

ORDINANCE NO.126 .2008 – TAP FEES AND SEWER IMPACT FEES

AN ORDINANCE AUTHORIZING A REDUCTION IN SEWER TAP FEES AND ESTABLISHING SEWER IMPACT FEES TO BE PAID BY USERS OF THE KERSHAW COUNTY UTILITIES SEWER SYSTEM IN CONNECTION WITH A WASTEWATER MASTER PLAN FOR KERSHAW COUNTY.

BE IT ORDAINED BY THE COUNTY COUNCIL OF KERSHAW COUNTY, SOUTH CAROLINA, IN MEETING DULY ASSEMBLED:

ARTICLE I

FINDINGS OF FACT

As incident to the adoption of this Ordinance, the County Council of Kershaw County (the “Council”), the governing body of Kershaw County, South Carolina (the “County”), finds each fact stated herein is true and correct.

Section 1.01

1. The County is a body politic and a political subdivision of the State of South Carolina. The Council is the governing body of the County.

2. Pursuant to Sections 44-55-1410 (2006) and 4-9-30(5) of the Code of Laws of South Carolina, 1976, and a favorable referendum vote of the people of Kershaw County at an election held on November 5, 1996, the County is authorized to acquire, construct, improve, enlarge, operate and maintain within the County a system for the collection, treatment and disposition of sewage and to place into effect schedules of rates and charges for the use of these sewer facilities.

3. By Ordinance dated June 12, 2007, Kershaw County Council created the Kershaw County Sewer District, comprised of the entire unincorporated area of Kershaw County (the “District”) to provide sewer service in the unincorporated areas of Kershaw County.

4. By Ordinance dated August 14, 2007, the Kershaw County Council adopted the Comprehensive Plan for Kershaw County 2006-2016, which was the ten-year update to the County’s existing Comprehensive Plan. One of the principal recommendations of the Comprehensive Plan was the development of a five-year Capital Improvement Program (the “CIP”), which was duly developed by the Planning Commission and received from the Planning Commission by Kershaw County Council by Ordinance dated May 13, 2008.

JOYCE McDONALD  
CLERK OF COURT  
KERSHAW COUNTY, S.C.

08 SEP 16 AM 10:19

FILED FOR RECORD

5. Certain areas to be provided sewer service serviced by the District are experiencing dramatic residential, commercial and industrial growth due to their proximity to the Columbia metropolitan area.

6. This growth places significant financial stress on the District, particularly in the western part of the County, and in areas near Interstate Highway 20.

7. The CIP initially identified capital improvements to the District's sewer system valued at \$20.5 million (without taking into account inflation and financing costs) that will need to be constructed in the five-year period 2008-2013.<sup>1</sup> The cost of those capital improvements has been updated by the Utilities Department through July 16, 2008 to account for inflation and financing costs, and the total cost is now estimated to be \$28,073,683.61 for the 2008-2013 period. The CIP indicates that an additional 3.28 MGD of waste water capacity, or 8,200 Residential Development Units, ("RDUs") of capacity, will be provided by the District's sewer system (the "System") during that time.

8. Pursuant to S.C. Code Ann. § 6-1-1080 (2006), the County may impose an impact fee if it has:

- (a) adopted a capital improvements plan before imposition of the impact fee, after due public notice before final adoption of the plan; and
- (b) prepared a report to be made public before the imposition of the impact fee, which shall include an explanation of the basis, use, calculation and method of collection of the impact fee; and
- (c) enacted the impact fee in accordance with Article 3, Chapter 1 of Title 6 of the S.C. Code of Laws, 1976, as amended.

9. County Council has reviewed the Kershaw County, South Carolina, Five-Year Sewer System Capital Improvement Plan Issued by the Utilities Department of Kershaw County, as incorporated verbatim into the CIP as Appendix E thereto and is attached hereto as Exhibit A. Council has also reviewed Exhibit B, which contains revised cost figures for plant and system improvements through July 16, 2008. Exhibits A and B together constitute the 2008 Sewer Capital Improvement Plan, and Council finds the Plan to be sufficient to comply with Section 6-1-1080(1), S.C. Code of Laws, 1976, as amended.

10. Council further finds that in light of the capital needs identified in the attached Sewer CIP, an Impact Fee is a fair and equitable way to address the increasing capital costs to the System associated with new customer growth and adoption of an Impact Fee is in the best interest of the County.

---

<sup>1</sup> The cost of current plant improvements, which have already been funded by a bond issue, are not included in the calculation of the Sewer Impact Fee.

11. The Kershaw County Utilities Department has issued a Sewer Impact Fee Report in satisfaction of the requirements of Section 6-1-1080(2) of the Code of Laws of South Carolina, 1976, a copy of which is attached hereto and incorporated herein by reference as Exhibit B.

12. Included in that Sewer Impact Fee Report is an Appendix A which calculates the revised costs of the capital improvements to the sewer collection, treatment and disposal services as outlined in the Sewer CIP (the "Improvements") when adjusted for inflation and the County's financing costs. Council has reviewed Appendix A for Exhibit B and finds it to represent a reasonable and appropriate analysis of the full cost of the Improvements to the County, i.e. \$28,073,683.61, and is an appropriate basis on which to establish the impact fee.

13. Based on the Sewer CIP and the Sewer Impact Fee Report, the Council finds that capacity for 8,200 RDUs will be added and that a reasonable estimate of the capital costs that new customers and new service demands will place on the System during the five-year planning horizon is \$ 3,424 per RDU.

14. Council has carefully considered the value to property owners, developers and industrial customers of sewer service availability; the impact of sewer service availability on land values; the burden impact fees place on developers, property owners, and industrial customers; and the relative ability of existing customers versus developers, property owners, and industrial customers to pay for the capital cost of improving the System. The Council has also assessed the reasonableness of the proposed Impact Fee against the comparable fees charged by other sewer systems in South Carolina for connections. The Council is specifically aware that existing customers will pay the costs of expanding the System that are not recovered through the Impact Fees.

15. In order to serve new customers at the same level of service being provided to current System customers, and to require new customers to pay a proportional share of the cost of the capacity installed to serve them, the Council finds that it is in the best interests of the County and its residents to implement an impact fee of Two Thousand Two Hundred Fifty (\$2,250) Dollars per RDU for all developers, individuals or other legal entities who on or after the effective date of this Ordinance (a) are issued sewer availability letters, (b) connect existing premises to the System where no availability letter has been required, or (c) increase their authorized discharge into the System by contract or otherwise (the "Impact Fee").

16. Council finds that an impact fee of \$2,250 per RDU is a reasonable and proportional contribution for developers, property owners, industrial customers and other new or expanding customers to pay toward the capital costs of the system as a condition of receiving new or expanded public sewer service.

17. Council further finds that the revenues derived from the Impact Fee must be used to pay the costs related to the Improvements including debt service on bonds issued to finance the Improvements.

18. The Impact Fee is set initially at \$2,250 per Residential Development Unit (“RDU”) which is estimated to generate less than the entire amount of the capital that will be required to complete the Improvements, particularly when associated inflation and financing costs are considered. The remaining cost of the Improvements will be defrayed through charges to existing customers and other System revenues.

19. In addition to the capital costs that service to new customers imposes on the District, such service also imposes substantial non-capital expenses. Non-capital expenses associated with service to new customers include such things as a) expenses incurred in supervising the location and construction of such connections; b) expenses incurred in reviewing engineering matters related to new services; c) expenses incurred in the inspection and approval of the new service connections; d) expenses incurred in resolving disputes with developers, landowners and their representatives related to new service issues; e) expenses incurred in negotiating contracts or contract amendments with industrial customers; f) expenses incurred in setting up new service accounts, including customer service expenses, computer system expenses, billing set up expenses; and g) other new service expenses.

20. The District currently charges a tap fee of \$2,000 to defray the cost of non-capital costs of connections made to its System. The “tap fee” shall hereafter be denominated as a “Service Initiation Fee,” which more accurately reflects the non-capital nature of the charge.

21. To reduce the burden on new customers of its System from the imposition of the Impact Fee, it is appropriate for this Service Initiation Fee to be established at \$750.

## ARTICLE II

### PROCEDURE SEWER IMPACT FEES IMPOSED, COLLECTION PROCEDURES

#### Section 2.01 Adoption of the Sewer Impact Fee Report.

The Council hereby adopts the Sewer Impact Fee Report attached hereto as Exhibit B, including Appendix A thereto, and affirms each of the findings and recommendations it contains.

#### Section 2.02 Sewer Impact Fee Imposed.

1. Each person seeking to receive a sewer availability letter from the Kershaw County Sewer System (the “System”), each person seeking to connect a new premises to the System, and each customer seeking to increase its authorized level of discharge into the System shall pay an Impact Fee equal to \$2,250 per RDU for each RDU represented by the customer’s request.

2. The Kershaw County Utilities Department shall compute the RDU for each customer or request using standard equivalency criteria promulgated from time to time by the South Carolina Department of Health and Environmental Control and successor agencies. The County reserves the right to review and revise the level at which Impact Fees are set or RDUs are calculated at any time in the future.

3. Impact Fees shall be used to defray the cost of capital improvements to the System which includes the payment of debt service related thereto. The Kershaw County Five-Year Sewer System Capital Improvement Plan, dated 2008, sets forth the current plan and sequencing of the those capital improvements (the "Improvements"). However, the County reserves to right to amend or modify the plan, or to change the Improvements on which the Impact Fees are expended, so long as the proceeds of the Impact Fees are spent on capital improvements to the System.

4. Impact Fees receipts will be kept in a separate interest bearing fund.

5. Impact Fees will become due and will be collected in cash by the Planning and Zoning Department as follows;

(a) Impact Fees for new developments will become due and will be collected at the time a sewer availability letter is requested for the development, or in the discretion of the County Administrator thirty (30) days thereafter. The District may cancel the sewer availability letter or letters for any development, developer or entity under their joint ownership or control if timely payment for letters issued in advance of payment is not received;

(b) Impact Fees for premises where no sewer availability letter was required shall become due and will be collected when such premises apply for authorization to connect to the System; and

(c) For existing industrial customers or other customers seeking to increase their permitted discharge volumes into the System, the Impact Fees will become due and will be collected at the time the changes in discharge volumes are contracted for.

6. In cases where at the written request of the District developers agree to install lines, pump stations or other facilities sized to serve other properties, the District shall determine the additional incremental costs of up-sizing facilities and shall credit against the Impact Fees owing from that party the additional incremental costs so determined. Incremental costs shall be determined by comparing the total cost of installing facilities sized to serve the property owned by the customer with the cost to install the up-sized facilities. The difference shall be the cost on which any credit shall be based. Property which is under common ownership or control or which is reasonably anticipated in the discretion of the utilities director to form part of the same development will not be considered "other property" in computing incremental costs.

7. The District is authorized to disconnect sewer service to any premises connected in violation of this Ordinance until all required Impact Fees and costs are paid

together with interest at the statutory rate applicable to civil judgments in the State of South Carolina accruing from the date due. The cost of disconnection of an unauthorized service connection and of the reconnection to the system after required Impact Fees, interest and costs are paid shall be borne by the person responsible for paying the Impact Fees. Interest on fees and costs resulting from unauthorized connections shall commence from the date that the District determines that the connection most probably was made, based on the evidence available to it.

Section 2.03 Miscellaneous Provisions.

1. The sewer tap fee previously authorized to be charged in fiscal year 2008-2009, and denominated in this Ordinance as a "Service Initiation Fee," shall be established and collected at the rate of \$750 per new sewer connection effective for all connection requests received on or after the effective date of this Ordinance. The fee shall be collected at the time a customer officially connects to the sewer system and shall be used to defray non-capital expenses exclusively.

2. A customer may pay under protest any Impact Fees, costs or interest assessed. Payment under protest shall not preclude customer from filing an appeal pursuant to this section or preclude receipt of a refund, if appropriate. In lieu of paying Impact Fees, costs or interest assessed under protest, the developer or fee payor, at the developer's or fee payor's option, may post a commercial bond acceptable to the County or submit an irrevocable letter of credit for the amount of the development Impact Fees, costs and/or interest due, pending the outcome of an appeal.

3. Any determination made by any official of the County charged with the administration of any part of this article may be appealed to a panel consisting of the County Administrator, County Engineer, and County Utilities Director by filing with the County Administrator or a designee within ten days of the date of the determination being appealed: (1) a written notice of appeal on a form provided by the County, or by letter (2) a written explanation of why the appellant feels that a determination was in error, and (3) payment of an appeal fee of \$50.00. The panel shall promptly fix a time and place for hearing the appeal, and the County Administrator shall mail notice of the hearing to the appellant at the address given in the notice of appeal. The hearing shall be conducted at the time and place stated in such notice given by the County Administrator, and the determination of the panel shall be final.

4. If any section, paragraph, clause or provision of this Ordinance shall be held invalid, the invalidity of such section, paragraph, clause or provision shall not affect any of the remaining provisions of the Ordinance. This Ordinance shall take effect immediately upon adoption by the Kershaw County Council.

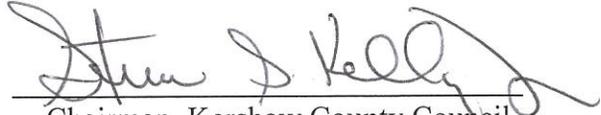
5. The Impact Fees set forth here shall remain in force until such time as all Improvements are constructed and all bonds or other obligations, including refunding bonds issued to pay their capital costs are repaid.

DONE BY VOTE OF A POSITIVE MAJORITY OF THE MEMBERS OF  
KERSHAW COUNTY COUNCIL IN MEETING DULY ASSEMBLED, this 12th day  
of August, 2008.

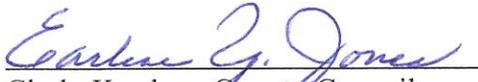
[SEAL]

KERSHAW COUNTY COUNCIL

By:

  
Chairman, Kershaw County Council

ATTEST:

  
Clerk, Kershaw County Council

1<sup>st</sup> Reading:            June 24, 2008  
2<sup>nd</sup> Reading:           July 22, 2008  
Public Hearing:        August 12, 2008  
3<sup>rd</sup> Reading:           August 12, 2008

I certify that the notice of the public hearing held in this matter was duly advertised in proper statutory form in a newspaper of general circulation in Kershaw County, South Carolina at least 15 days prior to the holding of said hearing.

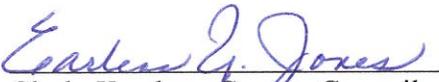
  
Clerk, Kershaw County Council

EXHIBIT A

TO AN ORDINANCE AUTHORIZING A REDUCTION IN SEWER TAP FEES AND ESTABLISHING  
SEWER IMPACT FEES TO BE PAID BY USERS OF THE KERSHAW COUNTY UTILITIES SEWER  
SYSTEM IN CONNECTION WITH A WASTEWATER MASTER PLAN FOR KERSHAW COUNTY

APPENDIX E  
KERSHAW COUNTY PUBLIC SEWER  
CIP REPORT

### Purpose and Scope

The purpose of this document is to outline a 5-year capital improvements plan for the Kershaw County wastewater collection system. During recent years the region has experienced rapid growth due to its proximity to the Columbia Metropolitan area. As documented in the Wastewater Master Plan for Kershaw County completed in November of 2000 by Hayes, Seay, Mattern & Mattern, Inc, the majority of this growth has been centralized in the south-west section of the county in the areas surrounding Lugoff and Elgin. The continued growth is dependent on the availability of essential infrastructure which includes wastewater collection, transportation, and treatment facilities. Based on the pattern of growth and the existing infrastructure, this capital improvements plan will focus on this section of the county.

The capital improvements plan (program) as outlined herein will base the plan on wastewater tap requests received to date by Kershaw County with a 10% growth factor for additional growth in the area. Additionally, the plan will include wastewater flows from industries which the County anticipates tying in to the system within the next five years.

This plan is drafted with the specific intention that it serve as the capital improvement plan required by Section 6-1-1080(1) of the Code of Laws of South Carolina (The Development Impact Fee Act), 1976, as a condition for the imposition of a development impact fee by water and wastewater utilities. As required by Sections 6-1-920(2) and (3) of that statute, a "capital improvement plan" must identify the improvements with a useful life of five years or more which are necessary to increase the service capacity of a public facility for which development impact fees may be used as a funding source. Such plans are otherwise exempt from the provisions of Chapter 1 of Article 6 by express provisions of Section 6-1-1080.

This document, which outlines a five-year capital improvement plan for the Kershaw County wastewater collection system is not a recommendation of a specific sewer impact fee structure.

### Existing System

Kershaw County owns and operates one of three major public wastewater treatment systems within the county. The Kershaw County WWTP is currently permitted for a discharge of 0.72 MGD to the Wateree River; however, the county has recently secured a construction permit for the expansion of this WWTP to 1.25 MGD expandable to 2.0 MGD with little modification. These improvements are expected to begin during March of 2008 with an expected completion within 18 months of initiation. In addition to ownership of the WWTP, Kershaw County maintains 23 pump stations throughout the service area, force mains ranging in size from 2- $\frac{1}{2}$ " to 10", and gravity sewer ranging in size from 6" to 18". As currently configured the wastewater system transmits all wastewater flows west of the Town of Lugoff through a series of pump stations along Highway 1. Each of these large pump stations are currently designed for a rated capacity of 350 gpm. The current configuration of the Kershaw County wastewater collection system is outlined in Exhibit 1. Due to the rapid growth in this area it is necessary that the County open a new corridor for transportation of wastewater from west to east. The proposed route

route for this additional corridor is outlined in Exhibit 1. The individual projects and the timing of these projects are outlined in the following sections.

### **Estimated Wastewater Flows**

As previously mentioned, the south and west portions of Kershaw County are currently experiencing heavy growth, as outlined in the tap requests summarized below. Based on this estimate the projected increase in wastewater flows in the region due to residential and commercial growth is 934,640 gallons per day. In addition to the residential and commercial growth, it is anticipated that Kershaw County will connect several industries to its wastewater system within the next five years (Kawashima, Clariant, and Cogsdill Tools). As outlined in the table below the overall increase in wastewater flows over the next five years is anticipated to reach in excess of 2,000,000 gallons per day. With increases of this magnitude it is imperative that the County outline a feasible plan for collection and transmission of this wastewater.

Tap Type	# of Taps	Requested Capacity	TMS #
Residential	35	14,000	310-00-00-080
Residential	50	20,000	310-00-00-086
Residential	180	72,000	358-00-00-011
Residential	220	88,000	309-00-00-053
Residential	74	29,600	281-00-00-036
Residential	78	31,600	335-00-00-005
Residential	280	112,000	358-00-00-111
Residential	49	19,600	296-00-00-072
Residential	4	1,600	335-00-00-085
Residential	20	8,000	308-00-00-080
Residential	200	80,000	336-00-00-115
Commercial	2	14,400	283-00-00-013
Commercial	6	2,400	283-00-00-013
Commercial	1	2,240	335-18-00-013
Residential	50	20,000	
Residential	30	12,000	296-18-00-024
Residential	280	104,000	350-00-00-038
Residential	450	180,000	281-00-00-044
Residential	1	400	310-00-00-080
Residential	1	400	
Residential	180	72,000	338-00-00-023
Commercial/Residential	105	50,000	
Residential	1	400	
<b>Total Commercial/Residential Flows</b>		<b>934,640</b>	
<b>Equivalent Residential Users</b>		<b>2,337</b>	
<b>Anticipated Wastewater Flows</b>			
Kawashima		800,000	
Clariant		500,000	
Cogsdill Tool		20,000	
<b>Total Industrial Flows</b>		<b>1,120,000</b>	
<b>Equivalent Residential Users</b>		<b>2,800</b>	

**Existing System Deficiencies**

**Kelsney Ridge/Steven Campbell Drive Development**

As outlined in the projected flows above, there are two large developments proposed in the area comprising Tax Map #358 along Kelsney Ridge Road and Steven Campbell Drive. In total the proposed development is for an average daily flow of 184,000 gpd, or a peak flow of 320 gpm. Due to the existing grade in the area, the construction of two new pump stations would be necessary to provide service to the proposed developments. The closest existing infrastructure to the proposed development is the

Elgin IGA pump station which has a rated capacity of 200 gpm. However, due to capacity issues at the IGA pump station it is proposed for the force main from the developments to bypass the IGA pump station and manifold into the force main from the existing White Pond Road pump station. Initially this sewer would be directed to the Town of Elgin pump station until such times that the run times at the Town of Elgin pump station become too large. The flow would then be reversed to send the wastewater to the existing White Pond Road pump station. Although this will be a long run of force main the route is downhill. Because these upgrades are necessary for future growth it is anticipated that these costs would be offset through the collection of sewer impact fees.

Item	Description	Qty	Unit	Unit Cost	Total Cost
1	200 gpm Duplex Pump Station	1	ls	\$200,000.00	\$200,000
2	Force Main				
	6-Inch PVC	2,900	lf	\$25.00	\$72,500
	6-Inch DIP	100	lf	\$35.00	\$3,500
	Air Release Valves	1	ea	\$4,000.00	\$4,000
3	320 gpm Duplex Pump Station	1	ls	\$250,000.00	\$250,000
4	Force Main				
	8-Inch PVC	9,750	lf	\$30.00	\$292,500
	8-Inch DIP	250	lf	\$40.00	\$10,000
	Air Release Valves	1	ea	\$4,000.00	\$4,000
5	Connection to Gravity Sewer	1	ls	\$5,000.00	\$5,000
SUBTOTAL					\$841,500
ENGINEERING & CONTINGENCY (25%)					\$210,375
TOTAL					\$1,051,875

Elgin #4 Pump Station

The Elgin #4 pump station is currently designed for 200 gpm. The existing pump station receives wastewater from the Town of Elgin pump station, a pump station serving Pine Forest, Leslie M. Stover School and other existing development in the area. In addition, there is approximately 31,600 gpd of sewer capacity being requested by developers in the area. Due to the volume of wastewater being transmitted to this system it is recommended that the pumps and panels be upgraded to supply a pumping capacity of 350 gpm. Additionally, the wet well will need to be rehabilitated simultaneously due to aggressive wastewater entering the pump station. The estimated costs are outlined in the table below. Because these upgrades are necessary for future growth it is anticipated that these costs would be offset through the collection of sewer impact fees.

Item	Description	Qty	Unit	Unit Cost	Total Cost
1	Upgrade of Pumps and Panels	1	ls	\$40,000.00	\$40,000
2	Rehabilitation of Wetwell	1	ls	\$20,000.00	\$20,000
SUBTOTAL					\$60,000
ENGINEERING & CONTINGENCY (25%)					\$15,000
TOTAL					\$75,000

### Elgin #2 Pump Station

The Elgin #2 pump station is a submersible duplex pump station with a design capacity currently of 350 gpm which is transmitted through an 8-inch force main. Based on existing data the pumps run for up to 140 minutes a day each, which correlates to an existing wastewater flow at the pump station of 98,000 gpd. According to tap requests received by the County there is an additional 96,000 gpd of wastewater flow anticipated from new development in the area. Based on these flows and the need to provide adequate capacity for wastewater collected within the Town of Elgin it is recommended that this pump station be upgraded to a capacity of 600 gpm. At these increased flows, the capacity of the receptor gravity sewer is inadequate. Therefore, it is recommended that the force main from this pump station be extended to bypass this gravity sewer. The estimated costs are outlined in the table below. Because these upgrades are necessary for future growth it is anticipated that these costs would be offset through the collection of sewer impact fees.

Item	Description	Qty	Unit	Unit Cost	Total Cost
1	600 gpm Duplex Pump Station	1	ls	\$300,000.00	\$300,000
2	Force Main				
	8-inch PVC	4,100	lf	\$30.00	\$123,000
	8-inch DIP	400	lf	\$40.00	\$16,000
	Air Release Valves	1	ea	\$4,000.00	\$4,000
3	Connection to Gravity Sewer	1	ls	\$5,000.00	\$5,000
SUBTOTAL					\$448,000
ENGINEERING & CONTINGENCY (25%)					\$112,000
TOTAL					\$560,000

### Elgin #1 Pump Station

The Elgin #1 pump station is a submersible duplex pump station with a design capacity currently of 350 gpm which is transmitted through an 8-inch force main. Based on existing data the pumps run for up to 260 minutes a day each, which correlates to an existing wastewater flow at the pump station of 182,000 gpd. According to tap requests received by the County there is an additional 20,000 gpd of wastewater flow anticipated from new development in the area. Based on these flows and the need to provide adequate capacity for wastewater collected within the Town of Elgin and in the area surrounding Elgin #2 pump station, it is recommended that this pump station be upgraded to a capacity of 800 gpm. At these increased flows, the capacity of the receptor gravity sewer is inadequate. Therefore, it is recommended that the force main from this pump station be extended to the large 18-inch sewer

Interceptor north of the Baldwin pump station. The estimated costs are outlined in the table below. Because these upgrades are necessary for future growth it is anticipated that these costs would be offset through the collection of sewer impact fees.

Item	Description	Qty	Unit	Unit Cost	Total Cost
1	800 gpm Duplex Pump Station	1	ls	\$400,000.00	\$400,000
2	Force Main				
	10-Inch PVC	13,000	lf	\$35.00	\$455,000
	10-Inch DIP	1,500	lf	\$45.00	\$67,500
	Air Release Valves	1	ea	\$4,000.00	\$4,000
3	Connection to Gravity Sewer	1	ls	\$5,000.00	\$5,000
SUBTOTAL					\$931,500
ENGINEERING & CONTINGENCY (25%)					\$232,875
TOTAL					\$1,164,375

Baldwin Pump Station

The existing Baldwin pump station is duplex suction lift pump station which currently experiences high run-times due to increased flows to the pump station. It is anticipated that these issues will be eliminated by extending the force main from Elgin #1 pump station around the Baldwin pumps. Although this routing eliminates the flow concerns at the pump station, the station has been in service for nearly twenty years and is in need of replacement. The estimated cost of this replacement is summarized in the table below. Because these costs are consider a maintenance cost it is anticipated that these costs would be offset through the operations budget.

Item	Description	Qty	Unit	Unit Cost	Total Cost
1	Replacement of Existing PS	1	ls	\$200,000.00	\$200,000
SUBTOTAL					\$200,000
ENGINEERING & CONTINGENCY (25%)					\$50,000
TOTAL					\$250,000

Rabon's Crossroads Development

As outlined in the projected flows above, there are two large developments that have requested sewer service near Highway 34 northwest of the Town of Lugoff. These developments will include a potential 209,600 gpd of wastewater generated in the area. The County does not have existing sewer service in the area; therefore, it will be necessary to extend gravity sewer to an area near the developments. The estimated costs for implementing this extension are included in the table below. This gravity sewer will transmit the wastewater from the area to an existing 12-inch gravity sewer line. Because these upgrades are necessary for future growth it is anticipated that these costs would be offset through the collection of sewer impact fees.

Item	Description	Qty	Unit	Unit Cost	Total Cost
1	Gravity Sewer				
	12-Inch PVC	6,400	lf	\$75.00	\$480,000
	12-Inch DIP	600	lf	\$85.00	\$51,000
	Jack & Bore	150	lf	\$300.00	\$45,000
2	Manholes	30	ls	\$2,500.00	\$75,000
				<b>SUBTOTAL</b>	<b>\$651,000</b>
				<b>ENGINEERING &amp; CONTINGENCY (25%)</b>	<b>\$162,750</b>
				<b>TOTAL</b>	<b>\$813,750</b>

### Clariant Pump Station

As previously mentioned it is anticipated that Clariant will likely tie on to the sewer system in the near future. The transportation of this wastewater flow will require a new major transmission line from west to east along Whiting Way to reach the WWTP. Discussions with Clariant personnel indicated that the industry could send a peak of 500,000 gpd to the system. Therefore, a new pump station with adequate capacity is recommended with force main routed to a low point along Whiting Way to another new pump station. The estimated costs for implementing this extension are included in the table below. Because these upgrades are necessary for future industrial flow and will allow additional residential growth throughout the system it is anticipated that these costs could be offset through the collection of sewer impact fees and grants.

Item	Description	Qty	Unit	Unit Cost	Total Cost
1	350 gpm Duplex Pump Station	1	ls	\$240,000.00	\$240,000
2	Force Main				
	8-Inch PVC	4,000	lf	\$30.00	\$120,000
	8-Inch DIP	400	lf	\$40.00	\$16,000
	Air Release Valves	1	ea	\$4,000.00	\$4,000
				<b>SUBTOTAL</b>	<b>\$380,000</b>
				<b>ENGINEERING &amp; CONTINGENCY (25%)</b>	<b>\$95,000</b>
				<b>TOTAL</b>	<b>\$475,000</b>

### Whiting Way Pump Station

The proposed Whiting Way pump station would collect wastewater from the Clariant pump station, the White Pond Road pump station, and the Highway 12 pump station. The new pump station would transmit the wastewater from these areas to a new pump station near Kawashima and Cogsdill Tools for final transmission to the Influent pump station. The estimated costs for implementing this extension are included in the table below. Because these upgrades are necessary for future industrial flow and will allow additional residential growth throughout the system it is anticipated that these costs could be offset through the collection of sewer impact fees and grants.

Item	Description	Qty	Unit	Unit Cost	Total Cost
1	1150 gpm Duplex Pump Station	1	ls	\$550,000.00	\$550,000
2	Force Main				
	12-Inch PVC	27,000	lf	\$45.00	\$1,215,000
	12-Inch DIP	500	lf	\$55.00	\$27,500
	Directional Bore	200	lf	\$250.00	\$50,000
	Air Release Valves	3	ca	\$4,000.00	\$12,000
SUBTOTAL					\$1,854,500
ENGINEERING & CONTINGENCY (25%)					\$463,625
TOTAL					\$2,318,125

### Kawashima Pump Station

As previously mentioned it is anticipated that Kawashima Tools will likely tie on to the sewer system in the near future. Discussions with Kawashima personnel indicated that the Industry could send as much as 600,000 gpd to the collection system. Therefore, the proposed pump station at Kawashima will be sized with adequate capacity for this flow as well as the flow transmitted along Whiting Way from the Whiting Way pump station. This new pump station will transmit wastewater flows directly to the influent pump station for introduction to the WWTP. The estimated costs for implementing this extension are included in the table below. Because these upgrades are necessary for future industrial flow and will allow additional residential growth throughout the system it is anticipated that these costs could be offset through the collection of sewer impact fees and grants.

Item	Description	Qty	Unit	Unit Cost	Total Cost
1	1850 gpm Duplex Pump Station	2	ls	\$600,000.00	\$1,200,000
2	Force Main				
	16-Inch PVC	26,000	lf	\$55.00	\$1,430,000
	16-Inch DIP	500	lf	\$65.00	\$32,500
	Directional Bore	200	lf	\$300.00	\$60,000
	Air Release Valves	2	ca	\$4,000.00	\$8,000
SUBTOTAL					\$2,730,500
ENGINEERING & CONTINGENCY (25%)					\$682,625
TOTAL					\$3,413,125

### Influent Pump Station

Due to the rapid growth in the area and the increase in sewer capacity resulting from this growth, the existing influent pump station is grossly undersized. It is recommended that an entirely new pump station and force main paralleling the existing force main be installed. The influent pump station should have adequate capacity to transmit wastewater flows for the proposed 4.0 MGD WWTP. The estimated costs for implementing this extension are included in the table below. Because these upgrades are necessary for future development as well as industrial flow throughout the system it is anticipated that these costs could be offset through the collection of sewer impact fees and grants.

Item	Description	Qty	Unit	Unit Cost	Total Cost
1	4.0 MGD Duplex Pump Station	1	ls	\$1,000,000.00	\$1,000,000
2	Force Main				
	24-Inch PVC	3,000	lf	\$80.00	\$240,000
	24-Inch DIP	300	lf	\$90.00	\$27,000
SUBTOTAL					\$1,267,000
ENGINEERING & CONTINGENCY (25%)					\$316,750
TOTAL					\$1,583,750

### Expanded Wastewater Treatment Plant

As previously mentioned, Kershaw County is set to construct a new 1.25 MGD WWTP expandable to 2.0 MGD with little modifications. However due to the rapid growth of the area, the 2.0 MGD capacity will be consumed almost immediately upon completion. Therefore, the County will need to implement proposed modifications at the new WWTP to have the capability of handling the projected 4.0 MGD of wastewater. These improvements will include additional SBR basins, ultraviolet disinfection, and the installation of sludge dewatering operations. The estimated costs for implementing these upgrades are included in the table below. Because these upgrades are necessary for future development as well as industrial flow throughout the system it is anticipated that these costs could be offset through the collection of sewer impact fees and grants.

Item	Description	Qty	Unit	Unit Cost	Total Cost
1	2.0 MGD Expansion	1	ls	\$7,000,000.00	\$7,000,000
SUBTOTAL					\$7,000,000
ENGINEERING & CONTINGENCY (25%)					\$1,750,000
TOTAL					\$8,750,000

### Overview & Schedule

A review of the sewer tap requests and the probable schedule for development was reviewed to determine a probable schedule for the multiple capital improvements projects outlined above. Based on this review, the anticipated schedule for these projects is summarized below.

KELSNEY RIDGE/STEVEN CAMPBELL DRIVE	\$ 1,051,875	2009
ELGIN #4 PUMP STATION UPGRADE	\$ 75,000	2008
ELGIN #2 PUMP STATION UPGRADE	\$ 580,000	2011
ELGIN #1 PUMP STATION UPGRADE	\$ 1,164,375	2011
BALDWIN PUMP STATION REHABILITATION	\$ 250,000	2009
HIGHWAY 34 (RABON'S)	\$ 813,750	2009
CLARIANT PUMP STATION	\$ 475,000	2010
WHITING WAY PUMP STATION	\$ 2,318,125	2010
KAWASHIMA PUMP STATION	\$ 3,413,125	2010
INFLUENT PUMP STATION	\$ 1,583,750	2008
WWTP EXPANSION	\$ 8,750,000	2012-2013
TOTAL	\$ 20,465,000	

TABLES

PUBLIC SEWER ENTERPRISE FUND CIP

**Public Sewer  
Enterprise Fund  
Capital Improvement Projects**

Project Name	08-09	09-10	10-11	11-12	12-13
Elgin # 4 Pump Station Upgrade	\$75,000				
Influent Pump Station	\$1,583,750				
Kelsney Ridge/Steven Campbell Drive		\$1,051,875			
Baldwin Pump Station Rehabilitation		\$250,000			
Highway 34 (Rabon's)		\$813,750			
Clariant Pump Station			\$475,000		
Whiting Way Pump Station			\$2,318,125		
Kawashima Pump Station			\$3,413,125		
Elgin # 2 Pump Station Upgrade				\$560,000	
Elgin # 1 Pump Station Upgrade				\$1,164,375	
Waste Water Treatment Plant Expansion					\$8,750,000
<b>TOTALS</b>	<b>\$1,658,750</b>	<b>\$2,115,625</b>	<b>\$6,206,250</b>	<b>\$1,724,375</b>	<b>\$8,750,000</b>
<b>GRAND TOTAL</b>	<b>\$20,455,000</b>				

**Kershaw County, South Carolina  
Sewer Impact Fees Report  
Prepared by the Kershaw County Utilities Department  
July 16, 2008**

**Introduction**

The Kershaw County South Carolina, Five-Year Sewer System Capital Improvement Plan, (the "Capital Improvement Plan") has identified approximately \$20.5 million in capital improvements that will need to be constructed in the five year period 2008-2013 (the "Improvements") to allow the wastewater treatment system operated by Kershaw County (the "County") to serve the needs of the people of the County effectively, to promote continued development, and to protect the public health and environmental quality of the County.

Through Ordinance No. 118.2008, which is currently pending before County Council, the County is considering establishing sewer impacts fees for new customers and new industrial demands on the sewer system (the "Impact Fees"). This report is issued in satisfaction of the requirements imposed by Section 6-1-1080(2) of the Code of Laws of South Carolina, 1976, as a condition for the adoption of a development impact fee by water and wastewater utilities. Each of the requirements of that statute is addressed below:

**Nature of the Cost Information Contained in the Capital Cost Plan**

During consideration of Ordinance No. 118.2008, members of County Council (the "Council") questioned whether the \$20.5 million cost estimate for the Improvements reflects the effects of inflation and financing cost on the cost of the assets to be constructed. After due inquiry, the Utilities Department (the "Department") has determined that the \$20.5 million cost estimate is an engineering estimate only. It does not reflect any adjustment for inflation in construction costs occurring after the date the Capital Improvement Plan was compiled, nor does it reflect the additional cost of financing the Improvements pending collection of sewer impact fees.

The Utilities Department believes that it is important that these additional costs be included in the capital cost estimates of the Improvements. Sewer construction costs reflect the cost of steel, concrete, pumps, motors, pipe and diesel fuel for construction equipment, among other things. These items have experienced significant inflation since the Capital Improvements Plan was compiled, and such inflation is anticipated to continue during the five-year construction period. Prudent financial planning requires the Department to take inflation into account in recommending to the Council an appropriate level at which to establish sewer Impact Fees. Otherwise, new customers may pay less than their proportionate share of the actual cost of new service, and existing customers may be required to make up the deficit.

In addition, because Impact Fees will be collected after the Improvements are constructed, and because Impact Fees will not cover the entire capital cost of the Improvements, the County will bear significant financing costs related to these capital improvements. Prudent financial management requires the Department to take these

financing costs into account also in recommending to the Council an appropriate level for sewer impact fees.

### **Calculating Inflation and Financing Costs**

The Utilities Department has asked the engineering firm that prepared the Capital Improve Plan to estimate the cost of the Improvements when those costs are adjusted for inflation and financing costs. As reflected in Appendix A, inflation in the cost of the Improvements has been estimated based on reasonable and appropriate estimates of current and future inflation in the cost of labor, materials, equipments and services related to sewer system construction.

Financing costs associated with the Improvements have been estimated based on the actual interest rates and issuance costs for the sewer system bonds recently issued by the County. As indicated in the Capital Improvement Plan, a volume of addition sewer capacity of approximately 3.28 million gallons per day will be added to the current plant capacity of 0.72 million gallons per day and represents an additional 8200 residential development units ("RDU"s. The County anticipates that Impact Fees related to these amounts will be received during the five-year planning horizon for the Capital Improvement Plan. The calculation contained in Appendix A reflects reasonable and appropriate assumptions regarding inflationary and financing rates/cost for the specified projects.

The Utilities Department has reviewed the calculations contained in Appendix A to this report and finds them to be reasonable and appropriate. Appendix A estimates that inflation and financing costs will add an additional \$ 5,698,998 million to the engineering estimate contained in the Capital Improvements Plan. With adjustments for inflation and financing costs, the full cost of the Improvements to the County is reasonably estimated to be \$ 28,073,684. For the reasons set forth above, the Utilities Department finds that it is appropriate to take these additional costs into account in recommending to the Council an appropriate level of sewer impact fees to establish in Ordinance No. 118.2008.

### **Payment of Impact Fee**

For the reasons stated above, it would be fair and appropriate for the County to require new customers and new demands on the sewer system to defray a proportional share of the cost of the Improvements identified by the Capital Improvement Plan through Impact Fees. Those Impact Fees will be payable by all persons a) requesting sewer availability letters from the County; b) seeking to connect existing premises to the System; or c) increasing their authorized volumes of discharge into the System. In subdivisions where a sewer availability letter has been obtained and Impact Fees were paid at that time, an additional Impact Fee would not be charged at the time that individual homes were connected to the System.

### **Basis for Setting the Proportional Amount of the Impact Fee**

To the extent that capital costs associated with service to new customers are not recovered through Impact Fees, those costs will be paid by existing customers of the System, including elderly or low or fixed income residents of the County. It is important the County appropriately balance the cost of expanding the System between existing customers and new development.

As indicated above, the need for the Impact Fee is established in the Capital Improvement Plan and the amount of the fee should be based on the total capital cost of the required Improvements as set forth above. When the full capital cost of the

Improvements, including inflation and financing costs, is divided by RDUs anticipated to be sold, the capital cost for each new RDU exceeds \$ 3,424. While the County has received grants toward payment for the Improvements, it is not anticipated that grants or other sources of funds apart from impact fees and revenues from existing customers will defray more than five percent (5%) of the cost of the Improvements. The Utilities Department has taken these potential grant payments into account in assessing and recommending an appropriate level on which County Council may set Impact Fees.

In establishing a proportional share of this amount to be charged as an Impact Fee, it is appropriate for the County to consider such factors as the value of sewer service to developers and owners of undeveloped property; the impact of sewer service availability on raw land values; the burden that Impact Fees place on developers, landowners and expanding industrial customers relative to existing customers; and the relative ability of existing customers versus developers, property owners and expanding industrial customers to pay for the capital cost of providing new capacity. It is also appropriate to assess the reasonableness of the proposed Impact Fee against the comparable fees charged by other sewer systems in the area for connections. Most neighboring systems charge new customers between \$2,000 and \$4,000 in total for tap fees and impact fees.

Based on these and other consideration, the Utilities Department has concluded that it would be appropriate for the County to establish the Impact Fee at \$2,250 per RDU at this time. This level of contribution would appear to reflect a reasonable and proportionate contribution by new customers to the cost of the capacity required to serve them. Coupled with the \$750 service initiation fee that Council is considering, the fees required by the System would not appear unduly burdensome and would be consistent with the fees charged by other systems.

In assessing proportionality, the Utility Department has also duly considered the fact that:

- Sewer demands, unlike demands for more traditional governmental services like police, fire, library and school services, are objectively quantifiable in terms of the RDUs of capacity that the Department of Health and Environmental Control requires to be reserved for each premises constructed. The capacity reserved in the System for a specific premise cannot be assigned or attributed to any other premises.
- The facilities that developers and owners construct to connect their properties to the District's transmission system in almost all cases benefit only the individual properties they are developing.
- Developers and property owners who connect to the System do not in any other way subsidize the provision of sewer service to other customers.

The recommended fee level set forth here is based on the information currently available to the Department. The County should carefully monitor costs, needs, inflation and revenues going forward and should make adjustments in level of the Impact Fee as future circumstances might warrant.

### **Basis for Calculating Impact Fees for Individual Customers**

Customers and developers will be charged Impact Fees based on the specific RDUs of wastewater capacity represented by a) the demands represented by the sewer availability letters they request from the County; b) the demands represented by premises customers seek to connect to the System where no sewer availability letter has been required; or c) the demands represented by industrial or commercial customers seeking to increase their authorized discharge into the System. At present, one RDU is equivalent to a projected wastewater loading of 400 gallons per day. The RDUs for specific customers shall be computed using standard equivalency criteria promulgated from time to time by the South Carolina Department of Health and Environmental Control or the County may, in the future, determine to adopt a System-specific set of criteria.

### **Use of the Impact Fee**

Impact Fees shall be used for capital Improvements to the System including the payment of debt service on capital Improvements such as those currently under construction. The Capital Improvement Plan sets forth the current plan and sequencing of those capital Improvements. However, the County reserves the right to amend or modify the plan, or to change the Improvements on which the Impact Fees are to be expended, so long as the proceeds of the Impact Fees are spent on capital Improvements to the System.

### **Additional Costs of the Improvements**

Considering the number of RDUs of capacity that are being requested or anticipated to be requested at this time, Impact Fees set at \$2,250 per RDU is estimated to generate significantly less than the \$ 28,073,684 that the County will be required to pay to complete and pay financing cost on the Improvements. Impact Fee revenues will be used either to pay capital costs for the Improvements directly or to pay debt service on bonds issued to finance the Improvements. The remaining cost of the Improvements will be defrayed through charges to existing customers of the System and System revenues as they become available. No grants related to the Improvements have been obtained to date and grants are not anticipated to defray a material portion of the cost of the Improvements going forward.

The County reserves the right to review and revise the level at which Impact Fees are set at any time in the future.

### **Collection of Impact Fees**

Impact Fees will be collected in cash by the Planning and Zoning Department at the time sewer capacity letters, construction permits, or increased discharge authorizations are issued to customers. Proof of payment of the Impact Fees will be required as a condition of issuance of sewer capacity letters, or construction permits in areas where the System provides public sewer service. Where sewer capacity/availability letters are requested, the County Administrator may allow the payment to be made no more than 30 calendar days after the issuance of the sewer availability letter, and may rescind any letter or associated capacity commitments if timely payment is not made. This provision is specifically allowed to create flexibility in situations where development loan funding cannot be obtained until after availability letters for the development are in hand.

Premises that seek to connect to the System where no sewer availability letter was required will be charged the Impact Fee at the time they seek authorization to connect.

For existing industrial customers or other customers seeking to increase their permitted discharge volumes into the System, the Impact Fees will be collected at the time the County agrees to increase the allowable discharge volumes into the System. Only one Impact Fee will be collected for each new RDU of sewer service.

Service premises that have been connected to the System without due payment of a required the Impact Fee will be disconnected until the fee is paid in full with interest at the statutory rate applicable to civil judgments in the State of South Carolina..

**APPENDIX A FOR EXHIBIT B**

**ADDENDUM – KERSHAW COUNTY SEWER CIP 2008-2013**

Due to the volatile construction market including the cost of steel, concrete, and petroleum products the estimates of project costs have been updated to adjust for future price increases. These increases are inflation driven and are therefore dependent on the time at which the projects have been projected to begin. Based on the volatility of the market the rate of inflation has been forecast at 5% per annum using the following formula.

*Inflation Adjustment*

$$= (\text{Const. Subtotal} * 1.05^{\text{Year of Project}-2008}) - \text{Const. Subtotal}$$

The following adjusted tables include provisions for this inflation and should replace the tables in the Kershaw County Sewer Capital Improvements Plan.

KELSEY RIDGE/STEVEN CAMPBELL DRIVE CONSTRUCTION ESTIMATE					
Item	Description	Qty	Unit	Unit Cost	Total Cost
1	200 gpm Duplex Pump Station	1	ls	\$200,000.00	\$200,000
2	Force Main				
	6-Inch PVC	2,900	lf	\$25.00	\$72,500
	6-Inch DIP	100	lf	\$35.00	\$3,500
	Air Release Valves	1	ea	\$4,000.00	\$4,000
3	320 gpm Duplex Pump Station	1	ls	\$250,000.00	\$250,000
4	Force Main				
	8-Inch PVC	9,750	lf	\$30.00	\$292,500
	8-Inch DIP	250	lf	\$40.00	\$10,000
	Air Release Valves	1	ea	\$4,000.00	\$4,000
5	Connection to Gravity Sewer	1	ls	\$5,000.00	\$5,000
SUBTOTAL					\$841,500
ONE YEAR INFLATION ADJUSTMENT					\$42,080
ENGINEERING & CONTINGENCY (25%)					\$220,900
<b>TOTAL</b>					<b>\$1,104,480</b>

ELGIN #4 PUMP STATION UPGRADE CONSTRUCTION ESTIMATE					
Item	Description	Qty	Unit	Unit Cost	Total Cost
1	Upgrade of Pumps and Panels	1	ls	\$40,000.00	\$40,000
2	Rehabilitation of Wetwell	1	ls	\$20,000.00	\$20,000
SUBTOTAL					\$60,000
ENGINEERING & CONTINGENCY (25%)					\$15,000
<b>TOTAL</b>					<b>\$75,000</b>

ELGIN #2 PUMP STATION UPGRADE CONSTRUCTION ESTIMATE					
Item	Description	Qty	Unit	Unit Cost	Total Cost
1	600 gpm Duplex Pump Station	1	ls	\$300,000.00	\$300,000
2	Force Main				
	8-Inch PVC	4,100	lf	\$30.00	\$123,000
	8-Inch DIP	400	lf	\$40.00	\$16,000
	Air Release Valves	1	ea	\$4,000.00	\$4,000
3	Connection to Gravity Sewer	1	ls	\$5,000.00	\$5,000
SUBTOTAL					\$448,000
THREE YEAR INFLATION ADJUSTMENT					\$70,620
ENGINEERING & CONTINGENCY (25%)					\$129,660
<b>TOTAL</b>					<b>\$648,280</b>

ELGIN #1 PUMP STATION UPGRADE CONSTRUCTION ESTIMATE					
Item	Description	Qty	Unit	Unit Cost	Total Cost
1	800 gpm Duplex Pump Station	1	ls	\$400,000.00	\$400,000
2	Force Main				
	10-Inch PVC	13,000	lf	\$35.00	\$455,000
	10-Inch DIP	1,500	lf	\$45.00	\$67,500
	Air Release Valves	1	ea	\$4,000.00	\$4,000
3	Connection to Gravity Sewer	1	ls	\$5,000.00	\$5,000
SUBTOTAL					\$931,500
THREE YEAR INFLATION ADJUSTMENT					\$146,830
ENGINEERING & CONTINGENCY (25%)					\$269,580
<b>TOTAL</b>					<b>\$1,347,910</b>

BALDWIN PUMP STATION REHABILITATION CONSTRUCTION ESTIMATE					
Item	Description	Qty	Unit	Unit Cost	Total Cost
1	Replacement of Existing PS	1	ls	\$200,000.00	\$200,000
SUBTOTAL					\$200,000
ONE YEAR INFLATION ADJUSTMENT					\$10,000
ENGINEERING & CONTINGENCY (25%)					\$52,500
<b>TOTAL</b>					<b>\$262,500</b>

HIGHWAY 34 (RABON'S) DEVELOPMENT CONSTRUCTION ESTIMATE					
Item	Description	Qty	Unit	Unit Cost	Total Cost
1	Gravity Sewer				
	12-Inch PVC	6,400	lf	\$75.00	\$480,000
	12-Inch DIP	600	lf	\$85.00	\$51,000
	Jack & Bore	150	lf	\$300.00	\$45,000
2	Manholes	30	ls	\$2,500.00	\$75,000
SUBTOTAL					\$651,000
ONE YEAR INFLATION ADJUSTMENT					\$32,550
ENGINEERING & CONTINGENCY (25%)					\$170,890
<b>TOTAL</b>					<b>\$854,440</b>

CLARIANT PUMP STATION CONSTRUCTION ESTIMATE					
Item	Description	Qty	Unit	Unit Cost	Total Cost
1	350 gpm Duplex Pump Station	1	ls	\$240,000.00	\$240,000
2	Force Main				
	8-Inch PVC	4,000	lf	\$30.00	\$120,000
	8-Inch DIP	400	lf	\$40.00	\$16,000
	Air Release Valves	1	ea	\$4,000.00	\$4,000
SUBTOTAL					\$380,000
TWO YEAR INFLATION ADJUSTMENT					\$38,950
ENGINEERING & CONTINGENCY (25%)					\$104,740
<b>TOTAL</b>					<b>\$523,690</b>

WHITING WAY PUMP STATION CONSTRUCTION ESTIMATE					
Item	Description	Qty	Unit	Unit Cost	Total Cost
1	1150 gpm Duplex Pump Station	1	ls	\$550,000.00	\$550,000
2	Force Main				
	12-Inch PVC	27,000	lf	\$45.00	\$1,215,000
	12-Inch DIP	500	lf	\$55.00	\$27,500
	Directional Bore	200	lf	\$250.00	\$50,000
	Air Release Valves	3	ea	\$4,000.00	\$12,000
SUBTOTAL					\$1,854,500
TWO YEAR INFLATION ADJUSTMENT					\$190,090
ENGINEERING & CONTINGENCY (25%)					\$511,150
<b>TOTAL</b>					<b>\$2,555,740</b>

KAWASHIMA PUMP STATIONS CONSTRUCTION ESTIMATE					
Item	Description	Qty	Unit	Unit Cost	Total Cost
1	1850 gpm Duplex Pump Station	2	ls	\$600,000.00	\$1,200,000
2	Force Main				
	16-Inch PVC	26,000	lf	\$55.00	\$1,430,000
	16-Inch DIP	500	lf	\$65.00	\$32,500
	Directional Bore	200	lf	\$300.00	\$60,000
	Air Release Valves	2	ea	\$4,000.00	\$8,000
SUBTOTAL					\$2,730,500
TWO YEAR INFLATION ADJUSTMENT					\$279,880
ENGINEERING & CONTINGENCY (25%)					\$752,600
<b>TOTAL</b>					<b>\$3,762,980</b>

INFLUENT PUMP STATION CONSTRUCTION ESTIMATE					
Item	Description	Qty	Unit	Unit Cost	Total Cost
1	4.0 MGD Duplex Pump Station	1	ls	\$1,000,000.00	\$1,000,000
2	Force Main				
	24-Inch PVC	3,000	lf	\$80.00	\$240,000
	24-Inch DIP	300	lf	\$90.00	\$27,000
SUBTOTAL					\$1,267,000
ENGINEERING & CONTINGENCY (25%)					\$316,750
<b>TOTAL</b>					<b>\$1,583,750</b>

WWTP EXPANSION CONSTRUCTION ESTIMATE					
Item	Description	Qty	Unit	Unit Cost	Total Cost
1	2.0 MGD Expansion	1	ls	\$7,000,000.00	\$7,000,000
SUBTOTAL					\$7,000,000
FIVE YEAR INFLATION ADJUSTMENT					\$1,933,970
ENGINEERING & CONTINGENCY (25%)					\$2,233,490
<b>TOTAL</b>					<b>\$11,167,460</b>

RECOMMENDED PROJECTS	PROJECT COSTS	YEAR OF PROJECT
KELSEY RIDGE/STEVEN CAMPBELL DRIVE	\$ 1,104,480	2009
ELGIN #4 PUMP STATION UPGRADE	\$ 75,000	2008
ELGIN #2 PUMP STATION UPGRADE	\$ 648,280	2011
ELGIN #1 PUMP STATION UPGRADE	\$ 1,347,910	2011
BALDWIN PUMP STATION REHABILITATION	\$ 262,500	2009
HIGHWAY 34 (RABON'S)	\$ 854,440	2009
CLARIANT PUMP STATION	\$ 523,690	2010
WHITING WAY PUMP STATION	\$ 2,555,740	2010
KAWASHIMA PUMP STATION	\$ 3,762,980	2010
INFLUENT PUMP STATION	\$ 1,583,750	2008
WWTP EXPANSION	\$ 11,167,460	2012-2013
<b>TOTAL</b>	<b>\$ 23,886,230</b>	

	<u>Total Payment</u>	<u>Interest</u>	<u>Principal</u>
2008 Projects	1,949,542.62	290,792.62	1,658,750.00
2009 Projects	2,610,853.31	389,433.31	2,221,420.00
2010 Projects	8,041,941.02	1,199,531.02	6,842,410.00
2011 Projects	2,346,138.58	349,948.58	1,996,190.00
WWTP Expansion	13,125,208.08	1,957,748.08	11,167,460.00
<b>TOTALS</b>	<b>28,073,683.61</b>	<b>4,187,453.61</b>	<b>23,886,230.00</b>