

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of

Electronic Proposed Acquisition by Bluegrass)
Water Utility Operating Company, LLC and)
the Transfer of Ownership and Control of)
Assets by: P.R. Wastewater Management, Inc.;)
Marshall County Environmental Services LLC;)
LH Treatment Company, LLC; Kingswood)
Development, Inc.; Airview Utilities, LLC;)
Brocklyn Utilities, LLC; Fox Run Utilities,)
LLC; and, Lake Columbia Utilities, Inc.)

No. 2019-00104

**Response to
Commission Staff's Post-Hearing Request**

Applicant Marshall County Environmental Services LLC herewith submits the response to Commission Staff's Post-Hearing Request.

A signed, notarized verification for this Request appears on the following page. The undersigned counsel is responsible for any objection noted for a particular response.

Respectfully submitted,

/s/ *Kathryn A. Eckert*

Katherine K. Yunker
kyunker@mcbayerfirm.com

Kathryn A. Eckert
keckert@mcbayerfirm.com

MCBRAYER PLLC
201 East Main Street; Suite 900
Lexington, KY 40507-1310
859-231-8780
fax: 859-231-1175

Attorneys for Applicants

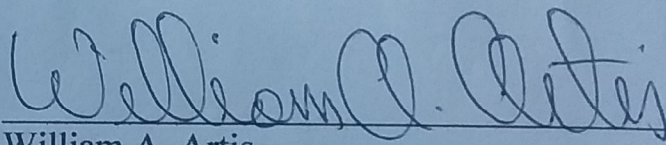
VERIFICATION

On behalf of Applicant Marshall County Environmental Services LLC

Commonwealth of KENTUCKY)

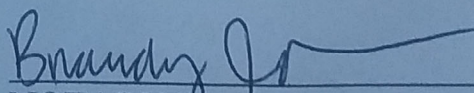
County of Marshall)

I, William A. Artis, a member/owner of **Marshall county Environmental Services LLC**, being duly sworn, state that I prepared or supervised the preparation of the following response or part thereof for which I am identified as a witness. I state that the matters and things set forth in those responses are true and correct to the best of my knowledge, information and belief formed after reasonable inquiry.


William A. Artis

Subscribed, sworn to, and acknowledged this 23rd day of May, 2019, before me, a Notary Public in and before said Commonwealth and County.

BRANDY JOHNSON
Notary Public
Kentucky - State at Large
My Commission Expires May 5, 2021


NOTARY PUBLIC

My Commission expires: May 5, 2021

Request

1. Provide the engineering study, and invoices for the study, that Marshall County Environmental had performed to investigate the feasibility of connecting with a regional sewer authority.

Response

Please see the attached 2018 study and invoice/statement from Rivercrest Engineering, Inc. for the mapping and estimates work relating to the Great Oaks wastewater treatment system, performed on behalf of MCES.



Transmittal

To: Allen Artis

Date: 7/15/2019

Subject: Great Oaks Mapping & Estimates
2018 Study

We are forwarding the following items: (X) Enclosed () Under Separate Cover

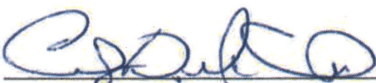
Quantity	Description
1	Great Oaks Existing WWTP Drawing
1	Great Oaks Existing WWTP Wall Thickness Drawing
1	Great Oaks WWTP Elimination – Lift Station & Force Main Improvements Planning Map
3	Estimates of Probable Cost w/ 20-year Present Worth Comparisons

These are transmitted as checked below:

- | | |
|--|--|
| <input type="checkbox"/> Approved | <input type="checkbox"/> For Your Approval |
| <input type="checkbox"/> Approved as Noted | <input type="checkbox"/> As Requested |
| <input type="checkbox"/> Not Approved | <input checked="" type="checkbox"/> For Your Use |
| <input type="checkbox"/> Revise and Resubmit | <input checked="" type="checkbox"/> For Your Files |

Remarks:
Allen,
Please find the noted items included with this transmittal. Note - these items were prepared in 2018 and may not reflect the current conditions of the existing Great Oaks WWTP facility. Rivercrest understands that structural or other improvements may have been implemented, which would affect the improvements estimates.

Rivercrest Engineering, Inc.

BY: 
Charles (Chad) D. McCann II, PE

GREAT OAKS WWTP ELIMINATION - LIFT STATION & FORCE MAIN IMPROVEMENTS

FOR
MARSHALL COUNTY ENVIRONMENTAL SERVICES, LLC
ESTIMATE OF PROBABLE COST - AUGUST, 2018

ITEM	DESCRIPTION	UNITS	QTY.	UNIT PRICE	CAPITAL COST	SERVICE LIFE	SALVAGE VALUE
1	16" STEEL ENCASMENT (Bore)	L.F.	110	\$ 250	\$ 27,500	50	\$ 16,500
2	8" SDR 35 PVC SEWER (Open Cut)	L.F.	100	\$ 60	\$ 6,000	50	\$ 3,600
3	8" DR 11 HDPE FORCE MAIN (Open Cut)	L.F.	10,950	\$ 27	\$ 295,650	50	\$ 177,390
4	8" DR 11 HDPE FORCE MAIN (HDD)	L.F.	750	\$ 60	\$ 45,000	50	\$ 27,000
5	4 ft DIAMETER PRECAST MANHOLE (10-15' dp) w/ CASTING	EACH	2	\$ 4,000	\$ 8,000	50	\$ 4,800
6	4 ft DIAMETER PRECAST MANHOLE - ARV VAULT (5 dp) w/ CASTING	EACH	2	\$ 3,500	\$ 7,000	50	\$ 4,200
7	2" AIR RELEASE VALVE ASSEMBLY	EACH	1	\$ 1,500	\$ 1,500	50	\$ 900
8	LIFT STATION 1 WET WELL & VALVE VAULT	EACH	1	\$ 80,000	\$ 80,000	50	\$ 48,000
9	200 GPM DUPLEX PUMP & CONTROL SYSTEMS (LIFT STATION 1)	L.S.	1	\$ 40,000	\$ 40,000	20	\$ -
10	ELECTRICAL SYSTEM IMPROVEMENTS (LIFT STATION 1)	L.S.	1	\$ 20,000	\$ 20,000	20	\$ -
11	LIFT STATION 2 WET WELL & VALVE VAULT	EACH	1	\$ 80,000	\$ 80,000	50	\$ 48,000
12	300 GPM DUPLEX PUMP & CONTROL SYSTEMS (LIFT STATION 2)	L.S.	1	\$ 55,000	\$ 55,000	20	\$ -
13	ELECTRICAL SYSTEM IMPROVEMENTS (LIFT STATION 2)	L.S.	1	\$ 25,000	\$ 25,000	20	\$ -
14	LIFT STATION & MISC. SITE PIPING	L.S.	2	\$ 40,000	\$ 80,000	50	\$ 48,000
15	TIE TO EXISTING MANHOLE	EACH	1	\$ 1,500	\$ 1,500		\$ -
16	DECOMMISSION & DEMOLITION OF EXISTING WWTP	L.S.	1	\$ 35,000	\$ 35,000		\$ -
17	ASPHALT PAVING	TON	10	\$ 250	\$ 2,500		\$ -
18	DENSE GRADE AGGREGATE BACKFILL/ACCESS ROAD	TON	450	\$ 25	\$ 11,250		\$ -
19	CONCRETE	S.Y.	70	\$ 120	\$ 8,400		\$ -
Subtotal Cost					\$ 829,300		
Loan Administration (5.00%)					\$ 41,000		
Easement Acquisition (Assume 35 @ \$1000/EACH)					\$ 35,000		
Engineering Design (9.20%)					\$ 76,300		
Survey & Electrical					\$ 15,000		
Permitting					\$ 7,500		
Construction Engineering/Inspection (10.00%)					\$ 82,900		
Contingencies (15.00%)					\$ 163,100		
Total Cost					\$ 1,250,100	Salvage	\$ 378,390

PERSONNEL COSTS (ESTIMATED 5 MANHOURS PER WEEK)

Operation & Maintenance	\$ 20,000
UTILITIES AND SUPPLIES	
Electricity @ \$0.11/KWh	\$ 14,000
Chemical Addition	\$ -
EQUIPMENT	
Miscellaneous	\$ 500
SERVICES	
Sludge Handling and Disposal (N/A)	\$ -
Sampling and Reporting	\$ 250
SINKING FUND REPLACEMENT (20 YEARS @ 5.0%)	\$ 5,000
SUBTOTAL O,M&R	\$ 39,750
PRESENT WORTH O,M&R (20 YEARS @ 5.0 %)	\$ 495,373
20-YEAR PRESENT WORTH COST SUMMARY	
Capital Cost Less Salvage Value	\$ 871,710
O,M&R Cost (Present Worth)	\$ 495,373
TOTAL 20-YEAR PRESENT WORTH	\$ 1,367,083

GREAT OAKS WWTP REPLACEMENT
FOR
MARSHALL COUNTY ENVIRONMENTAL SERVICES, LLC
ESTIMATE OF PROBABLE COST - AUGUST, 2018

ITEM	DESCRIPTION	UNITS	QTY.	UNIT PRICE	CAPITAL COST	SERVICE LIFE	SALVAGE VALUE
1	8" SDR 35 PVC SEWER (Open Cut)	L.F.	20	\$ 60	\$ 1,200	50	\$ 720
2	4 ft DIAMETER PRECAST MANHOLE (5-10' dp) w/ CASTING	EACH	1	\$ 3,500	\$ 3,500	50	\$ 2,100
3	INFLUENT LIFT STATION IMPROVEMENTS	L.S.	1	\$ 50,000	\$ 50,000	20	\$ -
4	ELECTRICAL SYSTEM IMPROVEMENTS	L.S.	1	\$ 15,000	\$ 15,000	20	\$ -
5	PACKAGE EXTENDED AERATION WWTP (70,000 GPD Capacity)	L.S.	1	\$ 695,250	\$ 695,250	50/20	\$ 208,575
6	WWTP FOUNDATION & 18-IN REINFORCED CONCRETE SLAB (80-FT x 30-FT)	L.S.	1	\$ 58,332	\$ 58,332	50	\$ 34,999
7	DECOMMISSIONING & DEMOLITION OF EXISTING WWTP	L.S.	1	\$ 35,000	\$ 35,000		\$ -
8	MISC. SITE PIPING	L.S.	2	\$ 4,000	\$ 8,000	50	\$ 4,800
9	MISC. SITE IMPROVEMENTS	L.S.	1	\$ 5,000	\$ 5,000	50	\$ 3,000
10	DENSE GRADE AGGREGATE BACKFILL/ACCESS ROAD	TON	400	\$ 25	\$ 10,000		\$ -
*	50 Years Structural & 20 Years Mechanical						\$ -
Subtotal Cost					\$ 881,282		
Loan Administration (5.00%)					\$ 44,000		
Easement Acquisition (Assume N/A)							
Engineering Design (9.20%)					\$ 81,100		
Survey & Electrical					\$ 7,000		
Permitting					\$ 2,500		
Construction Engineering/Inspection (10.00%)					\$ 88,100		
Contingencies (15.00%)					\$ 165,600		
Total Cost					\$ 1,269,582	Salvage	\$ 254,194
PERSONNEL COSTS (ESTIMATED 15 MANHOURS PER WEEK)							
Operation & Maintenance				\$	40,000		
UTILITIES AND SUPPLIES							
Electricity @ \$0.11/KWh				\$	17,000		
Chemical Addition				\$	-		
EQUIPMENT							
Miscellaneous				\$	1,000		
SERVICES							
Sludge Handling and Disposal				\$	5,000		
Sampling and Reporting				\$	4,000		
SINKING FUND REPLACEMENT (20 YEARS @ 5.0%)				\$	17,000		
SUBTOTAL O,M&R				\$	84,000		
PRESENT WORTH O,M&R (20 YEARS @ 5.0 %)				\$	1,046,826		
20-YEAR PRESENT WORTH COST SUMMARY							
Capital Cost Less Salvage Value				\$	1,015,388		
O,M&R Cost (Present Worth)				\$	1,046,826		
TOTAL 20-YEAR PRESENT WORTH				\$	2,062,213		

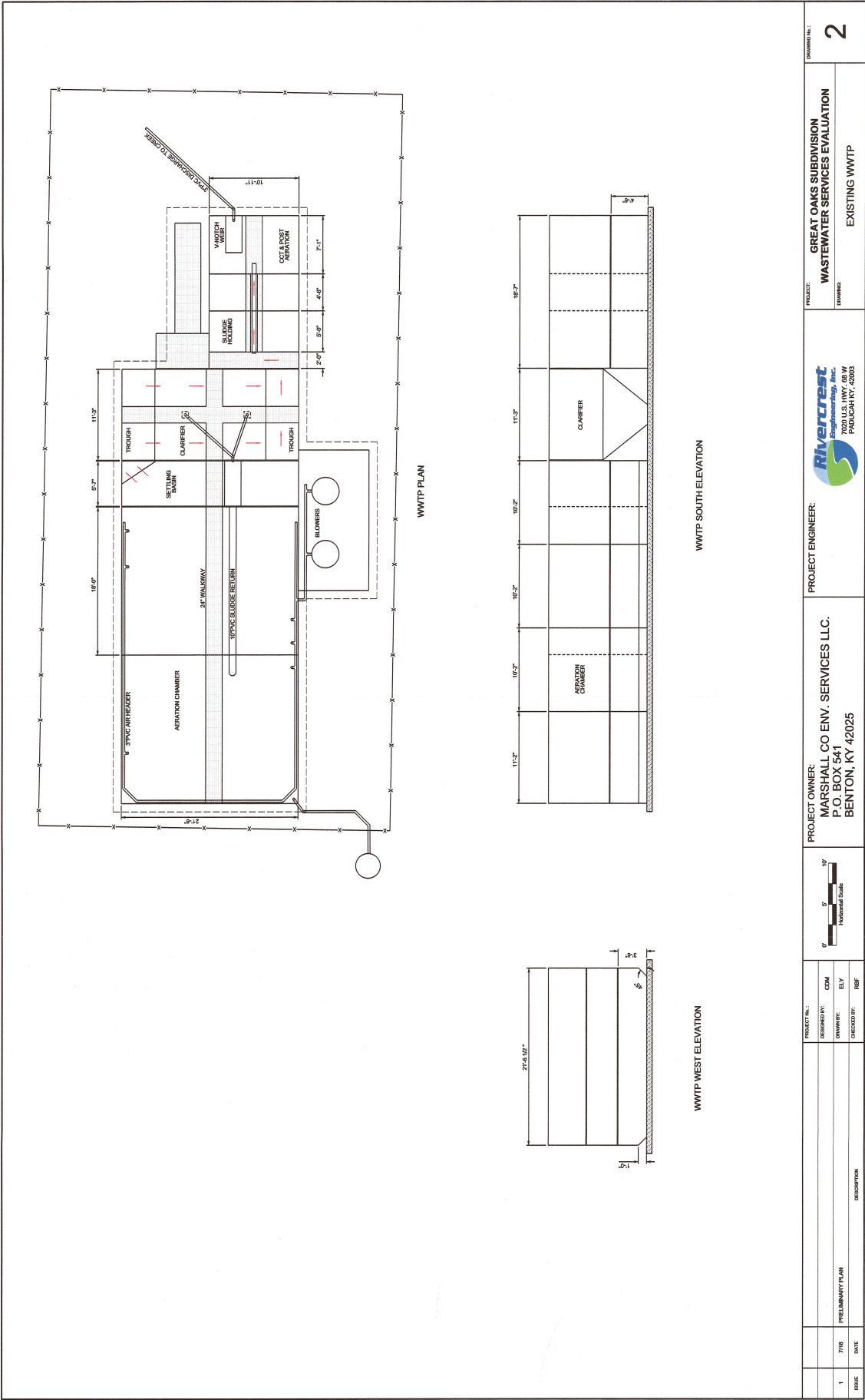
GREAT OAKS EXISTING WWTP IMPROVEMENTS
FOR
MARSHALL COUNTY ENVIRONMENTAL SERVICES, LLC
ESTIMATE OF PROBABLE COST - AUGUST, 2018

ITEM	DESCRIPTION	UNITS	QTY.	UNIT PRICE	CAPITAL COST	SERVICE LIFE	SALVAGE VALUE	
1	8" SDR 35 PVC SEWER (Open Cut)	L.F.	20	\$ 60	\$ 1,200	50	\$ 720	
2	4 ft DIAMETER PRECAST MANHOLE (5-10' dp) w/ CASTING	EACH	1	\$ 3,500	\$ 3,500	50	\$ 2,100	
3	INFLUENT LIFT STATION IMPROVEMENTS	L.S.	1	\$ 50,000	\$ 50,000	20	\$ -	
4	ELECTRICAL & CONTROL SYSTEM IMPROVEMENTS	L.S.	1	\$ 45,000	\$ 45,000	20	\$ -	
5	15 HP BLOWER REPLACEMENT	EACH	2	\$ 8,500	\$ 17,000	7	\$ -	
6	REINFORCE TANKS WALLS, BAFFLES, & WEIR SYSTEMS	L.S.	1	\$ 60,000	\$ 60,000	20	\$ -	
7	EPOXY PIT FILLING	SQ.IN.	5,000	\$ 6	\$ 30,000	20	\$ -	
8	TANK SEAM WELDING	L.F.	150	\$ 60	\$ 9,000	20	\$ -	
9	INTERIOR EPOXY COATING SYSTEM	S.F.	6,000	\$ 11	\$ 66,000	20	\$ -	
10	EXTERIOR EPOXY COATING SYSTEM	S.F.	7,500	\$ 9	\$ 67,500	20	\$ -	
11	UV DISINFECTION SYSTEM REPLACEMENT	L.S.	1	\$ 21,500	\$ 21,500	20	\$ -	
12	WWTP HEADER & DROP AIR PIPING REPLACEMENT	L.S.	1	\$ 35,000	\$ 35,000	20	\$ -	
13	SLUDGE TRANSFER PUMP REPLACEMENT	EACH	2	\$ 7,500	\$ 15,000	7	\$ -	
14	EFFLUENT FLOW METER REPLACEMENT	EACH	1	\$ 4,000	\$ 4,000	7	\$ -	
15	FIBERGLAS GRATING-WALKWAY REPLACEMENT	L.S.	1	\$ 16,000	\$ 16,000	20	\$ -	
16	PUMPER TRUCK / WASTE HAULING FOR 30 DAYS DURING CONSTRUCTION	LOAD	600	\$ 400	\$ 240,000		\$ -	
17	STAINLESS STEEL HARDWARE FOR EQUIPMENT MOUNTING	L.S.	1	\$ 3,500	\$ 3,500	50	\$ 2,100	
18	MISC. SITE IMPROVEMENTS	L.S.	1	\$ 5,000	\$ 5,000		\$ -	
19	DENSE GRADE AGGREGATE BACKFILL/ACCESS ROAD	TON	400	\$ 25	\$ 10,000	50	\$ 6,000	
*	<i>50 Years Structural & 20 Years Mechanical</i>							\$ -

Subtotal Cost	\$ 699,200	
Loan Administration (5.00%)	\$ 35,000	
Easement Acquisition (Assume N/A)		
Engineering Design (11.00%)	\$ 76,900	
Survey & Electrical	\$ 7,000	
Permitting	\$ 2,500	
Construction Engineering/Inspection (10.00%)	\$ 69,900	
Contingencies (15.00%)	\$ 133,600	
Total Cost	\$ 1,024,100	Salvage \$ 10,920

PERSONNEL COSTS (ESTIMATED 15 MANHOURS PER WEEK)

Operation & Maintenance	\$ 40,000
UTILITIES AND SUPPLIES	
Electricity @ \$0.11/KWh	\$ 17,000
Chemical Addition	\$ -
EQUIPMENT	
Miscellaneous	\$ 2,500
SERVICES	
Sludge Handling and Disposal	\$ 5,000
Sampling and Reporting	\$ 4,000
SINKING FUND REPLACEMENT (20 YEARS @ 5.0%)	\$ 10,000
SUBTOTAL O,M&R	\$ 78,500
PRESENT WORTH O,M&R (20 YEARS @ 5.0 %)	\$ 978,284
20-YEAR PRESENT WORTH COST SUMMARY	
Capital Cost Less Salvage Value	\$ 1,013,180
O,M&R Cost (Present Worth)	\$ 978,284
TOTAL 20-YEAR PRESENT WORTH	\$ 1,991,464

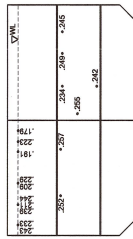


WWTP PLAN

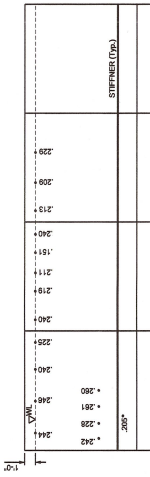
WWTP SOUTH ELEVATION

WWTP WEST ELEVATION

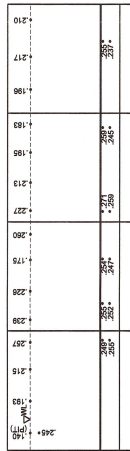
PROJECT NO.:	7718	DATE:	
DESIGNED BY:	CJM	CHECKED BY:	RFJ
DRAWN BY:	ELY	DESCRIPTION:	PRELIMINARY PLAN
PROJECT ENGINEER:	MARSHALL CO ENV. SERVICES LLC. P.O. BOX 541 BENTON, KY 42025		
PROJECT:	GREAT OAKS SUBDIVISION WASTEWATER SERVICES EVALUATION		
DRAWING NO.:	EXISTING WWTP		
 7700 U.S. HWY. 68 W PADUCAH, KY, 42003			
DRAWING NO. 2			



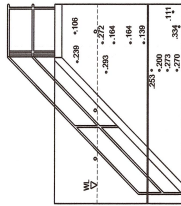
WWTP WEST ELEVATION



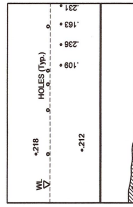
WWTP SOUTH ELEVATION
AERATION CHAMBER



WWTP NORTH ELEVATION
AERATION CHAMBER

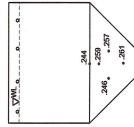


NORTH SIDE

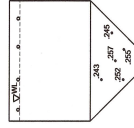


SOUTH SIDE

SLUDGE HOLDING & CHLORINE CONTACT CHAMBER



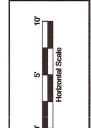
EAST FACE
NORTHERN CLARIFIER

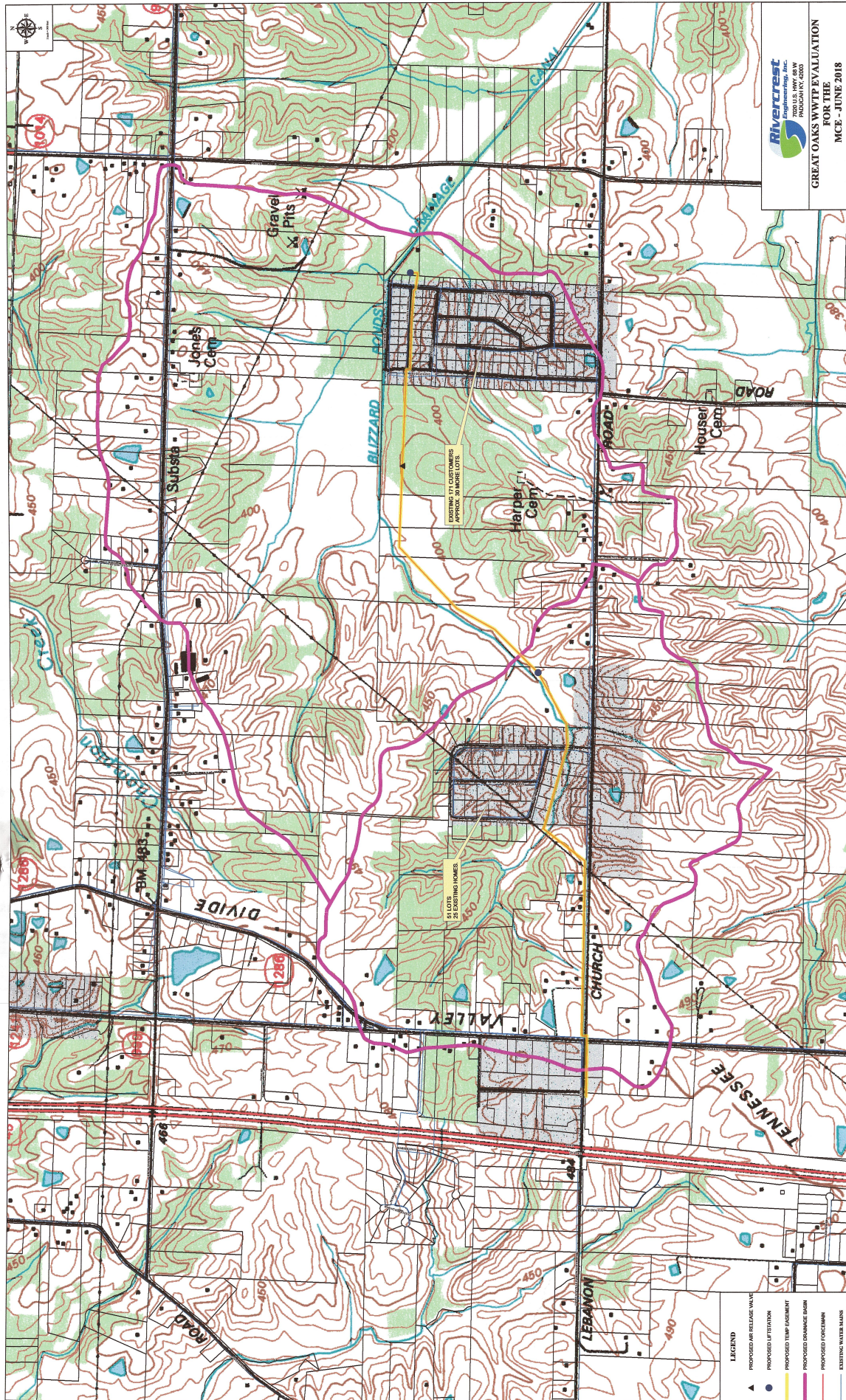


SOUTH FACE
SOUTHERN CLARIFIER

CLARIFIER ELEVATIONS

PROJECT NO.:	7718	DATE:		DESCRIPTION:		PROJECT ENGINEER:		PROJECT:	GREAT OAKS SUBDIVISION WASTEWATER SERVICES EVALUATION	DRAWING NO.:	3
ISSUE:	1	DATE:		DESCRIPTION:		PROJECT OWNER:	MARSHALL CO ENV. SERVICES LLC. P.O. BOX 541 BENTON, KY 42025	OWNER:	EXISTING WWTP THICKNESS SURVEY		






Rivercrest
 Engineering, Inc.
 2000 U.S. HWY 60W
 GREAT OAKS WWTPE EVALUATION
 FOR THE
 MCB - JUNE 2018

- LEGEND**
- ▲ PROPOSED AIR RELEASE VALVE
 - PROPOSED LIFT STATION
 - PROPOSED TUMPLE EASIMENT
 - PROPOSED STORMAGE BASIN
 - PROPOSED FORCEMAIN
 - EXISTING WATER MAINS

11 LOTS
 23 EXISTING HOMES
 30 LOTS
 30 LOTS





Professional Services Invoice

Service Provider: Rivercrest Engineering Incorporated
 3519 State Route 440
 Hickory, KY 42051
 Phone (270) 519-7675

Invoice No. 4
Invoice Date: July 15, 2019
REI Project No. 18006

Client: Marshall County Environmental Services
 Attn: Mr. Allen Artis, Manager
 P.O. Box 541
 Benton, KY 42025

Project Name: Wastewater Treatment System
 Great Oaks Subdivision
 McCracken County, KY

Service Dates: 9/1/2018 through 7/15/2019

Invoice Class: (Hourly & Lump Sum) \$ 12,840.00

	Service Rate	Hrs this Period	Hrs to Date	Amount Subtotal
Principal Engineer	135	0	0	\$0.00
Sr Engineer / Project Manager	115	0	11	\$1,265.00
Project Engineer	100	0	0	\$0.00
Graduate Engineer / Designer	90	0	18.5	\$1,665.00
Construction Observer / Engineering Tech	75	0	10	\$750.00
<hr/>				
Subtotal - Labor		0	39.5	\$3,680.00
Direct Expense - LS - Sub	1800	0%	100%	\$1,800.00
Amount Earned to Date				\$5,480.00
Less Amount Previously Invoiced				\$5,480.00
Amount Due this Invoice				\$0.00

Service fees due for professional services rendered Sept 1, 2018 through July 15, 2019 = \$0.00

R. Brian Flynn, PE, President

Payment History:

Invoice No.	Invoice Date	Service Amt	Amount Paid	Date Received	Invoice Age	Cumulative AR Amount
1	July 12, 2018	\$2,840.00	\$1,250.00	10/26/2018		\$1,590.00
2	August 8, 2018	\$2,410.00	\$750.00	11/21/2018		\$3,250.00
3	September 4, 2018	\$230.00	\$300.00	1/23/2019		\$3,180.00
4	July 15, 2019	\$0.00	\$300.00	2/25/2019		\$2,880.00
			\$300.00	4/20/2019		\$2,580.00
			\$300.00	6/18/2019		\$2,280.00