plant
  - 407.2 Amortization of Property Losses
  - 407.3 Amortization of Other Utility Plant
  - 407.4 Amortization of Regulatory Assets
  - 407.5 Amortization of Regulatory Liabilities
- 408. Taxes Other Than Income
  - 408.10 Utility Regulatory Assessment Fees
  - 408.11 Property Taxes
  - 408.12 Payroll Taxes
  - 408.13 Other Taxes and Licenses
- 409. Income Taxes
  - 409.10 Federal Income Taxes, Utility Operating Income
  - 409.11 State Income Taxes, Utility Operating Income
  - 409.12 Local Income Taxes, Utility Operating Income
- 410. Provision for Deferred Income Taxes
  - 410.10 Deferred Federal Income Taxes
  - 410.11 Deferred State Income Taxes
  - 410.12 Deferred Local Income Taxes
- 411. Provision for Deferred Income Taxes - Credit
  - 411.10 Provision for Deferred Income Taxes - Credit, Utility Operating Income
- 412. Investment Tax Credits
  - 412.10 Investment Tax Credits Deferred to Future Periods, Utility Operations
  - 412.11 Investment Tax Credits Restored to Operating Income, Utility Operations
- 413. Income From Utility Plant Leased to Others
- 414. Gains (Losses) From Disposition of Utility Property

### **Other Income and Deductions**

- 415. Revenues From Merchandising, Jobbing and Contract Work
- 416. Costs and Expenses of Merchandising, Jobbing and Contract Work
- 419. Interest and Dividend Income
- 420. Allowance for Funds Used During Construction
- 421. Nonutility Income
- 426. Miscellaneous Nonutility Expenses

### **Taxes Applicable to Other Income and Deductions**

- 408. Taxes Other Than Income
  - 408.20 Taxes Other Than Income, Other Income and Deductions
- 409. Income Taxes
  - 409.20 Income Taxes, Other Income and Deductions
- 410. Provision for Deferred Income Taxes

## INCOME ACCOUNTS

410.20 Provision for Deferred Income Taxes, Other Income and Deductions

411. Provision For Deferred Income Taxes - Credit

411.20 Provision for Deferred Income Taxes - Credit, Other Income and Deductions

412. Investment Tax Credits

412.20 Investment Tax Credits - Net, Nonutility Operations

412.30 Investment Tax Credits Restored to Nonoperating Income, Utility Operations

## Interest Expense

427. Interest Expense

427.1 Interest on Debt to Associated Companies

427.2 Interest on Short-Term Debt

427.3 Interest on Long-Term Debt

427.4 Interest on Customer Deposits

427.5 Interest - Other

428. Amortization of Debt Discount and Expense

429. Amortization of Premium on Debt

## Extraordinary Items

433. Extraordinary Income

434. Extraordinary Deductions

409. Income Taxes

409.30 Income Taxes, Extraordinary Items



## INCOME ACCOUNTS

### Operating Income

#### 400. Operating Revenues

This is the revenue control account which totals the accounts recorded in wastewater revenue accounts 521 through 544.

#### 401. Operating Expenses

This is the operating expense control account which totals the amounts recorded in operating expense accounts 700 through 775 for wastewater systems.

#### 403. Depreciation Expenses

A. This account shall be charged with depreciation credited to account 108 - Accumulated Depreciation of Wastewater Plant and credited with amortization debited to account 272 - Accumulated Amortization of Contributions in Aid of Construction. Depreciation shall be accrued on a straight-line remaining life basis or straight-line basis, as required by the Commission. A single composite depreciation rate may be used if approval from the Commission is obtained.

Note A:--See Accounting Instruction 33, for more detailed instructions on depreciation accounting.

B. Depreciation for property not used in wastewater operations is charged to account 426 - Miscellaneous Nonutility Expenses, and is credited to account 122 - Accumulated Depreciation and Amortization of Nonutility Property.

#### 406. Amortization of Utility Plant Acquisition Adjustments

This account shall be debited or credited, as the case may be, only upon the approval of the Commission, for the purpose of providing for the extinguishment of the amount in account 114 - Utility Plant Acquisition Adjustments.

#### 407. Amortization Expense

This account shall be the control account for amortization accounts totaling the amounts in accounts 407.1 to 407.3.

##### 407.1 Amortization of Limited Term Plant

This account shall include amortization charges applicable to amounts included in the utility plant

## INCOME ACCOUNTS

accounts for limited term franchises, licenses, patent rights, limited term interests in land, and expenditures on leased property where the service life of the improvements is terminable by action of the lease. The charges to this account shall be such as to distribute the book cost of each investment evenly over the period of benefit to the utility (See account 110.1 - Accumulated Amortization of Utility Plant in Service).

### 407.2 Amortization of Property Losses

This account shall be charged with amounts credited to account 182, Extraordinary Property Losses, when the Commission has authorized the amount in the latter account to be amortized by charges to operating expenses.

### 407.3 Amortization of Other Utility Plant

A. When authorized by the Commission, this account shall include charges for amortization of intangible or other utility plant in service which does not have a definite or terminable life and which is not subject to depreciation expense.

B. This account shall be supported in such detail as to show the amortization applicable to each investment being amortized, together with the book cost of the investment and the period of the amortization.

### 407.4 Amortization of Regulatory Assets

This account shall be debited, when appropriate, with the amounts credited to Account 253.1 - Regulatory Liabilities, to record regulatory liabilities imposed on the utility by the ratemaking actions of regulatory agencies. This account shall also be debited, when appropriate, with the amounts credited to Account 186.3 - Regulatory Assets, concurrent with the recovery of such amounts in rates.

### 407.5 Amortization of Regulatory Liabilities

This account shall be credited, when appropriate, with amounts debited to Account 186.3 - Regulatory Assets, to establish regulatory assets. This account shall also be credited, when appropriate, with the amounts debited to Account 253.1 - Regulatory Liabilities, concurrent with the return of such amount to customers through rates.

## INCOME ACCOUNTS

### 408. Taxes Other Than Income

A. These accounts shall include the amount of ad valorem, gross revenue or gross receipts taxes, regulatory agency general assessments for purposes of public utility regulation, state unemployment insurance, franchise taxes, federal excise taxes, social security taxes, and all other taxes assessed by federal, state, county, municipal, or other local governmental authorities, except income taxes.

B. These accounts shall be charged in each accounting period with the amounts of taxes which are applicable thereto, with concurrent credits to account 236 - Accrued Taxes, or account 162 - Prepayments, as appropriate. When it is not possible to determine the exact amounts of taxes, the amounts shall be estimated and adjustments made in current accruals as the actual tax levies become known.

C. The charges to these accounts shall be made or supported so as to show the amount of each tax and the basis upon which each charge is made. In the case of a utility rendering more than one utility service, taxes of the kind includible in these accounts shall be assigned directly to the utility department the operation of which gave rise to the tax in so far as practicable. Where the tax is not attributable to a specific utility department, it shall be distributed among the utility departments or nonutility operations on an equitable basis after appropriate study to determine such basis.

Note A:--Special assessments for street and similar improvements shall be included in the appropriate utility plant or non-utility property account.

Note B:--Taxes specifically applicable to construction shall be included in the cost of construction.

Note C:--Gasoline and other sales taxes shall be charged as far as practicable to the same account as the materials on which the tax is levied.

Note D:--Social security and other forms of payroll taxes shall be distributed to utility departments and to nonutility functions on a basis related to payroll. Amounts applicable to construction shall be charged to the appropriate plant account.

Note E:--Interest on tax refunds or deficiencies shall not be included in these accounts but in account 419 - Interest and Dividend Income, or 427.5 - Interest - Other, as appropriate.

## INCOME ACCOUNTS

### 408.10 Utility Regulatory Assessment Fees

This account shall include those general fees assessed by regulatory agencies for the purpose of public utility regulation.

### 408.11 Property Taxes

This account shall include ad valorem taxes related to utility property.

### 408.12 Payroll Taxes

This account shall include all types of taxes related to payroll and associated with utility operating income not properly accounted for elsewhere.

### 408.13 Other Taxes and Licenses

This account shall include all other taxes and licenses related to utility operating income not properly accounted for elsewhere.

### 408.20 Taxes Other Than Income, Other Income and Deductions

This account shall include those taxes recorded in account 408 - Taxes Other Than Income, which relate to Other Income and Deductions.

## 409. Income Taxes

A. These accounts shall include the amounts of local, state and federal income taxes on income properly accruable during the period covered by the income statement to meet the actual liability for such taxes. Concurrent credits for the tax accruals shall be made to account 236 - Accrued Taxes, and as the exact amounts of taxes become known, the current tax accruals shall be adjusted by charges or credits to these accounts unless such adjustments are properly included in account 439 - Adjustments to Retained Earnings, so that these accounts as nearly as can be ascertained shall include the actual taxes payable by the utility (See Accounting Instruction 8 for prior period adjustments).

B. The accruals for local, state and federal income taxes shall be apportioned to Utility Operating Income (by department/division), Other Income and Deductions and Extraordinary Items so that, as nearly as practicable, each tax included in the expenses of the utility department, Other Income and Deductions or Extraordinary Items, shall be related to the income which gave rise to the tax. The income tax effect of the amounts recorded in that account. The tax effects relating to interest charges, other than

## INCOME ACCOUNTS

interest specifically applicable to indebtedness on property in account 121 shall be included in account 409.10 - Income Taxes, Utility Operating Income.

C. This account shall be maintained according to the subaccounts 409.10, 409.11, 409.12, 409.13, 409.20 and 409.30 inclusive, as shown below.

Note A:--Taxes assumed by the utility on interest shall be charged to account 427.5 - Interest Other.

Note B:--Interest on tax refunds or deficiencies shall not be included in this account but in account 419 - Interest and Dividend Income, or account 427.5 - Interest - Other, as appropriate.

Note C:--See Accounting Instruction 34.

### 409.10 Federal Income Taxes, Utility Operating Income

This account shall include the amount of those federal income taxes reflected in account 409 - Income Taxes, which relate to utility operating income after interest charges and other tax adjustments. This account shall be maintained so as to allow ready identification of tax effects (both positive and negative) relating to Utility Operating Income (by department/division), Utility Plant Leased to Others and Other Utility Operating Income.

### 409.11 State Income Taxes, Utility Operating Income

This account shall include the amount of those state income taxes reflected in account 409 - Income Taxes, which relate to utility operating income after interest charges and other tax adjustments. This account shall be maintained so as to allow ready identification of tax effects (both positive and negative) relating to Utility Operating Income (by department/division), Utility Plant Leased to Others and Other Utility Operating Income.

### 409.12 Local Income Taxes, Utility Operating Income

This account shall include the amount of those local income taxes reflected in account 409 - Income Taxes, which relate to utility operating income after interest charges and other tax adjustments. This account shall be maintained so as to allow ready identification of tax effects (both positive and negative) relating to Utility Operating Income (by department/division), Utility Plant Leased to Others and Other Utility Operating Income.

## INCOME ACCOUNTS

### 409.20 Income Taxes, Other Income and Deductions

This account shall include those local, state, and federal income taxes reflected in account 409 - Income Taxes, (both positive and negative), which relate to Other Income and Deductions.

### 409.30 Income Taxes, Extraordinary Items

This account shall include those local, state and federal income taxes (both positive and negative) which relate to Extraordinary Items.

### 410. Provision for Deferred Income Taxes

A. Accounts 410.10, 410.11, 410.12 and 410.20 shall be debited and accounts 281, 282, or 283 Accumulated Deferred Income Taxes - Accelerated Amortization, Liberalized Depreciation, or Other, shall be credited with amounts equal to any current deferrals of taxes on income or any allocations of deferred taxes originating in prior periods, as provided by the texts of accounts 190, 281, 282, and 283. No credit amounts appropriately includible in account 411.10 or 411.20 shall be netted against entries required to be made to these accounts.

B. This account shall be maintained according to the subaccounts 410.10, 410.11, 410.12 and 410.20 inclusive, as shown below.

Note:--See Accounting Instruction 34.

#### 410.10 Deferred Federal Income Taxes

This account shall include the amounts of those deferrals of federal income taxes and allocations of deferred federal income taxes which relate to Utility Operating Income (by department/division).

#### 410.11 Deferred State Income Taxes

This account shall include the amounts of those deferrals of state income taxes and allocations of deferred state income taxes which relate to Utility Operating Income (by department/division).

#### 410.12 Deferred Local Income Taxes

This account shall include the amounts of those deferrals of local income taxes and allocations of deferred local income taxes which relate to Utility Operating Income (by department/division).

## INCOME ACCOUNTS

### 410.20 Provision for Deferred Income Taxes, Other Income and Deductions

This account shall include the amount of those deferred federal, state and local income taxes reflected in account 410 - Provision for Deferred Income Taxes, which relate to Other Income and Deductions.

### 411. Provision for Deferred Income Taxes - Credit

A. Accounts 411.10 and 412.20 shall be credited, and accounts 281, 282, or 283, Accumulated Deferred Income Taxes - Accelerated Amortization, Liberalized Depreciation or Other, shall be debited, with amounts equal to any allocations of deferred taxes originating in prior periods or any current deferrals of taxes on income, as provided by the texts of accounts 190, 281, 282, and 283. No debit amounts appropriately includible in account 410.10, 410.11, 410.12, or 410.20 shall be netted against entries required to be made to these accounts.

#### 411.10 Provision For Deferred Income Taxes - Credit, Utility, Operating Income

This account shall include the amounts of those allocations of deferred federal, state and local income taxes and deferrals of federal, state and local income taxes, credit which relate to Utility Operating Income (by department/division).

#### 411.20 Provision For Deferred Income Taxes - Credit, Other Income and Deductions

This account shall include the amounts of those allocations of deferred taxes and deferrals of taxes, credit, which relate to Other Income and Deductions.

### 412. Investment Tax Credits

A. This account shall be debited with the total amount of investment tax credits used in calculating the reported current year's income taxes payable.

Account 255 - Accumulated Deferred Investment Tax Credits, shall be credited with an equal amount of investment tax credits debited to this account. Investment tax credits related to property used in utility operations shall be debited to subaccount 412.10 - Investment Tax Credits Deferred to Future Periods, Utility Operations. Those investment tax credits related to property used in nonutility operations shall be debited to account 412.20 - Investment Tax Credits - Net, Nonutility Operations.

## INCOME ACCOUNTS

B. A company which has deferred its investment tax credits shall amortize these deferred credit amounts by crediting this account and debiting account 255 - Accumulated Deferred Investment Tax credits. Such annual amortization shall be allocated proportionately over the service lives of all assets or of the assets generating the credits. The proportional amounts shall be determined in relation to the method of depreciation actually used on the regulated books of account.

(1) In amortizing the deferred investment tax credits related to property used in utility operations, the annual proportional amount credited to account 412 - Investment Tax Credits may or may not be passed on to customers in accordance with the Internal Revenue Code section applicable to the company. Where the company is subject to Section 46 (f)(2) of the code which provides a "Special rule for ratable flow-through" or Option 2 treatment, the annual proportional amortization is to be credited to subaccount 412.11 - Investment Tax Credits Restored to Operating Income, Utility Operations. Where the company is subject to Code Section 46 (f)(1), which is the "General Rule" or Option 1 treatment, the annual proportional amortization shall be credited to subaccount 412.30 - Investment Tax Credits Restored to Nonoperating Income, Utility Operations.

(2) In amortizing the deferred investment tax credits related to property used in nonutility operations, the annual amount shall be credited to subaccount 412.20, Investment Tax Credits - Net, Nonutility Operations.

C. This account shall be maintained so that the debits and credits relating to each allowable percentage of credit, i.e., 3%, 4%, 6%, 7%, 8%, 10%, etc., may be readily identified.

D. This account shall be maintained so that the debits and credits relating to each utility department/division and each nonutility operation may be readily identified as well as the vintage year in which they were deferred.

E. This account shall be maintained according to subaccounts 412.10, 412.11, 412.20 and 412.30 as shown below.

### 412.10 Investment Tax Credits Deferred to Future Periods, Utility Operations

This account shall be debited and account 255 - Accumulated Deferred Investment Tax Credits, shall be credited with the amounts of realized investment tax credits deferred to future periods related to property used in utility operations (department/division).



## INCOME ACCOUNTS

### 412.11 Investment Tax Credits Restored to Operating Income, Utility Operations

This account shall be credited and account 255 - Accumulated Deferred Investment Tax Credits, shall be debited with the proportionate amounts of deferred investment tax credits related to property used in utility operations being restored to operating income in accordance with the "Special Rule for Ratable Flow-through" or Option 2 treatment as provided in the Revenue Act of 1971, the Tax Reduction Act of 1975 or the Economic Recovery Tax Act of 1981.

### 412.20 Investment Tax Credits - Net, Nonutility Operations

A. This account shall be debited and account 255 - Accumulated Deferred Investment Tax Credits, shall be credited with the amounts of realized investment tax credits deferred to future periods which relate to property used in non-utility operations.

B. This account shall be credited and account 255 - Accumulated Deferred Investment Tax Credits shall be debited with the proportionate amounts of deferred investment tax credits related to property used in nonutility operations being restored to nonoperating income.

### 412.30 Investment Tax Credits Restored to Nonoperating Income, Utility Operations

This account shall be credited and account 255 - Accumulated Deferred Investment Tax Credits shall be debited with the proportionate amounts of deferred investment tax credits related to property used in utility operations being restored to nonoperating income in accordance with the "General Rule" or Option 1 as provided by the Revenue Act of 1971, the Tax Reduction Act of 1975 and the Economic Recovery Tax Act of 1981.

### 413. Income from Utility Plant Leased to Others

A. This account shall include, revenues from utility property constituting a distinct operating unit or system leased by the utility to others, and which property is properly includible in account 102 - Utility Plant Leased to Others, and the expenses attributable to such property. A series of subaccounts shall be maintained for each operating unit or system leased to show separately revenues and expenses.

B. The detail expenses shall be kept or supported so as to show

## INCOME ACCOUNTS

separately the following:

Operation;  
Depreciation; and  
Amortization.

C. The related taxes shall be recorded in the appropriate subsidiary accounts and the control account 408 - Taxes Other than Income and Account 409 - Income Taxes. Records shall be maintained such that these taxes associated with leased plant are separately identifiable.

### 414. Gain (Losses) from Disposition of Utility Property

A. This account shall include, when authorized by the Commission, gains and losses from the sale, conveyance, exchange or transfer of utility property to another. The income tax attributable to gains and losses recorded in this account shall be recorded in the appropriate subsidiary account and control account 409 - Income Taxes.

B. This account shall be maintained so that the transactions and details underlying each gain or loss will be readily identifiable.

### 415. Revenues from Merchandising, Jobbing, and Contract Work

### 416. Cost and Expenses of Merchandising, Jobbing, and Contract Work

A. These accounts shall include respectively, all revenues derived from the sale of merchandise and jobbing or contract work, including any profit or commission accruing to the utility on jobbing work performed by it as agent under contracts whereby it does jobbing work for another for a stipulated profit or commission, and all expenses incurred in such activities.

B. Records in support of these accounts shall be so kept as to permit ready summarization of revenues, costs and expenses by such major items as are feasible.

Note:--Related operating taxes shall be recorded in account 408.20 - Taxes Other Than Income Taxes, Other Income and Deductions, and income taxes shall be recorded in account 409.20, Income Taxes, Other Income and Deductions.

### 419. Interest and Dividend Income

A. This account shall include interest revenues on securities, loans, notes, advances, special deposits, tax refunds and all other interest bearing assets and dividends on stocks of other companies, whether the securities are carried as investments or included in sinking or other special funds accounts.

## INCOME ACCOUNTS

### 420. Allowance for Funds Used During Construction

This account shall include concurrent credits for allowance for funds used during construction based upon the net cost of funds used for construction purposes and a reasonable rate upon other funds when so used. Appropriate regulatory approval shall be obtained for "a reasonable rate" (See Accounting Instruction No. 19).

### 421. Nonutility Income

In this account is entered all income not includible in operating revenue accounts 521 through 536 or in account 419 - Interest and Dividend Income. Items in this account shall include:

1. Gross income from nonutility operations; and
2. Net gain on sale of nonutility property.

### 426. Miscellaneous Nonutility Expenses

This account shall contain all expenses other than expenses of utility operations and interest expense. Items which are included in this account are:

1. Expenses disallowed in a proceeding before the Commission.
2. Amortization of an Acquisition Adjustment not approved by the Commission.
3. Depreciation associated with plant not used and useful in the public service.
4. Depreciation of Nonutility Plant.
5. Imprudent expenses.
6. Donations for charitable, social or community welfare purposes.
7. Life insurance on officers and employees where utility is beneficiary (net premiums less increase in cash surrender value of policies).
8. Penalties or fines for violations of statutes pertaining to regulation.
9. Expenditures for the purpose of:
  - a. Influencing public opinion with respect to the election or appointment of public officials, or the adoption, repeal, revocation or modification of referenda, legislation or ordinances.
  - b. Influencing public opinion with respect to obtaining approval, modification or revocation of franchises.
  - c. Influencing the decisions of public officials not including such expenditures which are directly related to appearances before regulatory or other governmental bodies in connection with the utility's existing or proposed operations.

## INCOME ACCOUNTS

10. Loss relating to investments in securities written-off or written-down.
11. Loss on sale of investments.
12. Loss on reacquisition, resale or retirement of utility's debt securities.
13. Preliminary survey and investigation expenses related to abandoned projects, when not written-off to the appropriate operating expense account.
14. Golf club dues, social club dues and service club dues (Kiwanis, Rotary, etc.) house charges and items of a similar nature whether such expenditures are made directly by the utility or indirectly by payment or reimbursement to associated companies, officers, or other employees, or by any other direct or indirect means.

### 427. Interest Expense

This account shall be the control account for recording interest expense and shall total the sum of accounts 427.1 through 427.5.

#### 427.1 Interest on Debt to Associated Companies

This account shall record interest incurred with related companies.

#### 427.2 Interest on Short-Term Debt

This account shall record interest expense associated with short-term debt (principal due in 1 year or less).

#### 427.3 Interest on Long-Term Debt

This account shall record interest expense associated with long-term debt (principal due in more than one year).

#### 427.4 Interest on Customer Deposits

This account shall record interest expense associated with customer deposits.

#### 427.5 Interest-Other

This account shall include in each accounting period all interest charges not provided for elsewhere.

### 428. Amortization of Debt Discount and Expense

A. This account shall include in each accounting period the portion of unamortized debt discount and expense on outstanding long-term debt which is applicable to such period. Amounts charged

## INCOME ACCOUNTS

to this account shall be credited concurrently to account 181 - Unamortized Debt Discount and Expense.

B. This account shall be so kept or supported as to show the debt discount and expense on each class and series of long-term debt.

### 429. Amortization of Premium on Debt

A. This account shall include in each accounting period the portion of unamortized net premium on outstanding long-term debt which is applicable to such period. Amounts credited to this account shall be charged concurrently to account 251 - Unamortized Premium on Debt.

B. This account shall be so kept or supported as to show the premium on each class and series of long-term debt.

## Extraordinary Items

### 433. Extraordinary Income

Upon approval of the regulatory authority this account shall be credited with nontypical, noncustomary, infrequently recurring gains, which would significantly distort the current year's income computed before extraordinary items, if reported other than as extraordinary items. The applicable income tax effects of the account shall be recorded in account 409.30 - Income Taxes, Extraordinary Items.

### 434. Extraordinary Deductions

Upon approval of the Commission this account shall be debited with nontypical, noncustomary, infrequently recurring losses, which would distort the current year's income, if not reported separately. The applicable income tax effects shall be recorded account 409.30 - Income Taxes, Extraordinary Items.

## RETAINED EARNINGS ACCOUNTS

- 435. Balance Transferred From Income
- 436. Appropriations of Retained Earnings
- 437. Dividends Declared - Preferred Stock
- 438. Dividends Declared - Common Stock
- 439. Adjustments to Retained Earnings

## RETAINED EARNINGS ACCOUNTS

### 435. Balance Transferred from Income

This account shall include the net credit or debit transferred from income for the year.

### 436. Appropriations of Retained Earnings

This account shall include appropriations of retained earnings.

#### Items

1. Appropriations required under terms of mortgages, orders or courts, contracts or other agreements.
2. Appropriations required by action of regulatory authorities.
3. Other appropriations made at option of utility for specific purposes.

### 437. Dividends Declared - Preferred Stock

A. This account shall include amounts declared payable out of retained earnings as dividends on actually outstanding preferred or prior lien capital stock issued by the utility.

B. Dividends shall be segregated for each class and series of preferred stock as to those payable in cash, stock and other forms. If not payable in cash, the medium of payment shall be described with sufficient detail to identify it.

### 438. Dividends Declared - Common Stock

A. This account shall include amounts declared payable out of retained earnings as dividends on actually outstanding common capital stock issued by the utility.

B. Dividends shall be segregated for each class of common stock as to those payable in cash, stock and other forms. If not payable in cash, the medium of payment shall be described with sufficient detail to identify it.

### 439. Adjustments to Retained Earnings

A. This account shall include significant nonrecurring transactions relating to prior periods. Other than transactions of capital stock as specified in paragraph B below, all entries to this account must receive prior Commission approval. These transactions are generally limited to those adjustments which:

## RETAINED EARNINGS ACCOUNTS

- (1) correct an error in the financial statements of a prior period; or
- (2) adjustments that result from realization of income tax benefits of preacquisition loss carry forwards of purchased subsidiaries.

This account shall also include the related income tax effects (state and federal) on items included herein. All items included in this account shall be sufficiently described in the entries relating thereto as to permit ready analysis.

B. Debits due to losses on reacquisition, resale or retirement of the company's own capital stock shall be included in this account (See account 210 - Gain or Resale or Cancellation of Reacquired Capital Stock, for the treatment of gains).

C. Changes in depreciation or amortization estimates or methods are considered changes in accounting estimates rather than accounting errors and therefore are not subject to prior period adjustments. Any adjustments made to the accumulated amortization or depreciation balances of the utility due to a change in estimate or method shall be offset by a charge or credit to either: an income account; account 186.2 - Other Deferred Debits; or account 253 - Other Deferred Credits, as is directed by the Commission.



## **WASTEWATER OPERATING REVENUE ACCOUNTS**

### **Wastewater Sales**

- 521. Flat Rate Revenues
  - 521.1 Residential Revenues
  - 521.2 Commercial Revenues
  - 521.3 Industrial Revenues
  - 521.4 Revenues From Public Authorities
  - 521.5 Multiple Family Dwelling Revenues
  - 521.6 Other Revenues
- 522. Measured Revenue
  - 522.1 Residential Revenues
  - 522.2 Commercial Revenues
  - 522.3 Industrial Revenues
  - 522.4 Revenues From Public Authorities
  - 522.5 Multiple Family Dwelling Revenues
- 523. Revenues From Public Authorities
- 524. Revenues From Other Systems
- 525. Interdepartmental Revenues

### **Other Wastewater Revenues**

- 530. Guaranteed Revenues
- 531. Sale of Sludge
- 532. Forfeited Discounts
- 534. Rents From Wastewater Property
- 535. Interdepartmental Rents
- 536. Other Wastewater Revenues

### **Reclaimed Water Sales**

- 540. Flat Rate Reuse Revenues
  - 540.1 Residential Reuse Revenues
  - 540.2 Commercial Reuse Revenues
  - 540.3 Industrial Reuse Revenues
  - 540.4 Reuse Revenues From Public Authorities
  - 540.5 Other Revenues
- 541. Measured Reuse Revenue
  - 541.1 Residential Reuse Revenues
  - 541.2 Commercial Reuse Revenues
  - 541.3 Industrial Reuse Revenues
  - 541.4 Reuse Revenues From Public Authorities
- 544. Reuse Revenues From Other Systems

## WASTEWATER OPERATING REVENUE ACCOUNTS

### Wastewater Sales

#### 521. Flat Rate Revenues

A. This account shall be credited with all revenue for wastewater service rendered to residential, commercial and industrial property where the charge is not dependent upon metered water consumption or metered effluent output but is based on diameter of service, structure size, area front footage or other similar unit.

B. All revenue credited hereto shall be classified to one of the following subaccounts:

- 521.1 Residential Revenues
- 521.2 Commercial Revenues
- 521.3 Industrial Revenues
- 521.4 Revenues from Public Authorities
- 521.5 Multiple Family Dwelling Revenues
- 521.6 Other Revenues

Note:--When service is supplied through a single lateral to property used for both residential and commercial purposes, the total revenue shall be included in subaccount 521.1 or 521.2 according to the principle use of the property.

#### 522. Measured Revenues

A. This account shall be credited with all revenues for wastewater service rendered to residential, commercial or industrial property where the charge is, or may be, in any way dependent on the quantity of water consumed or the quantity of effluent output by the customers.

B. All revenues credited hereto shall be classified to one of the following subaccounts:

- 522.1 Residential Revenues
- 522.2 Commercial Revenues
- 522.3 Industrial Revenues
- 522.4 Revenues from Public Authorities
- 522.5 Multiple Family Dwelling Revenues

Note:--See note following 521 above.

## WASTEWATER OPERATING REVENUE ACCOUNTS

### 523. Revenues form Public Authorities

This account shall be credited with revenue derived from wastewater service to properties of municipalities or other divisions or agencies of federal or state governments where such service is rendered and billed under special contracts or agreements or service classifications applicable only to public authorities, except such revenues which are includible in account 524 - Revenue from Other Systems. Service to public authority customers billed under general service (flat rate or measured service) rate schedules shall be credited to account 521 or 522 as appropriate.

### 524. Revenues form Other Systems

This account shall be credited with all revenues derived from wastewater services rendered to other wastewater system properties, whether operated by a public authority or a private enterprise.

### 525. Interdepartmental revenues

A. This account shall include amounts charged by the wastewater department at tariff or other specified rates for wastewater service by it to other utility departments.

B. Records shall be maintained so that the wastewater service supplied each other department and the charges therefor shall be readily available.

## Other Wastewater Revenues

### 530. Guaranteed Revenues

This account shall be credited with revenue received from developers or other persons for a period of time prior to wastewater service being established. Normally, this type of revenue is usually received to reserve or guarantee the availability of plant capacity when needed.

### 531. Sale of Sludge

This account shall include revenues received from the sale of the by-product sludge sold as fertilizer.

### 532. Forfeited Discounts

This account shall include the amounts which the utility allows its customers on condition that they pay their wastewater bills on or before a specified date and which are forfeited by customers because of failure to pay within the specified time. There shall likewise be credited hereto the amounts of penalties

## WASTEWATER OPERATING REVENUE ACCOUNTS

imposed by the utility on its customers because of failure to pay bills within a specified time.

### 534. Rents from Wastewater Property

A. This account shall include rents received for the use by others of land, buildings and other property devoted to wastewater operations by the utility.

B. When property owned by the utility is operated jointly with others under a definite arrangement for apportioning the actual expenses among the parties to the arrangement, any amounts received by the utility for interest or return or in reimbursement of taxes or depreciation on the property shall be credited to this account.

Note:--Do not include in this account rents from property constituting an operating unit or system (See account 413 - Income from Utility Plant Leased to Others).

### 535. Interdepartmental Rents

This account shall include rents credited to the wastewater department on account of rental charges made against other departments (water, etc. of the utility). In the case of property operated under a definite arrangement to allocate the cost among the departments using the property, any reimbursement to the wastewater department for interest, fair return, depreciation or taxes shall be credited to this account.

### 536. Other Wastewater Revenues

This account shall include revenues for all miscellaneous services and charges billed to customers which are not specifically provided for in other accounts.

#### Items

1. Fees for changing, connecting or disconnecting service.
2. Profit on maintenance of piping or other installations on customers' premises.
3. Net credit or debit (cost less net salvage and less payment from customers) on closing of work orders for plant installed for temporary service of less than one year (See account 185 - Temporary Facilities).
4. Recovery of expenses in connection with unauthorized taking of wastewater service (billing for service shall be included in the appropriate wastewater revenue account).
5. Profit on the sale of materials and supplies not ordinarily purchased for resale.
6. Physical inspection of service sewer connections other than those connections made by the company.

## WASTEWATER OPERATING REVENUE ACCOUNTS

- 7. Servicing of customer lateral.
- 8. Late payment fees.

### Reclaimed Water Sales

#### 540. Flat Rate Reuse Revenues

A. This account shall be credited with all revenue for reclaimed water service to residential, commercial and industrial property where the charge is not dependent upon metered reclaimed water consumption but is based on diameter of service, structure size, area front footage or other similar unit.

B. All revenue credited hereto shall be classified to one of the following subaccounts:

- 540.1 Residential Reuse Revenues
- 540.2 Commercial Reuse Revenues
- 540.3 Industrial Reuse Revenues
- 540.4 Reuse Revenues from Public Authorities
- 540.5 Other Reuse Revenues

Note:--When service is supplied through a single lateral to property used for both residential and commercial purposes, the total revenue shall be included in subaccount 540.1 or 540.2 according to the principle use of the property.

#### 541. Measured Reuse Revenues

A. This account shall be credited with all revenues for reclaimed water service rendered to residential, commercial or industrial property where the charge is, or may be, in any way dependent on the quantity of reclaimed water consumed.

B. All revenues credited hereto shall be classified to one of the following subaccounts:

- 541.1 Residential Revenues
- 541.2 Commercial Revenues
- 541.3 Industrial Revenues
- 541.4 Revenues from Public Authorities

Note:--See note following 540 above.

#### 544. Reuse Revenues From Other Systems

This account shall be credited with all revenues derived from amounts charged to other utility systems, such as water systems to defray the cost of the wastewater utility in supplying reclaimed water.

# WASTEWATER OPERATION AND MAINTENANCE EXPENSE ACCOUNTS

	.1	.2	.3
	Collection Expenses - <u>Operations</u>	Collection Expenses - <u>Maint.</u>	Pumping Expenses - <u>Operations</u>
701. Salaries and Wages - Employees	701.1	701.2	701.3
703. Salaries and Wages - Officers, Directors and Majority Stockholders	703.1	703.2	703.3
704. Employee Pensions and Benefits	704.1	704.2	704.3
710. Purchased Wastewater Treatment	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
711. Sludge Removal Expense	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
715. Purchased Power	715.1	XXXXXXXXXX	715.3
716. Fuel for Power Production	716.1	XXXXXXXXXX	716.3
718. Chemicals	718.1	718.2	718.3
720. Materials and Supplies	720.1	720.2	720.3
731. Contractual Services - Eng.	731.1	731.2	731.3
732. Contractual Services - Acct.	732.1	732.2	732.3
733. Contractual Services - Legal	733.1	733.2	733.3
734. Contractual Services - Management Fees	734.1	734.2	734.3
735. Contractual Services - Testing	735.1	735.2	735.3
736. Contractual Services - Other	736.1	736.2	736.3
741. Rental of Building/Real Property	741.1	741.2	741.3
742. Rental of Equipment	742.1	742.2	742.3
750. Transportation Expenses	750.1	750.2	750.3
756. Insurance - Vehicle	756.1	756.2	756.3
757. Insurance - General Liability	757.1	757.2	757.3
758. Insurance - Workman's Compensation	758.1	758.2	758.3
759. Insurance - Other	759.1	759.2	759.3
760. Advertising Expense	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
766. Regulatory commission Expenses - Amortization of Rate Case Expense	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
767. Regulatory commission Expense - Other	767.1	767.2	767.3
770. Bad Debt Expense	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
775. Miscellaneous Expenses	775.1	775.2	775.3

# WASTEWATER OPERATION AND MAINTENANCE EXPENSE ACCOUNTS

.4	.5	.6	.7	.8	.9
Pumping Expenses - Maint.	Treat. & Disposal Expenses - Operations	Treat. & Disposal Expenses - Maint.	Customer Accounts Expenses	Admin. & General Expenses	Reclaimed Water Treatment Expenses - Operations
701.4	701.5	701.6	701.7	701.8	701.9
703.4	703.5	703.6	703.7	703.8	703.9
704.4	704.5	704.6	704.7	704.8	704.9
XXXXXXXXXX	710.5	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
XXXXXXXXXX	711.5	711.6	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
XXXXXXXXXX	715.5	XXXXXXXXXX	715.7	715.8	715.9
XXXXXXXXXX	716.5	XXXXXXXXXX	716.7	716.8	716.9
718.4	718.5	718.6	XXXXXXXXXX	XXXXXXXXXX	718.9
720.4	720.5	720.6	720.7	720.8	720.9
731.4	731.5	731.6	731.7	731.8	731.9
732.4	732.5	732.6	732.7	732.8	732.9
733.4	733.5	733.6	733.7	733.8	733.9
734.4	734.5	734.6	734.7	734.8	734.9
735.4	735.5	735.6	735.7	735.8	735.9
736.4	736.5	736.6	736.7	736.8	736.9
741.4	741.5	741.6	741.7	741.8	741.9
742.4	742.5	742.6	742.7	742.8	742.9
750.4	750.5	750.6	750.7	750.8	750.9
756.4	756.5	756.6	756.7	756.8	756.9
757.4	757.5	757.6	757.7	757.8	757.9
758.4	758.5	758.6	758.7	758.8	758.9
759.4	759.5	759.6	759.7	759.8	759.9
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	760.8	XXXXXXXXXX
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	766.8	XXXXXXXXXX
767.4	767.5	767.6	767.7	767.8	767.9
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	770.7	XXXXXXXXXX	XXXXXXXXXX
775.4	775.5	775.6	775.7	775.8	775.9

# **WASTEWATER OPERATION AND MAINTENANCE EXPENSE ACCOUNTS**

	.10 Reclaimed Water Treatment Expenses - <u>Maint.</u>	.11 Reclaimed Water Distribut. Expenses - <u>Operations</u>	.12 Reclaimed Water Distribut. Expenses - <u>Maint.</u>
701. Salaries and Wages - Employees	701.10	701.11	701.12
703. Salaries and Wages - Officers, Directors and Majority Stockholders	703.10	703.11	703.12
704. Employee Pensions and Benefits	704.10	704.11	704.12
710. Purchased Wastewater Treatment	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
711. Sludge Removal Expense	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
715. Purchased Power	XXXXXXXXXX	715.11	XXXXXXXXXX
716. Fuel for Power Production	XXXXXXXXXX	716.11	XXXXXXXXXX
718. Chemicals	718.10	718.11	718.12
720. Materials and Supplies	720.10	720.11	720.12
731. Contractual Services - Eng.	731.10	731.11	731.12
732. Contractual Services - Acct.	732.10	732.11	732.12
733. Contractual Services - Legal	733.10	733.11	733.12
734. Contractual Services - Management Fees	734.10	734.11	734.12
735. Contractual Services - Testing	735.10	735.11	735.12
736. Contractual Services - Other	736.10	736.11	736.12
741. Rental of Building/Real Property	741.10	741.11	741.12
742. Rental of Equipment	742.10	742.11	742.12
750. Transportation Expenses	750.10	750.11	750.12
756. Insurance - Vehicle	756.10	756.11	756.12
757. Insurance - General Liability	757.10	757.11	757.12
758. Insurance - Workman's Compensation	758.10	758.11	758.12
759. Insurance - Other	759.10	759.11	759.12
760. Advertising Expense	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
766. Regulatory commission , Expenses - Amortization of Rate Case Expense	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
767. Regulatory commission Expense - Other	767.10	767.11	767.12
770. Bad Debt Expense	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
775. Miscellaneous Expenses	775.10	775.11	775.12



## WASTEWATER OPERATION AND MAINTENANCE EXPENSE ACCOUNTS

### 701. Salaries and Wages - Employees

This account shall include the compensation (salaries, bonuses and other consideration of services) paid or accrued to employees of the utility company for work related to operation and maintenance of that utility company. This account shall not include the salaries and wages of officers, directors or majority stockholders of the utility company.

### 703. Salaries and Wages - Officers, Directors and Majority Stockholders

This account shall include the compensation (salaries, bonuses and other consideration for services) paid or accrued to officers, directors or majority stockholders of the utility company.

### 704. Employee Pensions and Benefits

This account shall include all accruals under employee pension plans to which the utility has irrevocably committed such funds, and payments for employee accident, sickness, hospital and death benefits or insurance therefor. Include also expenses for medical, educational or recreational activities of employees.

### 710. Purchased Wastewater Treatment

A. This account shall include the cost at the point of delivery of wastewater treatment provided by another entity.

B. The records supporting this account shall be so kept as to show for each entity from which wastewater treatment is purchased, point of delivery, quantity treated, basis of charges, and the cost of wastewater treatment.

### 711. Sludge Removal Expense

This account shall include the costs of removal of sludge if such work is performed by persons other than owners, stockholders, and employees of the utility.

### 715. Purchased Power

This account shall include the cost of all electric power expense incurred by the utility.

### 716. Fuel For Power Production

A. This account shall include the cost of fuel used in the production of power to operate the pumps and other equipment used in the wastewater treatment process. Records shall be maintained to show the quantity and cost of each type of fuel used.

## WASTEWATER OPERATION AND MAINTENANCE EXPENSE ACCOUNTS

B. The cost of fuel shall be charged initially to appropriate fuel accounts under account 151 - Plant Materials and Supplies, and cleared to this account on the basis of the fuel used.

### 718. Chemicals

This account shall include the cost of all chemicals used in the treatment of wastewater. Include also the cost (except salaries and wages includible in accounts 701 - 703) of any chemicals manufactured by the utility and used to provide wastewater service to its customers.

#### Items

1. Activated carbon
2. Deodorants
3. Caustic soda
4. Chlorine
5. Copper sulphate
6. Enzymes
7. High test hypochlorite
8. Iron sulphate
9. Lime
10. Soda ash
11. Ferric chloride
12. Sulphate of alumina
13. Sulphuric acid
14. Other chemicals

### 720. Materials and Supplies

This account shall include all materials and supplies used in operation of the wastewater system, other than materials and supplies charged to Contractual Services Account.

### 731. Contractual Services - Engineering

This account shall include costs paid to outside engineers or engineering firms to perform ongoing, recurring engineering work for the utility. Engineering services for plant items are properly includible in the appropriate plant account. Engineering services for rate relief filings shall be included in account 766 - Regulatory Commission Expenses - Amortization of Rate Case Expense and account 186.1 - Deferred Rate Case Expense, as appropriate.

## WASTEWATER OPERATION AND MAINTENANCE EXPENSE ACCOUNTS

### 732. Contractual Services - Accounting

This account shall include costs paid to outside accounting companies to maintain or audit the books and records of the utility. Accounting expenses for rate relief filings shall be included in account 766 - Regulatory Commission Expenses - Amortization of Rate Case Expense and account 186.1 - Deferred Rate Case Expense, as appropriate.

### 733. Contractual Services - Legal

This account shall include costs paid to outside legal firms to perform legal services for the utility. Legal services for rate proceedings before the Commission shall be included in account 766 - Regulatory Commission Expenses - Amortization of Rate Case Expense or account 186.1 - Deferred Rate Case Expense.

### 734. Contractual Services - Management Fees

This account shall include contractual costs (other than those properly included in accounts 701 - 703 - Salaries and Wages) paid for the performance of management functions.

### 735. Contractual Services - Testing

This account shall include costs paid to outside laboratories for testing.

### 736. Contractual Services - Other

This account shall include those operation costs contracted for which are not included in accounts 730, 731, 732, 733, 734.

### 741. Rental of Building/Real Property

This account shall include those costs associated with the rental of buildings and/or real property which are properly treated as period costs.

### 742. Rental of Equipment

This account shall include costs associated with the rental of equipment, except vehicles, used in the operation of the utility. Vehicle rentals and leases are properly included in account 750 - Transportation Expenses.

### 750. Transportation Expenses

This account shall include all truck, automobile, construction equipment, and other vehicle expense chargeable to utility operations, except depreciation and insurance.

## WASTEWATER OPERATION AND MAINTENANCE EXPENSE ACCOUNTS

### 756. Insurance - Vehicle

This account shall include costs associated with insurance of automobile and trucks used for utility purposes.

### 757. Insurance - General Liability

This account shall include insurance costs associated with general liability coverage of the utility company.

### 758. Insurance - Workman's Compensation

This account shall include insurance costs associated with workman's compensation coverage for employees of the utility company.

### 759. Insurance - Other

This account shall include insurance costs associated with coverage for the utility company which are not included in account 756, 757, or 758.

### 760. Advertising Expenses

Advertising costs not associated with regulatory commission expenses shall be included in this account, if authorized by the Commission. This account shall be maintained so that informational and instructional advertising can be readily identified.

### 766. Regulatory Commission Expenses - Amortization of Rate Case Expense

This account shall include amortization of account 186.1 - Deferred Rate Case Expense. Costs associated with rate cases shall be first charged to account 186.1 and then amortized as prescribed by the Commission to this account.

### 767. Regulatory Commission Expenses - Other

This account shall include all expenses (except salaries of regular utility employees) incurred by the utility in connection with formal cases before regulatory commissions, except for rate case expenses which are accounted for as described above. This account shall not include payment of taxes which shall be reported in the Taxes Other Than Income accounts.

### 770. Bad Debt Expense

This account shall be charged with amounts sufficient to provide for losses from uncollectible utility revenues. Concurrent credits shall be made to account 143.

## WASTEWATER OPERATION AND MAINTENANCE EXPENSE ACCOUNTS

### 775. Miscellaneous Expenses

This account shall include all expenses not includible in other operating expenses accounts.

#### Items

1. Industry association dues for company memberships.
2. Contributions for conventions and meetings of the industry.
3. Communication service not chargeable to other accounts.
4. Trustee, registrar, and transfer agent fees and expenses.
5. Stockholders meeting expenses.
6. Dividend and other financial notices.
7. Printing and mailing dividend checks.
8. Director's fees and expenses.
9. Publishing and distributing annual reports to stockholders.
10. Public notices of financial, operating and other data required by regulatory statutes, not including, however, notices required in connection with security issues or acquisition of property.
11. Write off of expenditures for preliminary surveys, plans, investigations, etc., included in account 183 - Preliminary Survey and Investigation Charges, relative to projects which have been abandoned.



STATEMENT OF VALUES  
SEWAGE TREATMENT AND OTHER FACILITIES  
SUMMARY

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

		Structure	Mechanical	Electrical	Contents	Total	Notes	Item #
	<b>Administration</b>	\$ 4,541,972	\$ 438,927	\$ 311,915	\$ 251,640	\$ 5,544,454		1-4
	<b>Buildings</b>							
	B-1 (Grit)	\$ 485,694	\$ 165,165	\$ 197,040		\$ 847,898		2-1
	B-2 (Control)	\$ 6,740,454	\$ 609,218	\$ 6,726,986	\$ 305,681	\$ 14,382,340		2-2
	Laboratory				\$ 377,461	\$ 377,461		2-1
	B-3 (Incinerator)	\$ 6,608,197	\$ 24,265,597	\$ 2,099,166	\$ -	\$ 32,972,960		2-15
	B-4 (Thickening)	\$ 4,166,241	\$ 360,600	\$ 408,700	\$ -	\$ 4,935,541	FOG Building added in 2018.	2-13
	B-5 (Maintenance)	\$ 3,093,940	\$ 309,394	\$ 371,273	\$ 2,000,000	\$ 5,774,607		2-22
	B-5 (Engineering)	\$ 2,999,161	\$ 384,508	\$ 461,409	\$ 153,803	\$ 3,998,881		2-22
	B-6 (Blower)	\$ 1,115,643	\$ 6,939,890	\$ 952,917	\$ -	\$ 9,008,450		2-32
	B-7 (Garage)	\$ 471,368	\$ 38,900	\$ 46,700	\$ -	\$ 556,968	Includes garage between Primary Clarifiers and Aeration Tanks.	2-31
	Storage Sheds	\$ 45,237	\$ 4,500	\$ 900	\$ 40,000	\$ 90,637		2-31
	Maintenance Office (trailer)	\$ 47,574			\$ 9,863	\$ 57,437		2-28
	<b>Pump Stations</b>							
	EPS-1 (Building only)	\$ 555,947		\$ 17,309		\$ 573,255	Pumps and related equipment removed from service in 2018.	2-3
	PS-1 & PS-2 (Primary Sludge)	\$ 300,248	\$ 226,084	\$ 444,418		\$ 970,750		2-7
	PS-3 (Activated Sludge)	\$ 906,505	\$ 7,489,929	\$ 748,696		\$ 9,145,129		2-9
	PS-4 (Chlorine Bldg & Utility Water)	\$ 783,994	\$ 734,883	\$ 769,921		\$ 2,288,798		2-11
	PS-5 (Activated Sludge)	\$ 1,230,352	\$ 3,277,278	\$ 205,200		\$ 4,712,830		2-22
	PS-6 (Raw Influent)	\$ 7,859,658	\$ 3,118,259	\$ 5,225,270		\$ 16,203,187	Added Phase 2	2-16
	<b>Tanks</b>							
	T-1 & T-2 (Grit)	\$ 3,530,584	\$ 3,894,827	\$ 763,897		\$ 8,189,308	Screens added in 2018.	2-5
	T-3 to T-10 (Primary Clarifiers)	\$ 9,030,095	\$ 4,821,837	\$ 2,313,472		\$ 16,165,404		2-6
	T-11 to T-14 (Aeration)	\$ 16,916,060	\$ 9,378,956	\$ 3,012,626		\$ 29,307,642		2-8
	T-15 to T-18 (Secondary Clarifiers)	\$ 8,681,516	\$ 6,301,072	\$ 1,360,865		\$ 16,343,452		2-10
	T-27 (Secondary Clarifier)	\$ 3,933,060	\$ 1,473,627	\$ 915,373		\$ 6,322,060		2-10A
	T-19 to T-20 (Post Aeration)	\$ 884,518	\$ 191,032	\$ 147,500		\$ 1,223,050		2-12
	T-21 to T-22 (Chlorine Contact)	\$ 1,768,936	\$ 1,132,588	\$ 541,720		\$ 3,443,245		2-13
	T-23 to T-26 (inside B-4)	\$ 911,712	\$ 8,527,256	\$ 2,836,204		\$ 12,275,172	Includes GHTs, grease handling equipment, and odor control system	2-13
	EB-2 & ET-1 to ET-4 (Sludge Storage)	\$ 2,012,688	\$ 991,661	\$ 507,629		\$ 3,511,979		2-14
	Hauled Waste Acceptance Facility	\$ 1,790,324	\$ 117,085			\$ 1,907,409		2-17
	<b>Electrical</b>							
	Substation #1	\$ 122,438		\$ 1,798,636		\$ 1,921,075		2-24
	Substation #2 (old sub-2 & sub 3)	\$ 137,379		\$ 1,418,959		\$ 1,556,338		2-25
	Substation #3 (old sub-4)	\$ 77,747		\$ 1,406,255		\$ 1,484,003		2-26
	Primary Switchgear	\$ 42,562		\$ 574,514		\$ 617,076		2-23
	Generator			\$ 293,674		\$ 293,674		2-25
	Plant Electrical Distribution			\$ 2,691,317		\$ 2,691,317	Includes poles & 15kV duct bank	2-27
	<b>Misc</b>							
	Pit 1 (Valve)	\$ 195,278	\$ 132,652	\$ 32,600		\$ 360,530		2-27
	Pit 2 (Mag Meter)	\$ 124,849	\$ 215,748	\$ 20,900		\$ 361,497		2-28
	Pit 3 (Mag Meter)	\$ 77,042	\$ 89,289	\$ 12,900		\$ 179,231		2-29
	Sludge Receiving Station	\$ 31,104	\$ 126,461			\$ 157,565	Combination of Sludge Receiving (B-4) and Pit 4	2-28
	Utility Water Distribution System		\$ 5,618,275			\$ 5,618,275		2-10A
	Pit 5 (Potable Water)	\$ 42,571	\$ 54,821	\$ 7,200		\$ 104,592		2-21
	Bulkhead	\$ 4,401,705				\$ 4,401,705		2-30
	S-2 (Plant Outfall)					\$ -		2-30
	Ash Lagoon Effluent Box	\$ -				\$ -	out of service	2-18
	<b>Yard Piping</b>		\$ 500,985	\$ 74,103		\$ 575,088	PRF from PS-6 sheet	



STATEMENT OF VALUES  
SEWAGE TREATMENT AND OTHER FACILITIES  
SUMMARY

		Structure	Mechanical	Electrical	Contents	Total	Notes	Item #
<b>Western Collection System</b>								
<b>Chester System</b>	<b>Pump Stations</b>	Chester Pump Station	\$ 4,305,098	\$ 1,785,204	\$ 1,162,978	\$ -	\$ 7,253,280	
		Bulkhead	\$ 1,650,640				\$ 1,650,640	
		Grit Tanks	\$ 351,656	\$ 935,113	\$ 58,700		\$ 1,345,469	
		Siphon (both chambers)	\$ 703,312	\$ 667,127	\$ 117,400		\$ 1,487,839	
		Broomall Street Pump Station	\$ 322,776	\$ 125,389	\$ 53,900		\$ 502,065	
		8th Street Pump Station	\$ 76,173	\$ 54,572	\$ 12,800		\$ 143,545	
		Feltonville Pump Station	\$ 76,173	\$ 54,572	\$ 12,800		\$ 143,545	
		Eddystone Pump Station	\$ 877,858	\$ 199,881	\$ 278,099		\$ 1,355,839	
		Riverfront Pump Station	\$ 415,873	\$ 207,936	\$ 210,411		\$ 834,220	
	<b>CSO Facilities</b>	Outfall 007	\$ 681,670	\$ 270,955	\$ 198,502		\$ 1,151,127	
	<b>Force Mains</b>	Chester Force Main	\$ 17,743,953				\$ 17,743,953	
		Broomall Street Force Main	\$ 218,632				\$ 218,632	
		8th Street Force Main	\$ 134,094				\$ 134,094	
		Feltonville Force Main	\$ 268,188				\$ 268,188	
		Eddystone Force Main	\$ 1,105,744				\$ 1,105,744	
		Central Delaware County Force Main (west)	\$ 9,218,327				\$ 9,218,327	
	<b>Gravity Sewers</b>	Sewers	\$ 301,238,696				\$ 301,238,696	
		Interceptors	\$ 36,977,900				\$ 36,977,900	
		Siphons	\$ 2,558,669	\$ 1,559,949			\$ 4,118,617	
		Regulators	\$ 365,098	\$ 4,683,853			\$ 5,048,951	
		Tide Gates	\$ 252,760	\$ 311,772			\$ 564,532	
		CSO Outfalls	\$ 14,913,500				\$ 14,913,500	
<b>Marcus Hook</b>	<b>Pump Stations</b>	Marcus Hook Pump Station	\$ 801,717	\$ 169,826	\$ 228,047	\$ 119,079	\$ 1,318,669	
		Viscose Village Pump Station	\$ 801,717	\$ 169,826	\$ 228,047		\$ 1,199,590	
		Delaware Avenue Ejector Station	\$ 76,173	\$ 54,572	\$ 12,800		\$ 143,545	
	<b>Force Mains</b>	Marcus Hook Force Main	\$ 84,538				\$ 84,538	
		Viscose Village Force Main	\$ 87,453				\$ 87,453	
<b>Trainer</b>		Delaware Avenue Force Main	\$ 320,660				\$ 320,660	
	<b>Collection System</b>	Gravity Sewers	\$ 6,778,182				\$ 6,778,182	
	<b>Pump Stations</b>	Price Street Pump Station	\$ 415,873	\$ 207,936	\$ 210,411		\$ 834,220	
		Smith Street Pump Station	\$ 494,223	\$ 247,111	\$ 250,954		\$ 992,288	
	<b>Force Mains</b>	Price Street Force Main	\$ 945,370				\$ 945,370	70% of FM cost
<b>QRC</b>		Smith Street Force Main	\$ 405,158				\$ 405,158	30% of FM cost
	<b>Collection System</b>	Gravity Sewers	\$ 10,897,057				\$ 10,897,057	
	<b>Pump Stations</b>	Chester-Ridley Creek Pump Station	\$ 4,884,266	\$ 2,984,857	\$ 2,624,290	\$ -	\$ 10,493,414	Included former control building. Added in 2016
	<b>Force Mains</b>	Chester-Ridley Creek Force Main	\$ 6,850,900				\$ 6,850,900	



STATEMENT OF VALUES  
SEWAGE TREATMENT AND OTHER FACILITIES  
SUMMARY

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

		Structure	Mechanical	Electrical	Contents	Total	Notes	Item #
<b>Eastern Collection System</b>								
<b>Pump Stations</b>	Darby Creek Pump Station	\$ 6,843,664	\$ 2,837,331	\$ 6,756,728		\$ 16,437,723		6-1
	Muckinipates Pump Station	\$ 2,575,857	\$ 1,892,750	\$ 1,448,715		\$ 5,917,322		9-1
	Central Delaware County Pump Station	\$ 3,475,014	\$ 2,604,020	\$ 1,505,490		\$ 7,584,524		8-1
	Bridle Pump Station (EPS-1)	\$ 395,050	\$ 147,831	\$ 440,162		\$ 983,043		17-1
	Runnymede Pump Station (EPS-2)	\$ 444,062	\$ 176,260	\$ 516,967		\$ 1,137,289		17-2
	Dream Valley Pump Station (EPS-3)	\$ 173,986	\$ 45,487	\$ 125,378		\$ 344,850		17-3
<b>Force Mains</b>	Darby Creek Force Main	\$ 17,749,133				\$ 17,749,133	Assumes replacement along existing alignment.	
	Muckinipates Force Main	\$ 11,714,428				\$ 11,714,428	Assumes replacement along existing alignment.	
	Central Delaware County Force Main (east)	\$ 13,489,341				\$ 13,489,341	Assumes replacement along existing alignment.	
<b>Collection System</b>	Edgmont Gravity Sewers	\$ 4,027,325				\$ 4,027,325		
<b>Remote Systems</b>								
<b>Rose Valley System</b>	<b>WWTP</b>	\$ 35,202			\$ 4,122	\$ 39,324	Treatment facility removed in 2018. One remaining building.	14-1
	<b>Pump Stations</b>	Brookhaven Road Pump Station	\$ 76,173	\$ 54,572	\$ 12,800	\$ 143,545		14-2
		Old Mill Pump Station	\$ 232,971	\$ 112,189	\$ 39,000	\$ 384,160		14-3
		Longpoint Lane Ejector Station	\$ 76,173	\$ 54,572	\$ 12,800	\$ 143,545		14-4
		Forestview Siphon Station	\$ 42,571	\$ -	\$ -	\$ 42,571		14-5
		Rose Valley Pump Station	\$ 1,430,925	\$ -	\$ 424,360	\$ 1,855,285		14-6
	<b>Force Mains</b>	Brookhaven Road Force Main				\$ -	Included in collection system section.	
		Old Mill Force Main				\$ -	Included in collection system section.	
		Longpoint Lane Force Main				\$ -	Included in collection system section.	
	<b>Collection System</b>	Rose Valley Force Main	\$ 1,060,528			\$ 1,060,528		
		Gravity Sewers	\$ 14,814,790			\$ 14,814,790		
<b>Pocopson</b>	<b>WWTP</b>	Force Mains	\$ 73,460			\$ 73,460		
		Riverside WWTP	\$ 380,521	\$ 229,691	\$ 81,582	\$ 691,794		16-1
	<b>Collection System</b>	Corrine Village WWTP	\$ 380,521	\$ 229,691	\$ 81,582	\$ 691,794		16-2
		Gravity Sewers	\$ 5,590,000			\$ 5,590,000		
		Force Mains	\$ 1,311,791			\$ 1,311,791		
<b>General Notes:</b>								
1. CCI refers to ENR's Construction Cost Index and is used to escalate in time the cost of heavy construction, mechanical, and electrical items.								
2. BCI refers to ENR's Building Cost Index and is used to escalate in time the cost of building construction items.								
3. The index used to escalate the various components of the valuation is detailed on the individual sheets for items presented in the summary.								
4. Green tagged items transfer to Insurance SOV. Yellow tagged items are not included on the Insurance SOV.								
Total minus Yard Piping, FMs, and Collection System						\$ 291,125,638		



DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
ADMINISTRATION BUILDING

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
ADMINISTRATION BUILDING	8TH & WELSH						
MAIN OFFICE BUILDING	CHESTER, PA						
OFFICE BUILDING - 2 STORY - 39,900 SQ FT OF FLOOR SPACE	39,900	SF	\$ 80.50	\$ 4,416,703	\$ -	\$ -	R.S MEANS REFERENCE 2006 WITH BCI ESCALATION FROM OCT 2006 -> NOV 2018 FOR LOW RISE OFFICE BUILDINGS
BUILDING EQUIPMENT	39,900	SF	\$ -	\$ -	\$ 8	\$ 438,927	
OFFICE FURNISHINGS	1	LS	\$ -	\$ -	\$ 183,000	\$ 251,640	BCI ESCALATION FROM OCT 2006 -> NOV 2018
INFORMATION TECHNOLOGY UPGRADES TELEPHONES & DOCUMENT IMAGING	1	LS	\$ 108,751	\$ 125,269	\$ 138,000	\$ 189,762	
ENERGENCY GENERATOR	1	LS			\$ 104,328	\$ 122,153	CCI ESCALATION FROM SEP 2013 -> NOV 2018
TOTAL ADMIN BUILDING				\$ 4,541,972		\$ 1,002,482	\$ 5,544,454



DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
GRIT BUILDING B-1

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<u>GRIT BUILDING B-1</u>							
BUILDING STRUCTURE	27,170	CF	\$ 13	\$ 485,694	\$ -	\$ -	REFERENCE R.S MEANS COSTS FOR PROCESS BUILDINGS WITH BCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 15%	1	LS	\$ 72,900	\$ 72,900	\$ -	\$ -	
ELECTRICAL COSTS - 10%	1	LS	\$ 48,600	\$ 48,600	\$ -	\$ -	
SITE WORK - 5%	1	LS	\$ 24,300	\$ 24,300	\$ -	\$ -	
PUMPS	3	EA	\$ -	\$ -	\$ 4,300	\$ 18,302	CALCULATED FROM ESCALATED BASE
TOC ANALYZER	1	EA	\$ -	\$ -	\$ 30,600	\$ 35,507	
Ph ANALYZER	1	EA	\$ -	\$ -	\$ 12,200	\$ 14,156	
ELECTRICAL UPDATES	1	LS	\$ 146,052	\$ 148,439.51			CCI ESCALATION FROM OCT 2006 -> NOV 2018
							BCI ESCALATION FROM MAY 2018 -> NOV 2018
TOTAL GRIT BUILDING B-1				\$ 779,933		\$ 67,965	\$ 847,898

DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
WASTEWATER TREATMENT PLANT BUILDING B-2

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES	TOTAL	EQUIPMENT	TOTAL	REFERENCE
			UNIT PRICE	STRUCTURES	UNIT PRICE	EQUIPMENT	
<b>WASTEWATER TREATMENT PLANT BUILDING B-2</b>	3201-37 W. FRONT ST.						
<b>OFFICE/CONTROL BUILDING</b>	CHESTER, PA						
WASTEWATER TREATMENT BUILDING WITH LAB, ETC. 14,200 SF X 24'-0 HIGH =	340,800	CF	\$ 17.88	\$ 6,092,175	\$ -	\$ 609,217	R.S MEANS REFERENCE FOR PROCESS BUILDINGS - USE \$13.00 PER CF WITH BCI ESCALATION FROM OCT 2006 -> NOV 2018
OFFICE EQUIPMENT	28,400	SF	\$ -	\$ -	\$ 3	\$ 117,157	BCI ESCALATION FROM OCT 2006 -> NOV 2018
LAB FURNISHINGS & EQUIP	1	LS	\$ -	\$ -	\$ 377,461	\$ 377,461	
OFFICE FURNISHINGS	1	LS	\$ -	\$ -	\$ 188,524	\$ 188,524	
AUTOMATION, INCLUDING FIBRE OPTICS - 2005 - PER DELCORA REPORT - ITEMS FOR AUTOMATION	1	LS		\$ -	\$ 4,378,807	\$ 6,337,309	BCI ESCALATION FROM AUG 2005 -> NOV 2018
SECURITY UPGRADE PROJECT - 2005 - PER DELCORA REPORT	1	LS	\$ 447,933	\$ 648,279	\$ -	\$ -	BCI ESCALATION FROM AUG 2005 -> NOV 2018
SCADA/INSTRUMENTATION	1	LS			\$ 383,719	\$ 389,677	CCI ESCALATION FROM MAY 2018 -> NOV 2018
<b>TOTAL WASTEWATER TREATMENT PLANT BUILDING B-2</b>				\$ 6,740,454		\$ 8,019,346	\$ 14,759,800



DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
SOLIDS HANDLING/INCINERATION BUILDING B-3

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<b><u>SOLIDS HANDLING/INCINERATION BUILDING B-3</u></b>							
							USE \$10.40 PER CF FOR INCINERATION BLDG'S - BCI ESCALATION FROM OCT 2006 -> NOV 2018
BUILDING STRUCTURES	445,500	CF	\$ 10.40	\$ 6,371,042	\$ -	\$ -	
PIPING @ 15%	1	LS	\$ 955,700	\$ 955,700	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
ELECTRICAL COSTS - 12%	1	LS	\$ 764,600	\$ 764,600	\$ -	\$ -	
INSTRUMENTATION - 5%	1	LS	\$ 318,600	\$ 318,600	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 127,500	\$ 127,500	\$ -	\$ -	
ALL EQUIPMENT	1	LS	\$ -	\$ -	\$ 5,285,200	\$ 7,498,373	CCI ESCALATION FROM OCT 2006 -> NOV 2018
INCINERATION IMPROVEMENTS - 2006 - PER DELCORA REPORT	1	LS	\$ 1,639,472	\$ 2,451,645	\$ 501,300	\$ 711,219	
SLUDGE CONVEYOR SYSTEM MODIFICATIONS	1	LS			\$ 309,900	\$ 358,012.77	CCI ESCALATION FROM FEB 2014 -> NOV 2018
BELT FILTER PRESS RECONDITIONING	1	LS	\$ -	\$ -	\$ 537,300	\$ 613,430	CCI ESCALATION FROM MAY 2014 -> NOV 2018
FOURTH BELT FILTER PRESS	1	LS	\$ -	\$ -	\$ 548,000	\$ 619,951	CCI ESCALATION FROM OCT 2014 -> NOV 2018
<b><u>SECONDARY COMBUSTION CHAMBER &amp; WET SCRUBBER</u></b>							
GENERAL MECHANICAL	1	LS			\$ 9,859,000	\$ 11,057,266	CCI ESCALATION FROM JAN 2015 -> NOV 2018
ELECTRICAL	1	LS			\$ 886,000	\$ 993,685	
<b><u>BUILDING IMPROVEMENTS</u></b>							
GENERAL CONTRACTOR	1	LS	\$ 107,891	\$ 109,655			BCI ESCALATION FROM MAY 2018 -> NOV 2018 CCI ESCALATION FROM MAY 2018 -> NOV 2018
ELECTRICAL	1	LS			\$ 21,941	\$ 22,282	
<b>TOTAL SOLIDS HANDLING/INCINERATION BUILDING B-3</b>				\$ 10,989,087		\$ 21,874,218	\$ 32,863,306

DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
SLUDGE AND GREASE THICKENING BUILDING B-4

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<b>SLUDGE AND GREASE THICKENING BUILDING B-4</b>							
CONCRETE STRUCTURES	84,000	CF	\$ 7.50	\$ 893,812	\$ -	\$ -	USE \$7.50 PER CF FOR STRUCTURES - CCI ESCALATION FROM OCT 2006 ->
PIPING @ 15%	1	LS	\$ 134,100	\$ 134,100	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
ELECTRICAL COSTS - 12%	1	LS	\$ 107,300	\$ 107,300	\$ -	\$ -	
INSTRUMENTATION - 5%	1	LS	\$ 44,700	\$ 44,700	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 17,900	\$ 17,900	\$ -	\$ -	
BUILDINGS	218,500	CF	\$ 8.00	\$ 2,403,648	\$ -	\$ -	USE \$8.00 PER CF FOR BLD'G SUPERSTRUCTURE - BCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 15%	1	LS	\$ 360,600	\$ 360,600	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
ELECTRICAL COSTS - 12%	1	LS	\$ 288,500	\$ 288,500	\$ -	\$ -	
INSTRUMENTATION - 5%	1	LS	\$ 120,200	\$ 120,200	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 48,100	\$ 48,100	\$ -	\$ -	
ROOF REPLACEMENT	1	LS	\$ 1,074,378	\$ 1,302,983			BCI ESCALATION FROM AUG 2012 -> NOV 2018
OUTSIDE SLUDGE AND GREASE HANDLING	1	LS			\$ 90,300	\$ 121,779	CCI ESCALATION FROM JUL 2008 -> NOV 2018
GBT INSTALLATION	1	LS			\$ 1,458,355	\$ 1,739,663	CCI ESCALATION FROM OCT 2012 -> NOV 2018
GBT ELEC/INSTR/CONTROLS	1	LS			\$ 420,728	\$ 501,884	
GREASE & ODOR CONTROL SYSTEM MECHANICAL	1	LS			\$ 2,885,699	\$ 3,414,118	CCI ESCALATION FROM FEB 2013 -> NOV 2018
GREASE & ODOR CONTROL SYSTEM ELECTRICAL	1	LS			\$ 504,860	\$ 597,307.94	
SOLIDS HANDLING UPGRADE FOG BUILDING	1	LS	\$ 396,247	\$ 411,510.65			BCI ESCALATION FROM OCT 2017 -> NOV 2018
SOLIDS HANDLING UPGRADE MECHANICAL	1	LS			\$ 3,133,076	\$ 3,239,375	CCI ESCALATION FROM OCT 2017 -> NOV 2018
SOLIDS HANDLING UPGRADE ELECTRICAL	1	LS			\$ 1,533,000	\$ 1,585,012	
<b>TOTAL SLUDGE AND GREASE THICKENING BUILDING B-4 AND TANKS T-23 THRU T-26</b>				\$ 6,133,353		\$ 11,199,139	\$ 17,332,493



DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
MAINTENANCE AND ENGINEERING BUILDING B-5

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES	TOTAL	EQUIPMENT	TOTAL	REFERENCE
			UNIT PRICE	STRUCTURES	UNIT PRICE	EQUIPMENT	
<b>MAINTENANCE BUILDING B-5</b>							
BUILDING SUPERSTRUCTURE	450,000	CF	\$ 5.00	\$ 3,093,940	\$ -	\$ -	USE \$5.00 PER CF FOR MAINTENANCE BLDGS - BCI ESCALATION FROM OCT 2006 -> NOV 2018
ELECTRICAL (12%)				\$ 371,273			
MECHANICAL (10%)				\$ 309,394			
AUTOMATION, MAINTENANCE & STORES - SHELVING - PER DELCORA REPORT	1	LS	\$ -	\$ -	\$ 254,925	\$ 254,925	NO ESCALATION
<b>ENGINEERING BUILDING B-5</b>							
B-2 & B-5 UPGRADES - 2005 - PER DELCORA REPORT - ITEMS FOR B- 2 & B-5 UPGRADES	1	LS	\$ 2,657,414	\$ 3,845,078	\$ -	\$ -	BCI ESCALATION FROM AUG 2005 -> NOV 2018
<b>TOTAL MAINTENANCE AND ENGINEERING BUILDING</b>				\$ 7,619,685		\$ 254,925	\$ 7,874,610

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CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
MAINTENANCE AND ENGINEERING BUILDING B-5

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<b>BLOWER BUILDING B-6</b>							
BUILDING SUPERSTRUCTURE	1	LS	\$ 734,790	\$ 1,115,643	\$ 107,500	\$ 163,219	BCI ESCALATION FROM JUL 2004 -> NOV 2018
ELECTRICAL	1	LS	\$ 249,800	\$ 379,275			
AERATION SYSTEM UPGRADES	1	LS			\$ 3,631,475	\$ 5,699,469	CCI ESCALATION FROM JUL 2004 -> NOV 2018
AERATION ELECTRICAL	1	LS	\$ 215,654	\$ 338,461			
4TH BLOWER ADDITION MECH	1	LS	\$ -	\$ -	\$ 977,900	\$ 1,077,202	CCI ESCALATION FROM DEC 2015 -> NOV 2018
4TH BLOWER ADDITION ELECT	1	LS	\$ 213,500	\$ 235,180.14			
BUILDING IMPROVEMENTS	1	LS	\$ 124,730	\$ 126,769			BCI ESCALATION FROM MAY 2018 -> NOV 2018
TOTAL MAINTENANCE AND ENGINEERING BUILDING				\$ 2,195,329		\$ 6,939,890	\$ 9,135,219

DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
GARAGE B-7 AND STORAGE SHEDS

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES	TOTAL	EQUIPMENT	TOTAL	REFERENCE
			UNIT PRICE	STRUCTURES	UNIT PRICE	EQUIPMENT	
<b>GARAGE B-7</b>							
BUILDING	1	LS	\$ 281,738	\$ 388,730	\$ -	\$ -	BCI ESCALATION FROM APR 2007 -> NOV 2018
MECHANICAL @ 10%	1	LS	\$ 38,900	\$ 38,900	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
ELECTRICAL COSTS - 12%	1	LS	\$ 46,700	\$ 46,700	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 7,800	\$ 7,800	\$ -	\$ -	
<b>STORAGE SHEDS (near T-27)</b>							
BUILDING	1	LS	\$ 40,000	\$ 44,337	\$ -	\$ -	BCI ESCALATION FROM JAN 2015 -> NOV 2018
MECHANICAL @ 10%	1	LS	\$ 4,500	\$ 4,500	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
ELECTRICAL COSTS - 12%	1	LS	\$ 5,400	\$ 5,400	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 900	\$ 900	\$ -	\$ -	
<b>GARAGE (near T-10 &amp; T-13)</b>							
GARAGE ROOF & INSULATION	1	LS	\$ 74,838	\$ 76,061			BCI ESCALATION FROM MAY 2018 -> NOV 2018
TOTAL GARAGE B-7				\$ 613,328		\$ -	\$ 613,328

DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
EXISTING PUMP STATION EPS-1

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES	TOTAL	EQUIPMENT	TOTAL	REFERENCE
			UNIT PRICE	STRUCTURES	UNIT PRICE	EQUIPMENT	
<u>EXISTING PUMP STATION</u> EPS-1							
FOUNDATION	1	LS	\$ 150,000	\$ 206,262.69	\$ -	\$ -	BCI ESCALATION FROM OCT 2006 -> NOV 2018
ADD SUPERSTRUCTURE	1	LS	\$ 254,300	\$ 349,684	\$ -	\$ -	
ELECTRICAL EQUIPMENT	1	LS	\$ -	\$ -	\$ 12,200	\$ 17,309	CCI ESCALATION FROM OCT 2006 -> NOV 2018
TOTAL EXISTING PUMP STATION (ESP - 1)				\$ 555,947		\$ 17,309	\$ 573,255

DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
PRIMARY PUMP STATIONS PS-1 AND PS-2

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<b>PRIMARY PUMP STATIONS PS-1 AND PS-2</b>							
CONCRETE STRUCTURES	16,466	CF	\$ 13.00	\$ 294,348	\$ -	\$ -	R.S MEANS REFERENCE FOR PROCESS BUILDINGS - USE \$13.00 PER CF WITH BCI ESCALATION FROM OCT 2006 - > NOV 2018
PIPING @ 15%	1	LS	\$ 44,200	\$ 44,200	\$ -	\$ -	
ELECTRICAL COSTS - 10%	1	LS	\$ 29,500	\$ 29,500	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
INSTRUMENTATION - 5%	1	LS	\$ 14,800	\$ 14,800	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 5,900	\$ 5,900	\$ -	\$ -	
SLUDGE PLUNGER PUMPS	4	EA	\$ -	\$ -	\$ 30,500	\$ 173,087	CCI ESCALATION FROM OCT 2006 -> OCT 2012
SUMP PUMPS	2	EA	\$ -	\$ -	\$ 3,100	\$ 8,796	
INSTRUMENTATION	1	LS	\$ -	\$ -	\$ 18,300	\$ 25,963	
SLUDGE DENSITY METERS	2	EA	\$ -	\$ -	\$ 12,200	\$ 34,617	
ELECTRICAL EQUIPMENT	1	LS	\$ -	\$ -	\$ 18,300	\$ 25,963	
<b>PS IMPROVEMENTS</b>							
PS-1	1	LS			\$ 202,566	\$ 205,711	CCI ESCALATION FROM MAY 2018 -> NOV 2018
PS-2	1	LS			\$ 106,214	\$ 107,863	
<b>TOTAL PRIMARY PUMP STATIONS - PS-1 AND PS-2</b>				\$ 388,748		\$ 582,002	\$ 970,750

DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
ACTIVATED SLUDGE PUMP STATION PS-3

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<b>ACTIVATED SLUDGE PUMP STATION PS-3</b>							
CONCRETE STRUCTURES	83,520	CF	\$ 7.50	\$ 888,705	\$ -	\$ -	USE \$7.50/ PER CU FT. FOR STRUCTURES (FROM T-1 & T-2) - CCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 15%	1.00	LS	\$ 133,400	\$ 133,400	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
ELECTRICAL COSTS - 12%	1	LS	\$ 106,700	\$ 106,700	\$ -	\$ -	
INSTRUMENTATION - 5%	1	LS	\$ 44,500	\$ 44,500	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 17,800	\$ 17,800	\$ -	\$ -	
BRIDGE CRANE/HOISTS	1	LS	\$ -	\$ -	\$ 98,800	\$ 140,172	CCI ESCALATION FROM OCT 2006 -> NOV 2018
RAS RELATED IMPROVEMENTS - 2005 - PER DELCORA REPORT	1	LS	\$ 2,431,091	\$ 2,973,284	\$ -	\$ -	CCI ESCALATION OF FROM AUG 2005 -> NOV 2018
PS-3 PIPING IMPROVEMENTS	1	LS	\$ 742,543	\$ 885,775			CCI ESCALATION OF FROM OCT 2012 -> NOV 2018
<b>PS-3 IMPROVEMENTS</b>							
MECHANICAL	1	LS			\$ 3,305,966	\$ 3,357,298	CCI ESCALATION FROM MAY 2018 -> NOV 2018
ELECTRICAL	1	LS			\$ 588,360	\$ 597,496	
<b>TOTAL ACTIVATED SLUDGE PUMP STATION PS-3</b>				\$ 5,050,163		\$ 4,094,966	\$ 9,145,129

DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
UTILITY PUMP STATION PS-4

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<b>UTILITY PUMP STATION PS-4</b>							
							USE \$7.50/ PER CU FT. FOR STRUCTURES (FROM T-1 & T-2) - CCI ESCALATION FROM OCT 2006 -> NOV 2018
CONCRETE STRUCTURES	72,000	CF	\$ 7.50	\$ 766,125	\$ -	\$ -	
PIPING @ 15%	1	LS	\$ 115,000	\$ 133,440	\$ -	\$ -	
ELECTRICAL COSTS - 12%	1	LS	\$ 92,000	\$ 106,752	\$ -	\$ -	
INSTRUMENTATION - 5%	1	LS	\$ 38,400	\$ 44,557	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 15,400	\$ 17,869	\$ -	\$ -	
PUMPS	1	LS	\$ -	\$ -	\$ 36,600	\$ 51,926	
ELECTRICAL EQUIPMENT	1	LS	\$ -	\$ -	\$ 42,700	\$ 60,581	
INSTRUMENTATION	1	LS	\$ -	\$ -	\$ 79,300	\$ 112,507	
MISCELLANEOUS EQUIP	1	LS	\$ -	\$ -	\$ 24,400	\$ 34,617	
UTILITY WATER DISTRIBUTION SYSTEM	1	LS	\$ -	\$ -	\$ 5,145,062	\$ 5,618,275	
<b>PS-4 IMPROVEMENTS</b>							
MECHANICAL	1	LS			\$ 507,027	\$ 514,900	
ELECTRICAL	1	LS			\$ 438,713	\$ 445,525	
<b>TOTAL UTILITY PUMP STATION PS-4</b>				\$ 1,068,743		\$ 6,838,331	\$ 7,907,073

DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
ACTIVATED SLUDGE PUMP STATION PS-5

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<b>ACTIVATED SLUDGE PUMP STATION PS-5</b>							
CONCRETE STRUCTURES	40,000	CF	\$ 13.50	\$ 766,125	\$ -	\$ -	US \$13.50 PER CF FOR STRUCTURES - CCI ESCALATION FROM OCT 2006 -> NOV 2018
BUILDING SUPERSTRUCTURE	40,000	CF	\$ 8.00	\$ 440,027	\$ -	\$ -	USE \$8.00 PER CF FOR BUILDING COSTS - BCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 15%	1	LS	\$ 181,000	\$ 181,000	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
ELECTRICAL COSTS - 12%	1	LS	\$ 144,800	\$ 144,800	\$ -	\$ -	
INSTRUMENTATION - 5%	1	LS	\$ 60,400	\$ 60,400	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 24,200	\$ 24,200	\$ -	\$ -	
ALL EQUIPMENT	1	LS	\$ -	\$ -	\$ 2,182,400	\$ 3,096,278	CCI ESCALATION FROM OCT 2006 -> NOV 2018
<b>TOTAL ACTIVATED SLUDGE PUMP STATION PS-5</b>				\$ 1,616,552		\$ 3,096,278	\$ 4,712,830



DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
PUMP STATION PS-6

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<b>PUMP STATION PS-6</b>							
BUILDING	1	LS	\$ 6,257,315	\$ 6,649,079		\$ -	BCI ESCALATION FROM JAN 2017 -> NOV 2018
MECHANICAL	1	LS	\$ -	\$ -	\$ 2,296,500	\$ 2,436,355	CCI ESCALATION FROM JAN 2017 -> NOV 2018
HVAC	1	LS			\$ 575,000	\$ 610,017	
PLUMBING	1	LS	\$ -	\$ -	\$ 67,760	\$ 71,887	
ELECTRICAL	1	LS	\$ -	\$ -	\$ 4,727,085	\$ 5,014,961	
<b>PHASE 2</b>							
BUILDING	1	LS	\$ 1,191,108	\$ 1,210,579			BCI ESCALATION FROM MAY 2018 -> NOV 2018
ELECTRICAL	1	LS			\$ 207,093	\$ 210,309	CCI ESCALATION FROM MAY 2018 -> NOV 2018
<b>PRF</b>							
PRF PROJECT - 2005 - PER DELCORA REPORT	1	LS	\$ 144,442	\$ 217,656			CCI ESCALATION FROM AUG 2005 -> NOV 2018
GENERAL	1	LS	\$ 278,772	\$ 283,329			BCI ESCALATION FROM MAY 2018 -> NOV 2018
ELECTRICAL	1	LS			\$ 72,970	\$ 74,103	CCI ESCALATION FROM MAY 2018 -> NOV 2018
<b>PUMP STATION PS-6</b>				\$ 8,360,643		\$ 8,417,631	\$ 16,778,274

DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
GRIT TANKS T-1 AND T-2

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<u>GRIT TANKS</u> <u>T-1 AND T-2</u>							
CONCRETE STRUCTURES	154,545	CF	\$ 7.50	\$ 1,644,454	\$ -	\$ -	SEE BELOW FOR DETAILED CONSTRUCTION COSTS - CCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 15%	1	LS	\$ 246,700	\$ 246,700	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
ELECTRICAL COSTS - 10%	1	LS	\$ 164,500	\$ 164,500	\$ -	\$ -	
INSTRUMENTATION - 5%	1	LS	\$ 82,300	\$ 82,300	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 32,900	\$ 32,900	\$ -	\$ -	
GRIT CHAMBER EQUIPMENT	1	LS	\$ -	\$ -	\$ 195,200	\$ 276,940	CCI ESCALATION FROM OCT 2006 -> NOV 2018
ELECTRICAL EQUIPMENT	1	LS	\$ -	\$ -	\$ 54,900	\$ 77,889	
INSTRUMENTATION	1	LS	\$ -	\$ -	\$ 90,800	\$ 128,822	
GRIT REMOVAL UPGRADES - 2004 - PER DELCORA REPORT - ITEMS FOR GRIT REMOVAL	1	LS	\$ 1,180,804	\$ 1,853,229	\$ -	\$ -	CCI ESCALATION FROM JULY 2004 -> NOV 2018
GRIT TANK SCREENS MECHANICAL	1	LS			\$ 2,966,232	\$ 3,066,871	CCI ESCALATION FROM OCT 2017 -> NOV 2018
GRIT TANK SCREENS ELECTRICAL	1	LS			\$ 300,200	\$ 310,385	
GATE/VALE IMPROVEMENTS	1	LS			\$ 299,664	\$ 304,317	CCI ESCALATION FROM MAY 2018 -> NOV 2018
TOTAL GRIT TANKS T-1 AND T-2				\$ 4,024,084		\$ 4,165,224	\$ 8,189,308

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CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
PRIMARY SETTLING TANKS T-3 THRU T-10

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<b>PRIMARY SETTLING TANKS T-3 THRU T-10</b>							
CONCRETE STRUCTURES	832,000	CF	\$ 7.50	\$ 8,852,995	\$ -	\$ -	USE \$7.50/ PER CU FT. FOR STRUCTURES (FROM T-1 & T-2) - CCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 12%	1.00	LS	\$ 1,062,400	\$ 1,062,400	\$ -	\$ -	
ELECTRICAL COSTS - 10%	1	LS	\$ 885,300	\$ 885,300	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
INSTRUMENTATION - 5%	1	LS	\$ 442,700	\$ 442,700	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 177,100	\$ 177,100	\$ -	\$ -	
PRIMARY MECHANISMS	8	EA	\$ -	\$ -	\$ 152,500	\$ 1,730,874	CCI ESCALATION FROM OCT 2006 -> NOV 2018
SLIDE GATES	16	EA	\$ -	\$ -	\$ 5,500	\$ 124,850	
TELESCOPIC VALVES	1	EA	\$ -	\$ -	\$ 6,100	\$ 8,654	
INSTRUMENTATION	1	LS	\$ -	\$ -	\$ 488,000	\$ 692,350	
ELECTRICAL EQUIPMENT	1	LS	\$ -	\$ -	\$ 79,300	\$ 112,507	CCI ESCALATION FROM MAY 2018 -> NOV 2018
<b>TANK IMPROVEMENTS</b>							
MECHANICAL	1	LS			\$ 1,866,084	\$ 1,895,059	
ELECTRICAL	1	LS			\$ 177,854	\$ 180,616	
<b>TOTAL PRIMARY SETTLING TANKS T-3 THRU T-10</b>				\$ 11,420,495		\$ 4,744,909	\$ 16,165,404

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
AERATION TANKS T-11 THRU T-14

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<b><u>AERATION TANKS T-11 THRU T-14</u></b>							
CONCRETE STRUCTURES	2,031,744	CF	\$ 5.25	\$ 15,133,310	\$ -	\$ -	SEE BELOW FOR DETAILED CONSTRUCTION COSTS - CCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 15%	1	LS	\$ 2,270,000	\$ 2,270,000	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
ELECTRICAL COSTS - 12%	1	LS	\$ 1,816,000	\$ 1,816,000	\$ -	\$ -	
INSTRUMENTATION - 5%	1	LS	\$ 756,700	\$ 756,700	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 302,700	\$ 302,700	\$ -	\$ -	
SLUICE GATES	1	LS	\$ -	\$ -	\$ 97,600	\$ 138,470	CCI ESCALATION FROM OCT 2006 -> NOV 2018
AERATION SYSTEM UPGRADES	1	LS	\$ 943,029	\$ 1,480,050			CCI ESCALATION FROM JUL 2004 -> NOV 2018
AERATION PANELS	1	LS	\$ -	\$ -	\$ 3,980,000	\$ 4,315,300.05	CCI ESCALATION FROM MAY 2016 -> NOV 2018
<b><u>TANK IMPROVEMENTS</u></b>							
MECHANICAL	1	LS			\$ 2,614,589	\$ 2,655,186	CCI ESCALATION FROM MAY 2018 -> NOV 2018
ELECTRICAL	1	LS			\$ 433,200	\$ 439,926	
<b>TOTAL AERATION TANKS T-11 THRU T-14</b>				\$ 21,758,760		\$ 7,548,882	\$ 29,307,642

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STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
FINAL CLARIFIERS T-15 THRU T-18

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<b>FINAL CLARIFIERS T-15 THRU T-18</b>							
							SEE BELOW FOR DETAILED CONSTRUCTION COSTS - CCI ESCALATION FROM OCT 2006 -> NOV 2018
CONCRETE STRUCTURES	902,120	CF	\$ 6.65	\$ 8,511,216	\$ -	\$ -	
PIPING @ 10%	1	LS	\$ 851,200	\$ 851,200	\$ -	\$ -	
ELECTRICAL COSTS - 5%	1	LS	\$ 425,600	\$ 425,600	\$ -	\$ -	
INSTRUMENTATION - 3%	1	LS	\$ 255,400	\$ 255,400	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 170,300	\$ 170,300	\$ -	\$ -	
CLARIFIER MECHANISMS	4	EA	\$ -	\$ -	\$ 225,700	\$ 1,280,847	
INSTRUMENTATION	1	LS	\$ -	\$ -	\$ 424,300	\$ 601,975	
ELECTRICAL EQUIPMENT	1	LS	\$ -	\$ -	\$ 54,900	\$ 77,889	
CLARIFIER IMPROVEMENT - 2005 - PER DELCORA REPORT	1	LS	\$ 199,780	\$ 298,748.43	\$ -	\$ -	CCI ESCALATION FROM OCT 2006 -> NOV 2018
CLARIFIER PIPE LINING - OCT 2012	1	LS	\$ 243,457	\$ 290,418			CCI ESCALATION FROM OCT 2012 -> NOV 2018
T-18 EQUIPMENT	1	LS			\$ 1,024,500	\$ 1,088,027	CCI ESCALATION FROM DEC 2016 -> NOV 2018
T-15 THRU T-17 EQUIPMENT	1	LS			\$ 2,453,732	\$ 2,491,831	CCI ESCALATION FROM MAY 2018 -> NOV 2018
<b>TOTAL FINAL CLARIFIERS T-15 THRU T-18</b>				\$ 10,802,882		\$ 5,540,569	\$ 16,343,452

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STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
FINAL CLARIFIER T-27

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES	TOTAL	EQUIPMENT	TOTAL	REFERENCE
			UNIT PRICE	STRUCTURES	UNIT PRICE	EQUIPMENT	
<b>FINAL CLARIFIER T-27</b>							
CONCRETE STRUCTURES	408,690	CF	\$ 6.65	\$ 3,855,860	\$ -	\$ -	USE \$6.65/ PER CU FT. FOR STRUCTURES (FROM T-15> T- 18) - CCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 10%	1	LS	\$ 385,600	\$ 385,600	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
ELECTRICAL COSTS - 12%	1	LS	\$ 462,800	\$ 462,800	\$ -	\$ -	
INSTRUMENTATION - 5%	1	LS	\$ 192,800	\$ 192,800	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 77,200	\$ 77,200	\$ -	\$ -	
CLARIFIER MECHANISM	1	EA	\$ -	\$ -	\$ 1,024,500	\$ 1,088,026.59	CCI ESCALATION FROM DEC 2016 -> NOV 2018
INSTRUMENTATION	1	LS	\$ -	\$ -	\$ 164,800	\$ 233,810	CCI ESCALATION FROM OCT 2006 -> NOV 2018
ELECTRICAL EQUIPMENT	1	LS	\$ -	\$ -	\$ 18,300	\$ 25,963	
<b>TOTAL FINAL CLARIFIER T-27</b>				\$ 4,974,260		\$ 1,347,800	\$ 6,322,060



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STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
POST AERATION TANKS T-19 AND T-20

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES	TOTAL	EQUIPMENT	TOTAL	REFERENCE
			UNIT PRICE	STRUCTURES	UNIT PRICE	EQUIPMENT	
<b>POST AERATION TANKS T-19 AND T-20</b>							
CONCRETE STRUCTURES	81,491	CF	\$ 7.50	\$ 867,118	\$ -	\$ -	USE \$7.50/ PER CU FT. FOR STRUCTURES (FROM T-1>T-2) - CCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 15%	1	LS	\$ 130,100	\$ 130,100	\$ -	\$ -	
ELECTRICAL COSTS - 12%	1	LS	\$ 104,100	\$ 104,100	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
INSTRUMENTATION - 5%	1	LS	\$ 43,400	\$ 43,400	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 17,400	\$ 17,400	\$ -	\$ -	CCI ESCALATION FROM MAY 2018 -> NOV 2018
FRP BAFFLE WALLS	1	LS			\$ 60,000	\$ 60,932	
<b>TOTAL POST AERATION TANKS T-19 AND T-20</b>				\$ 1,162,118		\$ 60,932	\$ 1,223,050

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STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
CHLORINE CONTACT TANKS T-21 AND T-22

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	ADDRESS	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<u>CHLORINE CONTACT TANKS T-21 AND T-22</u>							
CONCRETE STRUCTURES	162,983	CF	\$ 7.50	\$ 1,734,236	\$ -	\$ -	USE \$7.50/ PER CU FT. FOR STRUCTURES (FROM T-1>T-2) - CCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 15%	1	LS	\$ 260,200	\$ 260,200	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
ELECTRICAL COSTS - 12%	1	LS	\$ 208,200	\$ 208,200	\$ -	\$ -	
INSTRUMENTATION - 5%	1	LS	\$ 86,800	\$ 86,800	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 34,700	\$ 34,700	\$ -	\$ -	
AERATORS	2	EA	\$ -	\$ -	\$ 56,400	\$ 160,035	CCI ESCALATION FROM OCT 2006 -> NOV 2018
CHLORINE EQUIPMENT	1	LS	\$ -	\$ -	\$ 42,700	\$ 60,581	
MONORAILS & HOISTS	1	LS	\$ -	\$ -	\$ 30,500	\$ 43,272	
INSTRUMENTATION	1	LS	\$ -	\$ -	\$ 143,400	\$ 203,449	
ELECTRICAL EQUIPMENT	1	LS	\$ -	\$ -	\$ 30,500	\$ 43,272	CCI ESCALATION FROM MAY 2018 -> NOV 2018
TANK IMPROVEMENTS	1	LS			\$ 599,197	\$ 608,501	
TOTAL CHLORINE CONTACT TANKS T-21 AND T-22				\$ 2,324,136		\$ 1,119,109	\$ 3,443,245



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STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
SLUDGE HOLDING BUILDING/TANKS ET-1 THRU ET-4

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<u>SLUDGE HOLDING BUILDING/TANKS ET-1 THRU ET-4</u>							
CONCRETE STRUCTURES	133,450	CF	\$ 7.50	\$ 1,419,991	\$ -	\$ -	USE \$7.50 PER CF FOR STRUCTURES - CCI ESCALATION FROM OCT 2006 -> NOV 2018
BUILDING SUPERSTRUCTURE	37,500	CF	\$ 8.00	\$ 412,525	\$ -	\$ -	USE \$8.00 PER CF FOR BLD'G SUPERSTRUCTURE - BCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 15%	1	LS	\$ 274,900	\$ 274,900	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
ELECTRICAL COSTS - 12%	1	LS	\$ 220,000	\$ 220,000	\$ -	\$ -	
INSTRUMENTATION - 5%	1	LS	\$ 91,700	\$ 91,700	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 36,700	\$ 36,700	\$ -	\$ -	
SLUDGE THICKENER MECHANISMS	1	LS	\$ -	\$ -	\$ 149,000	\$ 211,394	CCI ESCALATION FROM OCT 2006 -> NOV 2018
INSTRUMENTATION	1	LS	\$ -	\$ -	\$ 113,700	\$ 161,312	
ELECTRICAL EQUIPMENT	1	LS	\$ -	\$ -	\$ 24,400	\$ 34,617	
SLUDGE MIXING AND PUMPING - JUNE 2008	1	LS			\$ 369,853	\$ 505,368	CCI ESCALATION FROM JUN 2008 -> NOV 2018
TANK STRUCTURE REPAIR - JUNE 2008	1	LS	\$ 105,000	\$ 143,472			
TOTAL SLUDGE HOLDING BUILDING/TANKS ET-1 THRU ET-4				\$ 2,599,288		\$ 912,691	\$ 3,511,979

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CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
HAULED WASTE ACCEPTANCE FACILITY

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<b>TRUCK OFF-LOADING FACILITY</b>							
SUBSTRUCTURE = 120' x 100' x 5' = 60,000 CF	\$ 60,000	CF	\$ 7.50	\$ 638,437			USE \$7.50 PER CF FOR STRUCTURES - CCI ESCALATION FROM OCT 2006 -> NOV 2018
HAULED WASTE ACCEPTANCE FACILITY	\$ 1.00	LS	\$ 983,800	\$ 1,151,886	\$ 100,000	\$ 117,085	CCI ESCALATION FROM SEP 2013 -> NOV 2018
<b>TOTAL HAULED WASTE ACCEPTANCE FACILITY</b>				\$ 1,790,324		\$ 117,085	\$ 1,907,409

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STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
SUBSTATION NO. 1

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES	TOTAL	EQUIPMENT	TOTAL	REFERENCE
			UNIT PRICE	STRUCTURES	UNIT PRICE	EQUIPMENT	
<b>SUBSTATION NO. 1</b>							
SUBSTATION EQUIPMENT	1	LS	\$ 287,500	\$ 407,890	\$ -	\$ -	R.S. MEANS ELECTRICAL COST DATA 2006 - CCI ESCALATION FROM OCT 2006 -> NOV 2018
SUBSTATION FOUNDATION	1	LS	\$ 81,400	\$ 115,486	\$ -	\$ -	CCI ESCALATION FROM OCT 2006 -> NOV 2018
SUBSTATION FENCING	1	LS	\$ 4,900	\$ 6,952	\$ -	\$ -	CCI ESCALATION FROM MAY 2018 -> NOV 2018
IMPROVEMENTS	1	LS			\$ 167,188	\$ 169,784	
480V DISTRIBUTION	1	LS			\$ 1,202,294	\$ 1,220,962	
<b>TOTAL SUBSTATION NO. 1</b>				\$ 530,328		\$ 1,390,746	\$ 1,921,075

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STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
SUBSTATION NO. 1

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES	TOTAL	EQUIPMENT	TOTAL	REFERENCE
			UNIT PRICE	STRUCTURES	UNIT PRICE	EQUIPMENT	
<b><u>SUBSTATION NO. 2</u></b>							
SUBSTATION EQUIPMENT	1	LS			\$ 819,493	\$ 1,286,165	CCI ESCALATION FROM JUL 2004 -> NOV 2018
SUBSTATION FOUNDATION	1	LS	\$ 83,103	\$ 130,427	\$ -	\$ -	
SUBSTATION FENCING	1	LS	\$ 4,900	\$ 6,952	\$ -	\$ -	
IMPROVEMENTS	1	LS			\$ 130,764	\$ 132,794	CCI ESCALATION FROM MAY 2018 -> NOV 2018
TOTAL SUBSTATION NO. 2				\$ 137,379		\$ 1,418,959	\$ 1,556,338

DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
SUBSTATION NO. 3

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES	TOTAL	EQUIPMENT	TOTAL	REFERENCE
			UNIT PRICE	STRUCTURES	UNIT PRICE	EQUIPMENT	
<b>SUBSTATION NO. 3</b>							
SUBSTATION EQUIPMENT	1	LS	\$ 247,300	\$ 350,857	\$ -	\$ -	R.S. MEANS ELECTRICAL COST DATA 2006 - CCI ESCALATION FROM OCT 2006 -> NOV 2018
SUBSTATION FOUNDATION	1	LS	\$ 50,500	\$ 71,647	\$ -	\$ -	CCI ESCALATION FROM OCT 2006 -> NOV 2018
SUBSTATION FENCING	1	LS	\$ 4,300	\$ 6,101	\$ -	\$ -	CCI ESCALATION FROM MAY 2018 -> NOV 2018
IMPROVEMENTS	1	LS			\$ 133,059	\$ 135,125	
480V DISTRIBUTION	1	LS			\$ 906,203	\$ 920,274	
<b>TOTAL SUBSTATION NO. 3</b>				\$ 428,604		\$ 1,055,399	\$ 1,484,003

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STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
PRIMARY SWITCHGEAR

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES	TOTAL	EQUIPMENT	TOTAL	REFERENCE
			UNIT PRICE	STRUCTURES	UNIT PRICE	EQUIPMENT	
<b>PRIMARY SWITCHGEAR</b>							
15KV SWITCHGEAR	1	LS	\$ 338,700	\$ 480,530	\$ -	\$ -	R.S. MEANS ELECTRICAL COST DATA 2006 - CCI ESCALATION FROM OCT 2006 -> NOV 2018
SWITCHGEAR FOUNDATION	1	LS	\$ 26,300	\$ 37,313	\$ -	\$ -	
SWITCHGEAR FENCING	1	LS	\$ 3,700	\$ 5,249	\$ -	\$ -	
WRTP ELECTRICAL DISTRIBUTION			\$ 1,283,700	\$ 1,821,248			CCI ESCALATION FROM OCT 2006 -> NOV 2018
ELECTRICAL IMPROVEMENTS - 2005 - PER DELCORA REPORT	1	LS	\$ 62,849	\$ 93,984	\$ -	\$ -	CCI ESCALATION FROM AUG 2005 -> NOV 2018
GENERATOR	1	LS	\$ 265,000	\$ 293,674			CCI ESCALATION FROM NOV 2015 -> NOV 2018
POLE LINE	1	LS	\$ 208,772	\$ 212,014			CCI ESCALATION FROM MAY 2018 -> NOV 2018
DUCT BANK (DL08, DL10, DL16)	1	LS	\$ 59,922	\$ 60,852			
ENTRY ROAD	1	LS	\$ 138,239	\$ 140,385			
15KV DISTRIBUTION	1	LS	\$ 449,833	\$ 456,818			
<b>TOTAL PRIMARY SWITCHGEAR</b>				\$ 3,602,068		\$ -	\$ 3,602,068

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CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
VALVE PIT NO. 1

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES	TOTAL	EQUIPMENT	TOTAL	REFERENCE
			UNIT PRICE	STRUCTURES	UNIT PRICE	EQUIPMENT	
<b>VALVE PIT NO. 1</b>							
							USE \$13.50 PER CF FOR STRUCTURES - CCI ESCALATION FROM OCT 2006 -> NOV 2018
CONCRETE STRUCTURES	9,992	CF	\$ 13.50	\$ 191,378	\$ -	\$ -	
PIPING @ 15%	1.00	LS	\$ 28,800	\$ 28,800	\$ -	\$ -	
ELECTRICAL COSTS - 12%	1	LS	\$ 23,000	\$ 23,000	\$ -	\$ -	
INSTRUMENTATION - 5%	1	LS	\$ 9,600	\$ 9,600	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 3,900	\$ 3,900	\$ -	\$ -	
							CALCULATED FROM ESCALATED BASE
30" PLUG VALVES	1	LS	\$ -	\$ -	\$ 73,200	\$ 103,852	
							CCI ESCALATION FROM OCT 2006 -> NOV 2018
<b>TOTAL VALVE PIT NO. 1</b>				\$ 256,678		\$ 103,852	\$ 360,530

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STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
MAG METER PIT NO. 2

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES	TOTAL	EQUIPMENT	TOTAL	REFERENCE
			UNIT PRICE	STRUCTURES	UNIT PRICE	EQUIPMENT	
<b>MAG METER PIT NO. 2</b>							
CONCRETE STRUCTURE	6,899	CF	\$ 12.50	\$ 122,349	\$ -	\$ -	USE \$12.50 PER CF FOR STRUCTURE - CCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 15%	1	LS	\$ 18,400	\$ 18,400	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
ELECTRICAL COSTS - 12%	1	LS	\$ 14,700	\$ 14,700	\$ -	\$ -	
INSTRUMENTATION - 5%	1	LS	\$ 6,200	\$ 6,200	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 2,500	\$ 2,500	\$ -	\$ -	
MAG METERS - 54"	1	LS	\$ -	\$ -	\$ 65,900	\$ 93,496	CCI ESCALATION FROM OCT 2006 -> NOV 2018
KNIFE GATE VALVES - 60"	1	LS	\$ -	\$ -	\$ 73,200	\$ 103,852	
<b>TOTAL MAGMETER PIT NO. 2</b>				\$ 164,149		\$ 197,348	\$ 361,497



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STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
MAG METER PIT NO. 3

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES	TOTAL	EQUIPMENT	TOTAL	REFERENCE
			UNIT PRICE	STRUCTURES	UNIT PRICE	EQUIPMENT	
<b>MAG METER PIT NO. 3</b>							
CONCRETE STRUCTURES	4,254	CF	\$ 12.50	\$ 75,442	\$ -	\$ -	USE \$12.50 PER CF FOR STRUCTURES - CCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 15%	1	LS	\$ 11,400	\$ 11,400	\$ -	\$ -	
ELECTRICAL COSTS - 12%	1	LS	\$ 9,100	\$ 9,100	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
INSTRUMENTATION - 5%	1	LS	\$ 3,800	\$ 3,800	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 1,600	\$ 1,600	\$ -	\$ -	CCI ESCALATION FROM OCT 2006 -> NOV 2018
MAG METERS - 54"	1	LS	\$ -	\$ -	\$ 54,900	\$ 77,889	
<b>TOTAL MAG METER PIT NO. 3</b>				\$ 101,342		\$ 77,889	\$ 179,231

DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
SLUDGE PIT NO. 4

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES	TOTAL	EQUIPMENT	TOTAL	REFERENCE
			UNIT PRICE	STRUCTURES	UNIT PRICE	EQUIPMENT	
<u>SLUDGE PIT NO. 4</u>							
CONCRETE STRUCTURES	1,198	CF	\$ 18	\$ 31,104	\$ -	\$ -	USE \$18.30 PER CF FOR STRUCTURES - CCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING	1	LS	\$ 3,300	\$ 4,682	\$ -	\$ -	CCI ESCALATION FROM OCT 2006 -> NOV 2018
TOTAL SLUDGE PIT NO. 4				\$ 35,786		\$ -	\$ 35,786

DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
FRESHWATER METER PIT NO. 5

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<b>FRESHWATER METER PIT NO. 5</b>							
CONCRETE STRUCTURES	1,605	CF	\$ 18.30	\$ 41,671	\$ -	\$ -	USE \$18.30 PER CF FOR STRUCTURES - CCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 15%	1	LS	\$ 6,300	\$ 6,300	\$ -	\$ -	
ELECTRICAL COSTS - 12%	1	LS	\$ 5,100	\$ 5,100	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
INSTRUMENTATION - 5%	1	LS	\$ 2,100	\$ 2,100	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 900	\$ 900	\$ -	\$ -	
WATER METERS	1	LS	\$ -	\$ -	\$ 9,800	\$ 13,904	CCI ESCALATION FROM OCT 2006 -> NOV 2018
BACKFLOW PREVENTERS	1	LS	\$ -	\$ -	\$ 17,100	\$ 24,261	
SUMP PUMP	1	EA	\$ -	\$ -	\$ 1,800	\$ 2,554	
10" STRAINER	1	EA	\$ -	\$ -	\$ 5,500	\$ 7,803	
<b>TOTAL FRESHWATER METER PIT NO. 5</b>				\$ 56,071		\$ 48,521	\$ 104,592

DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
ASH LAGOON EFFLUENT BOX

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<u>ASH LAGOON EFFLUENT BOX</u>							
CONCRETE STRUCTURES	30,000	CF	\$ 7.50	\$ 319,219	\$ -	\$ -	USE \$7.50 PER CF FOR STRUCTURES - CCI ESCALATION FROM OCT 2006 -> NOV 2018
TOTAL ASH LAGOON EFFLUENT BOX				\$ 319,219		\$ -	\$ 319,219



DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
CHESTER PUMP STATION

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<b>CHESTER PUMP STATION</b> <b>25.0 MGD</b> <b>113 W. 2ND STREET</b>							
CONCRETE STRUCTURES	139,270	CF	\$ 7.50	\$ 1,481,919	\$ -	\$ -	USE \$7.50 PER CF FOR STRUCTURE - CCI ESCALATION FROM OCT 2006 -> NOV 2018
BUILDING SUPERSTRUCTURE	140,000	CF	\$ 8.00	\$ 1,540,095	\$ -	\$ -	USE \$8.00 PER CF FOR BUILDING COSTS - BCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 15%	1	LS	\$ 453,400	\$ 453,400	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
ELECTRICAL COSTS - 12%	1	LS	\$ 362,700	\$ 362,700	\$ -	\$ -	
INSTRUMENTATION - 5%	1	LS	\$ 151,200	\$ 151,200	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 60,500	\$ 60,500	\$ -	\$ -	
PUMPS - 300 HP	3	EA	\$ -	\$ -	\$ 108,200	\$ 460,526	CCI ESCALATION FROM OCT 2006 -> NOV 2018
INSTRUMENTATION	1	LS	\$ -	\$ -	\$ 183,000	\$ 259,631	
ELECTRICAL EQUIPMENT	1	LS	\$ -	\$ -	\$ 128,100	\$ 181,742	
VARI-DRIVES	1	LS	\$ -	\$ -	\$ 146,400	\$ 207,705	
MONORAILS & HOISTS	1	LS	\$ -	\$ -	\$ 61,000	\$ 86,544	CCI ESCALATION FROM FEB 2017 -> NOV 2018
BAR SCREENS IMPROVEMENTS	1	LS	\$ -	\$ -	\$ 740,881	\$ 784,734.64	
CPS UPGRADES - 2006 - PER DELCORA REPORT	1	LS	\$ 861,734	\$ 1,222,584	\$ -	\$ -	CCI ESCALATION FROM OCT 2006 -> NOV 2018
BULKHEAD	300	LF	\$ 4,500	\$ 1,650,640			CCI ESCALATION FROM OCT 2011 -> NOV 2018
CHESTER FORCE MAIN	13200	LF	\$ 1,033	\$ 17,743,953			CCI ESCALATION FROM NOV 2009 -> NOV 2018
<b>TOTAL CHESTER PUMP STATION</b>				\$ 24,666,991		\$ 1,980,882	\$ 26,647,873

DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
CHESTER PUMP STATION GRIT TANKS

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES	TOTAL	EQUIPMENT	TOTAL	REFERENCE
			UNIT PRICE	STRUCTURES	UNIT PRICE	EQUIPMENT	
<b>CHESTER PUMP STATION GRIT TANKS</b>							
CONCRETE STRUCTURES	18,000	CF	\$ 13.50	\$ 344,756	\$ -	\$ -	USE \$13.50 PER CF FOR STRUCTURES - CCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 15%	1	LS	\$ 51,800	\$ 51,800	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
ELECTRICAL COSTS - 12%	1	LS	\$ 41,400	\$ 41,400	\$ -	\$ -	
INSTRUMENTATION - 5%	1	LS	\$ 17,300	\$ 17,300	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 6,900	\$ 6,900	\$ -	\$ -	CCI ESCALATION FROM OCT 2006 -> NOV 2018
EQUIPMENT	1	LS	\$ -	\$ -	\$ 622,600	\$ 883,313	
<b>TOTAL CHESTER PUMP STATION GRIT TANKS</b>				\$ 462,156		\$ 883,313	\$ 1,345,469

DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
CHESTER PUMP STATION SIPHON

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<b>CHESTER PUMP STATION SIPHON</b>							
CONCRETE STRUCTURES	18,000	CF	\$ 13.50	\$ 344,756	\$ -	\$ -	USE \$13.50 PER CF FOR STRUCTURES - CCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 15%	1	LS	\$ 51,800	\$ 51,800	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
ELECTRICAL COSTS - 12%	1	LS	\$ 41,400	\$ 41,400	\$ -	\$ -	
INSTRUMENTATION - 5%	1	LS	\$ 17,300	\$ 17,300	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 6,900	\$ 6,900	\$ -	\$ -	CCI ESCALATION FROM OCT 2006 -> NOV 2018
EQUIPMENT	1	LS	\$ -	\$ -	\$ 198,600	\$ 281,764	
<b>TOTAL CHESTER PUMP STATION SIPHON</b>				\$ 462,156		\$ 281,764	\$ 743,920



DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
BROOMALL ST. PUMP STATION

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<b>BROOMALL ST. PUMP STATION</b> <b>1 BROOMALL ST.</b>							
CONCRETE STRUCTURES	9,626	CF	\$ 13.50	\$ 184,368	\$ -	\$ -	USE \$13.50 PER CF FOR STRUCTURE - CCI ESCALATION FROM OCT 2006 -> NOV 2018
BUILDING SUPERSTRUCTURE	12,000	CF	\$ 8.00	\$ 132,008	\$ -	\$ -	USE \$8.00 PER CF FOR BUILDING COSTS - BCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 15%	1	LS	\$ 47,500	\$ 47,500	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
ELECTRICAL COSTS - 12%	1	LS	\$ 38,000	\$ 38,000	\$ -	\$ -	
INSTRUMENTATION - 5%	1	LS	\$ 15,900	\$ 15,900	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 6,400	\$ 6,400	\$ -	\$ -	
PUMPS & INSTRUMENTATION	1	LS	\$ -	\$ -	\$ 54,900	\$ 77,889	CCI ESCALATION FROM OCT 2006 -> NOV 2018
BROOMALL ST. PS FORCE MAIN	750	LF	\$ 205	\$ 218,632	\$ -	\$ -	REPLACEMENT BID APR 2007 - CCI ESCALATION FROM APR 2007 -> NOV 2018
<b>TOTAL BROOMALL ST. PUMP STATION</b>				\$ 424,176		\$ 77,889	\$ 502,065

DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
8TH ST. PUMP STATION

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<b>8TH ST. PUMP STATION</b> <b>99 W. 8TH ST.</b>							
CONCRETE STRUCTURES	1,605	CF	\$ 18.30	\$ 41,671	\$ -	\$ -	USE \$18.50 PER CF FOR STRUCTURE - CCI ESCALATION FROM OCT 2006 -> NOV 2018
BUILDING SUPERSTRUCTURE	3,000	CF	\$ 8.00	\$ 33,002	\$ -	\$ -	USE \$8.00 PER CF FOR BUILDING COSTS - BCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 15%	1	LS	\$ 11,300	\$ 11,300	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
ELECTRICAL COSTS - 12%	1	LS	\$ 9,000	\$ 9,000	\$ -	\$ -	
INSTRUMENTATION - 5%	1	LS	\$ 3,800	\$ 3,800	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 1,500	\$ 1,500	\$ -	\$ -	
PUMPS & INSTRUMENTATION	1	LS	\$ -	\$ -	\$ 30,500	\$ 43,272	CCI ESCALATION FROM OCT 2006 -> NOV 2018
8TH ST. PS FORCE MAIN	460	LF	\$ 205	\$ 134,094	\$ -	\$ -	REPLACEMENT BID APR 2007 - CCI ESCALATION FROM APR 2007 -> NOV 2018
<b>TOTAL 8TH ST. PUMP STATION</b>				\$ 234,367		\$ 43,272	\$ 277,639

DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
FELTONVILLE PUMP STATION

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<b>FELTONVILLE PUMP STATION</b> <b>2432 CONCORD ROAD</b>							
CONCRETE STRUCTURES	1,605	CF	\$ 18.30	\$ 41,671	\$ -	\$ -	USE \$18.50 PER CF FOR STRUCTURE - CCI ESCALATION FROM OCT 2006 -> NOV 2018
BUILDING SUPERSTRUCTURE	3,000	CF	\$ 8.00	\$ 33,002	\$ -	\$ -	USE \$8.00 PER CF FOR BUILDING COSTS - BCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 15%	1	LS	\$ 11,300	\$ 11,300	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
ELECTRICAL COSTS - 12%	1	LS	\$ 9,000	\$ 9,000	\$ -	\$ -	
INSTRUMENTATION - 5%	1	LS	\$ 3,800	\$ 3,800	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 1,500	\$ 1,500	\$ -	\$ -	
PUMPS & INSTRUMENTATION	1	LS	\$ -	\$ -	\$ 30,500	\$ 43,272	CCI ESCALATION FROM OCT 2006 -> NOV 2018
FELTONVILLE ROAD PS FM	920	LF	\$ 205	\$ 268,188	\$ -	\$ -	REPLACEMENT BID APR 2007 - CCI ESCALATION FROM APR 2007 -> NOV 2018
<b>TOTAL FELTONVILLE PUMP STATION</b>				\$ 368,461		\$ 43,272	\$ 411,733

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CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
RIVERFRONT PUMP STATION AND SCREEN FACILITY

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<b>RIVERFRONT PUMP STATION</b>							
GENERATOR FOR STATION	1	LS	\$ 50,330	\$ 65,959	\$ -	\$ -	CCI ESCALATION FROM MAR 2009 -> NOV 2018
SITE WORK	1	LS	\$ 476,000	\$ 623,809	\$ -	\$ -	
ELECTRICAL	1	LS	\$ 110,225	\$ 144,452	\$ -	\$ -	
<b>RIVERFRONT PUMP STATION</b>							
BUILDING	1	LS	\$ 86,570	\$ 113,055	\$ -	\$ -	CCI ESCALATION FROM AUG 2009 -> NOV 2018
SITE WORK	1	LS	\$ 435,410	\$ 568,616	\$ -	\$ -	
MECHANICAL	1	LS	\$ 207,480	\$ 270,955	\$ -	\$ -	
ELECTRICAL	1	LS	\$ 152,000	\$ 198,502	\$ -	\$ -	
<b>TOTAL RIVERFRONT PUMP STATION &amp; SCREEN FACILITY</b>				\$ 1,985,346		\$ -	\$ 1,985,346

DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
EXISTING PUMP STATION EPS-1

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<b>EDDYSTONE PUMP STATION</b> <b>2.0 MGD</b> <b>736 EDDYSTONE AVENUE</b>							
CONCRETE STRUCTURES	22,300	CF	\$ 18.30	\$ 473,525	\$ -	\$ -	USE \$18.30 PER CF FOR STRUCTURE - CCI ESCALATION FROM OCT 2006 -> NOV 2018
BUILDING SUPERSTRUCTURE	42,000	CF	\$ 8.00	\$ 387,033	\$ -	\$ -	USE \$8.00 PER CF FOR BUILDING COSTS - BCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 15%	1	LS	\$ 129,100	\$ 129,100	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
ELECTRICAL COSTS - 12%	1	LS	\$ 103,300	\$ 103,300	\$ -	\$ -	
INSTRUMENTATION - 5%	1	LS	\$ 43,100	\$ 43,100	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 17,300	\$ 17,300	\$ -	\$ -	
PUMPS - 75 HP	2	EA	\$ -	\$ -	\$ 30,500	\$ 70,781	CCI ESCALATION FROM OCT 2006 -> NOV 2018
ELECTRICAL EQUIPMENT	1	LS	\$ -	\$ -	\$ 30,500	\$ 35,391	
INSTRUMENTATION	1	LS	\$ -	\$ -	\$ 83,000	\$ 96,309	
EDDYSTONE PS FORCE MAIN	1920	LF	\$ 405	\$ 1,105,744	\$ -	\$ -	REPLACEMENT BID APR 2007 - CCI ESCALATION FROM APR 2007 -> NOV 2018
<b>TOTAL EDDYSTONE PUMP STATION</b>				\$ 2,259,103		\$ 202,480	\$ 2,461,583

DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
EXISTING PUMP STATION EPS-1

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES	TOTAL	EQUIPMENT	TOTAL	REFERENCE
			UNIT PRICE	STRUCTURES	UNIT PRICE	EQUIPMENT	
<u>CENTRAL DELAWARE FORCE</u> <u>MAIN</u>							US EPA AREAWIDE ASSESSMENT POINT SOURCE COST ALTERNATIVES
FORCE MAIN	3.4	MI	\$ 600,000	\$ 9,218,327	\$ -	\$ -	FROM FIGURE H-85 USE \$600,000 PER MILE CCI ESCALATED SEP 1976 => NOV 2018
CENTRAL DELAWARE FORCE MAIN				\$ 9,218,327		\$ -	\$ 9,218,327

DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
EXISTING PUMP STATION EPS-1

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<b>WESTERN SEWER SYSTEM</b>							US EPA AREA WIDE ASSESSMENT POINT SOURCE COST ALTERNATIVES FROM FIGURE H-84 USE \$1,500,000 PER MILE FOR 44.0 MGD SYSTEM - CCI ESCALATION FROM FEB 2002 -> NOV 2018
COMBINED SEWER SYSTEM LINES	137	MI					
Separate Sewers (Non-Chester)	38.43	MI	\$ 2,270,400	\$ 87,251,472			
Separate Sewers	40.21	MI	\$ 2,270,400	\$ 91,292,784			
Combined Sewers	42.25	MI	\$ 2,904,000	\$ 122,694,440			
Interceptors	12.07	MI	\$ 3,062,400	\$ 36,977,900			
Outfalls	4.04	MI	\$ 3,696,000	\$ 14,913,500			
REGULATORS							
VAULT (6'x'12')	26	EA	\$ 11,000	\$ 365,098			CCI ESCALATION FROM MAY 2010 -> NOV 2018
BROWN & BROWN MECHANISM	24	EA			\$ 150,000	\$ 4,683,853	CCI ESCALATION FROM OCT 2009 -> NOV 2018
TIDE GATES							
VAULT (6'x'12')	18	EA	\$ 11,000	\$ 252,760			CCI ESCALATION FROM MAY 2010 -> NOV 2018
TIDE GATE	28	EA			\$ 6,550	\$ 311,772	CCI ESCALATION FROM OCT 2002 -> NOV 2018
CSO REPAIRS 2004 PER DELCORA REPORT - ITEMS FOR CSO REPAIRS	1	LS	\$ 7,643,401	\$ 11,996,042	\$ -		CCI ESCALATION FROM JUL 2004 -> NOV 2018
SEWER SYSTEM REPAIRS - 2005 PER DELCORA REPORT - ITEMS FOR SEWER SYSTEM REPAIRS	1	LS	\$ 2,569,392	\$ 3,842,236	\$ -		CCI ESCALATION FROM AUG 2005 -> NOV 2018
SEWER REHAB EQUIPMENT - 2005 - PER DELCORA REPORT	1	LS	\$ -	\$ -	\$ 542,917	\$ 811,871	
GIS IMPROVEMENTS - 2005 - PER DELCORA REPORT	1	LS	\$ 419,400	\$ 627,165	\$ 326,679	\$ 488,512	
TOTAL COMBINED SEWER SYSTEM				\$ 370,213,397		\$ 6,296,007	\$ 376,509,405

DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
EXISTING PUMP STATION EPS-1

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	SIZE	UNIT	STRUCTURES	TOTAL	EQUIPMENT	TOTAL	REFERENCE
	SQ. IN.		UNIT PRICE	STRUCTURES	UNIT PRICE	EQUIPMENT	
<b>CHESTER SIPHONS</b>							
CHESTER PS 3 barrels (20" & 2-24")	1,219	EA	\$ 758	\$ 924,312	\$ 462	\$ 563,527	CALCUALTED USING THE CHESTER PS SIPHON (ESCALATED TO NOV 2018) AS THE BASIS USING THE 6- TENTHS RULE ON THE BARREL SIZE
25TH STREET 3 barrels (12" & 2-16")	515	EA	\$ 1,070	\$ 551,348	\$ 652	\$ 336,142	
I-95 / CROZIER 3 barrels (12" & 2-16")	515	EA	\$ 1,070	\$ 551,348	\$ 652	\$ 336,142	
UPLAND AVE @ KERLIN 3 barrels (12" & 2-16")	515	EA	\$ 1,070	\$ 551,348	\$ 652	\$ 336,142	
UPLAND AVE 2 barrels (16" & 20")	515	EA	\$ 1,070	\$ 551,348	\$ 652	\$ 336,142	
PROVIDENCE AVE 2 barrels (8" each)	101	EA	\$ 2,057	\$ 206,828	\$ 1,254	\$ 126,097	
CROSBY SQUARE APTS 2 barrels (6" each)	57	EA	\$ 2,590	\$ 146,448	\$ 1,579	\$ 89,285	
<b>TOTAL CHESTER SIPHONS</b>				\$ 2,558,669		\$ 1,559,949	\$ 4,118,617



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CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
CHESTER-RIDLEY CREEK PUMP STATION

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<b>CHESTER-RIDLEY CREEK PUMP STATION 20 MGD 1 GAMBLE LANE</b>							
BUILDING	1	LS	\$ 3,862,000	\$ 4,451,601.59	\$ -	\$ -	BCI ESCALATION FROM JUN 2013 -> NOV 2018
MECHANICAL	1	LS	\$ -	\$ -	\$ 2,400,000	\$ 2,812,995	CCI ESCALATION FROM JUN 2013 -> NOV 2018
HVAC	1	LS			\$ 109,850	\$ 128,753	
PLUMBING	1	LS	\$ -	\$ -	\$ 36,780	\$ 43,109	
ELECTRICAL	1	LS	\$ -	\$ -	\$ 2,239,000	\$ 2,624,290	CCI ESCALATION FROM MAR 2013 -> NOV 2018
CRC FORCE MAIN	1	LS	\$ 5,792,392	\$ 6,850,900.18	\$ -	\$ -	BCI ESCALATION FROM APR 2016 -> NOV 2018
FORMER CONTROL BUILDING	1	LS	\$ 400,000	\$ 432,664.65			
<b>TOTAL CHESTER-RIDLEY CREEK PUMP STATION</b>				\$ 11,735,166		\$ 5,609,148	\$ 17,344,314

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
MARCUS HOOK BOROUGH PUMP STATIONS

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<b>MARCUS HOOK PS</b> 1.5 MGD 401 PENN STREET							
CONCRETE STRUCTURES	16,712	CF	\$ 18.30	\$ 433,896	\$ -	\$ -	USE \$18.30 PER CF FOR STRUCTURE - CCI ESCALATION FROM OCT 2006 -> NOV 2018
BUILDING SUPERSTRUCTURE	32,000	CF	\$ 8.00	\$ 352,022	\$ -	\$ -	USE \$8.00 PER CF FOR BUILDING COSTS - BCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 15%	1	LS	\$ 117,900	\$ 117,900	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
ELECTRICAL COSTS - 12%	1	LS	\$ 94,400	\$ 94,400	\$ -	\$ -	
INSTRUMENTATION - 5%	1	LS	\$ 39,300	\$ 39,300	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 15,800	\$ 15,800	\$ -	\$ -	
PUMPS - 1100 GPM	2	EA	\$ -	\$ -	\$ 18,300	\$ 51,926	CCI ESCALATION FROM OCT 2006 -> NOV 2018
ELECTRICAL EQUIPMENT	1	LS	\$ -	\$ -	\$ 11,600	\$ 16,457	
INSTRUMENTATION	1	LS	\$ -	\$ -	\$ 54,900	\$ 77,889	
<b>VISCOSE VILLAGE PS</b> 1.44 MGD 6 WALNUT STREET							
CONCRETE STRUCTURES	16,712	CF	\$ 18.30	\$ 433,896	\$ -	\$ -	USE \$18.30 PER CF FOR STRUCTURE - CCI ESCALATION FROM OCT 2006 -> NOV 2018
BUILDING SUPERSTRUCTURE	32,000	CF	\$ 8.00	\$ 352,022	\$ -	\$ -	USE \$8.00 PER CF FOR BUILDING COSTS - BCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 15%	1	LS	\$ 117,900	\$ 117,900	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
ELECTRICAL COSTS - 12%	1	LS	\$ 94,400	\$ 94,400	\$ -	\$ -	
INSTRUMENTATION - 5%	1	LS	\$ 39,300	\$ 39,300	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 15,800	\$ 15,800	\$ -	\$ -	

DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
MARCUS HOOK BOROUGH COLLECTION SYSTEM

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES	TOTAL	EQUIPMENT	TOTAL	REFERENCE
			UNIT PRICE	STRUCTURES	UNIT PRICE	EQUIPMENT	
<u>MARCUS HOOK BOROUGH COLLECTION SYSTEM</u>							US EPA AREAWIDE ASSESSMENT POINT SOURCE COST ALTERNATIVES FROM FIGURE H-84 @ 1.5 MGD. USE \$250,000 PER MI - CCI ESCALATION SEP 1976 => NOV 2018
SANITARY SEWERS	6	MI	\$ 250,000	\$ 6,778,182			
FORCE MAINS	290	LF	\$ 205	\$ 84,538			REPLACEMENT BID APR 2007 -
DELAWARE AVE FM	300	LF	\$ 205	\$ 87,453			CCI ESCALATION FROM APR
VISCOSE VILLAGE FM	1,100	LF	\$ 205	\$ 320,660			2007 -> NOV 2018
<b>TOTAL MARCUS HOOK BOROUGH COLLECTION SYSTEM</b>				\$ 7,270,832		\$ -	\$ 7,270,832

DELCORA  
CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
TRAINER BOROUGH PUMP STATIONS

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES	TOTAL	EQUIPMENT	TOTAL	REFERENCE
			UNIT PRICE	STRUCTURES	UNIT PRICE	EQUIPMENT	
<b>SMITH STREET PUMP STATION 810</b> GPM = 1.17 MGD							
GENERATOR FOR STATION	1	LS	\$ 60,500	\$ 79,287		\$ -	CCI ESCALATION FROM OCT 2006 -> NOV 2018
SITE WORK	1	LS	\$ 565,678	\$ 741,334		\$ -	
ELECTRICAL	1	LS	\$ 130,991	\$ 171,667		\$ -	
<b>PRICE STREET PUMP STATION 600</b> GPM = 0.864 MGD							
GENERATOR FOR STATION	1	LS	\$ 50,330	\$ 65,959	\$ -	\$ -	CCI ESCALATION FROM MAR 2009 -> NOV 2018
SITE WORK	1	LS	\$ 476,000	\$ 623,809	\$ -	\$ -	
ELECTRICAL	1	LS	\$ 110,225	\$ 144,452	\$ -	\$ -	
<b>TOTAL TRAINER BOROUGH PUMP STATIONS</b>				\$ 1,826,508		\$ -	\$ 1,826,508

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CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
TRAINER BOROUGH COLLECTION SYSTEM

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<u>TRAINER BOROUGH COLLECTION SYSTEM</u>							US EPA AREAWIDE ASSESSMENT POINT SOURCE COST ALTERNATIVES FROM FIGURE H-84 @ 2.5 MGD. USE \$350,000 PER MI - CCI ESCALATION SEP 1976 => NOV 2018
SANITARY SEWERS	6.89	MI	\$ 350,000	\$ 10,897,057			
FORCE MAINS	0.880	MI	\$ 1,079,251	\$ 1,350,528	\$ -	\$ -	REPLACEMENT BID APR 2007 - CCI ESCALATION FROM APR 2007 -> NOV 2018
TOTAL TRAINER BOROUGH COLLECTION SYSTEM				\$ 12,247,585		\$ -	\$ 12,247,585

the 'information' and 'communication' fields, and the 'information science' field.

The 'information science' field is the most recent, and is defined as follows:

Information science is the study of the nature, structure, and use of information, and the methods and tools for its management and communication.

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CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
DARBY CREEK PUMP STATION

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<u>DARBY CREEK PUMP STATION</u> 40 MGD <u>CALCON-HOOK ROAD AND</u> <u>TRIBBETT AVENUE</u>							
CONCRETE STRUCTURES	222,800	CF	\$ 13.50	\$ 4,267,314	\$ -	\$ -	USE \$13.50 PER CF FOR STRUCTURE - CCI ESCALATION FROM OCT 2006 -> NOV 2018
BUILDING SUPERSTRUCTURE	222,000	CF	\$ 8.00	\$ 2,442,150	\$ -	\$ -	USE \$8.00 PER CF FOR BUILDING COSTS - BCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 15%	1	LS	\$ 1,006,500	\$ 1,006,500	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
ELECTRICAL COSTS - 12%	1	LS	\$ 805,200	\$ 805,200	\$ -	\$ -	
INSTRUMENTATION - 5%	1	LS	\$ 335,500	\$ 335,500	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 134,200	\$ 134,200	\$ -	\$ -	
PUMPS - 700 HP	2	EA	\$ -	\$ -	\$ 306,000	\$ 868,275	CCI ESCALATION FROM OCT 2006 -> NOV 2018
ELECTRICAL EQUIPMENT	1	LS	\$ -	\$ -	\$ 162,300	\$ 230,263	
INSTRUMENTATION	1	LS	\$ -	\$ -	\$ 371,300	\$ 526,782	
MONORAILS & HOISTS	1	LS	\$ -	\$ -	\$ 61,000	\$ 86,544	
DCPS IMPROVEMENTS - 2006 - PER DELCORA REPORT - ITEMS FOR DCPS REPAIRS	1	LS	\$ 3,424,836	\$ 4,858,983.4	\$ -	\$ -	CCI ESCALATION FROM FEB 2017 -> NOV 2018
BAR SCREENS IMPROVEMENTS	1	LS	\$ -	\$ -	\$ 827,058	\$ 876,013	
DCPS FORCE MAIN	13,200	LF	\$ 1,033	\$ 17,749,133			CCI ESCALATION FROM NOV 2009 -> NOV 2018
TOTAL DARBY CREEK PUMP STATION				\$ 31,598,980		\$ 2,587,875	\$ 34,186,856

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CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
MUCKINIPATES PUMP STATION

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES	TOTAL	EQUIPMENT	TOTAL	REFERENCE
			UNIT PRICE	STRUCTURES	UNIT PRICE	EQUIPMENT	
<b>MUCKINIPATES PUMP STATION</b> 30.0 MGD 100 AMOSLAND ROAD							
CONCRETE STRUCTURES	83,600	CF	\$ 13.50	\$ 1,601,200	\$ -	\$ -	USE \$13.50 PER CF FOR STRUCTURE - CCI ESCALATION FROM OCT 2006 -> NOV 2018
BUILDING SUPERSTRUCTURE	84,000	CF	\$ 8.00	\$ 924,057	\$ -	\$ -	USE \$8.00 PER CF FOR BUILDING COSTS - BCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 15%	1	LS	\$ 378,800	\$ 378,800	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
ELECTRICAL COSTS - 12%	1	LS	\$ 303,100	\$ 303,100	\$ -	\$ -	
INSTRUMENTATION - 5%	1	LS	\$ 126,300	\$ 126,300	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 50,600	\$ 50,600	\$ -	\$ -	
PUMPS - 500 HP	2	EA	\$ -	\$ -	\$ 218,700	\$ 620,561	CCI ESCALATION FROM OCT 2006 -> NOV 2018
ELECTRICAL EQUIPMENT	1	LS	\$ -	\$ -	\$ 115,900	\$ 164,433	
INSTRUMENTATION	1	LS	\$ -	\$ -	\$ 262,300	\$ 372,138	
MONORAILS & HOISTS	1	LS	\$ -	\$ -	\$ 61,000	\$ 86,544	
MUCK PS IMPROVEMENTS 2005 - PER DELCORA REPORT	1	LS	\$ 322,822	\$ 482,744	\$ 61,000	\$ 91,219	CCI ESCALATION FROM AUG 2005 -> NOV 2018
CONVEYOR/BAR SCREENS IMPROVEMENTS	1	LS	\$ -	\$ -	\$ 675,635	\$ 715,627	CCI ESCALATION FROM FEB 2017 -> NOV 2018
MPS FORCE MAIN	8,712	LF	\$ 1,033	\$ 11,714,428			CCI ESCALATION FROM NOV 2009 -> NOV 2018
<b>TOTAL MUCKINIPATES PUMP STATION</b>				\$ 15,581,229		\$ 1,334,894	\$ 16,916,123



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CHESTER, PA

STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
CENTRAL DELAWARE PUMP STATION

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<b>CENTRAL DELAWARE PUMP STATION 40 MGD 801 S. SELLERS AVENUE</b>							
CONCRETE STRUCTURES	111,416	CF	\$ 13.50	\$ 2,133,963	\$ -	\$ -	USE \$13.50 PER CF FOR STRUCTURE - CCI ESCALATION FROM OCT 2006 -> NOV 2018
BUILDING SUPERSTRUCTURE	112,000	CF	\$ 8.00	\$ 1,232,076	\$ -	\$ -	USE \$8.00 PER CF FOR BUILDING COSTS - BCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 15%	1	LS	\$ 505,000	\$ 505,000	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
ELECTRICAL COSTS - 12%	1	LS	\$ 404,000	\$ 404,000	\$ -	\$ -	
INSTRUMENTATION - 5%	1	LS	\$ 168,400	\$ 168,400	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 67,400	\$ 67,400	\$ -	\$ -	
PUMPS - 450 HP	4	EA	\$ -	\$ -	\$ 115,000	\$ 652,625	CCI ESCALATION FROM OCT 2006 -> NOV 2018
ELECTRICAL EQUIPMENT	1	LS	\$ -	\$ -	\$ 162,300	\$ 230,263	
24" MAGNETIC FLOWMETERS	2	EA	\$ -	\$ -	\$ 20,300	\$ 57,601	
36" FLOW CONTROL PLUG VALVES	3	EA	\$ -	\$ -	\$ 48,800	\$ 207,705	
INSTRUMENTATION	1	LS	\$ -	\$ -	\$ 371,300	\$ 526,782	
MONORAILS & HOISTS CONVEYOR/BAR SCREEN IMPROVEMENTS - 2004 - PER DELCORA REPORT	1	LS	\$ 26,490	\$ 41,575	\$ 146,605	\$ 230,091	CCI ESCALATION FROM JUL 2004 -> NOV 2018
HARMONIC FILTERS	1	LS			\$ 135,245	\$ 176,045	CCI ESCALATION FROM NOV 2009 -> NOV 2018
INTRUMENTATION & CONTROL UPGRADE	1	LS			\$ 256,784	\$ 303,708.99	CCI ESCALATION FROM MAR 2013 -> NOV 2018
CONVEYOR/BAR SCREENS IMPROVEMENTS	1	LS	\$ -	\$ -	\$ 816,146	\$ 864,455	CCI ESCALATION FROM FEB 2017 -> NOV 2018
CDPS FORCE MAIN	10,032	LF	\$ 1,033	\$ 13,489,341			CCI ESCALATION FROM NOV 2009 -> NOV 2018
<b>TOTAL CENTRAL DELAWARE PUMP STATION</b>				\$ 18,041,755		\$ 3,335,819	\$ 21,377,574

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STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
EDGMONT TOWNSHIP

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<b>BRIDLE PUMP STATION (EPS-1)</b>							
SITE WORK	1	LS	\$ 347,400	\$ 395,050	\$ 130,000	\$ 147,831	
ELECTRICAL	1	LS			\$ 296,284	\$ 336,923	
SHARED ELECTRICAL COSTS	1	LS			\$ 90,786	\$ 103,238	
<b><u>RUNNYMEADE PUMP STATION (EPS-2)</u></b>							
SITE WORK	1	LS	\$ 390,500	\$ 444,062	\$ 155,000	\$ 176,260	
ELECTRICAL	1	LS			\$ 347,983	\$ 395,713	
SHARED ELECTRICAL COSTS	1	LS			\$ 106,628	\$ 121,253	
<b><u>DREAM VALLEY PUMP STATION (EPS-3)</u></b>							
SITE WORK	1	LS	\$ 153,000	\$ 173,986	\$ 40,000	\$ 45,487	
ELECTRICAL	1	LS			\$ 84,395	\$ 95,971	
SHARED ELECTRICAL COSTS	1	LS			\$ 25,860	\$ 29,407	
SANITARY SEWERS	1	LS	\$ 3,541,554	\$ 4,027,325			
<b>TOTAL EDGMONT TWP COLLECTION SYSTEM</b>				\$ 5,040,423		\$ 1,452,085	\$ 6,492,508

CCI ESCALATION  
FROM JUL 2014 ->  
NOV 2018



STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
ROSE VALLEY WASTEWATER FACILITIES

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<b>ROSE VALLEY WASTEWATER FACILITIES</b>							
REMAINING BUILDING	3,200	CF	\$ 8.00	\$ 35,202			USE \$8.00 PER CF FOR BUILDING COSTS - BCI ESCALATION FROM OCT 2006 -> NOV 2018
<b>OLD MILL PUMP STATION 0.4 MGD</b>							
CONCRETE STRUCTURES	9,626	CF	\$ 13.50	\$ 184,368	\$ -	\$ -	USE \$13.50 PER CF FOR STRUCTURE - CCI ESCALATION FROM OCT 2006 -> NOV 2018
BUILDING SUPERSTRUCTURE	4,000	CF	\$ 8.00	\$ 44,003	\$ -	\$ -	USE \$8.00 PER CF FOR BUILDING COSTS - BCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 15%	1	LS	\$ 34,300	\$ 34,300	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
ELECTRICAL COSTS - 12%	1	LS	\$ 27,500	\$ 27,500	\$ -	\$ -	
INSTRUMENTATION - 5%	1	LS	\$ 11,500	\$ 11,500	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 4,600	\$ 4,600	\$ -	\$ -	
PUMPS & INSTRUMENTATION	1	LS	\$ -	\$ -	\$ 54,900	\$ 77,889	CCI ESCALATION FROM OCT 2006 > NOV 2018
<b>BROOKHAVEN PUMP STATION 0.095 MGD</b>							ASSUMED SIMILAR IN SIZE TO 8TH STREET PS.
CONCRETE STRUCTURES	1,605	CF	\$ 18.30	\$ 41,671	\$ -	\$ -	USE \$18.50 PER CF FOR STRUCTURE - CCI ESCALATION FROM OCT 2006 -> NOV 2018
BUILDING SUPERSTRUCTURE	3,000	CF	\$ 8.00	\$ 33,002	\$ -	\$ -	USE \$8.00 PER CF FOR BUILDING COSTS - BCI ESCALATION FROM OCT 2006 -> NOV 2018
PIPING @ 15%	1	LS	\$ 11,300	\$ 11,300	\$ -	\$ -	CALCULATED FROM ESCALATED BASE
ELECTRICAL COSTS - 12%	1	LS	\$ 9,000	\$ 9,000	\$ -	\$ -	
INSTRUMENTATION - 5%	1	LS	\$ 3,800	\$ 3,800	\$ -	\$ -	
SITE WORK - 2%	1	LS	\$ 1,500	\$ 1,500	\$ -	\$ -	
PUMPS & INSTRUMENTATION	1	LS	\$ -	\$ -	\$ 30,500	\$ 43,272	CCI ESCALATION FROM OCT 2006 > NOV 2018
<b>LONG POINT EJECTOR STATION</b>							ASSUMED SIMILAR IN SIZE TO 8TH STREET PS.

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STATEMENT OF VALUES  
REPLACEMENT COSTS  
SEWAGE TREATMENT AND OTHER FACILITIES  
POCOPSON TOWNSHIP

APPRAISAL - NOVEMBER, 2018  
ENR CCI = 11184  
ENR BCI = 6093

DESCRIPTION	QUANTITY	UNIT	STRUCTURES UNIT PRICE	TOTAL STRUCTURES	EQUIPMENT UNIT PRICE	TOTAL EQUIPMENT	REFERENCE
<u>POCOPSON TOWNSHIP</u>							CCI ESCALATION FROM APR 2008 -> NOV 2018
<u>RIVERSIDE WWTP (0.045 MGD)</u>							
INFLUENT PUMP STATION	1	LS	\$ 26,000	\$ 35,846	\$ 23,816	\$ 32,835	
TREATMENT SYSTEM	1	LS	\$ 250,000	\$ 344,675	\$ 136,284	\$ 187,895	
SPRAY SYSTEM	1	LS			\$ 6,500	\$ 8,962	
GENERATOR W/ FUEL TANK	1	LS			\$ 31,495	\$ 43,422	
MISC ELECTRICAL AND INSTRUMENTATION EQUIPMENT	1	LS			\$ 27,678	\$ 38,160	
<u>CORRINE VILLAGE WWTP (0.020 MGD)</u>							
INFLUENT PUMP STATION	1	LS	\$ 26,000	\$ 35,846	\$ 23,816	\$ 32,835	
TREATMENT SYSTEM	1	LS	\$ 250,000	\$ 344,675	\$ 136,284	\$ 187,895	
SPRAY SYSTEM	1	LS			\$ 6,500	\$ 8,962	
GENERATOR W/ FUEL TANK	1	LS			\$ 31,495	\$ 43,422	
MISC ELECTRICAL AND INSTRUMENTATION EQUIPMENT	1	LS			\$ 27,678	\$ 38,160	
<u>COLLECTION SYSTEM</u>							
GRAVITY SEWERS	13,000	LF	\$ 430	\$ 5,590,000			UNIT COST FROM CHESTER SYSTEM FOR 8-IN & 10-IN SEWERS ESCALATED TO NOV 2018
FORCE MAINS	4,500	LF	\$ 205	\$ 1,311,791			REPLACEMENT BID APR 2007 - CCI ESCALATION FROM APR 2007 -> NOV 2018
TOTAL POCOPSON TOWNSHIP				\$ 7,662,833		\$ 622,546	\$ 8,285,379

SPRINGHILL FARMS COST ESTIMATE							11/20/2019
		Unit cost	Unit	net cost	CCI factor	1988 cost	Comments
Estimate from Dutchland*		\$1,218,380	LS	\$913,785.00	0.450	\$411,458.19	*- Similar system for 220,000 GPD, reduce by 25% for smaller size, Thronbury 2015
Installation (50%)			LS	\$456,892.50	0.450	\$205,729.10	
Building (32' x 20' = 640 SF)		\$103	SF	\$65,920.00	0.691	\$45,550.72	From Limerick 2002
Plumbing/ water piping		\$6,900	LS	\$6,900.00	0.691	\$4,767.90	From Limerick 2002
HVAC		\$7,500	LS	\$7,500.00	0.691	\$5,182.50	From Limerick 2002
Electrical		\$36,400	LS	\$36,400.00	0.691	\$25,152.40	From Limerick 2002
Emergency Generator		\$38,500	LS	\$38,500.00	0.691	\$26,603.50	From Limerick 2002
Total						\$724,444.31	use \$725,000
CCI Adjustment		2015 to 1988		0.450			
		2002 to 1988		0.691			



# Dutchland

## INCORPORATED

160 Route 41  
Gap, PA 17527-9410

Phone 717.442.8282  
Fax 717.442.9330

[www.dutchlandinc.com](http://www.dutchlandinc.com)

### **BUDGETARY PROPOSAL**

November 2, 2015

Pennoni Associates Inc.  
One Drexel Plaza  
3001 Market Street  
Philadelphia, PA 19104

Attn: Tim Daily, P.E.

#### **RE: Thornbury WWTP – 220k GPD Option – Thornbury, PA**

Dutchland, Inc. specializes in designing, manufacturing, and constructing wastewater treatment plants. Plants manufactured by Dutchland, Inc. include high strength precast concrete structures as well as high quality equipment to provide a superior, low maintenance system.

For additional information about Dutchland, Inc. and the products we manufacture, you may request a Product Information Catalog or view our web site at [www.dutchlandinc.com](http://www.dutchlandinc.com).

Accordingly, we are pleased to offer the following quote:

#### **Proposal #E15112-2**

##### **Scope of Work:**

Manufacture, deliver, and install (crane included) the following wastewater treatment plant into a prepared excavation and stone sub-base. All site work, including site access and dewatering, electrical work, and control building construction is to be provided by others. Scope is based on Dutchland, Inc.'s standard process design for biological nutrient reduction for typical residential influent and effluent wastewater characteristics.

1. One (1) precast post-tensioned concrete rectangular wastewater treatment plant designed to process 220,000 GPD of wastewater with the following standard influent residential wastewater characteristics:
  - A. CBOD .....300 mg/l
  - B. TSS .....250 mg/l
  - C. NH<sub>3</sub>-N.....40 mg/l
  - D. TKN .....45 mg/l
  - E. Phosphorus .....7 mg
  - F. pH.....6-9 SU
2. The wastewater treatment plant shall be designed to produce the following results (average monthly) based on the assumed wastewater fluid temperatures of 25°C in summer and 10°C in winter:
  - A. CBOD .....30 mg/l
  - B. TSS .....25 mg/l
  - C. NH<sub>3</sub>-N (Ammonia).....4.0 mg/l
  - D. Phosphorus .....2 mg/l
  - E. Fecal Coliform.....200/100 ml
  - F. Dissolved Oxygen.....min. 5.0 mg/l
  - G. pH.....6-9 SU

Specializing  
In  
Designing  
Manufacturing  
And  
Constructing  
  
Waste  
Water  
Treatment  
Plants  
  
Water  
Storage  
Tanks  
  
Pumping  
Stations  
  
Custom  
Precast  
Concrete  
Structures

3. The wastewater treatment plant shall be equipped with the following compartments and approximate effective capacities:
  - A. Equalization ..... 25,130 Gallons
  - B. Equalization 2 (Future Anoxic) ..... 80,425 Gallons
  - C. Aeration ..... 196,035 Gallons
  - D. Clarifier ..... 41,140 Gallons
  - E. Sludge Holding ..... 160,220 Gallons
  - F. UV ..... 6,000 Gallons
4. Plant performance criteria:
 

The process design used to achieve the stated effluent discharge parameters is based on the following criteria. The Owner shall be responsible to ensure the following criteria are met at all times.

  - A. Influent loadings to the facility are as stated within the process checklist received by Dutchland, Inc.
  - B. The plant design is configured for maximum Gallons Per Day (GPD).
  - C. The runoff period shall be 16 hours per day or greater.
  - D. Wastewater entering the facility contains the normal standard range of characteristics for standard domestic wastewater:
    - 1) Alkalinity - 100 to 300 mg/l
    - 2) P.H. - 6-9 SU
    - 3) Calcium - 100 mg/l
    - 4) Magnesium - 15 mg/l
    - 5) No excess metals have been considered in the design.
    - 6) COD will be no greater than 2 times the BOD value.
  - E. Operating temperatures of the wastewater within the treatment system will be maintained between 10°C in the wintertime and 25°C in the summer. Additional measures may need to be taken by the Owner to ensure that the wastewater does not fall below 10°C.
  - F. A steady state of influent flow to the treatment process will be utilized through the flow equalization tank.
  - G. Any infiltration/inflow must be accounted for in the maximum GPD.
  - H. The biomass within the treatment process will be maintained in accordance with standard operating procedures for activated sludge extended aeration process guidelines.
  - I. Influent loadings of higher organic strengths, influent containing toxic substances, and hydraulic overloading of the treatment system will impact the treatment process and result in a decrease of the ability to achieve the discharge parameters as stated within this proposal.
  - J. An operator will be employed who is knowledgeable and experienced with a treatment plant of this size and type of process.
5. Design calculations stamped by a registered engineer from the Commonwealth of Pennsylvania.
6. Ten (10) year structural warranty on the tank structure.
7. One (1) year warranty on all mechanical equipment.
8. All pipe within the WWTP structure will be provided and installed by Dutchland, Inc. Influent and effluent lines to be provided by the G.C. Aeration lines and chemical feed lines from the control building are not included.
9. Prevailing wages for all onsite labor.
10. PRECAST POST-TENSIONED CONCRETE RECTANGULAR WASTEWATER TREATMENT PLANT:
  - A. One (1) 68'-10" length x 72'-10" width cast-in-place reinforced concrete base slab consisting of a 16" thickness, 4,000-PSI. No slope in basin floors.



- B. WWTP Tank with a common wall:
    - 1) One (1) Equalization Basin: 15'-0" length x 16'-0" width, inside dimensions.
    - 2) Two (2) Future Anoxic Basins: 24'-0" length x 16'-0" width, inside dimensions.
    - 3) Two (2) Aeration Basins: 24'-0" length x 39'-0" width, inside dimensions.
    - 4) Four (4) Clarification Basins: 12'-0" length x 12'-0" width, inside dimensions.
    - 5) One (1) Sludge Holding Basin: 15'-0" length x 51'-0" width, inside dimensions.
  - C. Precast post-tensioned concrete walls, 16'-0" in height from the top of the base slab to the top of the precast walkway, with a 10" minimum thickness. 5,000-PSI minimum concrete compressive strength.
  - D. 4' wide x 12" thickness full perimeter precast post-tensioned concrete walkways around the top of the basins. 5,000-PSI minimum concrete compressive strength.
  - E. Cast-in wall penetrations as required.
  - F. Base joint sealant.
  - G. Reinforcement is to be standard, non-epoxy coated.
  - H. All labor, material, and equipment necessary to pour base and erect tank structure.
11. EQUALIZATION EQUIPMENT, INCLUDING:
- A. Duplex submersible equalization pumps, including necessary 2" PVC plumbing and valves.
  - B. Pump retrieval system, including:
    - 1) Stainless steel slide rail system.
    - 2) One (1) adjustable reach 300 lb. stainless steel hoist with stainless steel hoist socket and stainless steel lifting cable with ball.
  - C. Pump floats.
  - D. Aluminum bar screen and drying deck.
  - E. Aluminum flow regulation box.
  - F. PVC transfer pipe.
  - G. Necessary air piping, including valves, unions, branch header, and diffusers.
12. AERATION EQUIPMENT, INCLUDING:
- A. Stainless steel diffuser system.
  - B. Skimmer return piping.
  - C. Necessary air piping, including valves, unions, branch header, and diffusers.
13. CLARIFIER EQUIPMENT, INCLUDING:
- A. Four (4) airlift pumps including sludge return/sludge waste lines with necessary valves and air supply.
  - B. Stainless steel rotating skimmer with 6" pipe assembly.
  - C. Influent scum baffles (concrete).
  - D. Effluent aluminum adjustable weirs with aluminum scum baffles.
  - E. One (1) hopper scraper bar.
  - F. 8" PVC transfer line to UV tank piping.
14. SLUDGE HOLDING EQUIPMENT, INCLUDING:
- A. Overflow port from sludge holding to equalization.
  - B. Aeration piping, including valves, unions, and diffusers.
  - C. Sludge draw pipe with hose coupler and dust cap.
  - D. Sludge decant pump, necessary PVC draw pipe, slide rail, and retrieval system. Controls will consist of an on/off switch.
15. UV EQUIPMENT & POST AERATION, INCLUDING:
- A. One (1) 6'-10" x 15'-8" modular structure with 10' tall walls.
  - B. One (1) stainless steel transition box to UV system.
  - C. One (1) ultraviolet system, including controls.
  - D. Necessary air piping, including valves, unions, and diffusers.
  - E. Aluminum 90° V-notch meter box.
  - F. Ultrasonic flow meter, sensor, and chart recorder.
  - G. Aluminum UV platform with aluminum ladder.

16. CHEMICAL FEED SYSTEMS (ALUM FOR PHOSPHORUS CONTROL & SODA ASH FOR PH BALANCE), INCLUDING:
  - A. Four (4) chemical pumps (capable of pumping 45 GPD, with variable output adjustment).
  - B. 250 ft. of 1/2" dia. chem tubing inside 250 ft. of 2" PVC conduit supplied by Dutchland, Inc., but installed by G.C.
  - C. Two (2) 50-gallon polyethylene drums with lid with a 65-gallon secondary containment tanks.
  - D. 1/20 hp chem mixer.
17. AIR SUPPLY EQUIPMENT, INCLUDING:
  - A. Duplex 15 hp motors with duplex 56 URAI positive displacement blowers for Aeration tanks.
  - B. Duplex 15 hp motors with simplex 56 URAI Roots Dresser positive displacement blower for EQ, Sludge Holding, and Clarifier tanks.
  - C. Simplex 15 hp motor with simplex 56 URAI Roots Dresser positive displacement blower for spare back-up.
  - D. Blower inlet filters. **Note:** If blower intakes are to be housed within the control building, provisions will need to be made for proper ventilation and sound attenuation.
  - E. Blower inlet and discharge silencers.
  - F. Blower check valves, pressure relief valves, and flex connectors.
  - G. Necessary interconnection valves (to allow a duplex blower to provide air for the simplex blower in case it needs maintenance).
  - H. Necessary motor/blower transmissions with belts and belt guards.
  - I. Adjustable motor bases (to provide belt tension).
  - J. Motor/blower stand (painted steel).
  - K. Ductile iron (for pipe above 4" dia.), galv. steel (for pipe 4" dia. and below) air piping in the blower room and stubbing outside the blower room. Control Building penetrations, wall sleeves and Link Seals supplied by G.C.
18. AERATION PIPE AND DIFFUSER SYSTEM, INCLUDING:
  - A. Inlet/drop line assembly.
  - B. Air header assembly.
  - C. Manifold assembly.
  - D. Diffuser assembly including diffuser mounts.
19. INSTRUMENTATION AND CONTROLS, INCLUDING:
  - A. One (1) multiplex control panel housing controls for the Blowers and EQ Pumps.
    - 1) Control systems for the blower motors, including:
      - a) Indoor rated control panel(s).
      - b) Breakers.
      - c) Magnetic motor starters.
      - d) H-O-A (Hand-Off-Auto) controls.
      - e) Elapsed time meters.
      - f) Run indicator lights.
      - g) Alternator (for duplex blowers).
    - 2) Control system for EQ pumps, including:
      - a) Pump off, pump on, high level alarm/lag pump on float set-up.
      - b) H-O-A (Hand-Off-Auto) controls.
      - c) Duplex elapsed time meters.
      - d) Magnetic contactors.
      - e) Audible/visual high level alarms.
20. ELECTRICAL WORK: All electrical work to be by others.
21. SITE EXCAVATION: All site excavation, including backfill and trenching, to be by others.
22. CONTROL BUILDING: Control Building to be by others.

23. FENCE: Fence to be by others.
24. LAB EQUIPMENT: Lab equipment to be by others.
25. Dutchland, Inc. is proposing a hydraulic crane that must be close enough to set the proposed precast concrete structure with a maximum of one (1) set for structure.
26. Provide complete prints and equipment submittals for the WWTP structure. The Buyer will be responsible to provide an engineer to submit this information to DEP (and to provide the engineer's stamp). A Design Report will be provided to justify the design of the plant, upon request.
27. Coordinate site work with the Buyer's excavator.
28. Provide complete Operation & Maintenance Manuals.
29. One (1) start-up session including a detailed report with electrical service check, equipment amperage readings, equipment rotation check, lubrication check, sequence/alternating check, motor timers set, valves set, etc.

**TOTAL (For Above Scope)..... \$1,218,380.00**  
**Taxes not included.**

- No items other than those mentioned in the above scope are included.
- Dutchland, Inc. will install only that which Dutchland, Inc. supplies.
- Proposal is based on prevailing wage rates and Dutchland, Inc. standard wages.
- Dutchland, Inc. is responsible for plumbing interconnections only for items supplied by Dutchland, Inc.

### **OPTIONAL ITEMS**

#### **Option 1:**

#### **Scope of Work: Add Equipment to Upgrade to an MLE Process**

1. ANOXIC EQUIPMENT, INCLUDING:
  - A. Two (2) anoxic mixers with stainless steel shafts and impellers.
  - B. Mixer controls.
  - C. One (1) stainless steel hoist socket per mixer system.
  - D. 2" x 2" square stainless steel slide rail system and 1/4" stainless steel lift chain.
  - E. Sludge return plumbing.
  - F. Two (2) submersible recirculation pumps on VFD's, located in the Aeration tank, including necessary PVC plumbing and valves, with same retrieval systems as EQ pumps.
2. NITRATE PROBE, INCLUDING:
  - A. One (1) nitrate probe with controller and mounting hardware.
3. DISSOLVED OXYGEN PROBE, INCLUDING:
  - A. One (1) dissolved oxygen probe per train located in an aeration tank/compartments, cable, one (1) controller capable of handling two (2) D.O. probes wired to Aeration blowers and fitted with VFD's for fine D.O. control, mounting kit, and sun shield.
4. CHEMICAL FEED SYSTEMS (CARBON FOR DENITRIFICATION), INCLUDING:
  - A. Two (2) chemical pumps (capable of pumping 45 GPD, with variable output adjustment).
  - B. 250 ft. of 1/2" dia. chem tubing inside 250 ft. of 2" PVC conduit supplied by Dutchland, Inc. but installed by G.C.
  - C. One (1) 50-gallon polyethylene drums with lid with a 65-gallon secondary containment tanks.
  - D. 1/20 hp chem mixer.

**OPTION 1 ADD ON:..... \$103,425.00**  
**Taxes not included.**

### **EXCLUSIONS**

1. Full site access.
2. All site excavation including backfill and trenching.
3. Dewatering of excavation.
4. Rock removal and/or blasting.
5. Stone sub-base for precast structures.
6. Interior and exterior coatings of tanks.
7. All electrical installation.
8. All piping three (3') feet beyond the proposed precast concrete structures.
9. Water supply for construction and testing of tanks, pumps, and equipment.
10. Taxes.
11. All costs associated with wintertime construction.
12. Permits, easements, right-of-way agreements.
13. Engineering and approval fees.
14. Wastewater test equipment.
15. Pipe testing.
16. Chemicals for chemical feed systems.
17. All bonds. This includes performance and payment bonds, state and local highway bonds, and road bonds.

### **ITEMS BY OTHERS, BUT NOT LIMITED TO AND SITE INSTRUCTIONS**

1. Complete traffic control if Dutchland, Inc. is required to off-load in a street or area where other vehicles are present.
2. Site security as required to keep non-essential personnel from accessing the site for the sake of safety and property damage prevention.
3. Survey and layout complete with the corners of the plant and control building established (off-set so they are not in the way of the excavator), and an elevation pin.
4. All underground utilities marked (Dutchland, Inc. shall not be held responsible for hitting unmarked underground utilities).
5. The Buyer's representative shall be on the site at the beginning of construction to verify layout, elevations, etc.
6. The site shall be kept free of water at all times.
7. Influent sewage lines and effluent sewage lines (including headwall structures).
8. Incoming power and connection to all Dutchland, Inc. control panels.
9. Telephone service to the control building, and telephone (if required).
10. Wastewater testing equipment.

Thank you for considering Dutchland, Inc. for your project.

Sincerely,



Mike Schmidt  
Sales  
Dutchland, Inc.

## ESCROW TABULATION

**GILMORE & ASSOCIATES, INC.**  
350 BUTLER AVENUE  
NEW BRITAIN, PA 18901

**Client:** Limerick Township Municipal Authority  
**Project:** Heritage Hills Golf Club  
**File No.:** 00-0414

**Date:** 12/12/02  
**Revised:** 12/13/02

### **HERITAGE HILLS PUMP STATION**

Item No.	Construction Items	Units	Quantity	Unit Price	Total Amount
1	Sitework, Excavation, Backfill	EA	1	\$19,000.00	\$19,000.00
2	Mahole #8.1, Complete	EA	1	\$3,000.00	\$3,000.00
3	Influent Piping, 12" PVC	EA	20	\$34.45	\$689.00
4	Wet Well Complete w/ Hatches etc.	EA	1	\$26,000.00	\$26,000.00
5	Wet Well Mech. (6" pipe, supports, etc.)	EA	1	\$12,000.00	\$12,000.00
6	Flygt Sewage Pumps, Rails, Controls, etc.	EA	1	\$56,000.00	\$56,000.00
7	Muffin Monster Sewage Grinder	EA	1	\$29,500.00	\$29,500.00
8	Valve Chamber Complete w/ Hatches etc.	EA	1	\$9,500.00	\$9,500.00
9	Valve Chamber Mech. (6" pipe, sump pump, etc.)	EA	1	\$13,461.00	\$13,461.00
10	Misc. Mechanical (hoist, etc.)	EA	1	\$7,500.00	\$7,500.00
11	Hydraulic Piping - Grinder	EA	1	\$2,800.00	\$2,800.00
12	Misc. Yard Piping, Valves, Fittings	EA	1	\$4,500.00	\$4,500.00
13	Control Building Structure, Complete	EA	1	\$33,650.00	\$33,650.00
14	Odor Control Sys. w/ Pad, Tank, Pump, Chems, etc.	EA	1	\$10,200.00	\$10,200.00
15	Water Service/Plumbing/Drains/etc.	EA	1	\$6,900.00	\$6,900.00
16	HVAC	EA	1	\$7,500.00	\$7,500.00
17	Electrical Construction	EA	1	\$36,400.00	\$36,400.00
18	Dialer System - Raco	EA	1	\$3,000.00	\$3,000.00
19	Emergency Gen. w/ Pad, Ducts, Muffler, etc.-150kW	EA	1	\$38,500.00	\$38,500.00
20	Site Fencing	EA	1	\$8,800.00	\$8,800.00
21	Start-Up and Testing/Closeout/Submittals/Admin.	EA	1	\$2,500.00	\$2,500.00
22	As Built Plans	EA	1	\$2,000.00	\$2,000.00

### **Summary of Escrow Account**

Total Construction (100%)	\$333,400.00
Total Contingency (10%)	\$33,340.00
Inspection Escrow	\$33,340.00
<b>Grand Total to be Escrowed for Sanitary Sewer Construction</b>	<b>\$400,080.00</b>

Pump Station 33						
						11/20/2019
		Unit cost	Unit	net cost	CCI factor	2014
						Comments
Godwin Pump M150		\$5,000.00	LS	\$5,000.00	0.875	\$4,375.78
shed		\$3,500.00	LS	\$3,500.00	0.875	\$3,063.05
concrete pad (12 x 16)		\$20	SF	\$3,840.00	0.875	\$3,360.60
Electrical (12%)		\$1,020	LS	\$1,020.00	0.875	\$892.66
Instrumentation (5%)		\$425	LS	\$425.00	0.875	\$371.94
site work and piping (10%)		\$850	LS	\$850.00	0.875	\$743.88
total						\$12,807.91
						use \$12,900
CCI Adjustment		2019 to 2014			9807/11206 = 0.875	

# SUMMARY OF 1974 BOND ISSUE

% of  
PROJECT COSTS

	Eastern Area	Western Area	Total	EDC / WDC	
I. <u>Preliminary Expenses</u>					
1. Administration	\$ 26,000	\$ 99,000	\$ 125,000	20.80	79.20
2. Interest on Bank Loan	27,000	103,000	130,000	20.77	79.23
Total Preliminary Expenses	\$ 53,000	\$ 202,000	\$ 255,000	20.78	79.22
II. <u>Construction &amp; Acquisition</u>					
1. <u>Construction Contracts</u>					
Contract No. 1 - Site Preparation	\$	\$ 5,088,842	\$ 5,088,842		100.00
Contract No. 2 - Structural & Mechanical		25,772,773	25,772,773		100.00
Contract No. 3 - Heating		836,000	836,000		100.00
Contract No. 4 - Plumbing		157,000	157,000		100.00
Contract No. 5 - Electrical		2,296,870	2,296,870		100.00
Contract No. 6 - F.M. - Sec. 1	1,220,900		1,220,900	100.00	
Sec. 2	1,083,065		1,083,065	100.00	
Sec. 3	1,016,019		1,016,019	100.00	
Contract No. 7 - P.S. - Struct. & Mech.	2,356,650		2,356,650	100.00	
Contract No. 8 - P.S. - Electrical	355,614		355,614	100.00	
Contract No. 9 - P.S. - HVAC & Plumb.	79,419		79,419	100.00	
Contract No. 10 - F.M. - Sec. 4	1,540,733		1,540,733	100.00	
Total Construction Contracts	\$ 7,652,400	\$34,151,485	\$41,803,885	18.31	81.69
2. Contingencies (5%) <i>100,000 + 392,100W TO WDC</i>	382,620	1,707,574	2,090,194	18.31	81.69
3. <u>Acquisition of Chester Facilities</u>					
(a) Treatment Plant (Land: See below.)		460,352	460,352		100.00
(b) Other		762,272	762,272		100.00
Total Construction & Acquisition	\$ 8,035,020	\$37,081,683	\$45,116,703	17.81	82.19
III. <u>Engineering</u>					
1. Plans, Specs, etc.	\$ 425,000	\$ 1,992,000	\$ 2,417,000	17.58	82.42
2. Surveys	25,000	20,000	45,000	35.56	44.44
3. Borings	4,000	2,000	6,000	66.67	33.33
4. Soil Testing		16,000	16,000		100.00
5. Inspection	65,000	300,000	365,000	17.81	82.19
6. Financial Report	5,000	7,000	12,000	41.67	58.33
7. Rights-of-Way	15,000		15,000	100.00	
8. Operation Manual	2,000	10,000	12,000	16.67	83.33
9. Preliminary Design of Next Phase <i>10 WDC</i>		150,000	150,000		100.00
Total Engineering	\$ 541,000	\$ 2,497,000	\$ 3,038,000	17.81	82.19
IV. <u>Land and Rights-of-Way</u>	\$ 50,000	\$ 836,570	\$ 886,570	5.64	94.36
V. <u>Estimated Initial Contribution for Phila. Plant</u>	\$ 2,000,000		\$ 2,000,000	100.00	
VI. <u>Expenses During Construction, Authority Administration, Working Capital, etc.</u>	\$ 139,360	\$ 530,640	\$ 670,000	20.80	79.20
VII. <u>Financing</u>					
1. Bond Counsel	\$ 15,600	\$ 59,400	\$ 75,000	20.80	79.20
2. Local Counsel	15,600	59,400	75,000	20.80	79.20
3. Printing (bonds, indenture, official statement, etc.)	4,200	20,800	25,000	16.80	83.20
4. Trustee's Fee	208	792	1,000	20.80	79.20
5. Bond Discount	94,300	285,700	380,000	24.74	75.26
Total Financing	\$ 129,908	\$ 426,092	\$ 556,000	24.36	75.64
VIII. <u>Capitalized Items</u> <i>Debt Service Fund</i>					
1. Interest during construction	\$ 293,437	\$ 1,760,620	\$ 2,054,057	14.29	85.71
2. Debt Service Reserve Fund	368,750	1,106,250	1,475,000	25.00	75.00
Total Capitalized Items	\$ 662,187	\$ 2,866,870	\$ 3,529,057	18.76	81.24
<u>GROSS PROJECT COST</u>	<u>\$11,610,475</u>	<u>\$44,440,855</u>	<u>\$56,051,330</u>	<u>20.71</u>	<u>79.29</u>
IX. <u>Deductions</u>					
1. Federal Grants	\$ 6,450,000	\$28,800,000	\$35,250,000		
2. Interest Earned on Indenture Funds	210,475	640,855	851,330	24.72	75.28
Total Deductions	\$ 6,660,475	\$29,440,855	\$36,101,330		
<u>AMOUNT TO BE FINANCED</u>	<u>\$ 4,950,000</u>	<u>\$15,000,000</u>	<u>\$19,950,000</u>		

TABLE I-A

TABLE II

## DELAWARE COUNTY REGIONAL WATER QUALITY CONTROL AUTHORITY

## 1978 BOND ISSUE

WTP  
chest Con U  
chest Collect. 137,000  
448,800 22.37  
2004800

## EASTERN CONVEYANCE SYSTEM

	EASTERN	WESTERN	TOTAL
<u>Construction</u>			
<u>Pump Stations</u>			
Contract No. 18A - Structural and Mechanical	\$4,553,081	-	\$ 4,553,081
188 - Plumbing	61,115	-	61,115
18C - HVAC	73,615	-	73,615
18D - Electrical	586,260	-	586,260
Contract No. 20 - Force Main	2,774,989	-	2,774,989
<u>Total Construction</u>	<u>\$8,049,060</u>	-	<u>\$ 8,049,060</u>
<u>Engineering</u>			
Plans, Specifications and Observation of Construction	455,000	-	455,000
Inspection	96,000	-	96,000
Surveys and Stakeouts	80,000	-	80,000
Borings	45,200	-	45,200
Facilities Plan	36,200	-	36,200
Operation and Maintenance Manuals	85,000	-	85,000
Rights-of-Way	15,000	-	15,000
Infiltration/Inflow - Phase II M A	250,000	-	250,000
User Charge/ICR System	7,500	-	7,500
Archaeological Survey	28,000	-	28,000
<u>Total Engineering</u>	<u>\$1,097,900</u>	-	<u>\$ 1,097,900</u>
<u>Land and Rights-of-Way</u>	<u>\$ 250,000</u>	-	<u>\$ 250,000</u>
<u>Contingencies</u>	<u>\$ 402,440</u>	-	<u>\$ 402,440</u>
<u>SUBTOTAL - EASTERN CONVEYANCE SYSTEM</u>	<u>\$9,799,400</u>	-	<u>\$ 9,799,400</u>

## OTHER MISCELLANEOUS PROJECTS

(Includes Construction and Engineering)

Capital Equipment Purchases <i>16 E</i>	\$ 21,625	\$ 64,875	\$ 86,500
Rehabilitation Broomall Street P.S. <i>425</i>	-	22,800 <i>CY</i>	22,800
Morton Avenue Sewer Replacement	-	168,800 <i>C I</i>	168,800
Abandonment of Chester Force Main <i>31</i>	-	114,200 <i>CY</i>	114,200
Demolition and Rehabilitation of Clarifier T-18 <i>2Y</i>	-	610,000 <i>W F</i>	610,000
WRTP - Pilot Plant Study <i>675-04</i>	-	351,000	351,000
Primary Tank Rehabilitation	-	428,000	428,000
Lower Chichester Meter Pit	-	30,000	30,000
7th Street Sewer	-	125,000 <i>C I</i>	125,000
22nd Street Sewer	-	155,000 <i>C I</i>	155,000
Phase II - I/I Analysis <i>Chester. EIC</i>	-	800,000	800,000
Contingency	-	210,000	210,000
<u>Total Other Miscellaneous Projects</u>	<u>\$ 21,625</u>	<u>\$3,079,675</u>	<u>\$ 3,101,300</u>

## SUBTOTAL

## GOING, LEGAL AND MISCELLANEOUS

## CAPITALIZED ITEMS

Interest During Construction	\$ 170,200	\$ 195,741	\$ 365,941
Debt Service Reserve	213,900	246,100	460,000
<u>Total Capitalized Items</u>	<u>\$ 384,100</u>	<u>\$ 441,841</u>	<u>\$ 825,941</u>

## PROJECT COSTS

Less: Federal Grants	\$7,160,000	\$ 863,200	\$ 8,023,200
1976 Funds Available <i>III A D E - VIII A =</i>	735,000	-0-	735,000
<u>TO BE FUNDED</u>	<u>\$2,403,850</u>	<u>\$2,766,150</u>	<u>\$ 5,170,000</u>

46.50

53.50

100.00



DELAWARE COUNTY REGIONAL  
WATER QUALITY CONTROL AUTHORITY  
PROPERTY- PLANT- EQUIPMENT- BUILDING

SCHEDULE "C"

DECEMBER 31, 1976

<u>LAND-</u> Original Acquisition	\$ 836,570.00	
Chester Pump Station Land	<u>12,000.00</u>	
		\$ <u>848,570.00</u>
<u>TOTAL LAND</u>		
<u>PLANT:</u>		
Darby Creek Pump Station Completed 1976	\$ 9,366,696.59	
Chester Treatment Plant-Original Acquisition	460,352.00	
Chester Pump Station-Original Acquisition	124,014.00	
Chester Conveyance System-Original Acquisition	593,021.00	
Miscellaneous Costs-Original Acquisition	<u>3,500.00</u>	
		\$ <u>10,547,583.59</u>
<u>TOTAL PLANT COSTS</u>		\$ <u>148,052.50</u>
<u>OFFICE BUILDING</u>		
<u>EQUIPMENT:</u>		
Treatment Plant-Original Acquisition	\$ 17,387.07	
Equipment Acquired 1974	483.15	
Equipment Acquired 1975	5,986.97	
Equipment Acquired 1976	<u>1,475.00</u>	
		\$ <u>25,332.19</u>
<u>TOTAL EQUIPMENT</u>		
<u>PUMP STATION EQUIPMENT:</u>		
Acquired 1974	\$ 340.56	
Acquired 1975	292.00	
Acquired 1976 Pump Renovator	<u>8,931.00</u>	
		\$ <u>9,563.56</u>
<u>TOTAL PUMP STATION EQUIPMENT</u>		
<u>TOTAL PROPERTY- PLANT- EQUIPMENT- BUILDING</u>		\$ <u>11,579,101.84</u>

WESTERN REGIONAL TREATMENT PLANT

JANUARY, 1978

CONSTRUCTION & Engineering	Contract 1-WWTP Site Preparation BRENNEMAN	Contract 2-WWTP Struct. /Mech. BRENNEMAN	Contract 3-WWTP HVAC D. KEATING	Contract 4-WWTP Plumbing L. HACKBART	Contract 5-WWTP Electrical GERNGROSS CORP.	TOTAL
<u>CONSTRUCTION COSTS</u>						
Base Contract Price	\$5,068,300.44	\$27,223,526.00	\$846,016.03	\$160,950.71	\$2,694,994.64	\$35,993,786.82
Total Due to Date	5,068,300.44	27,167,766.00	840,114.03	157,610.82	2,638,895.46	35,872,686.75
Less Retainage	-0-	581,876.98	42,168.30	7,907.29	39,890.14	671,842.71
Net Amount Payable	5,068,300.44	26,585,889.02	797,945.73	149,703.53	2,599,005.32	35,200,844.04
Less Amount Previously Paid	5,068,300.44	26,585,889.02	797,945.73	149,703.53	2,585,205.32	35,187,044.04
Total Due This Month	-0-	-0-	-0-	-0-	13,800.00	13,800.00
Days Allowed in Contract	CONTRACT	CONTRACT	1100	850	1031	
Days Used to Date	CLOSED	CLOSED	1321	1321	1321	
% Time Elapsed	OUT	OUT	120%	155.4%	128%	
% Construction Completed	100%	100%	99%	98%	98%	99%

2. ENGINEERING COSTS

Construction Surveillance	\$ 160.63
Inspection	3,888.21
Surveys	
Rights of Way	
Operation Manual	5,322.57
Other	
Plant Start-up	8,855.88
<b>TOTAL ENGINEERING</b>	<b>\$18,227.29</b>

DELAWARE COUNTY REGIONAL WATER QUALITY CONTROL AUTHORITY  
CONSTRUCTION FUND FOR INITIAL PROJECT

REQUISITION BY AUTHORITY

(Not to be used for Philadelphia Contribution Account)

To: Girard Trust Bank, Trustee  
Philadelphia, Pennsylvania

No. 1157

Date \_\_\_\_\_

Attn: Corporate Trust Department

You are hereby requested to make disbursement of funds from the Construction Fund for the Project (*other than* moneys in the Philadelphia Contribution Account therein), held by you as Trustee under the Trust Indenture of this Authority dated May 1, 1974 securing its Sewer Revenue Bonds, to the payee, of the amount for the purpose set forth:

Payee: \_\_\_\_\_

Payee's Address: \_\_\_\_\_

Amount: \_\_\_\_\_

Purpose of Obligation: \_\_\_\_\_

(Unless otherwise stated, Trustee shall assume payment is made under terms of Construction Contract)

In connection therewith the Authority hereby certifies that the above amount is now due, that such obligation has been properly incurred by the Authority, is a proper charge against the above-named Construction Fund under the provisions of the aforesaid Trust Indenture, is unpaid, has not been the basis of any previous withdrawal, and that if this requisition is for payment under a construction contract, the Authority, with the consent of the Consulting Engineers, has not made any determination which is now in effect, to withhold payment of the amount being requisitioned, under the terms of the contract for such construction work.

DELAWARE COUNTY REGIONAL WATER  
QUALITY CONTROL AUTHORITY

By \_\_\_\_\_  
(Vice) Chairman

By \_\_\_\_\_  
(Assistant) Treasurer

Total Obligation to Payee named in Requisition

\$

Plus/Minus Change Orders

Amount paid to said Payee to date (including  
payment to be made pursuant to Requisition)

Amount of obligation remaining unpaid

\$

Total Payments in  
Requisition

\$ \_\_\_\_\_

Previous Balance

\$

Plus Interest earned,  
grant funds received,  
or other Receipts

Sub-Total

Previous Requisitions

\$ \_\_\_\_\_

Less this Requisition

Total Amount requisitioned

\$ \_\_\_\_\_

New Balance

\$ \_\_\_\_\_

VENDOR

## A. (The following certification is required if payment is made under a Construction Contract)

THE UNDERSIGNED, DOES HEREBY CERTIFY, that it has examined the documents and accounts covering the payment of obligations as requested in this requisition and reports of on-site job inspectors with respect thereto and that such obligations have been properly incurred, are now due and unpaid, and that insofar as such obligations were incurred for work, materials, supplies or equipment, according to the aforesaid reports such work was actually performed or such materials, supplies or items of equipment were actually installed in or about the construction of the Project, or delivered at the site of the work for that purpose, or delivered for fabrication at a place approved by the undersigned, covered by adequate insurance for fire and theft; and that all work done and materials, supplies or equipment furnished for which such obligations were incurred are in accordance with the plans and specifications provided for in the abovementioned Trust Indenture; that to the best of our knowledge there are no vendors', mechanics' or other liens or rights to liens or conditional sale or other title retention contracts upon or affecting any property with respect to which payment is requisitioned and which will not be discharged by such payment. This requisition hereby is certified as being correct and the payment approved as stated therein.

**BETZ ENVIRONMENTAL ENGINEERS, INC.**

By \_\_\_\_\_

B. (The following certification is required if payment **not** under Construction Contract).

I HEREBY CERTIFY that I have examined the documents and accounts covering the payment of obligations as requested in this requisition and that such obligations have been properly incurred and are a proper charge against the above-named Construction Fund under the provisions of the Trust Indenture of the Authority dated May 1, 1974, and the conditions precedent to the application of said moneys have been fulfilled. This requisition hereby is approved.

Date \_\_\_\_\_

\_\_\_\_\_  
Solicitor,  
**Delaware County Regional Water Quality Control  
Authority**

## C. (The following additional certification is required if payment is for lands, rights-of-way or other interests in real property).

I HEREBY CERTIFY that (based upon a review of title insurance, if any, and such other papers as I have deemed necessary) the Authority has, or will have upon payment therefor, if the acquisition of land is the subject of the requisition, good and marketable title in fee simple thereto, free and clear of all liens and encumbrances except those of a minor nature which will not materially impair the use of such property for the purpose for which it was, or will be, acquired, or, in case of the acquisition of rights-of-way or easements, the Authority has, or will have upon payment for such rights-of-way or easements, valid rights-of-way and easements for the purpose intended.

Date \_\_\_\_\_

\_\_\_\_\_  
Solicitor,  
**Delaware County Regional Water Quality Control  
Authority**

BETZ-CONVERSE-MURDOCH-INC.  
CHANGE ORDER NO. 60

Sheet No. 1 of 1 Sheets

Addition  
Deduction X  
No Price Change  
Extension Time

Contract Date 04/26/74  
Contract Number 2  
Base Contract Price \$25,772,773.00  
Amount This Change Order \$-11,173.00

OWNER

NAME Delcora  
ADDRESS 100 E. Fifth St.  
Chester, PA 19013

CONTRACTOR

NAME J.E. Brenneman Company  
ADDRESS 211 S. Broad Street  
Philadelphia, PA 19106

CONTRACT FOR WTP/Structural-Mechanical Work

GRANT NO. C-420675-01

It is hereby agreed this 29th day of August, 1980 subject to the provisions of the contract documents to make the following changes.

Item Number	Description	Contract Quantity	Quantity Change	Unit Price	Addition	Deduction
3.5	Direct Digital Control Syst.		- LS			\$ 4,000.00
4.8.1	Ash Tanks, Pumps, Fans, & Blowers		- LS			773.00
4.8.2	Furnaces		- LS			1,585.00
4.8.6	Instrumentation		- LS			1,065.00
6.4	Mech. piping & equipment		- LS			3,750.00
	Time Extension of 242 consecutive calendar days				\$ 0.00	0.00
TOTALS						\$11,173.00

JUSTIFICATION OF ALL ITEMS

Compensating change order adjusts the overages and short falls of already paid items on the monthly current estimate. This change order is for engineering purposes only, essential to contract close out. Time extension was necessary for administration to process close out papers.

ADDITIONAL DATA

Alternative Methods  
Drawings Attached  
Sketches Attached  
Specs. Attached  
Other Data

COST DATA

Base Contract Price \$25,772,773.00  
Total Net (+) by Previous Change \$ 3,065,884.33  
Total Amount Contract Prior to C.O. \$28,838,657.33  
Net (-) this Change Order \$ 11,173.00  
Net Amount of Contract to Date \$28,827,484.33

It is hereby agreed that this change order will be considered full compensation to the contractor for work described herein.

There will be an extension of time of 242 consecutive calendar days for completion. The date for completion was December 31, 1979 and now will be August 29, 1980.

Prepared by: Betz-Converse-Murdoch-Inc.

Accepted by Contractor: J.E. Brenneman Company

Approved by: Betz-Converse-Murdoch-Inc.

Approved by Owner: Delcora

PA-DER Approval (where applicable)

Federal Agency Approval (where applicable)



SETZ ENVIRONMENTAL ENGINEERS, Inc.

1000 Locust Street, Suite 200, Philadelphia, Pa. 19107

## CURRENT ESTIMATES

Contract Number <b>2</b>		Sheet No. <b>1</b> of <b>26</b> Sheets
Contract Date <b>May 16, 1974</b>		
Estimate Number <b>55 &amp; Final</b>	Month Ending <b>June 23, 1980</b>	Base Contract Price <b>\$25,772,773.00</b>
Owner <b>Delaware Co. Reg. Water Qual. Control Auth. 100 East Fifth Street Chester, Pa. 19013</b>		Contract for <b>Structural and Mechanical Work for Chester Regional Water Pollution Control Plant</b>
Contractor <b>J. E. Brenneeman Company 121 South Broad Street Philadelphia, Pa. 19107</b>		Starting Date <b>June 10, 1974</b> Time for Completion <b>850 Calendar Days</b> Completion Date <b>October 6, 1976</b>

(1) ITEM NUMBER	(2) DESCRIPTION AND UNIT	(3) CONTRACT QUANTITY	(4) CONTRACT UNIT PRICE	(5) ESTIMATE COST	(6) WORK ACCEPTED	(7) AMOUNT DUE (4) x (6)
.0	Site Work	-	-	-		
.1	Bond	L.S.	-	115,000	100%	115,000
.2	Mobilization	L.S.	-	350,000	100%	350,000
.3.0	Process Piping	-	-	-		
.3.1	Excavation and Shoring	16,885CY	8.43	142,302	16,885	142,302
.3.2	Fine Grade	34,670SF	0.36	12,402	34,670	12,402
.3.3	Backfill	16,000CY	4.77	76,312	16,000	76,312
.3.4	Reinforcing Steel	133 Tons	750.00	99,750	133	99,750
.3.5	Concrete	3,574CY	52.27	186,807	3,574	186,807
.4.0	Drainage Piping	-	-	-		
.4.1	Excavation	10,400CY	2.38	24,801	10,400	24,801
.4.2	Fine Grade	18,642SF	0.12	2,223	18,642	2,223
.4.3	Backfill	10,056CY	3.60	36,186	10,056	36,186
.4.4a	Reinforcing Steel	84 Tons	750.00	63,000	84	63,000
.4.5	Concrete	1,800CY	58.62	105,510	1,800	105,510
.6.0	Lay Pipe (R.C.C.P.)	-	-	-		
.6.1	12" R.C.C.P.	1,814LF	7.26	13,172	1,814	13,172
.6.2	15" R.C.C.P.	1,070LF	8.17	8,740	1,070	8,740
.6.3	18" R.C.C.P.	710LF	8.44	5,994	710	5,994
.6.4	21" R.C.C.P.	712LF	10.58	7,530	712	7,530
.6.5	24" R.C.C.P.	1,004LF	12.44	12,487	1,004	12,487
.6.6	30" R.C.C.P.	474LF	16.61	7,873	474	7,873
.6.7	36" R.C.C.P.	382LF	22.19	8,477	382	8,477
.4.7	Inlets	75ea	639.71	47,978	75	47,978
.5	Paving Bituminous	12,780	6.30	80,514	12,780	80,514
	Subtotals carried forward			1,407,058		1,407,058



Contract Number 2

Sheet No 2  
of 26 Sheets

Contract Date

May 16, 1974

mate Number

Month Ending

55 &amp; Final

June 23, 1980

**Base Contract Price**

\$25,772,773.00

Owner

**Contract for**

ne Delaware Co.Reg.Water Qual.Control Auth.

dress 100 East Fifth Street

Chester, Pa. 19013

# Structural and Mechanical Work for Chester Regional Water Pollution Control Plant

**Contractor**

me J. E. Brennenan Company

Address 121 South Broad Street

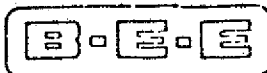
Philadelphia, Pa. 19107

Starting Date: June 10, 1974

Time for Completion 850 Calendar Days

Completion Date October 6, 1976

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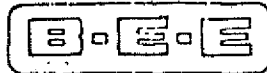


## CURRENT ESTIMATES

Estimate Number <b>55 &amp; Final</b>		Month Ending <b>June 23, 1980</b>	Contract Number <b>2</b>	Sheet No. <b>26</b> of <b>26</b> Sheets
Owner Name <b>Delaware Co. Reg. Water Qual. Control Auth.</b> Address <b>100 East Fifth Street</b> <b>Chester, Pa. 19013</b>			Contract Date <b>May 16, 1974</b>	
Contractor Name <b>J. E. Brennenan Company</b> Address <b>121 South Broad Street</b> <b>Philadelphia, Pa. 19107</b>			Base Contract Price <b>\$25,772,773.00</b>	
			Contract for <b>Structural and Mechanical Work for Chester Regional Water Pollution Control Plant</b>	
			Starting Date <b>June 10, 1974</b> Time for Completion <b>850 Calendar Days</b> Completion Date <b>October 6, 1976</b>	

(1) ITEM NUMBER	(2) DESCRIPTION AND UNIT	(3) CONTRACT QUANTITY	(4) CONTRACT UNIT PRICE	(5) ESTIMATE CCST	(6) WORK ACCEPTED	(7) AMOUNT DUE (4) x (6)
2.0	B-1; T-1 & T-2, T-3 → T-10; PS-1 & 2	-	-	-		
2.1	Excavation	4,523CY	4.02	18,184	4,523	18,184
2.2	Backfill	1,553CY	3.02	4,697	1,553	4,697
2.3.0	Structural	-	-	-		
2.3.1	Fine Grade	3,690SF	0.99	3,638	3,690	3,638
2.3.2	Type 1 Membrane	21,516SF	0.98	20,999	21,516	20,999
2.3.3	Type 2 Membrane	71,008SF	2.13	151,602	71,008	151,602
2.3.4	Reinforcing Steel	1,059Tons	750.00	794,250	1,059	794,250
3.5.0	Concrete	-	-	-		
3.5.1	Pile Caps	110CY	378.12	41,593	110	41,593
3.5.2	Slab on Grade	4,046CY	100.00	404,600	4,046	404,600
3.5.3	Walls	3,595CY	168.12	604,380	3,595	604,380
3.5.4	Columns	27CY	501.48	13,540	27	13,540
3.5.5	Supported Slab	598CY	114.28	68,338	598	68,338
3.5.6	Haunch	288CY	444.34	127,970	288	127,970
3.5.7	Pilaster	20CY	265.65	5,313	20	5,313
3.5.8	Fill	18CY	269.22	4,846	18	4,846
3.5.9	Pipe Encasement	48CY	78.40	3,763	48	3,763
3.5.10	Miscellaneous	22CY	332.91	7,324	22	7,324
2.3.6	Grout	172CY	95.14	16,364	172	16,364
2.3.7	Guniting	20,000SF	2.44	48,883	20,000	48,883
2.3.8	Structural Steel	N/A	-	-		
2.3.9	Miscellaneous Metals	L.S.	-	215,298	100%	215,298
2.4.0	Architectural	-	-	-		
2.4.1	Masonry	L.S.	-	67,661	100%	67,661
	Subtotals carried forward			2,623,243		2,623,243

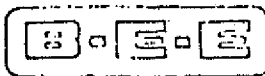




# CURRENT ESTIMATES

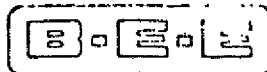
Contract Number <b>2</b>		Sheet No. <b>4</b> of <b>26</b> Sheets
		Contract Date <b>May 16, 1974</b>
Estimate Number <b>55 &amp; Final</b>	Month Ending <b>June 23, 1980</b>	Base Contract Price <b>\$25,772,773.00</b>
Owner <b>Delaware Co. Reg. Water Qual. Control Auth. 100 East Fifth Street Chester, Pa. 19013</b>		Contract for <b>Structural and Mechanical Work for Chester Regional Water Pollution Control Plant</b>
Contractor <b>J. E. Brenneeman Company 121 South Broad Street Philadelphia, Pa. 19107</b>		Starting Date <b>June 10, 1974</b> Time for Completion <b>850 Calendar Days</b> Completion Date <b>October 6, 1976</b>

(1) ITEM NUMBER	(2) DESCRIPTION AND UNIT	(3) CONTRACT QUANTITY	(4) CONTRACT UNIT PRICE	(5) ESTIMATE COST	(6) WORK ACCEPTED	(7) AMOUNT DUE (4) x (6)
2.4.2	Asbestos Cement Fascia	280SF	5.25	1,470	280	1,470
2.4.3	Aluminum Window Frames	85SF	3.15	268	85	268
2.4.4	Aluminum Sash	460SF	6.17	2,838	460	2,838
2.4.5	Glass & Glazing	L.S.	-	2,796	100%	2,796
2.4.6	Aluminum Louvres (PS-1 & PS-2)	8SF	7.38	59	8	59
2.4.7	Aluminum Louvres (B-1)	40SF	7.88	315	40	315
4.8.0	Roofing	-	-	-		
4.8.1	Precast Concrete Deck	2,400SF	2.78	6,678	2,400	6,678
4.8.2	Asbestos Panels	385SF	5.25	2,022	385	2,022
4.8.3	Light Weight Concrete Fill	24CY	84.00	2,016	24	2,016
4.8.4	Built Up Roof	2,400SF	0.84	2,016	2,400	2,016
4.8.5	Wood Walkway	140SF	3.15	441	140	441
4.8.5	Roof Hatch	1ea	210.00	210	1	210
2.4.9	Flashing and Sheet Metal	L.S.	-	4,830	100%	4,830
4.10	Doors, Frames & Hardware	7ea	1,098.71	7,691	7	7,691
4.11.0	Floor Finishes	-	-	-		
4.11.1	Quarry Tile	2,712SF	2.94	7,961	2,712	7,961
4.11.2	Quarry Tile Sill and Base	660SF	2.63	1,736	660	1,736
4.12	Rough Carpentry, Millwork & Spec.	L.S.	-	3,360	100%	3,360
4.13	Caulking	L.S.	-	4,302	100%	4,302
4.14	Painting	L.S.	-	33,620	100%	33,620
2.5.0	Mechanical Piping & Equipment	-	-	-		
2.5.1	B-1	L.S.	-	240,000	100%	240,000
2.5.2	T1 & T2; PS1 & PS2	L.S.	-	220,000	100%	220,000
2.5.3	T3-T10	L.S.	-	550,000	100%	550,000
	Subtotals carried forward			1,094,629		1,094,629



<b>CURRENT ESTIMATES</b>		Contract Number <b>2</b>	Sheet No. <b>5</b> of <b>26</b> Sheets
		Contract Date <b>May 16, 1974</b>	
Estimate Number <b>55 &amp; Final</b>	Month Completion <b>June 23, 1980</b>	Base Contract Price <b>\$25,772,773.00</b>	
Owner  Name <b>Delaware Co. Reg. Water Qual. Control Auth.</b> Address <b>100 East Fifth Street</b> <b>Chester, Pa. 19013</b>		Contract for  <b>Structural and Mechanical Work for Chester Regional Water Pollution Control Plant</b>	
Contractor  Name <b>J. E. Brennenman Company</b> Address <b>121 South Broad Street</b> <b>Philadelphia, Pa. 19107</b>		Starting Date <b>June 10, 1974</b> Time for Completion <b>850 Calendar Days</b> Completion Date <b>October 6, 1976</b>	

(1) ITEM NUMBER	(2) DESCRIPTION AND UNIT	(3) CONTRACT QUANTITY	(4) CONTRACT UNIT PRICE	(5) ESTIMATE COST	(6) WORK ACCEPTED	(7) AMOUNT DUE (4) x (6)
3.0	Building B-2	-	-	-		
3.1	Excavation	253CY	5.20	1,316	253	1,316
3.2	Backfill	93CY	26.39	2,454	93	2,454
3.3.0	Structural	-	-	-		
3.3.1	fine Gravel	6,165SF	0.78	4,807	6,165	4,807
3.3.2	6" Crushed Stone	110CY	13.00	1,430	110	1,430
3.3.3	Perimeter Insulation	2,560SF	0.91	2,330	2,560	2,330
3.3.4	Vapor Barrier	5,000SF	0.07	325	5,000	325
3.3.5	4" Cinder	80CY	7.80	624	80	624
3.3.6	2" Mud Mat	25CY	58.52	1,463	25	1,463
3.3.7	Reinforcing Steel	52 Tons	750.00	39,000	52	39,000
3.8.0	Concrete	-	-	-		
3.8.1	Pile Caps & Walls	166CY	276.55	45,907	166	45,907
3.8.2	Slabs	200CY	134.86	26,971	200	26,971
3.8.3	Miscellaneous	57CY	339.88	19,373	57	19,373
3.3.9	Structural Steel	148 Tons	640.49	94,793	148	94,793
3.3.10	Miscellaneous Metals	L.S.	-	30,096	100%	30,096
3.4.0	Architectural	-	-	-		
3.4.1	Masonry	L.S.	-	137,836	100%	137,836
3.4.2	8" Concrete Curb	450LF	8.12	3,654	450	3,654
3.4.3	4" Cinders	80CY	13.93	1,114	80	1,114
3.4.4	3"-5" White Washed Stone	100CY	29.00	2,900	100	2,900
3.4.5	2" Concrete Mud Mat	25CY	179.80	4,495	25	4,495
3.4.6	6" Concrete Paving	15CY	23.20	348	15	348
3.4.7	Exterior Aluminum Curtain Wall	8,800CY	17.40	153,120	8800	153,120
	Subtotals carried forward			574,356		574,356



<b>CURRENT ESTIMATES</b>		Contract Number <div style="text-align: center;">2</div>	Sheet No. <div style="text-align: center;">6</div> of <div style="text-align: center;">26</div>
		Contract Date <div style="text-align: center;">May 16, 1974</div>	
Estimate Number <div style="text-align: center;">55 &amp; Final</div>	Month Ending <div style="text-align: center;">June 23, 1980</div>	Base Contract Price <div style="text-align: center;">\$25,772,773.00</div>	
Owner  Delaware Co. Reg. Water Qual. Control Auth. 100 East Fifth Street Chester, Pa. 19013		Contract for  Structural and Mechanical Work for Chester Regional Water Pollution Control Plant	
Contractor  J. E. Brennenman Company 121 South Broad Street Philadelphia, Pa. 19107		Starting Date <div style="text-align: center;">June 10, 1974</div> Time for Completion <div style="text-align: center;">850 Calendar Days</div> Completion Date <div style="text-align: center;">October 6, 1976</div>	

(1) ITEM NUMBER	(2) DESCRIPTION AND UNIT	(3) CONTRACT QUANTITY	(4) CONTRACT UNIT PRICE	(5) ESTIMATE COST	(6) % WORK ACCEPTED	(7) AMOUNT DUE (4) x (6)
4.8	Glass & Glazing	L.S.	-	55,680	100%	55,680
9.0	Roofing	-	-	-		
9.1	Precast Concrete Deck	6,900SF	2.44	16,808	6,900	16,808
9.2	Asbestos Panels	716SF	5.80	4,153	716	4,153
9.3	Built Up Roof	6,900SF	1.28	8,804	6,900	8,804
9.4	Wood Walkways	320SF	3.48	1,114	320	1,114
1.10	Flashing & Sheet	L.S.	-	3,480	100%	3,480
11.0	Interior Partitions	-	-	-		
11.1	Metal w/Insulation & Rocklath	2,000SF	2.90	5,800	2,000	5,800
11.2	Metal w/Glass	2,165SF	4.06	8,789	2,165	8,789
11.3	3/4" Plaster Int. & Ext.	710SY	13.92	9,883	710	9,883
11.4	Metal w/Dry Wall	1,000SF	3.48	3,480	1,000	3,480
1.12	Doors, Frames & Hardware	67ea	704.31	47,189	67	47,189
1.13	2" Insulation	12,000SF	0.29	3,480	12,000	3,480
1.14	4" Insulation	1,712SF	0.58	993	1,712	993
1.15	Interior Acoustical Ceiling Tile	10,900SF	1.60	17,434	10,900	17,434
16.0	Floor Finishes	-	-	-		
16.1	Vinyl Asbestos Tile	5,900SF	0.87	5,133	5,900	5,133
16.2	Quarry Tile	2,500SF	3.43	8,565	2,500	8,565
16.3	Ceramic Tile	1,732SF	3.19	5,525	1,732	5,525
16.4	Carpet	140SY	17.40	2,436	140	2,436
1.17	Architectural Stairs w/Rail	26R's	803.08	20,880	100%	20,880
1.18	Rough Carpentry	L.S.	-	2,900	100%	2,900
1.19	Millwork	L.S.	-	4,640	100%	4,640
				237,166		237,166
	Subtotals carried forward					

## CURRENT ESTIMATES

**Contract Number**

2

Sheet No. \_\_\_\_\_

1

of 26

## Shouts

Contract Date

May 16, 1974

Image Number

Month Ending

55 &amp; .Final

June 23, 1980

Base Contract Price

\$25,772,773.00

Owner

Contract for

me Delaware Co.Reg.Water Qual.Control Auth.

dress 100 East Fifth Street

Chester, Pa. 19013

# Structural and Mechanical Work for Chester Regional Water Pollution Control Plant

**Contractor**

me J. E. Brennenman Company

dress 121 South Broad Street

Philadelphia, Pa. 19107

Starting Date June 10, 1974

Time for Completion 850 Calendar Days

Completion Date October 6, 1976

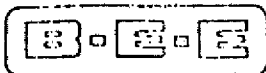
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# CURRENT ESTIMATES

Estimate Number <b>55 &amp; Final</b>		Month Ending <b>June 23, 1980</b>	Contract Number <b>2</b>	Sheet No. <b>8</b> of <b>26</b> Sheets
Owner <b>Delaware Co. Reg. Water Qual. Control Auth. 100 East Fifth Street Chester, Pa. 19013</b>			Contract Date <b>May 16, 1974</b>	
Contractor <b>J. E. Brenneman Company 121 South Broad Street Philadelphia, Pa. 19107</b>			Base Contract Price <b>\$25,772,773.00</b>	
			Contract for <b>Structural and Mechanical Work for Chester Regional Water Pollution Control Plant</b>	
			Starting Date <b>June 10, 1974</b> Time for Completion <b>850 Calendar Days</b> Completion Date <b>October 6, 1976</b>	

(1) ITEM NUMBER	(2) DESCRIPTION AND UNIT	(3) CONTRACT QUANTITY	(4) CONTRACT UNIT PRICE	(5) ESTIMATE COST	(6) WORK ACCEPTED	(7) AMOUNT DUE (4) x (6)
4.0	Building B-3	-	-	-		
4.1	Excavation	3,750CY	3.43	12,875	3,750	12,875
4.2	Backfill	1,000CY	7.14	7,138	1,000	7,138
4.3	Sump	42CY	28.71	1,206	42	1,206
4.4	Fill-Under Structure-L.S.	1,165CY	7.39	8,613	1,165	8,613
4.5.0	Structural	-	-	-		
4.5.1	Fine Grade	14,900SF	0.60	8,885	14,900	8,885
4.5.2	(2) 2" Mud Mats	85CY	56.25	4,781	85	4,781
4.5.3	Perimeter Insulation	4,500SF	0.88	3,938	4,500	3,938
4.5.4	Vapor Barrier	18,000SF	0.06	1,125	18,000	1,125
4.5.5	Type 1 Membrane	11,300SF	0.50	5,650	11,300	5,650
4.5.6	1/8" Protection Board	4,450SF	0.37	1,668	4,450	1,668
4.5.7	Reinforcing Steel	205 Tons	750.00	153,750	205	153,750
5.8.0	Concrete	-	-	-		
5.8.1	Pile Caps and Footings	42CY	244.38	10,264	42	10,264
5.8.2	Foundation Mat	630CY	71.65	45,140	630	45,140
5.8.3	Walls and Grade Beams	425CY	313.15	133,089	425	133,089
5.8.4	Slabs	532CY	273.86	145,695	532	145,695
5.8.5	Miscellaneous	51CY	264.02	13,465	51	13,465
4.5.9	Structural Steel	297 Tons	579.76	172,188	297	172,188
4.5.10	Miscellaneous Metals	L.S.	-	150,545	100%	150,545
4.6.0	Architectural	-	-	-		
4.6.1	Masonry	L.S.	-	350,445	100%	350,445
4.6.2	Exterior Aluminum Curtain Wall	1,120SF	11.49	12,870	1,120	12,870
4.6.3	Aluminum Window Frames	3,900SF	3.15	12,285	3,900	12,285
	Subtotals carried forward			1,255,615		1,255,615.00



<b>CURRENT ESTIMATES</b>		Contract Number <div style="text-align: center; font-weight: bold;">2</div>	Sheet No. <div style="text-align: center; font-weight: bold;">9</div> of <div style="text-align: center; font-weight: bold;">26</div> Sheets
		Contract Date <div style="text-align: center; font-weight: bold;">May 16, 1974</div>	
Estimate Number <div style="text-align: center; font-weight: bold;">55 &amp; Final</div>	Month Ending <div style="text-align: center; font-weight: bold;">June 23, 1980</div>	Base Contract Price <div style="text-align: center; font-weight: bold;">\$25,772,773.00</div>	
Owner  Name Delaware Co. Reg. Water Qual. Control Auth. Address 100 East Fifth Street Chester, Pa. 19013		Contract for  Structural and Mechanical Work for Chester Regional Water Pollution Control Plant	
Contractor  Name J. E. Brennenan Company Address 121 South Broad Street Philadelphia, Pa. 19107		Starting Date June 10, 1974 Time for Completion 850 Calendar Days Completion Date October 6, 1976	

(1) ITEM NUMBER	(2) DESCRIPTION AND UNIT	(3) CONTRACT QUANTITY	(4) CONTRACT UNIT PRICE	(5) ESTIMATE COST	(6) WORK ACCEPTED	(7) AMOUNT DUE (4) x (6)
4.6.4	Glass & Glazing	L.S.	-	27,333	100%	27,333
4.6.5	Aluminum Louvres	424SF	7.35	3,116	424	3,116
6.6.0	Roofing	-	-	-		
6.6.1	Precast Concrete Deck	14,400SF	2.21	31,752	14,400	31,752
6.6.2	Conveyor Enclosure	1,400SF	5.25	7,350	1,400	7,350
6.6.3	Asbestos Panels	2,590SF	5.25	13,598	2,590	13,598
6.6.4	Built Up Roof	14,400SF	1.16	16,632	14,400	16,632
6.6.5	Light Weight Concrete Fill	30CY	84.00	2,520	30	2,520
6.6.6	Wood Walkways	640SF	3.15	2,016	640	2,016
6.6.7	Skylite	1ea	2100.00	2,100	1	2,100
6.6.8	Roof Hatch	2ea	262.50	525	2	525
4.6.7	Flashing & Sheet Metal	L.S.	-	4,725	100%	4,725
4.6.8	Doors, Frames & Hardware	4lea	743.32	30,476	41	30,476
6.9.0	Interior Partitions	-	-	-		
6.9.1	Hollow Metal Lobby	1,288SF	3.15	4,057	1,288	4,057
6.9.2	Metal Stud w/Sound & Gyp. Bd.	2,400SF	3.15	7,560	2,400	7,560
6.9.3	3/4" Plaster	500SY	12.60	6,300	500	6,300
6.10.0	Floor Finishes	-	-	-		
6.10.1	Quarry Tile	11,200SF	3.10	34,733	11,200	34,733
6.10.2	Quarry Tile Sill & Base	1,500SF	2.07	3,100	1,500	3,100
6.10.3	Vinyl Asbestos Tile	2,200SF	0.79	1,733	2,200	1,733
6.10.4	Ceramic Tile	202SF	2.89	583	202	583
6.10.5	Floor Hardener	15,400SF	0.32	4,851	15,400	4,851
6.11	Interior Acoustical Ceiling Tile	2,300SF	1.45	3,330	2,300	3,330
6.12	Rough Carpentry	L.S.	-	4,200	100%	4,200
	Subtotals carried forward			212,590		212,590

## CURRENT ESTIMATES

Contract Number

2

Sheet No. 10  
of 26 Sheets

Contract Date

May 16, 1974

**Estimate Number**

55 &amp; Final

Month Ending

June 23, 1980

Base Contract Price

**\$25,772,773.00**

Owner

Name Delaware Co.Reg.Water Qual.Control Auth.  
Address 100 East Fifth Street  
Chester, Pa. 19013

**Contract for**

# Structural and Mechanical Work for Chester Regional Water Pollution Control Plant

Contractor

Name J. E. Brennenan Company  
Address 121 South Broad Street  
Philadelphia, Pa. 19107

Starting Date June 10, 1974  
Time for Completion 850 Calendar Days  
Completion Date October 6, 1976

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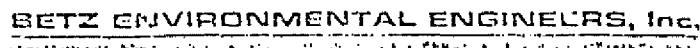


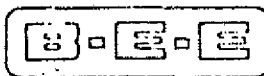
# CURRENT ESTIMATES

<b>Estimate Number</b> 55 & Final		<b>Month Ending</b> June 23, 1980	<b>Contract Number</b> 2	<b>Sheet No.</b> 11
			<b>Contract Date</b> May 16, 1974	<b>of</b> 26
<b>Owner</b>			<b>Base Contract Price</b> \$25,772,773.00	
<b>Name</b> Delaware Co. Reg. Water Qual. Control Auth. <b>Address</b> 100 East Fifth Street Chester, Pa. 19013			<b>Contract for</b> Structural and Mechanical Work for Chester Regional Water Pollution Control Plant	
<b>Contractor</b>			<b>Starting Date</b> June 10, 1974	
<b>Name</b> J. E. Brenneman Company <b>Address</b> 121 South Broad Street Philadelphia, Pa. 19107			<b>Time for Completion</b> 850 Calendar Days	
			<b>Completion Date</b> October 6, 1976	

(1) ITEM NUMBER	(2) DESCRIPTION AND UNIT	(3) CONTRACT QUANTITY	(4) CONTRACT UNIT PRICE	(5) ESTIMATE COST	(6) WORK ACCEPTED	(7) AMOUNT DUE (4) x (6)
5.0	Bldg. B-4; Tanks 1-23 → T-26	-	-	-		
5.1	Excavation	2,000CY	1.38	2,769	2,000	2,769
5.2	Backfill	500CY	2.77	1,385	500	1,385
5.3	Fill Under Structure	1,100CY	8.60	9,458	1,100	9,458
5.4.0	Structural	-	-	-		
5.4.1	Fine Grade	12,400SF	0.91	11,284	12,400	11,284
5.4.2	Crushed Stone	450CY	13.00	5,850	450	5,850
5.4.3	(2) 2" Mud Mats	170CY	58.50	9,945	170	9,945
5.4.4	Type 1 Membrane	4,240SF	0.52	2,205	4,240	2,205
5.4.5	Type 2 Membrane	9,000SF	2.28	20,475	9,000	20,475
5.4.6	1/8" Protection Board	1,400SF	0.39	546	1,400	546
5.4.7	Reinforcing Steel	245Tons	750.00	183,750	245	183,750
4.8.0	Concrete	-	-	-		
4.8.1	Foundation Mat	758CY	88.92	67,405	758	67,405
4.8.2	Walls	910CY	196.52	178,831	910	178,831
4.8.3	Supported Slabs	310CY	242.19	75,079	310	75,079
4.8.4	Miscellaneous	30CY	505.87	15,176	30	15,176
5.4.9	Structural Steel	48Tons	585.27	28,093	48	28,093
4.10	Miscellaneous Metals	L.S.	-	35,492	100%	35,492
5.5.0	Architectural	-	-	-		
5.5.1	Masonry	L.S.	-	115,898	100%	115,898
5.5.2	Aluminum Window Frames	920SF	3.18	2,926	920	2,926
5.5.3	Glass & Glazing	1,100SF	4.24	4,664	1,100	4,664
5.4.0	Roofing	-	-	-		
5.4.1	Precast Concrete Deck	12,000SF	2.23	26,712	12,000	26,712
	Subtotals carried forward			797,943		797,943







<b>CURRENT ESTIMATES</b>		Contract Number <b>2</b>	Sheet No. <b>13</b> of <b>26</b> Sheets
		Contract Date <b>May 16, 1974</b>	
Estimate Number <b>55 &amp; Final</b>	Month Expires <b>June 23, 1980</b>	Base Contract Price <b>\$25,772,773.00</b>	
Owner <b>Delaware Co. Reg. Water Qual. Control Auth. 100 East Fifth Street Chester, Pa. 19013</b>		Contract for <b>Structural and Mechanical Work for Chester Regional Water Pollution Control Plant</b>	
Contractor <b>J. E. Breineman Company 121 South Broad Street Philadelphia, Pa. 19107</b>		Starting Date <b>June 10, 1974</b> Time for Completion <b>850 Calendar Days</b> Completion Date <b>October 6, 1976</b>	

(1) ITEM NUMBER	(2) DESCRIPTION AND UNIT	(3) CONTRACT QUANTITY	(4) CONTRACT UNIT PRICE	(5) ESTIMATE COST	(6) WORK ACCEPTED	(7) AMOUNT DUE (4) x (6)
6.0	Tanks T-11 → T-14	-	-	-		
6.1	Excavation & Shoring	2,137CY	6.61	14,134	2,137	14,134
6.2	Fill	1,126CY	1.54	1,732	1,126	1,732
6.3.0	Structural	-	-	-		
6.3.1	Crushed Stone	2,573CY	17.06	43,907	2,573	43,907
6.3.2	Gravel	44CY	13.41	590	44	590
6.3.3	Type 1 Membrane	23,960SF	0.94	22,409	23,960	22,409
6.3.4	Type 2 Membrane	26,752SF	2.14	57,116	26,752	57,116
6.3.5	Reinforcing Steel	1,462 Tons	750.00	1,096,500	1,462	1,096,500
6.6.0	Concrete	-	-	-		
6.6.1	Pile Cap	82CY	344.18	28,223	82	28,223
6.6.2	Slab on Grade	7,549CY	100.00	754,900	7,549	754,900
6.6.3	Walls	3,329CY	139.15	463,237	3,329	463,237
6.6.4	Supported Slab	329CY	60.26	19,827	329	19,827
6.6.5	Pilaster	58CY	243.59	14,128	58	14,128
6.6.6	Haunch	266CY	275.07	73,169	266	73,169
6.6.7	Pier	370CY	295.69	109,406	370	109,406
6.3.7	Grout	604CY	63.49	38,349	604	38,349
6.3.8	Set Pressure Release Valves	65ea	116.83	7,594	65	7,594
6.3.9	Miscellaneous Metals	L.S.	-	265,972	100%	265,972
6.3.10	Caulking	L.S.	-	3,823	100%	3,823
6.3.11	Painting	L.S.	-	29,400	100%	29,400
6.4	Mechanical Piping & Equipment	L.S.	-	750,000	99 1/2%	746,250
	Subtotals carried forward			3,794,416		3,790,666



**Contract Number**

2

Sheet No. 14  
of 26

Contract Date

May 16, 1974

### Estimate Number

55 &amp; Final

**Month Ending**

June 23, 1980

Base Contract Price

\$25,772,773.00

Owner

**Contract for**

Name Delaware Co.Reg.Water Qual.Control Auth.

Address 100 East Fifth Street

Chester, Pa. 19013

## Structural and Mechanical Work for Chester Regional Water Pollution Control Plant

**Contractor**

Name J. E. Brennehan Company

Address 121 South Broad Street

Philadelphia, Pa. 19107

Starting Date June 10, 1974

Time for Completion 850 Calendar Days

Completion Date October 6, 1976

44-108A-171

**CURRENT ESTIMATE:**

Contract Number

2

Sheet No. 15

15

of 26 Sheets.

Contract Date

May 16, 1974

estimate Number

Month Ending

## 55 & Final

June 23, 1980

Owner

Jame Delaware Co.Reg.Water Qual.Control Auth.

Address 100 East Fifth Street

Chester, Pa. 19013

### Contract for

# Structural and Mechanical Work for Chester Regional Water Pollution Control Plant

**Contractor**

James J. E. Brennenman Company

Address 121 South Broad Street

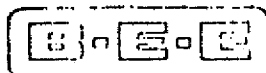
Philadelphia, Pa. 19107

Starting Date June 10, 1974

Time for Completion 850 Calendar Days

Completion Date **October 6, 1976**

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<b>CURRENT ESTIMATES</b>		Contract Number <b>2</b>	Sheet No. <b>16</b> of <b>25</b> Sheets
		Contract Date <b>May 16, 1974</b>	
Estimate Number <b>55 &amp; Final</b>	Month Ending <b>June 23, 1980</b>	Base Contract Price <b>\$25,772,773.00</b>	
Owner  Name <b>Delaware Co. Reg. Water Qual. Control Auth.</b> Address <b>100 East Fifth Street</b> <b>Chester, Pa. 19013</b>		Contract for  <b>Structural and Mechanical Work for Chester</b> <b>Regional Water Pollution Control Plant</b>	
Contractor  Name <b>J. E. Brenneman Company</b> Address <b>121 South Broad Street</b> <b>Philadelphia, Pa. 19107</b>		Starting Date <b>June 10, 1974</b> Time for Completion <b>850 Calendar Days</b> Completion Date <b>October 6, 1976</b>	

(1) ITEM NUMBER	(2) DESCRIPTION AND UNIT	(3) CONTRACT QUANTITY	(4) CONTRACT UNIT PRICE	(5) ESTIMATE COST	(6) WORK ACCEPTED	(7) AMOUNT DUE (4) x (6)
9.0	Pumping Station PS-3	-	-	-		
9.1	Excavation	6,500CY	3.40	22,125	6,500	22,125
9.2	Backfill	4,332CY	5.02	21,750	4,332	21,750
9.3.0	Structural	-	-	-		
9.3.1	Fine Grade	4,385CY	1.51	6,630	4,385	6,630
9.3.2	6" Crushed Stone	90CY	15.10	1,359	90	1,359
9.3.3	2" Mud Mats	60CY	62.50	3,750	60	3,750
9.3.4	Type 1 Membrane	19,795SF	0.50	9,901	19,795	9,901
9.3.5	1/8" Protection Board	15,140SF	0.38	5,779	15,140	5,779
3.6.0	Concrete	-	-	-		
3.6.1	Foundation Mat	840CY	62.77	52,219	840	52,219
3.6.2	Walls, Columns & Buttresses	631CY	147.00	92,807	631	92,807
3.6.3	Supported Slab	81CY	254.93	20,649	81	20,649
3.6.4	Miscellaneous	95CY	274.60	26,087	95	26,087
9.3.7	Reinforcing Steel	201 Tons	750.00	150,750	201	150,750
9.3.8	Structural Steel	26 Tons	579.77	15,074	26	15,074
9.3.9	Miscellaneous Metals	L.S.	-	68,059	100%	68,059
9.4.0	Architectural	-	-	-		
9.4.1	Masonry	L.S.	-	50,233	100%	50,233
9.4.2	Aluminum Windows	1,255SF	3.15	3,953	1,255	3,953
9.4.3	Glass & Glazing	1,250SF	4.47	5,591	1,250	5,591
4.4.0	Roofing	-	-	-		
4.4.1	Precast Concrete Deck 2-3/4"	3,364SF	2.20	7,416	3,364	7,416
4.4.2	Asbestos Panels	595SF	5.25	3,123	595	3,123
4.4.3	Built-Up w/3/4" Insulation	3,364SF	1.05	3,532	3,364	3,532
	Subtotals carried forward <i>pg 3</i>			570,787		570,787



**Contract Number**

2

Sheet No. 17  
of 26 Sheets

Contract Date

May 16, 1974

**Estimate Number**

55 &amp; Final

Month Ending

June 23, 1980

Base Contract Price

\$25,772,773.00

Name Delaware Co.Reg.Water Qual.Control Auth.

Address 100 East Fifth Street

Chester, Pa. 19013

# Structural and Mechanical Work for Chester Regional Water Pollution Control Plant

**Contractor**

Name J. E. Brennenan Company

Address 711 South Broad Street

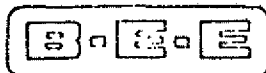
Philadelphia, Pa. 19107

Starting Date June 10, 1974

Time for Completion 850 Calendar Days

Completion Date October 6, 1976

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<b>CURRENT ESTIMATES</b>		Contract Number <b>2</b>	Sheet No. <b>18</b> of <b>26</b>
		Contract Date <b>May 16, 1974</b>	
Estimate Number <b>55 &amp; Final</b>	Month Ending <b>June 23, 1980</b>	Base Contract Price <b>\$25,772,773.00</b>	
Owner  Name <b>Delaware Co. Reg. Wat. Q. l. Control Auth.</b> Address <b>100 East Fifth Street</b> <b>Chester, Pa. 19013</b>		Contract for  <b>Structural and Mechanical Work for Chester Regional Water Pollution Control Plant</b>	
Contractor  Name <b>J. E. Brennenan Company</b> Address <b>121 South Broad Street</b> <b>Philadelphia, Pa. 19107</b>		Starting Date <b>June 10, 1974</b> Time for Completion <b>850 Calendar Days</b> Completion Date <b>October 6, 1976</b>	

(1) ITEM NUMBER	(2) DESCRIPTION AND UNIT	(3) CONTRACT QUANTITY	(4) CONTRACT UNIT PRICE	(5) ESTIMATE COST	(6) WORK ACCEPTED	(7) AMOUNT (1) (4) x (6)
10.0	Pumping Station PS-4	-	-	-		
10.1	Excavation	300CY	2.96	888	300	888
10.2	Structural	-	-	-		
10.2.1	Fine Grade	1,820SF	1.94	3,535	1,820	3,535
10.2.2	Crushed Stone	15CY	20.40	306	15	306
10.2.3	2" Mud Mats	50CY	69.62	3,481	50	3,481
10.2.4	Type 1 Membrane	4,210SF	0.50	2,106	4,210	2,106
10.2.5	1/8" Protection Board	2,210SF	0.38	829	2,210	829
10.2.6	Concrete	-	-	-		
10.2.6.1	Foundation Mat	140CY	85.20	11,928	140	11,928
10.2.6.2	Walls & Columns	107CY	192.70	20,619	107	20,619
10.2.6.3	Supported Slab	52CY	485.40	25,245	52	25,245
10.2.6.4	Miscellaneous	10CY	674.00	6,740	10	6,740
10.2.7	Reinforcing Steel	38 Tons	750.00	28,500	38	28,500
10.2.8	Structural Steel	11 Tons	579.82	6,378	11	6,378
10.2.9	Miscellaneous Metals	L.S.	-	17,995	100%	17,995
10.3.0	Architectural	-	-	-		
10.3.1	Masonry	L.S.	-	38,641	100%	38,641
10.3.2	Aluminum Windows	352SF	3.15	1,109	352	1,109
10.3.3	Glass & Glazing	L.S.	-	1,591	100%	1,591
10.3.4	Louvres	24SF	7.33	176	24	176
10.3.5.0	Roofing	-	-	-		
10.3.5.1	Precast Concrete Deck 2-3/4"	1,685SF	2.21	3,716	1,685	3,716
10.3.5.2	Asbestos Panels	480SF	5.25	2,520	480	2,520
10.3.5.3	Built-Up w/2" Insulation	1,685SF	1.15	1,946	1,685	1,946
	Subtotals carried forward			178,249		178,249

## CURRENT ESTIMATES

Contract Number

2

Sheet No. 19  
of 26 Sheets

Contract Date

May 16, 1974

ate Number

## 55 & Final

Month Ending

June 23, 1980

	Base Contract Price
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**\$25,772,773.00**

Owner

## Contract for

Delaware Co. Reg. Water Qual. Control Auth.  
100 East Fifth Street  
Chester, Pa. 19013

# Structural and Mechanical Work for Chester Regional Water Pollution Control Plant

**Contractor**

J. E. Brennan Company  
121 South Broad Street  
Philadelphia, Pa. 19107

Starting Date June 10, 1974  
Time for Completion 850 Calendar Days  
Completion Date October 6, 1976

[illegible]



## CURRENT ESTIMATES

**Contract Number**

2

Sheet No. 20

20

of 26 Sheets

Contract Date

May 16, 1974

Estimate Number

55 &amp; Final

Month Ending

June 23, 1980

Base Contract Price

\$25,772,773.00

Owner

Name Delaware Co.Reg.Water Qual.Control Auth.

Address 100 East Fifth Street  
Chester, Pa. 19013

Contract for

# Structural and Mechanical Work for Chester Regional Water Pollution Control Plant

\_\_\_\_\_  
Counselor

Name J. E. Brennan Company

Address 121 South Broad Street  
Philadelphia, Pa. 19107

Starting Date June 10, 1974

Time for Completion 850 Calendar Days

Completion Date October 6, 1976

(1) ITEM NUMBER	(2) DESCRIPTION AND UNIT	(3) CONTRACT QUANTITY	(4) CONTRACT UNIT PRICE	(5) ESTIMATE COST	(6) WORK ACCEPTED	(7) AMOUNT DUE (4) x (6)
11.0	Miscellaneous	-	-	-		
11.1	Site Fill	15,385CY	5.12	78,846	15,385	78,846
11.2	Dike Removal	1,511CY	2.41	3,646	1,511	3,646
11.3.0	Miscellaneous Structures	-	-	-		
11.3.1	Excavation	5,128CY	2.90	14,860	5,128	14,860
11.3.2	Backfill	2,979CY	3.63	10,816	2,979	10,816
11.3.3	Sheet	3,200SF	3.87	12,373	3,200	12,373
11.4	Miscellaneous Metals - Guard Posts	10ea	63.10	631	10	631
11.5.0	Structural	-	-	-		
5.1.0	Valve Pits (2)	-	-	-		
5.1.1	Foundation Slabs	150CY	100.00	15,000	150	15,000
5.1.2	Walls	250CY	109.70	27,425	250	27,425
5.1.3	Supported Slabs	50CY	178.12	8,906	50	8,906
5.1.4	Reinforcing Steel	55 Tons	750.00	41,250	55	41,250
5.1.5	Miscellaneous Metals	L.S.	-	10,543	100%	10,543
5.2.0	Sludge Box Pit No. 4	-	-	-		
5.2.1	Concrete	30CY	253.03	7,591	30	7,591
5.2.2	Reinforcing Steel	4 Tons	750.00	3,000	4	3,000
5.2.3	Miscellaneous Metals	L.S.	-	876	100	876
5.3.0	Oil Storage Tanks	-	-	-		
5.3.1	Concrete	45CY	108.82	4,897	45	4,897
5.3.2	Reinforcing Steel	5 Tons	750.00	3,750	5	3,750
5.3.3	Miscellaneous Metals	L.S.	-	333	100%	333
5.4.0	Monorail Support & Unloading	-	-	-		
5.4.1	Concrete	5CY	167.20	836	5	836
	Subtotals carried forward			245,579	To S.T.O. work	245,579



# CURRENT ESTIMATES

Contract Number

2

Sheet No. 21  
of 26

Contract Date

May 16, 1974

Estimate Number

55 & Final

Month Ending

June 23, 1980

Base Contract Price

\$25,772,773.00

Owner

Name Delaware Co. Reg. Water Qual. Control Auth.  
Address 100 East Fifth Street  
Chester, Pa. 19013

Contract for

Structural and Mechanical Work for Chester  
Regional Water Pollution Control Plant

Contractor

Name J. E. Brennan Company  
Address 121 South Broad Street  
Philadelphia, Pa. 19107

Starting Date

June 10, 1974

Time for Completion 850 Calendar Days

Completion Date October 6, 1976

(1) ITEM NUMBER	(2) DESCRIPTION AND UNIT	(3) CONTRACT QUANTITY	(4) CONTRACT UNIT PRICE	(5) ESTIMATE COST	(6) WORK ACCEPTED	(7) AMOUNT DUE (4) x (6)
5.4.2	Reinforcing Steel	1 Ton	750.00	750	1	750
5.4.3	Miscellaneous Metals	L.S.	-	11,542	100%	11,542
5.5.0	Effluent Box - Ash Lagoons	-	-	-		
5.5.1	Concrete	176CY	198.36	34,911	176	34,911
5.5.2	Reinforcing Steel	21 Tons	750.00	15,750	21	15,750
5.5.3	Crushed Stone	50CY	20.90	1,045	50	1,045
5.5.4	Miscellaneous Metals	L.S.	-	9,727	100%	9,727
5.6.0	Meter Pits <i>Site</i>	-	-	-		
5.6.1	Concrete <i>Work</i>	95CY	289.70	27,521	95	27,521
5.6.2	Reinforcing Steel	12 Tons	750.00	9,000	12	9,000
5.6.3	Miscellaneous Metals	L.S.	-	2,023	100%	2,023
5.7.0	Fresh Water Pit no. 5	-	-	-		
5.7.1	Miscellaneous Metals	L.S.	-	894	100%	894
5.8.0	Existing Digestors ET1-ET4	-	-	-		
5.8.1	Miscellaneous Metals	L.S.	-	88,119	100%	88,119
5.9.0	Existing Pumping Station EPS-1	-	-	-		
5.9.1	Miscellaneous Metals	L.S.	-	16,148	100%	16,148
5.10.1	Existing Settling Tank ET5-ET7	-	-	-		
5.10.1	Miscellaneous Metals	L.S.	-	33,389	100%	33,389
1.6.0	Architectural	-	-	-		
1.6.1	Div. 12 - Office Furniture	L.S.	-	22,050	100%	22,050
1.6.2	Div. 10 - Lab. Furniture & Equipment	L.S.	-	159,256	100	159,256
11.7	Chlorination System - <i>Site Work</i>	L.S.	-	70,000	100%	70,000
11.8	Instrumentation Panels	L.S.	-	15,000	100%	15,000
11.9.0	Instrumentation and Controls	-	-	-		
	Subtotals carried forward			517,125		517,125

## CURRENT ESTIMATES

Contract Number

2

Sheet No. 22

22

of 26 Sheet

Contract Date

May 16, 1974

Estimate Number

54

Myra's Ending

January : 20, 1979

Base Contract Price

\$25,772,713.00

Owner

Name Delaware Co. Reg. Water Qual. Control Auth.

Address 100 East Fifth Street

Chester, Pa. 19013

Contract for

# Structural and Mechanical Work for Chester Regional Water Pollution Control Plant

**Contractor**

Name J. E. Brennenman Company

Address 121 South Broad Street

Philadelphia, Pa. 19107

Starting Date June 10, 1974

Time for Completion 850 Calendar Days

Completion Date October 6, 1976

[illegible]



## Contract Number

2

Sheet No 23  
of 26 Sheets

Contract Date

May 16, 1974

estimate further.

## 55 & Final

Month Ending

June 23, 1980

Base Contract Price:

**\$25,772,773.00**

**Owner**

Delaware Co.Reg.Water Qual.Control Auth.

Address 100 East Fifth Street

Chester, Pa. 19013

**Contract for**

# Structural and Mechanical Work for Chester Regional Water Pollution Control Plant

### Contractor

14 June J. E. Brennan Company

Address 121 South Broad Street

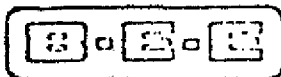
Philadelphia, Pa. 19107

Starting Date June 10, 1974

Time for Completion 850 Calendar Days

Completion Date October 6, 1976

[illegible]



## CURRENT ESTIMATES

Contract Number

2

Sheet No. 24  
of 26

Contract Date

May 16, 1974

Estimate Number

55 &amp; Final

Month Ending

June 23, 1980

Base Contract Price

\$25,772,773

Owner

Del. Co. Reg. Water Qual. Control Authority  
100 East Fifth Street  
Chester, Penna. 19013

Contract for

Structural and Mechanical Work  
for Chester Regional Water  
Pollution Control Plant

Contractor

J. E. Brenneeman Company  
121 South Broad Street  
Philadelphia, Penna. 19107

Starting Date

June 10, 1974

Time for Completion

850 Calendar Days

Completion Date

October 6, 1976

(1) ITEM NUMBER	(2) DESCRIPTION AND UNIT	(3) CONTRACT QUANTITY	(4) CONTRACT UNIT PRICE	(5) ESTIMATE COST	(6) WORK ACCEPTED	(7) AMOUNT (4) x (6) %
#1	Temporary Road <i>Site Work</i>	L.S.		11,200	100%	11,200
#2	Demolition of Garage <i>Site Work</i>	L.S.		4,850	100%	4,850
#3	Removal of Sludge Beds <i>Site Work</i>	L.S.		(10,000)	100%	(10,000)
#4	Substitution of T-Rails <i>Pro-Rate</i>	L.S.		(10,673)	100%	(10,673)
#5	Add items Contract No. 1	L.S.		-0-		
#7	Yard Piping Modifications <i>Site Work (Pr)</i>	L.S.		167,966.30	100%	167,966.30
#8	Extension of Time	--		---		
#9	Misc. and "Instrumentation" <i>Architectural</i>	L.S.		14,704.18	100%	14,704.18
#10	Auto Calibration of T.O.C. <i>Pro-Rate</i>	L.S.		1,265	100%	1,265
#11	Chiller Pad & Wall Sleeves <i>Pro-Rate</i>	L.S.		1,600.84	100%	1,600.84
#12	Steel Tube in lieu of Plate <i>Pro-Rate</i>	L.S.		(3,000)	100%	(3,000)
#13	Opening B-2 Floor Slab <i>Building B-2</i>	L.S.		1,075.29	100%	1,075.29
#14	Handrailings for Aeration Tank <i>Pro-Rate</i>	L.S.		72,207	100%	72,207
#15	Incinerator Emissions <i>Incinerator</i>	L.S.		19,800	100%	19,800
#16	Increased Pile Caps <i>Pro-Rate</i>	L.S.		12,206.03	100%	12,206.03
#17	Color CRT <i>Computer</i>	L.S.		44,275	100%	44,275
#18	Relocation	L.S.	VOID			
#19	Clean Sludge - Digesters <i>Pro-Rate</i>	1,200,000	0.05	60,000	1,911,660	95.58%
#20	Vacuum Filtrate Piping <i>Pro-Rate</i>	L.S.		1,100	100%	1,100
#21	Oscilloscope ( <i>Instrumentation</i> ) <i>Architectural</i>	L.S.		750	100%	750
#22	Plaque <i>" "</i>	L.S.		257	100%	257
#23	B-2 Roof Steel <i>Building B-2</i>	L.S.		2,868	100%	2,868
#24	Extension of Time	---		---		
#25	Adjustment for concrete pile	Unit Price	Items No. 4, 5, and 8			
#26	Extension of Time	---		---		
	Subtotals carried forward			392,450.60		428,033.10

## CURRENT ESTIMATES

Contract Number 2

Sheet No. 25  
of 26 Sheets

Contract Date May 16, 1974

estimate Number	Month Ending
55 & Final	June 23, 1980

	\$	_____
<b>Base Contract Price</b>		
	\$	_____
(Total)		

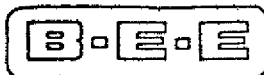
	Owner
name	Delaware Co. Reg. Water Qual. Control Auth.
address	100 East Fifth Street Chester, Pennsylvania 19013

Contract for  
Structural and Mechanical Work for  
Chester Regional Water Pollution  
Control Plant

Contractor	
name	J. E. Brenneman Company
address	211 South Broad Street Philadelphia, Pennsylvania 19107

Starting Date	June 10, 1974
Time for Completion	850 Calendar Days
Completion Date	October 6, 1976

[illegible]



## CURRENT ESTIMATES

Contract Number

2

Sheet No. 26  
of 26 Sheets

Contract Date

May 16, 1974

Estimate Number

55 &amp; Final

Month Ending

June 23, 1980

Base Contract Price

Owner  
Name Del. Co. Reg. Water Qual. Control Auth.  
Address 100 East Fifth Street  
Chester, Pennsylvania 19013

Contract for  
Structural and Mechanical Work for  
Chester Regional Water Pollution  
Control Plant

Contractor  
Name J. E. Brenneman Company  
Address 211 South Broad Street  
Philadelphia, Pennsylvania 19107

Starting Date June 10, 1974  
Time for Completion 850 Calendar Days  
Completion Date October 6, 1976

(1) ITEM NUMBER	(2) DESCRIPTION AND UNIT	(3) CONTRACT QUANTITY	(4) CONTRACT UNIT PRICE	(5) ESTIMATED COST	(6) WORK ACCEPTED	(7) AMOUNT DUE (4) x (6)
CO 47	Dissolved oxygen transfer test	L.S.		81,974.00		81,974.00
CO 48	O & P for work performed in schedu acctg. & paving inv. of the test. labs	L.S.		24,081.08		24,081.08
CO 49	Additional DPC Wiring	L.S.		14,855.41		14,855.41
CO 50	Reinspect pressure relief valves	L.S.	Pro-Rate	4,551.63		4,551.63
CO 51	Survey layout & stakeout for inst. of all plant water & sewer lines	L.S.		22,330.00		22,330.00
CO 52	Demonstration cost for fuel problems	L.S.		7,459.53		7,459.53
CO 53	Rev. to contract dwgs. 341, 342, 343	L.S.		7,576.83		7,576.83
CO 54	Installation of RR spur Site	L.S.		2,317.00		2,317.00
CO 55	Remove pile caps, addl. pipe fittings; Rev. to chlorine piping S. 7a	L.S.		4,284.60		4,284.60
CO 56	Compensation for delays associated with Yard Piping S. 7c P. 2	L.S.		49,000.00		49,000.00
CO 57	Escalation of labor, material, sub- contractor prices, extended warranty PRO-RATE	L.S.		132,700.00		132,700.00
CO 58	Claim Settlement/Time Extension PRO-RATE	L.S.		1,335,844.02		1,335,844.02
CO 59	Delete oxygen transfer test (C.O. 47)	L.S.		(81,974.00)		(81,974.00)
CO 60	Compensating C.O. PRO-RATE	L.S.		(11,173.00)		-
	TOTALS			\$28,827,484.33		1,605,000.10

Prepared by

Thomas H. Duncan  
Thomas H. Duncan, P.E.

Checked by

We hereby certify the foregoing to be a true and correct estimate of  
the amount and value of work done, materials incorporated and  
materials accepted but not incorporated to date.

J. H. Cantor  
Inspector  
Resident Engineer  
Principal Engineer

Approved

Total due on contract items

\$28,827,484.33

Material accepted, not incorporated in  
completed work. See statement on reverse.

0.00

Total estimate

\$28,827,484.33

Less 0 percent retained

0.00

Net amount payable on this estimate

\$28,827,484.33

Less amount previously paid

\$28,827,484.33

Amount now payable

0.00

Approved for the Owner

## 2

May 16, 1974

TOTAL ..... 105

PAYABLE TO CONTRACTOR ..... Percent

I hereby certify that this current estimate represents a true and correct value of work performed and materials accepted but not incorporated in this project; and I further certify that all claims outstanding for labor, together with materials and equipment to be incorporated in the project, have been paid for in accordance with the provisions of the contract.

Contractor J. E. Brenneman Company

by V. Allen

Title Project Manager

51073 1-71



DELAWARE COUNTY REGIONAL WATER QUALITY CONTROL AUTHORITY  
CONSTRUCTION FUND FOR INITIAL PROJECT

REQUISITION BY AUTHORITY

(Not to be used for Philadelphia Contribution Account)

To: Girard Trust Bank, Trustee  
Philadelphia, Pennsylvania

Attn: Corporate Trust Department

No. 1119  
Date \_\_\_\_\_

You are hereby requested to make disbursement of funds from the Construction Fund for the Project (other than moneys in the Philadelphia Contribution Account therein), held by you as Trustee under the Trust Indenture of this Authority dated May 1, 1974 securing its Sewer Revenue Bonds, to the payee, of the amount for the purpose set forth:

Payee: Philadelphia Contribution Account

Payee's Address: 1234 Market St. Philadelphia, PA 19102

Amount: \$ 100,000.00

Purpose of Obligation: Amalgamated Sewerage

(Unless otherwise stated, Trustee shall assume payment is made under terms of Construction Contract)

In connection therewith the Authority hereby certifies that the above amount is now due, that such obligation has been properly incurred by the Authority, is a proper charge against the above-named Construction Fund under the provisions of the aforesaid Trust Indenture, is unpaid, has not been the basis of any previous withdrawal, and that if this requisition is for payment under a construction contract, the Authority, with the consent of the Consulting Engineers, has not made any determination which is now in effect, to withhold payment of the amount being requisitioned, under the terms of the contract for such construction work.

DELAWARE COUNTY REGIONAL WATER  
QUALITY CONTROL AUTHORITY

By [Signature]  
(Vice) Chairman

By [Signature]  
(Assistant) Treasurer

Total Obligation to Payee named in Requisition  
Plus/Minus Change Orders  
Amount paid to said Payee to date (including  
payment to be made pursuant to Requisition)

\$ 100,000.00  
0.00  
100,000.00

Amount of obligation remaining unpaid

\$ 0.00

Total Payments in  
Requisition

\$ 100,000.00

Previous Balance  
Plus Interest earned,  
grant funds received,  
or other Receipts

\$ 0.00  
0.00  
0.00

Sub-Total

Previous Requisitions

\$ 0.00

Less this Requisition

100,000.00

Total Amount requisitioned

\$ 100,000.00

New Balance

\$ 0.00

VENDOR

## A. (The following certification is required if payment is made under a Construction Contract)

THE UNDERSIGNED, DOES HEREBY CERTIFY, that it has examined the documents and accounts covering the payment of obligations as requested in this requisition and reports of on-site job inspectors with respect thereto and that such obligations have been properly incurred, are now due and unpaid, and that insofar as such obligations were incurred for work, materials, supplies or equipment, according to the aforesaid reports such work was actually performed or such materials, supplies or items of equipment were actually installed in or about the construction of the Project, or delivered at the site of the work for that purpose, or delivered for fabrication at a place approved by the undersigned, covered by adequate insurance for fire and theft; and that all work done and materials, supplies or equipment furnished for which such obligations were incurred are in accordance with the plans and specifications provided for in the abovementioned Trust Indenture; that to the best of our knowledge there are no vendors', mechanics' or other liens or rights to liens or conditional sale or other title retention contracts upon or affecting any property with respect to which payment is requisitioned and which will not be discharged by such payment. This requisition hereby is certified as being correct and the payment approved as stated therein.

**BETZ ENVIRONMENTAL ENGINEERS, INC.**

By \_\_\_\_\_

B. (The following certification is required if payment **not** under Construction Contract).

I HEREBY CERTIFY that I have examined the documents and accounts covering the payment of obligations as requested in this requisition and that such obligations have been properly incurred and are a proper charge against the above-named Construction Fund under the provisions of the Trust Indenture of the Authority dated May 1, 1974, and the conditions precedent to the application of said moneys have been fulfilled. This requisition hereby is approved.

Date \_\_\_\_\_

\_\_\_\_\_  
Solicitor,  
**Delaware County Regional Water Quality Control  
Authority**

## C. (The following additional certification is required if payment is for lands, rights-of-way or other interests in real property).

I HEREBY CERTIFY that (based upon a review of title insurance, if any, and such other papers as I have deemed necessary) the Authority has, or will have upon payment therefor, if the acquisition of land is the subject of the requisition, good and marketable title in fee simple thereto, free and clear of all liens and encumbrances except those of a minor nature which will not materially impair the use of such property for the purpose for which it was, or will be, acquired, or, in case of the acquisition of rights-of-way or easements, the Authority has, or will have upon payment for such rights-of-way or easements, valid rights-of-way and easements for the purpose intended.

Date \_\_\_\_\_

\_\_\_\_\_  
Solicitor,  
**Delaware County Regional Water Quality Control  
Authority**

BETZ-CONVERSE-MURDOCH-INC.  
CHANGE ORDER NO. 18

Sheet No. 1 of 2 Sheets

Addition X  
Deduction  
No Price Change  
Extension Time X

Contract Date 05/06/74  
Contract Number 5

Base Contract Price \$2,296,870.00  
Amount This Change Order \$18,066.00

OWNER

NAME Delcora  
ADDRESS 100 E. Fifth Street  
Chester, PA 19013

CONTRACTOR

NAME The Gerngross Corporation  
ADDRESS 1313 Sellers Street  
Philadelphia, PA 19124

CONTRACT FOR WWTP/Electrical Work GRANT NO. C-420675-01

It is hereby agreed this 5th day of September, 1980 subject to the provisions of the contract documents to make the following changes.

Item Number	Description	Contract Quantity	Quantity Change	Unit Price	Addition	Deduction
1	Additional cost due Contractor due to delays caused by Conrail		+ LS		18,066.00	
				SUBTOTALS	18,066.00	
				TOTALS	18,066.00	

JUSTIFICATION OF ALL ITEMS

See expanded justification.

ADDITIONAL DATA

Alternative Methods  
Drawings Attached  
Sketches Attached  
Specs. Attached  
Other Data X

COST DATA

Base Contract Price \$2,296,870.00  
Total Net (+) by Previous Change \$ 409,673.13  
Total Amount Contract Prior to C.O. \$2,706,543.13  
Net (+) this Change Order \$ 18,066.00  
Net Amount of Contract to Date \$2,724,609.13

It is hereby agreed that this change order will be considered full compensation to the contractor for work described herein.

There will be an extension of time of 205 consecutive calendar days for completion. The date for completion was August 4, 1977, and now will be February 25, 1978.

Prepared by: Betz-Converse-Murdoch-Inc.

Accepted by Contractor: The Gerngross Corp.

Approved by: Betz-Converse-Murdoch-Inc.

Approved by Owner: Delcora

PA-DER Approval (where applicable)

Federal Agency Approval (where applicable)

BETZ•CONVERSE•MURDOCH•INC.  
CHANGE ORDER NO. 19

Sheet No. 1 of 3 Sheets

Addition X  
Deduction  
No Price Change  
Extension Time

Contract Date 05/06/74  
Contract Number 5  
Base Contract Price \$2,296,870.00  
Amount This Change Order \$11,547.75

OWNER

NAME Delcora  
ADDRESS 100 E. Fifth St.  
Chester, PA 19013

CONTRACTOR

NAME The Gerngross Corporation  
ADDRESS 1313 Seller Street  
Philadelphia, PA 19124

CONTRACT FOR WWTP/Electrical Work GRANT NO. C-420675-01

It is hereby agreed this 5th day of September, 1980 subject to the provisions of the contract documents to make the following changes.

Item Number	Description	Contract Quantity	Quantity Change	Unit Price	Addition	Deduction
1	Incinerator wiring Claim No. 3.		+ LS		11,547.75	
SUBTOTALS					11,547.75	
TOTALS					11,547.75	

JUSTIFICATION OF ALL ITEMS

See expanded justification.

ADDITIONAL DATA

Alternative Methods  
Drawings Attached  
Sketches Attached  
Specs. Attached  
Other Data X

COST DATA

Base Contract Price \$2,296,870.00  
Total Net (+) by Previous Change \$ 427,739.  
Total Amount Contract Prior to C.O. \$2,724,609.  
Net (+) this Change Order \$ 11,547.  
Net Amount of Contract to Date \$2,736,156.

It is hereby agreed that this change order will be considered full compensation to the contractor for work described herein.

It is hereby agreed that there will be NO extension of time as a result of this change order. The contract completion date remains as February 25, 1978.

Prepared by: Betz•Converse•Murdoch•Inc.

Accepted by Contractor: The Gerngross Corporation

Approved by: Betz•Converse•Murdoch•Inc.

Approved by Owner: Delcora

PA-DER Approval (where applicable)

Federal Agency Approval (where applicable)

BETZ•CONVERSE•MURDOCH•INC.  
CHANGE ORDER NO. 20

Sheet No. 1 of 2 Sheets

Addition X  
Deduction  
No Price Change  
Extension Time

Contract Date 05/06/74  
Contract Number 5  
Base Contract Price \$2,296,870.00  
Amount This Change Order \$20,264.15

OWNER

NAME Delcora  
ADDRESS 100 E. Fifth Street  
Chester, PA 19013

CONTRACTOR

NAME The Gerngross Corporation  
ADDRESS 1313 Sellers Street  
Philadelphia, PA 19124

CONTRACT FOR WWTP/Electrical Work GRANT NO. C-420675-01

It is hereby agreed this 5th day of September, 1980 subject to the provisions of the contract documents to make the following changes.

Item Number	Description	Contract Quantity	Quantity Change	Unit Price	Addition	Deduction
1	Escalation on Motor Control Centers (Claim Item 1)		+LS		\$20,264.15	
SUBTOTALS					\$20,264.15	
TOTALS					\$20,264.15	

JUSTIFICATION OF ALL ITEMS

See expanded justification.

ADDITIONAL DATA

Alternative Methods  
Drawings Attached X  
Sketches Attached X  
Specs. Attached  
Other Data X

COST DATA


Base Contract Price \$2,296,870.00  
Total Net (+) by Previous Change \$ 439,286.88  
Total Amount Contract Prior to C.O. \$2,736,156.88  
Net (+) this Change Order \$ 20,264.15  
Net Amount of Contract to Date \$2,756,421.03

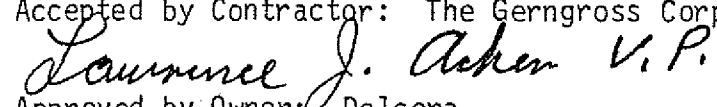
It is hereby agreed that this change order will be considered full compensation to the contractor for work described herein.

It is hereby agreed that there will be NO extension of time as a result of this change order. The contract completion date remains as February 25, 1978.

Prepared by: Betz•Converse•Murdoch•Inc.

Accepted by Contractor: The Gerngross Corporation

Approved by:  Betz•Converse•Murdoch•Inc.

Approved by Owner:  Delcora

PA-DER Approval (where applicable)

Federal Agency Approval (where applicable)

BETZ•CONVERSE•MURDOCH•INC.  
CHANGE ORDER NO. 21

Sheet No. 1 of 1 Sheets

Addition  
Deduction X  
No Price Change  
Extension Time X

Contract Date 05/26/74  
Contract Number 5

Base Contract Price \$2,296,870.00  
Amount This Change Order \$-17,699.24

OWNER

CONTRACTOR

NAME Delcora  
ADDRESS 100 E. Fifth Street  
Chester, PA 19013

NAME The Gerngross Corporation  
ADDRESS 1313 Sellers Street  
Philadelphia, PA 19124

CONTRACT FOR WWTP/Electrical Work GRANT NO. C-420675-01

It is hereby agreed this 5th day of September, 1980 subject to the provisions of the contract documents to make the following changes.

Item Number	Description	Contract Quantity	Quantity Change	Unit Price	Addition	Deduction
5	Piles.	8200 LF	-1332 LF	\$13.25+		\$17,699.00
A	Error in addition of Base Contract Price.		- LS			0.20
B	Time extension of 923 Consecutive Calendar Days.				\$0.00	0.00
TOTALS						\$17,699.20

JUSTIFICATION OF ALL ITEMS

Compensating change order adjusts the overages and short falls of already paid items on the monthly current estimate. This change order is for engineering purposes only, essential to contract close out. Time extension was necessary for administration to process close out papers.

ADDITIONAL DATA

Alternative Methods  
Drawings Attached  
Sketches Attached  
Specs. Attached  
Other Data

COST DATA

Base Contract Price \$2,296,870.00  
Total Net (+) by Previous Change \$ 459,551.00  
Total Amount Contract Prior to C.O. \$2,756,421.00  
Net (-) this Change Order \$ 17,699.20  
Net Amount of Contract to Date \$2,738,721.79

It is hereby agreed that this change order will be considered full compensation to the contractor for work described herein.

There will be an extension of time of 923 consecutive calendar days for completion. The date for completion was February 25, 1978 and now will be September 5, 1980.

Prepared by: Betz•Converse•Murdoch•Inc.

Accepted by Contractor: The Gerngross Corporation

Approved by:  Betz•Converse•Murdoch•Inc.

Approved by Owner:  Delcora

PA-DER Approval (where applicable)

Federal Agency Approval (where applicable)

DELAWARE COUNTY REGIONAL WATER QUALITY CONTROL AUTHORITY  
CONSTRUCTION FUND FOR INITIAL PROJECT

REQUISITION BY AUTHORITY

(Not to be used for Philadelphia Contribution Account)

To: Girard Trust Bank, Trustee  
Philadelphia, Pennsylvania

Attn: Corporate Trust Department

No. 1668

Date 10/10/77

You are hereby requested to make disbursement of funds from the Construction Fund for the Project (other than moneys in the Philadelphia Contribution Account therein), held by you as Trustee under the Trust Indenture of this Authority dated May 1, 1974 securing its Sewer Revenue Bonds, to the payee, of the amount for the purpose set forth:

Payee: Girard Trust Bank

Payee's Address: 1200 N. 10th St., Dept. Trustee, Phila. PA 19107

Amount: \$10,713,142.00

Purpose of Obligation: 100% of \$10 million bondwork

(Unless otherwise stated, Trustee shall assume payment is made under terms of Construction Contract)

In connection therewith the Authority hereby certifies that the above amount is now due, that such obligation has been properly incurred by the Authority, is a proper charge against the above-named Construction Fund under the provisions of the aforesaid Trust Indenture, is unpaid, has not been the basis of any previous withdrawal, and that if this requisition is for payment under a construction contract, the Authority, with the consent of the Consulting Engineers, has not made any determination which is now in effect, to withhold payment of the amount being requisitioned, under the terms of the contract for such construction work.

DELAWARE COUNTY REGIONAL WATER  
QUALITY CONTROL AUTHORITY

By John J. C. Mallick  
(Vice) Chairman

By Robert A. Stodder  
(Assistant) Treasurer

Total Obligation to Payee named in Requisition	\$ 10,713,142.00
Plus/Minus Change Orders	
Amount paid to said Payee to date (including payment to be made pursuant to Requisition)	\$ 0.00

Amount of obligation remaining unpaid	\$ 10,713,142.00
---------------------------------------	------------------

Total Payments in Requisition	\$ 10,713,142.00	Previous Balance	\$ 0.00
		Plus Interest earned, grant funds received, or other Receipts	

Sub-Total

Previous Requisitions	\$ 0.00	Less this Requisition	\$ 10,713,142.00
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Total Amount requisitioned	\$ 10,713,142.00	New Balance	\$ 0.00
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## A. (The following certification is required if payment is made under a Construction Contract)

THE UNDERSIGNED, DOES HEREBY CERTIFY, that it has examined the documents and accounts covering the payment of obligations as requested in this requisition and reports of on-site job inspectors with respect thereto and that such obligations have been properly incurred, are now due and unpaid, and that insofar as such obligations were incurred for work, materials, supplies or equipment, according to the aforesaid reports such work was actually performed or such materials, supplies or items of equipment were actually installed in or about the construction of the Project, or delivered at the site of the work for that purpose, or delivered for fabrication at a place approved by the undersigned, covered by adequate insurance for fire and theft; and that all work done and materials, supplies or equipment furnished for which such obligations were incurred are in accordance with the plans and specifications provided for in the abovementioned Trust Indenture; that to the best of our knowledge there are no vendors', mechanics' or other liens or rights to liens or conditional sale or other title retention contracts upon or affecting any property with respect to which payment is requisitioned and which will not be discharged by such payment. This requisition hereby is certified as being correct and the payment approved as stated therein.

**BETZ ENVIRONMENTAL ENGINEERS, INC.**

By \_\_\_\_\_

B. (The following certification is required if payment **not** under Construction Contract).

I HEREBY CERTIFY that I have examined the documents and accounts covering the payment of obligations as requested in this requisition and that such obligations have been properly incurred and are a proper charge against the above-named Construction Fund under the provisions of the Trust Indenture of the Authority dated May 1, 1974, and the conditions precedent to the application of said moneys have been fulfilled. This requisition hereby is approved.

Date \_\_\_\_\_

\_\_\_\_\_  
Solicitor,  
**Delaware County Regional Water Quality Control  
Authority**

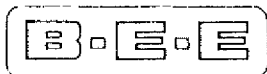
## C. (The following additional certification is required if payment is for lands, rights-of-way or other interests in real property).

I HEREBY CERTIFY that (based upon a review of title insurance, if any, and such other papers as I have deemed necessary) the Authority has, or will have upon payment therefor, if the acquisition of land is the subject of the requisition, good and marketable title in fee simple thereto, free and clear of all liens and encumbrances except those of a minor nature which will not materially impair the use of such property for the purpose for which it was, or will be, acquired, or, in case of the acquisition of rights-of-way or easements, the Authority has, or will have upon payment for such rights-of-way or easements, valid rights-of-way and easements for the purpose intended.

Date \_\_\_\_\_

\_\_\_\_\_  
Solicitor,  
**Delaware County Regional Water Quality Control  
Authority**





**BETZ ENVIRONMENTAL ENGINEERS, Inc.**

One Delaware Avenue, Suite 200, Newark, Delaware 19702

# **CURRENT ESTIMATES**

Contract Number

4 - Plumbing

Sheet No. 1

of 6

Sheets

Contract Date

4/26/74

Estimate Number

23

Month Ending

10/77

Base Contract Price

\$157,000.00

Name

DELCORA

Address

100 E. 5th Street  
Chester, Penna.

Contract For

Plumbing Work for Delaware County  
Regional Water Pollution Control Plant

Contractor

Name

Leonard E. Hackbart

Address

~~XXXXXXX~~ 3606 Winding Way  
~~XXXXXXX~~ 19063 Newtown Square  
~~XXXXXXX~~ Pa. 19073

Starting Date June 10, 1974

Time for Completion 850 Calendar Days

Completion Date ~~Oct. 6, 1976~~ Nov. 23, 1977

(1) ITEM NUMBER	(2) DESCRIPTION AND UNIT	(3) CONTRACT QUANTITY	(4) CONTRACT UNIT PRICE	(5) ESTIMATE COST	(6) WORK ACCEPTED	(7) AMOUNT DUE (4) x (6)
	B-1 GRIT REMOVAL BUILDING					
	SANITARY PIPING SYSTEM 4420.00					
1	Soil Pipe, Cast Iron	155 l. f.	20.	3100.	155	3100.
2	Soil Fittings, Cast Iron	20 ea.	40.	800.	20	800.
3	Floor Drain	4 ea.	130.	520.	4	520.
	STORM PIPING SYSTEM 1626.00					
1	Galv. Pipe	60 l. f.	8.	480.	60	480.
2	Galv. Fittings	8 ea.	52.	416.	8	416.
3	Roof Drain	2 ea.	125.	250.	2	250.
4	Copper Water Tube	30 l. f.	4.	120.	30	120.
5	Copper Fitting	6 ea.	20.	120.	6	120.
6	Hanger	4 ea.	30.	120.	4	120.
7	Insulate	40 l. f.	3.	120.	40	120.
	PUMP STATIONS NOS. 1 & 2 5242.00					
1	Soil Pipe, C. Iron	100 l. f.	20.	2000.	100	2000.
2	Soil Fitting, Cast Iron	16 ea.	40.	640.	16	640.
3	Floor Drain	2 ea.	130.	260.	2	260.
4	Galv. Pipe	60 l. f.	8.	480.	60	480.
5	Galv. Fitting	16 ea.	60.	960.	16	960.
6	Roof Drain	4 ea.	123.	492.	4	492.
7	Copper Water Tube	20 l. f.	4.	80.	20	80.
8	Copper Fitting	6 ea.	20.	120.	6	120.
9	Hanger	6 ea.	25.	150.	6	150.
10	Insulation	20 l. f.	3.	60.	20	60.
	Subtotals carried forward.			11,288.		11,288.



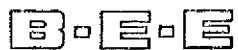
BETZ ENVIRONMENTAL ENGINEERS, Inc.

Environmental Engineering • Design • Construction • Maintenance • Pollution Control

## CURRENT ESTIMATES

Contract Number  
4 - PlumbingSheet No. 2  
of 6 SheetsContract Date  
4/26/74Estimate Number  
23Month Ending Oct. 77  
~~July 1977~~Base Contract Price  
\$157,000.00Owner  
Name DELCORA  
Address 100 E. 5th Street  
Chester, Penna.Contract for  
Plumbing Work for Delaware County  
Regional Water Pollution Control PlantContractor  
Name Leonard E. Hackbart  
Address ~~Box 604~~ 3606 Winding Way  
~~West Chester, Penna. 19380~~ Newtown Square,  
Pa., 19073Starting Date June 10, 1974  
Time for Completion 850 Calendar Days  
Completion Date ~~Oct. 6, 1976~~ Nov. 22, 1977

(1) ITEM NUMBER	(2) DESCRIPTION AND UNIT	(3) CONTRACT QUANTITY	(4) CONTRACT UNIT PRICE	(5) ESTIMATE COST	(6) WORK ACCEPTED	(7) AMOUNT DUE (4) x (6)
	PUMP STATION NO. 3 10,357.00					
1	Soil Pipe, Cast Iron	270 l. f.	20.	5400.	270	5400.
2	Soil Fitting, Cast Iron	35 ea.	40.	1400.	35	1400.
3	Area Drain	4 ea.	100.	400.	4	400.
4	Floor Drain	2 ea.	130.	260.	2	260.
5	Galv. Pipe	90 l. f.	8.	720.	90	720.
6	Galv. Fitting	16 ea.	52.	832.	16	832.
7	Roof Drain	4 ea.	125.	500.	4	500.
8	Sleeve & Hanger	12 ea.	40.	480.	12	480.
9	Service Sink	1 ea.	215.	215.	1	215.
10	Insulation	50 l. f.	3.	150.	50	150.
	PUMP STATION NO. 4 6155.00					
1	Soil Pipe, Cast Iron	90 l. f.	20.	1800.	90	1800.
2	Soil Fitting, Cast Iron	20 ea.	40.	800.	20	800.
3	Floor Drain	1 ea.	130.	130.	1	130.
4	Service Sink	1 ea.	215.	215.	1	215.
5	Water Closet	1 ea.	205.	205.	1	205.
6	Lavatory	1 ea.	155.	155.	1	155.
7	Elec. Water Heater	1 ea.	155.	155.	1	155.
8	Galv. Pipe	40 l. f.	8.	320.	40	320.
9	Galv. Fitting	8 ea.	60.	480.	8	480.
10	Roof Drain	2 ea.	125.	250.	2	250.
11	Copper Water Tube	100 l. f.	6.50	650.	100	650.
12	Copper Fitting	16 ea.	20.	320.	16	320.
13	Hanger	15 ea.	25.	375.	15	375.
14	Insulation	100 l. f.	3.	300.	100	300.
	Subtotals carried forward			27,800.		27,800.

**BETZ ENVIRONMENTAL ENGINEERS, Inc.**

One Plymouth Meeting Mall • Plymouth Meeting, Pa. 19362 • Telephone: 215/661-3811

**CURRENT ESTIMATES**

Contract Number

4 - Plumbing

Sheet No. 4of 6 Sheets

Contract Date

4/26/74

Estimate Number

23

Month Ending Oct. '77~~July 1977~~

Base Contract Price

\$157,000.00

Owner

Name

DELCORA

Address

100 E. 5th Street  
Chester, Penna.

Contract for

Plumbing Work for Delaware County  
Regional Water Pollution Control Plant

Contractor

Name

Leonard E. Hackbart

Address

~~P.O. Box 3004~~ 3606 Winding Way  
~~100 E. 5th Street~~ Newtown Square,  
Pa., 19073

Starting Date

June 10, 1974

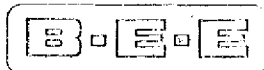
Time for Completion

850 Calendar Days

Completion Date

~~Oct. 6, 1976~~ Nov. 22, 1977

(1) ITEM NUMBER	(2) DESCRIPTION AND UNIT	(3) CONTRACT QUANTITY	(4) CONTRACT UNIT PRICE	(5) ESTIMATE COST	(6) WORK ACCEPTED	(7) AMOUNT DUE (4) x (6)
	PLUMBING FIXTURES AND EQUIPMENT		17084.00			
1	Water Closet & Carrier	4 ea.	265.	1060.	4	1060.
2	Lavatory	4 ea.	155.	620.	4	620.
3	Urinal	1 ea.	145.	145.	1	145.
4	Laundry Sink	1 ea.	205.	205.	1	205.
5	Mud Receptor	1 ea.	270.	270.	1	270.
6	Mop Receptor	1 ea.	238.	238.	1	238.
7	Shower	2 ea.	630.	1260.	2	1260.
8	Elec. Water Cooler	1 ea.	365.	365.	1	365.
9	Eye Wash & Shower	2 ea.	456.	912.	2	912.
10	Hot Water Generator	2 ea.	495.	990.	2	990.
11	Water Softener	1 ea.	2635.	2635.	1	2635.
12	Chemical Neutralizer	1 ea.	4124.	4124.	1	4124.
13	In Line Pump	1 ea.	175.	175.	1	175.
14	Elec. Hot Water Heater PS-4	1 ea.	160.	160.	1	160.
15	Elec. Hot Water Heater B-3	1 ea.	325.	325.	1	325.
16	Insulation	120 l.f.	30.	3600.	120	3600.
	BLDG. B-3 SOLIDS HANDLING SANITARY PIPING SYSTEM 37,205.00					
1	Soil Pipe	1400 l.f.	17.	23800.	1400	23800.
2	Soil Fittings	190 ea.	45.	8550.	190	8550.
3	3" Area Drain	3 ea.	90.	270.	3	270.
4	4" Acid Res. Drain	5 ea.	160.	800.	5	800.
5	4" Funnel Drain	6 ea.	125.	750.	6	750.
6	4" 9 x 9 Top Drain	1 ea.	125.	125.	1	125.
	Subtotals carried forward			117,804.		117,804.



BETZ ENVIRONMENTAL ENGINEERS, Inc.

One Plymouth Meeting, Pa. • Plymouth Meeting, Pa. 19362 • Telephone: 215-432-1000

## CURRENT ESTIMATES

Contract Number

4 - Plumbing

Sheet No. 5

of 6 Sheets

Contract Date

4/26/74

Estimate Number

23

Month Ending Oct. 77

~~July 1977~~

Base Contract Price

\$157,000.00

Owner

Name DELCORA  
Address 100 E. 5th Street  
Chester, Penna.

Contractor

Name Leonard E. Hackbart  
Address ~~2000 Broomfield~~ 3606 Winding Way  
~~3606 Broomfield~~ 19063 Newtown Square,  
Pa., 19073

Contract for

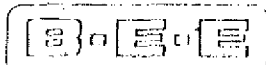
Plumbing Work for Delaware County  
Regional Water Pollution Control Plant

Starting Date June 10, 1974

Time for Completion 850 Calendar Days

Completion Date ~~Oct. 6, 1976~~ Nov. 22, 1977

(1) ITEM NUMBER	(2) DESCRIPTION AND UNIT	(3) CONTRACT QUANTITY	(4) CONTRACT UNIT PRICE	(5) ESTIMATE COST	(6) WORK ACCEPTED	(7) AMOUNT DUE (4) x (6)
7	4" Floor Drain	17 ea.	130.	2210.	17	2210.
8	Sleeve & Hanger	20 ea.	35.	700.	20	700.
	STORM PIPING SYSTEM 13,410.00					
1	Roof Drain $\pi$	14 ea.	125.	1750.	14	1750.
2	Galv. Pipe into B-3	540 l.f.	10.	5400.	540	5400.
3	Galv. Fitting	80 ea.	52.	4160.	80	4160.
4	Sleeve & Hanger	20 ea.	35.	700.	20	700.
5	Insulation	350 l.f.	4.	1400.	350	1400.
	WATER 8850.00					
1	Copper Tube "L" $\pi$	700 l.f.	4.50	3150.	700	3150.
2	Fitting & Valve into B-3	100 ea.	21.	2100.	100	2100.
3	Hanger	75 ea.	20.	1500.	75	1500.
4	Insulation	700 l.f.	3.	2100.	700	2100.
	FIXTURES 5146.00					
1	Water Closet & Carrier $\uparrow$	2 ea.	265.	530.	2	530.
2	Urinal into B-3	2 ea.	145.	290.	2	290.
3	Lav	2 ea.	155.	310.	2	310.
4	Shower	1 ea.	660.	660.	1	660.
5	Mop Receptor	2 ea.	238.	476.	2	476.
6	Mud Receptor	1 ea.	270.	270.	1	270.
7	Laundry Sink	1 ea.	205.	205.	1	205.
8	Elec. Water Cooler	1 ea.	365.	365.	1	365.
9	Eye Wash & Shower, Interior	3 ea.	435.	1305.	3	1305.
10	Eye Wash & Shower, Exterior	1 ea.	410.	410.	1	410.
11	Elec. Water Heater, 12KW	1 ea.	325.	325.	1	325.
	Subtotals carried forward			148,120.		148,120.



BETZ ENVIRONMENTAL ENGINEERS, INC.

## CURRENT ESTIMATES

Contract Number

4 - Plumbing

Sheet No.

of 6 Sheets

Contract Date

4/26/74

Estimate Number

23

Month Ending

10/77

Base Contract Price

\$157,000.00

Owner

Name DELCORA  
Address 100 E. 5th Street  
Chester, Penna.

Contract for

Plumbing Work for Delaware County  
Regional Water Pollution Control Plant

Contractor

Name Leonard E. Hackbart  
Address P. O. Box 604  
Media, Penna. 19063

Starting Date June 10, 1974

Time for Completion 850 Calendar Days

Completion Date Oct. 6, 1976

(1) ITEM NUMBER	(2) DESCRIPTION AND UNIT	(3) CONTRACT QUANTITY	(4) CONTRACT UNIT PRICE	(5) ESTIMATED COST	(6) WORK ACCEPTED	(7) AMOUNT DUE (4) x (6)
	BUILDING B-4 8880.00					
1	Galv. Pipe	140 l. f.	15.	2100.	140	2100.
2	Galv. Fitting	24 ea.	60.	1440.	24	1440.
3	Roof Drain	6 ea.	105.	630.	6	630.
4	Sleeve & Hanger	12 ea.	35.	420.	12	420.
5	Copper Water Tube	370 l. f.	4.	1480.	370	1480.
6	Copper Fitting	30 ea.	21.	630.	30	630.
7	Copper Hanger	40 ea.	20.	800.	40	800.
8	Insulation	460 l. f.	3.	1380.	460	1380.
	C.O. #1 - Drain in Lab.			597.26		597.26
	C.O. #2 - S'S Sink			548.56		548.56
	C.O. #3 - Alarm Panels			1534.78		1534.78
	C.O. #4 - Lab. Piping			2184.41		2184.41
				161,865.01		
				<del>157,000.00</del>		
	TOTALS			161,865.01		161,865.01

Prepared by Leonard E. Hackbart

Checked by

We hereby certify the foregoing to be a true and correct estimate of  
the amount and value of work done, materials incorporated and  
materials accepted but not incorporated to date.

Inspector

Resident Engineer

Principal Engineer

Total due on contract items

161,865.01

Material accepted, not incorporated in  
completed work. See statement on reverse.

Total estimate

161,865.01

Less 10 percent retained

None

Net amount payable on this estimate

161,865.01

Less amount previously paid

149,703.53

Amount now payable

12,161.48

Approved

Approved for the Owner

Andrew F. Cuban



4

ALBRIGHT & PRIEL  
A Division Of  
BETZ ENVIRONMENTAL ENGINEERS, INC.  
ONE PLYMOUTH MEETING MALL  
PLYMOUTH MEETING, PENNSYLVANIA 19462

BID FORM

(Notice: This Bid must be executed in ink or by typed entries  
and it must not be removed from this document)

BID

FOR CONSTRUCTION OF

CONTRACT NO. 5 - Electrical Work for the Chester Regional  
Water Pollution Control Plant

TO: Delaware County Regional  
Water Quality Control Authority  
Chester City Council Chambers  
Municipal Building  
5th & Welsh Streets  
Chester, Pennsylvania 19013

herein called the OWNER.

I, Pursuant to and in compliance with your Advertisement  
dated November 14, 1973, inviting proposals to be received  
until 2:00 P.M. Prevailing Time, Tues. February 19, 1974 for the  
construction of:

CONTRACT NO. 5 - Electrical Work for the Chester Regional  
Water Pollution Control Plant

and having carefully examined the contract documents comprising the  
plans, specifications and all other documents bound therewith,  
together with all addenda or bulletins thereto; and being familiar  
with the site and the various conditions affecting the work, the  
undersigned hereby offers to furnish all plant, labor, materials,  
supplies, equipment and other facilities and things necessary or  
proper or incidental to the construction as required by and in  
strict accordance with the applicable provisions of the plans and  
specifications and of all Addenda or bulletins issued by the Owner  
and mailed to the undersigned prior to the date for the opening of  
bids, whether received by the undersigned or not, for the following  
Unit and Lump Sum prices:

ITEM NO. 1

Amount for electrical work for the Chester Regional Water Pollution Control Plant, complete, but excluding timber piles for supports for electrical equipment is the lump sum price of:

Two Million, One Hundred Eighty-eight Thousand, Two Hundred Twenty  
\_\_\_\_\_ DOLLARS and 00 CENTS (\$2,188,220.00)

ITEM NO. 2

8,200 Vertical feet of timber piles driven to a bearing value of 25 tons, complete, in place.

Thirteen Dollars and twenty-five cents per foot. (\$ 13.25 )  
Per Vertical Foot in Words Figures

Total Amount For Item No. 2 (\$ 108,650.00 )  
Figures

ITEM NO. 3

TOTAL BID FOR CONTRACT NO. 5, Electrical Work, is the sum of Items 1 and 2, namely:

Two Million, Two Hundred Ninety-Six Thousand, Eight Hundred Seventy Dollars  
\_\_\_\_\_ DOLLARS and 00 CENTS (\$2,296,870.00)

The Deductive Options pertaining to Contract No. 5 hereinafter referred to are defined briefly below and more completely in Section 01200 MEASUREMENT AND PAYMENT.

<u>OPTION</u>	<u>DESCRIPTION</u>
C	Delete covers and agitators for ET-1 through ET-4
F	Delete some items relative to lime slaker
G	Delete one incinerator and two vacuum filters
H	Delete superstructure over sludge thickening tanks T-23 to T-26
J	Delete computer and automatic controls and related air conditioning-add necessary local instrumentation
K	Delete Control Building B-2



ITEM  
NO.

Total reduction in Bid  
amount for exercising  
Option C

DEDUCT			
Fifty-two Hundred	DOLLARS AND	00	CENTS (\$ 5200.00 )

Total reduction in Bid  
amount for exercising  
Options C and F

DEDUCT			
Six Thousand	DOLLARS AND	00	CENTS (\$ 6000.00 )

Total reduction in Bid  
amount for exercising  
Options C, F, and  
G

DEDUCT	Twelve Thousand One Hundred		
	DOLLARS AND	00	CENTS (\$ 12100.00 )

Total reduction in Bid  
amount for exercising  
Option C, F, G,  
and H

DEDUCT	Twelve Thousand One Hundred		
	DOLLARS AND	00	CENTS (\$ 12100.00 )

Total reduction in Bid  
amount for exercising  
Options C, F, G,  
H, and J

DEDUCT	ONE HUNDRED ONE THOUSAND ONE HUNDRED		
	DOLLARS AND	00	CENTS (\$101100.00 )

Total reduction in Bid  
amount for exercising  
Options C, F, G,  
H, J, and K

DEDUCT	ONE HUNDRED EIGHTY THOUSAND ONE HUNDRED		
	DOLLARS AND	00	CENTS (\$180100.00 )

2. The bidder agrees to begin work within ten (10) calendar days after the receipt of notice to proceed and to complete the entire contract within eight hundred and fifty (850) consecutive calendar days from the date of notification to begin work.
3. In case of failure on the part of the Contractor to complete the work within the time fixed in the contract or any extensions thereof, the Contractor shall pay the Owner as liquidated damages the sum of One Thousand Dollars
- DOLLARS and No CENTS (\$1,000.00) for each calendar day of delay until the work is completed or accepted.
4. The undersigned agrees upon receipt of written notice of the acceptance of this bid within Ninety (90) days after the date of opening of bids, to execute the Construction Contract, in accordance with the bid as accepted, and to give the bonds required with good and sufficient surety or sureties.
5. Payment for all work called for in the plans and specifications or required for proper completion of the work under this contract and not specifically mentioned in the plans and specifications will be considered as covered by the Lump Sum Price payment and no extra payment will be allowed therefor.
6. The undersigned hereby designates as his office to which such notice of acceptance may be mailed, telegraphed or delivered:
- The Gerngross Corporation
- 1313 Sellers St.
- Philadelphia, Penna. 19124
7. Accompanying this proposal is a Bid Bond
- in the amount of One hundred fourteen thousand eight hundred forty three dollars and fifty cents
- DOLLARS and 14,843 CENTS (\$114,843) as bid security.
8. This bid may be withdrawn at any time prior to the scheduled time for the opening of bids or any authorized postponement thereof.
9. The undersigned acknowledges that he received the following Addenda to the Specifications and that this bid was prepared in accordance with said Addenda: