



10/2/08 w/ OJRSA

**Oconee County Sewer Commission/
Oconee Joint Regional Sewer Authority**
P.O. Box 399, Seneca, SC 29679 • Ph: (864) 972-3900 • Fax: (864) 972-3917

October 28, 2008

**SEWER INFRASTRUCTURE PROJECTS
FOR ECONOMIC DEVELOPMENT IN OCONEE COUNTY
OUTSIDE OF THE I-85 CORRIDOR**

Martins Creek Project
Septage Receiving Project
Richard Creek Project

Millbrook Pump Station
Ravenal Pump Stations
Carson Road Relief Sewer
Scenic Heights - Highway 11
Dunlop Area - Highway 123
West Point Project
Airport Area Sewer
Bountyland Basin Sewer

This projects list is developed as a guide for removing development constraints of key unincorporated areas of Oconee County due to the lack of adequate public sewer.

The prioritization of these projects will be the responsibility of the Oconee Joint Regional Sewer Authority.

SOURCES FOR PROJECTS LISTED

- 1) OCSC Infrastructure Projects RFQ List, 2005
- 2) Oconee County Capital Projects Commission List, 2006
- 3) Comprehensive Economic Development Strategy List, 2008 (ACOG)
- 4) Scott Parris (City of Walhalla)
- 5) David Smith, (City of Westminster) Rhett Smith, (OJRSA), Bob Winchester (OJRSA)



Oconee Joint Regional Sewer Authority

P.O. Box 399, Seneca, SC 29679 * Phone (864) 972-3900 * Fax: (864) 972-1917

Mr. Reg Dexter
Oconee County Council Chairman
415 S. Pine Street
Walhalla, SC 29691

June 2, 2009

RE: GCCP Sewer System

Dear Mr. Dexter,

This letter will summarize activity and events relative to the proposed Golden Corner Commerce Park sewer system which will be discussed at the workshop this afternoon.

On October 21, 2008, the OJRSA presented to the County Council Preliminary Engineering documents and cost estimates for a sewer system at the GCCP. The PER contained alternatives and a phased approach to serving the proposed park with sewer services. The Council voted to approve Phase 1 which includes a drip irrigation system and closed holding tank with an estimated cost of \$4,357,500.00 (October 21, 2008 County Council Minutes, page 6, attached). The PER was revised to include those items and submitted to SCDHEC on November 18, 2008 (partial copy attached).

During SCDHEC's review of the PER, they requested additional soils analysis at an estimated cost of \$3,800.00 which were done Monday of this week. This additional data will be used by SCDHEC to determine an application rate for the drip irrigation system before approval of the PER. If and when the PER is approved by SCDHEC, Oconee County will be faced with the decision of funding the design and construction of the facilities at an estimated cost of \$4,357,500.00.

The OJRSA has been involved in the evaluation of several alternative methods of wastewater disposal over the years for the I-85 area and the proposed industrial park including stream discharge, spray irrigation, septic systems, and now drip irrigation. Copies of the referenced information are being supplied to other Council Members and the County Attorney.

If you need anything further, please call.

Sincerely,

Robert C. Winchester
Director, OJRSA

cc: County Council Members
Tom Martin, County Attorney
OJRSA Commissioners
Lowell Ross, OJRSA Attorney

RCW:ls

Ordinance 2008-18:

Mr. Ables made a motion, seconded by Mr. Crumpton, approved 4 - 0 to adopt Ordinance 2008-18 "AN ORDINANCE TO AMEND ORDINANCE 2008-06, THE 2008-2009 BUDGET APPROPRIATIONS ORDINANCE FOR OCONEE COUNTY" on third and final reading.

SDOC Donation of 4.946 acres to Oconee County:

Mr. Blanchard recognized Mr. John Adams, Library Board Chairman, who read from a prepared letter [filed with these minutes] regarding the School Districts donation of 4.946 acres of land adjacent to Blue Ridge Elementary School in Sealea for the purpose of building a new Oconee County Library.

Mr. Blanchard requested Council consider tabling this matter until January 2009 at which time the new council members will be seated. He stated that he felt that the new members should be involved in the decision to either accept the property for the expressed intent or to not accept the property. Mr. Blanchard stated that operating and maintenance costs are an issue that has not adequately been addressed. He also stated that he felt that if Council accepts the land that it will be the perception of the public that Council is committing to build a new Oconee County library on this site and this is not the case. Mr. Adams stated that voting to accept the land was not also voting for a new library. Mr. Blanchard respectfully disagreed with Mr. Adams.

Mr. Suarez stated that he felt Council should accept the land and work through issues in the coming months. Lengthy discussion followed.

A majority of Council [Mr. Suarez opposed] agreed to table acceptance of this land until January 2009 at which time Council can review and discuss the matter fully.

W.K. Dickson Engineering Report re: Golden Corner Commerce Park Sewer Options:

Mr. Blanchard recognized Mr. Bob Winchester, Oconee County Sewer Commission/Oconee Joint Regional Sewer Authority General Superintendent, who provided Council with two documents that provide an overview [filed with these minutes] of the sewer options for a drip irrigation system and closed holding tank at the Golden Corner Commerce Park. Cost for Alternative #1, Phase #1 would be \$4,357,500.00. Lengthy discussion followed.

Mr. Ables made a motion, seconded by Mr. Crumpton, approved 4 - 0, to approve Alternative #1, Phase #1 for the drip irrigation sewer option at the Golden Corner Commerce Park for a total amount of \$4,357,500.00 as outlined in the W. K. Dickson engineering proposal as presented. As part of the motion it is noted that approval is contingent upon the Sewer Authorities approval to commit block grant funds to this project and that Oconee County will commit one Economic Development mill to this project.

Mr. Winchester requested a letter outlining this approval and contingencies prior to the next Commission meeting. He also noted that he will begin the process to have a revised PER will be submitted to SCTHEC.



PRELIMINARY ENGINEERING REPORT
FOR
GOLDEN CORNER COMMERCE PARK PROJECT

May 2, 2008
Revised November 5, 2008
WKD#80021.00.C1

Prepared For
Oconee Joint Regional Sewer Authority
623 Return Church Road
Seneca, South Carolina 29678



Prepared by:
W.K. Dickson & Co., Inc.
616 Colonnade Drive
Charlotte, North Carolina 28205
Tel: 704-334-5348
Fax: 704-334-0070

EXECUTIVE SUMMARY

This Preliminary Engineering Report was prepared for the Oconee Joint Regional Sewer Authority (OJRSA) to evaluate alternatives for providing wastewater treatment and disposal for the proposed Golden Corner Commerce Park (GCCP) located on SC Highway 59 near Fair Play, SC.

The GCCP at build-out is projected to have a total employment of approximately 1980 persons with a phased development consisting of small to medium sized manufacturing facilities and medium to large distribution facilities. Wastewater generation at build-out of the park is projected to be approximately 250,000 gpd.

Three (3) alternatives were evaluated for meeting the wastewater treatment and disposal needs of the park as summarized below:

Alternative 1 - On-Site Treatment and Land Application

This alternative proposes a three phased wastewater treatment and land application system. The initial Phase I system is to consist of a 50,000 wastewater treatment system and disposal of effluent on a dedicated 30 acre drip irrigation land application site. As the GCCP develops, Phase II will expand the treatment capacity to 100,000 gpd with a 60 acre dedicated drip irrigation site. To meet the build-out needs of the GCCP, Phase III is proposed to expand and upgrade the treatment system to 250,000 gpd capacity providing a reclaimed water quality allowing expansion of the land application drip irrigation system into common areas and plant site landscaped irrigation areas of the park.

Alternative 2 - On-Site Treatment and Pumped Discharge to Cleveland Creek

Alternative 2 proposes a three phased system with the initial Phase I the same as Alternative I with treatment and effluent disposal via drip irrigation on a dedicated land application site. During the initial park development, it is proposed to evaluate and pilot test advanced treatment technologies for achieving effluent quality standards consistent with projected NPDES effluent limitation for a discharge to Cleveland Creek. Preliminary wasteload allocations performed by the South Carolina Department of Health and Environmental Control (DHEC) project a discharge limitation for total phosphorus of 0.06 mg/l. Upon demonstration of sustainable performance capable of achieving the discharge limitations for phosphorus as well as other parameters, it is proposed to request a NPDES Permit to allow the discharge of effluent to Cleveland Creek. The Phase I land application effluent storage tank and dedicated drip irrigation system are proposed to remain in service to provide off specification effluent storage for recycle back to the treatment system and/or land application disposal.

Alternative 3 - Conveyance to Congress WWTP for Treatment

Alternative 3 proposed to pump and convey the GCCP wastewater to the existing OJRSA Congress WWTP for treatment and discharge to Congress Creek. This alternative will require four (4) pump stations and approximately 10.6 miles of force main and gravity sewer. For evaluation purposes, the pumps and conveyance was sized only for the GCCP without consideration of service to additional drainage basins along the route.

To support the proposed land application system within Alternatives 1 and 2, preliminary site soils and hydraulic conductivity investigations were conducted at the site and the resulting data utilized in the preparation of preliminary calculations for storage and land application requirements.

Projections of total probable construction costs and present worth cost of the respective alternatives are summarized as follows:

	Probable Construction Cost (\$)	Present Worth Cost (\$)
<u>Alternative No. 1</u>		
Phase I -50,000 GPD WWTP w/ Land Application	4,357,500	
Phase II -100,000 GPD WWTP w/ Land Application	1,263,700	
Phase III -250,000 GPD WWTP w/ Land Application	4,269,400	
Total Alternative 1:	\$9,890,600	\$9,048,530
<u>Alternative No. 2</u>		
Phase I -50,000 GPD WWTP w/ Land Application	4,357,500	
Phase II -100,000 GPD WWTP w/ Land Application	653,700	
Phase III -250,000 GPD WWTP w/ NPDES Discharge	2,213,500	
Total Alternative 2:	\$7,224,700	\$8,309,250
<u>Alternative No. 3</u>		
Pump to OJRSA Condense WWTP	\$7,256,100	\$9,961,274

Based upon the cost evaluations, Alternative 2 was selected as the cost effective alternative. The advantages of this alternative include the following:

- Ability for phased construction minimizing initial cost.
- Delayed implementation of treatment technology required to meet stringent effluent limitations for phosphorus removal associated with a Cleveland Creek discharge allowing complete evaluation and pilot testing on the GSCP wastewater providing a demonstrated ability to obtain sustained compliance with a surface water discharge permit.
- Avoid schedule delays to the initial site development associated with NPDES Permitting.
- Ability for incorporation of initial effluent storage and land application system into future treatment system providing ability to recycle and/or land apply off-specification effluent during plant upset or maintenance.

The recommendation of this Preliminary Engineering Report (PER) is that OJRSA proceed as follows:

- Submit PER to DHEC to obtain preliminary approval and input regarding treatment concept and land application sizing calculations.
- Proceed with the design of the proposed Alternative 1 - Phase I treatment system sized for 50,000 gpd with a dedicated land application drip irrigation system.
- Initiate process of NPDES Permit application for a future discharge to Cleveland Creek to be implemented as part of future plant expansions.

2. COMPREHENSIVE DESCRIPTION OF THE PROJECT

2.1. Current Situation

Oconee County has purchased approximately 397 acres of land located in an unincorporated area of Oconee County immediately north of Fair Play, SC on Highway 59 with plans to develop this property into a commerce Park to stimulate growth in the southern portion of the County. The location on Highway 59 is less than 2 miles from two interchanges of Interstate 85 and mid-way between Atlanta, Georgia and Greenville, South Carolina. A general location map and aerial view of the site are provided in Figure No. 2.1 and Figure No. 2.2.

The site is generally composed of open farmland with small wooded areas. The topography includes gently rolling pastureland with steeper slopes dropping off to Cleveland Creek and an unnamed tributary running along the eastern boundary.

Existing utilities in the general area of the site are limited to water service provided by Pioneer Rural Water District (of Oconee and Anderson Counties). There is no wastewater service provider in the general area of the site. The nearest public wastewater treatment facility is the Oconee Joint Regional Sewer Authority's Comeran Regional Wastewater Treatment Plant located approximately 10.6 miles away.

Environmental evaluations previously conducted at the site are documented within the "Development Suitability Assessment - Roadside Property, Fair Play" report prepared by Glodde & Associates for Oconee County in October, 2004. A complete copy of this report is available upon request with the evaluations summarized below:

A. Geotechnical Characteristics

QORE, Inc. performed a geotechnical exploration at the site in October, 2004 consisting of nine test borings to depths of 25 feet. These borings found the site soils to generally consist of highly micaceous soils with areas of weathered bed rock in areas to the middle of the site. Groundwater was found to be 6 to 13 feet deep. A copy of this geotechnical report is included in Appendix A of this PER.

B. Environment Site Assessment

A "Phase I Environment Site Assessment" was prepared for the site in October, 2004 prior to the site purchase by Oconee County. This assessment concluded that "the site has no indication of past or current environmental concerns" and no further investigation was recommended.

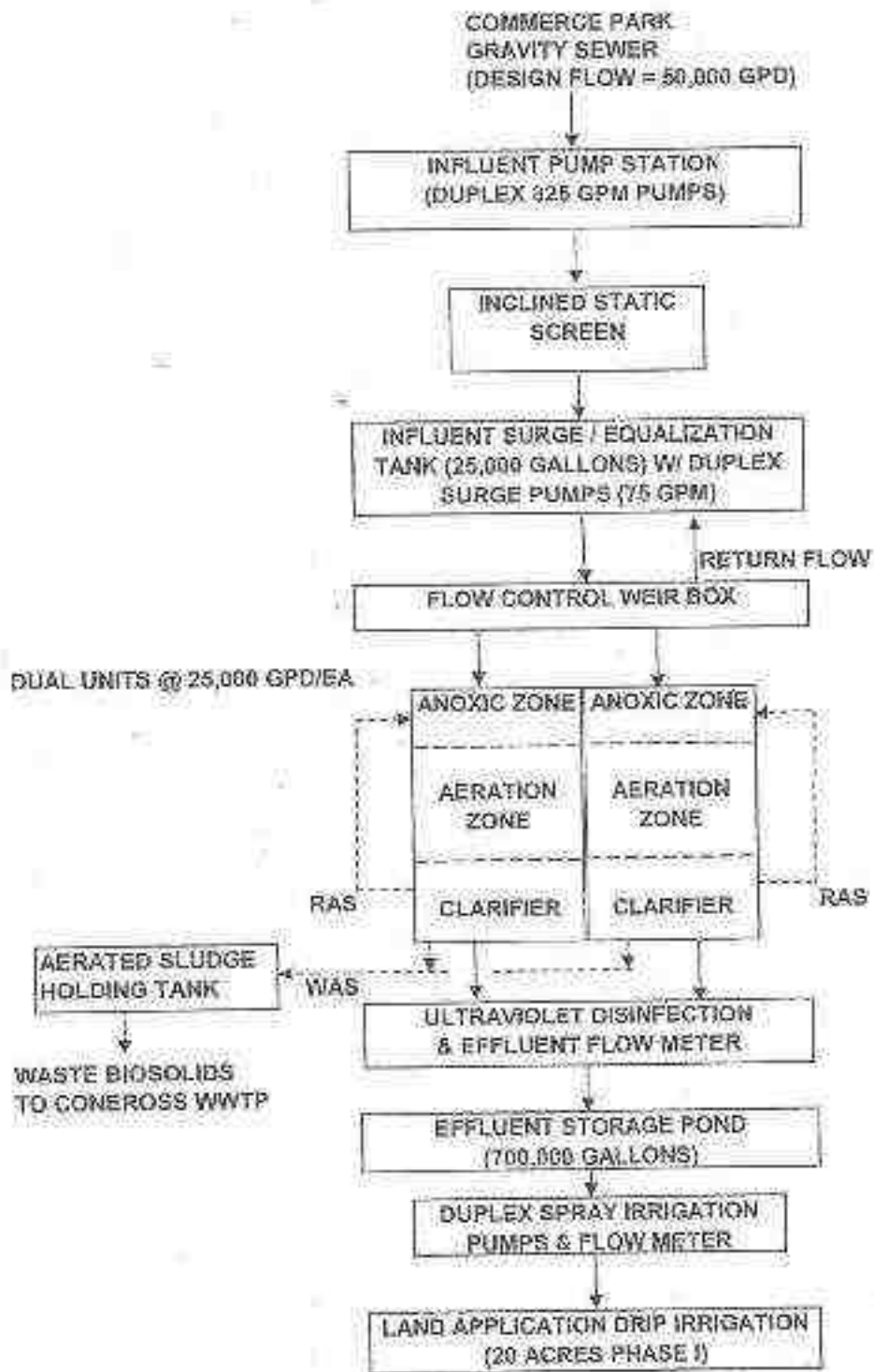
C. Threatened and Endangered Species

The threatened and endangered species records review and onsite reconnaissance concluded that the site does not contain federally listed threatened or endangered species. The barn owl and swamp rabbit species were identified as "species of concern" from the South Carolina Department of Natural Resources Rare, Threatened and Endangered Species Inventory as proximate to the site property but neither of these species is considered federally endangered or threatened. The site reconnaissance survey did not find the presence of either of these species although the potential habitat for these species is present at the site.

D. Archaeological Evaluation

The archaeological evaluation of the site found no structures at the site to be eligible for historic preservation or prehistoric facts.

FIGURE NO. 3.2: ALTERNATIVE NO. 1 - PROPOSED PHASE I WWTP AND DISPOSAL SYSTEM BLOCK FLOW DIAGRAM





Georgetown County Sewer Commission/
Georgetown Joint Regional Sewer Authority

P.O. Box 399, Seneca, SC 29679 • Ph: (864) 972-3900 • Fax: (864) 972-3917

Mr. Dale Surret
Georgetown County Administrator
415 S. Pine Street
Walhalla, SC 29691

October 21, 2008

RE: GOSP Sewer System

Dear Mr. Surret,

Enclosed find additional information relative to the alternative for drip irrigation and a closed holding tank at the Golden Corner Commerce Park near Fairplay. This follows copies of details of that alternative forwarded to you by e-mail on October 1, 2008.

This alternative was developed after a presentation by W.K. Dickson at the August 5, 2008 County Council meeting of the option to use septic tanks at the site. Mr. Jim Alexander suggested that drip irrigation be used in lieu of spray irrigation for the first phase of the project. The estimated cost for this option is \$4,357,500.00 and will be included in the revised PER to be submitted to SCDHEC.

Attached also find a spreadsheet comparing the various alternatives reviewed by County Council since December of 2007. With the Council's approval, we are prepared to move forward with this project.

I will be available this evening to discuss this alternative. Thank you for your cooperation.

Sincerely,

Robert C. Winchester
General Superintendent, OCSC

RCW:ls

Encls.

Cc: County Council Members
Commissioners
Jim Alexander

**GOLDEN CORNER COMMERCE PARK
WASTEWATER CONVEYANCE, TREATMENT AND DISPOSAL EVALUATIONS**

Phase 1 - 50,000 GPD WWTP WITH SPRAY IRRIGATION EFFLUENT DISPOSAL:

GCCP Gravity Sewer Extending Up Highway 59 (6250 LF)	\$ 559,500
GCCP Influent Pump Station to WWTP	\$ 249,600
Phase 1 - 50,000 WWTP (Expandable to 100,000 GPD)	\$ 1,129,500
Dedicated 30 Ac. Spray Irrigation Land Application System (Including 3 MG Effluent Storage Pond)	\$ 745,700
Subtotal Probable Construction Cost:	<u>\$ 2,684,300</u>
Design & Construction Phase Engineering Cost (15%)	\$ 402,600
Owner Administration & Legal Cost (2.75%)	\$ 73,800
Land Cost (36 Ac @ \$8000/Ac)	\$ 288,000
Grand Total Cost:	<u>\$ 3,448,700</u>

Phase 1 - 50,000 GPD WWTP WITH DRIP IRRIGATION EFFLUENT DISPOSAL:

GCCP Gravity Sewer Extending Up Highway 59 (6250 LF)	\$ 559,500
GCCP Influent Pump Station to WWTP	\$ 249,600
Phase 1 - 50,000 WWTP (Expandable to 100,000 GPD & Including Tertiary Filter)	\$ 1,212,100
Dedicated 20 Ac. Drip Irrigation Land Application System (Including 0.7 MG Effluent Storage Tank)	\$ 1,502,800
Subtotal Probable Construction Cost:	<u>\$ 3,524,000</u>
Design & Construction Phase Engineering Costs	\$ 528,600
Owner Administration and Legal Costs	\$ 96,900
Land Cost (26 Ac @ \$8000/Ac)	\$ 208,000
Grand Total Alternative 1 - Phase I Cost:	<u>\$ 4,357,500</u>

URS&A - GOLDEN CORNER COMMERCE CENTER

COMPARISON OF COSTS FOR (GOC) WWT/P AND LAND APPLICATIONS SYSTEM

ITEM DESCRIPTION	12/10/07 ESTIMATE 125,000 GPD MIC	06/02/08 ESTIMATE 60,000 GPD (Phase I) 550,000 \$	05/02/08 ESTIMATE 300,000 GPD (Phase I & II) 550,000 \$	06/20/08 ESTIMATE 300,000 GPD (Phase I & II) 550,000 \$	9/24/08 ESTIMATE 300,000 GPD (Phase I & II) 550,000 \$	9/24/08 ESTIMATE 300,000 GPD (Phase I & II) 550,000 \$
GOC Gravity Sewer (30" LF - 2' x 11")						
GOC Pump Sta. Incl. Ems. Assembly						
WWT/P						
Influent Pump Sta. (Revolving Emer. Tank)	\$ 31,200					
125,000 GPD WWT/P w/ Sump Tank	\$ 1,256,800					
Phase - 50,000 GPD WWT/P w/ Sump Tanks & 100,000 GPD Surge & Storage Holding						
Phase II Expansion to 100,000 GPD WWT/P w/ Sump Tank						
Land Application System:						
Storage Pond (30 days @ 125,000 gpd) = 3.75 MG	\$ 214,000					
Storage Pond (30 days @ 100,000 gpd) = 3.0 MG						
Storage Tank (1 @ 300,000 gal) = 0.7 MG						
Survey (1 station - 63 Ac @ 0.25 in/ft @ 125,000 gpd)						
Survey (1 station - 30 Ac @ 0.5 in/ft @ 100,000 gpd)						
Survey (1 station - 30 Ac @ 0.5 in/ft @ 100,000 gpd)						
French Infiltration System (0.5 gpd/s @ 14,400 gpd) @ 100 ft @ 20 ft @ 30,000 gpd						
Engineering Design & Const. (Phase I)	\$ 2,550,000	\$ 2,584,300	\$ 3,378,300	\$ 3,378,300	\$ 3,378,300	\$ 3,378,300
Owner Cost	\$ 300,000	\$ 400,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000
Land Cost	\$ 70,400	\$ 70,800	\$ 87,700	\$ 87,700	\$ 87,700	\$ 87,700
MIC						
GRAND TOTAL PROBABLE COST:	\$ 3,013,700	\$ 3,448,700	\$ 4,000,700	\$ 4,000,700	\$ 4,000,700	\$ 4,000,700
06/10/08 Estimate Loss (GOC) 95,78 & Land	\$ 2,265,800	\$ 3,163,800	\$ 3,730,000	\$ 3,730,000	\$ 3,730,000	\$ 3,730,000

**GOLDEN CORNER COMMERCE PARK
WASTEWATER CONVEYANCE, TREATMENT AND DISPOSAL EVALUATIONS**

Phase 1 - 50,000 GPD WWTP WITH DRIP IRRIGATION EFFLUENT DISPOSAL:

GCCP Gravity Sewer Extending Up Highway 69 (6250 LF)	\$ 859,500
GCCP Influent Pump Station to WWTP	\$ 249,600
Phase 1 - 50,000 WWTP (Expandable to 100,000 GPD & Including Tertiary Filter)	\$ 1,212,100
Dedicated 20 Ac. Drip Irrigation Land Application System (Including 0.7 MG Effluent Storage Tank)	\$ 1,502,800
Subtotal Probable Construction Cost:	<u>\$ 3,524,000</u>
Design & Construction Phase Engineering Costs	\$ 528,600
Owner Administration and Legal Costs	\$ 96,900
Land Cost (26 Ac @ \$8000/Ac)	\$ 208,000
Grand Total Alternative 1 - Phase I Cost	\$ 4,357,500

OPERATION & MAINTENANCE COST FIRST 10 YEARS (FLOW = 50,000 GPD)

Influent Pump Station	\$ 17,726
Gravity Sewer & Force Main	\$ 11,313
Spray Irrigation System	\$ 20,700
WWTP	<u>\$ 167,533</u>
	\$ 207,272
Estimated User Cost / 1000 Gallons @ 50,000 GPD:	\$ 11.36 /1000 Gal
Phase 1 Capital Cost Recovery (\$3,448,700 @ 5.25% & 20 Yrs)	\$ 357,315
Capital Cost Recovery / 1000 Gallons @ 50,000 GPD:	\$ 19.58 /1000 Gal
Construction Cost - 20 year Life Items & Engr / Owner Costs	\$ 2,087,200
Construction Cost - 40 year Life Items	\$ 2,062,300
Depreciation = Const Cost/Life x 57%/Yr	\$ 88,873 per Year
Depreciation Cost / 1000 Gallons @ 50,000 GPD:	\$ 4.87 /1000 Gal



Oconee County Sewer Commission

623 Return Church Road • Seneca, South Carolina 29678
Phone: 864-972-3990 • Fax: 864-972-3917

Oconee County Council
415 S. Pine Street
Walhalla, South Carolina 29691

December 11, 2007

RE: I-85 Sewer Projects

Dear Council Member,

The OCSC and our Engineer, Mr. Bob Fronberger of W.K. Dickson Co., plan to give you an update on the I-85 sewer projects at 3:45 p.m. today.

Fairplay Commerce Park

- A) Present the findings in the Soils Analysis and make a recommendation for proceeding with the next step.
- B) Ask Council to commit up to 95 acres for land application at the Industrial Park Site.
- C) Request that County Council commit to fund the facilities at the Industrial Park, including construction and operations and maintenance.

Welcome Center Sewer

The OCSC has developed cost estimates to expand the Welcome Center plant to 100,000 gallons/day and maintain the discharge into Lake Hartwell. It is our understanding that Oconee County will not participate in this project if it is not physically connected to the Fairplay Commerce Park. If this is the case, none of the SCDOT funding will be available for use at the Commerce Park.

This will also mean that the contract between Oconee County and SCDOT will be null. If that is the case, then the new Sewer Authority could contract with SCDOT directly if SCDOT is willing and able to pay the fees for O&M etc., which are expected to be high in the early stages of the project's operation.

I have talked with SCDOT and PRT about providing property for the facilities behind the Welcome Center. The SCDOT has committed 2 acres verbally, and a PRT rep. said it was a possibility.

I have talked with the developer at Exit 1, and he is taking a wait and see position at this time. The PRT plans to issue a Request for Proposals to develop the 300 acre peninsula beside the Welcome Center in early January 2008. You may recall that the RFP schedule has moved forward a month at a time since September, however if the PRT property develops, it will need sewer facilities for the project.

SCDOT is willing to wait for a long term solution to provide them sewer service. I discussed our situation with a SCDOT representative a few days ago.

With all of this said, it appears that the Commerce Park sewer project could move ahead of the Welcome Center sewer project if the two projects are separate.

Please give me your thoughts.

Sincerely,



Robert C. Winchester
General Superintendent
OCSC

Cc: Commissioner
Bob Froneberger, WK Dickson
Mr. Dale Starett, County Administrator