

GREATER HAZLETON JOINT SEWER AUTHORITY

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CAPITAL CHARGES AND TAPPING FEES STUDY PURSUANT TO PENNSYLVANIA ACT 57 OF 2003 AND PENNSYLVANIA MUNICIPALITY AUTHORITIES ACT

**CITY OF HAZLETON, BOROUGH OF WEST HAZLETON,
HAZLE TOWNSHIP AND SUGARLOAF TOWNSHIP
LUZERNE COUNTY, PENNSYLVANIA**

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I. INTRODUCTION

The purpose of this Study and Report is to calculate and document the appropriate wastewater system capital charges that can be imposed by the Greater Hazleton Joint Sewer Authority (GHJSA). Pennsylvania Act 203 of 1990, approved on December 19, 1990 (Act 203), provided statutory authority for municipalities to impose impact fees. Impact fees are charges imposed by a municipality against new developments in order to generate revenue for the funding of capital improvements necessitated by and attributable to new developments. Act 203 also provided that the Municipality Authorities Act of 1945, as amended, shall apply to and regulate tapping fees or other similar charges imposed by municipally-owned sewer and water systems. Pennsylvania Act 203 of 1990 amended the Pennsylvania Municipality Authorities Act of 1945, effective June 1991, with regard to the calculation and imposition of capital charges, including connection fees, customer facilities fees, and tapping fees. Pennsylvania Act 22 of 2001, signed into law June 2001, repealed the Pennsylvania Municipality Authorities Act of 1945 (Authorities Act) and placed the former stand-alone Authorities Act into the Pennsylvania Consolidated Statutes creating Chapter 56 in Title 53 (53 Pa. C.S. Ch. 56 - Municipality Authorities Act). Pennsylvania Act 57 of 2003, signed into law on December 30, 2003, amended Title 53 of the Pennsylvania Consolidated Statutes with regard to the calculation and imposition of capital charges on water and sewer systems.

In general, Act 57 provides for three (3) separate fees - a connection fee, customer facilities fee and tapping fee. Act 57 indicates that the connection fee and the customer facilities fee are to be based upon actual costs incurred by the Authority for relevant facilities. Act 57 requires that the tapping fee be based upon historical cost trended to current cost or upon historical cost plus interest and other financing fees paid on bonds financing the facilities. In the absence of historical costs, an engineer's estimated replacement cost may be used in accordance with requirements of the Act. Act 57 requires itemization of calculations showing the manner in which the fees are determined. This Report provides such itemization for determination of the connection, customer facilities and tapping fees applicable to the Greater Hazleton Joint Sewer Authority Wastewater system. The Municipalities or their Authorities may charge their own fees, and it is the responsibility of the applicant to contact the respective Municipality or other Authority to pay all relevant fees.

II. DESCRIPTION OF EXISTING FACILITIES

The Authority provides wastewater treatment service to approximately 18,112 existing customers in the City of Hazleton, West Hazleton Borough, Hazle Township, part of Sugarloaf Township, Jeddo Borough, and parts of Butler Township. The 2013 annual average daily flow at the treatment plant was 7.64 (MGD) million gallons per day. In 2013, the GHJSA acquired the existing wastewater collection and conveyance systems from the City of Hazleton, including the City's two (2) pump stations, and the Borough of West Hazleton. Hazle Township and Sugarloaf Township continue to own their respective wastewater collection systems. GHJSA does own a conveyance system that flows through part of Hazle Township. The GHJSA wastewater system is comprised of approximately 88.9 miles of pipelines in Hazleton, 11.0 miles in West Hazleton and 4.6 miles in Hazle Township. The pipelines range in size from 6" to 96" pipe along with stone arches up to 8' x 7'6". Within the wastewater system there are collection, conveyance and transmission mains. The Authority owns and maintains several buildings along with the four (4) original wastewater pumping stations constructed in 1966 and the two (2) pump stations acquired in 2013 from the City of Hazleton. The Greater Hazleton Joint Sewer Authority System consists of the following property and facilities:

A. **Wastewater Treatment Plant** West Hazleton, PA 18202

The Wastewater Treatment Plant is a permitted 8.9 MGD conventional Wastewater Treatment Plant that was constructed in 1965. The treatment plant and original administration building are situated on 15.573 acres of land owned by the Authority.

The cost of construction of the Wastewater Treatment Plant and adjoining structures was approximately \$7.3 million in 1965.

B. New Administration Building

500 Oscar Thomas Drive, West Hazleton, PA 18202

The new Administration Building was constructed in January 2010 and houses the Authority's new administrative offices. The cost of construction was approximately \$2.0 million in 2010.

C. Cranberry Pump Station – Old Cranberry Road, Hazle Township, PA – 1.76 MGD Pump Station constructed in 1965.

D. Locust Street Pump Station – Locust Street, Hazleton, PA – 2.33 MGD Pump Station constructed in 1965.

E. Diamond Avenue Pump Station - Located on East Diamond Avenue in Hazle Township, PA – 1.32 MGD Pump Station constructed in 1965.

F. Gas House Pump Station - Hazleton, PA – 7.56 MGD Pump Station constructed in 1965.

The Authority's current long term debt principal associated with Notes and Bonds outstanding is \$45,986,036 as of July 31, 2014.

III. Tapping Fee Parts

According to Act 57, the tapping fee for a wastewater system shall not exceed an amount based on some or all of the cost-based amounts established for four (4) individual tapping fee parts, namely, (A) capacity part, (B) distribution or collection part, (C) special purpose part and (D) reimbursement part. All parts may or may not apply in each case, and in certain cases the Authority may opt for dedication of developer constructed facilities rather than a tapping fee payment. Specific calculation procedures are defined in the Act, and certain costs must be excluded from the cost-based calculations applicable to each part. Summary descriptions of this methodology are provided below as a prelude to presenting the maximum fee determination for each part as applicable to the Authority's system.

In general, tapping fees for new customers are designed to recover costs of existing or planned (only planned capacity-related facilities with defined requirements are permitted) facilities necessary to serve those customers, excluding cost recovered by other means, such as through metered rates or other charges. Facilities considered in the capacity part include but are not limited to: transmission, trunk, or interceptor mains, wastewater treatment plant, pump stations, sludge treatment or disposal, or other related facilities. Facilities considered in the collection part include collection sewer mains. The special purpose part is limited to facilities applicable only to a particular group of customers or serving a particular purpose or specific area. The reimbursement part is imposed when necessary to provide reimbursement to the property owner or developer who funds new facilities that benefit new customers by direct tap ins only, within the limits of their development interests.

Besides prescribing cost calculation methodology and requiring that contributed or grant-funded facilities be excluded from cost calculations, Act 57 also specifies four (4) exclusionary rules for tapping fee calculations, as follows:

A. No Double-Counting - the same cost shall not be included in more than one part of the tapping fee.

B. No Existing Customer Upgrades - no tapping fee may be based upon or include the cost of expanding, replacing, updating or upgrading facilities serving only existing customers in order to meet stricter efficiency, environmental, regulatory or safety standards or to provide better service to or meet the needs of existing customers.

- C. **No O&M Expenses** - tapping fees shall not include operation and maintenance expenses, i.e., expenditures made during the useful life of a wastewater system for labor, materials, utilities, equipment accessories, appurtenances and other items which are necessary to manage and maintain the system capacity and performance and to provide the service for which the system was constructed. Costs or expenses to reduce or eliminate groundwater infiltration or inflow may not be included in the cost of facilities used to calculate tapping fees unless these costs or expenses result in an increase in system design capacity.
- D. **No Design Capacity Required for Residential Customers Above Act Requirements** - except as otherwise provided for in the calculation of a special purpose part, the design capacity required by a new residential customer used in calculating sewer tapping fees shall not exceed an amount established by multiplying 90 gallons per capita per day (gpcd) times the average number of persons per household as established by the most recent census data provided by the United States Census Bureau. Alternatively, the design capacity required for a new residential customer shall be determined by a measured sewage flow study but shall not exceed the average wastewater demand per residential customer determined by a sewage flow study. Requirements for completing the study and addressing challenges to the validity of the study results are provided for in the Pennsylvania Municipality Authorities Act.

Tapping fee part costs, which may include applicable costs of both existing and planned (only planned capacity-related facilities are permitted) facilities and are subject to certain provisions and/or tests shall be based upon:

- A. Historical cost trended to current costs using published cost indices; or
- B. Historical cost plus interest and fees paid on the debt financing such facilities.

To the extent that historical costs are not available, tapping fees may be based on an engineer's reasonable written estimate of the current replacement cost. Such written estimate shall be based upon and include an itemized listing of those components of the actual facilities for which historical costs are not available.

In the case of existing facilities, outstanding debt related to the facilities shall be subtracted from the cost, except when calculating the initial tapping fee imposed for connection to facilities exclusively serving new customers.

The Act permits the reasonable estimated cost of planned capacity-related facilities that will provide future service to be included in the calculation of the capacity-related tapping fee parts, as long as certain requirements are met to satisfy the planned facility(s) inclusion.

Separate accounting for future facility costs. In accordance with the Act, any portion of tapping fees collected which have been based on facilities to be constructed or acquired in the future, shall be separately accounted for and shall be expended only for that particular facility or a substitute facility accomplishing the same purpose which is commenced within the same period. Such accounting shall include but is not limited to the total fees collected as a result of including facilities to be constructed in the future, the source of the fees collected and the amount of fees expended on specific facilities. The proportionate share of tapping fees based upon facilities to be constructed or acquired in the future under this section shall be refunded to the payor of such fees within ninety (90) days of the occurrence of the following:

- A. The Authority abandons its plan or a part thereof to construct or acquire a facility or facilities which are the basis for such fee; or

- B. The facilities have not been placed into service within seven (7) years or, for an Authority which provides service to five or more municipalities, the facilities have not been placed into service within fifteen (15) years, after adoption of a resolution which imposes tapping fees which are based upon facilities to be constructed or acquired in the future. Any refund of fees held for fifteen (15) years shall include interest for the period the money was held.

GREATER HAZLETON JOINT SEWER AUTHORITY
SUMMARY OF FEES CALCULATED FOR
CAPITAL CHARGES AND TAPPING FEES STUDY

Pennsylvania Act No. 57 of 2003 and the Pennsylvania Municipality Authorities Act provide for the imposition of three (3) separate fees that are designed to allow the Authority to recover certain specific capital costs. These are the only capital charges that an Authority may make except for Assessments. Wastewater rentals and other charges that recover operating and maintenance costs and debt service are not to be included as capital costs. The three (3) fees authorized are:

1. Connection Fee
2. Customer Facilities Fee
3. Tapping Fee (4 Parts)

<u>Fee Description</u>	<u>Maximum Fee Allowed per EDU</u>	<u>See Schedule</u>	<u>Description of Facilities</u>
1. Connection Fee	\$ 1,250.00	A	Public Sewer Service Connection
(Applicable only to new customers in the City of Hazleton and Borough of West Hazleton when Greater Hazleton Joint Sewer Authority constructs said sewer lateral lines)			
2. Customer Facilities Fee	N/A	B	Private Building Sewer Line
3. Tapping Fee			
a. Capacity Part	\$ 1,666.34	C	Wastewater Treatment Plant/Transmission/Interceptor Lines/Pump Stations
(Applicable to <u>ALL</u> new customers of the Greater Hazleton Joint Sewer Authority receiving service for Wastewater Treatment)			
b. Collection Part	\$ 5,560.36	D	Sewer Collection Lines/Mains
(Applicable only to new customers in the City of Hazleton and Borough of West Hazleton receiving service via the Greater Hazleton Joint Sewer Authority owned collection system)			
c. Special Purpose Part	N/A	E	Sewer Main Extensions/Other
d. Reimbursement Part	N/A	F	Sewer Main Extensions

The cost of sewer mains, laterals, etc., constructed by parties other than the Authority, or Grants-in-Aid have been excluded from the Connection Fee and Tapping Fee calculations. The Tapping Fee computations are based upon the cost of initial construction improvements and additions thereto paid by the Authority and trended to the present.

NOTE: EDU as used herein refers to equivalent dwelling unit, household or billable unit.

SCHEDULE A

GREATER HAZLETON JOINT AUTHORITY

CALCULATION OF CONNECTION FEE

PURSUANT TO ACT 57 OF 2003

The Connection Fee covers the cost of the public sewer service connection (sewer lateral line) installed between the sewer main and the property line, including up to the first 25 feet of sewer lateral line and all appurtenances and restoration costs to which the private building customer service line connects. The construction of the connection facilities when completed by the Authority may be based on either:

1. The actual cost of each connection.
2. The average actual cost of previously bid connections of a similar type and size.
3. In lieu of payment of a Connection Fee, the Authority may require the construction and dedication of these service connections by the property owner.

We recommend using the Average Actual Cost Method as the basis for calculating the Connection Fee, which is **only** applicable to sewer lateral lines installed by the Authority or under contracts awarded by the Authority in the City of Hazleton and the Borough of West Hazleton.

An average lateral line length of 25 feet has been used in the following calculation to compute the Total Estimated Cost of installations by the size and type indicated below. Unit Prices were based on recent construction figures provided by the Greater Hazleton Joint Sewer Authority.

<u>Open Cut</u>	<u>Average Quantity</u>	<u>Unit Price</u>	<u>Actual Cost</u>
4" Ø PVC Lateral Line	25 L.F.	\$ 50/L.F.	\$ 1,250.00

Total Connection Fee for up to the first 25 L.F. of installed 4" PVC sewer lateral line= \$1,250.00

(Only applicable to new customers in the City of Hazleton and the Borough of West Hazleton when the Greater Hazleton Joint Sewer Authority constructs said sewer lateral lines)

SCHEDULE B

**GREATER HAZLETON JOINT AUTHORITY
CALCULATION OF CUSTOMER FACILITIES FEE
PURSUANT TO ACT 57 OF 2003**

The Customer Facilities Fee covers the cost of the facilities from the sewer lateral line at the property line to the proposed dwelling, building, or establishment, also known as the "Private Building Sewer Line." This fee may be charged only if the Authority constructs such facilities, however, this Authority has not constructed such facilities to date.

Total Customer Facilities Fee = N/A

IV. CAPACITY PART OF TAPPING FEE

The capacity part of the tapping fee is designed to recover from new customers their fair share of the costs of existing and planned capacity-related facilities that will provide them with service and enable them to achieve the same standing as existing customers. The capacity part of the tapping fee, per unit of capacity required by the new customer, shall not exceed the applicable cost of such facilities divided by the design capacity of the facilities.

The capacity part of the Authority's tapping fee recovers costs associated with the construction of the Authority's Wastewater Treatment Plant, pumping stations, interceptor and transmission facilities. The existing interceptor mains that transmit sewage to and from the WWTP are considered transmission mains and are included in the capacity part of the tapping fee. The Authority does have historical cost records for the treatment plant, pump stations and transmission mains. The Authority does not have historical cost records for all of the wastewater collection and other transmission mains acquired from the City of Hazleton and the Borough of West Hazleton; therefore, the calculation of this part of the fee is based on estimated replacement costs. Estimated quantities and unit prices used in calculating collection main replacement costs are included in Section V. It is assumed that approximately 75% of the Authority's collection mains are located in paved areas and the remaining 25% are located in unpaved areas.

As established by Act 57, the calculation of this fee is based on current costs and includes the deduction of outstanding debt. The Authority's current outstanding long term debt is distributed accordingly between the capacity and collection parts of the tapping fee.

Schedule C presents the calculation of the maximum allowable Capacity Part of the Authority's tapping fee. The total net value of the existing capacity-related facilities divided by the total system design capacity results in a unit capacity value of \$7.54 per gallon per day (gpd). The design capacity required by a new residential customer is calculated at 221gpd/household in accordance with the provisions of Act 57. This value is based on 90 gallons per capita per day (gpd) times the average number of persons per household in 2010 (2.45 persons/household based on the Pennsylvania 2010 United States Census). The average number of persons per household in Pennsylvania was used because the Authority's service area is not located entirely within a municipal boundary for which census data is available. The result of multiplying 90 gpd times 2.45 persons per household is rounded to 221 gpd per household. The capacity-related cost per new residential customer or EDU is calculated by multiplying the unit capacity value of \$7.54/gpd capacity by 221 gpd. The calculated maximum value for the capacity-related tapping fee is **\$1,666.34**. Commercial and industrial customers would be assessed a maximum capacity component of the tapping fee based on **\$7.54** times the customer's estimated wastewater usage requirements.

The GHJSA has elected to establish and adopt a lower amount for the capacity part of the tapping fee in the amount of \$250.00 for each residential EDU and \$1.13 per gallon for commercial and industrial customers.

All new customers of the Greater Hazleton Joint Sewer Authority receiving service for Wastewater Treatment would be subject to the capacity part of the tapping fee.

SCHEDULES C, D, E, & F

GREATER HAZLETON JOINT AUTHORITY

CALCULATION OF TAPPING FEE

A Tapping Fee is comprised of up to four separate parts which are separately calculated. In lieu of the payment of a Tapping Fee, the Authority may require the construction and dedication of only such capacity, collection or special purpose facilities necessary to supply service to the property owners.

<u>See Schedule</u>	<u>Cost Components</u>	<u>Description of Facilities</u>
C	Capacity Part	Wastewater Treatment Plant Transmission/Interceptor Lines/Pump Stations
D	+ Collection Part	Sewer Collection Lines/Mains
E	+ Special Purpose Part	Sewer Main Extensions/Other
F	+ <u>Reimbursement Part</u>	
	= Tapping Fee	

Authority operation and maintenance expenses have not been included in the following tapping fee calculations. The attached Tapping Fee calculations do not include any cost to expand, replace, update or upgrade facilities serving existing customers in order to meet stricter efficiency, environmental, regulatory or safety standards, or to provide better service to or meet the needs of existing customers.

In addition to construction costs, project costs include engineering, legal, right-of-way/property acquisition, administrative and fiscal costs associated with financing the project.

Original Project Construction:	Varies
Equivalent Dwelling Unit (EDU):	221 Gallons/Day (GPD)
Total Design Capacity:	8,900,000 Gallons/Day (GPD)
Established by Act 57 of 2003 establishing 90 gallons per person per day	or 40,271 EDU's at 221 Gallons/Day/EDU

SCHEDULE C

GREATER HAZLETON JOINT AUTHORITY

CALCULATION OF TAPPING FEE

CAPACITY PART

Capital Improvements Including Wastewater Treatment Plant /Four (4) Pump Stations/Transmission Mains / Interceptor Lines:

A. Wastewater Treatment Plant, Wastewater Pump Stations, Transmission Mains and Appurtenances (as originally constructed in 1966)

(1)	Engineering/Inspection	\$ 451,858
(2)	Legal Expenses	\$ 66,500
(3)	Administration Expenses	\$ 15,000
(4)	Property/West Hazleton Collecting Trunk and Intercepting Sewer Line Acquisition	\$ 152,500
(5)	Interest during Construction	\$ 457,230
(6)	Payment to CANDO	\$ 102,165
(7)	Payment to City of Hazleton for Federal Loan Reimbursement	\$ 35,000
(8)	Bond Discount	\$ 127,000
(9)	Construction of Treatment Plant and Pump Stations	\$ 3,629,114
(10)	Construction of Force Mains, Sewers and Diversion Chambers	\$ 1,766,426
(11)	Initial O & M and Trustee Fee	\$ 200,000
(12)	Miscellaneous Costs	\$ 335,797

A SUBTOTAL = \$ 7,338,590

Less Federal Grant = - \$ 988,590

Revised A Subtotal = \$ 6,350,000

ENR Index @ in service date (1966) = 1,019

ENR Index for January 2015 = 9,972

Ratio of ENR Index = 9.79

TRENDING FACTOR (OVER 49 YEARS) x 9.79

A TOTAL = \$ 62,166,500

B. Wastewater Treatment Plant Upgrade (1989)

(1)	Engineering Costs	\$ 498,536
(2)	Legal Costs	\$ 1,825
(3)	Administration Costs	\$ 4,500
(4)	Construction Costs	\$ 4,397,590

B SUBTOTAL = \$ 4,902,451

ENR Index @ in service date (1989) = 4,615

ENR Index for January 2015 = 9,972

Ratio of ENR Index = 2.16

TRENDING FACTOR (OVER 26 YEARS) x 2.16

B TOTAL = \$ 10,589,294

C. Wastewater Treatment Plant Upgrade (2012)

(1)	Engineering Costs	\$ 1,426,757
(2)	Legal Costs	\$ 62,908
(3)	Administration Costs	\$ 149,500
(4)	West Hazleton Building Permit Costs	\$ 207,895
(5)	Interest during Construction Costs	\$ 141,294
(6)	Other Permits Costs	\$ 3,750
(7)	Construction Management Costs	\$ 1,531,837
(8)	Construction Costs	\$ 34,153,428

C SUBTOTAL = \$ 37,677,369

TRENDING FACTOR (OVER 3 YEARS) x 1.07

C TOTAL = \$ 40,314,785

ENR Index @ in service date (2012) = 9,308

ENR Index for January 2015 = 9,972

Ratio of ENR Index = 1.07

TOTAL (A+B+C) = \$ 113,070,579

Minus Outstanding Debt = - \$ 45,986,036

Revised Total (A+B+C) = \$ 67,084,543

System Design Capacity = 8,900,000 GPD

Unit Cost = \$ 7.54/Gallon

Household Flow x 221 GPD

Maximum Capacity Part of Tapping Fee per Household or EDU = \$ 1,666.34

V. COLLECTION PART OF TAPPING FEE

The collection part of the tapping fee is designed to recover from new customers their fair share of the costs of collection facilities normally required to provide service, such as sewer collection mains, manholes, and associated appurtenances. The collection part of the tapping fee, per unit of design capacity required by the new customer, as defined by Act 57, shall not exceed the applicable cost of such facilities divided by the system design capacity of the facilities. As established by Act 57, the calculation of this fee is based on current costs and includes the deduction of outstanding debt.

Sewer mains, 24 inches and smaller in diameter, are considered collection mains and are included in the collection part of the tapping fee. Developer constructed and dedicated sewer mains are not included in the computation of this fee. The length of collection mains used in the computation of the collection part of the tapping fee is shown below. The collection part of the tapping fee is based on replacement costs because the Authority does not have historical cost records for all of the owned collection facilities. Estimated quantities and unit prices used in calculating the collection main replacement costs are summarized below. Historical construction cost records are not available for the collection sewer mains. It is assumed that approximately 75% of the Authority's collection mains are located in paved areas and the remaining 25% are located in unpaved areas.

Schedule D presents the calculation of the maximum allowable Collection Part of the Authority's tapping fee. The unit distribution value is \$25.16/gpd. The design capacity required by a new residential customer is calculated at 221 gpd/household in accordance with the provisions of Act 57. This value is based on 90 gpd times the average number of persons per household in PA (2.45 persons per household based on the 2010 United States Census). The collection related cost per new residential customer is calculated by multiplying the unit distribution value of \$25.16/gpd capacity by 221 gpd. The calculated maximum value for the collection-related tapping fee is **\$5,560.36**. Commercial and industrial customers would be assessed a maximum collection component of the tapping fee based on **\$25.16** times the customer's estimated wastewater usage requirements.

The GHJSA has elected to establish and adopt a lower amount for the collection part of the tapping fee in the amount of \$1,500.00 for each residential EDU and \$6.79 per gallon for commercial and industrial customers.

Only new customers residing in the City of Hazleton and the Borough of West Hazleton receiving sewer service via the Greater Hazleton Joint Sewer Authority owned sewer collection system would be subject to this fee.

Hazleton City Sewers	=	Approximately 88.9 miles	or	469,392 L.F. of Sewer Replacement
West Hazleton Borough Sewers	=	Approximately 11.0 miles	or	58,080 L.F. of Sewer Replacement
Hazle Township Sewers	=	Approximately 4.6 miles	or	24,288 L.F. of Sewer Replacement
Total				= 551,760 L.F. of Sewer Replacement
				x \$ 300/L.F. Avg.
Estimated Total Replacement Cost				= \$ 165,528,000

SCHEDULE D

GREATER HAZLETON JOINT AUTHORITY

CALCULATION OF TAPPING FEE

COLLECTION PART

This part is for Collection facilities consisting of sewer mains constructed or acquired by the Authority. The costs of the wastewater treatment plant, transmission mains, pump stations, interceptor lines, and lateral connections have been excluded and the calculations are based on estimated replacement costs.

CAPITAL IMPROVEMENTS:

TOTAL

Collection System and Appurtenances (as acquired from the City of Hazleton and the Borough of West Hazleton) all figures are estimated

(1) Engineering	\$ 24,829,200
(2) Legal	\$ 6,000,000
(3) Administration	\$ 3,300,000
(4) Right-of-Way Acquisition	0
(5) Interest During Construction	\$ 8,275,500
(6) Construction	\$ 165,528,000
(7) Contingency	\$ 16,552,800
A SUBTOTAL =	\$ 224,485,500
TRENDING FACTOR (OVER N/A YEARS) x	N/A
A SUBTOTAL =	\$224,485,500
¹(Minus Outstanding Debt) =	- \$ 548,143
Revised Subtotal =	\$223,937,357
System Design Capacity =	8,900,000 GPD
Unit Cost =	\$ 25.16/Gallon
Household Flow =	x 221 GPD
Maximum Collection Part of Tapping Fee per Household or EDU =	\$ 5,560.36/EDU

¹ (Assumption of City of Hazleton PENNVEST Loan #58103 in the principal remaining amount of \$548,143)

COLLECTION SYSTEM DESIGN PARAMETER

Maximum Design Capacity established by PADEP Water Quality Management Permit No. 4012404 dated January 15, 2013 = 8,900,000 GPD

1 Equivalent Dwelling Unit (EDU, Household, or Billable Unit) = 221 GPD
2.45 people per Household (as per year 2010 census for Pennsylvania) x 90 gallons per person per day as allowed by Act 57

Design Capacity: 8,900,000 GPD ÷ 221 GPD/EDU = 40,271 EDU'S

\$ 223,937,357 ÷ 40,271 EDU's = \$5,560.36/EDU or Household

VI. SPECIAL PURPOSE PART OF TAPPING FEE

This part shall be applicable only to a particular class or group of customers. The special purpose component is designed to recover the Authority's cost for facilities that serve a special purpose or a specific area. Examples may include pumping stations, sewer mains, industrial wastewater treatment facilities dedicated or exclusive to serving a certain customer group or service area. Such facilities may include only those that provide existing service. Fees would be separately calculated for each applicable group and applied to new users as appropriate. The special purpose part is in addition to all other fees. No special purpose facilities have been identified in the Authority's system. Therefore, a special purpose part of the tapping fee is not appropriate for the Authority at this time.

SCHEDULE E

CALCULATION OF SPECIAL PURPOSE PART

When appropriate, a part for special purpose facilities shall be applicable only to a particular group of customers or for serving a particular purpose or a specific area based upon the cost of the facilities including, but not limited to, booster pump stations, fire service facilities, water or sewer mains, pumping stations and industrial wastewater treatment facilities. Such facilities may include only those that provide existing service. The cost of special purpose facilities, excluding facilities contributed to the Authority by any person, government or agency, or portions of facilities paid for with contributions or grants other than tapping fees, shall be based upon historical cost trended to current cost using published cost indices or upon the historical cost plus interest and other financing fees paid on debt financing such facilities. To the extent that historical cost is not ascertainable, tapping fees may be based upon an engineer's reasonable written estimate of current replacement cost. Such written estimate shall be based upon and include an itemized listing of those components of the actual facilities for which historical cost is not ascertainable. Outstanding debt related to the facilities shall be subtracted from the cost, except when calculating the initial tapping fee imposed for connection to facilities exclusively serving new customers. The outstanding debt shall be subtracted for all subsequent revisions of the initial tapping fee, where the historical cost has been updated to reflect current cost, except as specifically provided in this section. For tapping fees or components related to facilities initially serving exclusively new customers, an Authority may no more frequently than annually and without updating the historical cost of or subtracting the outstanding debt related to such facilities, increase such tapping fee by an amount calculated by multiplying the tapping fee by the weighted average interest rate on the debt related to such facilities applicable for the period since the fee was initially established or the last increase of the tapping fee for such facilities. The special purpose part of the tapping fee per unit of design capacity of such special purpose facilities required by the new customer shall not exceed the cost of the facilities as described herein divided by the design capacity of the facilities. Where an Authority constructs special purpose facilities at its own expense, the design capacity for the facilities may be expressed in terms of the number of equivalent dwelling units to be served by the facilities. In no event shall an Authority continue to collect any tapping fee which includes a special purpose part after the special purpose part fee has been imposed on the total number of design capacity units used in the original calculation of the special purpose part. An Authority may allocate its special purpose facilities to different sections or districts of its system and may impose additional special purpose tapping fees on specific groups of existing customers, such as commercial and industrial customers, in conjunction with additional capacity requirement of those customers. No special purpose parts have been identified in the Authority's system at the present time. Therefore, a special purpose part of the tapping fee is not appropriate for the Authority at this time.

VII. REIMBURSEMENT PART OF TAPPING FEE

The reimbursement part may be included in the tapping fee charged for new connections to facilities constructed by others for which a reimbursement is due to the property owner or developer originally constructing the facilities. Generally, this reimbursement is defined in a written reimbursement agreement between the Authority and the property owner or developer originally constructing the facilities. Reimbursements typically apply when a direct connection is made to a developer-installed sewer main extension. Act 57 requires that reimbursement provisions be defined in a sewer main extension agreement between the Authority and the developer. The total amount to be reimbursed shall not exceed the actual cost of the main extension, which shall be confirmed by documentation supplied by the developer at the completion of construction, less the amount that would be chargeable to the developer based upon the Authority's collection part of the tapping fee if such extension was not funded by the developer. The reimbursement period is limited by the Act to ten (10) years from the date of the dedication of the sewer extension facilities to the Authority.

When a fee, as set forth in a written agreement, is to be collected from users of certain specific facilities and reimbursed to the property owner or developer at whose expense the facilities were constructed, the reimbursement part shall only be applicable to those users. No reimbursement facilities have been identified in the Authority's system at the present time. Therefore, a reimbursement part of the tapping fee is not appropriate for the Authority at this time.

SCHEDULE F

CALCULATION OF REIMBURSEMENT PART

Where appropriate, a reimbursement part may be included in order to recapture the allowable portion of expenses of another party, other than the Authority. When another party constructs new sewer main extensions, a reimbursement part can be added to the Tapping Fee computed under Schedules C and D.

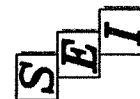
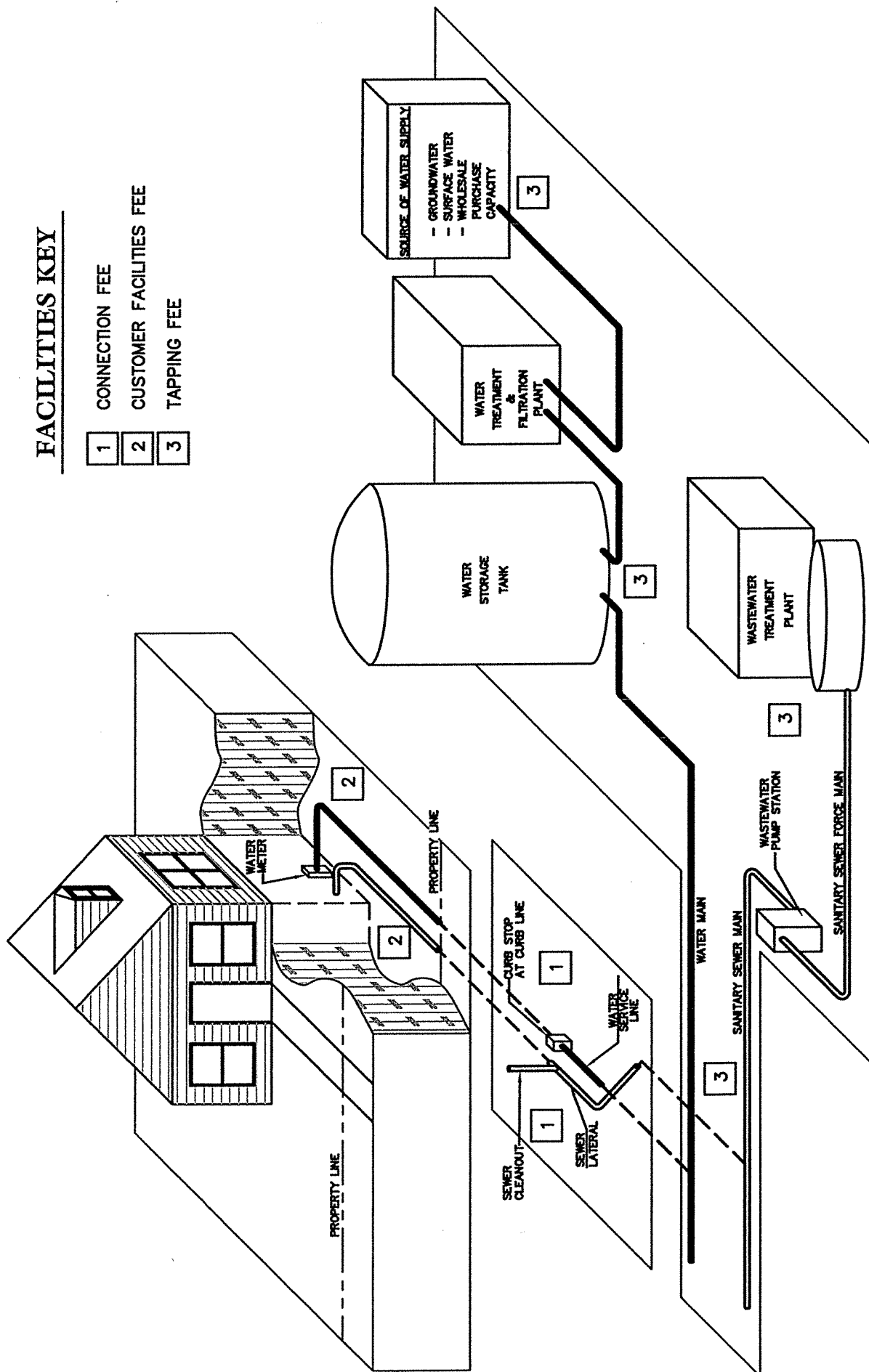
VIII. TAPPING FEE SUMMARY

In accordance with Act 57 of 2003, the historical trended cost method was used where historical costs were available. Replacement costs were developed for facilities where original construction cost records are not available. The following is a summary of the maximum allowable fees per residential connection as calculated herein:

<u>Authority Constructed</u>	<u>Maximum Allowable Capital Charges Fee Amount Per Household, EDU or Billable Unit</u>	<u>Adopted Capital Charges Fee Amount for Household, EDU or Billable Unit</u>
1. Connection Fee	\$ 1,250.00 (See Schedule A)	\$ 1,250.00
2. Customer Facilities Fee	Not Applicable (See Schedule B)	N/A
3. Tapping Fee		
Capacity Part	\$ 1,666.34 (See Schedule C)	\$ 250.00
Collection Part	\$ 5,560.36 (See Schedule D)	\$ 1,500.00
Special Purpose Part	Not Applicable (See Schedule E)	N/A
Reimbursement Part	Not Applicable (See Schedule F)	N/A

FACILITIES KEY

1	CONNECTION FEE
2	CUSTOMER FACILITIES FEE
3	TAPPING FEE



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