US Army Corps
of Engineers
Memphis District

GRAND PRAIRIE REGION AND BAYOU METO BASIN, ARKANSAS PROJECT

BAYOU METO BASIN, ARKANSAS

GENERAL REEVALUATION REPORT

VOLUME 9

APPENDIX C

ENGINEERING INVESTIGATIONS & ANALYSES FLOOD CONTROL COMPONENT

SECTION II – GEOLOGY & SOILS
SECTION III – LEVEE & DRAINAGE
SECTION IV – STRUCTURAL, ELECTRICAL & MECHANICAL
SECTION V – RELOCATIONS
SECTION VI – GEOSPATIAL
SECTION VII – SURVEY
SECTION VIII – COST ENGINEERING REPORT

NOVEMBER 2006

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BAYOU METO BASIN, ARKANSAS PROJECT
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BAYOU METO COMPREHENSIVE STUDY
BAYOU METO BASIN, ARKANSAS

APPENDIX C

ENGINEERING INVESTIGATIONS & ANALYSES
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SECTION II

GEOLOGY AND SOILS

Appendix C - Engineering Investigations & Analyses
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II-03	Little Bayou Meto Pumping Plant Excavation Dewatering Analysis
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Appendix C - Engineering Investigations & Analyses
Flood Control Component

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APPENDICES

Appendix No.	**Title**
II-A	Computations

Appendix C - Engineering Investigations & Analyses
Flood Control Component

Section II - Geology and Soils

II-1. GENERAL. This report includes the geotechnical analyses related to the flood control portion of the Bayou Meto Comprehensive Study. The project consists of water control structures and channel work to reduce flood impacts in the basin. Flood control components include a pumping station on Little Bayou Meto, hinged crest gate weirs on Salt Bayou and Dry Bayou in the Bayou Meto Wildlife Management Area, an auxiliary ditch near Lonoke, several small weirs, channel cleanouts, channel restorations, bridge relocations, culverts and a diversion ditch on Big Bayou Meto. This report will address the major features of the project: a 1000 or 3000 cubic feet per second (cfs) pumping station at Little Bayou Meto and hinged crest gate weirs on Salt and Dry Bayous. Corps of Engineers design criteria and standards were used for the geotechnical design presented in this study.

The pumping station will be located on Little Bayou Meto adjacent to the gravity control structure in Jefferson County. The pump station will be constructed on the north top bank and provide the ability to pump water over the levee into the Arkansas River during high river stages when the gravity drainage structure gates must be closed. Both 1000 and 3000-cfs capacity pump stations were evaluated. The pump station will be connected to the Little Bayou Meto channel by a newly constructed inlet channel. Other features of the pumping station include inlet retaining walls, a truck bay and a dewatering system to lower the ground water during construction.

The hinged crest gate weir on Salt Bayou will be located just south of Dry Bayou in Jefferson County. The structure will be constructed within the existing channel and will require a circular cofferdam and dewatering system. It will have a control tower and retaining walls associated with it.

The Dry Bayou hinged crest gate weir will be located between Salt Bayou and Bayou Meto in Arkansas County. It will be constructed within the existing channel using cofferdams within top bank of the channel and a dewatering

system. It will have a control tower and retaining walls associated with it.

II-2. GEOLOGY. The southern area of the Bayou Meto Basin project lies within the lower portion of the Arkansas River Valley, which is considered a subdivision of the Mississippi Alluvial Plain. The Arkansas River enters the Mississippi Alluvial Plain at Little Rock, Arkansas and, from there to the Mississippi River, flows through a broad valley of low relief called the Arkansas River lowland which represents the present floodplain of the Arkansas River.

The Arkansas River floodplain is covered by a complex pattern of abandoned meanders that are indicated by ox-bow lakes, abandoned channel fills, backswamps, natural levee deposits and point bars. The area within the project boundary is generally underlain by natural levee materials and point bar accretionary deposits. Also, numerous cutoffs, caused by the meandering of the river over time, have formed ox-bow lakes and abandoned channels near the river. Some of the cutoffs or ox-bow lakes have become completely filled with considerable amounts of silt and clay material. Backswamp deposits also exist within the project area and are generally located approximately three to five miles west of the river. Within the Arkansas River floodplain, the substratum sands, silts and clays generally vary in thickness and are underlain by Tertiary deposits. These alluvial materials have been recently deposited and are generally loosely consolidated.

The point bars are ridges and depressions (swales) that formed on the inside of meander loops as the river migrated laterally and downstream. Within the point bar top stratum, there are two types of deposits: silty and sandy elongate bar deposits, or "ridges", which were laid down during high stages of the river, and silty, clayey deposits in depressions, or "swales", which were laid down during falling river stages. The natural levee deposits were built up by deposition of sands and silts during times of flood and generally form the highest portions of the land surface in the project area. In many areas, the point bars are covered by thin natural levee deposits. Natural levee deposits gradually merged laterally away from the river with finer-grained materials, which were deposited in backswamp areas. Backswamp deposits are found in the low-lying areas within the project boundary that are generally

flooded during times of high water. Backswamps have very little relief, usually support a dense growth of vegetation and consist principally of clays containing some organic matter.

II-3. SUBSURFACE INVESTIGATION. Subsurface investigation is documented in Volume 4, Appendix B Engineering Investigations & Analyses Agricultural Water Supply Component, Section II, Geology and Soils. This investigation included drilling an undisturbed soil boring at the potential pumping station sites on Little Bayou Meto and Big Bayou Meto and at the sites of the proposed two hinged crest gate weirs. Boring locations are shown on Plate II-06 of Appendix B. Boring profiles are presented on Plates II-16 and II-17 of Appendix B.

II-4. LABORATORY TESTING. Laboratory testing is documented in Volume 4, Appendix B Engineering Investigations & Analyses Agricultural Water Supply Component, Section II, Geology and Soils.

II-5. SOILS AND FOUNDATION ANALYSES.

II-5-a. General. The boring logs along with the corresponding test results were examined to determine appropriate soil stratification and shear strength parameters for the major structures foundation design. Once stratifications and shear strength values were assigned, a variety of foundation analyses were performed as applicable to determine channel slope stability, structural excavation slope stability, structural sliding stability, bearing capacity, settlement and dewatering requirements.

II-5-b. Design Shear Strengths.

II-5-b-1. Clays. The selection of the design values for the Q and R conditions was based on consistencies indicated by the boring logs, natural densities, moisture contents, Atterberg limits, unconfined compression tests and Q triaxial tests. Design values for the S condition were based on Atterburg Limits as correlated in TM 3-604 dated June 1962.

II-5-b-2. Silts. The design shear strengths for silts were selected based on past experience. Design values of $\phi=20^{\circ}$, c=300 psf were used for the Q and R conditions.

Design values of □=28°, c=0 psf were used for the S case strengths.

II-5-b-3. Sands. Design values for the coarse grained soils were selected based on past experience. A strength of □=30° and c=0 psf was used.

II-6. STABILITY ANALYSES.

II-6-a. Slope Stability. Slope stability analyses were performed to determine the required slopes for the channels and excavations, and required set back distances for cofferdams. Slope stability analyses were conducted in accordance with guidelines and criteria presented in DIVR 1110-1-400, Section 5, Part 4, Item 1, dated March 1973, for Type A projects. Long-term stability analyses for the canals used Type B criteria or a factor of safety greater than 1.0. All other stability analyses were performed for the following loading cases with respective minimum allowable factors of safety for Type A projects:

Loading Case	Minimum Factor of Safety
After Construction (AC)	1.30
Long-Term (LT)	1.25
Sudden Drawdown (SD)	1.20

Stability analyses for the appropriate loading conditions were performed using the microcomputer program SSW028 - Analysis of Slope Stability (Wedge Method) published by USACE Waterways Experiment Station, Vicksburg, Mississippi (WES). Only the critical factors of safety are presented for each analysis.

II-6-b. Structural Stability Analyses.

II-6-b-1. Sliding. Sliding stability analyses were performed for both the 1000 and 3000-cfs pumping station options at the Little Bayou Meto structure and the hinged crest gate weirs in accordance with procedures presented in ETL 1110-2-256 and EM 1110-2-2502. Sliding stability analyses were performed to ensure the stability against sliding at the base of the structure or through any soil layer below the base. Program SSW028 from the WES library was used to design and analyze the structure. A minimum allowable factor of safety of 1.50 was used for normal loading conditions.

II-6-b-2. Bearing Capacity. Bearing capacity computations were based on principles and methods presented in EM 1110-1-1905. Bearing capacity was determined by Meyerhof's Equation, which is a modification of the general bearing capacity equation to account for effects of embedment, overburden pressure, foundation shape and inclination of loading. Analyses included determining a factor of safety by dividing the ultimate bearing capacity of the foundation soil by the pressure due to each structure assuming a uniform vertical load. Due to the preliminary nature of the structural analysis correction factors for eccentricity, inclined loading and earthquake loading were not evaluated. A minimum allowable factor of safety of 3.0 is required for normal loading conditions and 2.0 for unusual loading as presented in EM 1110-1-1905 and EM 1110-2-2502.

II-6-b-3. Settlement. Since the Little Bayou Meto pumping station will be founded on a thin layer of silt underlain by sand and silty sand, settlement was considered negligible and no analyses were performed. The two hinged crest gate weirs will be founded on a five-foot layer of clay (CL) underlain by sand and silty sand settlement was also considered negligible and no analyses were performed.

II-6-b-4. Dewatering. Dewatering analyses were performed for the Little Bayou Meto pumping station and the two hinged crest gate weirs. The analysis was performed to determine the required number and layout of wells for the dewatering cost estimate. Dewatering requirements were based on procedures and guidelines presented in TM 5-818-5. The dewatering system was designed to lower the water table five feet below the bottom of the excavation.

II-7. LITTLE BAYOU METO PUMPING STATION.

II-7-a. General. The Little Bayou Meto pumping station was evaluated for 1000 and 3000-cfs capacity stations. The 1000-cfs station will consist of a 55-foot by 68-foot concrete structure with an inlet slab grade at Elevation 151.5, NGVD. The station consists of two bays and has a foundation elevation of 147.5, NGVD. The 3000-cfs station will consist of a 93-foot by 93.5-foot concrete structure with an inlet slab grade at Elevation 147.7, NGVD. The station consists of three bays and has a foundation elevation of 143.7, NGVD. The strength and stratification of soil boring 54-BMU-00 taken in the general proximity of

the proposed site was used for all pumping station analyses.

II-7-b. Excavation Stability Analysis. The structural excavation was evaluated for the 1000-cfs pumping station assuming excavation on a 1V on 3H slope from the existing ground surface of Elevation 182.0, NGVD, to Elevation 147.5, NGVD. Analysis was performed using a minimum 20-foot wide construction berm between the toe of the Arkansas River levee and the structural excavation. The steady seepage case was evaluated using S-strengths and assuming river elevations of 182.0, NGVD, and 199.0, NGVD. The dewatering system was assumed to bring the water phreatic surface to five feet below the ground surface. Analyses resulted in minimum factors of safety of 2.14 for the bank full river stage of Elevation 182.0, NGVD, and 1.39 for the project flood at Elevation 199.0, NGVD. The project flood and bank full analyses are presented on Plates II-01 and II-02, respectively.

II-7-c. Inlet Channel Slope. The inlet channel was evaluated for the 3000-cfs pumping station. The 1V on 3H slope was analyzed assuming a top bank elevation of 182.0, NGVD, and a channel bottom elevation of 145.0, NGVD. The analysis was performed for the most critical case, which would be a dry channel. The after construction analysis resulted in a minimum factor of safety of 2.06. Analysis of the long term case resulted in a minimum factor of safety of 1.60.

II-7-d. Structural Sliding Stability. Sliding stability analyses were performed for both the 1000-cfs and 3000-cfs pump stations. After construction and long term cases were evaluated by conservatively assuming the in situ soil strengths and the water table at the ground surface in the inlet channel. The failure surface was not allowed to go through the concrete structure. The after construction analyses resulted in minimum factors of safety of 2.1 and 30.4 for the 1000 and 3000-cfs structures respectively. The long term analyses resulted in minimum factors of safety of 1.37 and 30.4 for the 1000 and 3000-cfs structures, respectively.

II-7-e. Bearing Capacity. At Little Bayou Meto, 1000 and 3000-cfs pump stations were evaluated for the after construction case assuming the water table at the ground

surface in the inlet channel. The 1000-cfs station will be founded at Elevation 147.5, NGVD, on a 3.5-foot layer of silt underlain by silty sand and sand. Analysis was performed assuming a silt foundation. The 68-foot long by 55-foot wide structure analyzed using a four-foot embedment resulted in a factor of safety of 5.0. The 3000-cfs pump station foundation at Elevation 143.7, NGVD, is comprised of less than two feet of silt underlain with silty sand. Analysis of the 93.5-foot long by 93-foot wide structure with a 3.5-foot embedment resulted in a factor of safety of 14.5. These factors of safety should be large enough to compensate for the additional earthquake, eccentric and inclined loadings due to more detailed structural design and remain above the required minimum factors of safety.

II-7-f. Dewatering. A dewatering analysis was performed for the 1000-cfs pumping station. The system was designed to lower the water table to elevation 142.0, NGVD, five feet below the bottom of the excavation. Two cases were analyzed. The first case assumed artesian flow and a circular source with a headwater elevation of 182.0, NGVD. This is the approximate ground surface elevation at the pump station site and just above the maximum gage reading of 181.7, NGVD, on the landside of Little Bayou Meto Structure. The second case was evaluated for the design flow on the Arkansas River using it as a line source. The location of Tertiary and the aquifer thickness were based on the stratification of boring 54-BMU-00. A Tertiary elevation at 60.0, NGVD, resulted in an aquifer thickness of 82 feet. A horizontal permeability of 900 x 10^{-4} cm/sec was selected based on the D_{10} grain size of the foundation sands taken from this boring. The analysis presented on Plate II-03 indicates a dewatering system consisting of sixteen, 10-inch diameter fully penetrating wells is required.

II-7-g. Truck Bay Foundation. The truck bay will be located adjacent to the pumping station on backfill material. Due to the large design loadings it will be founded on two-foot diameter drilled concrete piers that will extend into sands. Pier capacity was determined according to EM 1110-2-2906 and TM 5-818-1. A minimum factor of safety of 3.0 is required for the usual loading condition in compression piers. Analysis was performed for the long-term case using Q strengths and conservatively assuming a water table at the ground surface and neglecting adhesion in the cohesive backfill. Analysis resulted in an

allowable capacity of 40 kips per pier. For cost estimating purposes the piers are assumed to extend five feet into sands.

II-8. SALT BAYOU HINGE CREST GATE WEIR.

II-8-a. General. The hinged crest gate weir on Salt Bayou will have a 100-foot width. The gate and stilling basin combined is approximately 55 feet in length. The foundation will be at Elevation 165.0, NGVD, with the stilling basin at Elevation 170.0, NGVD. A control tower will be adjacent to the gate. Concrete retaining walls will join the stilling weir and stilling to the channel slopes. The strength and stratification of soil boring 58-BMU-00 taken in the general proximity of the proposed site was used in the analyses.

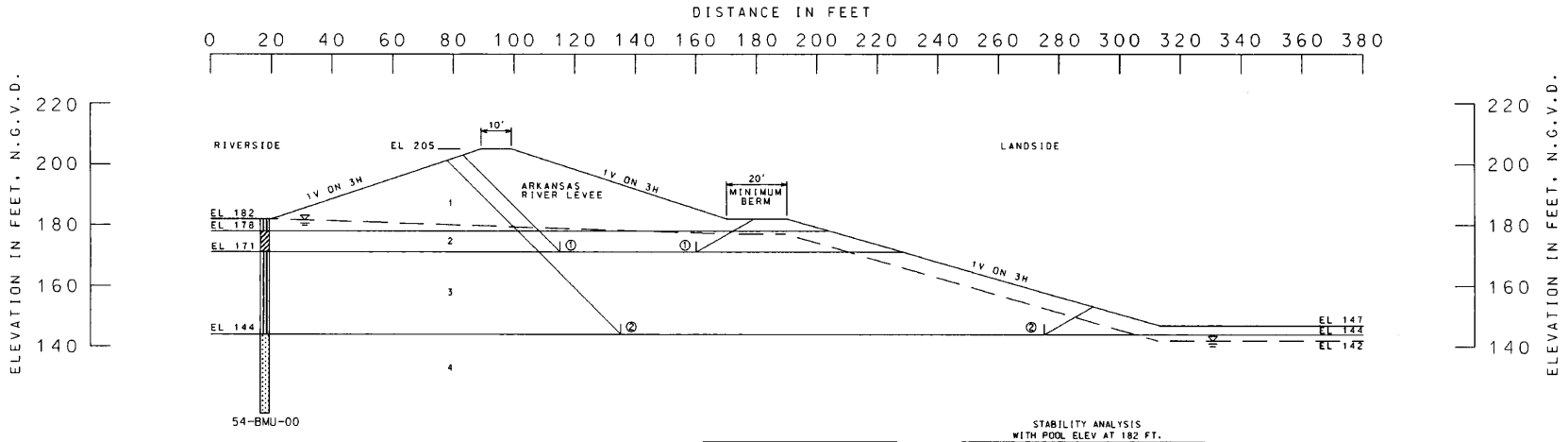
II-8-b. Dewatering. The dewatering system was designed to lower the water table to Elevation 160.0, NGVD, which is five feet below the bottom of the excavation. Analysis was performed assuming artesian flow and a circular source with a headwater elevation of 187.0, NGVD. This elevation is the equivalent of a five-year event. The stratification of boring 58-BMU-00 was used to determine aquifer thickness. Since this boring did not extend into Tertiary deposits, Tertiary was assumed as elevation 100.0, NGVD, based on existing geologic mapping. A horizontal permeability of 1800×10^{-4} cm/sec was selected based on the D_{10} grain size of the foundation sands taken from boring 58-BMU-00 assuming the deeper deposits in the aquifer to be as coarse as than those depicted in the boring. The analysis presented on Plate II-04 indicates a dewatering system consisting of sixteen, 10-inch diameter fully penetrating wells is required.

II-9. DRY BAYOU HINGE CREST GATE WEIR.

II-9-a. General. The hinged crest gate weir on Dry Bayou will have a 25-foot width. The gate and stilling basin combined is approximately 55 feet in length. The foundation will be at Elevation 165.0, NGVD, with the stilling basin at Elevation 170.0, NGVD. The channel thalwag is Elevation 172.0, NGVD. A control tower will be adjacent to the gate. Concrete retaining walls will join the stilling weir and stilling to the channel slopes. The strength and stratification of soil boring 57-BMU-00 taken

in the general proximity of the proposed site was used in the analyses.

II-9-b. Dewatering. The dewatering system was designed to lower the water table to Elevation 160.0, NGVD, which is five feet below the bottom of the excavation. Analysis was performed assuming artesian flow and a circular source with a headwater elevation of 187.0, NGVD. This elevation is the equivalent of a five-year event. The stratification of boring 57-BMU-00 was used to determine aquifer thickness. Since this boring did not extend into Tertiary deposits Tertiary was assumed as elevation 100.0, NGVD, based on existing geologic mapping. Due to the close proximity to the Salt Bayou Weir, the same horizontal permeability, 1800 x 10^{-4} cm/sec, was used for this site. The analysis presented on Plate II-05 indicates a dewatering system consisting of sixteen, 10-inch diameter fully penetrating wells is required.



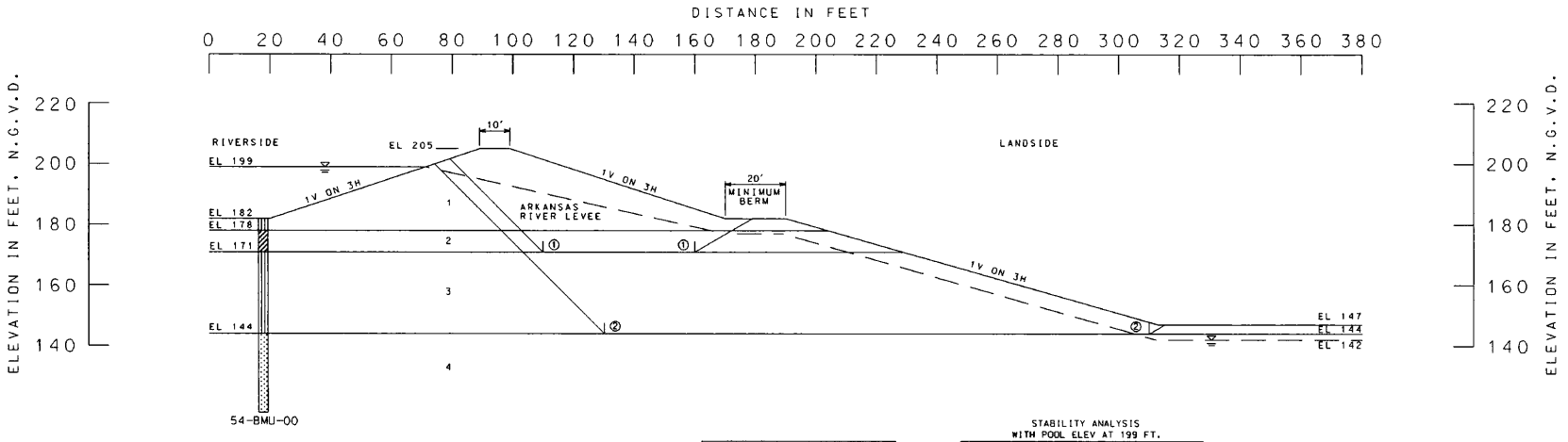
DESIGN SOIL PROPERITES			
SOIL NO.	γ(PCF)	Φ(DEG)	C(PSF)
1	115	20	300
2	115	0	900
3	115	20	300
4	120	30	0

STABILITY ANALYSIS
WITH POOL ELEV AT 182 FT.

STEADY SEEPAGE CASE				
WEDGE NO.	ELEV.	NEUTRAL BLOCK PASSIVE	ACTIVE	SAFETY FACTOR
①	171	115	160	2.252
②	144	135	275	2.142

LITTLE BAYOU METO
PUMPING PLANT EXCAVATION
STABILITY ANALYSIS
SCALES AS SHOWN
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
CORPS OF ENGINEERS
VICKSBURG, MISSISSIPPI
DATE: 07/13/82 FILE NO. 1

PLATE II-01



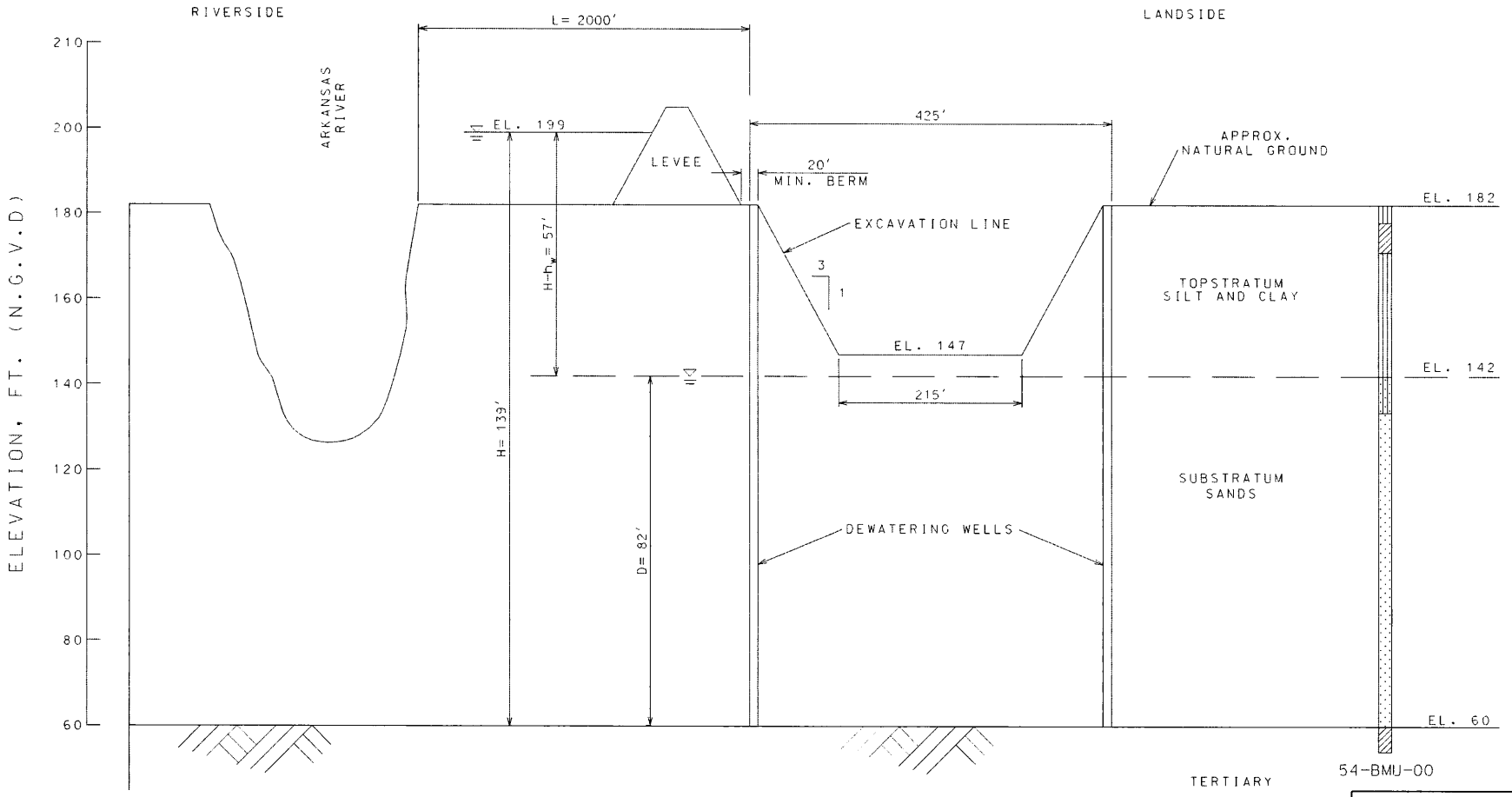
DESIGN SOIL PROPERITES			
SOIL NO.	γ(PCF)	Φ(DEG)	C(PSF)
1	115	20	300
2	115	0	900
3	115	20	300
4	120	30	0

STABILITY ANALYSIS
WITH POOL ELEV AT 199 FT.

STEADY SEEPAGE CASE				
WEDGE NO.	ELEV.	NEUTRAL BLOCK PASSIVE	ACTIVE	SAFETY FACTOR
①	171	110	160	1.924
②	144	130	310	1.391

LITTLE BAYOU METO
PUMPING PLANT EXCAVATION
STABILITY ANALYSIS
SCALES AS SHOWN
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
CORPS OF ENGINEERS
VICKSBURG, MISSISSIPPI
DATE: 07/13/82 FILE NO. 1

PLATE II-02

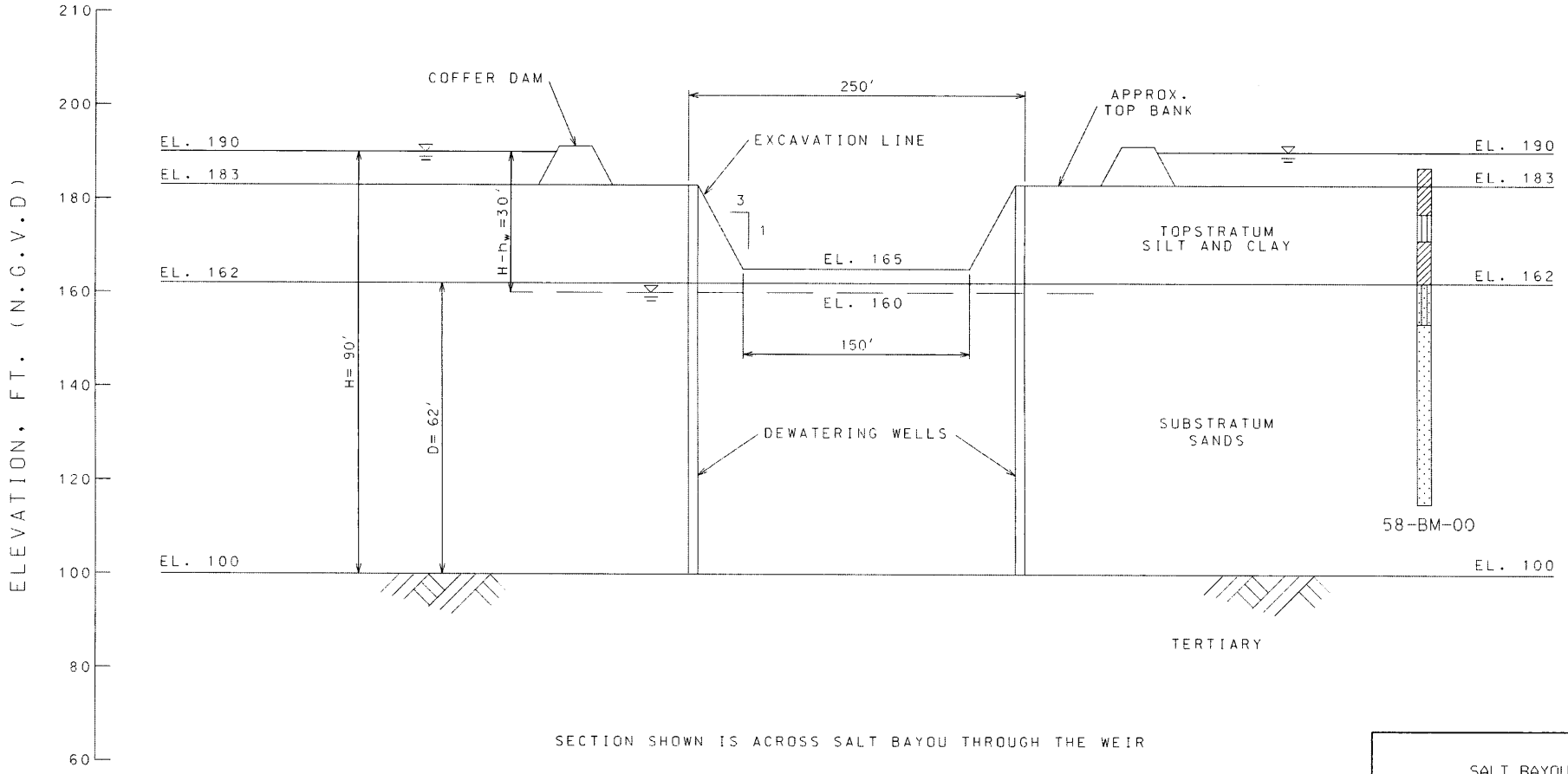


SECTION SHOWN IS PARALLEL WITH INLET CHANNEL THROUGH CENTER OF THE EXCAVATION AND PUMPING STATION

LITTLE BAYOU METO
PUMPING PLANT EXCAVATION
DEWATERING ANALYSIS

SCALES AS SHOWN
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
CORPS OF ENGINEERS
VICKSBURG, MISSISSIPPI
DATE: 04/02/03 FILE NO. X

PLATE II-03

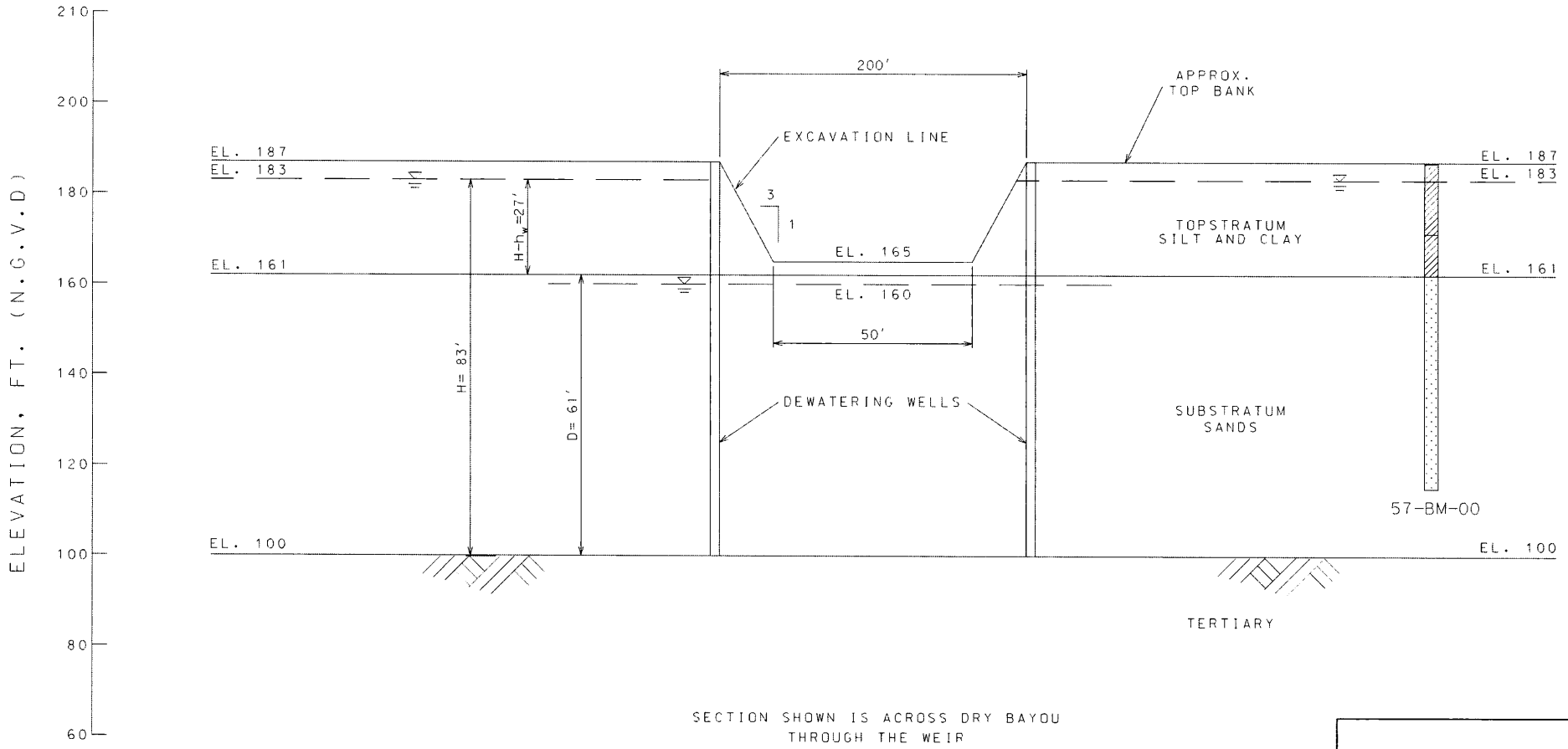


SECTION SHOWN IS ACROSS SALT BAYOU THROUGH THE WEIR

SALT BAYOU
HINGED CREST GATE WEIR
DEWATERING ANALYSIS

SCALES AS SHOWN
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
CORPS OF ENGINEERS
VICKSBURG, MISSISSIPPI
DATE: 04/02/03 FILE NO. X

PLATE II-04



SECTION SHOWN IS ACROSS DRY BAYOU
THROUGH THE WEIR

DRY BAYOU
HINGED CREST GATE WEIR
DEWATERING ANALYSIS

SCALES AS SHOWN
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
CORPS OF ENGINEERS
VICKSBURG, MISSISSIPPI
DATE: 04/02/03 FILE NO. x

PLATE II-05

SECTION C – ENGINEERING INVESTIGATIONS & ANALYSES
FLOOD CONTROL COMPONENT

SECTION II – GEOLOGY & SOILS

APPENDIX II-A

Little Bayou Meto (PE2 filename: lbm)
Excavation
Pool Elev. @ 199ft.

NEUTRAL BLOCK			DRIVING AND RESISTING FORCES IN POUNDS					INITIAL AND FINAL SF	
ACT	PASS	EL	DA	RA	RNB	DP	RP	SF-INIT	SF-FIN
110	160	171.0	62884	23279	22280	-8791	8540	1.84	1.92

STEADY SEEPAGE CASE USING S-STRENGTHS
PHREATIC PROFILE USED.
S.F. = 1.924

NEUTRAL BLOCK			DRIVING AND RESISTING FORCES IN POUNDS					INITIAL AND FINAL SF	
ACT	PASS	EL	DA	RA	RNB	DP	RP	SF-INIT	SF-FIN
130	310	144.0	190115	70013	117389	-625	2100	1.36	1.39

STEADY SEEPAGE CASE USING S-STRENGTHS
PHREATIC PROFILE USED.
S.F. = 1.391

Little Bayou Meto (PE2 filename: lbm)
Excavation
Pool Elev. @ 182ft.

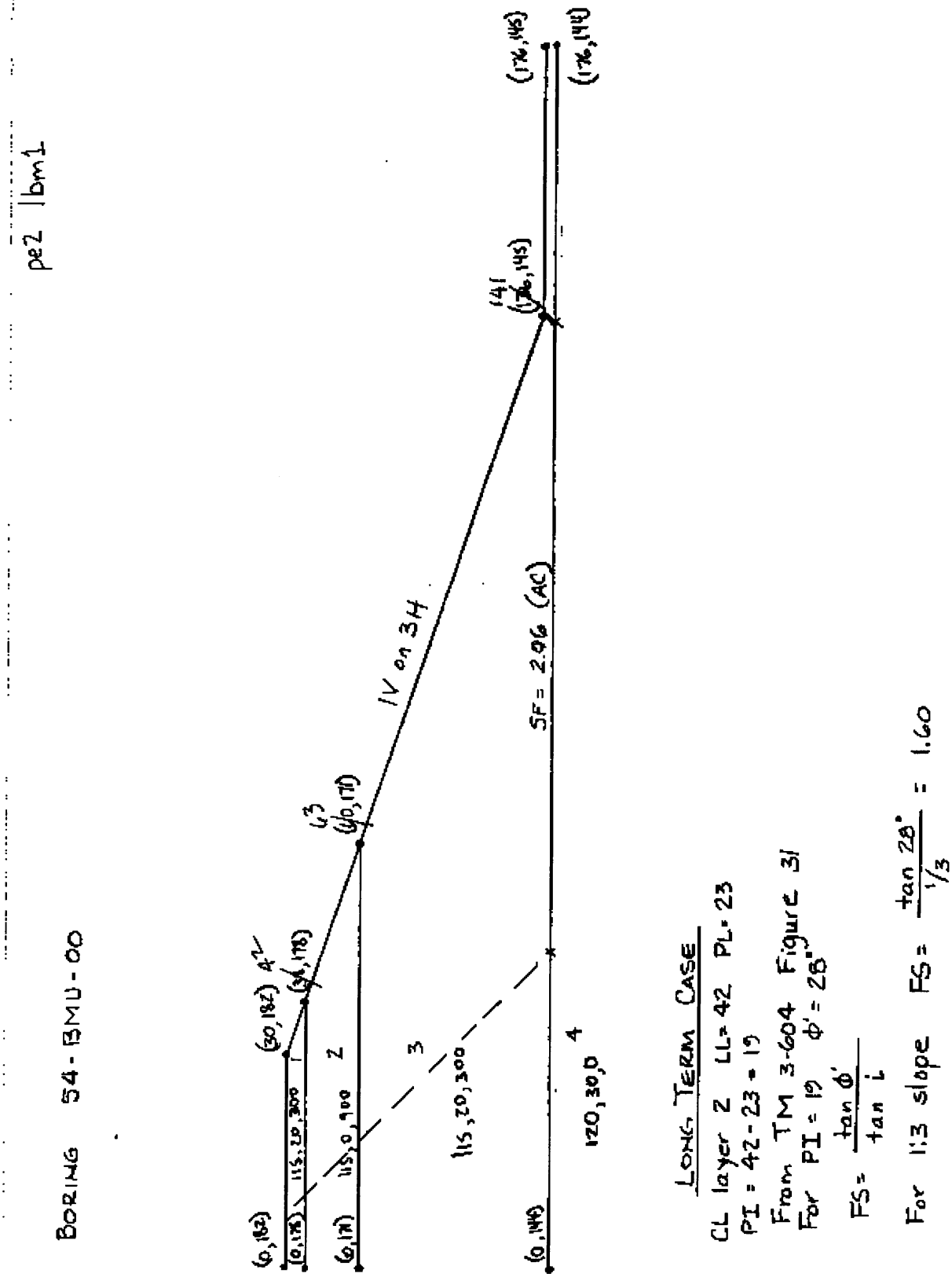
NEUTRAL BLOCK			DRIVING AND RESISTING FORCES IN POUNDS					INITIAL AND FINAL SF	
ACT	PASS	EL	DA	RA	RNB	DP	RP	SF-INIT	SF-FIN
115	160	171.0	61159	22412	23949	-8795	6006	2.15	2.26

STEADY SEEPAGE CASE USING S-STRENGTHS
PHREATIC PROFILE USED.
S.F. = 2.252

NEUTRAL BLOCK			DRIVING AND RESISTING FORCES IN POUNDS					INITIAL AND FINAL SF	
ACT	PASS	EL	DA	RA	RNB	DP	RP	SF-INIT	SF-FIN
135	275	144.0	185063	65051	105962	-7648	6410	2.07	2.14

STEADY SEEPAGE CASE USING S-STRENGTHS
PHREATIC PROFILE USED.
S.F. = 2.142

PROJECT	Little Bayou Metro	PAGE OF	COMPUTED BY	DATE
SUBJECT	3000 CFS INLET CHANNEL SLOPE		CHECKED BY	DATE



Long Term Case

CL layer 2 LL = 42 PL = 23
PI = 42 - 23 = 19
From TM 3-604 Figure 31
For PI = 19 $\phi' = 28°$

$$FS = \frac{\tan \phi'}{\tan i}$$

For 1:3 slope $FS = \frac{\tan 28°}{1/3} = 1.60$

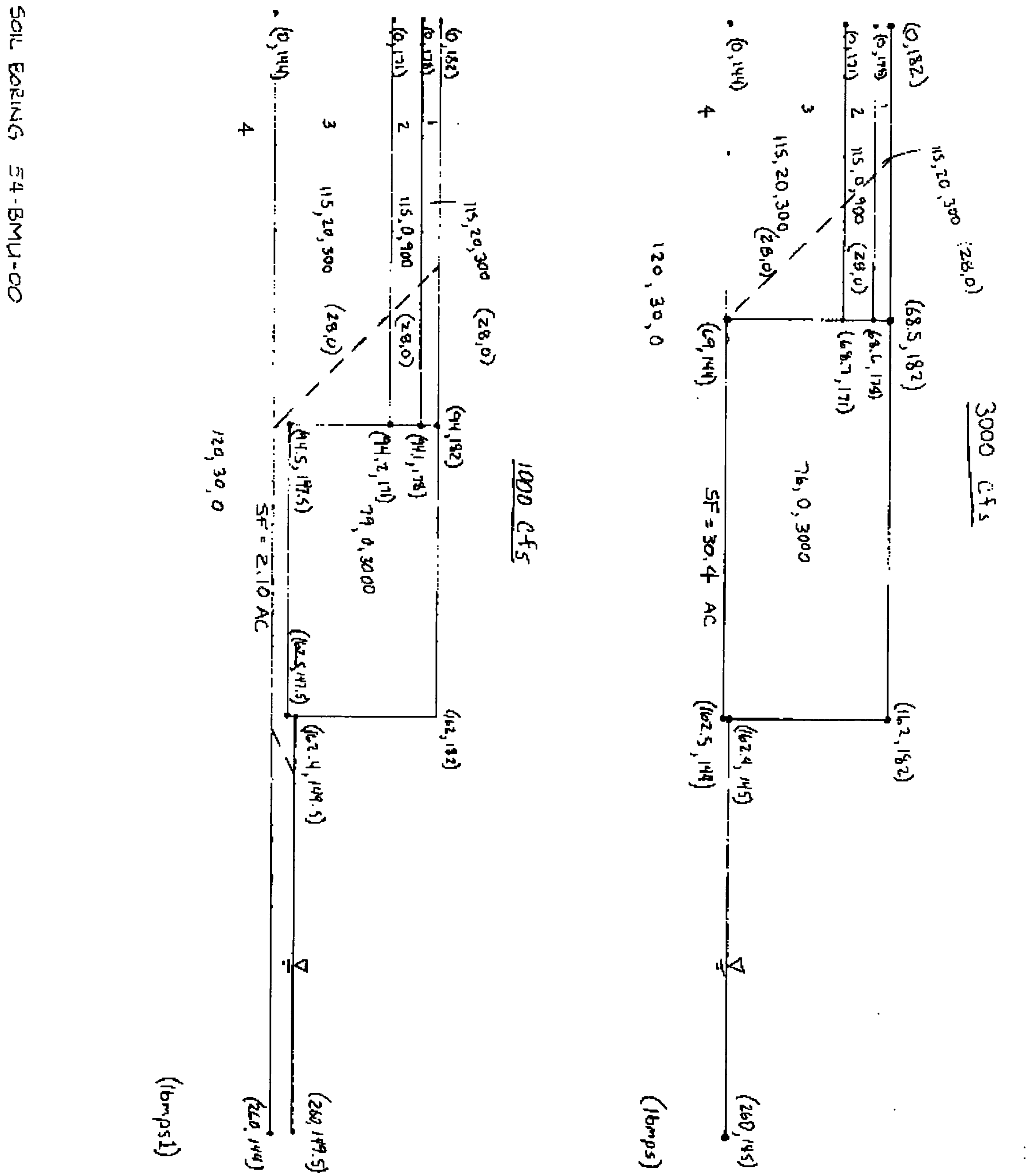
Little Bayou Meto

NEUTRAL BLOCK			DRIVING AND RESISTING FORCES IN POUNDS					INITIAL AND FINAL SF	
ACT	PASS	EL	DA	RA	RNB	DP	RP	SF-INIT	SF-FIN
60	120	144.0	62837	29337	27985	-2640	2894	2.14	2.18
55	120	144.0	68858	31288	31977	-2638	2955	2.08	2.14
50	120	144.0	73948	32735	35623	-2638	2956	2.05	2.14
45	120	144.0	77932	33492	38896	-2639	2913	2.06	2.17
50	125	144.0	73931	33041	37054	-1652	2189	2.03	2.12
50	130	144.0	73916	33320	38210	-896	1495	2.01	2.09
50	135	144.0	73902	33575	39082	-370	880	1.99	2.08
50	140	144.0	73889	33801	39656	-73	365	1.97	2.06
50	145	144.0	73890	33778	39704	-57	358	1.97	2.06

AFTER CONSTRUCTION CASE USED R STRGTH BELOW GR WATER
145.000
S.F. = 2.060

COMPUTATION SHEET

PROJECT Little Bayou Meto Pump Station	PAGE OF	COMPUTED BY AH	DATE
SUBJECT		CHECKED BY	DATE



CMV Form 107e PREVIOUS EDITIONS MAY BE USED

Little Bayou Meto Pump Station **(LBMPS1)**

1000 cfs

NEUTRAL BLOCK BASE 1
94.00, 144.00 172.00, 144.00

AFTER CONSTRUCTION CASE USED R STRGTH BELOW GR WATER
149.500

INITIAL FACTOR OF SAFETY = 1.98

CROSS-OVER OCCURS AT STA. 162.24

X	Y	WEIGHT	UPLIFT	SOIL
60.91	182.00	774.	.00	1
64.28	178.00	6037.	.00	2
71.28	171.00	64016.	795.49	4
94.00	144.00	437.	34.37	4
94.10	144.00	437.	34.37	4
94.20	144.00	1125.	103.13	4
94.50	144.00	211140.	23203.13	4
162.00	144.00	595.	82.02	4
162.24	144.00	191.	55.48	5
162.40	144.00	56.	34.38	5
162.50	144.00	5667.	3265.63	5
172.00	144.00	2067.	1123.35	4
178.54	149.50	0.	.00	0

	L WEDGE	N BLOCK	R WEDGE	TOTAL
FD	83030.00	.00	-1739.38	81290.63
FR	35655.86	43454.09	2195.69	81305.64

S.F. = 2.099

Little Bayou Meto Pump Station **(LBMPS)**

3000 cfs

NEUTRAL BLOCK BASE 1
69.00, 144.00 162.50, 144.00

AFTER CONSTRUCTION CASE USED R STRGTH BELOW GR WATER
145.000

INITIAL FACTOR OF SAFETY = 53.45

CROSS-OVER OCCURS AT STA. 162.00

X	Y	WEIGHT	UPLIFT	SOIL
30.95	182.00	931.	.00	1
35.00	178.00	6038.	.00	2
42.00	171.00	73902.	7.81	4
68.50	144.50	432.	3.44	3
68.60	144.40	433.	4.06	3
68.70	144.30	114.	1.17	2
68.73	144.27	1192.	14.77	4
69.00	144.00	337497.	5812.50	5
162.00	144.00	0.	.00	5
162.00	144.00	1501.	25.00	5
162.40	144.00	467.	6.25	5
162.50	144.00	4524.	30.66	5
163.48	145.00	63278.	.00	1
191.30	173.16	0.	.00	0

	L WEDGE	N BLOCK	R WEDGE	TOTAL
FD	83030.01	.00	-68649.41	14380.60
FR	5819.28	6327.70	2232.01	14378.99

S.F. = 30.437

Little Bayou Meto Pump Station $\phi = 28°$ **(LBMPS)**

3000 cfs $c = 0$ for all but sand

NEUTRAL BLOCK BASE 1
69.00, 144.00 162.50, 144.00

LONG TERM
~~AFTER CONSTRUCTION~~ CASE USED R STRGTH BELOW GR WATER
145.000 .

INITIAL FACTOR OF SAFETY = 74.18

CROSS-OVER OCCURS AT STA. 162.00

X	Y	WEIGHT	UPLIFT	SOIL
30.81	182.00	936.	.00	1
34.88	178.00	6144.	.00	2
42.00	171.00	73902.	7.81	4
68.50	144.50	432.	3.44	3
68.60	144.40	433.	4.06	3
68.70	144.30	114.	1.17	2
68.73	144.27	1192.	14.77	4
69.00	144.00	337497.	5812	5
162.00	144.00	0.	.00	5
162.00	144.00	1501.	25.00	5
162.40	144.00	467.	6.25	5
162.50	144.00	4523.	30.66	5
163.48	145.00	63029.	.00	1
191.19	173.20	0.	.00	0

	L WEDGE	N BLOCK	R WEDGE	TOTAL
FD	83030.01	.00	-68751.41	14278.60
FR	5564.63	6334.64	2374.94	14274.21

S.F. = 30.398

Little Bayou Meto Pump Station $\phi = 28^\circ$ for all but sand **(LBMPS1)**

1000 cfs $c = 0$

NEUTRAL BLOCK BASE 1
95.00, 144.00 170.00, 144.00

LONG TERM
~~AFTER CONSTRUCTION~~ CASE USED R STRGTH BELOW GR WATER
149.500

INITIAL FACTOR OF SAFETY = 1.29

THE PROBLEM DID NOT CONVERGE IN THE ALLOTTED
IX TRIALS. THE APPROXIMATE SAFETY FACTOR IS 1.373

AFTER CONSTRUCTION CASE USED R STRGTH BELOW GR WATER
149.500

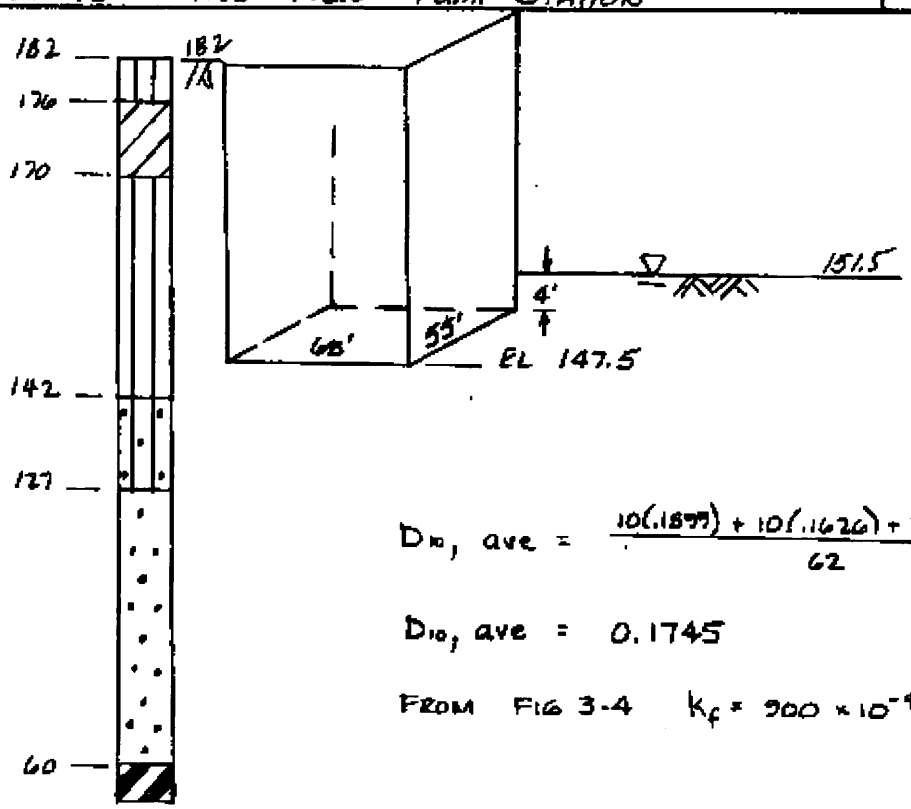
X	Y	WEIGHT	UPLIFT	SOIL
68.97	182.00	630.	.00	6
71.71	178.00	4136.	.00	7
76.50	171.00	47831.	349.49	9
94.00	145.46	421.	25.71	9
94.10	145.31	423.	26.62	9
94.20	145.17	906.	85.34	9
94.50	144.73	922.	160.47	9
95.00	144.00	113632.	23031.25	9
162.00	144.00	431.	137.50	9
162.40	144.00	46.	34.38	9
162.50	144.00	3998.	2578.13	9
170.00	144.00	2539.	1379.83	9
178.03	149.50	0.	.00	0

	L WEDGE	N BLOCK	R WEDGE	TOTAL
FD	80673.24	.00	-1739.38	78933.87
FR	42307.15	35755.63	897.75	78960.53

S.F. = 1.373

COMPUTATION SHEET

PROJECT	BAYOU METO	PAGE OF	COMPUTED BY	DATE
SUBJECT	LITTLE BAYOU METO PUMP STATION		CHECKED BY	DATE



54-BMD-00

$$D_{10,\,ave} = \frac{10(.1877) + 10(.1626) + 7(.1404) + 15(.1050) + 20(.1693)}{62}$$

$D_{10,\,ave} = 0.1745$

FROM FIG 3-4 $k_f = 900 \times 10^{-4}$ cm/sec

1000 CFS STATION

Evaluate as rectangular footing on silt

NAVFAC DM 7.2

$$q_{ult} = cN_c\left(1 + .3\frac{B}{L}\right) + \gamma D N_q + 0.4\gamma B N_\gamma$$

$$q_{ult} = 300(15)\left[1 + .3\left(\frac{55}{68}\right)\right] + (115-62.4)\,4\,(6.5) + 0.4\,(115-62.4)\,55\,(3)$$

$$q_{ult} = 5592 + 1368 + 3472$$

$q_{ult} = 10{,}432$ psf

For FS = 3 $q_{all} = \frac{10432}{3} = 3478$ psf

PROJECT	PAGE OF	COMPUTED BY	DATE
SUBJECT PUMP STATION BEARING CAPACITY		CHECKED BY	DATE

1000 CFS

WEIGHT –	CONCRETE	9,945 k
	PUMPS	153 k
	GEARS	19 k
	MOTORS	29.6 k
	SWITCH GEAR	12 k
		10,158.6 kips

volume = $9{,}945{,}000\ lb \times \frac{1\ yd^3}{150 \times 27}$

Vol = 2455 yd^3

AREA – 55' × 68' = 3740 ft^2

$WT/FT^2 = \frac{10{,}158.6\ k}{3740\ FT^2} = 2.7\ k/ft^2$

3000 CFS

WEIGHT –	CONCRETE	24,350 k
	PUMPS	417 k
	GEARS	63 k
	MOTORS	165 k
	SWITCH GEAR	19.6 k
		25,014.6 k

AREA – 93' × 93.5' = 8695 ft^2

$WT/FT^2 = \frac{25{,}014.6}{8695} = 2.9\ k/ft^2$

COMPUTATION SHEET

PROJECT Bayou Meto	PAGE 1 OF 2	COMPUTED BY	DATE
SUBJECT Little Bayou Meto Pump Station Bearing Capacity		CHECKED BY	DATE

1000 CFS

EM 1110-1-1905 EQ 4-1:

$$q_u = cN_c \zeta_c + \frac{1}{2} B' \gamma'_H N_\gamma \zeta_\gamma + \sigma_D N_q \zeta_q$$

@ EL 147.5 silt foundation

$\phi = 20°$ $c = 300$ psf $= 0.3$ ksf $D = 4'$ embedment

$\gamma' = 115 - 62.4 = 52.6$ pcf $= 0.0526$ kcf

TABLE 4-1:

$N_c = 17.69$ $N_\gamma = 4.9$ $N_q = 7.44$

TABLE 4-3:

ASSUME NO INCLINATION & NO ECCENTRIC LOAD

$$\zeta_c = 1 \times 1 \times \left\{1 + 0.2\left[\tan\left(45 + \frac{\phi}{2}\right)\right]\frac{D}{B}\right\}$$

$$\zeta_c = 1 + 0.2\left[\tan\left(45 + \frac{20}{2}\right)\right]\frac{4}{68}$$

$$\zeta_c = 1.02$$

$$\zeta_\gamma = 1 \times 1 \times \left\{1 + 0.1\left[\tan\left(45 + \frac{\phi}{2}\right)\right]\frac{D}{B}\right\}$$

$$\zeta_\gamma = 1 + 0.1\left[\tan\left(45 + \frac{20}{2}\right)\right]\frac{4}{68}$$

$$\zeta_\gamma = 1.01$$

$$\zeta_q = 1 \times 1 \times \left\{1 + 0.1\left[\tan\left(45 + \frac{\phi}{2}\right)\right]\frac{D}{B}\right\}$$

$$\zeta_q = 1 + 0.1\left[\tan\left(45 + \frac{20}{2}\right)\right]\frac{4}{68}$$

$$\zeta_q = 1.01$$

$$q_u = 0.3(17.69)1.02 + \frac{1}{2}(68)0.0526(4.9)1.01 + 0.0526(4)7.44(1.01)$$

$q_u = 5.41 + 8.85 + 1.58$ reduction factor for mats EQ 4-13

$q_u = 5.41 + 8.85(0.74) + 1.58 = 13.54$ $r_\gamma = 1 - 0.25 \log \frac{B}{6}$ $r_\gamma = 0.74$

STRUCTURE WT $= 2.7$ ksf

Factor of Safety $= \frac{13.54}{2.7} = 5.0 > 3$ ∴ adequate

COMPUTATION SHEET

PROJECT Bayou Meto	PAGE 2 OF 2	COMPUTED BY	DATE
SUBJECT Little Bayou Meto Pump Station Bearing Capacity		CHECKED BY	DATE

3000 CFS

@ EL 142 silty sand foundation

$\phi = 30$ $c = 0'$ $\gamma' = 120 - 62.4 = 57.6$ pcf $= 0.0576$ kcf

$N_c = 37.16$ $N_\gamma = 19.7$ $N_q = 22.46$ $D = 3.5'$ embedment

ASSUME NO INCLINATIONAL & NO ECCENTRIC LOAD

$$S_c = 1 + 0.2\left[\tan\left(45 + \frac{30}{2}\right)\right]\frac{3.5}{93.5}$$

$S_c = 1.01$

$$S_\gamma = 1 + 0.1\left[\tan\left(45 + \frac{30}{2}\right)\right]\frac{3.5}{93.5}$$

$S_\gamma = 1.01$

$S_q = S_\gamma = 1.01$

mat reduction factor

$$r_\gamma = 1 - .25 \log \frac{93.5}{6}$$

$r_\gamma = 0.70$

$$q_u = 0(37.16)\,1.01 + (.7)\frac{1}{2}(93.5)(.0576)(19.7)\,1.01 + 3.5(0.0576)\,22.46\,(1.01)$$

$q_u = 0 + 37.5 + 4.6$

$q_u = 42.1$ ksf

Structure Wt. $= 2.9$ ksf

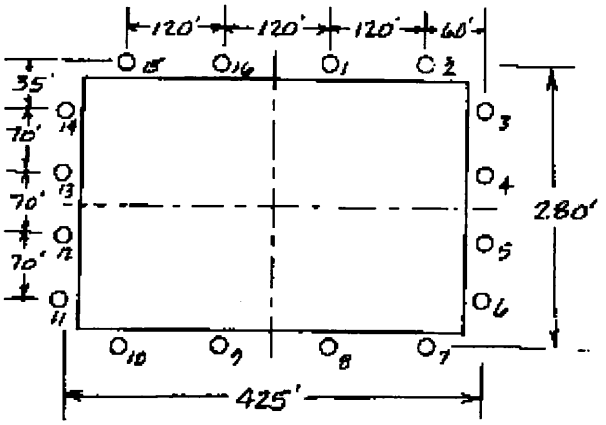
Factor of Safety $= \frac{42.1}{2.9} = 14.5 > 3$ ∴ adequate

COMPUTATION SHEET

PROJECT	BAYO METO	PAGE 2 OF 7	COMPUTED BY	DATE
SUBJECT	LITTLE BAYOU METO STRUCTURE DEWATERING		CHECKED BY	DATE

FROM TABLE 4-2 MAX CAPACITY FOR 10" SCREEN IS 600gpm

∴ MINIMUM NUMBER OF WELLS IS $\frac{9778}{600} = 16.2$ SAY 16



WELL	R ft	s: ft	$\ln\left(\frac{R}{r_i}\right)$
1	3600	152	3.16
2	3600	228	2.76
3	3600	237	2.72
4	3600	215	2.82
			11.46

USE FULLY PENETRATING WELLS

$Flow/_{WELL} = \frac{9778}{16} = 611\ gpm \times .1337 \frac{ft^3}{gal} = 82\ cfm$

FOR 4 WELLS

$H - h_c = \frac{\sum Q_{wi} \ln\left(\frac{R}{r_i}\right)}{2\pi k D} = \frac{82\ (11.46)}{2\pi\ (.1772)\ 82} = 10.29'$

FOR 16 WELLS

$H - h_c = 4(10.29) = 41.16'$

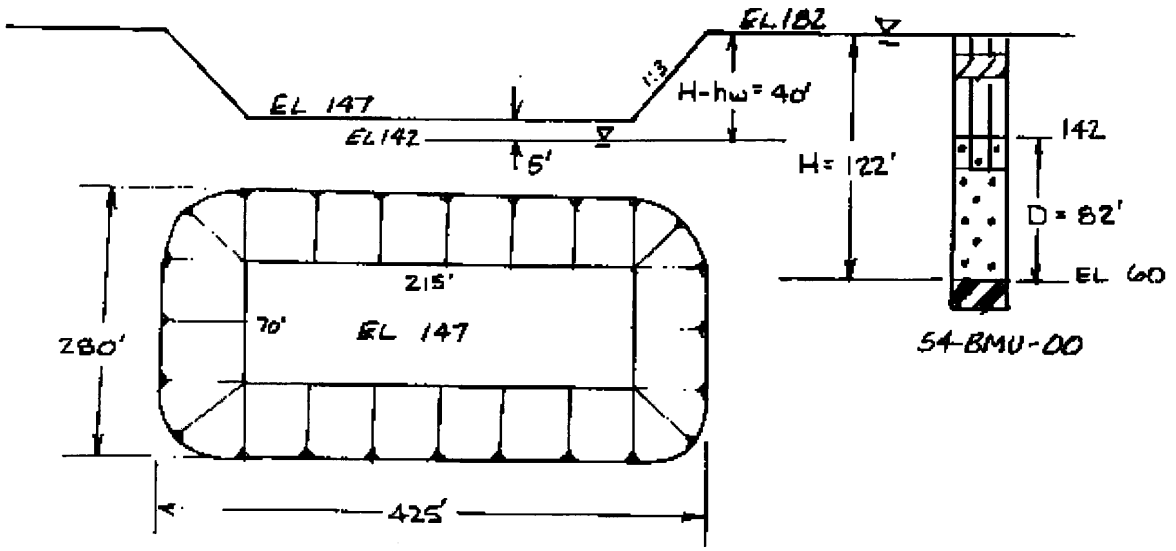
$h_c = 182 - 41.16 = 140.84 \approx$ EL 140.7 ∴ OK

USE 16 10" WELLS w/ 85' screen w/ 40' RISER

HEADER PIPE ≈ 1500'

COMPUTATION SHEET

PROJECT	BAYOU METO	PAGE 1 OF 7	COMPUTED BY	DATE 28 MAY 02
SUBJECT	LITTLE BAYOU METO DEWATERING ESTIMATE		CHECKED BY	DATE



ASSUME PROTECTION TO WATER LEVEL OF EL 182 CIRCULAR SOURCE ARTESIAN

10" well screen
20" dia. hole ∴ r_w = 1.7'

k_f = 900 × 10^{-4} cm/sec × 1.969 = 0.1772 ft/min

$$A_e = \frac{4}{\pi}\sqrt{b_1 b_2}$$

$$A_e = \frac{4}{\pi}\sqrt{\frac{280}{2} \times \frac{425}{2}} = 220'$$

FROM FIG 4-23 $R = C(H-h_w)\sqrt{k}$

C = 3 for wells $R = 3(40)\sqrt{900} = 3600'$

Q_t for $r_w = A_e$

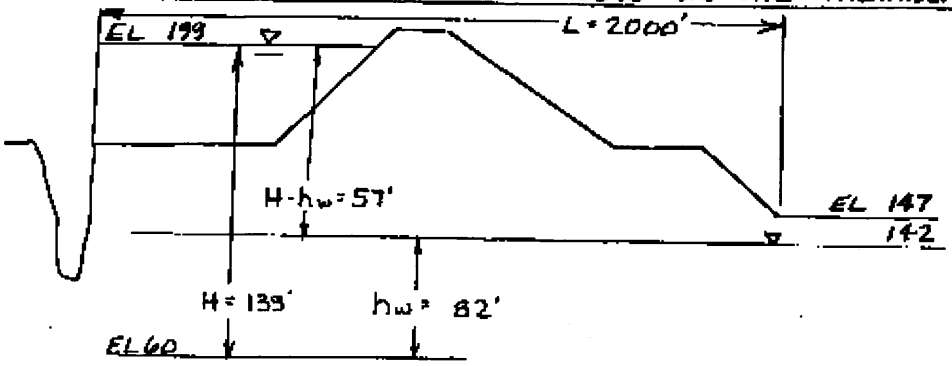
FIG 4-10 TOTAL FLOW $Q_t = \dfrac{2\pi k D (H-h_w)}{\ln(R/r_w)}$

$$Q_t = \frac{2\pi(.1772)\,82\,(40)}{\ln\left(\frac{3600}{220}\right)} = 1307 \text{ cfm}$$

$$Q_t = 1307 \text{ cfm} \times 7.481 \frac{\text{gal}}{\text{ft}^3} = 9778 \text{ gpm}$$

PROJECT BAYOU METO	PAGE 3 OF 7	COMPUTED BY	DATE
SUBJECT LITTLE BAYOU METO PUMP STATION Dewatering		CHECKED BY	DATE

PROTECTION TO DESIGN FLOW ON THE ARKANSAS RIVER EL 199



LINE SOURCE @ 2000'

FIG 4-23 $R = C(H-h_w)\sqrt{k}$

$R = 3(57)\sqrt{900}$

$R = 5130'$

CHECK FOR CIRCULAR SOURCE FIG 4-17

$2L = 2(2000) = 4000 < 5130'$ ∴ USE LINE SOURCE

ARTESIAN FLOW TOTAL $= \dfrac{2\pi k D (H-h_w)}{\ln\left(\frac{2L}{r_w}\right)}$

$Q_T = \dfrac{2\pi (.1772)\, 82\, (57)}{\ln\left[\frac{2(2000)}{220}\right]}$

$Q_T = 1794$ cfm

$Q_T = 1794 \text{ cfm} \times 7.481 \frac{gal}{ft^3} = 13{,}421$ gpm

GRAVITY FLOW TOTAL $= \dfrac{\pi k (H^2 - h_w^2)}{\ln\left(\frac{2L}{r_w}\right)}$

$Q_T = \dfrac{\pi (.1772)\,(139^2 - 82^2)}{\ln\left[\frac{2(2000)}{220}\right]}$

$Q_T = 2{,}418$ cfm

$Q_T = 2{,}418 \text{ cfm} \times 7.481 \frac{gal}{ft^3} = 18{,}089$ gpm

LIMITING FLOW DUE TO AQUIFER

limiting flow/ft of screen for $k = 900 \times 10^{-4}$ cm/sec = .1772 ft/min

10" screen 20" dia hole 1.7'

$$q_c = \frac{2\pi r_w \sqrt{k}}{1.07} \times 7.48 \frac{\text{gpm}}{\text{ft of screen}}$$

$$q_c = \frac{2\pi (1.7\text{ ft}) \sqrt{0.1772 \text{ ft/min}}}{1.07} \times 7.48 \frac{\text{gpm}}{\text{ft of screen}}$$

$q_c = 31.4$ gpm/ft screen

for 600 gpm $\frac{600}{31.4} = 19.1$ ft of wetted screen req'd

12" screen 22" hole 1.8'

$$q_c = \frac{2\pi (1.8) \sqrt{.1772}}{1.07} \times 7.48 = 33.3 \text{ gpm/ft}$$

ft wetted screen req'd for 1200 gpm = $\frac{1200 \text{ gpm}}{33.3 \text{ gpm/ft}} = 36$ ft

14" screen 24" hole 2'

$$q_c = \frac{2\pi (2) \sqrt{.1772}}{1.07} \times 7.48 = 37.0 \text{ gpm/ft}$$

ft wetted screen req'd for 1800 gpm = $\frac{1800}{37.0} = 47$ ft

LIMITING FLOW DUE TO WELL SCREEN

limiting flow per ft of screen for 20 slot stainless V wire rod base by Johnson 0.1 ft/sec

10" screen

60 x .31 = 18.6 gpm/ft

for 600 gpm $\frac{600}{18.6} = 33'$ screen req'd

12" screen

57 x .31 = 17.7 gpm/ft

for 1200 gpm $\frac{1200}{17.7} = 68'$ ft wetted screen req'd

14" screen

62 x .31 = 18.6 gpm/ft

for 1800 gpm $\frac{1800}{18.6} = 97$ ft wetted screen req'd ∠ 82 agency

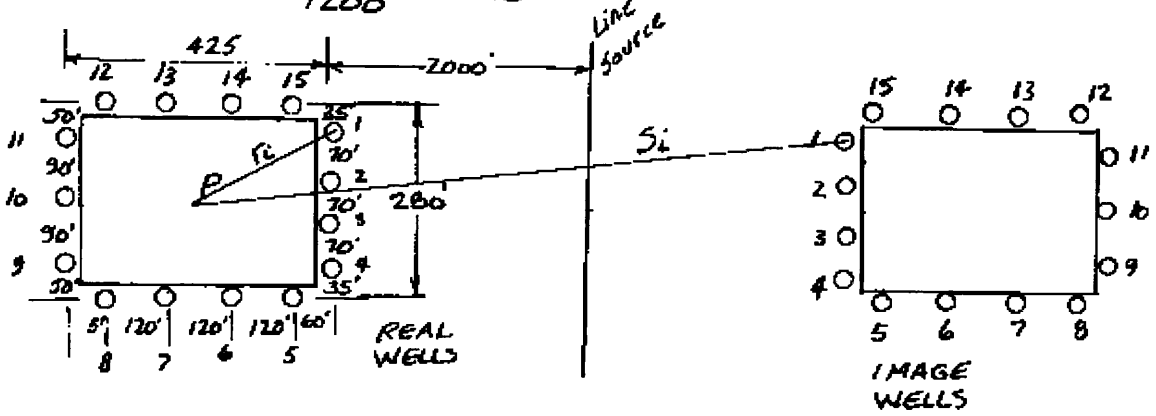
not enough wetted screen for 1800 gpm pump

∴ use 12" well

PROJECT BAYOU METO	PAGE 6 OF 7	COMPUTED BY	DATE
SUBJECT LITTLE BAYOU METO PUMP STATION DEWATERING		CHECKED BY	DATE

12" well fully penetrating
22" diameter bore hole 1.8'
1200 gpm pump

wells = $\frac{18,089}{1200}$ = 15



Well	Si	ri	$\ln \frac{Si}{ri}$
1	4214	237	2.88
2	4213	215	2.98
3	4213	215	2.98
4	4214	237	2.88
5	4275	207	3.03
6	4398	144	3.42
7	4515	165	3.31
8	4635	250	2.92
9	4638	231	3.00
10	4637	213	3.08
11	4638	231	3.00
12	4635	250	2.92
13	4515	165	3.31
14	4398	144	3.42
15	4275	207	3.03
			46.16

PROJECT	BAYOU METO	PAGE 7 OF 7	COMPUTED BY	DATE
SUBJECT	LITTLE BAYOU METO PUMP STATION DEWATERING		CHECKED BY	DATE

FIG 4-18 $F_p' = \Sigma Q_{wi} \ln \frac{S_i}{r_i}$ $\quad Q_{wi} = \frac{18,089}{15} \cdot 1206 \text{ gpm} = 161 \text{ cfm}$

$F_p' = 161 \ (46.16) = 7432$

drawdown $H^2 - h_p^2 = \frac{F_p'}{\pi k}$

$H^2 - h_p^2 = \frac{7432}{\pi \ (.1772)} = 13,350$

$139^2 - h_p^2 = 13,350$

$h_p = \sqrt{19,321 - 13,350}$

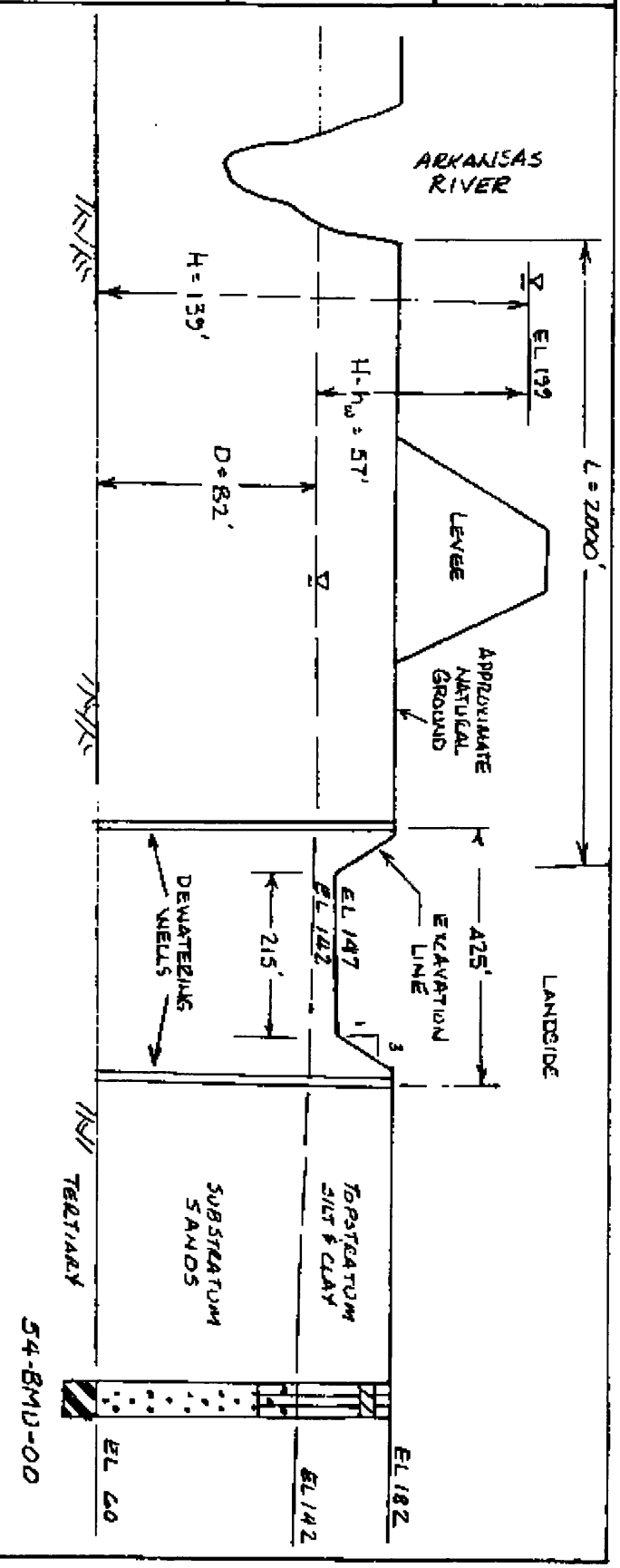
$h_p = 77'$

$\therefore$ elev. $60 + 77 = 137 < 142 \therefore$ adequate

use 15 - 12" wells w/ 80' screen and 42' riser

COMPUTATION SHEET

PROJECT	BAYOU MEto PUMPING STATION	PAGE OF	COMPUTED BY	DATE
SUBJECT	1000 CFS		CHECKED BY	DATE

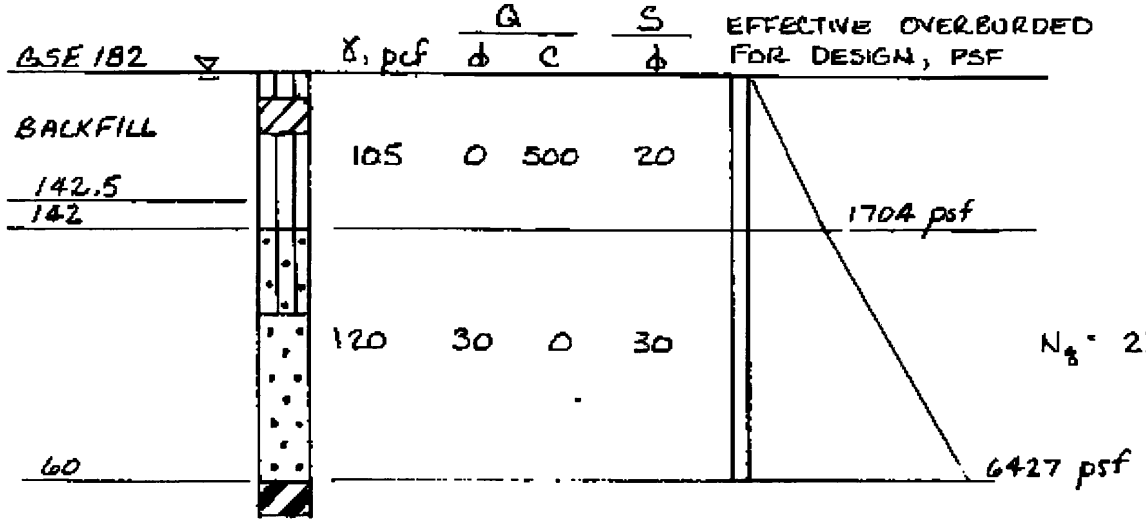


SECTION SHOWN IS PARALLEL WITH INLET CHANNEL THROUGH CENTER OF THE EXCAVATION AND PUMPING STATION

54-BMU-00

COMPUTATION SHEET

PROJECT	BAYOU METO	PAGE OF	COMPUTED BY	DATE
SUBJECT	TRUCK BAY PILES		CHECKED BY	DATE



54-BMU-00

Assume watertable at ground surface and K = 0.5 from TM 5-818-1 para 11-6

$\sigma'_{142} = (182-142)(105-62.4) = 1704$ psf

$\sigma'_{60} = (142-60)(120-62.4) + 1704 = 6427$ psf

FOR 2' diameter concrete piles

end area, $A_p = \pi r^2 = \pi 1^2 = 3.14$ ft²

circumference, $A_c = \pi d = \pi(2) = 6.28$ ft

S case

$$Q_u = \sum A_c L K \left[(z\gamma') + \tfrac{1}{2}(L\gamma')\right] \tan\phi + A_p (\Sigma \gamma' z) N_q$$

friction developed in clay; point bearing in sand

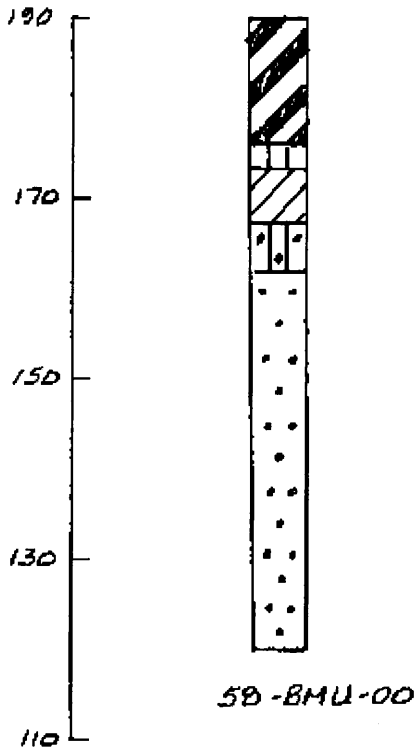
$$+ A_c P K \left[z\gamma' + \tfrac{1}{2} P\gamma'\right] \tan\phi$$

friction in sand

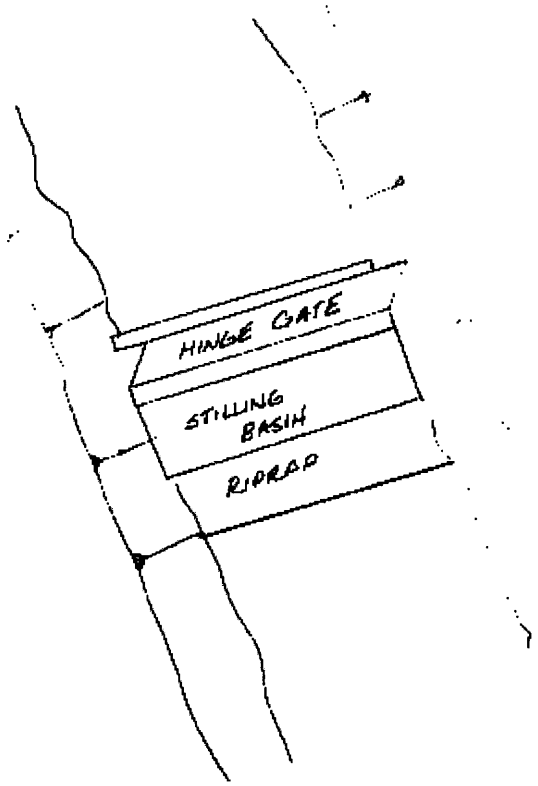
@ EL 142 $Q_u = 3.14(1704)\,22.46 = 120{,}174$ lbs neglecting adhesion in clay

FOR FS=3 $Q_a = \frac{120{,}174}{3} = 40{,}058$ lbs

PROJECT	Bayou Meto	PAGE 1 OF 3	COMPUTED BY	DATE
SUBJECT	Salt Bayou Weir Dewatering		CHECKED BY	DATE



SB-BMU-00



TERTIARY @ ELEV. 100 FROM GEOLOGIC MAPS

PERMEABILITY

20' @ $\frac{.1736 + .1696}{2} = .1716$

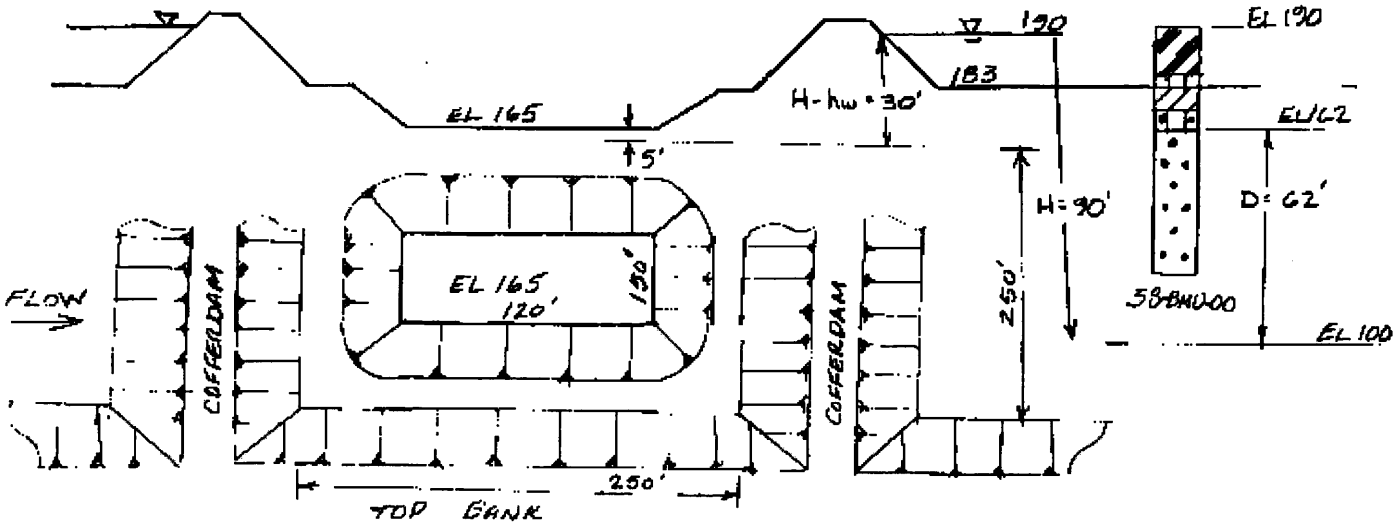
41' @ $\frac{.2336 + .2503}{2} = .2420$

$$D_{10} = \frac{20 \times .1716 + 41 \times .2420}{61} = .2189$$

FROM FIG 3-4 TM 5-818-5

$k = 1800 \times 10^{-4}$ cm/sec

PROJECT	BAYOU METO	PAGE 2 OF 3	COMPUTED BY	DATE 23MAY02
SUBJECT	SALT BAYOU WEIR DEWATERING ESTIMATE		CHECKED BY	DATE



ASSUME PROTECTION TO WATER LEVEL OF EL. 190

10" well screen $k = 1800 \times 10^{-4}$ cm/sec $\times$ 1.969 = .3544 ft/min

20" dia hole $\therefore r_w = 1.7'$

$$A_e = \frac{4}{\pi}\sqrt{\frac{250}{2}\times\frac{250}{2}} = 159'$$

FROM FIG. 4-23 $R = C(H-h_w)\sqrt{k}$

C = 3 FOR WELLS $R = 3\,(30)\sqrt{1800} = 3818$

Q_t for $r_w = A_e$

TOTAL FLOW, $Q_t = \dfrac{2\pi k D (H-h_w)}{\ln\left(R/r_w\right)}$

$$Q_t = \frac{2\pi\,(.3544)62(30)}{\ln\left(\frac{3818}{159}\right)} = 1303 \text{ cfm} = 9748 \text{ gpm}$$

FROM TABLE 4-2 MAX. CAPACITY 600 gpm

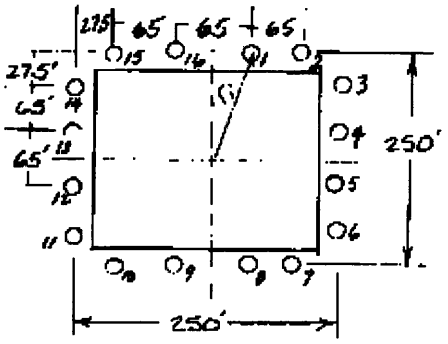
$\therefore$ MIN # OF WELLS = 9748 ÷ 600 = 16.2 USE 16

LIMITING FLOW/FT SCREEN EQ. 4-1 $q_c = \dfrac{2\pi r_w\sqrt{k}}{1.07} \times 7.48 \times 1.2 = 53.3$ gpm/ft

PROJECT BAYOU METO	PAGE 3 OF 3	COMPUTED BY	DATE
SUBJECT SALT BAYOU WEIR DEWATERING		CHECKED BY	DATE

$$q_c = \frac{2\pi (1.7)\sqrt{.3544}}{1.07} \times 7.48 \times 1.20 = 53.3 \text{ gpm/ft screen}$$

for 600 gpm minimum screen = $600 \div 53.3 = 11.3$



Well	R ft	r_i ft	$\ln \frac{R}{r_i}$
1	3818	129	3.39
2	3818	159	3.18
3	3818	159	3.18
4	3818	129	3.39
			Σ = 13.14

USE FULLY PENETRATING WELLS 60'

$$\text{Flow/well} = \frac{7412}{16} = 588 \text{ gpm} \times .1337 \frac{ft^3}{gal} = 79 \text{ cfm}$$

For 4 wells

$$H - h_c = \frac{\Sigma Q_{wi} \ln \frac{R_i}{r_i}}{2\pi k D} = \frac{79\ (13.14)}{2\pi\ (.3544)\ 62} = 7.52 \text{ ft}$$

For 16 wells

$H - h_c = 4\ (7.52) = 30.08'$

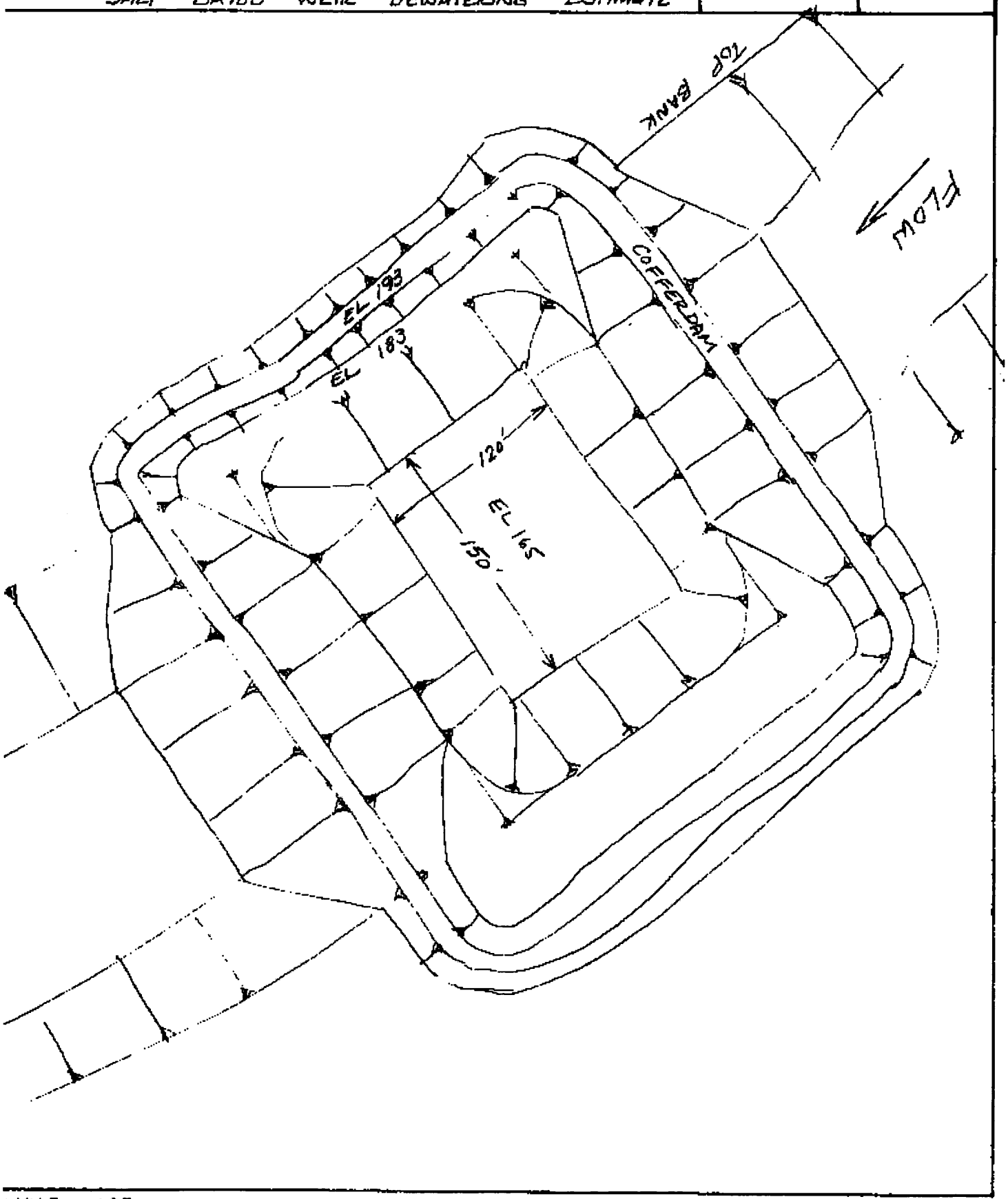
$h_c = 190 - 30.08 = 159.92$ < el 160 ∴ OK

USE 16 10" wells w/ 60' screen w/ 25' riser

HEADER PIPE ≈ 1000'

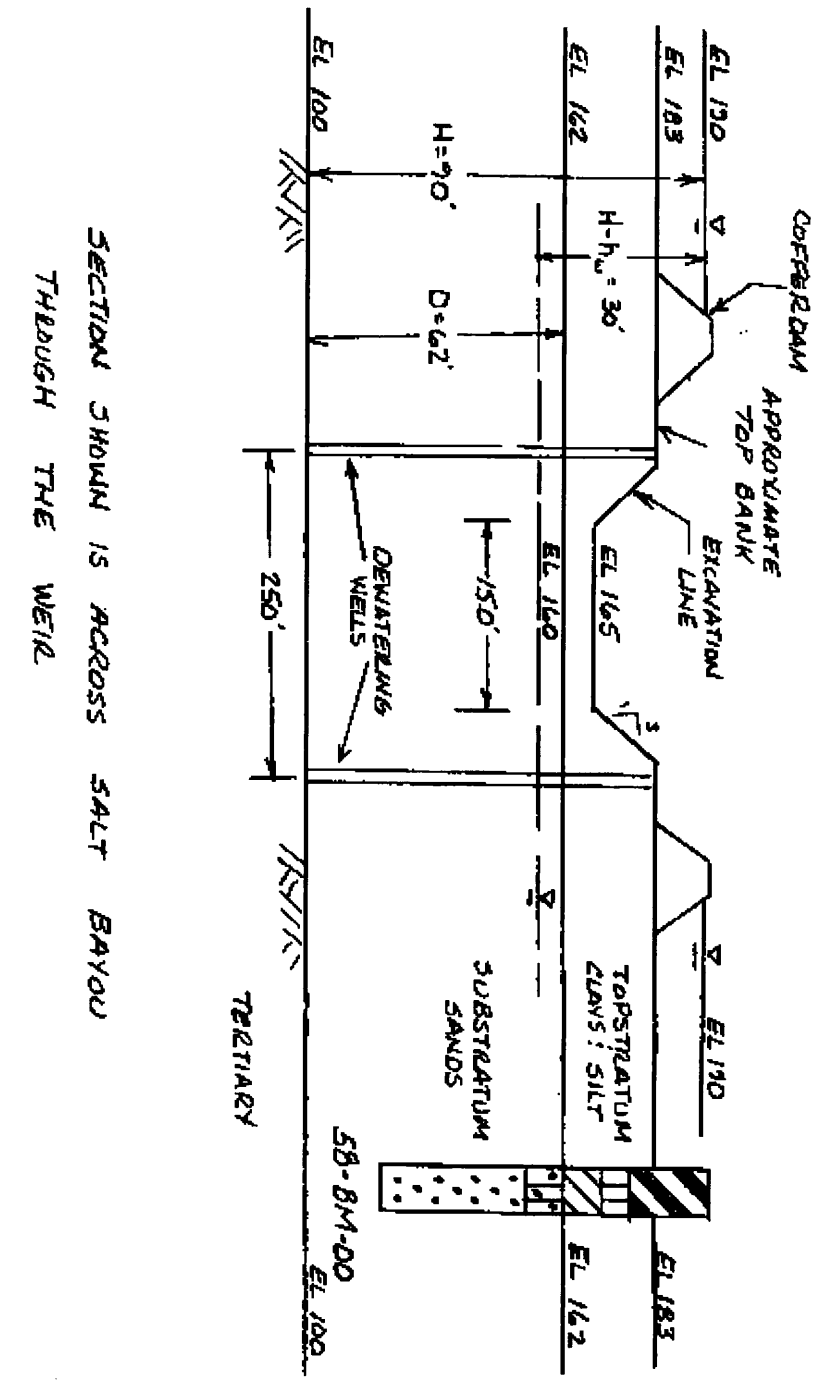
COMPUTATION SHEET

PROJECT	BAYOU METO	PAGE OF	COMPUTED BY	DATE
SUBJECT	SALT BAYOU WEIR DEWATERING ESTIMATE		CHECKED BY	DATE



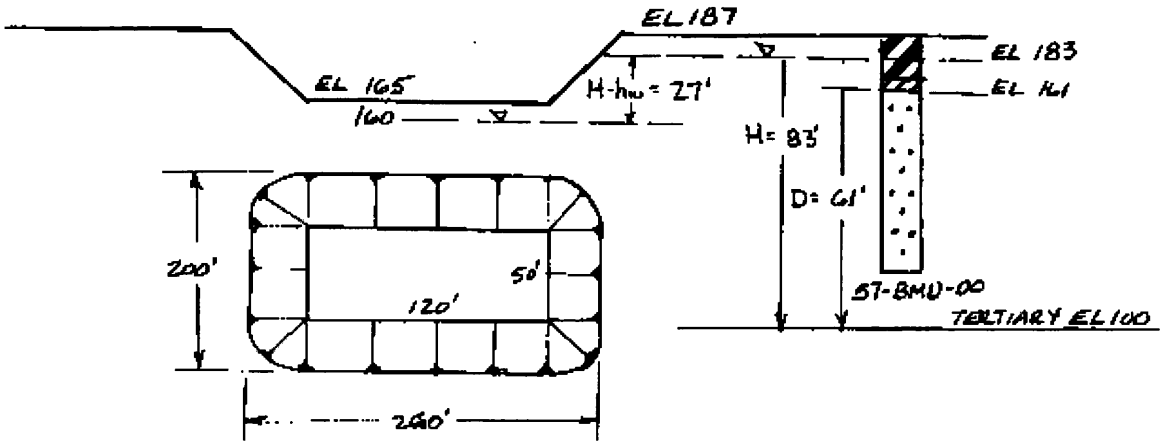
COMPUTATION SHEET

PROJECT	BAYO METO	PAGE OF	COMPUTED BY	DATE
SUBJECT	SALT BAYOU WEIR DEWATERING ESTIMATE		CHECKED BY	DATE



SECTION SHOWN IS ACROSS SALT BAYOU THROUGH THE WEIR

PROJECT BAYOU METO	PAGE 1 OF 2	COMPUTED BY	DATE 29 MAY 02
SUBJECT DRY BAYOU WEIR DEWATERING ESTIMATE		CHECKED BY	DATE



ASSUME LEVEL OF PROTECTION TO ELEV. 183

10" well screen

20" dia. hole ∴ $r_w = 1.7'$

$k_f = 1800 \times 10^{-4}$ cm/sec = 3544 ft/min (same as Salt Bayou)

$A_e = \frac{4}{\pi}\sqrt{\frac{200}{2} \times \frac{260}{2}} = 145'$

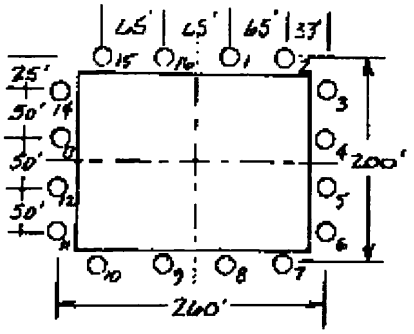
$R = 3(27)\sqrt{1800} = 3436$

Q_w for $r_w = A_e$

TOTAL FLOW = $\frac{2\pi(.3544)\,61\,(27)}{\ln\left(\frac{3436}{145}\right)}$ = 1159 cfm = 8670 gpm

10" well maximum capacity is 600 gpm

∴ number of wells req'd = $\frac{8670}{600}$ = 15 try 16



Well	R, ft	r_i, ft	$\ln \frac{R}{r_i}$
1	3436	105	3.49
2	3436	140	3.20
3	3436	150	3.13
4	3436	133	3.25
			13.07

PROJECT	BAYOU METO	PAGE 2 OF 2	COMPUTED BY	DATE
SUBJECT	DRY BAYOU WEIR DEWATERING		CHECKED BY	DATE

FULLY PENETRATING WELLS

$$\text{FLOW/WELL} = \frac{8670}{16} = 542 \text{ gpm} \times .1337 \frac{ft^3}{gal} = 72.5 \text{ cfm}$$

FOR 4 WELLS

$$H - h_c = \frac{\Sigma Q_{wi} \ln \frac{R_i}{r_i}}{2\pi k D} = \frac{72.5(13.07)}{2\pi(.3544)61} = 6.98'$$

FOR 16 WELLS

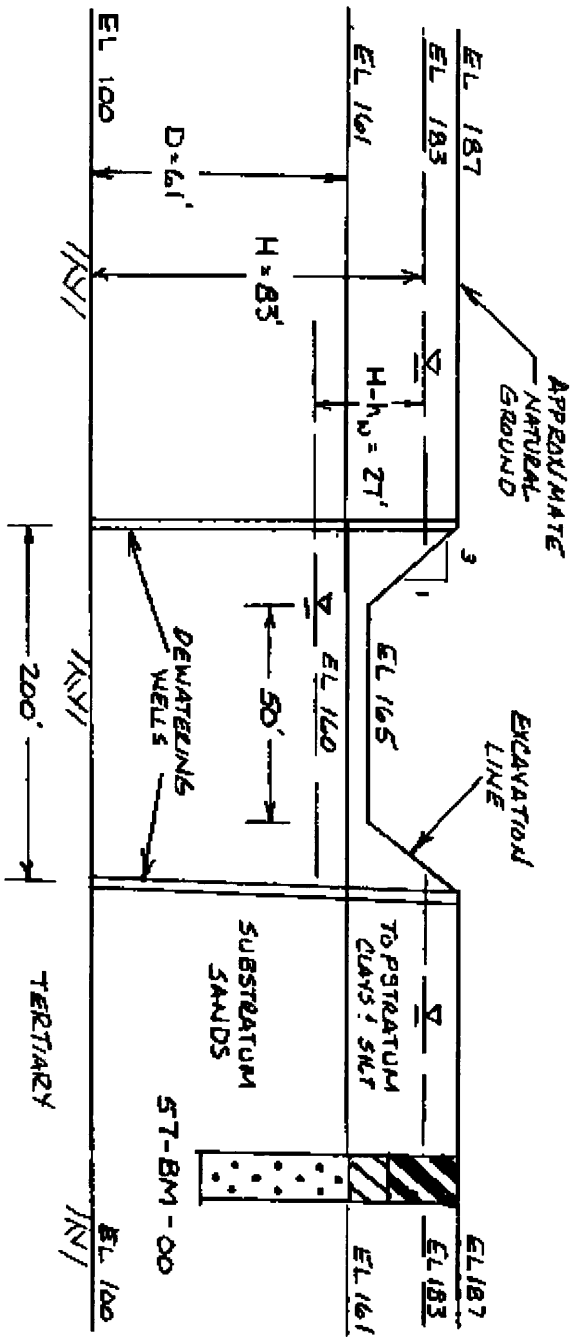
$H - h_c = 4(6.98) = 27.92'$

$h_c = 183 - 27.92 = 155.08 < \text{EL } 160$ ∴ OK

USE 16 10" wells w/61' screen and 26' riser
≈ 1000' header pipe

COMPUTATION SHEET

PROJECT	BAYOU METO	PAGE OF	COMPUTED BY	DATE
SUBJECT	DRY BAYOU WEIR		CHECKED BY	DATE



SECTION SHOWN IS ACROSS DRY BAYOU THROUGH THE WEIR

BAYOU METO COMPREHENSIVE STUDY
BAYOU METO BASIN, ARKANSAS

APPENDIX C

ENGINEERING INVESTIGATIONS & ANALYSES
FLOOD CONTROL COMPONENT

SECTION III

WATER QUALITY ASSESSMENT

Appendix C - Engineering Investigations & Analyses
Flood Control Component

Section III - Water Quality Assessment

TABLE OF CONTENTS

Appendix C - Engineering Investigations & Analyses
Flood Control Component

Section III - Water Quality Assessment

III-1. General. The Bayou Meto Basin, Arkansas Project area is located in east central Arkansas and includes portions of Lonoke, Jefferson, Prairie, Pulaski and Arkansas counties. The project area encompasses 779,109 acres lying generally south of Interstate 40, between the Arkansas and White Rivers. Tributaries of the Arkansas River provide natural drainage to the project area. Major tributaries include Bayou Meto, Two Prairie Bayou, Indian Bayou and Little Bayou Meto. Smaller tributary systems include Wabbaseka Bayou, Baker's Bayou, Salt Bayou Ditch, Big Ditch and Crooked Creek. Some 396,874 acres of the project area are irrigated and 22,942 are in commercial fishponds. Primary crops include rice, soybeans, cotton, wheat and baitfish. Currently, agriculture relies heavily on the Mississippi River Valley alluvial aquifer as the primary source of irrigation water. However, groundwater is being withdrawn at such a rate that the aquifer is in danger of being permanently damaged. Surface stream flows can become inadequate to support fish and wildlife during the summer months due to the lack of rainfall and withdrawals for crop irrigation. Agricultural flooding is a major problem at other times of the year. The Bayou Meto Basin Project is twofold. One goal is to relieve the strain on the aquifer by supplying irrigation water from the Arkansas River through a series of new canals, improved existing channels and pipelines. The second goal is to provide flood control to the low-lying regions in the project area. This section of the report addresses the existing water quality conditions within the project area and evaluates project impacts to water quality as a result of flood control improvements.

III-2. Project Description. Alternatives considered for the Bayou Meto Flood Control Study are described in detail in other sections of this document. They include plans to provide some flood relief for the most frequently flooded reaches while giving full consideration to environmental resources. Streams identified for work include: Indian Bayou, Indian Bayou Ditch, Wabbaseka Bayou, Boggy Slough, Little Bayou Meto, Salt Bayou, Crooked Creek Ditch, Crooked Creek, Two Prairie Bayou and Big Bayou Meto. Work includes

selective excavation of stream bottoms, selective clearing and snagging, selective cutting of stream banks, construction of levees, construction of low water weirs and construction of pumping stations.

III-3. Historic and Existing Water Quality. The project area is located within three USGS Hydrologic Units (HU): the Lower Arkansas River (HUC 08020401) containing Wabbaseka Bayou; Bayou Meto and its tributaries (HUC 08020402); and, the Lower Arkansas-Maumelle (HUC 11110207), the source water for the water supply project. These three Hydrologic Units lie within the Arkansas Delta Ecoregion. A review of the 2002 State of Arkansas Integrated Water Quality Monitoring and Assessment Report indicates that the Arkansas Department of Environmental Quality (ADEQ) has designated the waters within the project area as suitable for the propagation of fish and wildlife; primary and secondary contact recreation; and, public, industrial and agricultural water supplies. Although there is some concern for elevated bacteria and nutrients in Wabbaseka Bayou and high turbidity in the Arkansas River, all designated uses are being maintained in these waters. The upper reach (007) of Bayou Meto is under a fish consumption advisory due to the presence of dioxin in fish tissue. ADEQ states that the source, residue from Vertac, Inc., a Superfund site, has been removed and that contamination downstream is being addressed through natural attenuation.

To evaluate the water quality within the project area, water quality data were retrieved from the USGS NWIS Web Database and the ADEQ Surface Water Quality Monitoring Database. Surface water data from two stations located on the Arkansas River at Terry Lock and Dam just below the planned water supply intake and groundwater data from the ADEQ Lonoke Monitoring Area are also included in the analysis. Table 1 on page III-17, lists the stations and periods of record for the resulting data set. In addition, the Vicksburg District Corps of Engineers (MVK) collected water and sediment data from the Bayou Meto project area in August, 2000 and January, 2001. These sampling stations are listed in Table 2 on page III-18. Station locations are also indicated on the project area map in Figure 1 on page III-15.

III-4. USGS and ADEQ Water Quality Data. The data from the USGS and ADEQ are summarized in Tables 3 through 6, presented on pages III-19 through III-22. These tables

report the number of samples analyzed from each site and the minimum, mean and maximum concentrations compared to state criteria. Data from each stream were grouped to simplify analysis. The groups, indicated next to the station number in Table 1 on page III-17, are: 1) Bayou Meto (BM), 2) Bayou Meto Urban (BMU), 3) Two Prairie Bayou (TPB), 4) Crooked Creek (CC), 5) Wabbaseka Bayou (WAB) and 6) Arkansas River (AR). The four stations in the Bayou Meto Urban group are outside the project area but are included for comparison as source water to the basin.

Water quality and nutrient data are summarized in Table 3 on page III-19. In general, many of these parameters exhibit seasonal cycles. Mean water temperatures were similar, 17 to 19 degrees Centigrade (C) for all streams, although the maximum temperature criterion of 32°C was exceeded slightly in Bayou Meto and the Arkansas River at least once. Mean pH measurements were between 6.9 and 7.7 SU with maxima at or below the 9.0 SU criterion. Minimum values < 6.0 SU were reported in the Bayou Meto Urban, Bayou Meto, Two Prairie Bayou and Arkansas River groups. All groups reported low values for dissolved oxygen (DO) during late summer at least once during the period of record. Mean DO values were 5.3 mg/l or lower with the exception of the Arkansas River stations. Of the three groups with similar number of measurements, Bayou Meto had the most variability in DO.

Mean turbidities for Bayou Meto Urban, Two Prairie Bayou and Arkansas River were less than 45 NTU, the criterion for the Delta Ecoregion least-altered streams. However, all streams exceeded the 100 NTU storm flow criterion of 100 NTU at least once during the period of record. Figure 2 on page III-16, shows the typical periodicity seen in the water quality data in the basin. Turbidity concentrations (Figure 2a on page III-16) were typically higher in the first 6 months of the year when rain runoff was likely. The majority of TDS measurements exceeding the 390 mg/l Ecoregion criterion were collected before 1995. Samples collected outside the project area in the Bayou Meto Urban and Arkansas River groups had the highest TDS. The Arkansas River group had the highest mean concentration. TDS also exhibited seasonal cycles (Figure 2b on page III-16), with concentrations reaching their maxima during the late fall. Similarly, soluble salts also peaked at this time. While all groups except Crooked Creek had data greater than the 36 mg/l criterion for chloride, Arkansas

River had the only mean exceeding 36 mg/l. The Arkansas River had the highest sulfate mean and maximum concentrations (both exceeding the 28 mg/l criterion). All groups except Crooked Creek had maxima exceeding 28 mg/l.

Nitrogen and phosphorus species are represented by nitrate/nitrite (NO3-N) and total phosphorus (TP) in Figure 2c on page III-16. Peak concentrations for these nutrients occurred during the first six months of the year, probably moving into streams in rain runoff. Means for nitrogen and phosphorus species were generally highest in the Bayou Meto Urban and Two Prairie Bayou groups. The Arkansas River group had the lowest mean for ammonia (0.071 mg/l), the lowest mean for TKN (0.713 mg/l), and the next lowest mean for nitrate/nitrite (0.327 mg/l). Bayou Meto Urban and Two Prairie Bayou maximia exceeded the 1.6 mg/l chronic aquatic life criterion for ammonia at least once during the period of record. ADEQ recommends using 0.1 mg/l as a guideline for assessing TP data. The means for all groups exceeded this value. The minimum value for Wabbaseka Bayou also exceeded 0.1 mg/l TP. While orthophosphate does not have criteria, mean concentrations for all groups except Arkansas River were greater than 0.1 mg/l. The fecal coliform criterion for secondary contact waters is 1000 / 100 ml of water. None of the means exceeded that value; however, the maxima for all groups except Wabbaseka Bayou did exceed it. The fecal coliform maximum for Arkansas River was an order of magnitude greater than that of the other streams. Only Bayou Meto and Bayou Meto Urban had fecal coliform means that did not exceed the 200/100 ml criterion for primary contact waters.

III-5. USGS and ADEQ Metals Data. Similarly, Table 4 on page III-20 summarizes the combined ADEQ and USGS metals data. Both acute and chronic exposure limits are utilized when evaluating aquatic life protection criteria for metals in water. Where required, criteria were calculated for a hardness of 50 mg/l and 100 mg/l. Data for Bayou Meto Urban, Bayou Meto and Two Prairie Bayou were compared to the 50 mg/l criteria. Data for Wabbaseka Bayou and the Arkansas River were compared to the 100 mg/l criteria. Bayou Meto had the highest mean values for aluminum, chromium, iron, mercury and selenium. Two Prairie Bayou had the highest mean values for copper, manganese and zinc. Wabbaseka Bayou had the highest mean values for arsenic, cadmium and nickel. The Arkansas River had the highest mean value for silver. No stream exceeded any criteria for

chromium, nickel and silver. All cadmium data from Wabbaseka Bayou exceeded the acute aquatic life criterion (CMC). Two Prairie Bayou had cadmium means exceeding the CMC. The Arkansas River cadmium means exceeded the chronic aquatic life criterion (CCC). Mean copper values exceeded the CCC for Bayou Meto Urban and the CMC for Bayou Meto and Two Prairie Bayou. Bayou Meto Urban, Bayou Meto and Two Prairie Bayou lead means exceeded the CCC. Bayou Meto Urban, Bayou Meto, Two Prairie Bayou and the Arkansas River mean mercury values all exceeded their CCC. No stream means exceeded any zinc or selenium criteria. Many of the metals, however, had maximum values exceeding their criteria briefly during the period of record.

III-6. USGS and ADEQ Pesticide Data. Pesticide and PCB data are summarized in Tables 5 and 6 on pages III-21 and III-22. The chlorinated pesticides listed in Table 5 are compared to their aquatic life criteria. Aldrin, DDE, DDT, dieldrin, endrin and toxaphene were detected in only a few samples from Bayou Meto Urban and Two Prairie Bayou. DDD was detected in one sample from Bayou Meto Urban at a concentration of 0.005 µg/l. This value exceeded the CCC for DDD. The Bayou Meto Urban means for dieldrin and endrin also exceeded their CCC values and the toxaphene, detected in both streams, exceeded its CMC. No chlorinated pesticides were detected in samples from Bayou Meto, Wabbaseka Bayou or the Arkansas River. The agricultural herbicides detected in the project area streams are listed in Table 6. These compounds are commonly used for either broad-leaf weed control or grassy weed control throughout the Delta Ecoregion on a variety of crops. Unlike the chlorinated pesticides, many of these compounds have short half-lives in the environment and are generally non-toxic to aquatic organisms. Bayou Meto had the highest number of samples with herbicide detections in the project area. Two Prairie Bayou had the fewest. Samples from the Arkansas River contained only low levels of 4 herbicides.

III-7. Vicksburg District (MVK) Water Quality Data. Nutrient data collected by MVK personnel in August 2000 and January 2001 are listed in Table 7 on page III-24. Generally, most of the data fell within the minimum/maximum ranges developed from the combined USGS and ADEQ data. Total organic carbon (TOC), only collected in August, 2000, was the exception with values at least doubled the maximum concentrations seen in the combined dataset. Ammonia concentrations in samples collected by

the MVK did not exceed any aquatic life criteria. All but two of the TP samples did exceed the 0.1 assessment guideline. Seven of the nine samples collected in August, 2000 exceeded the Delta ecoregion criterion for chloride and three exceeded the sulfate criterion.

III-8. Vicksburg District (MVK) Metals Data. Data for trace metals in water are listed in Table 8 on page III-24. Most of the values are non detect and are given as < the detection limit. Of the detected metals, only lead in BM-14 (Indian Bayou) exceeded its chronic aquatic life (CCC) value. Results reported for copper, lead, selenium and silver in August, 2000 have detection limits above some of their criteria and could not be evaluated.

III-9. Historic Sediment Quality Data Review. No historic metals or pesticide sediment data were available from the ADEQ or USGS for the project study area.

III-10 Historic Dioxin Contamination in Bayou Meto Sediments. Historic sediment data were available for dioxin (2,3,7,8 TCDD) in Bayou Meto from samples in the early 1990s. The Vertac Chemical Corporation site, located on Rocky Branch Creek a tributary of Bayou Meto in Jacksonville, Arkansas, has a long history of herbicide production. In 1948, as Reasor Hill Company, the site began producing 2,4,5-T (dioxin is a by-product). In 1961, Hercules purchased the plant and produced Agent Orange. From 1971 to 1976, Transvall leased the plant and produced 2,4-D; 2,4,5-T; and 2,4,5-TP. Vertac organized in 1976 and in 1979 suspended production of 2,4,5-T and 2,4,5-TP. The site was placed on the NPL (Superfund) list in September 1983. All manufacturing operations at the site ceased in May 1986. In December 1986, the Potentially Responsible Party (PRP) began removal activities with EPA oversight; and, all site remedial construction activities were declared complete in September 1998. The site is considered 100% remediated but has not been delisted.

The ADH has been monitoring dioxin in fish tissue since the late 1970s. In 1980, a fish consumption advisory was issued for Bayou Meto below Vertac. Sediment samples collected for the US Fish and Wildlife Service (USFW) in 1991 showed dioxin concentrations well above background samples throughout Bayou Meto as far south as the Bayou Meto Wildlife Management Area (Table 12 on page III-28).

Background samples collected in other streams were below the detection limit.

There are no specific criteria to evaluate sediment data. At the time of the 1991 sampling, no screening guidelines existed for dioxin concentrations in sediment. More recently, sediment guidelines for organic compounds are being developed through the use of bioassays. The National Oceanic and Atmospheric Administration (NOAA) developed the upper effects threshold (UEL) presented in Table 12 on page III-28 from bioassays using *Hyalella azteca* and freshwater sediments. This guideline represents the concentration of dioxin above which adverse biological impacts would always be expected to *H. azteca* due to exposure to dioxin alone; although adverse impacts can occur below the UEL. In 1991, six of the twelve stations had sediment concentrations greater than the current UEL. Present day, in the 2002 Water Quality Inventory Report, ADEQ states that the source of the dioxin has been removed and that contamination downstream is being addressed through natural attenuation. As of October, 2002, the fish consumption advisory is still in place for Bayou Meto reach number 08020402-007 extending approximately 48 miles downstream of the original source to the Highway 13 Bridge. Based on new fish tissue data and recommendations from the US EPA, the ADH is considering extending the advisory downstream for some fish species.

III-11. Existing Sediment Quality Data Review. Sediment data from samples collected by the MVK in August, 2000 and January, 2001 were analyzed for metals, chlorinated pesticides, herbicides, PAHs and TOC. These data are presented in Tables 13 through 16 on pages III-29 through III-32. While there are no specific criteria to evaluate sediment data, NOAA has developed benchmark levels that can be used to screen sediment concentrations for some of these parameters. Two of the NOAA benchmarks are the Environmental Response-Low (ERL) and the Environmental Response-Median (ERM). The ERL and the ERM represent the 10^{th} and 50^{th} percentiles of contaminant concentrations that have elicited adverse biological responses. The ERL represents the value at which toxicity may begin to be observed in sensitive species. The ERM is the median concentration of toxic samples evaluated in the NOAA study. These NOAA benchmarks are based on data collected from marine studies, which limits their usefulness. However in the absence of specific criteria, they still provide a reasonable guide to use in comparing sediment data.

Positive results were reported for all of the metals except silver (Table 13 on page III-29). Reported concentrations exceeded the ERLs for arsenic in WB-02 and Indian Bayou-01 from the August, 2000 sampling and for nickel in BM-10 from the January, 2001 sampling. Table 13 also contains the mean concentration of metals found in the soils in the Eastern US by the US Geological Survey. The three samples exceeding the NOAA ERLs were also slightly above the USGS Earth's Crust averages but were well within the observed ranges.

Table 14 on page III-30, contains chlorinated pesticide and PCB data from samples collected in August, 2000. Positive results were found for the compounds beta-BHC, gamma-BHC, DDD, DDE, DDT, endosulfan sulfate and endrin. All of the samples with positive results for DDT and its derivatives exceeded either its corresponding ERL or ERM. There are no guidelines for the herbicides listed in Table 15 on page III-31. The only samples with positive results not qualified as less than the detection limit (J) or blank contaminated (B) were BM-10 (2,4,5-TP) and BM-11 (Dinoseb), both at low ppb concentrations. For the PAHs listed in Table 16 on page III-32, only Bayou Meto-1 from August, 2000 had 'J' concentrations for fluoranthene and pyrene. No concentrations exceeded any guidelines.

III-12. Summary. Concentrations of chemical parameters within the waters and sediments of the Bayou Meto project area exhibited patterns generally expected within historic agricultural regions. Within the Bayou Meto project area and excluding the Arkansas River, the urban areas, generally, had lower mean concentrations for turbidity, TDS, total suspended solids (TSS), chloride and sulfate. The more agricultural portions of Bayou Meto and Wabbaseka Bayou had the highest means for turbidity, conductivity, chloride, sulfate, TDS and TSS of the streams within the project area. Concentrations of dissolved solids represented by TDS, conductivity, sulfate and chloride peaked in the late summer when conditions were dry and water levels were generally low. Nitrogen, phosphorus, fecal coliform and turbidity concentrations peaked in the late winter and spring, probably coinciding with rainfall events. Each of these parameters exceeded its criterion at least once during the period of record; however, these occasions were of a temporal nature and concentrations probably did not remain elevated long after the associated

event ended. Samples collected from the Arkansas River had mean concentrations for TDS higher than the other groups. Mean concentrations for conductivity, fecal coliform and sulfate were at least two times higher than the other groups; and, mean concentrations for chloride were at least three times higher over the period of record.

Metals in Bayou Meto and Two Prairie Bayou, the longest streams, had similar mean concentrations. No stream exceeded any criteria for chromium, nickel and silver. Other dissolved metals with aquatic life criteria did exceed one of those values at least once during the period of record. Various streams within the project area had the highest means for all metals except silver, which was higher in the Arkansas River.

The ADEQ reported in its 2002 Water Quality Report that Bayou Meto had the highest number of pesticide detections per sampling event in the basin and that Wabbaseka Bayou at HW 79 had a high number as well. The insecticides aldrin, DDT and its derivatives, dieldrin, endrin and toxaphene were reported by the ADEQ and USGS in water samples from Bayou Meto Urban, Bayou Meto and Two Prairie Bayou. Water samples collected by the MVK also had traces of aldrin, BHC and endrin aldehyde in Bayou Meto, Wabbaseka Bayou and Indian Bayou. While no DDT or toxaphene was detected in the water, all sediment samples collected by MVK had DDT or its derivatives. Two Prairie Bayou, Bayou Meto, Wabbaseka Bayou, Indian Bayou Ditch and Crooked Creek sediment also had traces of endrin and BHC.

The ADEQ tested water samples from these streams for herbicides from 1995 to 2001. Herbicides detected include pre-emergent herbicides, and those associated with specific crops such as rice, cotton and soybeans. In the Mississippi Embayment Study by the USGS, concentrations of these types of herbicides showed distinct seasonal patterns that corresponded to the type of crop grown in the basin and the pesticide used on those crops. Concentrations of the detected herbicides in the Bayou Meto project area were generally in the low ppb ranges and, while not equally dispersed throughout the project area at the time of sampling, could certainly move and dilute within the steams of the basin after application. Water samples collected by the MVK from Two Prairie Bayou, Bayou Meto, Wabbaseka Bayou, Indian Bayou and Indian Bayou Ditch also had traces of 2,4-D; 2,4,5-T; 2,4-DB; and, Dinoseb. Sediment samples

had traces of 2,4,5-TP and Dinoseb. These samples were not analyzed for all of the herbicides listed by ADEQ.

Sediment downstream of the Vertac Chemical Corporation was contaminated with dioxin due to historic chemical manufacturing processes. Bayou Meto throughout most of its length was impacted by this contamination. Minimal sediment data exists for dioxin in Bayou Meto; however, data from 1992 indicate that at the I-40 and Highway 15 bridges, dioxin sediment concentrations were 39.7 and 46.0 ppt, respectively. Sediment concentrations decreased further downstream from the source to 4.2 ppt at Highway 152 and 1.4 ppt at Highway 11 below the Bayou Meto Wildlife Management Area. Elevated dioxin concentrations in fish caused the ADH to issue a fish consumption advisory in 1980. Today, the advisory extends to the Highway 13 Bridge; but, in the future may be extended downstream of this site for certain fish species. Although the dioxin source, the Vertac site, is considered 100% remediated it has not been delisted from the NPL.

The US EPA requires ongoing monitoring at the Vertac site and in the affected streams beyond to ensure that the site is being maintained correctly and that the public is sufficiently protected from dioxin. The required Bayou Meto fish monitoring program involves yearly samplings of fish tissue from set collection sites within the affected streams. Two of the fish monitoring stations lie within the Bayou Meto Project Area. BM 5.5 extends approximately 1.5 miles upstream from the I-40 Bridge. Another site, BM6, is approximately 2.5 miles in length and centered in the bend at the Highway 15 Bridge. The Bayou Meto bypass channel in the Reach 3 flood control alternative will cut into the stream in this portion of Bayou Meto.

III-13. Water Quality Impacts. The purpose of this section is to discuss anticipated water quality impacts associated with the project alternatives. Alternative 2 is broken out into construction activities for several reaches within the project area. Work consists mainly of selective clearing, excavation of streambeds, construction of low water weirs, construction of a bypass channel and bridge, and construction of a levee. Alternative 2A also includes an overlap between flood control and water supply in three reaches (Indian Bayou Ditch, Crooked Creek Ditch and Crooked Creek). Alternatives 3A and 3B call for construction of pumping stations.

III-13-a. Levee Construction. No direct impacts to water quality will likely result from the construction or modification of levees since the actual work involved would not be directly connected to the water. Soil erosion is likely to increase in the vicinity of the construction area due to the removal of vegetation and the placement of fill material. Runoff from the project area will be highly turbid and contain high concentrations of suspended solids. Indirect impacts to water quality of any water body receiving this runoff include increased turbidity and suspended solids. The effects of increased turbidities may include decreased light penetration, increased water temperatures and lowered DO. Erosion effects can be minimized through the development and proper implementation of the State required storm water plan. These impacts are anticipated to be short term and will decrease once vegetation has been reestablished along the affected area.

III-13-b. Channel Excavation and Selective Clearing. Direct impacts would tend to be immediate, localized and short term in duration. The physical process of channel and bank excavation would resuspend sediment, strip away existing aquatic habitat and bury or kill invertebrates. Net effects of this activity would be to increase water turbidities and lower and shift fish and invertebrate species composition. The effects of increased turbidities may include decreased light penetration, increased water temperatures and lowered DO concentrations. These impacts will be magnified if streams are stressed due to low water, late summer conditions. However, these impacts are anticipated to be short term and will decrease once construction ceases and vegetation has been reestablished along the project areas.

Indirect impacts of channel and bank excavation can be longer term. They can include the loss of stream habitat and long term increases in turbidity due to loss of stream bank vegetative cover and the erosion protection it provides during rain and flood events. Increased solids in the system can mean a redistribution of pollutants throughout the system. The flood control plan calls for minimal excavation in each reach to reduce this impact. Once vegetation has reestablished the potential for erosion will be reduced. For the metals and organic pesticides evaluated in this study, the concentrations and spatial distributions are similar throughout the system. Any

effects due to redistribution because of erosion should be minimal. For the dioxin contaminated sediments in upper Bayou Meto, the effects could be longer term.

III-13-c. Channel Excavation for Bayou Meto Bypass Channel in Reach 3. As discussed above in the Summary, the upper end of the bypass channel will be cut into an area that is one of the USEPA's dioxin fish monitoring sites and is known to have dioxin contamination in the sediment. Any excavation in this reach of Bayou Meto should be done with care to minimize or prevent the movement of contaminated sediment downstream or into other parts of the basin. Excavated sediment should be treated as contaminated and placed in capped, upland disposal sites where it cannot be reintroduced into the system. The two low water weirs intended for this bypass channel have the potential for collecting contaminated sediment over time. Measures should be taken to protect the bank and streambed from erosion or head cutting above the bypass channel in order to prevent contaminated sediment from moving downstream. Currently the ADH is considering extending the current fish consumption advisory beyond the Highway 13 Bridge. Any repositioning of dioxin-contaminated sediment could have a long-term effect on the distribution of dioxin in the aquatic system.

III-13-d. Construction of Low Water Weirs. The immediate, short-term impacts from weir construction would be similar to those from channel excavation such as increased turbidities and species reduction. Long term, the construction of weirs will allow for a permanent pool of water during low flow conditions and could provide some improvement of habitat for freshwater mussels, other freshwater invertebrates and fish. The potential exists, however, for basic water quality parameters such as DO and temperature to become impaired in the summer. Also, since weirs have the potential to trap sediments moving through the system and the main contaminants of concern in the project area are associated with sediments, provisions should be made to monitor the depth of sediments trapped by the weirs and their anthropogenic chemical composition to ensure there are no long term impacts to biota within the immediate project area.

III-13-e. Construction of Pumping Plants. The construction of pumping plants will likely have no direct impacts to the streams. Indirect impacts will be localized

resulting from removal of vegetation and from construction practices. Erosion effects can be minimized through the development and proper implementation of the State required storm water plan. These impacts are anticipated to be short term and will decrease once vegetation has been reestablished along the effected area.

III-13-f. Operation of Pumping Plants. In operation, the pumping plants may become point sources that introduce turbidity into the receiving waters. In Regulation 2, the State of Arkansas says that 'there shall be no distinctly visible increase in turbidity of receiving waters attributable to municipal, industrial, agricultural, other waste discharges or instream activities'. No discharge or instream activity should cause turbidity values to exceed 45 NTU for least-altered Delta Ecoregion streams or 75 NTU for channel-altered Delta Ecoregion streams. Suspended sediment that would normally settle during flood events would be pumped out of the basin, resulting in a pulse of high turbidity in the receiving water. The effects would be those of increased turbidities discussed above.

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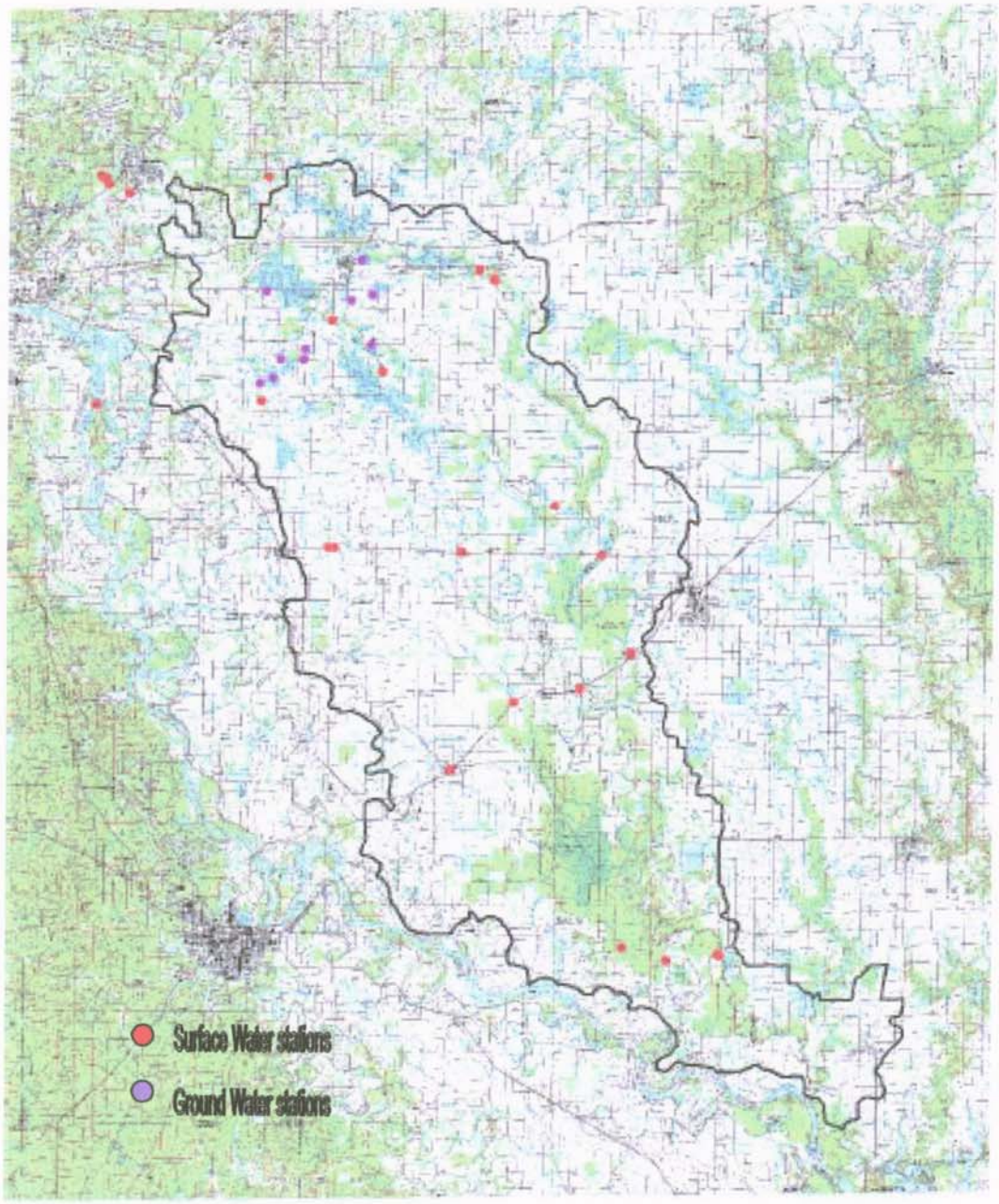

Figure 1. Sampling stations evaluated within the Bayou Meto Project Area.

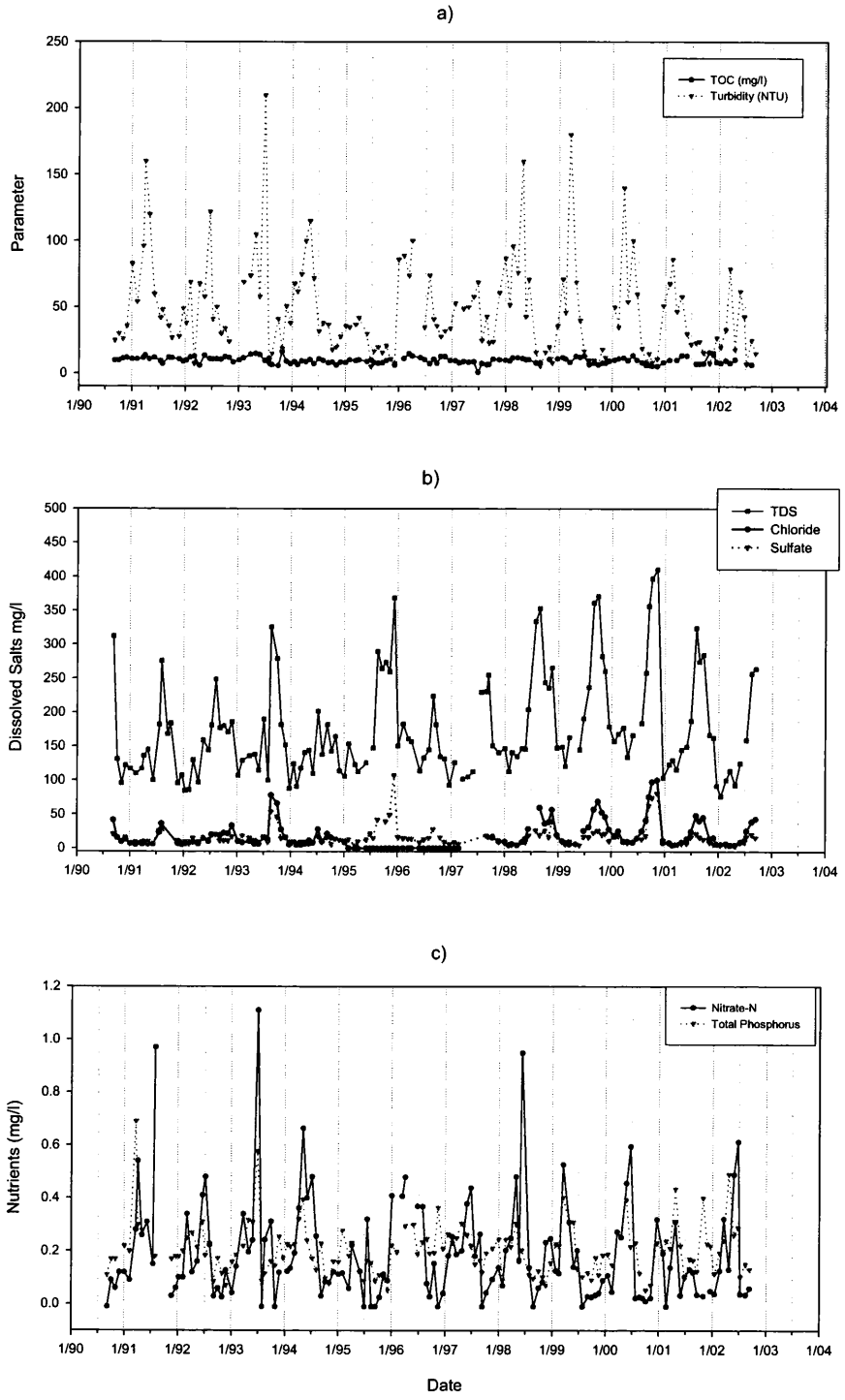

Figure 2. Example of water quality data periodicity in the project area (ARK023: Bayou Meto at Bayou Meto, Arkansas).

Table 1. Sampling stations for USGS and ADEQ data used in this water quality evaluation.		
STATION	LOCATION	PERIOD OF RECORD
Surface Water Bayou Meto HUC 08020402		
USGS 7263920 (BMU)	Bayou Meto nr N. Little Rock, AR -0920913: 345158 NAD27	11/01/83 – 9/06/94
USGS 7263935 (BMU)	Bayou Meto nr Jacksonville, AR -0920720: 345039 NAD 27	11/01/83 – 9/06/94
USGS 7264000 (BM)	Bayou Meto nr Lonoke, AR -0915458: 344413 NAD 27	2/21/55 – 10/04/83
USGS 7264050 (TPB)	Two Prairie Bayou nr Furlow, AR -0915848: 345132 NAD 27	4/03/74 – 7/12/83
USGS 7264200 (TPB)	Two Prairie Bayou @ Carlisle, AR -0914558: 344644 NAD 27	7/11/61 – 10/20/87
USGS 7264203 (TPB)	Two Prairie Bayou on HW 13 Br. S of Carlisle, AR -0914505: 344610 NAD 27	10/05/93 – 9/06/94
USGS 7264500 (BM)	Bayou Meto nr Stuttgart, AR -0913658: 342715	11/10/49 – 12/11/74
USGS 7265000 (CC)	Crooked Creek nr Humphrey, AR -0914004: 342535 NAD 27	11/14/45 – 2/22/55
USGS 7265099 (BM)	Bayou Meto nr Bayou Meto, AR -0913145: 341205 NAD 27	4/17/74 – 5/23/96
ADEQ ARK0023 (USGS 7265099) (BM)	Bayou Meto nr Bayou Meto, AR -91.5306: 34.2019	9/04/90 – 9/10/02
ADEQ ARK0050 (BMU)	Bayou Meto @ HW 161 nr Jacksonville, AR -92.1221: 34.8442	10/01/83 – 9/10/02
ADEQ ARK0060 (BMU)	Bayou Meto @ W Main St Br in Jacksonville, AR -92.1538: 34.8661	10/01/83 – 9/10/02
ADEQ ARK0097 (TPB)	Two Prairie Bayou @ HW 13 S of Carlisle, AR -91.7514: 34.7694	5/14/93 – 9/10/02
ADEQ UWBM001 (BM)	Bayou Meto @ county rd SE of Seaton Dump -91.6911: 34.5769	6/01/94 – 9/11/01
ADEQ UWBM002 (BM)	Bayou Meto @ HW 79, 2 mi SW of Stuttgart, AR -91.6164: 34.4536	6/01/94 – 9/11/01
Surface Water Lower Arkansas River HUC 08020401		
ADEQ UWWSB01 (USGS 07262528) (WAB)	Wabbaseka Bayou @ HW 79 @ Wabbaseka, AR -91.3164: 33.9717	6/01/94 – 9/10/01
Surface Water Lower Arkansas - Maumelle HUC 11110207		
USGS 07263620 (AR)	Arkansas River @ David D. Terry Lock & Dam 920918: 344007 NAD 27	7/24/69 – 9/13/01
ADEQ ARK0046 (USGS 07263620) (AR)	Arkansas River @ David D. Terry Lock & Dam -92.155: 34.6686	10/01/86 – 9/10/02
Ground Water Lonoke Monitoring Area - Mississippi River Valley Alluvial Aquifer (Bayou Meto HUC 08020402)		
ADEQ LON014	-91 53 29.7; 34 47 10.1	6/12/01
ADEQ LON016	-91 59 09.7; 34 45 49.1	6/19/01
ADEQ LON017	-91 52 43.5; 34 45 32.5	6/12/01
ADEQ LON017R	-91 53 46.4; 34 45 18.2	6/12/01
ADEQ LON020	-91 56 01.7; 34 42 40.2	6/12/01
ADEQ LON021	-91 59 21.2; 34 42 19.2	6/19/01
ADEQ LON024	-91 52 32.4; 34 42 56.4	6/12/01
ADEQ LON040	-91 58 37.0; 34 41 13.5	6/19/01
ADEQ LON041	-91 58 58.1; 34 41 14.8	6/19/01
ADEQ LON042	-91 58 02.1; 34 42 19.7	6/19/01

Table 2. Sampling stations for MVK water and sediment samples.		
Station	**Location**	**Sample Date**
LBM-01	Little Bayou Meto	August 2000
TPB-01	Two Prairie Bayou	August 2000
Bayou Meto-1	Bayou Meto	August 2000
BM HW 11	Bayou Meto	August 2000
WB-01	Wabbaseka Bayou	August 2000
WB-02	Wabbaseka Bayou	August 2000
Indian Bayou-01	Indian Bayou	August 2000
Indian Bayou Ditch		August 2000
Crooked Creek	Crooked Creek	August 2000
BM-10	Little Bayou Meto 0630601: 3784809	January 2001
BM-11	Little Bayou Meto 0626444: 3786017	January 2001
BM-12	Salt Bayou Ditch 0616261: 3808691	January 2001
BM-13	Two Prairie Bayou 0614279: 3847993	January 2001
BM-14	Indian Bayou 0592729: 3836600	January 2001

Table 3. Water quality and nutrient data from streams in the project area (sources: USGS and ADEQ).

Parameter	#/Group	Statistic	Bayou Meto Urban	Bayou Meto	Two Prairie Bayou	Crooked Creek	Wabbaseka Bayou	Arkansas River Terry L&D	Criteria
Water	495/570	Min	1.0	0.0	0.5		4.0	0.0	30 [a]
Temperature	/220/0	Mean	17.6	18.2	17.0	-	19.3	18.7	32 [b]
(C)	/13/518	Max	32.0	35.0	32.0		30.0	33.0	
pH	499/689	Min	5.9	4.4	5.3	6.3	6.0	5.9	6.0 – 9.0
(SU)	/222/11	Mean	6.9	7.3	6.9	7.1	7.3	7.7	
	/13/567	Max	7.3	8.8	8.0	8.4	8.2	9.0	
Dissolved	542/778	Min	ND	ND	ND		ND	ND	5 [c]
Oxygen	/237/19	Mean	5.34	4.39	5.3	ND	3.2	7.8	2 [d]
(mg/l)	/23/592	Max	9.66	16.3	12.0		12.8	16.4	
Turbidity	466/404	Min	4.20	3.00	4.00		4.1	0.60	45 [a]
(NTU)	/176/0	Mean	21.3	56.8	37.3	-	66.5	22.0	75 [b]
	/16/441	Max	192	2000	290		240	660	100 [j]
Conductivity	0/374	Min		38.0	43.0	43.0		135	
(µhos/cm)	/65/19	Mean	-	198	139	118	-	533	
	/0/417	Max		1530	849	300		1110	
Chloride	477/640	Min	0.035	0.035	0.035	2.20	0.035	0.035	36[e]
(mg/l)	/202/19	Mean	18.9	22.2	16.5	8.10	16.4	72.9	
	/15/526	Max	1200	550	85.7	32.0	49.7	230	
Sulfate	480/630	Min	1.17	0.500	0.500	1.00	3.63	13.0	28
(mg/l)	/207/19	Mean	8.95	12.3	10.9	7.98	20.4	45.2	
	/15/529	Max	35.1	130	52.6	22.0	66.4	257	
Ammonia	494/412	Min	0.002	0.002	0.002		0.002	0.002	19.9 [g]
(mg/l)	/190/0	Mean	0.266	0.100	0.514	-	0.081	0.071	1.6 [h]
	/15/260	Max	5.60	0.911	9.50		0.180	0.460	
Nitrate/Nitrite	469/472	Min	0.005	0.005	0.005		0.005	ND	
(mg/l)	/215/0	Mean	0.583	0.282	.333	-	0.415	0.327	
	/15/267	Max	12.0	1.41	4.94		1.12	0.855	
Ortho-	498/356	Min	0.002	0.002	0.018		0.106	0.002	
Phosphate	/149/0	Mean	0.441	0.127	0.476	-	0.220	0.063	
(mg/l)	/15/192	Max	6.10	0.880	7.33		0.592	0.370	
Total	482/501	Min	0.010	0.030	0.010		0.166	ND	0.1
Phosphorus	/217/0	Mean	0.576	0.238	0.655	-	0.358	0.109	
(mg/l)	/15/544	Max	7.50	0.390	7.90		0.838	0.933	
TKN	413/132	Min	0.050	0.050	0.692		0.620	0.080	
(mg/l)	/56/0	Mean	0.988	1.13	1.44	-	1.26	0.713	
	/6/476	Max	5.50	3.30	2.68		2.24	4.60	
TOC	393/222	Min	2.10	0.700	4.85		6.4	0.60	
(mg/l)	/110/0	Mean	7.24	9.76	10.4	-	8.69	5.71	
	/12/188	Max	20.0	16.4	17.5		10.4	11.0	
TSS	499/466	Min	0.50	0.50	2.00		6.00	0.50	
(mg/l)	/216/0	Mean	18.0	39.0	28.4	-	22.4	19.6	
	/13/162	Max	267	375	287		61.5	121	
TDS	488/612	Min	6.00	20.0	45.0	77.0	123	5.00	390[e]
(mg/l)	/206/2	Mean	102	159	143	87.0	230	290	
	/15/513	Max	2510	1120	376	97.0	391	1480	
Fecal Coliform	259/610	Min	ND	ND	ND	ND	88	ND	1000 [f]
(# / 100 mls)	/131/19	Mean	131	159	288	ND	323	766	200 [i]
	/8/450	Max	4500	7400	4400	ND	820	51000	

[a] Delta Ecoregion, Least-Altered Streams
[b] Delta Ecoregion, Channel-Altered Streams
[c] Delta Ecoregion, Primary Season Value
[d] Delta Ecoregion, Lowest Critical Season Value
[e] Delta Ecoregion
[f] Secondary Contact Waters
[g] acute aquatic life (CMC)
[h] chronic aquatic life (CCC)
[i] Primary contact waters
[j] Storm runoff

Table 4. Metals data from streams in the project area (sources: USGS and ADEQ).

Parameter µg/l	#/Group	Statistic	Bayou Meto Urban	Bayou Meto	Two Prairie Bayou	Crooked Creek	Wabbaseka Bayou	Arkansas River Terry L&D	Criteria (Reg 2, July 2001)
Aluminum	98/65 /48/0 /11/48	Min Mean Max	21.8 128 701	28.1 269 1806	23.1 252 1619	-	18.9 146 485	16.9 134 587	
Arsenic	52/143 /73/0 /5/149	Min Mean Max	0.500 0.965 2.78	0.500 3.98 24.0	0.500 3.66 30.0	-	1.43 6.65 17.9	ND 1.43 4.14	
Cadmium	234/272 /108/0 /12/132	Min Mean Max	ND 0.331 1.30	ND 3.00 10.0	0.070 3.54 10.0	-	7.10 30.2 62.7	0.02 1.22 78.0	1.7 [a,c] 3.7 [a,d] 0.6 [b,c] 1.0 [b,d]
Chromium	227/217 /78/0 /5/126	Min Mean Max	0.200 0.860 11.0	ND 3.15 50.0	0.200 2.53 16.0	-	0.200 0.276 0.580	ND 1.65 20.0	326 [a,c] 564 [a,d] 111 [b,c] 188 [b,d]
Copper	280/347 /149/0 /12/163	Min Mean Max	0.250 7.23 32.0	ND 13.1 176	0.250 13.6 127	-	0.25 1.43 3.80	ND 4.12 24.4	9 [a,c] 17 [a,d] 7 [b,c] 12 [b,d]
Iron	98/229 /110/1 /11/170	Min Mean Max	42.1 479 2270	ND 1579 14100	19.0 1373 4410	1300	9.00 133 675	1.5 44.7 298	
Lead	231/214 /75/0 /5/130	Min Mean Max	0.200 3.57 100	ND 8.13 70.0	0.20 7.01 52.0	-	ND	ND 1.19 27.0	30 [a,c] 65 [a,d] 1.2 [b,c] 2.5 [b,d]
Manganese	98/223 /112/0 /12/169	Min Mean Max	23.3 480 2799	ND 225 1500	13.0 757 13000	-	4.90 262 1400	0.25 7.24 80	
Mercury	6/17 /3/0 /0/75	Min Mean Max	ND 0.196 0.250	ND 0.449 1.60	ND 0.42 0.50	-	-	ND 0.127 0.700	2.0 [a] 0.012 [b]
Nickel	98/78 /48/0 /11/148	Min Mean Max	ND 1.51 24.3	ND 2.81 37.0	ND	-	1.00 2.94 22.4	ND 1.74 9.00	780 [a,c] 1400 [a,d] 88 [b,c] 157 [b,d]
Selenium	52/76 /47/0 /5/59	Min Mean Max	ND	ND 2.31 5.00	ND 2.30 10.0	-	ND	ND 1.02 4.15	20 [a] 5 [b]
Silver	0/5 /0/0 /0/100	Min Mean Max	-	ND 0.200 1.00	-	-	-	ND 0.48 1.0	1.0 [a,c] 3.4 [a,d]
Zinc	232/330 /144/0 /12/156	Min Mean Max	ND 23.4 500	ND 24.4 320	ND 28.7 390	-	ND 3.44 9.40	ND 8.7 110	64 [a,c] 115 [a,d] 58 [b,c] 105 [b,d]
Hardness	322/661 /171/19 12/195	Min Mean Max	ND 22.6 260	ND 38.4 250	ND 32.5 168	14.0 38.7 120	28.0 123 260	45.0 116 208	

[a] acute aquatic life criteria (CMC)
[b] chronic aquatic life criteria (CCC)
[c] hardness dependent (50 mg/l)
[d] hardness dependent (100 mg/l)

Table 5. Combined pesticides and PCB data from project area streams (sources: USGS and ADEQ).

Parameter (µg/l)	# Detected /Group	Statistic	Bayou Meto Urban	Bayou Meto	Two Prairie Bayou	Crooked Creek	Wabbaseka Bayou	Arkansas River Terry L & D	Criteria CMC [a] CCC [b]
Aldrin	6/0/3	Min	ND	ND	ND				3.0
		Max	0.001		0.001	-	-	-	-
A-BHC	0/0/0	Min	ND	ND	ND	-	-	-	
		Max							
B-BHC		Min	ND	ND	ND	-	-	-	
		Max							
G-BHC		Min	ND	ND	ND	-	-	-	
		Max							
D-BHC		Min	ND	ND	ND	-	-	-	
		Max							
pp-DDD	1/0/0	Min	0.005	ND	ND	-	-	-	1.1
		Max							0.0010
pp-DDE	10/0/3	Min	0.001	ND	0.001	-	-	-	1.1
		Max	0.001		0.001				0.0010
pp-DDT	6/0/1	Min	0.001	ND	0.001	-	-	-	1.1
		Max	0.001						0.0010
Heptachlor		Min	ND	ND	ND	-	-	-	0.52
		Max							0.0038
Dieldrin	18/0/2	Min	0.001	ND	0.001				2.5
		Max	0.010		0.001	-	-	-	0.0019
A-Endosulfan		Min	ND	ND	ND				
		Max				-	-	-	
B-Endosulfan		Min	ND	ND	ND				Sum =
		Max				-	-	-	0.22
Endosulfan Sulfate		Min	ND	ND	ND				
		Max				-	-	-	0.056
Endrin	19/0/2	Min	0.001	ND	0.001				0.18
		Max	0.068		0.001	-	-	-	0.0023
Endrin Aldehyde		Min	ND	ND	ND				
		Max				-	-	-	
Heptachlor Epoxide		Min	ND	ND	ND				
		Max				-	-	-	
Methoxychlor		Min	ND	ND	ND				
		Max				-	-	-	
Chlordane		Min	ND	ND	ND				2.4
		Max				-	-	-	0.0043
Toxaphene	2/0/1	Min	1	ND	5	-	-	-	0.73
		Max	5						0.0002
PCB		Min	ND	ND	ND	-	-	-	-
		Max							0.0140

[a] (CMC) - acute aquatic life criteria
[b] (CCC) - chronic aquatic life criteria

Table 6. Herbicide data from ADEQ for project area streams.

Parameter (µg/l)	# Detected /Group	Statistic	Bayou Meto Urban	Bayou Meto	Two Prairie Bayou	Crooked Creek	Wabbaseka Bayou	Arkansas River Terry L & D	Criteria
Molinate	2/8/1 0/4/0	Min Max	0.016 3.38	0.62 11.5	0.088	-	0.025 12.3	ND	
Trifluralin	1/0/0 0/0/0	Min Max	0.007	ND	ND	-	ND	ND	
Prometon	2/1/0 0/2/0	Min Max	0.023 0.035	0.011	ND	-	0.088 0.568	ND	
Simazine	1/2/1 0/0/0	Min Max	0.047	0.011	0.118	-	ND	ND	
Atrazine	4/6/1 0/3/1	Min Max	0.008 0.293	0.031 0.202	0.472	-	0.034 0.085	0.368	
Diazinon	2/0/0 0/0/0	Min Max	0.038 0.044	ND	ND	-	ND	ND	
Metribuzin	1/4/1 0/1/1	Min Max	0.082	0.016 0.066	0.012	-	0.074	0.010	
Alachlor	1/2/0 0/0/1	Min Max	0.056	0.045 0.056	ND	-	ND	0.024	
Ametryn	0/1/0 0/0/0	Min Max	ND	0.006	ND	-	ND	ND	
Prometryn	0/2/0 0/3/0	Min Max	ND	0.004 0.050	ND	-	0.017 0.213	ND	
Terbutryn	0/1/1 0/3/1	Min Max	0.060	ND	0.018	-	0.041 1.60	ND	
Metolachlor	3/9/1 0/4/0	Min Max	0.008 1.78	0.013 1.53	0.594	-	0.029 1.81	0.159	
Cyanazine	0/2/0 0/1/0	Min Max	0.083 0.717	ND	ND	-	0.860	ND	
Pendimethalin	1/1/0 0/0/0	Min Max	0.010	0.064	ND	-	ND	ND	

Table 7. Water quality samples collected by MVK for nutrients in water.

Parameter (mg/l)	LBM - 01	TPB-01	Bayou Meto -1	BM HW 11	WB-01	WB-02	Indian Bayou-01	Indian Bayou Ditch	Crooked Creek	BM-10 Little Bayou Meto	BM-11 Bayou Meto	BM-12 Five Fork	BM-13 Two Prairie Bayou	BM-14 Indian Bayou	Criteria
	August 2000									January 2001					
TKN	0.38	0.57	0.70	0.37	0.21	0.35	0.34	0.30	0.86	1.3	0.81	0.78	0.90	0.92	
TP	0.30	0.11	0.12	0.084	0.12	0.12	0.17	0.076	0.14	0.32	0.22	0.18	0.25	0.29	0.1
Sulfate	9.5 J	21	20 J	19 J	21	41	60	82	ND	19 J	15 J	22	14 J	16 J	28
Chloride	28	27	49	43	55	77	64	81	34	16	8.5	20	17	11	36
TSS	20.7	38	56	18	26	28	36	22	40	36.8	6.9	19.0	30.2	52.7	
Total Solids	390	290	376	298	460	528	540	658	273	234	118	220	147	191	
TOC	82	48	52	45	73	66	76	79	47	-	-	-	-	-	
Ammonia	0.094J	ND	ND	ND	ND	0.037J	ND	0.13	ND	-	-	-	-	-	19.9 [a] 1.6 [b]
NO2/NO3	0.10	0.035 J	0.065 J	0.027 J	0.053 J	0.24	0.088J	0.16	0.041J	-	-	-	-	-	

a acute aquatic life criteria (CMC)

b chronic aquatic life criteria (CCC)

Table 8. Water quality samples collected by MVK for trace metals in water.

Parameter (µg/l)	LBM - 01	TPB-01	Bayou Meto -1	BM HW 11	WB-01	WB-02	Indian Bayou-01	Indian Bayou Ditch	Crooked Creek	BM-10 Little Bayou Meto	BM-11 Bayou Meto	BM-12 Five Fork	BM-13 Two Prairie Bayou	BM-14 Indian Bayou	Criteria (Reg 2, July 2001)
	August 2000									**January 2001**					
Antimony	<20	<20	<20	<20	<20	<20	<20	<20	<20	< 3	< 3	< 3	< 3	< 3	
Arsenic	4.95	<15	3.5 J	<15	6.8 J	3.6 J	5.6 J	<15	<15	2	2	2	< 2	2	
Beryllium	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	< 1	< 1	< 1	< 1	< 1	
Cadmium	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	1.7 [a] 0.6 [b]
Chromium	<10	2.1 J	<10	8.1 J	<10	<10	2.1 J	<10	<10	3	3	3	2	5	326 [a] 111 [b]
Copper	<10	<10	<10	<10	<10	<10	<10	<10	<10	3	3	2	2	4	9 [a] 7 [b]
Lead	<10	<10	<10	<10	<10	<10	<10	<10	<10	1	1	1	1	2	30 [a] 1.2 [b]
Mercury	.000007	.000003	.000006	.000003	.000002	.000004	.000003	.000002	.000004	0.008	0.010	0.005	0.008	0.010	2.0 [a] 0.012 [b]
Nickel	<10	<10	<10	5.9 J	<10	<10	<10	<10	<10	3	3	3	2	4	780 [a] 88 [b]
Selenium	<20	<20	<20	<20	<20	<20	<20	<20	<20	< 2	< 2	< 2	< 1	< 2	20 [a] 5 [b]
Silver	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	< 1	< 1	< 1	< 1	< 1	1.0 [a]
Thallium	<30	<30	<30	<30	<30	<30	<30	<30	<30	< 2	< 2	< 2	< 2	< 2	
Zinc	<10	3.0 J	7.2 J	3.1 J	4.4 J	4.7 J	6.2 J	<10	5.2 J	< 10	12	11	10	411	64 [a] 58 [b]

[a] acute aquatic life criteria (CMC)
[b] chronic aquatic life criteria (CCC)

Table 9. Water quality samples collected by MVK for pesticides and PCBs in water.										
Parameter (µg/l)	LBM - 01	TPB-01	Bayou Meto -1	BM HW 11	WB-01	WB-02	Indian Bayou-01	Indian Bayou Ditch	Crooked Creek	Criteria CMC [a] CCC [b]
	August 2000									
Aldrin	<0.025	<0.025	0.032	<0.025	<0.025	0.029	0.031	<0.025	0.034	3.0 -
A-BHC	<0.025	0.015J	0.019J	<0.025	0.012J	<0.025	0.011J	<0.025	0.022J	
B-BHC	<0.025	<0.025	<0.025	0.030	0.024J	0.012J	0.028	<0.025	<0.025	
G-BHC	<0.025	<0.025	<0.025	<0.025	0.023J	<0.025	<0.025	<0.025	<0.025	
D-BHC	<0.025	<0.025	<0.025	0.034	<0.025	<0.025	<0.025	<0.025	<0.025	
pp-DDD	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1.1 0.0010
pp-DDE	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1.1 0.0010
pp-DDT	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1.1 0.0010
Heptachlor	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.52 0.0038
Dieldrin	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	2.5 0.0019
A-Endosulfan	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	Sum = 0.22
B-Endosulfan	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
Endosulfan Sulfate	<0.050	0.098	0.038J	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.056
Endrin	<0.050	<0.050	0.016J	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.18 0.0023
Endrin Aldehyde	<0.050	0.17	<0.050	0.17	<0.050	<0.050	<0.050	<0.050	<0.050	
Heptachlor Epoxide	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	
Methoxychlor	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	
Chlordane	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	2.4 0.0043
Toxaphene	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.73 0.0002
PCBs	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	- 0.0140

[a] acute aquatic life criteria (CMC)
[b] chronic aquatic life criteria (CCC)

Table 10. Water quality samples collected by MVK for herbicides in water.

Parameter (µg/l)	LBM - 01	TPB-01	Bayou Meto -1	BM HW 11	WB-01	WB-02	Indian Bayou-01	Indian Bayou Ditch	Crooked Creek	BM-10 Little Bayou Meto	BM-11 Bayou Meto	BM-12 Five Fork	BM-13 Two Prairie Bayou	BM-14 Indian Bayou	Criteria
	August 2000									January 2001					
2,4-D	<0.20	<0.19	0.66	0.14 J	<0.19	<0.19	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.20	<0.20	
2,4-DP	<0.20	<0.19	<0.21	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.20	<0.20	
2,4,5-T	<0.050	<0.047	<0.053	<0.047	<0.047	<0.048	<0.047	0.011 J	<0.048	<0.05	<0.05	<0.05	0.038 J	<0.05	
2,4,5-TP	<0.050	<0.047	<0.053	<0.047	<0.047	<0.048	<0.047	<0.048	<0.048	<0.05	<0.05	<0.05	<0.05	<0.05	
2,4-DB	<0.20	<0.19	<0.21	<0.19	<0.19	0.45	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.20	0.20	
Dinoseb	<0.050	0.019 J	0.35	<0.047	<0.047	<0.048	<0.047	<0.048	<0.048	<0.05	<0.05	<0.05	0.120	<0.05	
MCPA	<20.0	<18.9	<21.3	<18.9	<18.9	<19.2	<18.9	<19.2	<19.2	<20	<20	<20	<20	<20	
MCPP	<20.0	<18.9	<21.3	<18.9	<18.9	<19.2	<18.9	<19.2	<19.2	<20	<20	<20	<20	<20	
Dalapon	<0.10	<0.094	<0.11	<0.094	<0.094	<0.096	<0.094	<0.096	<0.096	ND	<0.10	<0.10	<0.10	<0.10	
Dicamba	<0.10	<0.094	<0.11	<0.094	<0.094	<0.096	<0.094	<0.096	<0.096	ND	<0.10	<0.10	<0.10	<0.10	
DCAA % (surrogate)	125	122	117	144	126	119	124	109	111	125	130	99	175	131	

Table 11. Water quality samples collected by MVK for PAHs in water.

Parameter (µg/l)	LBM -01	TPB-01	Bayou Meto - 1	BM HW 11	WB-01	WB-02	Indian Bayou-01	Indian Bayou Ditch	Crooked Creek	Criteria CMC[1] CCC[2]
	August 2000									
Acenaphthene	<9.6	<9.4	<9.8	<9.6	<9.6	<9.4	<9.6	<9.4	<9.4	1700 520
Acenaphthylene	<9.6	<9.4	<9.8	<9.6	<9.6	<9.4	<9.6	<9.4	<9.4	
Anthracene	<9.6	<9.4	<9.8	<9.6	<9.6	<9.4	<9.6	<9.4	<9.4	
Benzo[k]fluoranthene	<9.6	<9.4	<9.8	<9.6	<9.6	<9.4	<9.6	<9.4	<9.4	
Benzo[a]pyrene	<9.6	<9.4	<9.8	<9.6	<9.6	<9.4	<9.6	<9.4	<9.4	
Benzo[b]fluoranthene	<9.6	<9.4	<9.8	<9.6	<9.6	<9.4	<9.6	<9.4	<9.4	
Benzo[ghi]perylene	<9.6	<9.4	<9.8	<9.6	<9.6	<9.4	<9.6	<9.4	<9.4	
Benzo[a]anthracene	<9.6	<9.4	<9.8	<9.6	<9.6	<9.4	<9.6	<9.4	<9.4	
Chrysene	<9.6	<9.4	<9.8	<9.6	<9.6	<9.4	<9.6	<9.4	<9.4	
Dibenz[a,h]anthracene	<9.6	<9.4	<9.8	<9.6	<9.6	<9.4	<9.6	<9.4	<9.4	
Fluoranthene	<9.6	<9.4	<9.8	<9.6	<9.6	<9.4	<9.6	<9.4	<9.4	3980
Fluorene	<9.6	<9.4	<9.8	<9.6	<9.6	<9.4	<9.6	<9.4	<9.4	
Indeno [1,2,3-cd]pyrene	<9.6	<9.4	<9.8	<9.6	<9.6	<9.4	<9.6	<9.4	<9.4	
2-Methylnaphthalene	<9.6	<9.4	<9.8	<9.6	<9.6	<9.4	<9.6	<9.4	<9.4	
Napthalene	<9.6	<9.4	<9.8	<9.6	<9.6	<9.4	<9.6	<9.4	<9.4	2300 620
Phenanthrene	<9.6	<9.4	<9.8	<9.6	<9.6	<9.4	<9.6	<9.4	<9.4	
Pyrene	<9.6	<9.4	<9.8	<9.6	<9.6	<9.4	<9.6	<9.4	<9.4	

[1] CMC- acute - ambient water quality criteria – freshwater lowest observable effect level
[2] CCC- chronic - ambient water quality criteria – freshwater lowest observable effect level

Table 12. Dioxin in sediment (University of Arkansas 1992).			
Station Number	Stream Location	2,3,7,8-TCDD (ppt)	UEL Guideline [1]
Bayou Macon			
1	Macon Bridge	0.260	8.8
2	New (Caddo) Bridge	0.490	
3	Highway 167	199.	
4	Reeds Bridge	276.	
6	Broken Bridge	197.	
7	I-40	39.7	
8	Highway 15	46.	
10	Culler	24.2	
13	Highway 79	4.2	
14	Highway 152	5.6	
15	Wildlife Mgt. Area	5.3	
16	Highway 11	1.4	
Wattensaw Bayou (background sample)			
19	Highway 11	0.420	8.8
20	Wildlife Mgt. Area	0.280	
[1] Upper effects threshold for *Hyalella azteca* bioassay in freshwater sediments (1999).			

Table 13. Samples collected by MVK for metals in sediment.

Parameter (mg/kg)	LBM -01	TPB-01	Bayou Meto -1	BM HW 11	WB-01	WB-02	Indian Bayou-01	Indian Bayou Ditch	Crooked Creek	BM-10 Little Bayou Meto	BM-11 Bayou Meto	BM-12 Five Fork	BM-13 Two Prairie Bayou	BM-14 Indian Bayou	Guidelines ERL[1] ERM[2]	Guidelines Earth's Crust[3]
	August 2000									January 2001					NOAA	USGS
Antimony	-	0.66	0.74	-	0.69	1.61	1.03	0.98	0.85	0.70	0.67	0.75	0.79	0.57	-	-
Arsenic	-	2.8	2.77	-	5.43	8.39	9.28	5.13	8.05	5.99	4.40	5.70	5.30	2.80	8.2 70.	7.4
Beryllium	-	0.899	0.900	-	0.800	1.20	1.30	1.10	1.10	1.20	1.60	1.30	0.800	0.899	-	-
Cadmium	-	0.174	0.082	-	0.192	0.593	0.295	0.229	0.080	0.439	0.150	0.150	0.270	0.180	1.2 9.6	-
Chromium	-	19.7	24.1	-	21.6	31.9	30.4	28.8	29.1	28.4	28.4	18.5	15.2	12.3	81 370	52
Copper	-	9.29	7.40	-	10.5	24.0	17.0	14.9	10.5	19.9	13.9	14.8	12.2	10.6	34 270	22
Lead	-	18.4	17.6	-	15.2	38.2	19.7	21.0	19.7	19.1	15.7	16.4	40.4	10.1	46.7 218	17
Mercury	-	0.067	0.032	-	0.023	0.065	0.039	0.039	0.018	0.0447	0.0148	0.0203	0.1230	0.0143	0.15 0.71	0.12
Nickel	-	11.7	12.8	-	15.8	21.7	22.6	19.8	18.0	23.4	25.2	19.9	10.5	15.0	20.9 51.6	18
Selenium	-	0.75	0.71	-	0.57	0.91	1.07	0.81	0.68	0.599	0.500	0.400	0.600	0.400	-	0.45
Silver	-	0.29	<0.10	-	<0.10	0.11	<0.10	0.29	<0.10	<0.100	<0.100	<0.100	<0.100	<0.100	1 3.7	-
Thallium	-	0.36	0.39	-	0.25	0.37	0.38	0.32	0.30	0.200	0.300	0.200	<0.200	<0.200	-	-
Zinc	-	51.3	48.4	-	133	165	72.1	71.4	46.1	85.7	63.9	51.3	53.3	42.9	150 410	52
TOC	-	40000	16600	-	5890	31600	25500	23700	10600	39300	4700	4720	43200	7400	-	-

[1] ERL Effects Range-Low
[2] ERM Effects Range Median
[3] Mean concentration of elements in soils in the Eastern United States.

Table 14. Samples collected by MVK for pesticides and PCBs in sediment.

Parameter (µg/kg)	LBM - 01	TPB-01	Bayou Meto -1	BM HW 11	WB-01	WB-02	Indian Bayou-01	Indian Bayou Ditch	Crooked Creek	Criteria ERL[1] ERM[2]
	August 2000									
Aldrin	-	<1.70	<1.27	-	<1.25	<1.35	<1.86	<1.34	<1.28	
A-BHC	-	<1.70	<1.27	-	<1.25	<1.35	<1.86	<1.34	<1.28	
B-BHC	-	2.90	<1.27	-	2.81	2.95	<1.86	5.08	1.29	
G-BHC	-	<1.70	<1.27	-	0.85 J	<1.35	<1.86	1.07 J	0.68 J	
D-BHC	-	<1.70	<1.27	-	<1.25	<1.35	<1.86	<1.34	<1.28	
pp-DDD	-	<3.40	5.06	-	51.9	75.2	37.3	145	4.49	2 20
pp-DDE	-	5.68	8.50	-	76.3	149	123	343	11.6	2.2 27
pp-DDT	-	<3.40	<2.55	-	13.0	15.1	35.4	61.2	3.51	1 7
Heptachlor	-	<1.70	<1.27	-	<1.25	<1.35	<1.86	<1.34	<1.28	
Dieldrin	-	<3.40	<2.55	-	<2.50	<2.70	<3.72	<2.68	<2.56	0.02 8
A-Endosulfan	-	<1.70	<1.27	-	<1.25	<1.35	<1.86	<1.34	<1.28	
B-Endosulfan	-	<3.40	<2.55	-	<2.50	<2.70	<3.72	<2.68	<2.56	
Endosulfan Sulfate	-	<3.40	<2.55	-	2.61	3.43	<3.72	<2.68	<2.56	
Endrin	-	5.58	1.68	-	3.66	<2.70	<3.72	14.1	1.44 J	
Endrin Aldehyde	-	2.23	<2.55	-	<2.50	<2.70	<3.72	11.5	<2.56	
Heptachlor Epoxide	-	<1.70	<1.27	-	<1.25	<1.35	<1.86	<1.34	<1.28	
Methoxychlor	-	<17.0	<12.7	-	<12.5	<13.5	<18.6	<13.4	<12.8	
Chlordane	-	<17.0	<12.7	-	<12.5	<13.5	<18.6	<13.4	<12.8	
Toxaphene	-	<17.0	<12.7	-	<12.5	<13.5	<18.6	<13.4	<12.8	
Total PCBs	-	<17.0	<12.7		<12.5	<13.5	<18.6	<13.4	<12.8	22.7 180

Table 15. Samples collected by MVK for herbicides in sediment.

Parameter (µg/kg)	LBM - 01	TPB-01	Bayou Meto -1	BM HW 11	WB-01	WB-02	Indian Bayou-01	Indian Bayou Ditch	Crooked Creek	BM-10 Little Bayou Meto	BM-11 Bayou Meto	BM-12 Five Fork	BM-13 Two Prairie Bayou	BM-14 Indian Bayou	Criteria
	August 2000									January 2001					
2,4-D	-	<13.6	<10.3	-	<10.1	<10.8	<14.8	<10.9	<10.2	<18.8	<9.48	<9.47	<14.5	<9.54	
2,4-DP	-	<13.6	<10.3	-	<10.1	<10.8	<14.8	<10.9	<10.2	<18.8	<9.48	<9.47	<14.5	<9.54	
2,4,5-T	-	<3.40	<2.56	-	<2.52	<2.70	<3.70	1.46 J	<2.54	<4.70	<2.37	<2.37	<3.62	<2.38	
2,4,5-TP	-	<3.40	<2.56	-	<2.52	<2.70	<3.70	<2.73	<2.54	7.32	<2.37	<2.37	<3.62	<2.38	
2,4-DB	-	<13.6	<10.3	-	<10.1	<10.8	<14.8	38.8 B	26.1B	<18.8	<9.48	<9.47	<14.5	<9.54	
Dinoseb	-	<3.40	<2.56	-	<2.52	<2.70	<3.70	<2.73	<2.54	<4.70	4.80	<2.37	<3.62	<2.38	
DCAA % (surrogate)	-	123	99.5	-	114	126	146	101	103	110	45.0	61.5	23.3	64.9	
MCPA	-	<1361	<1026	-	<1009	<1079	<1480	<1092	<1016	<1880	<948	23400B	2093B	10000B	
MCPP	-	3522	<1026	-	<1009	<1079	<1480	<1092	<1016	<1880	<948	<947	<1449	<954	
Dalapon	-	<6.81	<5.13	-	<5.05	<5.40	<7.40	<5.46	<5.08	<9.40	<4.74	<4.73	<7.25	<4.77	
Dicamba	-	<6.81	<5.13	-	<5.05	<5.40	<7.40	<5.46	<5.08	<9.40	<4.74	<4.73	<7.25	<4.77	

2,4-DB method blank for Aug 2000 = 31.3 µg/kg
MCPA method blank for Jan 2001 = 2193 µg/kg

Table 16. Samples collected by MVK for PAHs in sediment.

Parameter (µg/kg)	LBM - 01	TPB-01	Bayou Meto -1	BM HW 11	WB-01	WB-02	Indian Bayou-01	Indian Bayou Ditch	Crooked Creek	Guidelines ERL[1] ERM[2]
	August 2000									
Acenaphthene	-	<690	<510	-	<510	<530	<740	<550	<510	16 500
Acenaphthylene	-	<690	<510	-	<510	<530	<740	<550	<510	44 640
Anthracene	-	<690	<510	-	<510	<530	<740	<550	<510	85.3 1100
Benzo[k]fluoranthene	-	<690	<510	-	<510	<530	<740	<550	<510	
Benzo[a]pyrene	-	<690	<510	-	<510	<530	<740	<550	<510	430 1600
Benzo[b]fluoranthene	-	<690	<510	-	<510	<530	<740	<550	<510	
Benzo[ghi]perylene	-	<690	<510	-	<510	<530	<740	<550	<510	
Benzo[a]anthracene	-	<690	<510	-	<510	<530	<740	<550	<510	261 1600
Chrysene	-	<690	<510	-	<510	<530	<740	<550	<510	384 2800
Dibenz[a,h]anthracene	-	<690	<510	-	<510	<530	<740	<550	<510	63.4 260
Fluoranthene	-	<690	370 J	-	<510	<530	<740	<550	<510	600 5100
Fluorene	-	<690	<510	-	<510	<530	<740	<550	<510	19 540
Indeno [1,2,3-cd]pyrene	-	<690	<510	-	<510	<530	<740	<550	<510	
2-Methylnaphthalene	-	<690	<510	-	<510	<530	<740	<550	<510	70 670
Napthalene	-	<690	<510	-	<510	<530	<740	<550	<510	160 2100
Phenanthrene	-	<690	<510	-	<510	<530	<740	<550	<510	240 1500
Pyrene	-	<690	270 J	-	<510	<530	<740	<550	<510	665 2600

[1] ERL - Environmental Response Low
[2] ERM- Environmental Response Median

BAYOU METO COMPREHENSIVE STUDY
BAYOU METO BASIN, ARKANSAS

APPENDIX C

ENGINEERING INVESTIGATIONS & ANALYSES
FLOOD CONTROL COMPONENT

SECTION IV

STRUCTURAL, MECHANICAL, ELECTRICAL AND CIVIL DESIGN

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Section IV - Structural, Mechanical, Electrical & Civil Design

Part A - Structural Design

IV-A-1. GENERAL. The structural flood control features for the alternatives investigated for the project included several pumping plant and control structure alternatives. The pumping plant alternatives included a pump station with either a 5,000 or a 10,000 cubic feet per second (cfs) pumping capacity adjacent to the Big Bayou Meto Drainage Structure and a pump station with either a 1,000-cfs or a 3,000-cfs pumping capacity adjacent to the Little Bayou Meto Drainage Structure. The Big Bayou Meto pumping station alternative was dropped prior to design. The control structure alternatives include slide gated control structures, hinged crest gated control structures and a slide gated box culvert. The structural quantities for all examined alternatives were developed and are reflected in the cost estimates.

IV-A-2. LITTLE BAYOU METO PUMP STATION. The Little Bayou Meto pump station is located on the west side of the existing channel adjacent to the drainage structure at the lower end of Little Bayou Meto. Two alternatives were examined: a 1,000-cfs and a 3,000-cfs pumping station. Each pump station was laid out similarly with an inlet channel, inlet channel retaining walls, a pumping plant with a superstructure and a substructure, discharge lines crossing over the levee on the northwest side of the existing drainage structure and an outfall structure. Plate IV-01 shows the site layout for the 1,000-cfs Pump Station. Plate IV-02 is the plan for the 1,000-cfs Pump Station. Plate IV-03 is a typical section through the 1,000-cfs Pump Station. Plate IV-04 shows the site layout for the 3,000-cfs Pump Station. Plate IV-05 is the plan for the 3,000-cfs Pump Station. Plate IV-06 is a typical section through the 3,000-cfs Pump Station.

IV-A-2-a. Inlet Channel. A riprap lined inlet channel connects Little Bayou Meto to the pump station.

IV-A-2-a-1. 1,000-cfs Station. The channel thalweg, beginning at the inlet side of the pump station, is at Elevation 149.5, NGVD, for a distance of 50 feet and then transitions to Elevation 159.0, NGVD, on a 1V on 20H slope. The thalweg remains at Elevation 159.0, NGVD, until it enters the existing Little Bayou Meto channel. The channel bottom width is 45 feet at the pump station and for a distance of 50 feet upstream with channel side slopes of 1V on 4H. The channel bottom width then contracts to 30 feet in a distance of 180 feet. The channel side slops transitions to 1V on 3H in a distance of 60 feet, and then remains at 1V on 3H until the channel bottom reaches Elevation 159.0, NGVD. The channel bottom width then remains at 30 feet with side slopes of 1V on 3H.

IV-A-2-a-2. 3,000-cfs Station. The channel thalweg, beginning at the inlet side of the pump station, is at Elevation 145.0, NGVD, for a distance of 60 feet and then transitions to Elevation 159.0, NGVD, on a 1V on 20H slope. The thalweg remains at Elevation 159.0, NGVD, until it enters the existing Little Bayou Meto channel. The channel bottom width is 93 feet at the pump station and for a distance of 60 feet upstream with channel side slopes of 1V on 4H. The channel bottom width then contracts to 30 feet in a distance of 280 feet. The channel side slopes transitions to 1V on 3H in a distance of 212 feet, and then remains at 1V on 3H until the channel bottom reaches Elevation 159.0, NGVD. The channel bottom width then remains at 30 feet with side slopes of 1V on 3H.

IV-A-2-b. Inlet Retaining Walls. Inlet retaining walls are used to retain the backfill upstream from the pump station. The retaining walls consist of concrete reinforced inverted t-wall monoliths running perpendicular to the channel centerline extends from either side of the pump station to the top bank of the inlet channel.

IV-A-2-b-1. 1,000-cfs Station. The inlet retaining walls, inverted t-walls, extend from the upstream end of the substructure perpendicular to the channel centerline for a distance of 127.5 feet. There are two walls, one on each side of the channel centerline. They retain the backfill against the substructure.

IV-A-2-b-2. 3,000-cfs Station. The inlet retaining walls, inverted t-walls, extend from the upstream end of the substructure perpendicular to the channel centerline for a

distance of 168.0 feet. There are two walls, one on each side of the channel centerline. They retain the backfill against the substructure.

IV-A-2-c. Pump Station Substructure. The pump station substructure consist of that part of the pump station that lies beneath the operating floor of the station, and includes the trash racks, the formed suction intakes and the foundation, and the bottom slab for the service bay.

IV-A-2-c-1. 1,000-cfs Station. The substructure extends between Elevation 184.0, NGVD, the operating floor elevation, and Elevation 147.5, NGVD, the bottom of the structure. The portion of the service bay below Elevation 184.0, NGVD, is part of the substructure. The service bay, located on the west end of the pump station, at Elevation 182.0, NGVD, is two feet lower than the operating floor.

IV-A-2-C-2. 3,000-cfs Station. The substructure extends between Elevation 187.0, NGVD, the operating floor elevation, and Elevation 143.7, NGVD, the bottom of the structure. The portion of the service bay below Elevation 187.0, NGVD, is part of the substructure. The service bay, located on the west end of the pump station, at Elevation 184.0, NGVD, is three feet lower than the operating floor.

IV-A-2-d. Pump Station Superstructure. The pump station superstructure consists of that part of the pump station that lies above the substructure and includes the building, and the service crane (a bridge crane).

IV-A-2-d-1. 1,000-cfs Station. The superstructure consists of a steel frame supported, precast concrete panel wall and roof. The service crane has a lifting capacity of 20 tons. The building is 77.0 feet by 38.75 feet with a height of 28.0 feet at the upstream side and a height of 25.67 feet at the downstream side.

IV-A-2-d-2. 3,000-cfs Station. The superstructure consists of a steel frame supported, precast concrete panel wall and roof. The service crane has a lifting capacity of 35 tons. The building is 115.0 feet by 60.67 feet with a height of 44.75 feet at the upstream side and a height of 40.67 feet at the downstream side.

IV-A-2-e. Discharge Pipes. There is a discharge pipe for each pump. The discharge pipes exit the downstream end of

the pump station, turn approximately 45° eastward, cross under the access road, cross over the levee and end up at the outfall structure located in the outlet channel for the Little Bayou Meto Drainage Structure. The discharge ends of the pipes are turned upward 90° to form a gooseneck. The pipes are buried. Concrete and H-pile thrust blocks are supplied at all changes in direction for the discharge pipes.

IV-A-2-e-1. 1,000-cfs Station. Each discharge pipe is 96 inches in diameter with a wall thickness of ½-inch. The discharge pipes have lengths of 628 feet and 648 feet.

IV-A-2-e-2. 3,000-cfs Station. Each discharge pipe is 120 inches in diameter with a wall thickness of ½-inch. The discharge pipes have lengths of 646 feet, 618 feet and 590 feet.

IV-A-2-f. Outfall Structure. The outfall structure consists of a reinforced concrete slab surrounding the goose necked outfall on the discharge pipes.

IV-A-2-f-1. 1,000-cfs Station. The outfall structure is 72.5 feet by 58.0 feet. The reinforced concrete slab is 2.0 feet thick. The perimeter of the outfall structure has an embedded sheetpile scour wall 10.0 feet deep.

IV-A-2-f-2. 3,000-cfs Station. The outfall structure is 93.5 feet by 60.0 feet. The reinforced concrete slab is 2.0 feet thick. The perimeter of the outfall structure has an embedded sheetpile scour wall 10.0 feet deep.

IV-A-3. CANNON BREAK EXTENSION STRUCTURE. The Cannon Break Extension Structure is located in the dam adjacent to the Cannon Break Structure. The structure is located approximately 100 feet westward from the existing Cannon Break Structure. The structure consists of a gated control structure with inlet and outlet retaining walls, a vehicular bridge across the top of the gated control structure, and riprap lined inlet and outlet channels. Plate IV-07 gives the site location for the Cannon Break Extension Structure. Plate IV-08 depicts the plan for the 3-gated control structure, and Plate IV-09 depicts the plan for the 5-gated control structure.

IV-A-3-a. Retaining Walls. The retaining walls for the Cannon Break Extension Structure are used to retain the

material in the levee section at the structure. Inlet retaining walls are used to retain the backfill adjacent to either side of the structure.

IV-A-3-a-1. Inlet Walls. The retaining walls, concrete reinforced inverted t-walls, are each flared 30° away from the channel centerline. They extend from either end of the gated structure to the toe of the levee. Each inlet wall is 67.0 feet long, and varies in height from 17.7 feet to 4.2 feet.

IV-A-3-a-2. Outlet Walls. The retaining walls, concrete reinforced inverted t-walls, are each flared 30° away from the channel centerline. They extend from either end of the gated structure to the toe of the levee. Each inlet wall is 48.5 feet long, and varies in height from 20.8 feet to 2.2 feet.

IV-A-3-b. Gated Structure. The gated control structure consists of openings 10 feet wide by 10 feet high with slide gates provided for each opening. The invert elevation of the structure is 164.0, NGVD. The operating platform is at Elevation 189.0, NGVD. Each opening has provisions for stop logs for un-watering.

IV-A-3-b-1. 3-Gated Control Structure. The 3-gated structure is 46.0 feet long, and contains three slide gates. It will be used with the 1,000-cfs Little Bayou Meto Pump Station.

IV-A-3-b-2. 5-Gated Control Structure. The 5-gated structure is 74.0 feet long, and contains five slide gates. It will be used with the 3,000-cfs Little Bayou Meto Pump Station.

IV-A-3-c. Vehicular Access Bridge. A bridge spans each opening to provide vehicular access across the structure. Each span is 12 feet long by 12 feet wide with New Jersey Barriers. The road surface of each span is at Elevation 182.5, NGVD. The bridge span is designed to support the operational equipment used for maintenance and cleanout at this site.

IV-A-3-d. Stone Protection. Stone protection consisting of 18 inches of R90 riprap will be placed in the inlet and outlet channel.

IV-A-4. BAYOU METO WILDLIFE MANAGEMENT AREA CONTROL STRUCTURES. The Bayou Meto Wildlife Management Area Control Structures consist of hinged crest gated structures located on Salt Bayou and Dry Bayou. Each control structure consists of a reinforced concrete structure, hinged crest gate, retaining walls, control building, fenced compound and riprap-lined channels. Plate IV-10 is a site map showing the location of both the Salt Bayou and the Dry Bayou Control Structures. Plate IV-11 depicts the structure for the Salt Bayou Control Structure. Plate IV-12 depicts the structure for the Dry Bayou Control Structure.

IV-A-4-a. Retaining Walls. The four retaining walls are identical. They are located at the upstream and downstream ends of the control structure and retain the backfill behind the control structure to Elevation 183.0, NGVD. Each wall is 32.0 feet long.

IV-A-4-b. Control Structure. The control structure consists of a reinforced concrete structure with integral stilling basin. The crest is at Elevation 175.0, NGVD. The control structure is 54 feet long. The stilling basin is 25 feet long with invert at Elevation 172.0, NGVD. Chute blocks and baffle blocks and an end sill are integral to the stilling basin. The outlet channel is at Elevation 172.0, NGVD. A hinged crest gate is installed on the control structure.

IV-A-4-b-1. Salt Bayou Control Structure. The Salt Bayou Control Structure is 114.0 feet wide with a channel opening of 100.0 feet.

IV-A-4-b-2. Dry Bayou Control Structure. The Dry Bayou Control Structure is 38.0 feet wide with a channel opening of 24.0 feet.

IV-A-4-c. Hinged Crest Gate. A steel fabricated hinged crest gate is used to control water elevations upstream of each structure. The top of the hinged crest gate is at Elevation 181.0 feet, NGVD, in the raised position, and at Elevation 175.0, NGVD, in the lowered position. The hinged crest gate shown is the same gate used on the J. Bennett Waterway at both the Russell B. Long and Joe D. Waggonner, Jr. Locks and Dams. The design for this gate is covered in the documentation for the locks and dams.

IV-A-4-c-1. Salt Bayou Control Structure. The hinged crest gate is 100.0 feet long with a height of 6.0 feet.

IV-A-4-c-2. Dry Bayou Control Structure. The hinged crest gate is 24.0 feet long with a height of 6.0 feet.

IV-A-4-d. Equipment Building. The equipment building houses the hydraulic pumps and control units for the structure. The floor of the building is at Elevation 192.5, NGVD, which is 2.8 feet above the 100-year flood elevation of 189.7, NGVD, and 9.5 feet above the structure end wall elevation. The building measures 12.0 feet wide by 12.0 feet long by 12.5 feet high and is constructed of cast-in-place, reinforced concrete supported above the ground by four corner columns.

IV-A-4-e. Stone Protection. Stone protection consists of 18 inches of R90 riprap upstream and downstream of the control structure.

Part B - Mechanical Design

IV-B-1. LITTLE BAYOU METO PUMP STATION

IV-B-1-a. General. The Little Bayou Meto Pump Station will be used to lower water elevations in the study area. Little Bayou Meto normally drains through the Arkansas River levee at the Little Bayou Meto Control Structure. When the Arkansas River is at high stages, the control structure will be closed and the pump station will be used to pump water from Little Bayou Meto up and over the Arkansas River levee to reduce interior water levels. This study considered three different pump station capacities, 1000, 3000 and 5000 cubic feet per second (cfs). The 5000-cfs station was determined early not to be feasible. A preliminary design and cost estimate was developed for the 1000 and 3000-cfs stations.

IV-B-1-b. 1000-cfs Station. The station will have a combined capacity of 1000-cfs at six feet average static head. The station shall have two, 500-cfs pumps which will be vertical axial/mixed flow type. The pumps shall use the low profile, type 10 formed suction intake (fsi) and shall have a discharge elbow. The pump design shall be the pull-out type, allowing for removal of the impeller bell, impeller, diffuser and lower shaft as a unit from above.

The pumps shall take advantage of siphonic recovery when possible to only pump against pool-to-pool head. The pumps shall have the capacity to prime the siphon without assistance by achieving a velocity greater then seven feet/second in the discharge pipe at the crown of the siphon during start up. The pumps shall be driven by electric motors; the motors shall provide anti-reversing devices to prevent reverse over-speeding of the pump when the motor is stopped. A vertical, parallel shaft, speed reducer shall be used to reduce the motor speed to the required pump speed. The speed reducer shall provide a thrust bearing to handle the pump thrust, and an oil cooling system with electric fan and radiator shall provide cooling for the speed reducer. The speed reducer shall be coupled to the pump with an adjustable coupling capable of adjusting the pump for proper clearance. Pump bearings shall be grease lubricated bronze/brash bushings with a timer controlled automatic grease lubrication system. Water lubricated pump bearings will be considered during detailed design work if a suitable source of clean lubrication water is available (reference Plates IV-02 and IV-03).

Total Station Capacity	1000-cfs
Pump Capacity (2 pumps)	500-cfs
Average Static Head	6 ft
Max Static Head, period of record	18.91 ft
Discharge Pipe Size	96 inch
Pump Type	Vertical Mixed Flow
Siphon Priming Capacity	232-cfs
Siphon Priming Head	35 ft
Pump Station Floor Elevation	183.0
fsi Bottom Elevation	151.5
Pump Start Elevation	167.0
Minimum Surface Elevation for Pumping	163.0
100 Year Interior Elevation	182.0

IV-B-1-b-1. Discharge Pipes. Each pump will discharge through a 96-inch pipe up and over the Arkansas River levee to a discharge structure consisting of a concrete pad and up-turned pipe exits. The pipe invert at the top of the levee shall be placed just above the project flowline elevation. These pipes shall have ½ inch wall thickness and welded joints. The pipes will be coated coal tar epoxy paint in accordance with AWWA.

IV-B-1-b-2. Siphon Breaking Valve Assembly. To prevent reverse siphoning into the protected area, each discharge pipe shall have a siphon breaking valve assembly. The siphon breaking valve assembly shall consist of an 8-inch butterfly valve with electric actuator and a "fail-safe", rechargeable battery power supply to open the valve in the case of power failure and associated piping. The siphon breaking valve assembly shall be located at the top of the levee and contained in a concrete pit for weather and damage protection.

IV-B-1-b-3. Pump Intake, Bar Screen and Trash Rake. The pumps shall use the low profile, type 10 fsi. The fsi shall be either an embedded steel liner or formed with concrete. The pump intake shall be protected by a bar screen type trash rack. The bar screens will have a maximum opening of four inches. A trash rake to remove debris from the trash rack shall be provided. The trash rake shall be a monorail crane type, similar to the Brackett Green Raking Machine, capable of removing the trash from the bar screens and carrying it to a dumpsite that can be serviced by removal equipment or dumped directly in to a truck or container.

IV-B-1-b-4. Sump Dewatering. The stoplog slot shall be provided upstream of the trash racks for dewatering. Portable pumps will be used to remove water from the pump intake area.

IV-B-1-b-5. Station Bridge Crane. A 20-ton bridge crane with top running trolley will be provided in the station for maintenance of the pumps and motors. The crane will have a span of 35 feet. The bridge, trolley and hoist shall be motorized and operated with pendant controls from the ground. The crane shall be provided with a single line auxiliary hoist.

IV-B-1-b-6. Station Ventilation. The station shall use two roof mounted exhaust fans for ventilation. The fans shall be 2000-cfm each, electric motor driven and centrifugal with roof curbs. Two air intake louvers will be located in the wall of the discharge side of the station, two feet above the ground, and directly inline with the pumps. The intake louvers shall have motorized dampers.

IV-B-1-c. 3000-cfs Station. The station will have a combined capacity of 3000-cfs at six feet average static head. The station shall have three, 1000-cfs pumps; the pumps shall be vertical axial/mixed flow type. The pumps shall use the low profile, type 10 formed suction intake (fsi) and the pumps shall have a discharge elbow. The pump design shall be the pull-out type, allowing for removal of the impeller bell, impeller, diffuser and lower shaft as a unit from above. The pumps shall take advantage of siphonic recovery when possible to only pump against pool-to-pool head. The pumps shall have the capacity to prime the siphon without assistance by achieving a velocity greater than seven feet/second in the discharge pipe at the crown of the siphon during start up. The pumps shall be driven by electric motors; the motors shall provide anti-reversing devices to prevent reverse over-speeding of the pump when the motor is stopped. A vertical, parallel shaft speed reducer shall be used to reduce the motor speed to the required pump speed. The speed reducer shall provide a thrust bearing to handle the pump thrust, and an oil cooling system with electric fan and radiator shall provide cooling for the speed reducer. The speed reducer shall be coupled to the pump with an adjustable coupling capable of adjusting the pump for proper clearance. Pump bearings shall be grease lubricated, bronze/brass bushings with a timer controlled, automatic grease lubrication system. Water lubricated pump bearings will be considered during detailed design work if a suitable source of clean lubrication water is available (reference Plates IV-05 and IV-06).

Total Station Capacity	3000-cfs
Pump Capacity (3 pumps)	1000-cfs
Average Static Head	6 ft
Max Static Head, period of Record	25.18 ft
Discharge Pipe Size	120-inch
Pump Type	Vertical Mixed Flow
Siphon Priming Capacity	232-cfs
Siphon Priming Head	37 ft
Pump Station Floor Elevation	187.0
fsi Bottom Elevation	147.7
Pump Start Elevation	167.0
Minimum Surface Elevation for Pumping	163.0
100 Year Interior Elevation	182.0

IV-B-1-c-1. Discharge Pipes. Each pump will discharge through a 120-inch pipe up and over the Arkansas River levee to a discharge structure consisting of a concrete pad and up-turned pipe exits. The pipe invert at the top of the levee shall be placed just above the project flowline elevation. These pipes shall have ½ inch wall thickness and welded joints. The pipes will be coated coal tar epoxy paint in accordance with AWWA.

IV-B-1-c-2. Siphon Breaking Valve Assembly. To prevent reverse siphoning into the protected area, each discharge pipe shall have a siphon breaking valve assembly. The siphon breaking valve assembly shall consist of a ten-inch butterfly valve with electric actuator and a "fail-safe", rechargeable battery power supply to open the valve in the case of power failure and associated piping. The siphon breaking valve assembly shall be located at the top of the levee and contained in a concrete pit for weather and damage protection.

IV-B-1-c-3. Pump Intake, Bar Screen and Trash Rake. The pumps shall use the low profile, type 10 fsi. The fsi shall be either an embedded steel liner or formed with concrete. The pump intake shall be protected by a bar screen type trash rack. The bar screens will have a maximum opening of five inches. A trash rake to remove debris from the trash rack shall be provided. The trash rake shall be a monorail crane type, similar to the Brackett Green Raking Machine, capable of removing the trash from the bar screens and carrying it to a dumpsite that can be serviced by removal equipment or dumped directly in to a truck or container.

IV-B-1-c-4. Sump Dewatering. The stoplog slot shall be provided upstream of the trash racks for dewatering. Portable pumps will be used to remove water from the pump intake area.

IV-B-1-c-5. Station Bridge Crane. A 35-ton bridge crane with top running trolley will be provided in the station for maintenance of the pumps and motors. The crane will have a span of 45 feet. The bridge, trolley and hoist shall be motorized and operated with pendant controls from the ground. The crane shall be provided with a single line auxiliary hoist.

IV-B-1-c-6. Station Ventilation. The station shall use three, roof mounted exhaust fans for ventilation. The fans shall be 3000-cfm each, electric motor driven and centrifugal with roof curbs. Three air intake louvers will be located in the wall of the discharge side of the station, two feet above the ground, and directly inline with the pumps. The intake louvers shall have motorized dampers.

IV-B-2. CANNON BREAK EXTENSION STRUCTURE. The Cannon Break Extension Structure is designed for either three or five gates, depending on the size of the pump station at Little Bayou Meto. The gates are the same size and type at each structure. The gates are standard cast iron sluice gates with wall thimbles. An electrically operated rising stem screw hoist shall be used to raise and lower the gates at approximately one foot/minute. A portable, engine-driven generator shall provide electrical power; the generator shall be sized to move two gates at once. The sluice gates and hoists are standard items from many manufacturers and no detailed design was developed for this study.

IV-B-3. SALT BAYOU AND DRY BAYOU HINGED CREST GATE STRUCTURES.

IV-B-3-a. General. The hinged crest gates at both of these structures shall be raised and lowered by means of hydraulic cylinders attached to the ends of the gate. Hydraulic power shall come from a single electric motor driven hydraulic pump. The operating machinery for Salt Bayou and Dry Bayou hinged crest gates shall be essentially the same for this study (reference Plates IV-11 and IV-12).

IV-B-3-b. Hydraulic Cylinders. The hydraulic cylinders shall be center trunnion mounted. The cylinders shall have a 10-inch bore diameter with a 5-inch rod diameter and a stroke length of 10.75 feet. The rod shall be stainless steel with threaded end. Fittings shall be either flanged or SAE-O-ring type. The trunnions shall be mounted in pillow block bearings with grease lubrication.

IV-B-3-c. Power Unit. The power unit shall consist of a variable displacement, axial piston pump driven by an electric motor. The motor and pump shall be mounted on a 150-gallon reservoir. The pump shall be rated at 15-gpm at 2000-psi. A device that will bring the pump from neutral

to full flow in approximately two seconds shall control the pump. A 20-horsepower electric motor shall power the unit. A duplex type hydraulic oil filter, pressure gauge and a system relief valve shall be included in the power unit.

IV-B-3-d. Controls and Piping. The gate shall be raised or lowered by the activation of a hydraulic control valve. The control valve shall be 4-way, 3-position, spring centered and electric solenoid operated. A counter-balance valve shall hold up the gate, and two relief valves shall protect the gate/cylinders. An operation station with raise, lower and stop buttons shall be provided at a location where the operator can see the gate. Piping shall be Schedule 160, stainless steel pipe with welded joints and socket-weld fittings. Piping to the far side cylinder shall be routed in a trench under the gate. Flexible hose shall be used to make connections to the cylinders to provide for movement during operation. The following sequence of operation is designed to prevent hydraulic shock: with the pump running and in the neutral position, select either raise or lower to begin moving the gate; the 4-way valve shall shift, then the pump controller shall shift the pump to provide flow; once the gate is in the desired position, press stop; then, the pump controller will shift the pump to neutral and the 4-way valve will shift to closed.

IV-B-3-e. Gate Connection. The cylinder shall be connected a section of steel pipe to complete the length required to reach the gate connection. The pipe and rod shall be connected with a threaded coupling. The pipe shall have a female clevis on the other end for connection the gate.

IV-B-4. BOGGY SLOUGH WATER CONTROL STRUCTURE. The Boggy Slough Water Control Structure has one sluice gate operated by a manual rising stem screw hoist, pedestal mounted. The gate and hoist are standard products of many manufacturers and no detail design was done for this study.

Part C - Electrical Design

IV-C-1. GENERAL. This section presents the preliminary electrical design and analysis used in determining the

first costs and the average annual costs required for the feasibility study.

IV-C-2. LITTLE BAYOU METO PUMP STATION.

IV-C-2-a. Electric Design. The preliminary electrical design consisted of sizing the pump motors and selecting the switchgear. The technical basis and design criteria for the selection of type and configuration of electrical equipment are given in the EMs.[i,ii] See the Appendices IV-C-A and IV-C-B for tables of the pump curves input to HEC-IFH. Note that the curves are static H-Q pump curves; i.e., the pumping system is modeled, not just the pump bowl. Pump motor sizing (500 and 1000-cfs pumps) is also included. Typical medium-voltage motor controller ratings are given in Appendix IV-C-C.

IV-C-2-b. Electrical Systems and Equipment Requirements.

IV-C-2-b-1. Electric Motor Alternative - 1000-cfs Pump. The pump motor is a vertical induction, rated 4-kV, 1750-hp, 6-pole/1200-rpm, and coupled to pump with a speed reducer. The switchgear is metal-clad, rated 5-kV, with 600-A fused load-interrupter switch and digital multi-function metering. Motor controllers are medium-voltage, reduced-voltage autotransformer type for controlling pumps, with digital motor protection and monitoring relay. The motor control center is rated 489-V, 3-phase, 600-A with main breaker (225A/3P) and metering section (voltmeter, ammeter and ammeter switch) and auxiliary sections for motor auxiliaries and station service. The weights and dimensions of switchgear were based on GE switchgear (See Appendix IV-C-F).

IV-C-2-b-2. Electric Motor Alternative - 3000-cfs Pump. The vertical induction motors, three each, are rated 4-kV, 4000-hp, 6-pole/1200-rpm, with gear-drive coupled to pump. The metal-clad switchgear is rated 5-kV, with 2000-A main breaker. The motor control center is rated 480-V, 3-phase, 600-A with main breaker and metering section and auxiliary sections for motor auxiliaries and station service.

IV-C-2-c. Electric Power Supply. The fixed costs for the transmission line and substation, or distribution line and transformer bank, for each alternative were obtained from Entergy. The basis of Entergy's figures were estimates of the amount of power and energy the station would use. These estimates relied upon the preliminary electrical

design and energy analysis made for this study. Points of contact at Entergy were established early in the process (See the messages in Appendix IV-C-D).

IV-C-2-d. Power and Energy Analysis. One large pump station is planned at the Little Bayou Meto Drainage Structure. In support of the study to determine the most economical pump station capacity, the annual operating costs of operating the pump units were estimated.[iii] The power and energy analysis forecasts the average annual cost for only operating the pumps using IFH pump station operating data. Electric motors and diesel engines are the two prime movers that were considered. Electric power demand, electrical energy usage and diesel fuel consumption were computed over the period-of-record using motor and engine models and the pump operating records from the IFH continuous simulation analyses. However, the diesel fuel consumption was not pursued because of the favorable rate schedule that Entergy furnished; see correspondence, Appendix IV-C-D, subject: Entergy - Little Bayou Meto Pumping Plant for Rate SGS and Rider M1. Such a power and energy cost study consists of four phases.

IV-C-2-d-1. Phase I. For each alternative, obtain data from ED-H for selecting pump curves. Refer to Appendix IV-C-D, under CEMVK-ED-H - Little Bayou Meto Pumping Plant for related correspondence. Determine pump sizes, motor sizes, and station configuration:[iv]

IV-C-2-d-1-a. Pump Motor Sizes.

- 1750 hp (500-cfs pump)
- 4000 hp (1000-cfs pump)

IV-C-2-d-1-b. Pump Station Sizes.

- 1000-cfs (2, 500-cfs pumps)
- 3000-cfs (3, 1000-cfs pumps)
- 5000-cfs (5, 1000-cfs pumps) (This alternative dropped from study.)

IV-C-2-d-1-c. Number of Pumps/Stations. At least two, depending on electric utility requirements and maximum manufactured pump capacity; multiple pumps will have sequential start elevations incremented by 0.5-1.0 feet.

In any given alternative, use multiples of one size pump only; do not mix pumps of different capacities in a station to simplify pump O&M.

IV-C-2-d-2. Phase II. Furnish static H-Q pump curves for each alternative to ED-H for input to IFH: Screen PUMP, Figure 7.3, Page 119, Comment Head loss set to absolute minimum (0.10 feet); Pump START and STOP elevations by ED-H.

IV-C-2-d-3. Phase III. Obtain POR data that results from the IFH-CSA hydrologic analyses.

IV-C-2-d-4. Phase IV. Forecast annual pump operating costs using the POR data, motor models, and the rate schedule from the local electric utility, Entergy. (See input data in Appendix IV-C-G). A full year of pump operation data is given with POR summary and notes in Appendix IV-C-E.

IV-C-2-e. Fixed Costs. The up-front construction cost of utility service was obtained from Entergy. The plant demand was not high enough to warrant the use of a transmission line and substation. Instead, power will be supplied at 4160-V, 3-phase after being transformed from the 13.8-kV radial feed configuration of an Entergy distribution line extension (See Appendix IV-C-D for related correspondence). The costs of major electrical equipment were obtained from manufacturers or from cost estimating guides. The costs of pump motors were obtained from GE Motors.

IV-C-2-f. Annual Costs. The annual costs of operating the pumps were calculated using the pump operation data and Entergy"s rate schedule. (See pertinent correspondence in Appendix IV-C-E, and Period-of-Record - Metering and Billing Histories in Appendix IV-C-H).

IV-C-3. CANNON BREAK EXTENSION STRUCTURE. No electrical design was performed for this structure since electrical costs would not be significant.

IV-C-4. BAYOU METO WILDLIFE MANAGEMENT AREA (WMA) HINGED CREST GATES. No electrical design was performed for these structures since the electrical costs would be insignificant. Each hinged crest gate structure will have a hydraulic pump driven by a 20-hp motor with a motor starter and small panelboard. The local electric utility,

First Electric Co-operative Corporation, was contacted about furnishing permanent electric service to both Hinged Crest Gate structures (See Correspondence, Appendix IV-C-D, subject: First Electric - Hinged Crest Gate Structure).

Part D - Civil Design

IV-D-1. GENERAL. The features considered included new grade control structures as well as modifications to existing grade control structures. The work shall be performed from one side of the waterway only.

IV-D-2. BOGGY SLOUGH WATER CONTROL STRUCTURE. This feature consists of a weir and a gated culvert for drawdown. The weir consists of riprap and sheet pile (PZ-22 Sheet Piles) with an 18-inch concrete cap extending from top bank to top bank of the stream, constructed at a control elevation of 179.0, NGVD. The upstream portion of the weir will consist of 18-inch (R200) riprap over nine inches of bedding material extending 25 feet upstream from the sheet pile at an elevation of 179.0, NGVD, and then transition to the existing thalweg of the stream at a slope of 1V to 3H. The downstream portion of the weir will consist of 36-inch (R650) riprap over nine inches of bedding material extending 25 feet downstream from the sheet pile at an elevation of 178.0, NGVD, and then transition to the existing thalweg of the stream at a slope of 1V to 12H. An erosion retardant key will be constructed at the upstream and downstream end of the weir. A bypass channel with 3-foot tall x 5-foot wide gated box culvert is to parallel the Boggy Slough Weir Structure. The channel/culvert invert is to be at an elevation of 173.0, NGVD, with 1V on 3H side slopes to existing ground at approximately Elevation 185.0, NGVD. Side slopes bottom and culvert embankment are to be armored with 12 inches of R90 riprap over engineering fabric. Plate IV-13 depicts the Boggy Slough Water Control Structure.

IV-D-3. BOGGY SLOUGH BYPASS. This feature contains three structures.

IV-D-3-a. Boggy Slough Diversion Channel Structure, Mile 0.1. This feature consists of a sheet pile weir (PZ-22 Sheet Piles) with an 18-inch concrete cap extending from top bank to top bank of the stream, constructed at a

control elevation of 173.0, NGVD. The upstream portion of the weir will consist of 18-inch (R200) riprap over nine inches of bedding material extending 25 feet upstream from the sheet pile at an elevation of 172.0, NGVD, and then transition to the existing thalweg of the stream at a slope of 1V to 4H. The downstream portion of the weir will consist of 36-inch (R650) riprap over nine inches of bedding material extending 25 feet downstream from the sheet pile at an elevation of 172.0, NGVD, and then transition to the existing thalweg of the stream at a slope of 1V to 12H. An erosion retardant key will be constructed at the upstream and downstream end of the weir. Plate IV-14 depicts the Boggy Slough Diversion Channel Structure, Mile 0.1.

IV-D-3-b. Boggy Slough Diversion Channel Structure, Mile 4.97. This feature consists of a sheet pile weir (PZ-22 Sheet Piles) with an 18-inch concrete cap extending from top bank to top bank of the stream, constructed at a control elevation of 176.0, NGVD. The upstream portion of the weir will consist of 18-inch (R200) riprap over nine inches of bedding material extending 25 feet upstream from the sheet pile at an elevation of 175.0, NGVD, and then transition to the existing thalweg of the stream at a slope of 1V to 4H. The downstream portion of the weir will consist of 36-inch (R650) riprap over nine inches of bedding material extending 25 feet downstream from the sheet pile at an elevation of 175.0, NGVD, and then transition to the existing thalweg of the stream at a slope of 1V to 12H. An erosion retardant key will be constructed at the upstream and downstream end of the weir. Plate IV-15 depicts the Boggy Slough Diversion Channel Structure, Mile 4.97.

IV-D-3-c. Castor Bayou Low Drop Grade Control Structure. This feature consists of a low drop grade control structure extending from top bank to top bank of the stream, constructed at a control elevation of 175.0, NGVD. The upstream portion of the weir will consist of 24-inch (R90) riprap over nine inches of bedding material extending 10 feet upstream from the centerline of the structure at an elevation of 175.0, NGVD. The downstream portion of the weir will consist of 36-inch (R650) riprap over nine inches of bedding material extending 18 feet from Elevation 175.0, NGVD, to Elevation 169.0, NGVD, at a slope of 1V to 3H; invert elevation of Elevation 169.0, NGVD, for a distance of 17 feet; transitioning to an elevation of 172.0, NGVD,

at a slope of 1V on 5H; and then extending 25 feet at Elevation 172.0, NGVD. An erosion retardant key will be constructed at the upstream and downstream end of the weir. Plate IV-16 depicts the Castor Bayou Low Drop Grade Control Structure.

IV-D-4. INDIAN BAYOU DITCH WEIR, MILE 58.3. This feature consists of a sheet pile weir (PZ-22 Sheet Piles) with an 18-inch concrete cap extending from top bank to top bank of the stream, constructed at a control elevation of 215.0, NGVD. The upstream portion of the weir will consist of 18-inch (R200) riprap over nine inches of bedding material extending 25 feet upstream from the sheet pile at an elevation of 214.0, NGVD, and then transition to the existing thalweg of the stream at a slope of 1V to 4H. The downstream portion of the weir will consist of 36-inch (R650) riprap over nine inches of bedding material extending 25 feet downstream from the sheet pile at an elevation of 214.0, NGVD, and then transition to the existing thalweg of the stream at a slope of 1V to 12H. An erosion retardant key will be constructed at the upstream and downstream end of the weir. Plate IV-17 depicts the Indian Bayou Weir, Mile 58.3.

IV-D-5. INDIAN BAYOU WEIR, MILE 16.4. This feature consists of a sheet pile weir (PZ-22 Sheet Piles) with an 18-inch concrete cap extending from top bank to top bank of the stream, constructed at a control elevation of 215.0, NGVD. The upstream portion of the weir will consist of 18-inch (R200) riprap over nine inches of bedding material extending 25 feet upstream from the sheet pile at an elevation of 214.0, NGVD, and then transition to the existing thalweg of the stream at a slope of 1V to 4H. The downstream portion of the weir will consist of 36-inch (R650) riprap over nine inches of bedding material extending 25 feet downstream from the sheet pile at an elevation of 214.0, NGVD, and then transition to the existing thalweg of the stream at a slope of 1V to 12H. An erosion retardant key will be constructed at the upstream and downstream end of the weir. Plate IV-18 depicts the Indian Bayou Weir, Mile 16.4.

IV-D-6. CROOKED CREEK WEIR MODIFICATIONS. This feature consists of removing an existing riprap weir at Mile 13.3 of Crooked Creek. The weir was constructed by placing riprap into the existing channel. The approximate average elevation is 189.0, NGVD. The riprap will be removed to

Elevation 182.0, NGVD, with a channel bottom width of 45 feet and 1V on 3H side slopes. Plate IV-19 depicts the Crooked Creek Weir Modifications.

IV-D-7. BIG BAYOU METO DIVERSION WEIRS. This feature consists of the construction of weirs at Mile 0.0 and Mile 2.5.

IV-D-7-a. Big Bayou Meto Diversion Channel Low Water Weir, Mile 0.0. This feature consists of a sheet pile weir (PZ-22 Sheet Piles) with an 18-inch concrete cap extending from top bank to top bank of the stream, constructed at a control elevation of 215.0, NGVD. The upstream portion of the weir will consist of 18-inch (R200) riprap over nine inches of bedding material extending 25 feet upstream from the sheet pile at an elevation of 214.0, NGVD, and then transitioning to the existing thalweg of the stream at a slope of 1V to 4H. The downstream portion of the weir will consist of 36-inch (R650) riprap over nine inches of bedding material extending 25 feet downstream from the sheet pile at an elevation of 214.0, NGVD, and then transition to the existing thalweg of the stream at a slope of 1V to 12H. An erosion retardant key will be constructed at the upstream and downstream end of the weir. Plate IV-20 depicts the Big Bayou Meto Diversion Channel Low Water Weir, Mile 0.0.

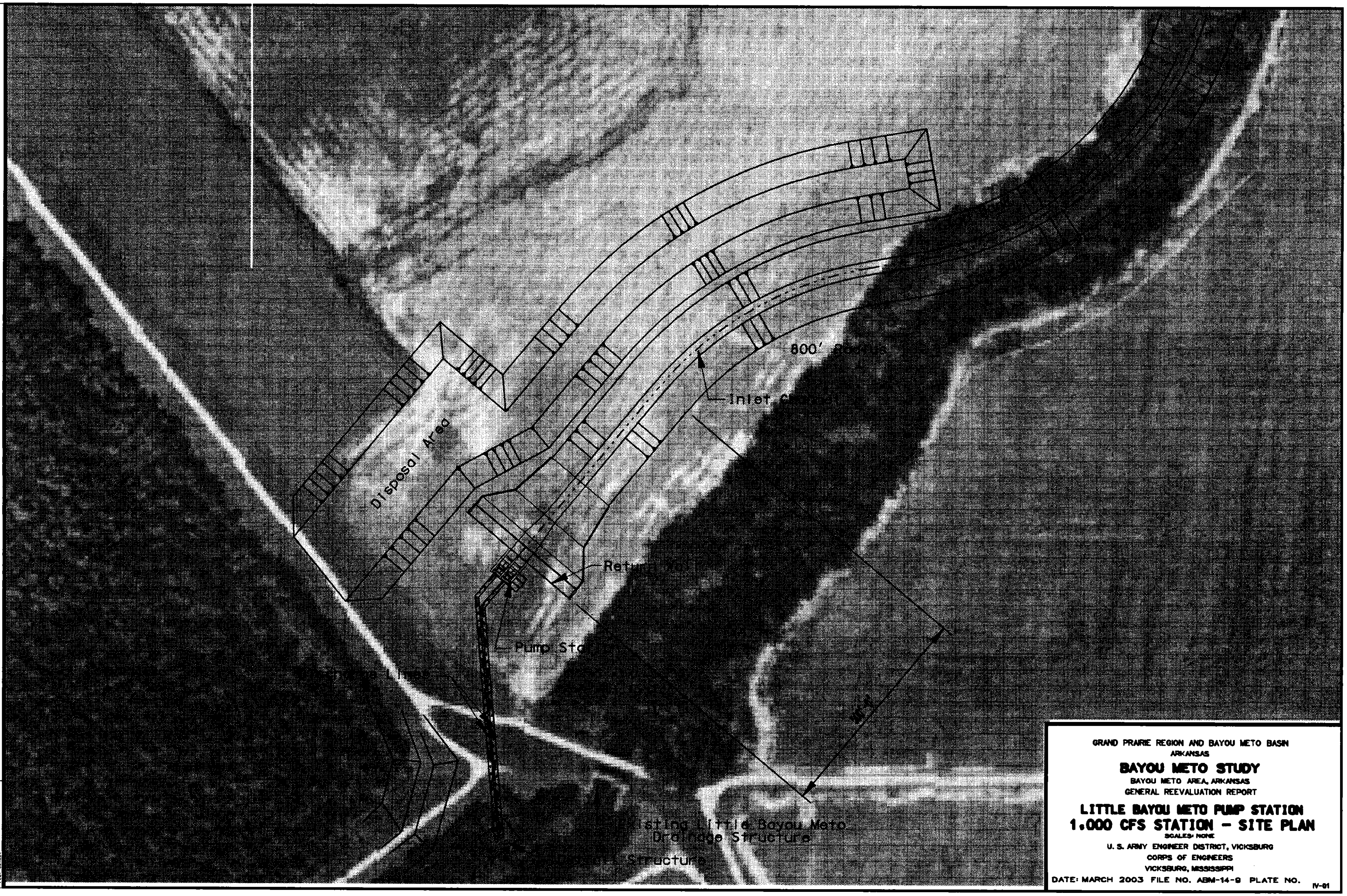
IV-D-7-b. Big Bayou Meto Diversion Channel Low Water Weir, Mile 2.5. This feature consists of a sheet pile weir (PZ-22 Sheet Piles) with an 18-inch concrete cap extending from top bank to top bank of the stream, constructed at a control elevation of 218.0, NGVD. The upstream portion of the weirs will consist of 18-inch (R200) riprap over nine inches of bedding material extending 25 feet upstream from the sheet pile at an elevation of 217.0, NGVD, and then transitioning to the existing thalweg of the stream at a slope of 1V to 4H. The downstream portion of the weir will consist of 36-inch (R650) riprap over nine inches of bedding material extending 25 feet downstream from the sheet pile at an elevation of 217.0, NGVD, and then transition to the existing thalweg of the stream at a slope of 1V to 12H. An erosion retardant key will be constructed at the upstream and downstream end of the weir. Plate IV-21 depicts the Big Bayou Meto Diversion Channel Low Water Weir, Mile 2.5.

[i] *Engineering and Design - Mechanical and Electrical Design of Pumping Stations*, EM 1110-2-3105 (Change 2), 30 November 1999 (change 2)

[ii] *Engineering and Design - General Principles Of Pumping Station Design And Layout*, EM 1110-2-3102, 28 February 1995

[iii] *Forecasting Operation Costs for Flood-Control Pumping Station Alternatives*,
Hank T. Braswell, P.E., USACE Electrical and Mechanical Conference, St. Louis, 1995

[iv] *HEC-IFH User's Manual*, Apr 92



GRAND PRAIRIE REGION AND BAYOU METO BASIN
ARKANSAS

BAYOU METO STUDY

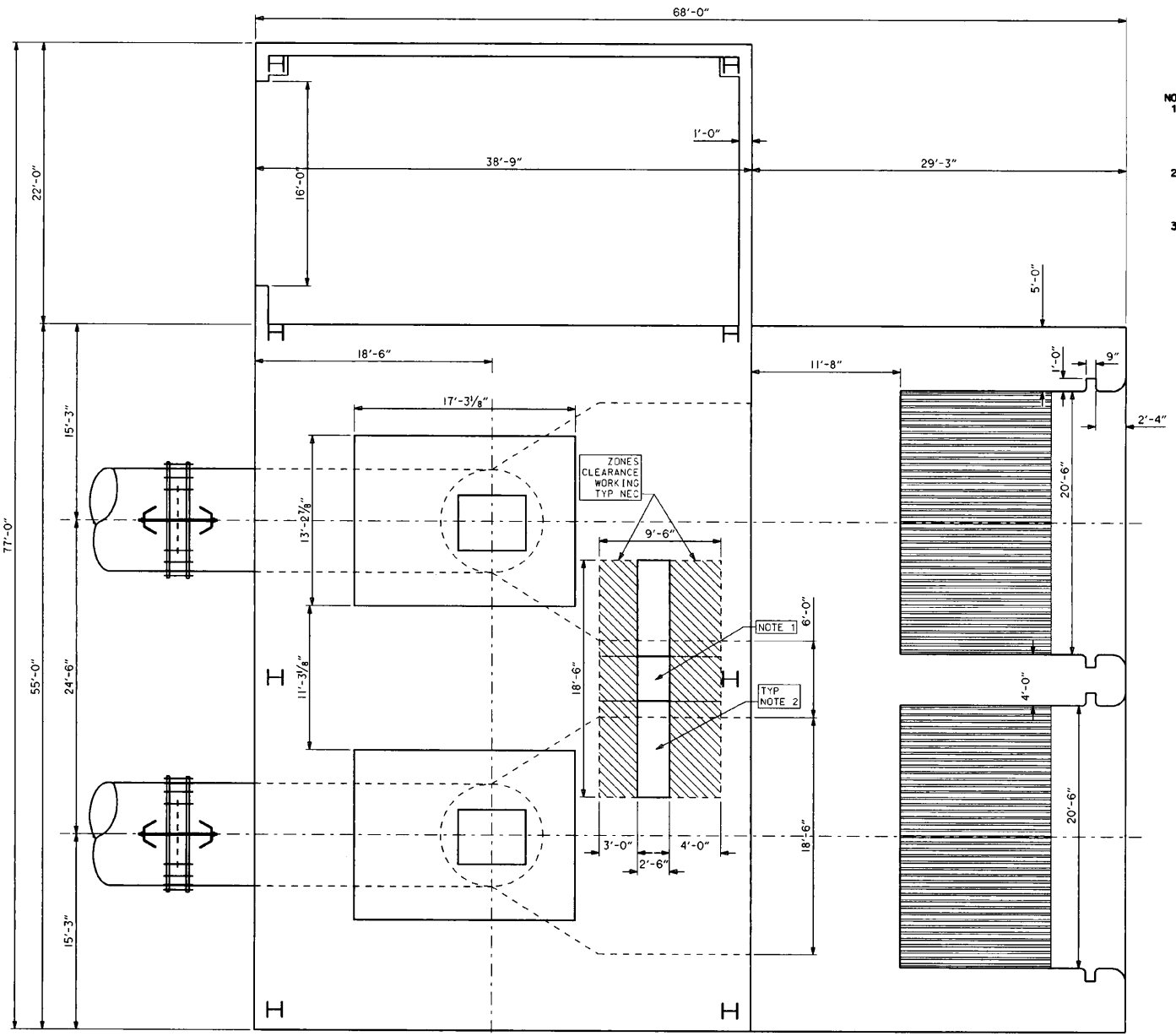
BAYOU METO AREA, ARKANSAS
GENERAL REEVALUATION REPORT

LITTLE BAYOU METO PUMP STATION
1,000 CFS STATION - SITE PLAN

SCALES: NONE

U. S. ARMY ENGINEER DISTRICT, VICKSBURG
CORPS OF ENGINEERS
VICKSBURG, MISSISSIPPI

DATE: MARCH 2003 FILE NO. ABM-14-9 PLATE NO. IV-01



NOTES:

1. MAIN DISCONNECT SWITCH:
   5-KV DRAWOUT FUSED LOAD-BREAK SW
   90"H x 38"W x 30"D, 2000#, 1-HIGH
   ENCLOSURE, 600-A FUSED RATING (DE
   FOR NON-VENTED ENCLOSURE)
2. 5-KV MVC RVAT (TYP OF 2):
   90"H x 90"W x 30"D, 5000# 1-HIGH
   ENCLOSURE 400-A CONTACTORS 2800 K
   (DERATE 0.8 FOR NON-VENTED ENCLOS
3. IF REQ'D, MOUNT SWITCHGEAR ON CO
   TO ALLOW FULL DOOR SWING OVER SO
   ASSEMBLY.

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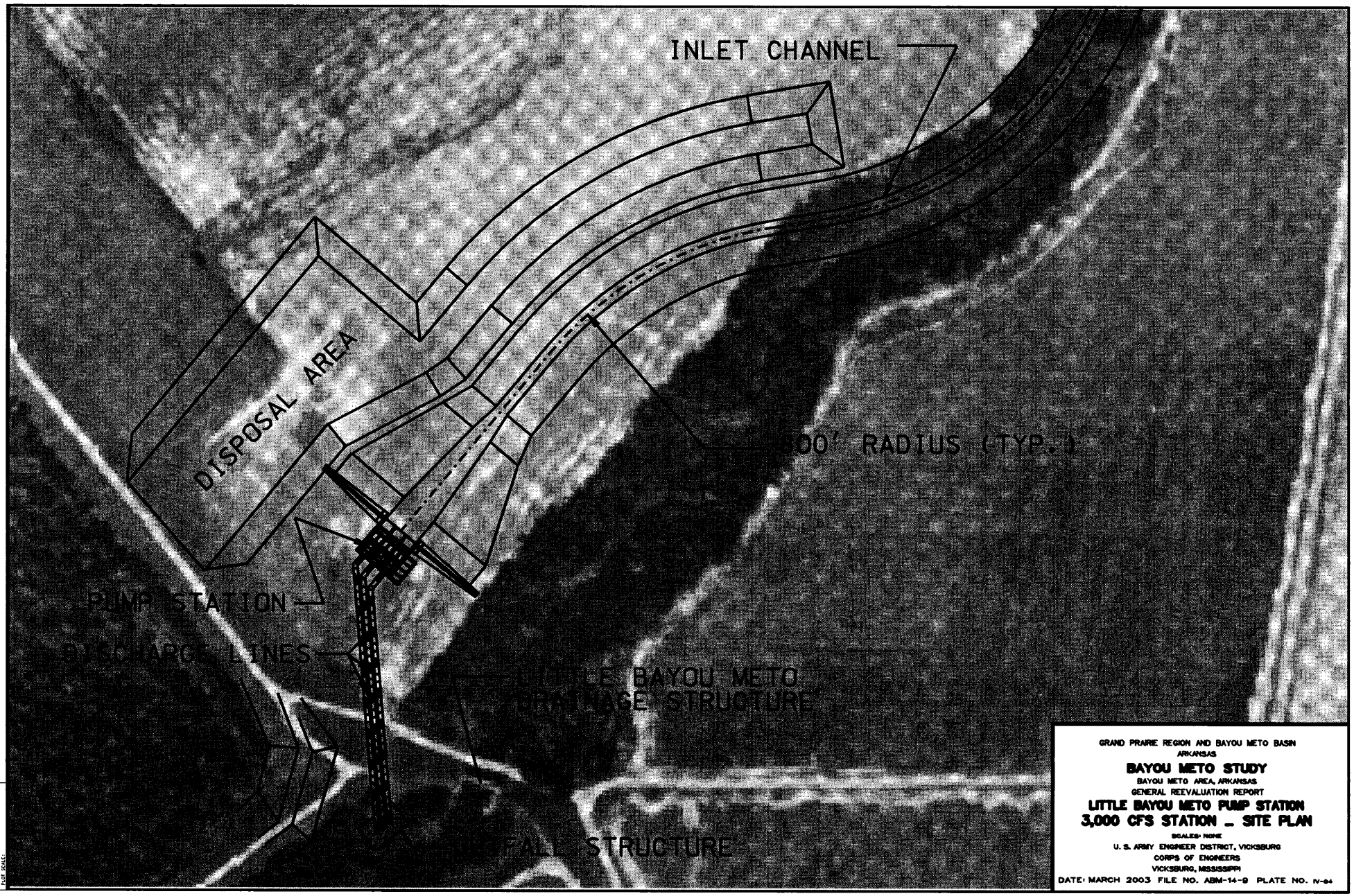


GRAND PRAIRIE REGION AND BAYOU METO BASIN
ARKANSAS

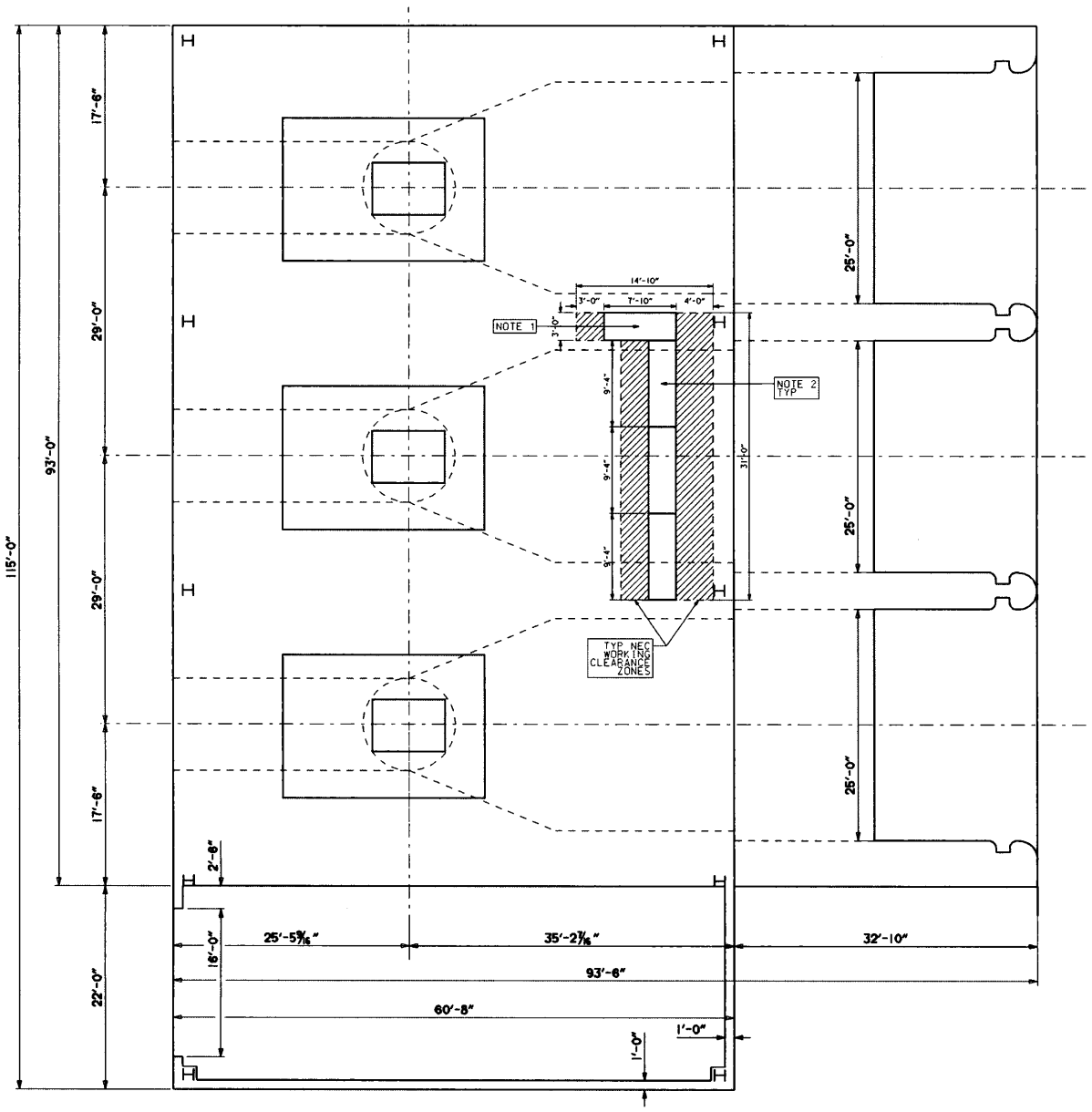
BAYOU METO STUDY

BAYOU METO AREA, ARKANSAS
GENERAL REEVALUATION REPORT

LITTLE BAYOU METO PUMP STATION
3,000 CFS STATION _ SITE PLAN

SCALES: NONE
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
CORPS OF ENGINEERS
VICKSBURG, MISSISSIPPI
DATE: MARCH 2003 FILE NO. ABM-14-9 PLATE NO. IV-64

USER (DRAFT) NO.
DESIGN FILE NO.
PLOT SCALE



NOTES:

1. MAIN DISCONNECT SWITCH:
   5-KV 2000-A METAL-CLAD VACUUM BREAKER
   95"H x 36"W x 94"D, 4000#, 1-HIGH VENTED
   ENCLOSURE. TRANSITION SECTION NOT SHOWN.
2. 5-KV MVC RVAT (TYP OF 3):
   5600 HP MAX. 800-A CONTACTORS
   90"H x 112"W x 30"D. 5200#. 1-HIGH VENTED
   ENCLOSURE (DERATE 0.8 FOR NON-VENTED
   ENCLOSURES)
3. IF REQ'D. MOUNT SWITCHGEAR ON CONCRETE PAD
   TO ALLOW FULL DOOR SWING OVER SOLE PLATE
   ASSEMBLY.

GRAND PRAIRIE REGION AND BAYOU METO BASIN
ARKANSAS

BAYOU METO STUDY

BAYOU METO AREA, ARKANSAS
GENERAL REEVALUATION REPORT

LITTLE BAYOU METO PUMP STATION
3,000 CFS STATION - PLAN

SCALES: NONE
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
CORPS OF ENGINEERS
VICKSBURG, MISSISSIPPI
DATE: MARCH 2003 FILE NO. ABM-14-9 PLATE NO. IV-05

USER INDEX NO.
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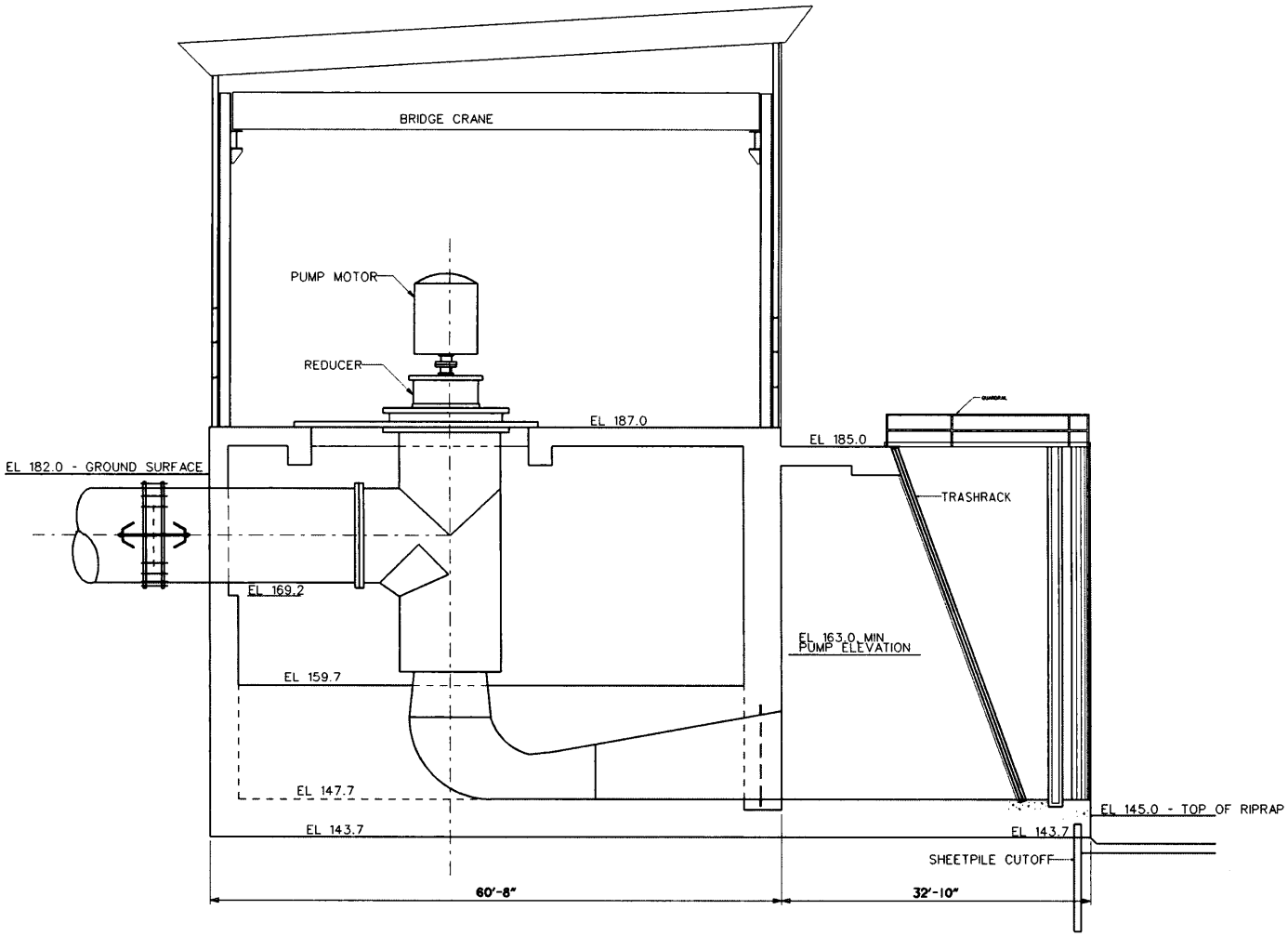


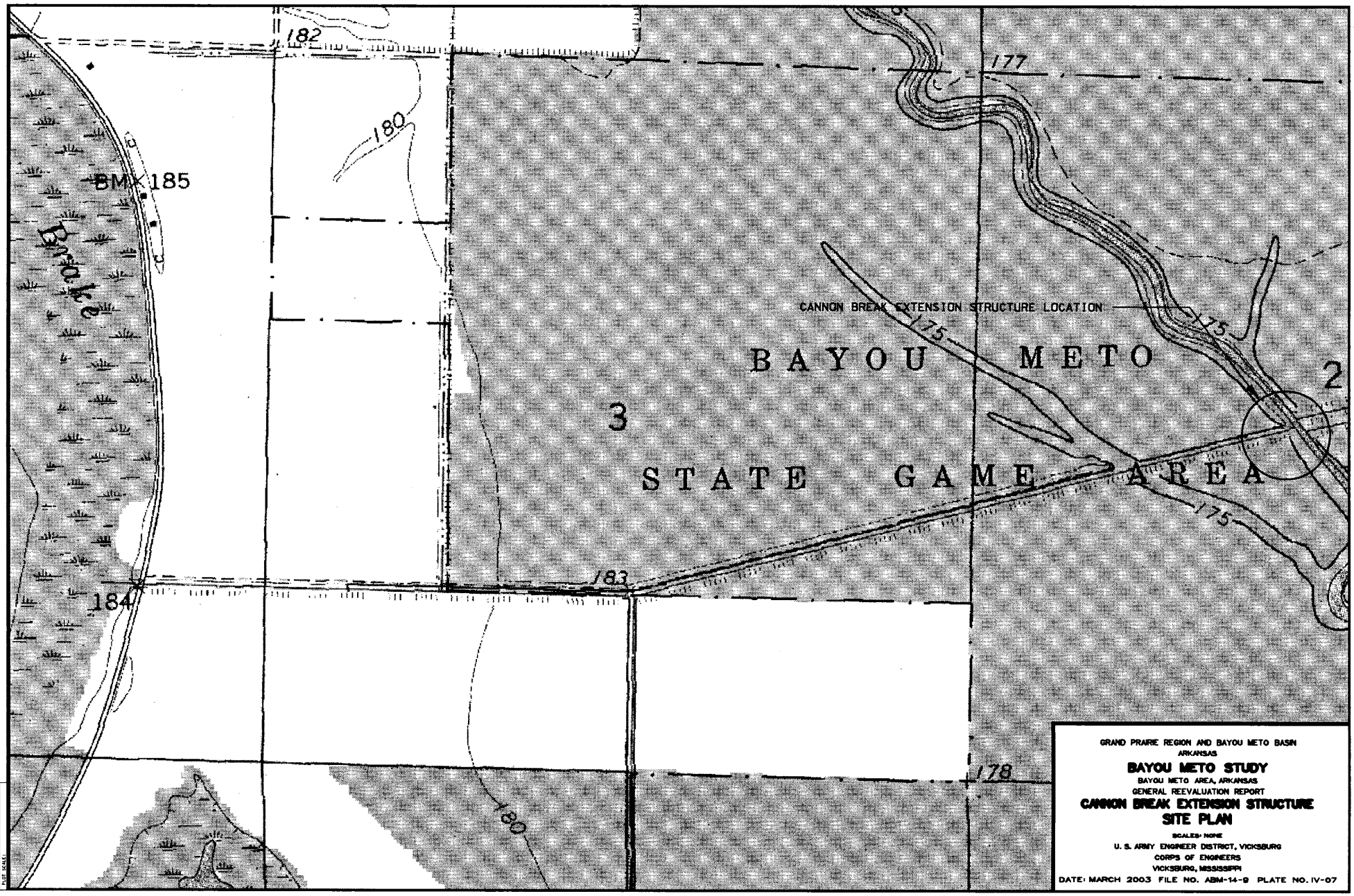
GRAND PRAIRIE REGION AND BAYOU METO BASIN
ARKANSAS

BAYOU METO STUDY

BAYOU METO AREA, ARKANSAS
GENERAL REEVALUATION REPORT

LITTLE BAYOU METO PUMP STATION
3,000 CFS STATION - SECTION

SCALES: NONE
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
CORPS OF ENGINEERS
VICKSBURG, MISSISSIPPI
DATE: MARCH 2003 FILE NO. ABM-14-9 PLATE NO. IV-06



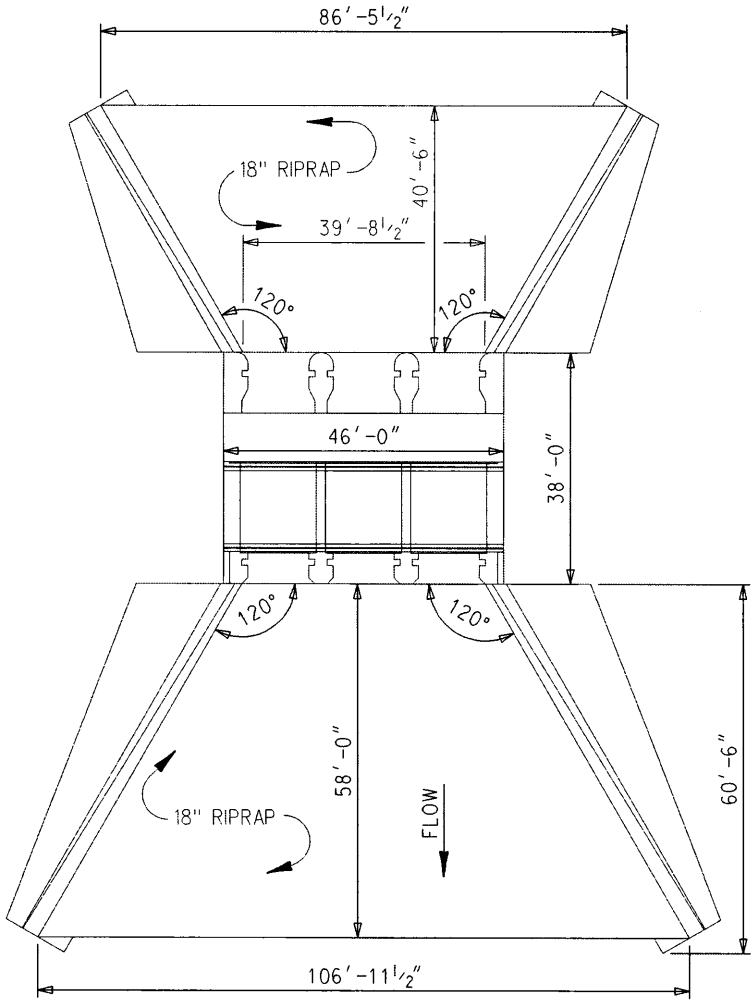
GRAND PRAIRIE REGION AND BAYOU METO BASIN
ARKANSAS

BAYOU METO STUDY

BAYOU METO AREA, ARKANSAS
GENERAL REEVALUATION REPORT

CANNON BREAK EXTENSION STRUCTURE
SITE PLAN

SCALES: NONE
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
CORPS OF ENGINEERS
VICKSBURG, MISSISSIPPI
DATE: MARCH 2003 FILE NO. ABM-14-9 PLATE NO. IV-07



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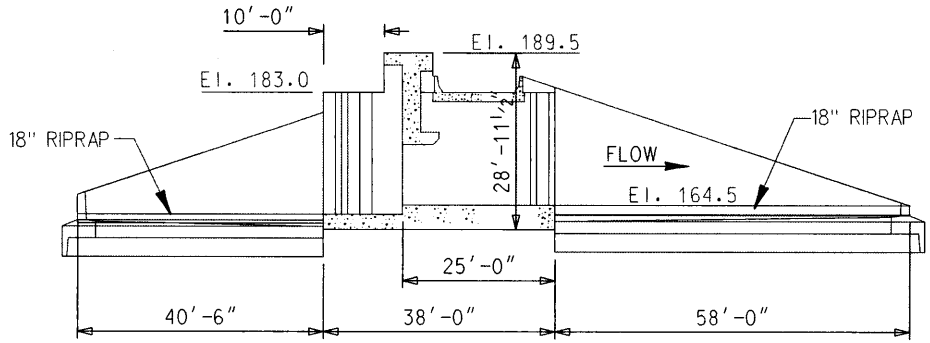

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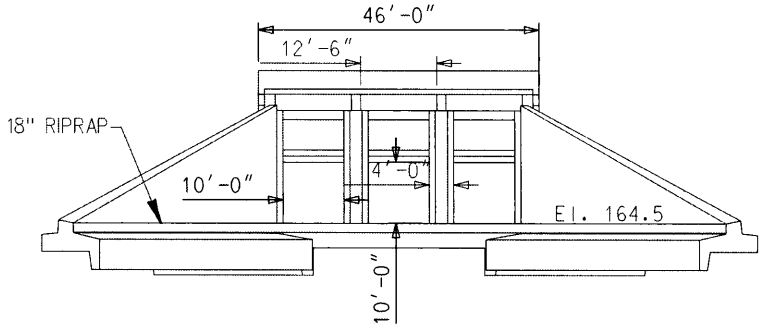


DOWNSTREAM ELEVATION

GRAND PRAIRIE REGION AND BAYOU METO BASIN
ARKANSAS

BAYOU METO STUDY

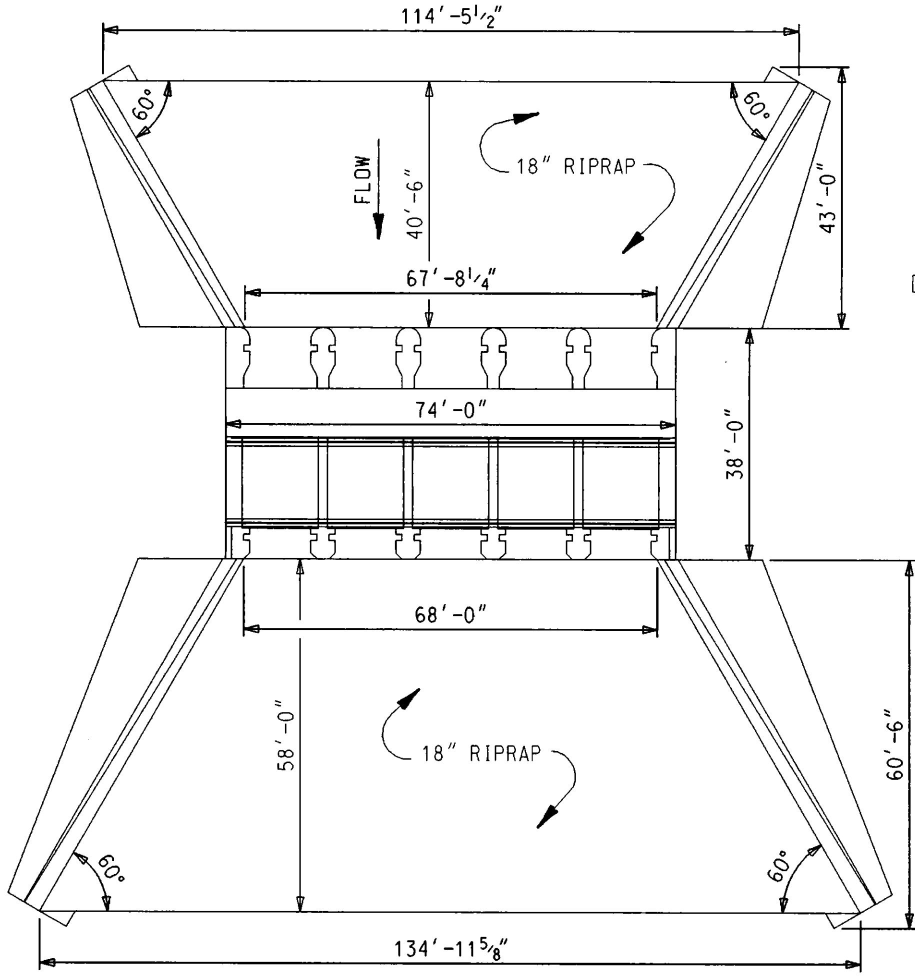
BAYOU METO AREA, ARKANSAS
GENERAL REEVALUATION REPORT

CANNON BREAK EXTENSION STRUCTURE
1,000 CFS ALTERNATIVE

SCALES: NONE

U. S. ARMY ENGINEER DISTRICT, VICKSBURG
CORPS OF ENGINEERS
VICKSBURG, MISSISSIPPI

DATE: MARCH 2003 FILE NO. ABM-14-9 PLATE NO. IV-08



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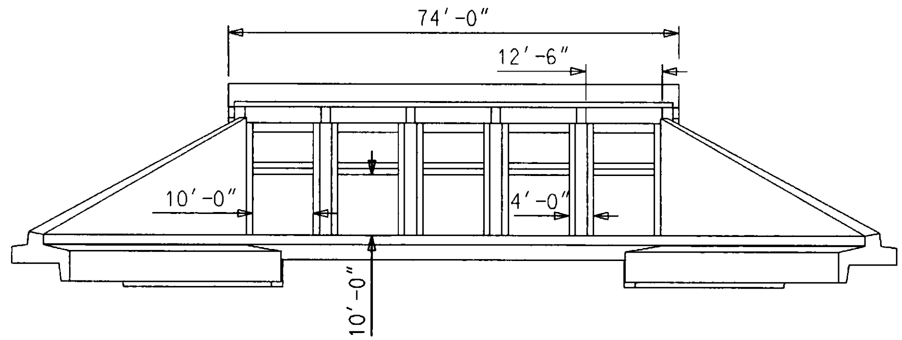
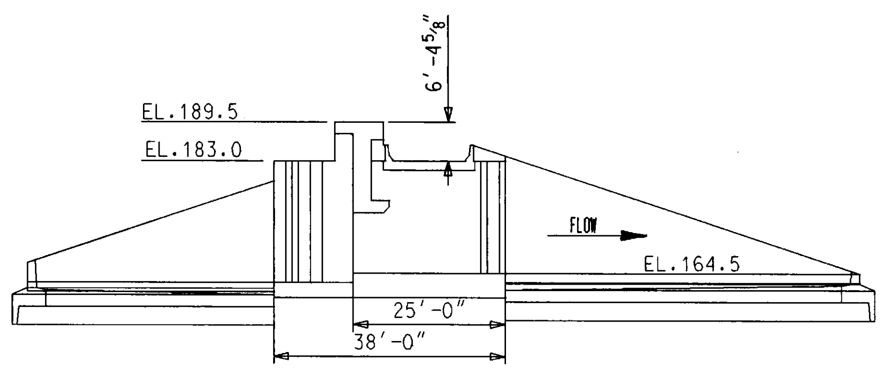


DOWNSTREAM ELEVATION



SECTION THROUGH CENTERLINE

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GENERAL REEVALUATION REPORT
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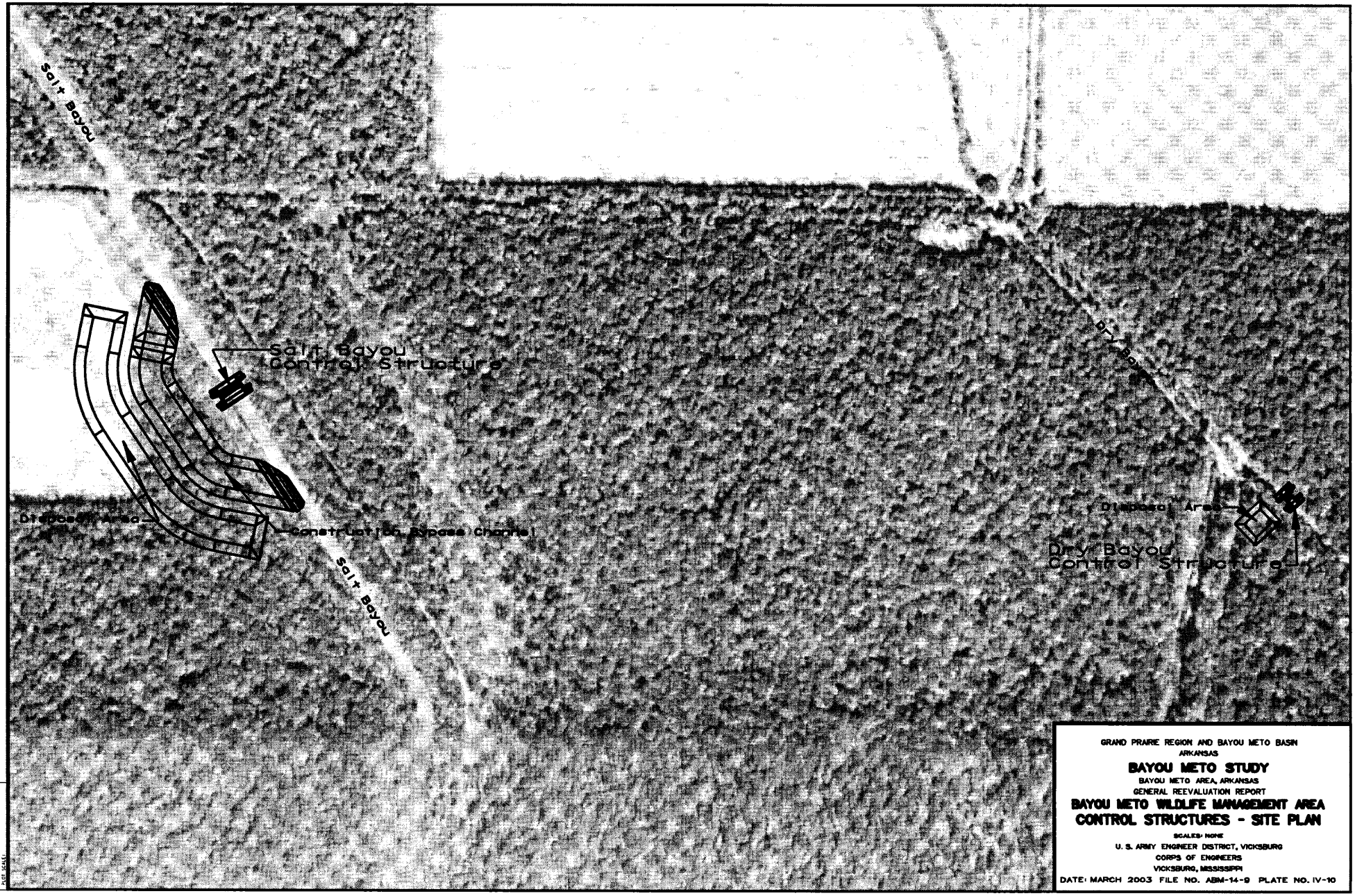
3,000 CFS ALTERNATIVE
SCALE: NONE
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
CORPS OF ENGINEERS
VICKSBURG, MISSISSIPPI
DATE: MARCH 2003 FILE NO. ABM-14-2 PLATE NO. IV-[illegible]



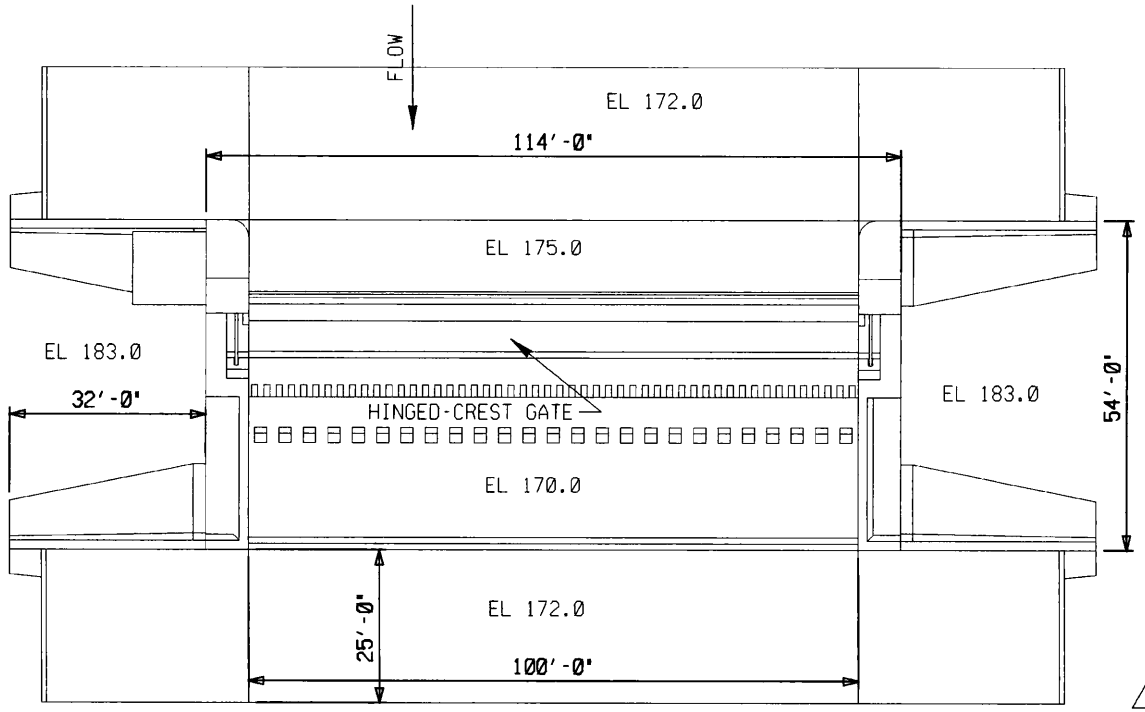
GRAND PRAIRIE REGION AND BAYOU METO BASIN
ARKANSAS

BAYOU METO STUDY

BAYOU METO AREA, ARKANSAS
GENERAL REEVALUATION REPORT

BAYOU METO WILDLIFE MANAGEMENT AREA
CONTROL STRUCTURES - SITE PLAN

SCALES: NONE
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
CORPS OF ENGINEERS
VICKSBURG, MISSISSIPPI
DATE: MARCH 2003 FILE NO. ABM-14-9 PLATE NO. IV-10



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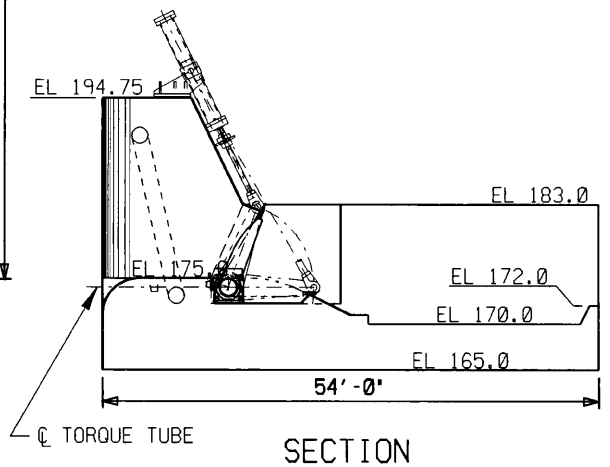

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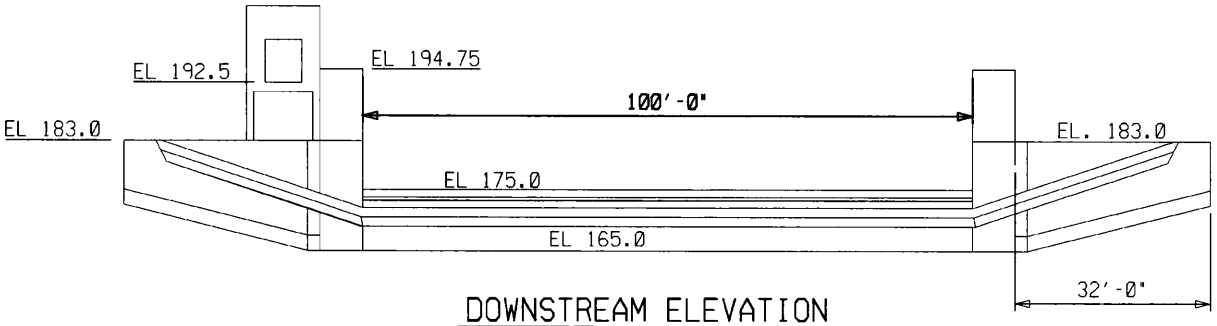


DOWNSTREAM ELEVATION

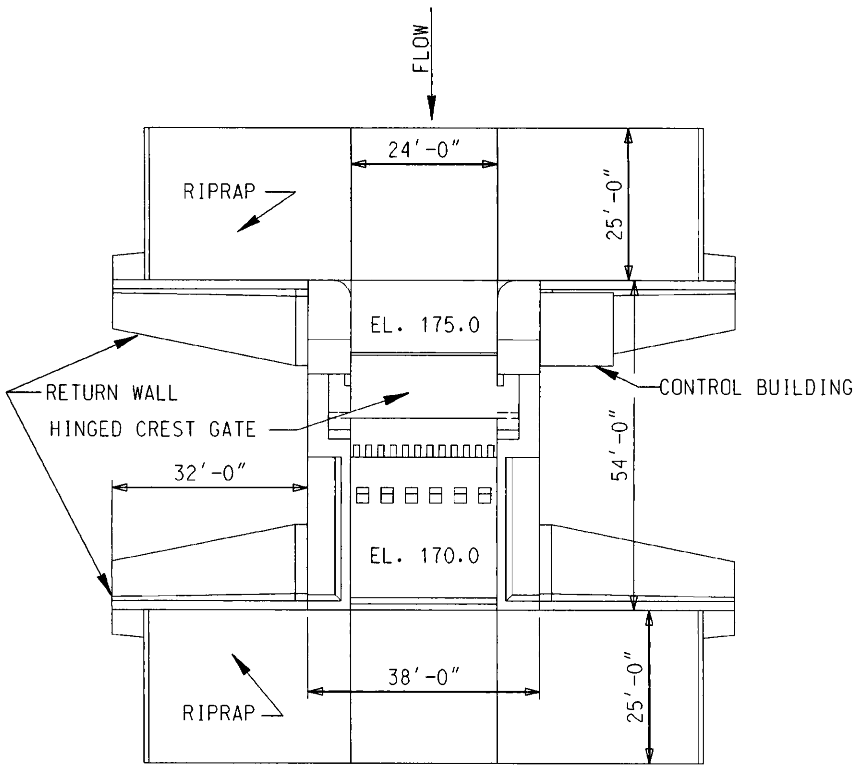
GRAND PRAIRIE REGION AND BAYOU METO BASIN
ARKANSAS

BAYOU METO STUDY

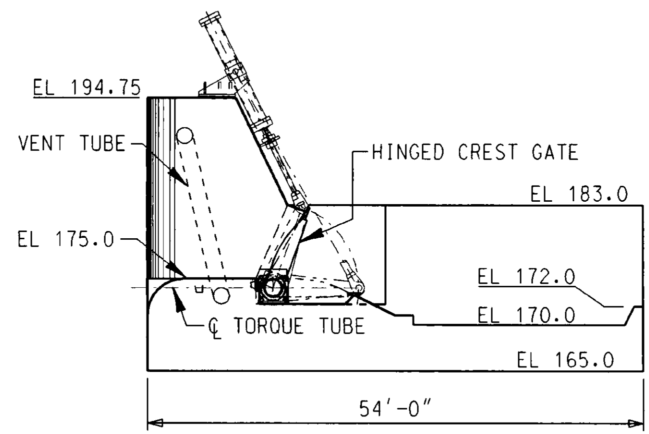
BAYOU METO AREA, ARKANSAS
GENERAL REEVALUATION REPORT

BAYOU METO WILDLIFE MANAGEMENT AREA
SALT BAYOU CONTROL STRUCTURE

SCALES: NONE
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
CORPS OF ENGINEERS
VICKSBURG, MISSISSIPPI
DATE: MARCH 2003 FILE NO. ABM-14-9 PLATE NO. IV-11



PLAN



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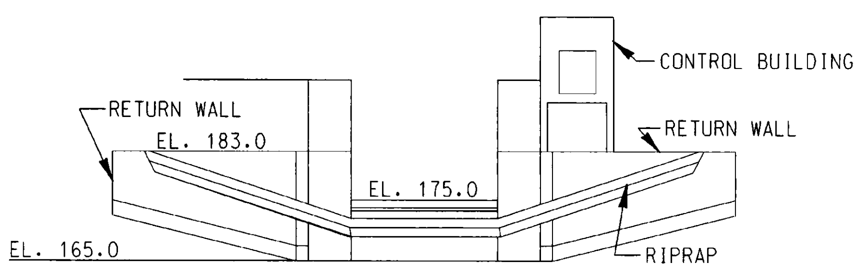


DOWNSTREAM ELEVATION

GRAND PRAIRIE REGION AND BAYOU METO BASIN
ARKANSAS

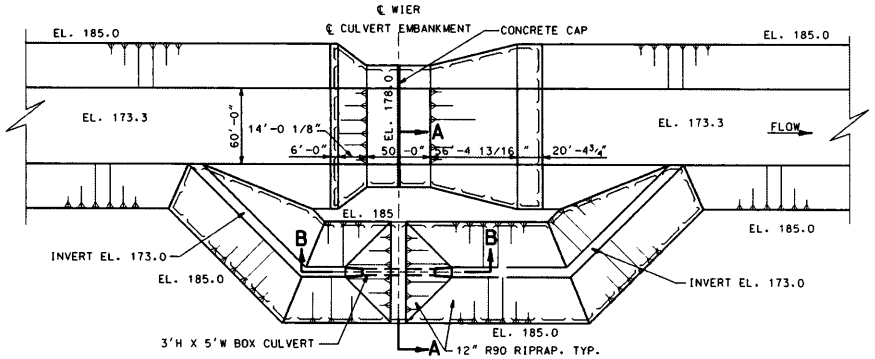
BAYOU METO STUDY

BAYOU METO AREA, ARKANSAS
GENERAL REEVALUATION REPORT

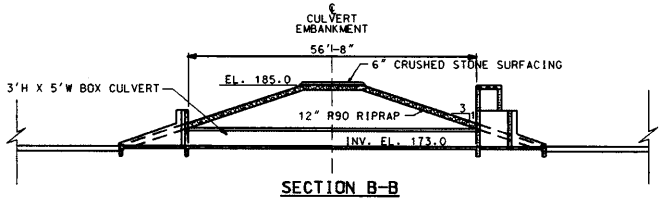
BAYOU METO WILDLIFE MANAGEMENT AREA
DRY BAYOU CONTROL STRUCTURE

SCALES: NONE
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
CORPS OF ENGINEERS
VICKSBURG, MISSISSIPPI

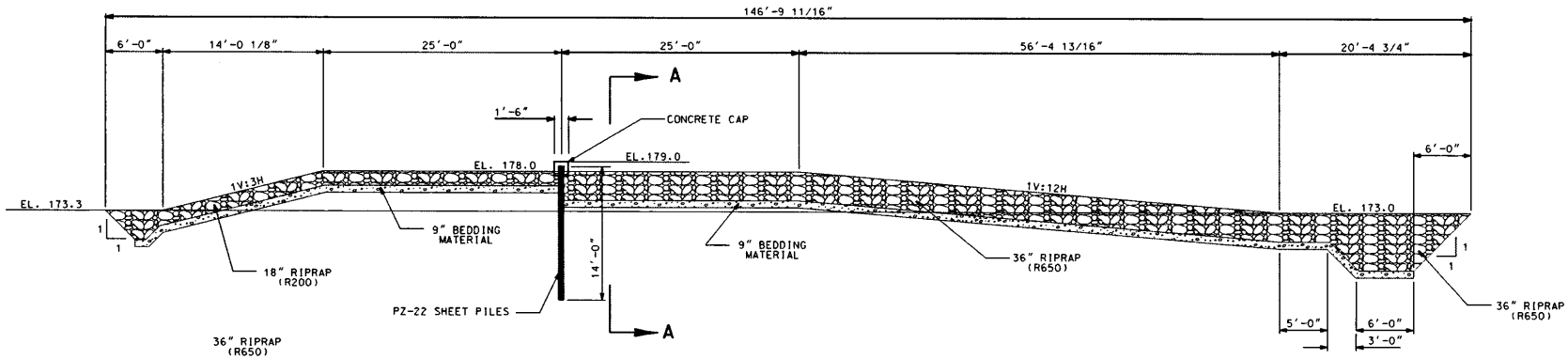
DATE: MARCH 2003 FILE NO. ABM-14-9 PLATE NO. IV-12



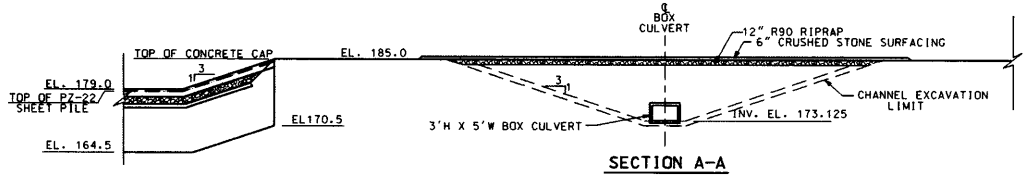
PLAN



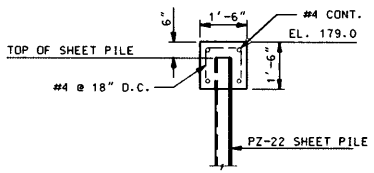
SECTION B-B



PROFILE OF WEIR



SECTION A-A



CONCRETE CAP DETAIL

GRAND PRAIRIE REGION AND BAYOU METO BASIN
ARKANSAS

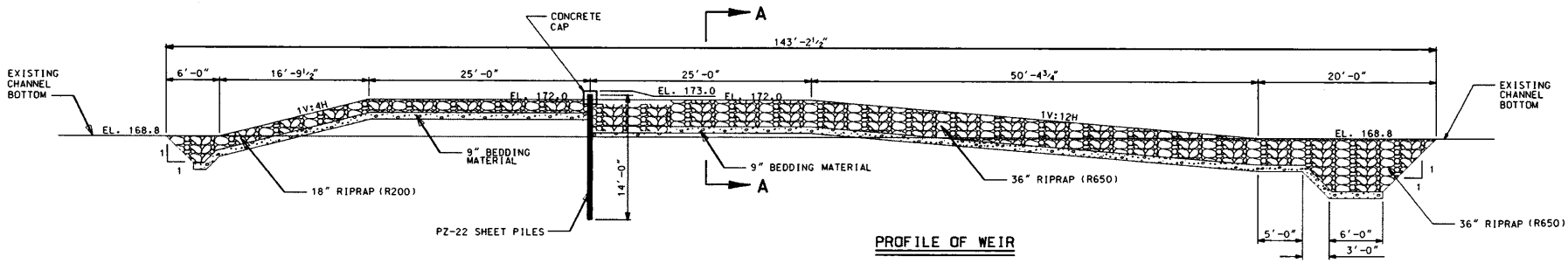
BAYOU METO STUDY

BAYOU METO AREA, ARKANSAS
GENERAL REEVALUATION REPORT

BOGGY SLOUGH CHANNEL
WATER CONTROL STRUCTURE

SCALES: NONE
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
CORPS OF ENGINEERS
VICKSBURG, MISSISSIPPI
DATE: MARCH 2003 FILE NO. ABM-14-9 PLATE NO. IV-13

LAST PRINT ON:
DESIGN FILENAME:
PLOT SCALE:



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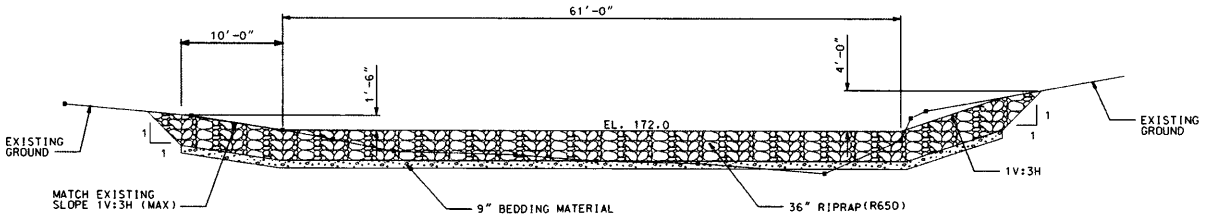
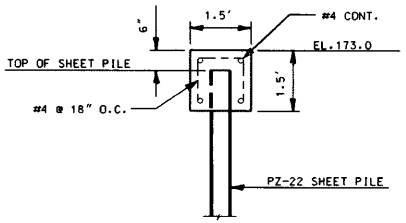


SECTION A-A



CONCRETE CAP DETAIL

GRAND PRAIRIE REGION AND BAYOU METO BASIN
ARKANSAS

BAYOU METO STUDY

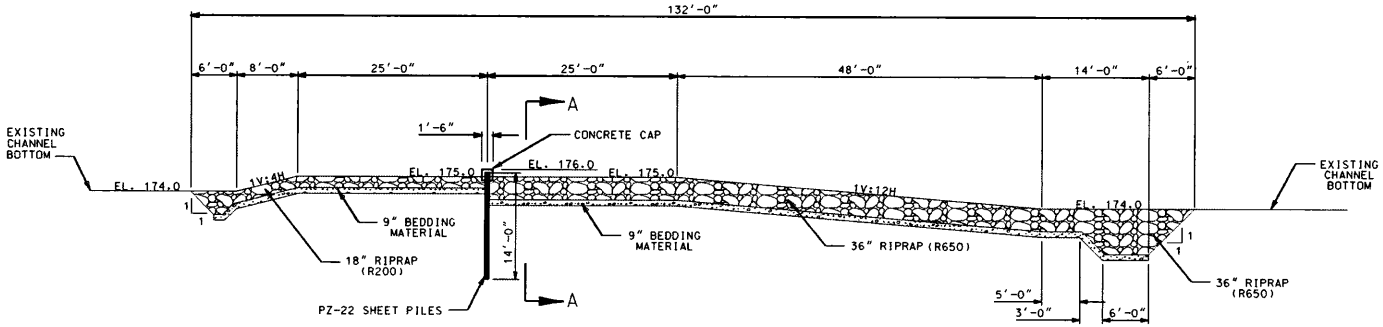
BAYOU METO AREA, ARKANSAS
GENERAL REEVALUATION REPORT

BOGGY SLOUGH DIVERSION CHANNEL

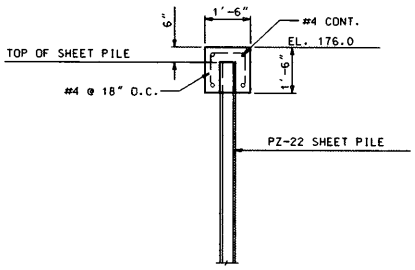
WEIR @ MILE 0.1

SCALES: NONE
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
CORPS OF ENGINEERS
VICKSBURG, MISSISSIPPI
DATE: MARCH 2003 FILE NO. ABM-14-8 PLATE NO. IV-14

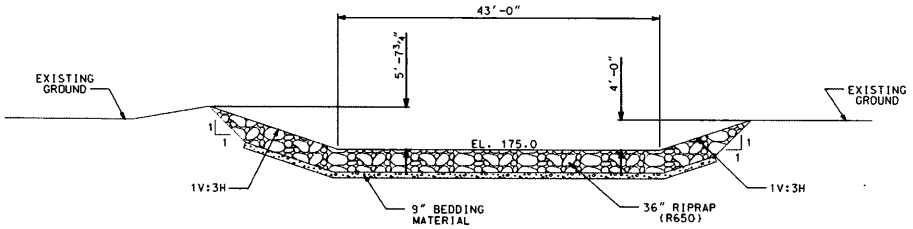
USER IDENT. NO.
DESIGN FILE(S)
PLOT SCALE:



PROFILE OF WEIR



CONCRETE CAP DETAIL



SECTION A-A

GRAND PRAIRIE REGION AND BAYOU METO BASIN
ARKANSAS

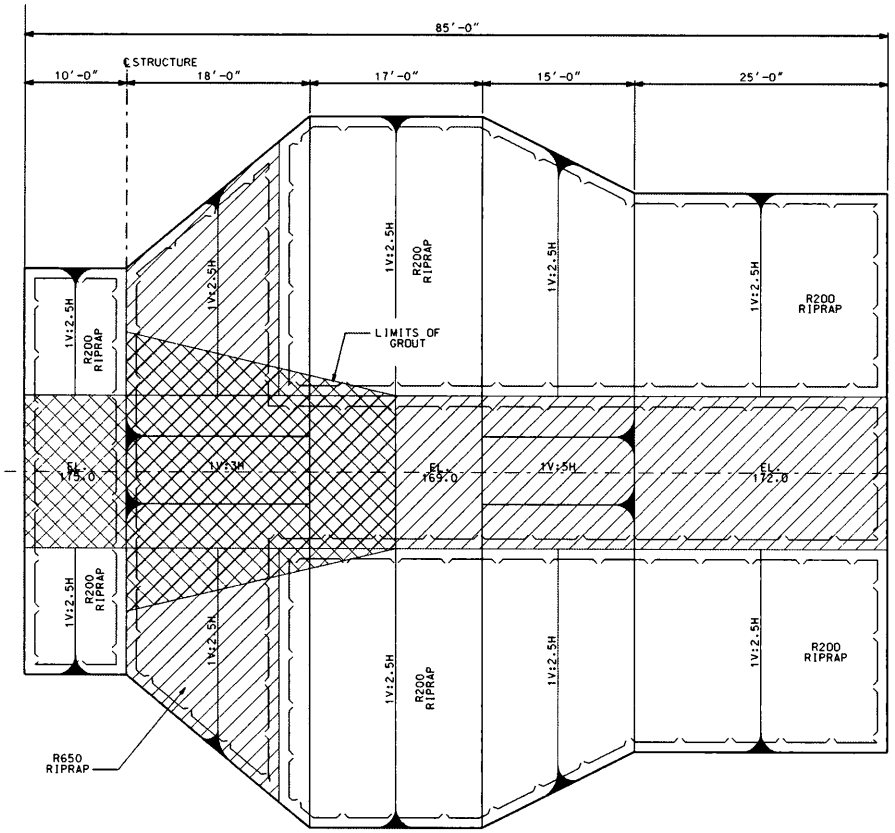
BAYOU METO STUDY

BAYOU METO AREA, ARKANSAS
GENERAL REEVALUATION REPORT

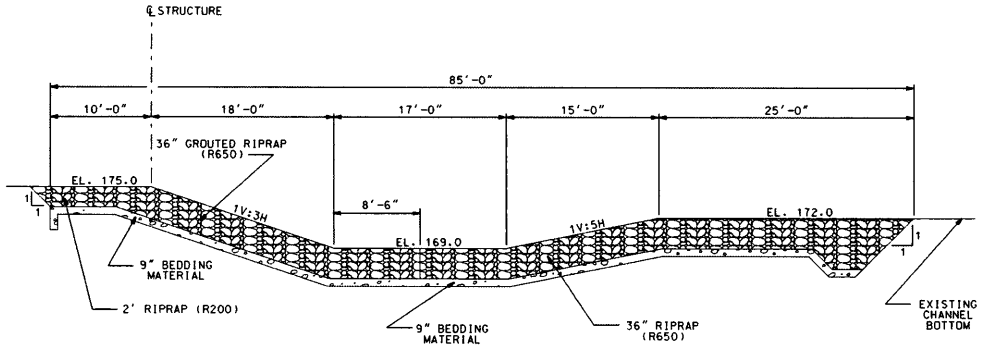
BOGGY SLOUGH DIVERSION CHANNEL
WEIR @ MILE 4.97

SCALES: NONE
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
CORPS OF ENGINEERS
VICKSBURG, MISSISSIPPI
DATE: MARCH 2003 FILE NO. ABM-14-9 PLATE NO. IV-15

USER NAME=
DESIGN FILE=
PLOT SCALE=



SITE PLAN



PROFILE ALONG STRUCTURE CENTER LINE

GRAND PRAIRIE REGION AND BAYOU METO BASIN
ARKANSAS

BAYOU METO STUDY

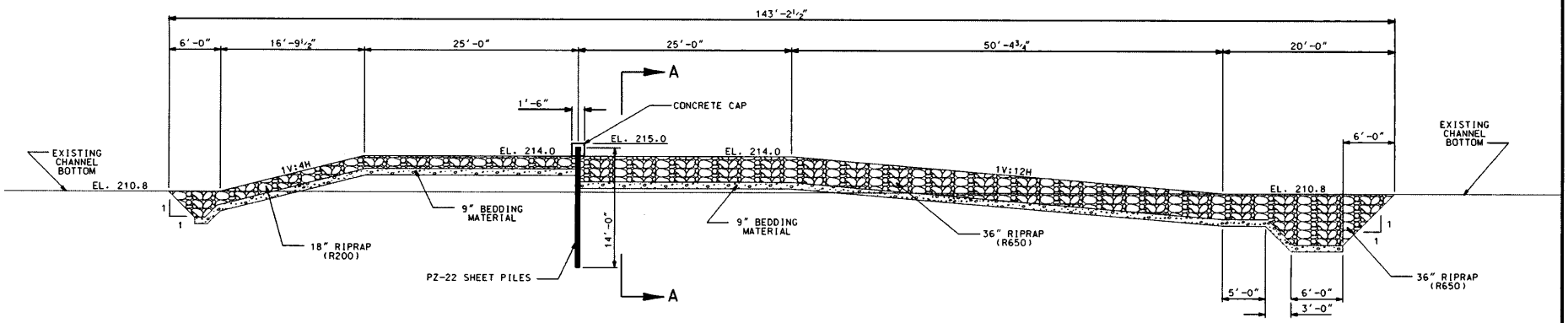
BAYOU METO AREA, ARKANSAS
GENERAL REEVALUATION REPORT

CASTOR BAYOU
LOW DROP GRADE CONTROL STRUCTURE

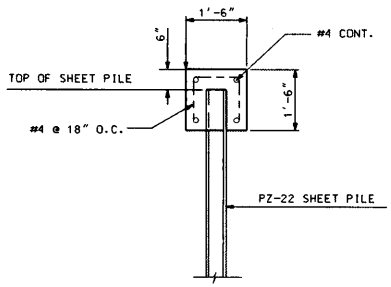
SCALES: NONE

U. S. ARMY ENGINEER DISTRICT, VICKSBURG
CORPS OF ENGINEERS
VICKSBURG, MISSISSIPPI

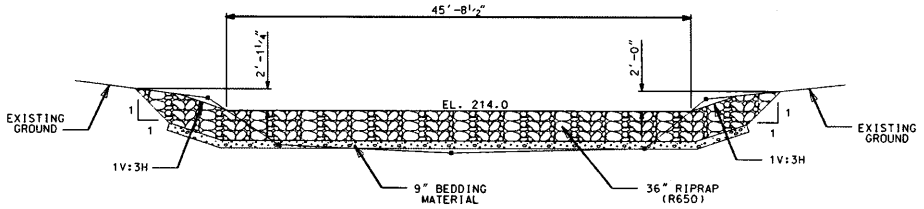
DATE: MARCH 2003 FILE NO. ABM-14-9 PLATE NO. IV-16



PROFILE OF WEIR



CONCRETE CAP DETAIL



SECTION A-A

GRAND PRAIRIE REGION AND BAYOU METO BASIN
ARKANSAS

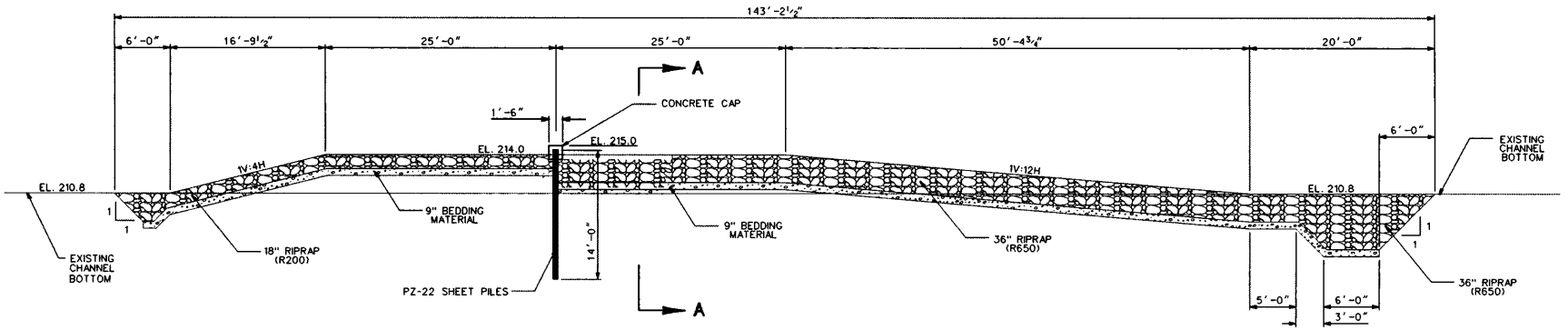
BAYOU METO STUDY

BAYOU METO AREA, ARKANSAS
GENERAL REEVALUATION REPORT

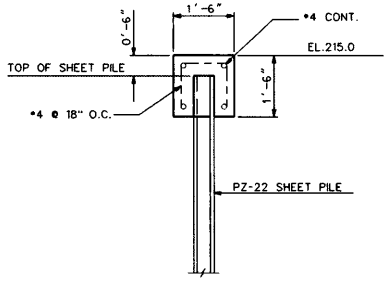
INDIAN BAYOU DITCH
WEIR @ MILE 58.3

SCALES: NONE
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
CORPS OF ENGINEERS
VICKSBURG, MISSISSIPPI
DATE: MARCH 2003 FILE NO. ABM-14-9 PLATE NO. IV-17

USER INFO: NO.
DESIGN FILES:
PLOT SCALE:



PROFILE OF WEIR



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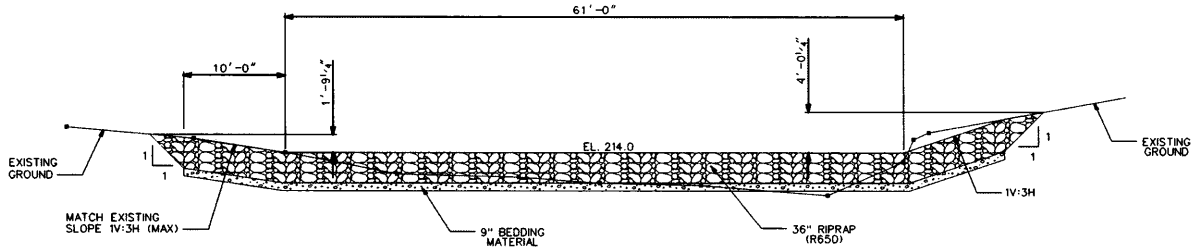


SECTION A-A

GRAND PRAIRIE REGION AND BAYOU METO BASIN
ARKANSAS

BAYOU METO STUDY

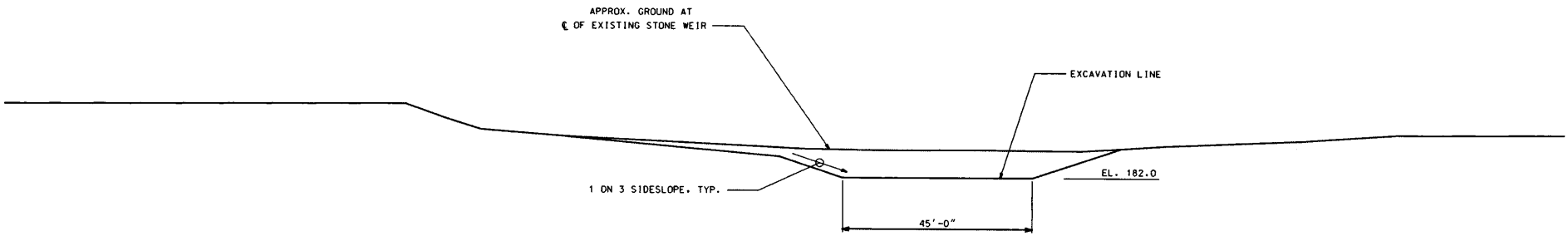
BAYOU METO AREA, ARKANSAS
GENERAL REEVALUATION REPORT

INDIAN BAYOU
WEIR @ MILE 18.4

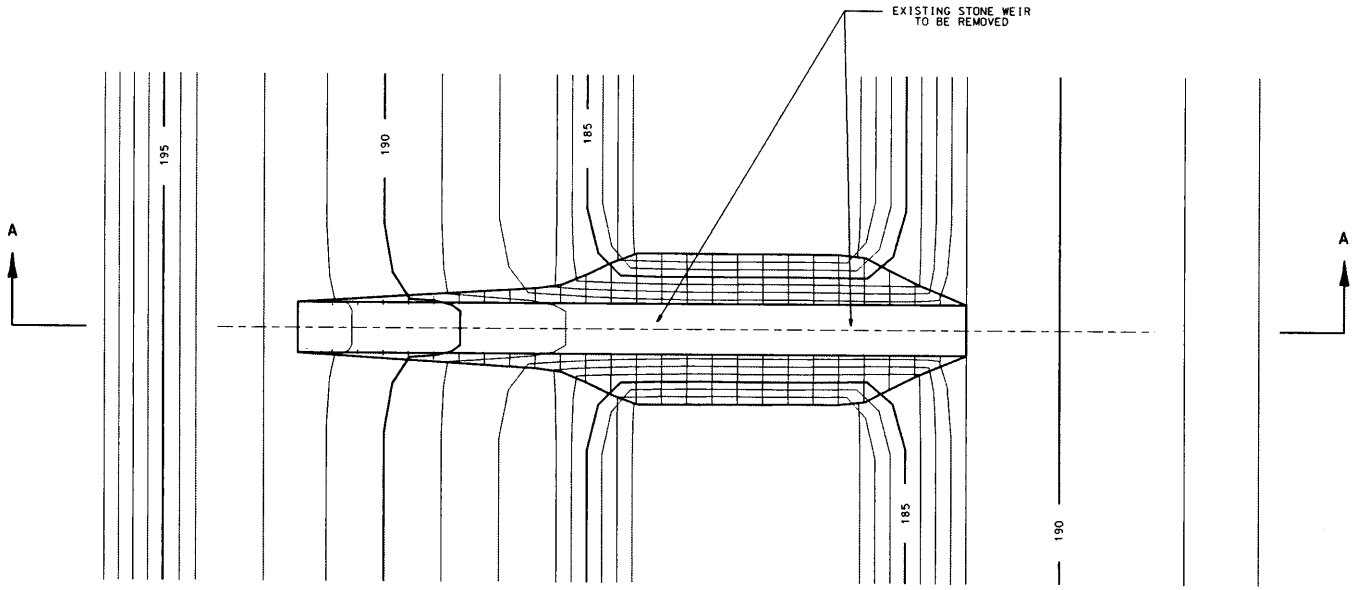
SCALES: NONE

U. S. ARMY ENGINEER DISTRICT, VICKSBURG
CORPS OF ENGINEERS
VICKSBURG, MISSISSIPPI

DATE: MARCH 2003 FILE NO. ABM-14-9 PLATE NO. IV-18



SECTION A



PLAN

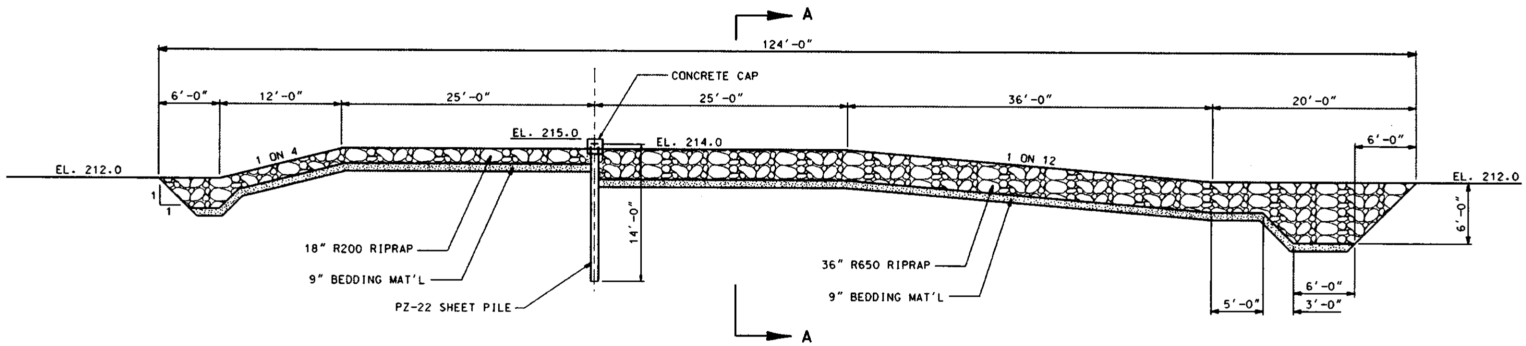
GRAND PRAIRIE REGION AND BAYOU METO BASIN
ARKANSAS

BAYOU METO STUDY

BAYOU METO AREA, ARKANSAS
GENERAL REEVALUATION REPORT

CROOKED CREEK
WEIR MODIFICATION

SCALES: NONE
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
CORPS OF ENGINEERS
VICKSBURG, MISSISSIPPI
DATE: MARCH 2003 FILE NO. ABM-14-9 PLATE NO. IV-19



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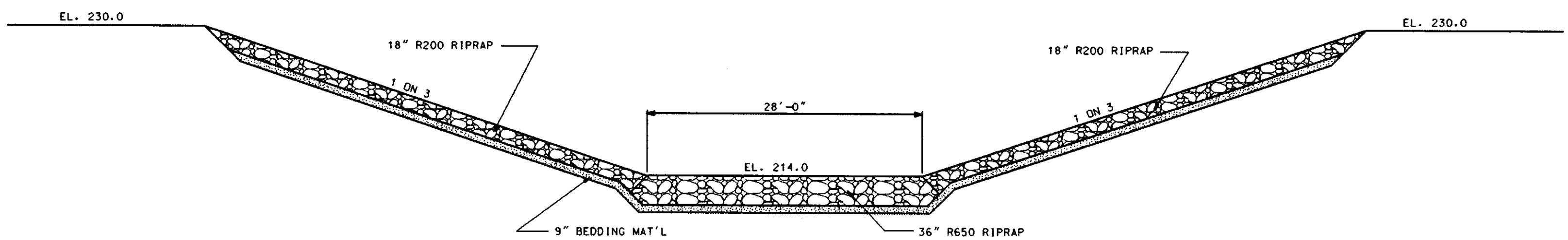
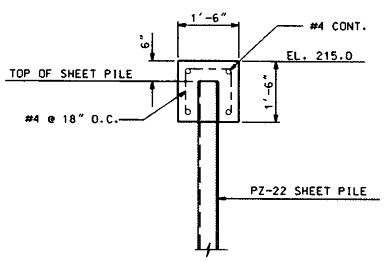


SECTION A



CONCRETE CAP DETAIL

USER IDENT. NO.
DESIGN FILE:
PLOT SCALE:

GRAND PRAIRIE REGION AND BAYOU METO BASIN
ARKANSAS

BAYOU METO STUDY

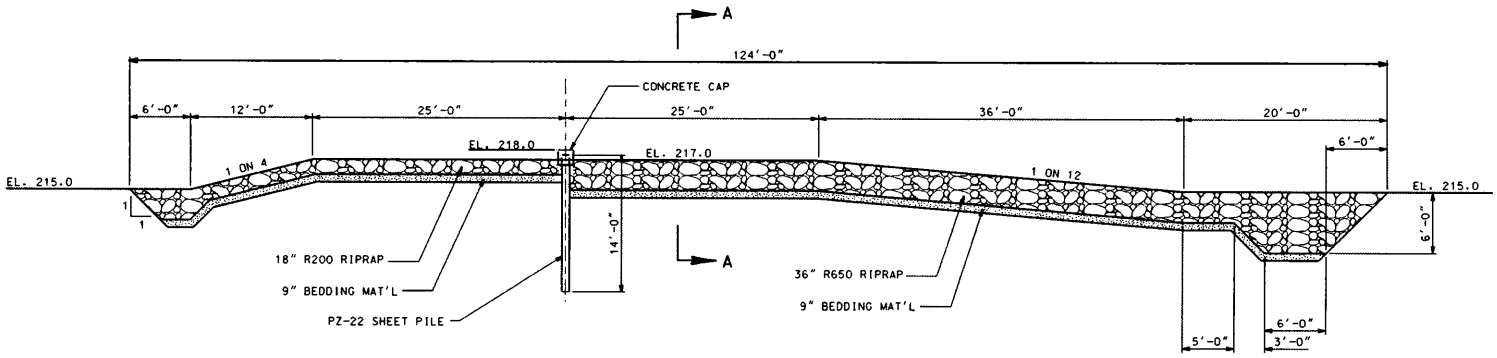
BAYOU METO AREA, ARKANSAS
GENERAL REEVALUATION REPORT

BIG BAYOU METO DIVERSION CHANNEL
LOW WATER WEIR @ MILE 0.0

SCALES: NONE

U. S. ARMY ENGINEER DISTRICT, VICKSBURG
CORPS OF ENGINEERS
VICKSBURG, MISSISSIPPI

DATE: MARCH 2003 FILE NO. ABM-14-9 PLATE NO. IV-20



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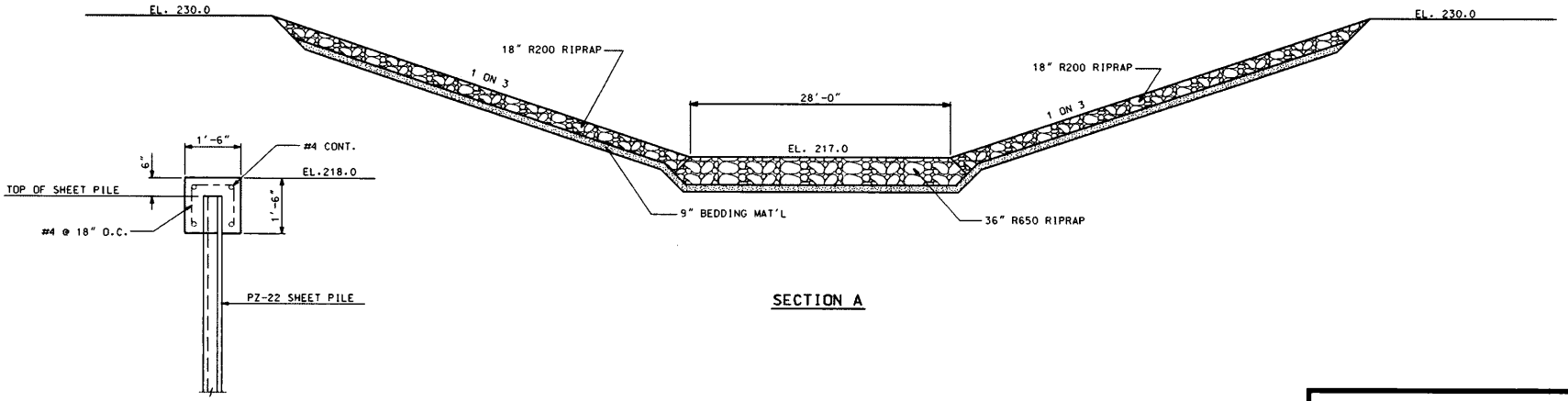

SECTION A

CONCRETE CAP DETAIL

USER INSRT. NO.
DESIGN FILE NO.
PLOT SCALE

GRAND PRAIRIE REGION AND BAYOU METO BASIN
ARKANSAS

BAYOU METO STUDY

BAYOU METO AREA, ARKANSAS
GENERAL REEVALUATION REPORT

BIG BAYOU METO DIVERSION CANNEL
LOW WATER WEIR @ MILE 2.5

SCALES: NONE

U. S. ARMY ENGINEER DISTRICT, VICKSBURG
CORPS OF ENGINEERS
VICKSBURG, MISSISSIPPI

DATE: MARCH 2003 FILE NO. ABM-14-9 PLATE NO. IV-21

APPENDIX C – ENGINEERING INVESTIGATIONS & ANALYSES FLOOD CONTROL COMPONENT

SECTION IV – STRUCTURAL, MECHANICAL, ELECTRICAL & CIVIL DESIGN

APPENDIX IV-C-A

	S	T	U	V	W	X	Y	Z
1	500-cfs Pump — Linear Interpolation Table							
2	Static Head (ft)		Capacity (cfs)		Efficiency (%)		Brake hp (hp)	
3								
4	-2.22	-0.09	546.3	539.3	48.1%	56.9%	970.3	1012.5
5	-0.09	2.04	539.3	532.3	56.9%	63.5%	1012.5	1075.8
6	2.04	4.22	532.3	523.9	63.5%	68.8%	1075.8	1139.1
7	4.22	6.42	523.9	514.4	68.8%	73.2%	1139.1	1202.3
8	6.42	8.63	514.4	504.4	73.2%	77.3%	1202.3	1255.1
9	8.63	10.89	504.4	493.0	77.3%	80.6%	1255.1	1307.8
10	10.89	13.15	493.0	481.0	80.6%	82.5%	1307.8	1371.1
11	13.15	15.45	481.0	467.5	82.5%	84.2%	1371.1	1423.8
12	15.45	17.72	467.5	454.6	84.2%	86.2%	1423.8	1466.0
13	17.72	20.04	454.6	439.6	86.2%	88.5%	1466.0	1487.1
14	20.04	22.36	439.6	424.2	88.5%	90.2%	1487.1	1508.2
15	22.36	24.67	424.2	408.7	90.2%	92.0%	1508.2	1518.7
16	24.67	26.98	408.7	392.3	92.0%	92.6%	1518.7	1539.8
17	26.98	29.31	392.3	374.3	92.6%	92.3%	1539.8	1560.9
18	29.31	#VALUE!	374.3	#VALUE!	92.3%	#VALUE!	1560.9	#VALUE!
19								
20	29.00 = Head							
21	376.8 = Capacity							
22	92.3% = Efficiency							
23	1558.1 = Bhp							
24	1750 = Mhp							

APPENDIX C – ENGINEERING INVESTIGATIONS & ANALYSES
FLOOD CONTROL COMPONENT

SECTION IV – STRUCTURAL, MECHANICAL, ELECTRICAL & CIVIL DESIGN

APPENDIX IV-C-B

	AB	AC	AD	AE	AF	AG	AH	AI
1	1000-cfs Pump — Linear Interpolation Table							
2	Static Head		Capacity		Efficiency		Brake hp	
3	(ft)		(cfs)		(%)		(hp)	
4	-0.75	1.35	1229.2	1213.5	48.1%	56.9%	2183.2	2278.1
5	1.35	3.44	1213.5	1197.8	56.9%	63.5%	2278.1	2420.5
6	3.44	5.57	1197.8	1178.7	63.5%	68.8%	2420.5	2562.9
7	5.57	7.73	1178.7	1157.4	68.8%	73.2%	2562.9	2705.3
8	7.73	9.90	1157.4	1135.0	73.2%	77.3%	2705.3	2823.9
9	9.90	12.10	1135.0	1109.2	77.3%	80.6%	2823.9	2942.6
10	12.10	14.30	1109.2	1082.3	80.6%	82.5%	2942.6	3085.0
11	14.30	16.54	1082.3	1052.0	82.5%	84.2%	3085.0	3203.6
12	16.54	18.76	1052.0	1022.8	84.2%	86.2%	3203.6	3298.5
13	18.76	21.01	1022.8	989.2	86.2%	88.5%	3298.5	3346.0
14	21.01	23.27	989.2	954.4	88.5%	90.2%	3346.0	3393.4
15	23.27	25.51	954.4	919.6	90.2%	92.0%	3393.4	3417.2
16	25.51	27.76	919.6	882.6	92.0%	92.6%	3417.2	3464.6
17	27.76	30.03	882.6	842.3	92.6%	92.3%	3464.6	3512.1
18	30.03	#VALUE!	842.3	#VALUE!	92.3%	#VALUE!	3512.1	#VALUE!
19								
20	29.00 = Head							
21	860.5 = Capacity							
22	92.4% = Efficiency							
23	3490.6 = Bhp							
24	4000 = Mhp							

APPENDIX C – ENGINEERING INVESTIGATIONS & ANALYSES
FLOOD CONTROL COMPONENT

SECTION IV – STRUCTURAL, MECHANICAL, ELECTRICAL & CIVIL DESIGN

APPENDIX IV-C-C

Table B.2, Page 9			
	Maximum Motor Hp		
System Distribution Voltage	Induction, Wound-rotor, Synchronous (0.8 PF)	Synchronous (1.0 PF)	Interrupting Rating (MVA) Symmetrical 3-phase 50 or 60 Hz
CR194 400 Ampere stationary and drawout [1]			
2400	1600	2000	200
4200	2800	3500	350
4800	3200	4000	400
7200	4800	6000	600
CR194 800 Ampere stationary [2]			
2400	3200	4000	200
4200	5600	7000	350
4800	6400	8000	400

NOTES:

1. Based on 400 A RMS maximum, enclosed, NEMA 1, vented one-high
2. Based on 800 A RMS maximum, enclosed, NEMA 1, vented one-high
3. For non-vented enclosures, apply a factor of 0.8 to the maximum hp

Source: *Limitamp® Medium-Voltage Motor Control, 2400-7200 Volts, Application and Selection Guide*, GET-6840B 0496 BL

APPENDIX C – ENGINEERING INVESTIGATIONS & ANALYSES
FLOOD CONTROL COMPONENT

SECTION IV – STRUCTURAL, MECHANICAL, ELECTRICAL & CIVIL DESIGN

APPENDIX IV-C-D

Braswell, Hank T MVK
From: Braswell, Hank T MVK
Sent: Tuesday, September 14, 1999 6:14 PM
To: Watkins, Gordon MVK
Cc: Lee, Fred MVK; Cary, Garland L MVK; Hite, Robert E MVK
Subject: RE: BAYOU METO PUMP STATION

Gordon,

Reference HEC-IFH User's Manual, Apr 92. As we discussed today, one large pump station alternative, located near the Big Bayou Meto Drainage Structure, is contemplated. In support of the study to determine the most economical pump station capacity, we will estimate the annual operating costs of operating the pump units. Such a power and energy cost study consists of 4 phases.

PHASE I -- For each alternative, obtain data from ED-H for selecting pump curves:

- Operating point (capacity and head)
- Maximum discharge elevation--maximum riverside elevation to be pumped against
- Elevation of levee at site
- Pump start and stop elevations
- Discharge configuration (i.e., over-the-levee, through-the-levee, siphon-assist, etc.)

PHASE II -- Furnish pump curves for each alternative to ED-H for input to IFH:

Screen	Figure	Page	Comment
PUMP	7.3	119	Head loss set to 0.10; Pump Start and Stop elevations by ED-H.

PHASE III -- Obtain results from IFH:
We will first make a limited study of the annual pump operating cost. Based on the results of that study, an extended study may be necessary. How the first costs are developed may also influence whether an extended study will be made. For the limited study and for each alternative, we need the following screen prints from the IFH CSA hydrologic analysis summaries:

Screen	Figure	Page	Comment
D	11.6	181	Verification of pump station data
M	11.39	206	Monthly summaries of operating time and pump head
O	11.45	211	Water year annual summaries; many screens to be printed
Q	11.50	215	Maximum values
S	11.52	218	Exceedance duration table
V	11.59	224	Pump operation

PHASE IV -- Forecast annual pump operating costs:
Since the site is fairly remote, electric service may be very expensive to connect. We will consider diesel-engine-driven pumps as well.

Hank

-----Original Message-----
From: Watkins, Gordon MVK
Sent: Tuesday, August 31, 1999 9:53 AM
To: Braswell, Hank T MVK
Subject: BAYOU METO PUMP STATION

HANK,
Could you please provide me with a paragraph stating the data required for your ananlysis of the pump station to include in the scope of work to the AE. Be sure to include the format you will need the data in. Also I will need to obtain the pump efficiency curves to provide the AE. We should have an idea in a couple of weeks the range of capacities we will analyze. Our

schedule is to go out on contract shortly after beginning of fy. If you have any questions give me a call at 1-7222.

Gordon Watkins, P.E.
Hydraulic Engineer
CEMVK-ED-HD

U. S. Army Engineer District. Vicksburg
4155 East Clay St.
Vicksburg, MS 39180-3435
Email: Gordon.Watkins@mvk02.usace.army.mil
(601)-631-7222 Phone
(601)-631-7231 Fax

http://www.mvk.usace.army.mil

Braswell, Hank T MVK
From: Braswell, Hank T MVK
Sent: Monday, April 03, 2000 7:29 AM
To: Watkins, Gordon MVK; Sullivan, Barry A MVK
Cc: Lee, Fred MVK; Cary, Garland L MVK; Hite, Robert E MVK
Subject: RE: BAYOU METO PUMP STATION

Importance: High

Gordon and Barry,

Updated data and revisions shown in blue. Reference HEC-IFH User's Manual, Apr 92. One large pump station, located near the Big Bayou Meto Drainage Structure, is contemplated. We understand that a pump station at Little Bayou Meto is now being contemplated. In support of the study to determine the most economical pump station capacity, we will estimate the annual operating costs of operating the pump units. Such a power and energy cost study consists of 4 phases.

PHASE I -- For each alternative, obtain data from ED-H for selecting pump curves:

- Elevation of levee at site: El. 194
- Maximum discharge elevation--maximum riverside elevation to be pumped against: El. 185 (highest stage on record, 1927)
- Discharge configuration (i.e., over-the-levee, through-the-levee, siphon-assist, etc.): Over-the-levee with siphon-assist.
- Invert of culverts: El. 145.67.
- Pool elevation: El. 162 which will be pump STOP elevation.
- Pump START and STOP elevations: El. 165 START; El. 162 STOP.
- Operating point (capacity and static head): Four pump size alternatives: 250 cfs, 500 cfs, 1000 cfs, 2000cfs; 23 ft. If more capacity is indicated, then multiple pump sizes (e.g., 500-, 1000- or 2000-cfs) will be modeled.
- 1 pump/station? Not necessarily, depends on electric utility requirements; Entergy/AP&L is probable local electric utility; quad map will be needed to assist AP&L with locating the nearest power line with sufficient capacity. If station will have multiple pumps, sequential start elevations will be incremented by 0.5-1.0 ft.
- Estimated station motor hp: 1000 hp, 2000 hp, 4000 hp, 8000 hp (for comparison, Lake Chicot PP has 10 3100-hp and 2 1250-hp pumps for a total station hp of 33,500-hp; 6500 cfs total station capacity, and Tensas-Cocodrie PP has 5 3000-hp pumps for a total station hp of 15,000-hp; 4000 cfs total station capacity).

PHASE II -- Furnish static H-Q pump curves for each alternative to ED-H for input to IFH:

Screen	Figure	Page	Comment
PUMP	7.3	119	Head loss set to absolute minimum (0.10 ft.); Pump START and STOP elevations by ED-H.

PHASE III -- Obtain results from IFH:
Screen prints from the IFH CSA hydrologic analysis summaries required for each alternative:

Screen	Figure	Page	Comment
D	11.6	181	Verification of pump station data
M	11.39	206	Monthly summaries of operating time and pump head
O	11.45	211	Water year annual summaries; many screens to be printed
Q	11.50	215	Maximum values
S	11.52	218	Exceedance duration table
V	11.59	224	Pump operation

Also, the DSS file from the IFH CSA for each alternative is required.

PHASE IV -- Forecast annual pump operating costs:
We will first make a limited study of the annual pump operating cost. Based on the results of that study, an extended study may be necessary. How the first costs are developed may also influence whether an extended study will be made. Since the site is fairly remote, electric service may be very expensive to connect. We will consider diesel-engine-driven pumps as well.

* * *

-----Original Message-----
From: Watkins, Gordon MVK
Sent: Tuesday, August 31, 1999 9:53 AM
To: Braswell, Hank T MVK
Subject: BAYOU METO PUMP STATION

HANK,
Could you please provide me with a paragraph stating the data required for your ananlysis of the pump station to include in the scope of work to the AE. Be sure to include the format you will need the data in. Also I will need to obtain the pump efficiency curves to provide the AE. We should have an idea in a couple of weeks the range of capacities we will analyze. Our schedule is to go out on contract shortly after beginning of fy. If you have any questions give me a call at 1-7222.

Gordon Watkins, P.E.
Hydraulic Engineer
CEMVK-ED-HD

U. S. Army Engineer District, Vicksburg
4155 East Clay St.
Vicksburg, MS 39180-3435
Email: Gordon.Watkins@mvk02.usace.army.mil
(601)-631-7222 Phone
(601)-631-7231 Fax

http://www.mvk.usace.army.mil

~~Previously updated data and revisions shown in blue. Newly updated data and revisions shown in red.~~ Reference HEC-IFH User's Manual, Apr 92. One large pump station, located near the Big Bayou Meto (BBM) Drainage Structure and a smaller ~~, is contemplated. We understand that a~~ pump station ~~at~~ near Little Bayou Meto (LBM) ~~is~~ are now ~~being~~ contemplated. In support of the study to determine the most economical pump station capacity, we will estimate the annual operating costs of operating the pump units. Such a power and energy cost study consists of 4 phases.

PHASE I -- For each alternative, obtain data from ED-H for selecting pump curves for BBM only:

- Elevation of levee at site: El. 194
- Maximum discharge elevation--maximum riverside elevation to be pumped against: El. 185 (highest stage on record, 1927)
- Discharge configuration (i.e., over-the-levee, through-the-levee, siphon-assist, etc.): Over-the-levee with siphon-assist.
- Invert of culverts: El. 145.67.
- Pool elevation: El. 162 which will be pump STOP elevation.
- Pump START and STOP elevations: El. 165 START; El. 162 STOP.
- Operating point (capacity and static head): Four pump sizes to be used in configuring the alternatives: 250 cfs, 500 cfs, 1000 cfs, 2000 cfs; ~~23~~ 6 ft operating, 29 ft priming. ~~If more capacity is indicated, then multiple pump sizes (e.g., 500-, 1000- or 2000-cfs) will be modeled.~~ The anticipated range of alternatives for BBM is 3000-8000 cfs; for LBM alone, 500-2000 cfs.
- 1 pump/station? Not necessarily, depends on electric utility requirements; Entergy/AP&L is probable local electric utility; quad map will be needed to assist AP&L with locating the nearest power line with sufficient capacity. Based on hp ranges given below, a subtransmission line and substation will be required for BBM; distribution substation upgrade will probably be required for LBM. If station will have multiple pumps, sequential start elevations will be incremented by 0.5-1.0 ft.
- Estimated station motor hp for BBM: ~~1000 hp, 2000 hp, 4000 hp, 8000 hp~~ 12000-32000 hp up to 15000-40000 hp (for comparison, Lake Chicot PP has 10 3100-hp and 2 1250-hp pumps for a total station hp of 33,500-hp; 6500 cfs total station capacity, and Tensas-Cocodrie PP has 5 3000-hp pumps for a total station hp of 15,000-hp; 4000 cfs total station capacity). The ranges are based on an empirical factors of 4 & 5 hp/cfs. Based on the pump curves, the pump motor sizes corresponding to 125 cfs, 250 cfs, 500 cfs, and 1000 cfs are 450 hp, 1000 hp, 1750 hp, and 4000 hp.
- Note that curves for the 2000-cfs pump model were not furnished; one reason is that highly specialized, custom—and prohibitively expensive— manufacturing would be required for pumps with runners larger than 10-ft diameter. Note also that curves for the 125-cfs pump model were furnished for use only at LBM.
- Period of Record: 1948-1997 (50 yrs)
- In any given alternative, use multiples of one size pump only; try not to mix pumps of different capacities in a station; this will simplify pump O&M.
    - At BBM, for the anticipated range of capacities (3000-8000 cfs), use the 1000 cfs model.
    - At LBM, for the anticipated range of capacities (500-2000 cfs), use a minimum of 4 pumps per alternative, owing to anticipated power company motor starting limitations.

What are same criteria for LBM? Barry to furnish these to Hank along with computation interval.

PHASE II -- Furnish static H-Q pump curves for each alternative to ED-H for input to IFH:

Screen	Figure	Page	Comment
PUMP	7.3	119	Head loss set to absolute minimum (0.10 ft.); Pump START and STOP elevations by ED-H.

Also furnish minimum submergence, minimum impeller height above base slab, and other factors dealing with pump installation.

Initial Pump Curves for ED-H.p...

PHASE III -- Obtain results from IFH:
Screen prints from the IFH CSA hydrologic analysis summaries required for each alternative:

Screen	Figure	Page	Comment
D	11.6	181	Verification of pump station data
M	11.39	206	Monthly summaries of operating time and pump head
O	11.45	211	Water year annual summaries; many screens to be printed
Q	11.50	215	Maximum values
S	11.52	218	Exceedance duration table
V	11.59	224	Pump operation

Also, the DSS file from the IFH CSA for each alternative is required.

PHASE IV -- Forecast annual pump operating costs:
We will first make a limited study of the annual pump operating cost. Based on the results of that study, an extended study may be necessary. How the first costs are developed may also influence whether an extended study will be made. Since the site is fairly remote, electric service may be very expensive to connect, especially since it appears that high-voltage work will be required of Entergy/AP&L. We will consider diesel-engine-driven pumps as well.

* * *

Braswell, Hank T MVK
From: Braswell, Hank T MVK
Sent: Saturday, April 29, 2000 11:44 AM
To: 'cwood@entergy.com'
Subject: Bayou Meto Pumping Plants, Feasibility Study

Importance: High
Sensitivity: Confidential

Charles,

1. I appreciate your assistance with, and interest in, this important project. As you requested, I am outlining subject study for determining the economically optimal plant configurations, if there are any. This information is *for Entergy's internal and official use only*.

2. One large pumping plant (BBM), to be located at the existing Big Bayou Meto Structure, and a smaller pumping plant (LBM), to be located at the existing Little Bayou Meto Structure, are being evaluated in three scenarios:

   a. BBM only
   b. LBM only
   c. BBM and LBM together

3. For each scenario, several alternative pump sizes will be selected. We will, as part of the overall feasibility study, determine the first costs and the annual operating costs associated with the pumps. Alternatives may be:

   a. For BBM: 3000- to 8000-cfs pumping plant alternatives in 1000-cfs increments; each alternative would consist of the required number of 1000-cfs pumps.
   b. LBM: 500- to 2000-cfs pumping plant alternatives in 500-cfs increments; each alternative may consist of 4 pumps.

4. Drivers for the pumps may consist of the following:

   a. Vertical, direct-driven, 3-phase electric motors
   b. Horizontal, gear-driven, 3-phase electric motors
   c. Internal combustion engines

5. Individual pump capacities and driver ratings, based on selected pump models, may be:

   a. 125 cfs (450 hp)
   b. 250 cfs (1000 hp)
   c. 500 cfs (1750 hp)
   d. 1000 cfs (4000 hp)

6. Medium-voltage controllers, subject to Entergy's approval, for the motors may be:

   a. Full-voltage
   b. Reduced-voltage autotransformer

c. Reduced-voltage solid-state

7. Flood hydrology computer simulations will be conducted to determine pump operation data over a 50-year period of historical meteorological and hydrological data (1948-1997). Those pump operation data, in conjunction with pump driver models and monthly fossil fuel and electric service unit costs, will result in 50-year estimated monthly billing and metering histories.

8. Bear in mind that the local sponsor, not the Corps of Engineers, will operate and maintain these pumping plants. Accordingly, the local sponsor will be responsible for contribution-in-aid of construction costs, monthly service charges, and all other costs associated with permanent electric service for the pumping plants.

9. This summer, we will furnishing more detailed requirements. At that time, we would appreciate Entergy providing the following data in support of subject feasibility study:

   a. Confirmation that BBM (T7S R4W S15) and LBM (T6S R5W S29) are in your service area
   b. Description of electric service facilities required for each alternative
   c. Estimated contribution-in-aid of construction costs and all other nonrecurring charges for each alternative
   d. Rate schedules, riders, and all other recurring charges applicable to each alternative (I understand that our neighboring Lake Chicot Pumping Plant is under the SGS rate schedule.)

10. Finally, let me reiterate that the above information is *for Entergy's internal and official use only.*

Sincerely,

Hank T. Braswell, P.E.
U.S. Army Engineer District, Vicksburg,
CEMVK-ED-DC, ACME Section, Room 209
4155 Clay Street
Vicksburg, MS 39183-3435

Phone: 601/631-5742 (8am-4pm)
Fax: 601/631-5583
E-mail: Hank.T.Braswell@mvk02.usace.army.mil
Website: http://www.mvk.usace.army.mil
[Updated 14 Apr 2000]

Braswell, Hank T MVK
From: BURNETTE, DAVID R [DBURNET@entergy.com]
Sent: Wednesday, July 05, 2000 11:46 AM
To: 'Braswell, Hank T MVK'
Subject: Bayou Meto progress

Hank,

Understand by your voicemail you are on vacation so want to send this email to update you on our progress.

Both sites are in our service territory. Considering the distances involved, the most likely method of serving the sites is through construction of a transmission tap. We are putting some very ball-parkish numbers together for your use on transmission line and substation construction costs. Around mid July we would like to schedule a call with you and discuss some of the larger issues and other questions that will arise as we begin to move forward. From that conference call, we can determine what the issues are and who should be included on the next call/or site meeting.

Some basic questions are:

- Exactly what is the nature and purpose of the project? Companion project to the Grand Prairie project. Although the main effort for these 2 projects is concerned with ground water depletion and irrigation, the pumping stations feasibility study is concerned with flood protection for the Bayou Meto Basin.
- Who will be the "local sponsor". The Bayou Meto Irrigation District is the potential project sponsor (Proj Coop Agreement has not been executed yet; only in draft stage).
- Have you hired an outside A/E firm for this project? Strange question. Why?
- Will the Corps want Entergy to own the potential substation?
- Will the be responsible for procuring Right of Way for transmission line extensions? If this is Entergy, will the Corps assist?
- We will need basic construction questions answered (for pricing estimate purposes) such as 2 way feed or lateral, fused substation or LTC?

I don't need these answers now but these are some of the things we will discuss during our next call. After that call, we can decide about the need of a site meeting. Let me know what your schedule is this week and I will call to discuss with you further.

Thanks,
db

PS....Do you have a contact in Little Rock who can discuss a couple accounts in Arkansas?

Braswell, Hank T MVK
From: Braswell, Hank T MVK
Sent: Friday, July 07, 2000 11:06 AM
To: 'BURNETTE, DAVID R'
Subject: RE: Bayou Meto progress

David,

I will be in the office Tue-Thu of next week. Please let me know the names and job titles of the others you will have take part in our teleconference so I can schedule the appropriate people.

I have answers to your basic questions. The questions I have - the ones that can be answered at this point - have been answered or will be answered in our teleconference.

Hank T. Braswell, P.E.
U.S. Army Engineer District, Vicksburg,
CEMVK-ED-DC, ACME Section, Room 209
4155 Clay Street
Vicksburg, MS 39183-3435

Phone: 601/631-5742 (8am-11am & 1pm-4pm)
Fax: 601/631-5583
E-mail: Hank.T.Braswell@mvk02.usace.army.mil
Website: http://www.mvk.usace.army.mil
[Updated 12 May 2000]

-----Original Message-----

From: BURNETTE, DAVID R [mailto:DBURNET@entergy.com]
Sent: Wednesday, July 05, 2000 11:46 am
To: 'Braswell, Hank T MVK'
Subject: Bayou Meto progress

Hank,

Understand by your voicemail you are on vacation so want to send this email to update you on our progress.

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- Exactly what is the nature and purpose of the project?
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- Have you hired an outside A/E firm for this project?

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Thanks,
db

PS....Do you have a contact in Little Rock who can discuss a couple accounts in Arkansas?

Braswell, Hank T MVK
From: BURNETTE, DAVID R [DBURNET@entergy.com]
Sent: Monday, November 05, 2001 3:38 PM
To: 'Braswell, Hank T MVK'
Subject: Summary of rates

Summary-July01
.xls

Hank,

Instead of taking the time to make the call and explain what I wanted, I decided to send you this info myself. For your information, the attachment is a summary of all our rates. SGS is on the first page right after the residential rates. The rate summaries are easier to use and include all the current riders whereas, the rate schedule just lists the demand and energy charges for the particular rate.

If you don't know this already, when looking at the summaries, the riders are M26 - Nuclear Decommissioning, M33- the Grand Gulf nuclear plant rider and ECR, which is energy cost recovery (fuel).

If you have questions, give me a call. I always check voicemail and I will have my laptop this week checking emails.

David

Account Service Manager
Arkansas C & I Accounts
870-541-4747 (8-730-4747 internal)
870-692-0464 (mobile)
870-541-4738 (fax)

Braswell, Hank T MVK
From: Braswell, Hank T MVK
Sent: Monday, April 29, 2002 10:57 AM
To: 'BURNETTE, DAVID R'; VOGT, GEORGE Y; WOOD, CHARLES W
Subject: Little Bayou Meto Pumping Plant

1. Sorry for the short (practically nonexistent) fuse on this, but I was told recently that the numbers for the feasibility of subject pumping plant are due Tuesday 30 April 2002. Anything you can do to expedite this would be appreciated. Here's what we need in order of decreasing priority:

a. Voltage and liberally estimated length of distribution or transmission line required to serve the pumping plant for each alternative.

b. Budgetary unit cost in $/mile for the D-/T-line.

c. Budgetary lump-sum cost in $ for the substation that will adjoin the plant. Substation arrangements should be double-ended, even though the D-/T-line is radial.

(1) For the 1000-cfs pumping plant, two (2) 3750-kVA Class OA substation transformers with 4160Y/2400-V secondaries and low-resistance grounding. Note: The average annual electric bill, based on a 49-yr, 1-mo simulation is $321,800.

(2) For the 3000-cfs pumping plant, two (2) 12-MVA Class OA substation transformers with 4160Y/2400-V secondaries and low-resistance grounding. Note: The average annual electric bill, based on a 49-yr, 1-mo simulation is $601,400.

(3) We are no longer considering the 5000-cfs pumping plant.

d. I need the actual SGS rate schedule so I will know how to apply the different rates given in the summaries that David Burnette had sent me in a previous e-mail. I think I've made a pretty good stab at it, but I still need to verify that I understand the rate structure. Also, have all riders been included? What about a power-factor penalty rider?

2. Subject plant is to be located in T6S, R5W of Section 29. That's about 1.4 miles SSW of Reydell (Intersection of Hwy 88? And Hwy 11). The exact location is where Little Bayou Meto flows through the Ark. R. Levee.

3. The budgetary costs should be generous. If the feasibility study shows too low a B/C ratio, then it's a bust and no further consideration will be given to the 2 pumping plants mentioned above. However, if the B/C ratio is close to 1.0, then we will be asked to extend the design so that more specific information can be used to base first costs on; in other words, we'll have to dig a little deeper to fine-tune the costs. For example, instead of using a circuitous route for the T-line, a field survey might need to be performed to get a more accurate estimate of the T-line's length. Another thing we could do is do away with the double-ended substation in favor of a radial one.

Still another is to omit the low-resistance grounding, although that might be just shaving pennies off the first cost.

Thanks,

Hank T. Braswell, P.E.
Electrical Engineer
U.S. Army Engineer District, Vicksburg,
CEMVK-ED-DC, ACME Section, Room 209
4155 Clay Street
Vicksburg, MS 39183-3435

Phone: 601/631-5742 (8am-11am & 1pm-4pm)
Fax: 601/631-7065 or 601/631-5583
E-mail: Hank.T.Braswell@mvk02.usace.army.mil
Website: http://www.mvk.usace.army.mil
[Updated 11 Apr 2002]

Braswell, Hank T MVK
From: VOGT, GEORGE Y [GVOGT@entergy.com]
Sent: Monday, April 29, 2002 4:30 PM
To: 'Braswell, Hank T MVK'
Cc: HUNT, MARK WILLIAM; WOOD, CHARLES W; BURNETTE, DAVID R
Subject: RE: Little Bayou Meto Pumping Plant

Hank,
Here is the info that I can provide at this time:
1. The distance to the nearest Transmission line is 9.5 miles, 115 kV Woodward to Lake Village line, estimated at $265,000 per mile---Total= $2,517,500
2. 1,000 cfs pump station total= $958,000
3. 3,000 cfs pump station total= $1,480,000
4. The closest Distribution line is 24.5 miles at $89,500 per mile, BUT we believe there will be excessive voltage drop due to motor
startup, and less reliable
service from this line, and recommend against this approach.
George

-----Original Message-----

From: **Braswell, Hank T MVK**
[mailto:Hank.T.Braswell@mvk02.usace.army.mil]
Sent: Monday, April 29, 2002 10:57 AM
To: BURNETTE, DAVID R; VOGT, GEORGE Y; WOOD, CHARLES W
Subject: Little Bayou Meto Pumping Plant

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a. Voltage and liberally estimated length of distribution or transmission line required to serve the pumping plant for each alternative.

b. Budgetary unit cost in $/mile for the D-/T-line.

c. Budgetary lump-sum cost in $ for the substation that will adjoin the plant. Substation arrangements should be double-ended, even though the D-/T-line is radial.

(1) For the 1000-cfs pumping plant, two (2) 3750-kVA Class OA substation transformers with 4160Y/2400-V secondaries and low-resistance grounding. Note: The average annual electric bill, based on a 49-yr, 1-mo simulation is $321,800.

(2) For the 3000-cfs pumping plant, two (2) 12-MVA Class OA substation transformers with 4160Y/2400-V secondaries and low-resistance grounding. Note: The average annual electric bill, based on a 49-yr, 1-mo simulation is $601,400.

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d. I need the actual SGS rate schedule so I will know how to apply the different rates given in the summaries that David Burnette had sent me in a previous e-mail. I think I've made a pretty good stab at it, but I still need to verify that I understand the rate structure. Also, have all riders been included? What about a power-factor penalty rider?

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3. The budgetary costs should be generous. If the feasibility study shows too low a B/C ratio, then it's a bust and no further consideration will be given to the 2 pumping plants mentioned above. However, if the B/C ratio is close to 1.0, then we will be asked to extend the design so that more specific information can be used to base first costs on; in other words, we'll have to dig a little deeper to fine-tune the costs. For example, instead of using a circuitous route for the T-line, a field survey might need to be performed to get a more accurate estimate of the T-line's length. Another thing we could do is do away with the double-ended substation in favor of a radial one. Still another is to omit the low-resistance grounding, although that might be just shaving pennies off the first cost.

Thanks,

Hank T. Braswell, P.E.
Electrical Engineer
U.S. Army Engineer District, Vicksburg,
CEMVK-ED-DC, ACME Section, Room 209
4155 Clay Street
Vicksburg, MS 39183-3435

Phone: 601/631-5742 (8am-11am & 1pm-4pm)
Fax: 601/631-7065 or 601/631-5583
E-mail: Hank.T.Braswell@mvk02.usace.army.mil
Website: http://www.mvk.usace.army.mil <http://www.mvk.usace.army.mil>
[Updated 11 Apr 2002]

*****

Braswell, Hank T MVK
From: Braswell, Hank T MVK
Sent: Wednesday, May 01, 2002 3:25 PM
To: 'HUNT, MARK WILLIAM'
Cc: 'VOGT, GEORGE Y'; 'WOOD, CHARLES W'; 'BURNETTE, DAVID R'; Graham, Tim J MVK
Subject: Little Bayou Meto Pumping Plant

Mark,

Attached is an Adobe Acrobat PDF file showing the Metering and Billing History created from a hydrological/mechanical/electrical simulation over the period-of-record (49-yr, 1-mo). Would you be so kind as to review the results of the application of Rate Schedule SGS to confirm my understanding of it? Thanks,

BayouMet.pdf

Hank T. Braswell, P.E.
Electrical Engineer
U.S. Army Engineer District, Vicksburg,
CEMVK-ED-DC, ACME Section, Room 209
4155 Clay Street
Vicksburg, MS 39183-3435

Phone: 601/631-5742 (8am-11am & 1pm-4pm)
Fax: 601/631-7065 or 601/631-5583
E-mail: Hank.T.Braswell@mvk02.usace.army.mil
Website: http://www.mvk.usace.army.mil
[Updated 11 Apr 2002]

Braswell, Hank T MVK
From: Braswell, Hank T MVK
Sent: Wednesday, May 01, 2002 11:06 AM
To: 'VOGT, GEORGE Y'
Cc: HUNT, MARK WILLIAM; WOOD, CHARLES W; BURNETTE, DAVID R; Graham, Tim J MVK
Subject: RE: Little Bayou Meto Pumping Plant

George,

I need some information about the cost data.

1. Does the cost in Item 1 below include the cost for connecting the T-line at a substation on the Woodward to Lake Village line?

2. Are the costs in Items 2 and 3 below for the double-ended substations with low-resistance grounding?

By the beginning of next week, we should know which alternative, if any, is feasible.

Thanks,

Hank T. Braswell, P.E.
Electrical Engineer
U.S. Army Engineer District, Vicksburg,
CEMVK-ED-DC, ACME Section, Room 209
4155 Clay Street
Vicksburg, MS 39183-3435

Phone: 601/631-5742 (8am-11am & 1pm-4pm)
Fax: 601/631-7065 or 601/631-5583
E-mail: Hank.T.Braswell@mvk02.usace.army.mil
Website: http://www.mvk.usace.army.mil
[Updated 11 Apr 2002]

-----Original Message-----

From: VOGT, GEORGE Y [mailto:GVOGT@entergy.com]
Sent: Monday, April 29, 2002 4:30 PM
To: 'Braswell, Hank T MVK'
Cc: HUNT, MARK WILLIAM; WOOD, CHARLES W; BURNETTE, DAVID R
Subject: RE: Little Bayou Meto Pumping Plant

Hank,

Here is the info that I can provide at this time:

1. The distance to the nearest Transmission line is 9.5 miles, 115 kV Woodward to Lake Village line, estimated at $265,000 per mile--Total= $2,517,500
2. 1,000 cfs pump station total= $958,000
3. 3,000 cfs pump station total= $1,480,000
4. The closest Distribution line is 24.5 miles at $89,500 per mile, BUT we believe there will be excessive voltage drop due to motor

startup, and less reliable service from this line, and recommend against this approach.

George

Braswell, Hank T MVK
From: VOGT, GEORGE Y [GVOGT@entergy.com]
Sent: Thursday, May 02, 2002 9:41 AM
To: 'Braswell, Hank T MVK'
Subject: RE: Little Bayou Meto Pumping Plant

Hank,
The estimates are intended to include the costs of items 1. 2. and 3. in your below memo. These are estimates only. Actual results can vary by as much as plus/minus 20% at this early stage of the process.

George

-----Original Message-----

From: **Braswell, Hank T MVK**
[mailto:Hank.T.Braswell@mvk02.usace.army.mil]
Sent: Wednesday, May 01, 2002 11:06 AM
To: VOGT, GEORGE Y
Cc: HUNT, MARK WILLIAM; WOOD, CHARLES W; BURNETTE, DAVID R; Graham, Tim J
MVK
Subject: RE: Little Bayou Meto Pumping Plant

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By the beginning of next week, we should know which alternative, if any, is feasible.

Thanks,

Hank T. Braswell, P.E.
Electrical Engineer
U.S. Army Engineer District, Vicksburg,
CEMVK-ED-DC, ACME Section, Room 209
4155 Clay Street
Vicksburg, MS 39183-3435

Phone: 601/631-5742 (8am-11am & 1pm-4pm)
Fax: 601/631-7065 or 601/631-5583
E-mail: Hank.T.Braswell@mvk02.usace.army.mil Website: http://www.mvk.usace.army.mil <http://www.mvk.usace.army.mil> [Updated 11 Apr 2002]

-----Original Message-----

From: VOGT, GEORGE Y [mailto:GVOGT@entergy.com <mailto:GVOGT@entergy.com>
]
Sent: Monday, April 29, 2002 4:30 PM
To: 'Braswell, Hank T MVK'
Cc: HUNT, MARK WILLIAM; WOOD, CHARLES W; BURNETTE, DAVID R
Subject: RE: Little Bayou Meto Pumping Plant

Hank,

Here is the info that I can provide at this time:

1. The distance to the nearest Transmission line is 9.5 miles, 115 kV Woodward to Lake Village line, estimated at $265,000 per mile--Total= $2,517,500
2. 1,000 cfs pump station total= $958,000
3. 3,000 cfs pump station total= $1,480,000
4. The closest Distribution line is 24.5 miles at $89,500

per mile, BUT we believe there will be excessive voltage drop due to motor
startup, and less reliable
service from this line, and recommend against this approach.

George

Braswell, Hank T MVK
From: CARPENTER, DAVID J [DCARPE2@entergy.com]
Sent: Friday, May 03, 2002 8:14 AM
To: 'Hank T. Braswell-Corp of Engineers'
Subject: FW: Little Bayou Metro Pumping Plant


M1 Rider 1-04-01.doc


Summary Rates 4-1-2002.xls

SGS1-2002.pdf

Hank,
I may of had your email wrong the first time. See letter below:
David Carpenter

-----Original Message-----
From: **CARPENTER, DAVID J**
Sent: Thursday, May 02, 2002 9:53 AM
To: 'Hank T. Braswell-Corp of Engineers'
Cc: HUNT, MARK WILLIAM
Subject: Little Bayou Metro Pumping Plant

Hank,
I left you a voice mail.
Mark Hunt sent me your .pdf file on estimated demand and usage as applied
to rate SGS.
We bill on 90% of kVA, so it looks like the billed demands you list are a
little high. We recently had a decrease in our energy cost recovery rider
(ECR). As of now, the first block on SGS is $.05607/kWh and the second
block is $.04493/kWh. However, the ECR is subject to change every April
billing.
The billed demand charge will vary depending upon what voltage service is
delivered and taken. I have attached Voltage Adjustment Rider M1. The
$2.95/kW is the worst case.
The demand ratchet goes back for the following 12 months, including the
present month. Looks like some of the ratchets indicated only went back to
the first of the year. This makes very little difference based of the
history of example account .
I will forward the file to our rate department to review. An excel file
would be useful.
David Carpenter
Account Manager
501-396-4825
P.O. Box 551
Little Rock, AR 72203
A-9LA-2A

<<M1 Rider 1-04-01.doc>> <<Summary Rates 4-1-2002.xls>>
<<SGS1-2002.pdf>>

ENTERGY ARKANSAS, INC.
SUMMARY OF RATES
EFFECTIVE FOR BILLINGS BEGINNING WITH CYCLE ONE FOR JULY, 2001

All charges are in dollars ($)	(1) Present Rate	(2) M26	(3) M33	(4) Sub-Total	(5) ECR	(6) TOTAL *
RESIDENTIAL (RS)						
Customer Charge	6.94	-	-	-	-	**6.94**
Three-Phase Charge	2.73	-	-	-	-	**2.73**
KWH Charge:						
Summer	0.06013	0.00000	0.00720	0.06733	0.01922	**0.08655**
Other						
1st 1000	0.06013	0.00000	0.00720	0.06733	0.01922	**0.08655**
Additional	0.02990	0.00000	0.00720	0.03710	0.01922	**0.05632**
Water Heating	0.02990	0.00000	0.00720	0.03710	0.01922	**0.05632**
Low/Level Use Provision						
KWH Charge:	0.05340	0.00000	0.00720	0.06060	0.01922	**0.07982**
RESIDENTIAL TIME-OF-USE (RT)						
Customer Charge	11.05	-	-	-	-	**11.05**
Three-Phase Charge	2.73	-	-	-	-	**2.73**
KWH Charge:						
On-peak	0.11627	0.00000	0.00720	0.12347	0.01922	**0.14269**
Off-peak	0.02295	0.00000	0.00720	0.03015	0.01922	**0.04937**
SMALL GENERAL SERVICE (SGS)						
Customer Charge	16.24	-	-	-	-	**16.24**
Minimum Kw Charge	1.97	-	-	-	-	**1.97**
KW Charge:	2.95	-	-	-	-	**2.95**
KWH Charge:						
1st 150 Kwh/Kw	0.03771	0.00000	0.00579	0.04350	0.01922	**0.06272**
Additional Kwh	0.02657	0.00000	0.00579	0.03236	0.01922	**0.05158**
GENERAL FARM SERVICE (GFS)						
Customer Charge	13.52	-	-	-	-	**13.52**
Minimum KVA Charge	1.02	-	-	-	-	**1.02**
Three-Phase Service	2.00	-	-	-	-	**2.00**
KW Charge:	2.63	-	-	-	-	**2.63**
KWH Charge:	0.02804	0.00000	0.00579	0.03383	0.01922	**0.05305**

*Franchise adjustment and sales taxes where applicable will apply to totals.

ARKANSAS PUBLIC SERVICE COMMISSION

1st Revised	Sheet No.: 18.1	Docket No.: 99-249-U
		Order No.: 15
Replacing: Original	Sheet No.: 18.1	Effective: 3/9/01
Entergy Arkansas, Inc. Name of Company		
Kind of Service: Electric	Class of Service: Commercial/Industrial	
Part IV. Rate Schedule No.: 18		
Title: Voltage Adjustment Rider (M1)		PSC File Mark Only

18.0. VOLTAGE ADJUSTMENT RIDER

18.1. AVAILABILITY

Available at the option of the Company to a customer receiving electric service under any approved Small General Service, Large General Service, or Large Power Service Rate Schedules where such service is delivered and/or metered at voltages of 13,800Y/7,960 or greater. Does not apply to Minimum provision of any Rate Schedule.

18.2. ADJUSTMENT TO NET MONTHLY RATE

This rate shall remain in effect until modified or terminated in accordance with its terms or applicable regulations or laws. (AT)

18.2.1. Service is delivered and metered at voltages less than 13,800Y/7,960.

No reduction in Demand or Energy.

18.2.2. Service is delivered at voltages less than 13,800Y/7,960 but metering is at voltages 13,800Y/7,960 or greater but less than 115,000 Volts.

Reduce Demand and Energy by 1% for losses.

18.2.3. Service is metered at voltages less than 13,800Y/7,960 and Customer owns and maintains all transformation facilities. (AT)

Function: Billing Item	Generation	Transmission	Distribution	Customer Service	Total
Reduce Monthly Demand Charge per kW by:	$0.00	$0.00	$0.77	$0.00	$0.77
Reduce Daily Demand Charge per kW, if applicable, by:	$0.0000	$0.0000	$0.0253	$0.0000	$0.0253

18.2.4. Service is delivered and metered at voltages of 13,800Y/7,960 or greater but less than 115,000 Volts and Customer owns and maintains all transformation facilities. (AT)

Function: Billing Item	Generation	Transmission	Distribution	Customer Service	Total
Reduce Demand and Energy by 1.0% for losses; and,					
Reduce Monthly Demand Charge per kW by:	$0.00	$0.00	$0.77	$0.00	$0.77
Reduce Daily Demand Charge per kW, if applicable, by:	$0.0000	$0.0000	$0.0253	$0.0000	$0.0253

ARKANSAS PUBLIC SERVICE COMMISSION

1st Revised	Sheet No.: 18.2	Docket No.: 99-249-U
		Order No.: 15
Replacing: Original	Sheet No.: 18.2	Effective: 3/9/01
Entergy Arkansas, Inc. Name of Company		
Kind of Service: Electric	Class of Service: Commercial/Industrial	
Part IV. Rate Schedule No.: 18		
Title: Voltage Adjustment Rider (M1)		PSC File Mark Only

18.2.5. Service is delivered at 115,000 Volts or greater but metered at a lower voltage. (AT, MT)

Function: Billing Item	Generation	Transmission	Distribution	Customer Service	Total
Reduce Demand and Energy by 1.0% for losses; and, Reduce Monthly Demand Charge per kW by:	$0.00	$0.00	$1.63	$0.00	$1.63
Reduce Daily Demand Charge per kW, if applicable, by:	$0.0000	$0.0000	$0.0536	$0.0000	$0.0536

18.2.6. Service is delivered and metered at 115,000 Volts or greater. (AT)

Function: Billing Item	Generation	Transmission	Distribution	Customer Service	Total
Reduce Demand and Energy by 2.0% for losses; and, Reduce Monthly Demand Charge per kW by:	$0.00	$0.00	$1.63	$0.00	$1.63
Reduce Daily Demand Charge per kW, if applicable, by:	$0.0000	$0.0000	$0.0536	$0.0000	$0.0536

Braswell, Hank T MVK
From: CARPENTER, DAVID J [DCARPE2@entergy.com]
Sent: Monday, May 06, 2002 4:45 PM
To: 'Hank T. Braswell-Corp of Engineers'
Cc: HUNT, MARK WILLIAM
Subject: FW: Little Bayou Metro Pumping Plant

Summary of
etering and Billli.

Hank,
I asked our rate department to update your spreadsheet with the latest SGS information and it is attached with two extra bookmarks. This assumes service is metered and delivered at low voltage. There are further discounts if take service and metered at higher voltages described in the Voltage Adjustment Rider I sent you last week.

David Carpenter

-----Original Message-----

From: **Braswell, Hank T MVK**
[mailto:Hank.T.Braswell@mvk02.usace.army.mil]
Sent: Monday, May 06, 2002 10:33 AM
To: CARPENTER, DAVID J
Cc: Graham, Tim J MVK
Subject: RE: Little Bayou Metro Pumping Plant

David,

XLS file attached as requested. I will call you about the SGS rates

sometime this week, hopefully today or tomorrow. Thanks for your help,

Hank T. Braswell, P.E.
Electrical Engineer
U.S. Army Engineer District, Vicksburg,
CEMVK-ED-DC, ACME Section, Room 209
4155 Clay Street
Vicksburg, MS 39183-3435

Phone: 601/631-5742 (8am-11am & 1pm-4pm)
Fax: 601/631-7065 or 601/631-5583
E-mail: Hank.T.Braswell@mvk02.usace.army.mil Website:
http://www.mvk.usace.army.mil <http://www.mvk.usace.army.mil> [Updated
11 Apr 2002]

-----Original Message-----

From: **CARPENTER, DAVID J [mailto:DCARPE2@entergy.com**

<mailto:DCARPE2@entergy.com>]
Sent: Friday, May 03, 2002 8:14 AM
To: 'Hank T. Braswell-Corp of Engineers'
Subject: FW: Little Bayou Metro Pumping Plant

Hank,
I may of had your email wrong the first time. See letter below:
David Carpenter
-----Original Message-----
From: CARPENTER, DAVID J
Sent: Thursday, May 02, 2002 9:53 AM
To: 'Hank T. Braswell-Corp of Engineers'
Cc: HUNT, MARK WILLIAM
Subject: Little Bayou Metro Pumping Plant

Hank,
I left you a voice mail.
Mark Hunt sent me your .pdf file on estimated demand and usage as applied
to rate SGS.
We bill on 90% of kVA, so it looks like the billed demands you list are a
little high. We recently had a decrease in our energy cost recovery rider

(ECR). As of now, the first block on SGS is $.05607/kWh and the second
block is $.04493/kWh. However, the ECR is subject to change every April
billing.
The billed demand charge will vary depending upon what voltage service is
delivered and taken. I have attached Voltage Adjustment Rider M1. The
$2.95/kW is the worst case.
The demand ratchet goes back for the following 12 months, including the
present month. Looks like some of the ratchets indicated only went back to

the first of the year. This makes very little difference based of the
history of example account .
I will forward the file to our rate department to review. An excel file
would be useful.
David Carpenter
Account Manager
501-396-4825
P.O. Box 551
Little Rock, AR 72203
A-9LA-2A
<<M1 Rider 1-04-01.doc>> <<Summary Rates 4-1-2002.xls>>
<<SGS1-2002.pdf>>

Braswell, Hank T MVK
From: Braswell, Hank T MVK
Sent: Monday, May 06, 2002 7:06 AM
To: 'VOGT, GEORGE Y'; Braswell, Hank T MVK
Subject: RE: Little Bayou Meto Pumping Plant

George,

Thanks for the clarifications. I asked for them because I remembered you mentioning that the substation cost would be the largest.

Also, ±20% is a lot tighter than what I was expecting, which was ±50% or more.

No need to reply to this message. I'll be in touch. Thanks very much for your help.

Hank T. Braswell, P.E.
Electrical Engineer
U.S. Army Engineer District, Vicksburg,
CEMVK-ED-DC, ACME Section, Room 209
4155 Clay Street
Vicksburg, MS 39183-3435

Phone: 601/631-5742 (8am-11am & 1pm-4pm)
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E-mail: Hank.T.Braswell@mvk02.usace.army.mil
Website: http://www.mvk.usace.army.mil
[Updated 11 Apr 2002]

-----Original Message-----

From: VOGT, GEORGE Y [mailto:GVOGT@entergy.com]
Sent: Thursday, May 02, 2002 9:41 AM
To: 'Braswell, Hank T MVK'
Subject: RE: Little Bayou Meto Pumping Plant

Hank,

The estimates are intended to include the costs of items 1. 2. and 3. in your below memo. These are estimates only. Actual results can vary by as much as plus/minus 20% at this early stage of the process.

George

-----Original Message-----

From: Braswell, Hank T MVK
[mailto:Hank.T.Braswell@mvk02.usace.army.mil]
Sent: Wednesday, May 01, 2002 11:06 AM
To: VOGT, GEORGE Y
Cc: HUNT, MARK WILLIAM; WOOD, CHARLES W; BURNETTE, DAVID R; Graham, Tim J
MVK
Subject: RE: Little Bayou Meto Pumping Plant

George,

I need some information about the cost data.

1. Does the cost in Item 1 below include the cost for connecting the T-line at a substation on the Woodward to Lake Village line?
2. Are the costs in Items 2 and 3 below for the double-ended substations with low-resistance grounding?

By the beginning of next week, we should know which alternative, if any, is feasible.

Thanks,

Hank T. Braswell, P.E.
Electrical Engineer
U.S. Army Engineer District, Vicksburg,
CEMVK-ED-DC, ACME Section, Room 209
4155 Clay Street
Vicksburg, MS 39183-3435

Phone: 601/631-5742 (8am-11am & 1pm-4pm)
Fax: 601/631-7065 or 601/631-5583
E-mail: Hank.T.Braswell@mvk02.usace.army.mil
Website: http://www.mvk.usace.army.mil
<http://www.mvk.usace.army.mil>
[Updated 11 Apr 2002]

-----Original Message-----

From: VOGT, GEORGE Y [mailto:GVOGT@entergy.com <mailto:GVOGT@entergy.com>
]
Sent: Monday, April 29, 2002 4:30 PM
To: 'Braswell, Hank T MVK'
Cc: HUNT, MARK WILLIAM; WOOD, CHARLES W; BURNETTE, DAVID R
Subject: RE: Little Bayou Meto Pumping Plant

Hank,

Here is the info that I can provide at this time:

1. The distance to the nearest Transmission line is 9.5 miles, 115 kV Woodward to Lake Village line, estimated at $265,000 per mile--Total= $2,517,500
2. 1,000 cfs pump station total= $958,000
3. 3,000 cfs pump station total= $1,480,000
4. The closest Distribution line is 24.5 miles at $89,500

per mile, BUT we believe there will be excessive voltage drop due to motor
startup, and less reliable
service from this line, and recommend against this approach.

George

Braswell, Hank T MVK
From: Braswell, Hank T MVK
Sent: Monday, May 06, 2002 10:33 AM
To: 'CARPENTER, DAVID J'
Cc: Graham, Tim J MVK
Subject: RE: Little Bayou Metro Pumping Plant

Summary of
etering and Billli.

David,

XLS file attached as requested. I will call you about the SGS rates sometime this week, hopefully today or tomorrow. Thanks for your help,

Hank T. Braswell, P.E.
Electrical Engineer
U.S. Army Engineer District, Vicksburg,
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E-mail: Hank.T.Braswell@mvk02.usace.army.mil
Website: http://www.mvk.usace.army.mil
[Updated 11 Apr 2002]

-----Original Message-----

From: CARPENTER, DAVID J [mailto:DCARPE2@entergy.com]
Sent: Friday, May 03, 2002 8:14 AM
To: 'Hank T. Braswell-Corp of Engineers'
Subject: FW: Little Bayou Metro Pumping Plant

Hank,
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David Carpenter

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From: CARPENTER, DAVID J
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Cc: HUNT, MARK WILLIAM
Subject: Little Bayou Metro Pumping Plant

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the first of the year. This makes very little difference based of the
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David Carpenter
Account Manager
501-396-4825
P.O. Box 551
Little Rock, AR 72203
A-9LA-2A
<<M1 Rider 1-04-01.doc>> <<Summary Rates 4-1-2002.xls>>
<<SGS1-2002.pdf>>

Braswell, Hank T MVK

From: Braswell, Hank T MVK
Sent: Tuesday, June 25, 2002 3:12 PM
To: 'GVOGT@entergy.com'
Subject: FW: Bayou Meto Basin Project, Hinged Crest Gate Structures

Hank, 1-5742
ED-DC, Rm 209

-----Original Message-----
From: Braswell, Hank T MVK
Sent: Wednesday, May 08, 2002 9:13 AM
To: 'DCARPE2@entergy.com'; 'MHUNT@entergy.com'
Cc: Graham, Tim J MVK
Subject: Bayou Meto Basin Project, Hinged Crest Gate Structures

Mark and David,

In addition to the pumping plant at Little Bayou Meto, there will be 2 hinged crest gate structures. One is called Salt Bayou; the other, Dry Bayou.

T4S, R7W; Section 1 for Salt Bayou and Section 6 for Dry Bayou. See saltdrylocation.jpg for an aerial photo with the structure locations marked in red. See saltdryvicinity.jpg for an excerpt from a quad map. I've been advised that these locations are difficult to get to now.

As it stands now, each structure have a hydraulic pump powered by a 20-hp motor and equipment heaters for the motors and equipment enclosures. Maximum demand for each structure will be on the order of 15 kW. Energy usage may be between 100-400 kWh/month. The extremely low annual load factor is a result of the motor producing the demand and the heaters consuming the energy.

Would you please send me budgetary estimates of the contributions-in-aid-of-construction for the line extensions and the applicable rate schedules and riders that I do not already have?

Thanks,

Hank T. Braswell, P.E.
Electrical Engineer
U.S. Army Engineer District, Vicksburg,
CEMVK-ED-DC, ACME Section, Room 209
4155 Clay Street
Vicksburg, MS 39183-3435

Phone: 601/631-5742 (8am-11am & 1pm-4pm)
Fax: 601/631-7065 or 601/631-5583
E-mail: Hank.T.Braswell@mvk02.usace.army.mil
Website: http://www.mvk.usace.army.mil
[Updated 11 Apr 2002]

Braswell, Hank T MVK
From: VOGT, GEORGE Y [GVOGT@entergy.com]
Sent: Monday, July 22, 2002 7:59 AM
To: 'Hank Braswell'
Subject: FW: Bayou Meto Basin Project, Hinged Crest Gate Structures

Follow Up Flag: Follow up
Due By: Monday, July 29, 2002 5:00 PM
Flag Status: Flagged

Hank,

An investigation reveals that this is not in Entergy service territory. Sorry for the delay in determining this.

George -----Original Message-----

From: **TAYLOR, JAMES DENNIS**
Sent: Friday, July 19, 2002 8:39 AM
To: COLLINS, JEFFERY A; VOGT, GEORGE Y
Cc: CARPENTER, DAVID J
Subject: RE: Bayou Meto Basin Project, Hinged Crest Gate Structures

George,

The interested parties should be advised that the two sites mentioned below that will need electric service are not in the Entergy service area. Both sites are south of Humphrey. I believe these will be in the First Electric Coop service area. They need to check with First Electric for further information.

Dennis Taylor

-----Original Message-----

From: **COLLINS, JEFFERY A**
Sent: Thursday, July 18, 2002 3:38 PM
To: VOGT, GEORGE Y
Cc: TAYLOR, JAMES DENNIS; CARPENTER, DAVID J
Subject: FW: Bayou Meto Basin Project, Hinged Crest Gate Structures

George,

This appears to be in Dennis Taylor's area. Dennis's phone number is 8-733-5624.

Jeff Collins
-----Original Message-----
From: **VOGT, GEORGE Y**
Sent: Tuesday, July 16, 2002 2:18 PM
To: COLLINS, JEFFERY A
Cc: CARPENTER, DAVID J
Subject: FW: Bayou Meto Basin Project, Hinged Crest Gate Structures

Jeff,
Can you provide this info?
George -----Original Message-----
From: **Braswell, Hank T MVK**
[mailto:Hank.T.Braswell@mvk02.usace.army.mil]
Sent: Tuesday, June 25, 2002 3:12 PM
To: VOGT, GEORGE Y
Subject: FW: Bayou Meto Basin Project, Hinged Crest Gate Structures

Hank, 1-5742

ED-DC, Rm 209

-----Original Message-----

From: **Braswell, Hank T MVK**
Sent: Wednesday, May 08, 2002 9:13 AM
To: 'DCARPE2@entergy.com'; 'MHUNT@entergy.com'
Cc: Graham, Tim J MVK
Subject: Bayou Meto Basin Project, Hinged Crest Gate Structures

Mark and David,

In addition to the pumping plant at Little Bayou Meto, there will be 2 hinged crest gate structures. One is called Salt Bayou; the other, Dry Bayou.

T4S, R7W; Section 1 for Salt Bayou and Section 6 for Dry Bayou. See saltdrylocation.jpg for an aerial photo with the structure locations marked in red. See saltdryvicinity.jpg for an

excerpt from a quad map. I've been advised that these locations are difficult to get to now.

As it stands now, each structure have a hydraulic pump powered by a 20-hp motor and equipment heaters for the motors and equipment enclosures. Maximum demand for each structure will be

on the order of 15 kW. Energy usage may be between 100-400 kWh/month. The extremely low annual load factor is a result of the motor producing the demand and the heaters consuming the

energy.

Would you please send me budgetary estimates of the contributions-in-aid-of-construction for the line extensions and the applicable rate schedules and riders that I do not already have?

Thanks,

Hank T. Braswell, P.E.

Electrical Engineer

U.S. Army Engineer District, Vicksburg,

CEMVK-ED-DC, ACME Section, Room 209

4155 Clay Street

Vicksburg, MS 39183-3435

Phone: 601/631-5742 (8am-11am & 1pm-4pm)

Fax: 601/631-7065 or 601/631-5583

E-mail: Hank.T.Braswell@mvk02.usace.army.mil

Website: http://www.mvk.usace.army.mil

[Updated 11 Apr 2002]

First Electric Co-op Corp
Stuttgart, AR 72160-6013
Tel: (800)489-3594 or (870)673-2695
Fax: (870)673-3695

Randy,

In addition to a pumping plant at Little Bayou Meto that is in Entergy's territory, there will be 2 hinged crest gate structures. One is called Salt Bayou; the other, Dry Bayou. T4S, R7W; Section 1 for Salt Bayou and Section 6 for Dry Bayou. An excerpt from a quad map follows.

As it stands now, each structure will have a hydraulic pump powered by a 20-hp motor and equipment heaters for the motors and equipment enclosures. Maximum demand for each structure will be on the order of 15 kW. Energy usage may be between 100-400 kWh/month. The low annual load factor is a result of the motor producing the demand and the heaters consuming the energy.

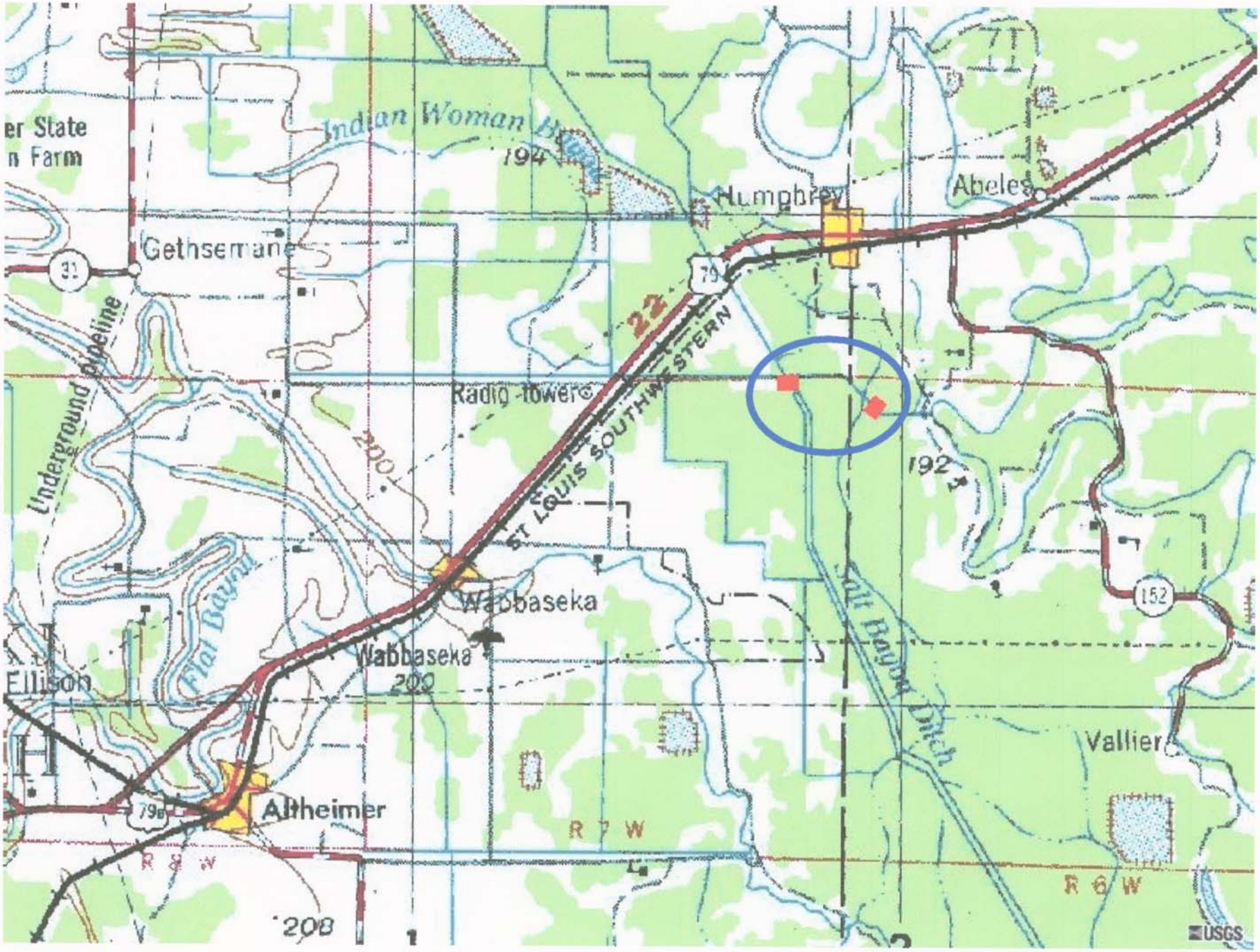
We need budgetary estimates of the contributions-in-aid-of-construction for the line extensions and the applicable rate schedule and riders. These estimates will be used in determining whether the Bayou Meto Basin Project is feasible.

If you have questions or need additional information, please call me. Thanks for your help.

Hank T. Braswell, P.E.
Electrical Engineer
U.S. Army Engineer District, Vicksburg,
CEMVK-ED-DC, ACME Section, Room 209
4155 Clay Street
Vicksburg, MS 39183-3435

Phone: 601/631-5742 (8am-11am & 1pm-4pm)
Fax: 601/631-7065 or 601/631-5583
E-mail: Hank.T.Braswell@mvk02.usace.army.mil
Website: http://www.mvk.usace.army.mil
[Updated 11 Apr 2002]


USGS


er State
n Farm
Indian Woman Bayou
194
Humphrey
Abeles
Gethsemane
31
79
22
Underground Pipeline
Radio Tower
200
ST LOUIS SOUTHWESTERN
192
Salt Bayou Ditch
152
Flat Bayou
Wabbaseka
Wabbaseka
209
Ellison
Vallier
Altheimer
79B
R 7 W
R 6 W
208
1
2
USGS

APPENDIX C – ENGINEERING INVESTIGATIONS & ANALYSES
FLOOD CONTROL COMPONENT

SECTION IV – STRUCTURAL, MECHANICAL, ELECTRICAL & CIVIL DESIGN

APPENDIX IV-C-E

Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8699	25-Oct-72	0	163.17		0.10	0	0.0	0.0%	0.0%					
8700	26-Oct-72	0	163.37		0.10	0	0.0	0.0%	0.0%					
8701	27-Oct-72	0	163.64		0.10	0	0.0	0.0%	0.0%					
8702	28-Oct-72	0	163.62		0.10	0	0.0	0.0%	0.0%					
8703	29-Oct-72	0	163.81		0.10	0	0.0	0.0%	0.0%					
8704	30-Oct-72	0	164.67		0.10	0	0.0	0.0%	0.0%					
8705	31-Oct-72	0	164.78		0.10	0	0.0	0.0%	0.0%					
8706	01-Nov-72	0	165.41		0.10	0	0.0	0.0%	0.0%					
8707	02-Nov-72	545	167.20	0.30	0.40	1	1027.0	60.4%	59.3%	91.9%	86.3%	841.9	975.3	20,205
8708	03-Nov-72	1,091	169.69	0.13	0.23	2	1021.9	60.1%	59.0%	91.8%	86.3%	1,676.0	1,943.0	40,225
8709	04-Nov-72	1,086	170.82	0.97	1.07	2	1046.9	61.6%	60.4%	92.0%	86.5%	1,713.9	1,980.4	41,134
8710	05-Nov-72	1,089	171.66	0.47	0.57	2	1032.0	60.7%	59.6%	91.9%	86.4%	1,691.4	1,958.2	40,593
8711	06-Nov-72	1,092	171.78	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8712	07-Nov-72	1,092	171.46	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8713	08-Nov-72	1,092	171.20	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8714	09-Nov-72	1,092	171.03	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8715	10-Nov-72	1,092	171.09	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8716	11-Nov-72	1,092	170.97	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8717	12-Nov-72	1,092	170.95	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8718	13-Nov-72	1,092	171.36	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8719	14-Nov-72	1,092	171.13	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8720	15-Nov-72	1,092	171.33	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8721	16-Nov-72	1,092	171.40	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8722	17-Nov-72	1,092	172.10	0.03	0.13	2	1018.9	60.0%	58.8%	91.8%	86.2%	1,671.5	1,938.5	40,117
8723	18-Nov-72	1,092	172.32	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8724	19-Nov-72	1,091	172.52	0.12	0.22	2	1021.6	60.1%	59.0%	91.8%	86.3%	1,675.6	1,942.6	40,214
8725	20-Nov-72	1,092	172.70	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8726	21-Nov-72	1,092	172.73	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8727	22-Nov-72	1,091	172.92	0.23	0.33	2	1024.9	60.3%	59.2%	91.9%	86.3%	1,680.6	1,947.5	40,334
8728	23-Nov-72	1,092	173.01	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8729	24-Nov-72	1,092	172.92	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8730	25-Nov-72	1,092	172.78	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8731	26-Nov-72	1,092	172.75	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8732	27-Nov-72	1,092	172.58	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8733	28-Nov-72	1,092	172.27	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8734	29-Nov-72	1,092	171.70	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8735	30-Nov-72	1,092	171.29	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8736	01-Dec-72	1,092	170.58	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8737	02-Dec-72	1,092	170.28	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084

Tab "Power & Energy - 1000 cfs" of
File "Bayou Meto Study - 1000-cfs Pumping Station.XLS"

Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8738	03-Dec-72	1,091	169.62	0.20	0.30	2	1024.0	60.3%	59.1%	91.9%	86.3%	1,679.2	1,946.2	40,301
8739	04-Dec-72	1,080	167.70	2.12	2.22	2	1081.0	63.6%	62.4%	92.2%	86.9%	1,765.3	2,030.8	42,368
8740	05-Dec-72	1,048	163.38	6.44	6.54	2	1205.2	70.9%	69.6%	93.1%	88.3%	1,950.6	2,208.3	46,815
8741	06-Dec-72	0	159.04		0.10	0	0.0	0.0%	0.0%					
8742	07-Dec-72	0	164.92		0.10	0	0.0	0.0%	0.0%					
8743	08-Dec-72	1,087	168.49	0.87	0.97	2	1043.9	61.4%	60.2%	92.0%	86.5%	1,709.4	1,976.0	41,026
8744	09-Dec-72	1,058	164.22	5.14	5.24	2	1168.5	68.8%	67.4%	92.8%	87.9%	1,896.2	2,156.8	45,508
8745	10-Dec-72	0	160.28		0.10	0	0.0	0.0%	0.0%					
8746	11-Dec-72	1,092	169.39	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8747	12-Dec-72	1,092	169.55	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8748	13-Dec-72	1,092	170.07	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8749	14-Dec-72	1,092	170.23	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8750	15-Dec-72	1,092	170.47	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8751	16-Dec-72	1,092	170.88	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8752	17-Dec-72	1,092	171.21	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8753	18-Dec-72	1,092	171.24	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8754	19-Dec-72	1,092	171.18	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8755	20-Dec-72	1,092	171.34	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8756	21-Dec-72	1,092	171.22	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8757	22-Dec-72	1,092	170.54	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8758	23-Dec-72	1,092	170.13	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8759	24-Dec-72	1,092	169.93	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8760	25-Dec-72	1,092	169.58	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8761	26-Dec-72	1,092	169.31	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8762	27-Dec-72	1,092	168.54	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8763	28-Dec-72	1,092	168.45	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8764	29-Dec-72	1,092	168.33	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8765	30-Dec-72	1,092	168.10	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8766	31-Dec-72	1,091	167.94	0.10	0.20	2	1021.0	60.1%	58.9%	91.8%	86.2%	1,674.7	1,941.7	40,193
8767	01-Jan-73	1,088	167.04	0.73	0.83	2	1039.8	61.2%	60.0%	92.0%	86.5%	1,703.1	1,969.8	40,875
8768	02-Jan-73	1,076	165.00	2.77	2.87	2	1099.9	64.7%	63.5%	92.4%	87.1%	1,793.8	2,058.4	43,051
8769	03-Jan-73	0	161.56		0.10	0	0.0	0.0%	0.0%					
8770	04-Jan-73	1,090	167.72	0.32	0.42	2	1027.6	60.5%	59.3%	91.9%	86.3%	1,684.6	1,951.5	40,431
8771	05-Jan-73	0	162.71		0.10	0	0.0	0.0%	0.0%					
8772	06-Jan-73	1,083	167.62	1.50	1.60	2	1062.7	62.5%	61.3%	92.1%	86.7%	1,737.7	2,003.8	41,706
8773	07-Jan-73	0	162.80		0.10	0	0.0	0.0%	0.0%					
8774	08-Jan-73	1,087	168.44	0.92	1.02	2	1045.4	61.5%	60.3%	92.0%	86.5%	1,711.7	1,978.2	41,080
8775	09-Jan-73	1,069	165.79	3.80	3.90	2	1129.9	66.5%	65.2%	92.6%	87.5%	1,838.7	2,101.8	44,128
8776	10-Jan-73	1,054	163.71	5.65	5.75	2	1183.1	69.6%	68.3%	92.9%	88.1%	1,917.9	2,177.4	46,030

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Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8777	11-Jan-73	0	162.65		0.10	0	0.0	0.0%	0.0%					
8778	12-Jan-73	1,092	169.73	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8779	13-Jan-73	1,088	168.90	0.69	0.79	2	1038.6	61.1%	59.9%	92.0%	86.4%	1,701.3	1,968.0	40,831
8780	14-Jan-73	1,081	167.54	1.82	1.92	2	1072.2	63.1%	61.9%	92.2%	86.8%	1,752.1	2,017.9	42,050
8781	15-Jan-73	1,067	165.28	4.08	4.18	2	1138.0	67.0%	65.7%	92.6%	87.6%	1,850.8	2,113.5	44,420
8782	16-Jan-73	0	161.75		0.10	0	0.0	0.0%	0.0%					
8783	17-Jan-73	1,084	167.89	1.47	1.57	2	1061.8	62.5%	61.3%	92.1%	86.7%	1,736.4	2,002.5	41,673
8784	18-Jan-73	1,049	163.22	6.37	6.47	2	1203.5	70.8%	69.5%	93.1%	88.3%	1,948.2	2,205.9	46,756
8785	19-Jan-73	0	159.03		0.10	0	0.0	0.0%	0.0%					
8786	20-Jan-73	0	164.38		0.10	0	0.0	0.0%	0.0%					
8787	21-Jan-73	539	167.30	2.29	2.39	1	1085.9	63.9%	62.7%	92.3%	87.0%	886.4	1,019.0	21,273
8788	22-Jan-73	528	165.07	5.44	5.54	1	1177.1	69.3%	67.9%	92.9%	88.0%	954.5	1,084.5	22,908
8789	23-Jan-73	526	165.73	5.89	5.99	1	1190.0	70.0%	68.7%	93.0%	88.2%	964.1	1,093.5	23,138
8790	24-Jan-73	1,069	170.26	3.69	3.79	2	1126.7	66.3%	65.0%	92.5%	87.4%	1,833.9	2,097.2	44,013
8791	25-Jan-73	1,075	171.67	2.92	3.02	2	1104.3	65.0%	63.7%	92.4%	87.2%	1,800.3	2,064.8	43,208
8792	26-Jan-73	1,079	172.48	2.27	2.37	2	1085.4	63.9%	62.6%	92.3%	87.0%	1,771.9	2,037.2	42,526
8793	27-Jan-73	1,082	172.82	1.77	1.87	2	1070.7	63.0%	61.8%	92.2%	86.8%	1,749.8	2,015.7	41,996
8794	28-Jan-73	1,086	173.09	1.02	1.12	2	1048.4	61.7%	60.5%	92.0%	86.6%	1,716.2	1,982.6	41,188
8795	29-Jan-73	1,088	173.36	0.75	0.85	2	1040.3	61.2%	60.0%	92.0%	86.5%	1,704.0	1,970.7	40,896
8796	30-Jan-73	1,087	173.60	0.83	0.93	2	1042.7	61.4%	60.2%	92.0%	86.5%	1,707.6	1,974.2	40,983
8797	31-Jan-73	1,087	173.82	0.93	1.03	2	1045.7	61.5%	60.4%	92.0%	86.5%	1,712.1	1,978.7	41,091
8798	01-Feb-73	1,087	174.01	0.89	0.99	2	1044.5	61.5%	60.3%	92.0%	86.5%	1,710.3	1,976.9	41,047
8799	02-Feb-73	1,088	174.17	0.73	0.83	2	1039.8	61.2%	60.0%	92.0%	86.5%	1,703.1	1,969.8	40,875
8800	03-Feb-73	1,089	174.30	0.45	0.55	2	1031.4	60.7%	59.5%	91.9%	86.4%	1,690.5	1,957.3	40,572
8801	04-Feb-73	1,090	174.43	0.32	0.42	2	1027.6	60.5%	59.3%	91.9%	86.3%	1,684.6	1,951.5	40,431
8802	05-Feb-73	1,090	174.52	0.37	0.47	2	1029.0	60.6%	59.4%	91.9%	86.3%	1,686.9	1,953.8	40,485
8803	06-Feb-73	1,089	174.59	0.59	0.69	2	1035.6	61.0%	59.8%	91.9%	86.4%	1,696.8	1,963.6	40,723
8804	07-Feb-73	1,088	174.63	0.69	0.79	2	1038.6	61.1%	59.9%	92.0%	86.4%	1,701.3	1,968.0	40,831
8805	08-Feb-73	1,086	174.64	0.96	1.06	2	1046.6	61.6%	60.4%	92.0%	86.5%	1,713.5	1,980.0	41,123
8806	09-Feb-73	1,086	174.64	1.10	1.20	2	1050.8	61.8%	60.6%	92.0%	86.6%	1,719.8	1,986.2	41,274
8807	10-Feb-73	1,086	174.65	1.08	1.18	2	1050.2	61.8%	60.6%	92.0%	86.6%	1,718.9	1,985.3	41,253
8808	11-Feb-73	1,086	174.71	1.03	1.13	2	1048.7	61.7%	60.5%	92.0%	86.6%	1,716.6	1,983.1	41,199
8809	12-Feb-73	1,087	174.79	0.95	1.05	2	1046.3	61.6%	60.4%	92.0%	86.5%	1,713.0	1,979.5	41,112
8810	13-Feb-73	1,086	174.87	1.01	1.11	2	1048.1	61.7%	60.5%	92.0%	86.6%	1,715.7	1,982.2	41,177
8811	14-Feb-73	1,086	174.95	1.07	1.17	2	1049.9	61.8%	60.6%	92.0%	86.6%	1,718.4	1,984.9	41,242
8812	15-Feb-73	1,086	175.03	0.99	1.09	2	1047.5	61.7%	60.5%	92.0%	86.5%	1,714.8	1,981.3	41,155
8813	16-Feb-73	1,088	175.11	0.77	0.87	2	1040.9	61.3%	60.1%	92.0%	86.5%	1,704.9	1,971.6	40,918
8814	17-Feb-73	1,088	175.19	0.69	0.79	2	1038.6	61.1%	59.9%	92.0%	86.4%	1,701.3	1,968.0	40,831
8815	18-Feb-73	1,089	175.25	0.49	0.59	2	1032.6	60.8%	59.6%	91.9%	86.4%	1,692.3	1,959.1	40,615

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Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8816	19-Feb-73	1,089	175.30	0.44	0.54	2	1031.1	60.7%	59.5%	91.9%	86.4%	1,690.0	1,956.9	40,561
8817	20-Feb-73	1,092	175.33	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8818	21-Feb-73	1,092	174.91	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8819	22-Feb-73	1,092	174.08	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8820	23-Feb-73	1,092	172.98	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8821	24-Feb-73	1,092	169.77	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8822	25-Feb-73	1,092	165.67	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8823	26-Feb-73	0	159.02		0.10	0	0.0	0.0%	0.0%					
8824	27-Feb-73	0	164.17		0.10	0	0.0	0.0%	0.0%					
8825	28-Feb-73	0	166.88		0.10	0	0.0	0.0%	0.0%					
8826	01-Mar-73	546	167.31	0.00	0.10	1	1018.0	59.9%	58.8%	91.8%	86.2%	835.1	968.6	20,042
8827	02-Mar-73	539	165.05	2.45	2.55	1	1090.6	64.2%	62.9%	92.3%	87.0%	889.9	1,022.4	21,357
8828	03-Mar-73	0	162.65		0.10	0	0.0	0.0%	0.0%					
8829	04-Mar-73	0	166.65		0.10	0	0.0	0.0%	0.0%					
8830	05-Mar-73	1,081	169.67	1.94	2.04	2	1075.7	63.3%	62.1%	92.2%	86.9%	1,757.5	2,023.1	42,179
8831	06-Mar-73	1,052	167.52	5.95	6.05	2	1191.7	70.1%	68.8%	93.0%	88.2%	1,930.7	2,189.5	46,337
8832	07-Mar-73	1,022	165.63	9.27	9.37	2	1272.3	74.9%	73.4%	93.5%	89.1%	2,049.3	2,300.2	49,184
8833	08-Mar-73	1,000	164.18	11.56	11.66	2	1329.4	78.2%	76.7%	93.8%	89.6%	2,135.8	2,384.3	51,260
8834	09-Mar-73	993	164.11	12.20	12.30	2	1347.3	79.3%	77.8%	93.8%	89.7%	2,163.8	2,412.7	51,932
8835	10-Mar-73	1,008	166.43	10.84	10.94	2	1309.2	77.1%	75.6%	93.7%	89.5%	2,104.3	2,352.3	50,504
8836	11-Mar-73	1,023	168.66	9.22	9.32	2	1271.1	74.8%	73.4%	93.5%	89.1%	2,047.6	2,298.6	49,143
8837	12-Mar-73	1,035	169.99	7.89	7.99	2	1239.8	73.0%	71.6%	93.3%	88.7%	2,001.6	2,255.9	48,037
8838	13-Mar-73	1,041	170.85	7.27	7.37	2	1225.0	72.1%	70.7%	93.2%	88.6%	1,979.8	2,235.6	47,516
8839	14-Mar-73	1,045	171.57	6.79	6.89	2	1213.6	71.4%	70.0%	93.1%	88.4%	1,963.0	2,219.8	47,111
8840	15-Mar-73	1,049	172.09	6.27	6.37	2	1200.9	70.7%	69.3%	93.0%	88.3%	1,944.3	2,202.3	46,663
8841	16-Mar-73	1,052	172.33	5.91	6.01	2	1190.6	70.1%	68.7%	93.0%	88.2%	1,929.0	2,187.9	46,296
8842	17-Mar-73	1,054	172.49	5.75	5.85	2	1186.0	69.8%	68.4%	92.9%	88.1%	1,922.2	2,181.4	46,132
8843	18-Mar-73	1,055	172.66	5.58	5.68	2	1181.1	69.5%	68.2%	92.9%	88.1%	1,914.9	2,174.6	45,959
8844	19-Mar-73	1,057	172.87	5.37	5.47	2	1175.1	69.2%	67.8%	92.9%	88.0%	1,906.0	2,166.1	45,744
8845	20-Mar-73	1,058	173.10	5.14	5.24	2	1168.5	68.8%	67.4%	92.8%	87.9%	1,896.2	2,156.8	45,508
8846	21-Mar-73	1,060	173.31	4.93	5.03	2	1162.4	68.4%	67.1%	92.8%	87.8%	1,887.2	2,148.2	45,293
8847	22-Mar-73	1,062	173.49	4.75	4.85	2	1157.3	68.1%	66.8%	92.7%	87.8%	1,879.5	2,140.9	45,109
8848	23-Mar-73	1,064	173.64	4.48	4.58	2	1149.5	67.7%	66.3%	92.7%	87.7%	1,868.0	2,129.9	44,831
8849	24-Mar-73	1,065	173.76	4.36	4.46	2	1146.1	67.5%	66.1%	92.7%	87.7%	1,862.8	2,125.0	44,708
8850	25-Mar-73	1,065	173.85	4.27	4.37	2	1143.5	67.3%	66.0%	92.7%	87.6%	1,859.0	2,121.3	44,616
8851	26-Mar-73	1,066	173.91	4.21	4.31	2	1141.8	67.2%	65.9%	92.6%	87.6%	1,856.4	2,118.8	44,554
8852	27-Mar-73	1,067	173.97	4.03	4.13	2	1136.6	66.9%	65.6%	92.6%	87.6%	1,848.7	2,111.4	44,368
8853	28-Mar-73	1,067	174.08	4.04	4.14	2	1136.9	66.9%	65.6%	92.6%	87.6%	1,849.1	2,111.8	44,378
8854	29-Mar-73	1,068	174.22	3.90	4.00	2	1132.8	66.7%	65.4%	92.6%	87.5%	1,843.0	2,106.0	44,232

Tab "Power & Energy - 1000 cfs" of
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Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8855	30-Mar-73	1,069	174.35	3.77	3.87	2	1129.0	66.4%	65.2%	92.6%	87.5%	1,837.4	2,100.5	44,096
8856	31-Mar-73	1,070	174.47	3.53	3.63	2	1122.0	66.0%	64.8%	92.5%	87.4%	1,826.9	2,090.5	43,846
8857	01-Apr-73	1,071	174.56	3.44	3.54	2	1119.4	65.9%	64.6%	92.5%	87.4%	1,823.0	2,086.7	43,752
8858	02-Apr-73	1,072	174.65	3.35	3.45	2	1116.8	65.7%	64.5%	92.5%	87.3%	1,819.1	2,082.9	43,658
8859	03-Apr-73	1,072	174.75	3.25	3.35	2	1113.9	65.6%	64.3%	92.5%	87.3%	1,814.7	2,078.7	43,553
8860	04-Apr-73	1,074	174.84	3.04	3.14	2	1107.8	65.2%	63.9%	92.4%	87.2%	1,805.6	2,069.9	43,333
8861	05-Apr-73	1,075	174.91	2.83	2.93	2	1101.6	64.8%	63.6%	92.4%	87.2%	1,796.4	2,061.0	43,113
8862	06-Apr-73	1,076	174.98	2.77	2.87	2	1099.9	64.7%	63.5%	92.4%	87.1%	1,793.8	2,058.4	43,051
8863	07-Apr-73	1,075	175.03	2.85	2.95	2	1102.2	64.9%	63.6%	92.4%	87.2%	1,797.3	2,061.8	43,134
8864	08-Apr-73	1,074	175.06	2.94	3.04	2	1104.8	65.0%	63.8%	92.4%	87.2%	1,801.2	2,065.6	43,229
8865	09-Apr-73	1,075	175.07	2.81	2.91	2	1101.1	64.8%	63.5%	92.4%	87.2%	1,795.5	2,060.1	43,092
8866	10-Apr-73	1,074	175.07	2.93	3.03	2	1104.6	65.0%	63.7%	92.4%	87.2%	1,800.8	2,065.2	43,218
8867	11-Apr-73	1,074	175.07	2.93	3.03	2	1104.6	65.0%	63.7%	92.4%	87.2%	1,800.8	2,065.2	43,218
8868	12-Apr-73	1,074	175.08	3.04	3.14	2	1107.8	65.2%	63.9%	92.4%	87.2%	1,805.6	2,069.9	43,333
8869	13-Apr-73	1,073	175.09	3.15	3.25	2	1111.0	65.4%	64.1%	92.4%	87.3%	1,810.4	2,074.5	43,449
8870	14-Apr-73	1,071	175.10	3.50	3.60	2	1121.1	66.0%	64.7%	92.5%	87.4%	1,825.6	2,089.2	43,815
8871	15-Apr-73	1,067	175.09	4.04	4.14	2	1136.9	66.9%	65.6%	92.6%	87.6%	1,849.1	2,111.8	44,378
8872	16-Apr-73	1,067	175.08	4.05	4.15	2	1137.1	66.9%	65.6%	92.6%	87.6%	1,849.5	2,112.2	44,389
8873	17-Apr-73	1,067	175.06	4.07	4.17	2	1137.7	67.0%	65.7%	92.6%	87.6%	1,850.4	2,113.0	44,409
8874	18-Apr-73	1,064	175.04	4.45	4.55	2	1148.7	67.6%	66.3%	92.7%	87.7%	1,866.7	2,128.7	44,801
8875	19-Apr-73	1,063	175.05	4.62	4.72	2	1153.5	67.9%	66.6%	92.7%	87.7%	1,874.0	2,135.6	44,975
8876	20-Apr-73	1,056	175.11	5.46	5.56	2	1177.7	69.3%	68.0%	92.9%	88.0%	1,909.8	2,169.7	45,836
8877	21-Apr-73	1,045	175.24	6.78	6.88	2	1213.3	71.4%	70.0%	93.1%	88.4%	1,962.6	2,219.5	47,102
8878	22-Apr-73	1,046	175.46	6.70	6.80	2	1211.4	71.3%	69.9%	93.1%	88.4%	1,959.8	2,216.9	47,035
8879	23-Apr-73	1,046	175.77	6.70	6.80	2	1211.4	71.3%	69.9%	93.1%	88.4%	1,959.8	2,216.9	47,035
8880	24-Apr-73	1,042	176.10	7.17	7.27	2	1222.6	72.0%	70.6%	93.2%	88.5%	1,976.3	2,232.4	47,431
8881	25-Apr-73	1,038	176.44	7.56	7.66	2	1231.9	72.5%	71.1%	93.2%	88.6%	1,990.0	2,245.2	47,760
8882	26-Apr-73	1,030	176.79	8.47	8.57	2	1253.6	73.8%	72.3%	93.4%	88.9%	2,021.9	2,274.8	48,525
8883	27-Apr-73	1,026	177.15	8.86	8.96	2	1262.7	74.3%	72.9%	93.5%	89.0%	2,035.3	2,287.2	48,847
8884	28-Apr-73	1,030	177.51	8.50	8.60	2	1254.3	73.8%	72.4%	93.4%	88.9%	2,022.9	2,275.8	48,550
8885	29-Apr-73	1,034	177.85	8.01	8.11	2	1242.6	73.1%	71.7%	93.3%	88.8%	2,005.8	2,259.9	48,138
8886	30-Apr-73	1,045	178.16	6.80	6.90	2	1213.8	71.4%	70.1%	93.1%	88.4%	1,963.3	2,220.2	47,119
8887	01-May-73	1,052	178.43	5.93	6.03	2	1191.2	70.1%	68.7%	93.0%	88.2%	1,929.8	2,188.7	46,316
8888	02-May-73	1,056	178.67	5.45	5.55	2	1177.4	69.3%	68.0%	92.9%	88.0%	1,909.4	2,169.3	45,826
8889	03-May-73	1,075	178.87	2.87	2.97	2	1102.8	64.9%	63.6%	92.4%	87.2%	1,798.1	2,062.7	43,155
8890	04-May-73	1,071	179.03	3.44	3.54	2	1119.4	65.9%	64.6%	92.5%	87.4%	1,823.0	2,086.7	43,752
8891	05-May-73	1,071	179.16	3.47	3.57	2	1120.3	65.9%	64.7%	92.5%	87.4%	1,824.3	2,088.0	43,783
8892	06-May-73	1,071	179.28	3.51	3.61	2	1121.4	66.0%	64.7%	92.5%	87.4%	1,826.0	2,089.6	43,825
8893	07-May-73	1,072	179.37	3.26	3.36	2	1114.2	65.6%	64.3%	92.5%	87.3%	1,815.2	2,079.1	43,564

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Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8894	08-May-73	1,075	179.44	2.86	2.96	2	1102.5	64.9%	63.6%	92.4%	87.2%	1,797.7	2,062.3	43,145
8895	09-May-73	1,074	179.50	2.97	3.07	2	1105.7	65.1%	63.8%	92.4%	87.2%	1,802.5	2,066.9	43,260
8896	10-May-73	1,072	179.53	3.26	3.36	2	1114.2	65.6%	64.3%	92.5%	87.3%	1,815.2	2,079.1	43,564
8897	11-May-73	1,069	179.56	3.71	3.81	2	1127.3	66.3%	65.1%	92.5%	87.5%	1,834.7	2,098.0	44,034
8898	12-May-73	1,076	179.57	2.74	2.84	2	1099.0	64.7%	63.4%	92.4%	87.1%	1,792.5	2,057.2	43,019
8899	13-May-73	1,080	179.58	2.16	2.26	2	1082.2	63.7%	62.5%	92.2%	86.9%	1,767.1	2,032.5	42,410
8900	14-May-73	1,080	179.57	2.03	2.13	2	1078.4	63.5%	62.2%	92.2%	86.9%	1,761.4	2,027.0	42,274
8901	15-May-73	1,079	179.57	2.31	2.41	2	1086.5	63.9%	62.7%	92.3%	87.0%	1,773.7	2,038.9	42,568
8902	16-May-73	1,076	179.55	2.76	2.86	2	1099.6	64.7%	63.5%	92.4%	87.1%	1,793.3	2,058.0	43,040
8903	17-May-73	1,073	179.53	3.10	3.20	2	1109.5	65.3%	64.0%	92.4%	87.3%	1,808.2	2,072.4	43,396
8904	18-May-73	1,072	179.51	3.28	3.38	2	1114.7	65.6%	64.3%	92.5%	87.3%	1,816.0	2,080.0	43,585
8905	19-May-73	1,078	179.48	2.40	2.50	2	1089.1	64.1%	62.9%	92.3%	87.0%	1,777.6	2,042.7	42,662
8906	20-May-73	1,084	179.44	1.31	1.41	2	1057.0	62.2%	61.0%	92.1%	86.7%	1,729.2	1,995.5	41,501
8907	21-May-73	1,085	179.41	1.16	1.26	2	1052.5	61.9%	60.7%	92.0%	86.6%	1,722.5	1,988.8	41,339
8908	22-May-73	1,087	179.37	0.84	0.94	2	1043.0	61.4%	60.2%	92.0%	86.5%	1,708.1	1,974.7	40,993
8909	23-May-73	1,089	179.35	0.50	0.60	2	1032.9	60.8%	59.6%	91.9%	86.4%	1,692.7	1,959.5	40,626
8910	24-May-73	1,091	179.34	0.15	0.25	2	1022.5	60.2%	59.0%	91.8%	86.3%	1,677.0	1,943.9	40,247
8911	25-May-73	1,092	179.27	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8912	26-May-73	1,092	179.13	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8913	27-May-73	1,092	178.99	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8914	28-May-73	1,092	178.79	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8915	29-May-73	1,092	178.58	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8916	30-May-73	1,092	178.33	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8917	31-May-73	1,092	178.04	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8918	01-Jun-73	1,092	177.65	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8919	02-Jun-73	1,092	177.18	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8920	03-Jun-73	1,092	176.69	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8921	04-Jun-73	1,092	176.23	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8922	05-Jun-73	1,092	175.86	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8923	06-Jun-73	1,085	175.85	1.25	1.35	2	1055.2	62.1%	60.9%	92.1%	86.6%	1,726.5	1,992.8	41,436
8924	07-Jun-73	1,084	175.86	1.41	1.51	2	1060.0	62.4%	61.2%	92.1%	86.7%	1,733.7	1,999.9	41,609
8925	08-Jun-73	1,080	175.86	2.02	2.12	2	1078.1	63.5%	62.2%	92.2%	86.9%	1,761.0	2,026.5	42,263
8926	09-Jun-73	1,051	175.85	6.03	6.13	2	1194.0	70.3%	68.9%	93.0%	88.2%	1,934.1	2,192.7	46,418
8927	10-Jun-73	1,049	175.83	6.33	6.43	2	1202.6	70.8%	69.4%	93.1%	88.3%	1,946.8	2,204.6	46,722
8928	11-Jun-73	1,049	175.79	6.36	6.46	2	1203.3	70.8%	69.4%	93.1%	88.3%	1,947.8	2,205.6	46,748
8929	12-Jun-73	1,084	175.75	1.36	1.46	2	1058.5	62.3%	61.1%	92.1%	86.7%	1,731.4	1,997.7	41,555
8930	13-Jun-73	1,086	175.69	1.10	1.20	2	1050.8	61.8%	60.6%	92.0%	86.6%	1,719.8	1,986.2	41,274
8931	14-Jun-73	1,086	175.62	1.01	1.11	2	1048.1	61.7%	60.5%	92.0%	86.6%	1,715.7	1,982.2	41,177
8932	15-Jun-73	1,086	175.55	1.08	1.18	2	1050.2	61.8%	60.6%	92.0%	86.6%	1,718.9	1,985.3	41,253

Tab "Power & Energy - 1000 cfs" of
File "Bayou Meto Study - 1000-cfs Pumping Station.XLS"

Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8933	16-Jun-73	1,087	175.47	0.84	0.94	2	1043.0	61.4%	60.2%	92.0%	86.5%	1,708.1	1,974.7	40,993
8934	17-Jun-73	1,087	175.39	0.92	1.02	2	1045.4	61.5%	60.3%	92.0%	86.5%	1,711.7	1,978.2	41,080
8935	18-Jun-73	1,088	175.30	0.71	0.81	2	1039.2	61.2%	60.0%	92.0%	86.5%	1,702.2	1,968.9	40,853
8936	19-Jun-73	1,091	175.22	0.24	0.34	2	1025.2	60.3%	59.2%	91.9%	86.3%	1,681.0	1,947.9	40,344
8937	20-Jun-73	1,092	175.13	0.05	0.15	2	1019.5	60.0%	58.8%	91.8%	86.2%	1,672.4	1,939.4	40,138
8938	21-Jun-73	1,092	175.06	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8939	22-Jun-73	1,092	174.57	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8940	23-Jun-73	1,092	173.76	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8941	24-Jun-73	1,092	172.66	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8942	25-Jun-73	1,092	171.62	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8943	26-Jun-73	1,091	171.04	0.16	0.26	2	1022.8	60.2%	59.0%	91.8%	86.3%	1,677.4	1,944.4	40,258
8944	27-Jun-73	1,089	170.04	0.47	0.57	2	1032.0	60.7%	59.6%	91.9%	86.4%	1,691.4	1,958.2	40,593
8945	28-Jun-73	1,078	167.64	2.41	2.51	2	1089.4	64.1%	62.9%	92.3%	87.0%	1,778.0	2,043.2	42,673
8946	29-Jun-73	0	162.82		0.10	0	0.0	0.0%	0.0%					
8947	30-Jun-73	540	167.47	2.12	2.22	1	1081.0	63.6%	62.4%	92.2%	86.9%	882.7	1,015.4	21,184
8948	01-Jul-73	538	166.76	2.60	2.70	1	1095.0	64.4%	63.2%	92.3%	87.1%	893.2	1,025.6	21,436
8949	02-Jul-73	535	165.63	3.73	3.83	1	1127.8	66.4%	65.1%	92.6%	87.5%	917.8	1,049.4	22,027
8950	03-Jul-73	533	164.27	4.04	4.14	1	1136.9	66.9%	65.6%	92.6%	87.6%	924.5	1,055.9	22,189
8951	04-Jul-73	0	162.78		0.10	0	0.0	0.0%	0.0%					
8952	05-Jul-73	0	166.05		0.10	0	0.0	0.0%	0.0%					
8953	06-Jul-73	0	165.35		0.10	0	0.0	0.0%	0.0%					
8954	07-Jul-73	0	164.40		0.10	0	0.0	0.0%	0.0%					
8955	08-Jul-73	0	163.50		0.10	0	0.0	0.0%	0.0%					
8956	09-Jul-73	0	163.42		0.10	0	0.0	0.0%	0.0%					
8957	10-Jul-73	0	163.39		0.10	0	0.0	0.0%	0.0%					
8958	11-Jul-73	0	163.36		0.10	0	0.0	0.0%	0.0%					
8959	12-Jul-73	0	163.35		0.10	0	0.0	0.0%	0.0%					
8960	13-Jul-73	0	163.35		0.10	0	0.0	0.0%	0.0%					
8961	14-Jul-73	0	163.35		0.10	0	0.0	0.0%	0.0%					
8962	15-Jul-73	0	163.35		0.10	0	0.0	0.0%	0.0%					
8963	16-Jul-73	0	163.38		0.10	0	0.0	0.0%	0.0%					
8964	17-Jul-73	0	163.36		0.10	0	0.0	0.0%	0.0%					
8965	18-Jul-73	0	164.00		0.10	0	0.0	0.0%	0.0%					
8966	19-Jul-73	0	164.70		0.10	0	0.0	0.0%	0.0%					
8967	20-Jul-73	0	165.36		0.10	0	0.0	0.0%	0.0%					
8968	21-Jul-73	0	165.94		0.10	0	0.0	0.0%	0.0%					
8969	22-Jul-73	0	166.79		0.10	0	0.0	0.0%	0.0%					
8970	23-Jul-73	0	166.83		0.10	0	0.0	0.0%	0.0%					
8971	24-Jul-73	0	166.83		0.10	0	0.0	0.0%	0.0%					

Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8972	25-Jul-73	0	166.82		0.10	0	0.0	0.0%	0.0%					
8973	26-Jul-73	0	166.81		0.10	0	0.0	0.0%	0.0%					
8974	27-Jul-73	0	166.80		0.10	0	0.0	0.0%	0.0%					
8975	28-Jul-73	0	166.30		0.10	0	0.0	0.0%	0.0%					
8976	29-Jul-73	0	166.14		0.10	0	0.0	0.0%	0.0%					
8977	30-Jul-73	0	166.14		0.10	0	0.0	0.0%	0.0%					
8978	31-Jul-73	0	166.15		0.10	0	0.0	0.0%	0.0%					
8979	01-Aug-73	0	166.02		0.10	0	0.0	0.0%	0.0%					
8980	02-Aug-73	0	166.15		0.10	0	0.0	0.0%	0.0%					
8981	03-Aug-73	0	166.22		0.10	0	0.0	0.0%	0.0%					
8982	04-Aug-73	0	166.24		0.10	0	0.0	0.0%	0.0%					
8983	05-Aug-73	0	166.17		0.10	0	0.0	0.0%	0.0%					
8984	06-Aug-73	0	166.14		0.10	0	0.0	0.0%	0.0%					
8985	07-Aug-73	0	166.02		0.10	0	0.0	0.0%	0.0%					
8986	08-Aug-73	0	165.89		0.10	0	0.0	0.0%	0.0%					
8987	09-Aug-73	0	165.20		0.10	0	0.0	0.0%	0.0%					
8988	10-Aug-73	0	165.16		0.10	0	0.0	0.0%	0.0%					
8989	11-Aug-73	0	164.89		0.10	0	0.0	0.0%	0.0%					
8990	12-Aug-73	0	164.81		0.10	0	0.0	0.0%	0.0%					
8991	13-Aug-73	0	164.77		0.10	0	0.0	0.0%	0.0%					
8992	14-Aug-73	0	164.76		0.10	0	0.0	0.0%	0.0%					
8993	15-Aug-73	0	165.08		0.10	0	0.0	0.0%	0.0%					
8994	16-Aug-73	0	165.41		0.10	0	0.0	0.0%	0.0%					
8995	17-Aug-73	0	165.65		0.10	0	0.0	0.0%	0.0%					
8996	18-Aug-73	0	166.08		0.10	0	0.0	0.0%	0.0%					
8997	19-Aug-73	0	166.17		0.10	0	0.0	0.0%	0.0%					
8998	20-Aug-73	0	166.14		0.10	0	0.0	0.0%	0.0%					
8999	21-Aug-73	0	166.14		0.10	0	0.0	0.0%	0.0%					
9000	22-Aug-73	0	165.75		0.10	0	0.0	0.0%	0.0%					
9001	23-Aug-73	0	165.05		0.10	0	0.0	0.0%	0.0%					
9002	24-Aug-73	0	164.75		0.10	0	0.0	0.0%	0.0%					
9003	25-Aug-73	0	163.81		0.10	0	0.0	0.0%	0.0%					
9004	26-Aug-73	0	163.62		0.10	0	0.0	0.0%	0.0%					
9005	27-Aug-73	0	163.46		0.10	0	0.0	0.0%	0.0%					
9006	28-Aug-73	0	163.30		0.10	0	0.0	0.0%	0.0%					
9007	29-Aug-73	0	163.18		0.10	0	0.0	0.0%	0.0%					
9008	30-Aug-73	0	163.13		0.10	0	0.0	0.0%	0.0%					
9009	31-Aug-73	0	163.11		0.10	0	0.0	0.0%	0.0%					
9010	01-Sep-73	0	163.10		0.10	0	0.0	0.0%	0.0%					

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Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
9011	02-Sep-73	0	163.10		0.10	0	0.0	0.0%	0.0%					
9012	03-Sep-73	0	163.10		0.10	0	0.0	0.0%	0.0%					
9013	04-Sep-73	0	163.10		0.10	0	0.0	0.0%	0.0%					
9014	05-Sep-73	0	163.52		0.10	0	0.0	0.0%	0.0%					
9015	06-Sep-73	0	164.35		0.10	0	0.0	0.0%	0.0%					
9016	07-Sep-73	0	165.04		0.10	0	0.0	0.0%	0.0%					
9017	08-Sep-73	0	165.43		0.10	0	0.0	0.0%	0.0%					
9018	09-Sep-73	0	165.84		0.10	0	0.0	0.0%	0.0%					
9019	10-Sep-73	0	166.04		0.10	0	0.0	0.0%	0.0%					
9020	11-Sep-73	0	166.07		0.10	0	0.0	0.0%	0.0%					
9021	12-Sep-73	0	166.25		0.10	0	0.0	0.0%	0.0%					
9022	13-Sep-73	0	166.26		0.10	0	0.0	0.0%	0.0%					
9023	14-Sep-73	0	166.22		0.10	0	0.0	0.0%	0.0%					
9024	15-Sep-73	0	166.20		0.10	0	0.0	0.0%	0.0%					
9025	16-Sep-73	0	166.51		0.10	0	0.0	0.0%	0.0%					
9026	17-Sep-73	0	166.50		0.10	0	0.0	0.0%	0.0%					
9027	18-Sep-73	0	166.50		0.10	0	0.0	0.0%	0.0%					
9028	19-Sep-73	0	166.37		0.10	0	0.0	0.0%	0.0%					
9029	20-Sep-73	0	166.10		0.10	0	0.0	0.0%	0.0%					
9030	21-Sep-73	0	165.80		0.10	0	0.0	0.0%	0.0%					
9031	22-Sep-73	0	165.45		0.10	0	0.0	0.0%	0.0%					
9032	23-Sep-73	0	165.10		0.10	0	0.0	0.0%	0.0%					
9033	24-Sep-73	0	164.89		0.10	0	0.0	0.0%	0.0%					
9034	25-Sep-73	0	164.81		0.10	0	0.0	0.0%	0.0%					
9035	26-Sep-73	0	164.77		0.10	0	0.0	0.0%	0.0%					
9036	27-Sep-73	0	165.06		0.10	0	0.0	0.0%	0.0%					
9037	28-Sep-73	0	165.12		0.10	0	0.0	0.0%	0.0%					
9038	29-Sep-73	0	165.10		0.10	0	0.0	0.0%	0.0%					
9039	30-Sep-73	0	165.10		0.10	0	0.0	0.0%	0.0%					
9040	01-Oct-73	0	165.10		0.10	0	0.0	0.0%	0.0%					
9041	02-Oct-73	0	165.10		0.10	0	0.0	0.0%	0.0%					
9042	03-Oct-73	0	165.44		0.10	0	0.0	0.0%	0.0%					
9043	04-Oct-73	0	165.49		0.10	0	0.0	0.0%	0.0%					
9044	05-Oct-73	0	165.69		0.10	0	0.0	0.0%	0.0%					
9045	06-Oct-73	0	165.82		0.10	0	0.0	0.0%	0.0%					
9046	07-Oct-73	0	165.81		0.10	0	0.0	0.0%	0.0%					
9047	08-Oct-73	0	165.80		0.10	0	0.0	0.0%	0.0%					
9048	09-Oct-73	0	166.11		0.10	0	0.0	0.0%	0.0%					
9049	10-Oct-73	0	166.15		0.10	0	0.0	0.0%	0.0%					

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1000-cfs (2 1750-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
9050	11-Oct-73	1,089	167.53	0.51	0.61	2	1033.2	60.8%	59.6%	91.9%	86.4%	1,693.2	1,960.0	40,637
9051	12-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9052	13-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9053	14-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9054	15-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9055	16-Oct-73	0	159.03		0.10	0	0.0	0.0%	0.0%					
9056	17-Oct-73	0	166.10		0.10	0	0.0	0.0%	0.0%					
9057	18-Oct-73	1,043	170.13	6.97	7.07	2	1217.8	71.7%	70.3%	93.2%	88.5%	1,969.3	2,225.8	47,263
9058	19-Oct-73	1,037	169.44	7.67	7.77	2	1234.5	72.7%	71.2%	93.3%	88.7%	1,993.9	2,248.8	47,852
9059	20-Oct-73	1,033	168.95	8.16	8.26	2	1246.2	73.3%	71.9%	93.3%	88.8%	2,011.0	2,264.7	48,264
9060	21-Oct-73	1,029	168.55	8.56	8.66	2	1255.7	73.9%	72.5%	93.4%	88.9%	2,025.0	2,277.7	48,600
9061	22-Oct-73	1,030	168.03	8.44	8.54	2	1252.9	73.7%	72.3%	93.4%	88.9%	2,020.8	2,273.8	48,499
9062	23-Oct-73	1,024	167.08	9.08	9.18	2	1267.9	74.6%	73.2%	93.5%	89.0%	2,042.8	2,294.2	49,028
9063	24-Oct-73	1,011	165.26	10.48	10.58	2	1300.6	76.5%	75.1%	93.7%	89.4%	2,090.8	2,338.5	50,178
9064	25-Oct-73	0	162.26		0.10	0	0.0	0.0%	0.0%					
9065	26-Oct-73	1,044	168.16	6.88	6.98	2	1215.7	71.6%	70.2%	93.1%	88.5%	1,966.1	2,222.8	47,187
9066	27-Oct-73	1,016	164.26	10.01	10.11	2	1289.6	75.9%	74.4%	93.6%	89.3%	2,074.6	2,323.5	49,791
9067	28-Oct-73	0	159.03		0.10	0	0.0	0.0%	0.0%					
9068	29-Oct-73	0	164.52		0.10	0	0.0	0.0%	0.0%					
9069	30-Oct-73	536	167.36	3.38	3.48	1	1117.6	65.8%	64.5%	92.5%	87.3%	910.2	1,042.1	21,845
9070	31-Oct-73	521	164.74	7.05	7.15	1	1219.7	71.8%	70.4%	93.2%	88.5%	986.0	1,114.2	23,665
9071	01-Nov-73	0	161.58		0.10	0	0.0	0.0%	0.0%					
9072	02-Nov-73	0	164.69		0.10	0	0.0	0.0%	0.0%					
9073	03-Nov-73	532	167.43	4.53	4.63	1	1151.0	67.7%	66.4%	92.7%	87.7%	935.1	1,066.0	22,441
9074	04-Nov-73	526	166.26	6.04	6.14	1	1194.3	70.3%	68.9%	93.0%	88.2%	967.3	1,096.5	23,214
9075	05-Nov-73	521	165.20	7.10	7.20	1	1220.9	71.9%	70.5%	93.2%	88.5%	986.9	1,115.0	23,686
9076	06-Nov-73	517	164.21	8.09	8.19	1	1244.5	73.2%	71.8%	93.3%	88.8%	1,004.3	1,131.2	24,103
9077	07-Nov-73	518	164.61	7.69	7.79	1	1235.0	72.7%	71.3%	93.3%	88.7%	997.3	1,124.7	23,935
9078	08-Nov-73	543	167.30	1.01	1.11	1	1048.1	61.7%	60.5%	92.0%	86.6%	857.9	991.1	20,589
9079	09-Nov-73	1,088	169.59	0.69	0.79	2	1038.6	61.1%	59.9%	92.0%	86.4%	1,701.3	1,968.0	40,831
9080	10-Nov-73	1,089	169.25	0.57	0.67	2	1035.0	60.9%	59.7%	91.9%	86.4%	1,695.9	1,962.7	40,702
9081	11-Nov-73	1,092	168.31	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
9082	12-Nov-73	1,091	167.93	0.11	0.21	2	1021.3	60.1%	58.9%	91.8%	86.3%	1,675.1	1,942.1	40,203
9083	13-Nov-73	1,092	163.78	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
9084	14-Nov-73	0	161.18		0.10	0	0.0	0.0%	0.0%					
9085	15-Nov-73	0	164.40		0.10	0	0.0	0.0%	0.0%					
9086	16-Nov-73	0	164.33		0.10	0	0.0	0.0%	0.0%					
9087	17-Nov-73	0	164.26		0.10	0	0.0	0.0%	0.0%					
9088	18-Nov-73	0	164.20		0.10	0	0.0	0.0%	0.0%					

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	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
17903		Q	Period-of-Record Pumping Station Operating Statistics											
17904	DATE	(kcfs)	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
17905	357.9	(cfs)	(ft)	(ft)	(ft)		(hp)					(kW)	(kVA)	(MWh)
17906	SUM/COUNT	5,898.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	233,453
17907	MIN	0.0	159.0	0.0	0.1	0.0	0.0	0.0%	0.0%	91.8%	86.2%	835.1	968.6	20.04
17908	AVG	329.6	165.6	2.3	0.9	0.6	362.4	21.3%	20.9%	92.2%	87.0%	1,625.8	1,867.8	39.02
17909	MAX	1,092.0	179.6	20.1	20.2	2.0	1,488.3	87.6%	85.9%	94.0%	90.5%	2,383.6	2,632.9	57.21
17910														
17911	17897	= No. of days pumped over POR												
17912	429528	= No. of hours pumped over POR												
17913	50.00	= Duration of POR in years												
17914	4.1%	= Days pumped per year as a percentage												

Cell: H17904
Comment: Total flow (in SUM/COUNT line) over the POR of pump station in 1000's of cfs

Cell: G17905
Comment: Average number of hours pumped annually over the POR

Cell: H17905
Comment: Min, avg, and max flows of pump station over the POR in cfs

Cell: J17905
Comment: Hydraulic static head is the negative of mechanical static head

Cell: L17905
Comment: Number of pumps operating

Cell: M17905
Comment: Pump brake hp

Cell: N17905
Comment: Diesel engine load as a percentage

Cell: O17905
Comment: Electric motor load as a percentage

Cell: P17905
Comment: Electric motor efficiency as a function of M_load

Cell: Q17905
Comment: Electric motor power factor as a function of M_load

Cell: R17905
Comment: Power demand in kW of pumping station

Cell: S17905
Comment: Power demand in kVA of pumping plant (accounts for power factor)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8704	30-Oct-72	0	164.67		0.10	0	0.0	0.0%	0.0%					
8705	31-Oct-72	0	164.77		0.10	0	0.0	0.0%	0.0%					
8706	01-Nov-72	0	165.41		0.10	0	0.0	0.0%	0.0%					
8707	02-Nov-72	1,225	167.20	0.30	0.40	2	1027.0	32.1%	25.9%	86.5%	76.0%	1,788.3	2,354.2	42,918
8708	03-Nov-72	3,633	168.22	1.60	1.70	7	1065.6	33.3%	26.9%	86.7%	76.3%	6,478.5	8,486.4	155,484
8709	04-Nov-72	0	159.05		0.10	0	0.0	0.0%	0.0%					
8710	05-Nov-72	3,642	170.92	1.21	1.31	7	1054.0	32.9%	26.6%	86.7%	76.2%	6,412.7	8,412.7	153,906
8711	06-Nov-72	0	159.01		0.10	0	0.0	0.0%	0.0%					
8712	07-Nov-72	3,676	170.74	0.23	0.33	7	1024.9	32.0%	25.9%	86.5%	75.9%	6,247.0	8,226.2	149,929
8713	08-Nov-72	0	159.03		0.10	0	0.0	0.0%	0.0%					
8714	09-Nov-72	3,684	171.01	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8715	10-Nov-72	3,583	167.00	3.74	3.84	7	1128.1	35.2%	28.5%	87.1%	77.0%	6,831.1	8,877.0	163,946
8716	11-Nov-72	3,507	164.05	6.46	6.56	7	1205.7	37.6%	30.4%	87.5%	77.7%	7,264.8	9,348.4	174,355
8717	12-Nov-72	0	162.13		0.10	0	0.0	0.0%	0.0%					
8718	13-Nov-72	3,684	171.64	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8719	14-Nov-72	3,684	170.88	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8720	15-Nov-72	3,612	168.67	2.53	2.63	7	1092.9	34.1%	27.6%	86.9%	76.6%	6,632.8	8,658.1	159,187
8721	16-Nov-72	0	162.63		0.10	0	0.0	0.0%	0.0%					
8722	17-Nov-72	3,684	172.20	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8723	18-Nov-72	3,624	170.16	1.97	2.07	7	1076.6	33.6%	27.2%	86.8%	76.4%	6,540.7	8,555.8	156,977
8724	19-Nov-72	0	159.08		0.10	0	0.0	0.0%	0.0%					
8725	20-Nov-72	3,639	171.32	1.32	1.42	7	1057.3	33.0%	26.7%	86.7%	76.3%	6,431.3	8,433.6	154,351
8726	21-Nov-72	0	161.24		0.10	0	0.0	0.0%	0.0%					
8727	22-Nov-72	3,631	171.50	1.65	1.75	7	1067.1	33.3%	26.9%	86.7%	76.4%	6,486.9	8,495.8	155,686
8728	23-Nov-72	0	162.75		0.10	0	0.0	0.0%	0.0%					
8729	24-Nov-72	3,645	171.52	1.12	1.22	7	1051.4	32.8%	26.5%	86.6%	76.2%	6,397.5	8,395.7	153,541
8730	25-Nov-72	0	160.43		0.10	0	0.0	0.0%	0.0%					
8731	26-Nov-72	3,628	170.84	1.80	1.90	7	1071.6	33.4%	27.1%	86.8%	76.4%	6,512.2	8,524.0	156,293
8732	27-Nov-72	0	159.02		0.10	0	0.0	0.0%	0.0%					
8733	28-Nov-72	3,633	170.36	1.60	1.70	7	1065.6	33.3%	26.9%	86.7%	76.3%	6,478.5	8,486.4	155,484
8734	29-Nov-72	0	159.02		0.10	0	0.0	0.0%	0.0%					
8735	30-Nov-72	3,653	169.84	0.90	1.00	7	1044.8	32.6%	26.4%	86.6%	76.1%	6,360.4	8,354.0	152,649
8736	01-Dec-72	0	159.01		0.10	0	0.0	0.0%	0.0%					
8737	02-Dec-72	0	159.01		0.10	0	0.0	0.0%	0.0%					
8738	03-Dec-72	0	159.01		0.10	0	0.0	0.0%	0.0%					
8739	04-Dec-72	0	159.01		0.10	0	0.0	0.0%	0.0%					
8740	05-Dec-72	0	159.01		0.10	0	0.0	0.0%	0.0%					
8741	06-Dec-72	0	159.01		0.10	0	0.0	0.0%	0.0%					

Little Bayou Meto
Flood Control Pumping Plant
3000-cfs (3 4000-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8742	07-Dec-72	0	159.01		0.10	0	0.0	0.0%	0.0%					
8743	08-Dec-72	0	159.01		0.10	0	0.0	0.0%	0.0%					
8744	09-Dec-72	0	159.01		0.10	0	0.0	0.0%	0.0%					
8745	10-Dec-72	0	159.01		0.10	0	0.0	0.0%	0.0%					
8746	11-Dec-72	0	159.03		0.10	0	0.0	0.0%	0.0%					
8747	12-Dec-72	3,684	169.85	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8748	13-Dec-72	3,602	166.64	2.95	3.05	7	1105.1	34.5%	27.9%	86.9%	76.7%	6,701.7	8,734.5	160,841
8749	14-Dec-72	3,625	167.64	1.94	2.04	7	1075.7	33.6%	27.2%	86.8%	76.4%	6,535.8	8,550.3	156,858
8750	15-Dec-72	3,684	169.93	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8751	16-Dec-72	3,684	170.34	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8752	17-Dec-72	3,684	170.62	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8753	18-Dec-72	3,684	170.61	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8754	19-Dec-72	3,684	170.61	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8755	20-Dec-72	3,680	170.85	0.12	0.22	7	1021.6	31.9%	25.8%	86.5%	75.9%	6,228.4	8,205.1	149,482
8756	21-Dec-72	3,684	170.93	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8757	22-Dec-72	3,684	170.49	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8758	23-Dec-72	3,645	168.47	1.11	1.21	7	1051.1	32.8%	26.5%	86.6%	76.2%	6,395.9	8,393.8	153,500
8759	24-Dec-72	0	162.18		0.10	0	0.0	0.0%	0.0%					
8760	25-Dec-72	3,684	169.88	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8761	26-Dec-72	0	159.54		0.10	0	0.0	0.0%	0.0%					
8762	27-Dec-72	3,684	168.79	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8763	28-Dec-72	0	159.05		0.10	0	0.0	0.0%	0.0%					
8764	29-Dec-72	3,684	168.43	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8765	30-Dec-72	0	159.01		0.10	0	0.0	0.0%	0.0%					
8766	31-Dec-72	3,684	168.33	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8767	01-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8768	02-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8769	03-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8770	04-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8771	05-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8772	06-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8773	07-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8774	08-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8775	09-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8776	10-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8777	11-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8778	12-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8779	13-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					

Little Bayou Meto
Flood Control Pumping Plant
3000-cfs (3 4000-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8780	14-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8781	15-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8782	16-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8783	17-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8784	18-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8785	19-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8786	20-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8787	21-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8788	22-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8789	23-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8790	24-Jan-73	0	159.05		0.10	0	0.0	0.0%	0.0%					
8791	25-Jan-73	3,595	171.30	3.29	3.39	7	1115.0	34.8%	28.2%	87.0%	76.8%	6,757.4	8,796.0	162,178
8792	26-Jan-73	3,391	164.54	10.21	10.31	7	1294.3	40.4%	32.7%	88.0%	78.6%	7,754.9	9,868.8	186,119
8793	27-Jan-73	0	159.08		0.10	0	0.0	0.0%	0.0%					
8794	28-Jan-73	3,619	171.90	2.21	2.31	7	1083.6	33.8%	27.4%	86.8%	76.5%	6,580.2	8,599.7	157,924
8795	29-Jan-73	3,567	169.80	4.31	4.41	7	1144.6	35.7%	28.9%	87.2%	77.1%	6,923.8	8,978.6	166,170
8796	30-Jan-73	0	162.32		0.10	0	0.0	0.0%	0.0%					
8797	31-Jan-73	3,609	172.11	2.64	2.74	7	1096.1	34.2%	27.7%	86.9%	76.6%	6,650.8	8,678.2	159,620
8798	01-Feb-73	3,552	170.04	4.86	4.96	7	1160.4	36.2%	29.3%	87.2%	77.3%	7,012.2	9,075.1	168,294
8799	02-Feb-73	0	159.81		0.10	0	0.0	0.0%	0.0%					
8800	03-Feb-73	3,599	171.68	3.07	3.17	7	1108.6	34.6%	28.0%	87.0%	76.8%	6,721.4	8,756.2	161,313
8801	04-Feb-73	3,451	166.44	8.31	8.41	7	1249.8	39.0%	31.6%	87.7%	78.1%	7,509.3	9,609.6	180,223
8802	05-Feb-73	0	159.06		0.10	0	0.0	0.0%	0.0%					
8803	06-Feb-73	3,566	170.81	4.37	4.47	7	1146.4	35.8%	28.9%	87.2%	77.1%	6,933.4	8,989.2	166,402
8804	07-Feb-73	0	159.03		0.10	0	0.0	0.0%	0.0%					
8805	08-Feb-73	3,531	169.94	5.66	5.76	7	1183.4	36.9%	29.9%	87.4%	77.5%	7,140.6	9,214.5	171,375
8806	09-Feb-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8807	10-Feb-73	3,521	169.75	5.99	6.09	7	1192.9	37.2%	30.1%	87.4%	77.6%	7,193.5	9,271.5	172,644
8808	11-Feb-73	0	159.05		0.10	0	0.0	0.0%	0.0%					
8809	12-Feb-73	3,561	171.19	4.55	4.65	7	1151.5	35.9%	29.1%	87.2%	77.2%	6,962.4	9,020.8	167,097
8810	13-Feb-73	0	161.42		0.10	0	0.0	0.0%	0.0%					
8811	14-Feb-73	3,560	171.46	4.56	4.66	7	1151.8	36.0%	29.1%	87.2%	77.2%	6,964.0	9,022.6	167,136
8812	15-Feb-73	3,298	163.22	12.80	12.90	7	1364.1	42.6%	34.4%	88.4%	79.3%	8,137.2	10,266.0	195,292
8813	16-Feb-73	0	159.05		0.10	0	0.0	0.0%	0.0%					
8814	17-Feb-73	3,559	171.25	4.63	4.73	7	1153.8	36.0%	29.1%	87.2%	77.2%	6,975.3	9,034.8	167,406
8815	18-Feb-73	0	160.99		0.10	0	0.0	0.0%	0.0%					
8816	19-Feb-73	3,558	171.09	4.65	4.75	7	1154.4	36.0%	29.1%	87.2%	77.2%	6,978.5	9,038.3	167,483
8817	20-Feb-73	0	159.05		0.10	0	0.0	0.0%	0.0%					

Tab "Power & Energy - 3000 cfs" of
File "Bayou Meto Study - 3000-cfs Pumping Station.XLS"

Little Bayou Meto
Flood Control Pumping Plant
3000-cfs (3 4000-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8818	21-Feb-73	3,599	170.23	3.08	3.18	7	1108.9	34.6%	28.0%	87.0%	76.8%	6,723.0	8,758.0	161,352
8819	22-Feb-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8820	23-Feb-73	3,599	168.52	3.10	3.20	7	1109.5	34.6%	28.0%	87.0%	76.8%	6,726.3	8,761.6	161,431
8821	24-Feb-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8822	25-Feb-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8823	26-Feb-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8824	27-Feb-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8825	28-Feb-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8826	01-Mar-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8827	02-Mar-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8828	03-Mar-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8829	04-Mar-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8830	05-Mar-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8831	06-Mar-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8832	07-Mar-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8833	08-Mar-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8834	09-Mar-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8835	10-Mar-73	3,473	169.65	7.62	7.72	7	1233.3	38.5%	31.1%	87.7%	78.0%	7,418.3	9,512.7	178,038
8836	11-Mar-73	0	159.04		0.10	0	0.0	0.0%	0.0%					
8837	12-Mar-73	3,466	170.06	7.82	7.92	7	1238.1	38.6%	31.3%	87.7%	78.0%	7,444.7	9,540.8	178,672
8838	13-Mar-73	0	159.04		0.10	0	0.0	0.0%	0.0%					
8839	14-Mar-73	3,468	170.59	7.77	7.87	7	1236.9	38.6%	31.2%	87.7%	78.0%	7,438.1	9,533.8	178,514
8840	15-Mar-73	0	159.05		0.10	0	0.0	0.0%	0.0%					
8841	16-Mar-73	3,470	170.55	7.69	7.79	7	1235.0	38.5%	31.2%	87.7%	78.0%	7,427.5	9,522.6	178,260
8842	17-Mar-73	0	159.04		0.10	0	0.0	0.0%	0.0%					
8843	18-Mar-73	3,478	170.79	7.45	7.55	7	1229.3	38.4%	31.0%	87.6%	77.9%	7,395.8	9,488.7	177,500
8844	19-Mar-73	0	160.72		0.10	0	0.0	0.0%	0.0%					
8845	20-Mar-73	3,505	171.72	6.51	6.61	7	1206.9	37.7%	30.5%	87.5%	77.7%	7,271.4	9,355.5	174,514
8846	21-Mar-73	3,391	168.05	10.19	10.29	7	1293.8	40.4%	32.7%	88.0%	78.6%	7,752.4	9,866.1	186,057
8847	22-Mar-73	0	159.03		0.10	0	0.0	0.0%	0.0%					
8848	23-Mar-73	3,498	171.35	6.77	6.87	7	1213.1	37.9%	30.6%	87.5%	77.8%	7,305.9	9,392.5	175,341
8849	24-Mar-73	0	162.50		0.10	0	0.0	0.0%	0.0%					
8850	25-Mar-73	3,496	171.30	6.82	6.92	7	1214.3	37.9%	30.7%	87.5%	77.8%	7,312.5	9,399.6	175,500
8851	26-Mar-73	0	159.04		0.10	0	0.0	0.0%	0.0%					
8852	27-Mar-73	3,476	170.49	7.52	7.62	7	1230.9	38.4%	31.1%	87.6%	78.0%	7,405.1	9,498.6	177,721
8853	28-Mar-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8854	29-Mar-73	0	159.10		0.10	0	0.0	0.0%	0.0%					
8855	30-Mar-73	3,503	171.52	6.60	6.70	7	1209.0	37.7%	30.5%	87.5%	77.7%	7,283.4	9,368.3	174,801

Tab "Power & Energy - 3000 cfs" of
File "Bayou Meto Study - 3000-cfs Pumping Station.XLS"

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8856	31-Mar-73	3,307	165.43	12.57	12.67	7	1357.6	42.4%	34.3%	88.3%	79.2%	8,102.1	10,229.8	194,450
8857	01-Apr-73	0	159.06		0.10	0	0.0	0.0%	0.0%					
8858	02-Apr-73	3,497	171.20	6.80	6.90	7	1213.8	37.9%	30.6%	87.5%	77.8%	7,309.8	9,396.7	175,436
8859	03-Apr-73	0	162.74		0.10	0	0.0	0.0%	0.0%					
8860	04-Apr-73	3,515	171.71	6.17	6.27	7	1198.1	37.4%	30.3%	87.5%	77.6%	7,222.3	9,302.6	173,335
8861	05-Apr-73	3,299	164.98	12.77	12.87	7	1363.2	42.5%	34.4%	88.4%	79.3%	8,132.6	10,261.3	195,182
8862	06-Apr-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8863	07-Apr-73	3,484	170.65	7.23	7.33	7	1224.0	38.2%	30.9%	87.6%	77.9%	7,366.7	9,457.6	176,802
8864	08-Apr-73	0	159.02		0.10	0	0.0	0.0%	0.0%					
8865	09-Apr-73	3,454	169.68	8.20	8.30	7	1247.1	38.9%	31.5%	87.7%	78.1%	7,494.8	9,594.2	179,875
8866	10-Apr-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8867	11-Apr-73	3,441	169.35	8.65	8.75	7	1257.8	39.3%	31.8%	87.8%	78.2%	7,553.8	9,656.8	181,291
8868	12-Apr-73	0	159.02		0.10	0	0.0	0.0%	0.0%					
8869	13-Apr-73	3,446	169.76	8.48	8.58	7	1253.8	39.1%	31.7%	87.8%	78.2%	7,531.7	9,633.4	180,761
8870	14-Apr-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8871	15-Apr-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8872	16-Apr-73	3,381	168.64	10.49	10.59	7	1300.8	40.6%	32.8%	88.0%	78.6%	7,790.9	9,906.6	186,983
8873	17-Apr-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8874	18-Apr-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8875	19-Apr-73	3,400	169.72	9.95	10.05	7	1288.2	40.2%	32.5%	88.0%	78.5%	7,721.5	9,833.7	185,316
8876	20-Apr-73	0	159.09		0.10	0	0.0	0.0%	0.0%					
8877	21-Apr-73	3,393	171.88	10.14	10.24	7	1292.6	40.3%	32.6%	88.0%	78.6%	7,745.9	9,859.4	185,902
8878	22-Apr-73	3,391	171.96	10.20	10.30	7	1294.0	40.4%	32.7%	88.0%	78.6%	7,753.7	9,867.5	186,088
8879	23-Apr-73	3,404	172.63	9.84	9.94	7	1285.6	40.1%	32.5%	87.9%	78.5%	7,707.3	9,818.8	184,976
8880	24-Apr-73	3,394	173.15	10.11	10.21	7	1291.9	40.3%	32.6%	88.0%	78.6%	7,742.1	9,855.3	185,810
8881	25-Apr-73	3,386	173.67	10.33	10.43	7	1297.1	40.5%	32.8%	88.0%	78.6%	7,770.4	9,885.0	186,489
8882	26-Apr-73	3,362	174.24	11.02	11.12	7	1314.3	41.0%	33.2%	88.1%	78.8%	7,864.8	9,983.8	188,756
8883	27-Apr-73	3,355	174.79	11.22	11.32	7	1319.9	41.2%	33.3%	88.1%	78.8%	7,895.5	10,015.8	189,492
8884	28-Apr-73	3,372	175.28	10.73	10.83	7	1306.4	40.8%	33.0%	88.1%	78.7%	7,821.8	9,938.8	187,723
8885	29-Apr-73	3,391	175.67	10.19	10.29	7	1293.8	40.4%	32.7%	88.0%	78.6%	7,752.4	9,866.1	186,057
8886	30-Apr-73	3,431	175.98	8.98	9.08	7	1265.5	39.5%	32.0%	87.8%	78.3%	7,596.4	9,701.9	182,314
8887	01-May-73	3,457	176.22	8.14	8.24	7	1245.7	38.9%	31.5%	87.7%	78.1%	7,486.9	9,585.8	179,685
8888	02-May-73	3,470	176.40	7.72	7.82	7	1235.7	38.6%	31.2%	87.7%	78.0%	7,431.5	9,526.8	178,355
8889	03-May-73	3,543	176.53	5.21	5.31	7	1170.5	36.5%	29.6%	87.3%	77.4%	7,068.5	9,136.2	169,643
8890	04-May-73	3,524	176.60	5.87	5.97	7	1189.4	37.1%	30.0%	87.4%	77.6%	7,174.3	9,250.8	172,183
8891	05-May-73	3,521	176.64	5.99	6.09	7	1192.9	37.2%	30.1%	87.4%	77.6%	7,193.5	9,271.5	172,644
8892	06-May-73	3,516	176.66	6.13	6.23	7	1196.9	37.4%	30.2%	87.4%	77.6%	7,215.9	9,295.7	173,181
8893	07-May-73	3,521	176.65	5.99	6.09	7	1192.9	37.2%	30.1%	87.4%	77.6%	7,193.5	9,271.5	172,644

Little Bayou Meto
Flood Control Pumping Plant
3000-cfs (3 4000-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8894	08-May-73	3,529	176.60	5.71	5.81	7	1184.8	37.0%	29.9%	87.4%	77.5%	7,148.6	9,223.1	171,567
8895	09-May-73	3,522	176.53	5.94	6.04	7	1191.4	37.2%	30.1%	87.4%	77.6%	7,185.5	9,262.9	172,452
8896	10-May-73	3,510	176.44	6.35	6.45	7	1203.1	37.6%	30.4%	87.5%	77.7%	7,250.2	9,332.7	174,005
8897	11-May-73	3,492	176.32	6.95	7.05	7	1217.4	38.0%	30.7%	87.6%	77.8%	7,329.7	9,418.0	175,913
8898	12-May-73	3,517	176.19	6.12	6.22	7	1196.6	37.3%	30.2%	87.4%	77.6%	7,214.3	9,294.0	173,143
8899	13-May-73	3,529	176.03	5.71	5.81	7	1184.8	37.0%	29.9%	87.4%	77.5%	7,148.6	9,223.1	171,567
8900	14-May-73	3,528	175.85	5.75	5.85	7	1186.0	37.0%	29.9%	87.4%	77.5%	7,155.1	9,230.0	171,721
8901	15-May-73	3,514	175.65	6.23	6.33	7	1199.8	37.4%	30.3%	87.5%	77.7%	7,231.9	9,312.9	173,565
8902	16-May-73	3,494	175.42	6.89	6.99	7	1215.9	38.0%	30.7%	87.6%	77.8%	7,321.8	9,409.5	175,722
8903	17-May-73	3,477	175.16	7.47	7.57	7	1229.7	38.4%	31.1%	87.6%	77.9%	7,398.5	9,491.5	177,563
8904	18-May-73	3,462	174.84	7.95	8.05	7	1241.2	38.7%	31.3%	87.7%	78.1%	7,461.8	9,559.1	179,084
8905	19-May-73	3,479	174.48	7.40	7.50	7	1228.1	38.3%	31.0%	87.6%	77.9%	7,389.2	9,481.7	177,341
8906	20-May-73	3,499	174.04	6.71	6.81	7	1211.6	37.8%	30.6%	87.5%	77.8%	7,297.9	9,383.9	175,150
8907	21-May-73	3,489	173.51	7.06	7.16	7	1220.0	38.1%	30.8%	87.6%	77.9%	7,344.3	9,433.6	176,262
8908	22-May-73	3,482	172.91	7.30	7.40	7	1225.7	38.3%	30.9%	87.6%	77.9%	7,376.0	9,467.5	177,024
8909	23-May-73	3,446	171.38	8.47	8.57	7	1253.6	39.1%	31.7%	87.8%	78.2%	7,530.4	9,632.0	180,729
8910	24-May-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8911	25-May-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8912	26-May-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8913	27-May-73	0	159.03		0.10	0	0.0	0.0%	0.0%					
8914	28-May-73	3,470	170.18	7.70	7.80	7	1235.2	38.6%	31.2%	87.7%	78.0%	7,428.8	9,524.0	178,292
8915	29-May-73	0	159.05		0.10	0	0.0	0.0%	0.0%					
8916	30-May-73	3,530	171.27	5.68	5.78	7	1184.0	37.0%	29.9%	87.4%	77.5%	7,143.8	9,217.9	171,452
8917	31-May-73	3,334	164.35	11.81	11.91	7	1336.4	41.7%	33.7%	88.2%	79.0%	7,985.9	10,109.7	191,662
8918	01-Jun-73	0	159.08		0.10	0	0.0	0.0%	0.0%					
8919	02-Jun-73	3,662	171.50	0.63	0.73	7	1036.8	32.4%	26.2%	86.6%	76.1%	6,314.7	8,302.6	151,554
8920	03-Jun-73	3,359	163.31	11.12	11.22	7	1317.1	41.1%	33.3%	88.1%	78.8%	7,880.2	9,999.8	189,124
8921	04-Jun-73	0	159.04		0.10	0	0.0	0.0%	0.0%					
8922	05-Jun-73	3,558	170.66	4.66	4.76	7	1154.7	36.0%	29.2%	87.2%	77.2%	6,980.1	9,040.1	167,522
8923	06-Jun-73	0	159.05		0.10	0	0.0	0.0%	0.0%					
8924	07-Jun-73	3,478	169.82	7.44	7.54	7	1229.0	38.4%	31.0%	87.6%	77.9%	7,394.5	9,487.3	177,468
8925	08-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8926	09-Jun-73	3,283	168.67	13.21	13.31	7	1374.7	42.9%	34.7%	88.4%	79.4%	8,195.3	10,325.7	196,688
8927	10-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8928	11-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8929	12-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8930	13-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8931	14-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					

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Little Bayou Meto
Flood Control Pumping Plant
3000-cfs (3 4000-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8932	15-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8933	16-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8934	17-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8935	18-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8936	19-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8937	20-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8938	21-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8939	22-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8940	23-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8941	24-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8942	25-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8943	26-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8944	27-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8945	28-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8946	29-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8947	30-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8948	01-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8949	02-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8950	03-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8951	04-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8952	05-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8953	06-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8954	07-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8955	08-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8956	09-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8957	10-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8958	11-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8959	12-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8960	13-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8961	14-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8962	15-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8963	16-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8964	17-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8965	18-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8966	19-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8967	20-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8968	21-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8969	22-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					

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Little Bayou Meto
Flood Control Pumping Plant
3000-cfs (3 4000-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8970	23-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8971	24-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8972	25-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8973	26-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8974	27-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8975	28-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8976	29-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8977	30-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8978	31-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8979	01-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8980	02-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8981	03-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8982	04-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8983	05-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8984	06-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8985	07-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8986	08-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8987	09-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8988	10-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8989	11-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8990	12-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8991	13-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8992	14-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8993	15-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8994	16-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8995	17-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8996	18-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8997	19-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8998	20-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8999	21-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9000	22-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9001	23-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9002	24-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9003	25-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9004	26-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9005	27-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9006	28-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9007	29-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					

Tab "Power & Energy - 3000 cfs" of
File "Bayou Meto Study - 3000-cfs Pumping Station.XLS"

Little Bayou Meto
Flood Control Pumping Plant
3000-cfs (3 4000-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
9008	30-Aug-73	0	159.55		0.10	0	0.0	0.0%	0.0%					
9009	31-Aug-73	0	160.54		0.10	0	0.0	0.0%	0.0%					
9010	01-Sep-73	0	161.20		0.10	0	0.0	0.0%	0.0%					
9011	02-Sep-73	0	161.66		0.10	0	0.0	0.0%	0.0%					
9012	03-Sep-73	0	162.00		0.10	0	0.0	0.0%	0.0%					
9013	04-Sep-73	0	162.24		0.10	0	0.0	0.0%	0.0%					
9014	05-Sep-73	0	162.77		0.10	0	0.0	0.0%	0.0%					
9015	06-Sep-73	0	164.04		0.10	0	0.0	0.0%	0.0%					
9016	07-Sep-73	0	165.03		0.10	0	0.0	0.0%	0.0%					
9017	08-Sep-73	0	165.42		0.10	0	0.0	0.0%	0.0%					
9018	09-Sep-73	0	165.84		0.10	0	0.0	0.0%	0.0%					
9019	10-Sep-73	0	166.04		0.10	0	0.0	0.0%	0.0%					
9020	11-Sep-73	0	166.07		0.10	0	0.0	0.0%	0.0%					
9021	12-Sep-73	0	166.25		0.10	0	0.0	0.0%	0.0%					
9022	13-Sep-73	0	166.26		0.10	0	0.0	0.0%	0.0%					
9023	14-Sep-73	0	166.24		0.10	0	0.0	0.0%	0.0%					
9024	15-Sep-73	0	166.21		0.10	0	0.0	0.0%	0.0%					
9025	16-Sep-73	0	166.51		0.10	0	0.0	0.0%	0.0%					
9026	17-Sep-73	0	166.50		0.10	0	0.0	0.0%	0.0%					
9027	18-Sep-73	0	166.50		0.10	0	0.0	0.0%	0.0%					
9028	19-Sep-73	0	166.37		0.10	0	0.0	0.0%	0.0%					
9029	20-Sep-73	0	166.10		0.10	0	0.0	0.0%	0.0%					
9030	21-Sep-73	0	165.80		0.10	0	0.0	0.0%	0.0%					
9031	22-Sep-73	0	165.45		0.10	0	0.0	0.0%	0.0%					
9032	23-Sep-73	0	165.10		0.10	0	0.0	0.0%	0.0%					
9033	24-Sep-73	0	164.89		0.10	0	0.0	0.0%	0.0%					
9034	25-Sep-73	0	164.81		0.10	0	0.0	0.0%	0.0%					
9035	26-Sep-73	0	164.77		0.10	0	0.0	0.0%	0.0%					
9036	27-Sep-73	0	165.06		0.10	0	0.0	0.0%	0.0%					
9037	28-Sep-73	0	165.12		0.10	0	0.0	0.0%	0.0%					
9038	29-Sep-73	0	165.10		0.10	0	0.0	0.0%	0.0%					
9039	30-Sep-73	0	165.10		0.10	0	0.0	0.0%	0.0%					
9040	01-Oct-73	0	165.10		0.10	0	0.0	0.0%	0.0%					
9041	02-Oct-73	0	165.10		0.10	0	0.0	0.0%	0.0%					
9042	03-Oct-73	0	165.44		0.10	0	0.0	0.0%	0.0%					
9043	04-Oct-73	0	165.49		0.10	0	0.0	0.0%	0.0%					
9044	05-Oct-73	0	165.69		0.10	0	0.0	0.0%	0.0%					
9045	06-Oct-73	0	165.82		0.10	0	0.0	0.0%	0.0%					

Tab "Power & Energy - 3000 cfs" of
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Little Bayou Meto
Flood Control Pumping Plant
3000-cfs (3 4000-hp)

Induction Motor Data
Efficiency and Power Factor

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
9046	07-Oct-73	0	165.81		0.10	0	0.0	0.0%	0.0%					
9047	08-Oct-73	0	165.80		0.10	0	0.0	0.0%	0.0%					
9048	09-Oct-73	0	166.11		0.10	0	0.0	0.0%	0.0%					
9049	10-Oct-73	0	166.15		0.10	0	0.0	0.0%	0.0%					
9050	11-Oct-73	2,444	167.53	0.51	0.61	5	1033.2	32.2%	26.1%	86.5%	76.0%	4,496.0	5,914.1	107,905
9051	12-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9052	13-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9053	14-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9054	15-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9055	16-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9056	17-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9057	18-Oct-73	0	159.02		0.10	0	0.0	0.0%	0.0%					
9058	19-Oct-73	3,426	168.00	9.11	9.21	7	1268.6	39.6%	32.0%	87.8%	78.3%	7,613.2	9,719.6	182,717
9059	20-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9060	21-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9061	22-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9062	23-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9063	24-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9064	25-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9065	26-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9066	27-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9067	28-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9068	29-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9069	30-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9070	31-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9071	01-Nov-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9072	02-Nov-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9073	03-Nov-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9074	04-Nov-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9075	05-Nov-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9076	06-Nov-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9077	07-Nov-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9078	08-Nov-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9079	09-Nov-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9080	10-Nov-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9081	11-Nov-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9082	12-Nov-73	3,684	168.25	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
9083	13-Nov-73	0	159.01		0.10	0	0.0	0.0%	0.0%					

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	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
17900														
17901														
17902														
17903		Q	Period-of-Record Pumping Station Operating Statistics											
17904	DATE	(kcfs)	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
17905	365.2	(cfs)	(ft)	(ft)	(ft)		(hp)					(kW)	(kVA)	(MWh)
17906	SUM/COUNT	7,488.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	336,795
17907	MIN	0.0	159.0	0.0	0.1	0.0	0.0	0.0%	0.0%	86.5%	75.9%	1,773.7	2,337.7	42.57
17908	AVG	418.4	163.2	3.0	0.5	0.8	158.0	4.9%	4.0%	86.9%	76.7%	5,471.0	7,111.2	131.30
17909	MAX	3,684.0	176.7	23.0	23.1	7.0	1,511.7	47.2%	38.2%	89.2%	80.7%	8,935.1	11,070.6	214.44
17910														
17911	17896	= No. of days pumped over POR												
17912	429504	= No. of hours pumped over POR												
17913	49.00	= Duration of POR in years												
17914	4.2%	= Days pumped per year as a percentage												

Cell: K1
Comment: The pumping system HQ curve was used, not the pump bowl curve. Total dynamic head is the static head plus the 0.1-foot minimum head loss input to HEC-IFH CSA.

Cell: P1
Comment: The values in this column must be linearly interpolated.

Cell: Q1
Comment: The values in this column must be linearly interpolated.

Cell: H17904
Comment: Total flow (in SUM/COUNT line) over the POR of pump station in 1000's of cfs

Cell: G17905
Comment: Average number of hours pumped annually over the POR

Cell: H17905
Comment: Min, avg, and max flows of pump station over the POR in cfs

Cell: J17905
Comment: Hydraulic static head is the negative of mechanical static head

Cell: L17905
Comment: Number of pumps operating

Cell: M17905
Comment: Pump brake hp

Cell: N17905
Comment: Diesel engine load as a percentage

Cell: O17905
Comment: Electric motor load as a percentage

Cell: P17905
Comment: Electric motor efficiency as a function of M_load

Cell: Q17905
Comment: Electric motor power factor as a function of M_load

Cell: R17905
Comment: Power demand in kW of pumping station

Cell: S17905
Comment: Power demand in kVA of
pumping plant (accounts for power factor)

APPENDIX C – ENGINEERING INVESTIGATIONS & ANALYSES
FLOOD CONTROL COMPONENT

SECTION IV – STRUCTURAL, MECHANICAL, ELECTRICAL & CIVIL DESIGN

APPENDIX IV-C-E

Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8699	25-Oct-72	0	163.17		0.10	0	0.0	0.0%	0.0%					
8700	26-Oct-72	0	163.37		0.10	0	0.0	0.0%	0.0%					
8701	27-Oct-72	0	163.64		0.10	0	0.0	0.0%	0.0%					
8702	28-Oct-72	0	163.62		0.10	0	0.0	0.0%	0.0%					
8703	29-Oct-72	0	163.81		0.10	0	0.0	0.0%	0.0%					
8704	30-Oct-72	0	164.67		0.10	0	0.0	0.0%	0.0%					
8705	31-Oct-72	0	164.78		0.10	0	0.0	0.0%	0.0%					
8706	01-Nov-72	0	165.41		0.10	0	0.0	0.0%	0.0%					
8707	02-Nov-72	545	167.20	0.30	0.40	1	1027.0	60.4%	59.3%	91.9%	86.3%	841.9	975.3	20,205
8708	03-Nov-72	1,091	169.69	0.13	0.23	2	1021.9	60.1%	59.0%	91.8%	86.3%	1,676.0	1,943.0	40,225
8709	04-Nov-72	1,086	170.82	0.97	1.07	2	1046.9	61.6%	60.4%	92.0%	86.5%	1,713.9	1,980.4	41,134
8710	05-Nov-72	1,089	171.66	0.47	0.57	2	1032.0	60.7%	59.6%	91.9%	86.4%	1,691.4	1,958.2	40,593
8711	06-Nov-72	1,092	171.78	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8712	07-Nov-72	1,092	171.46	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8713	08-Nov-72	1,092	171.20	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8714	09-Nov-72	1,092	171.03	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8715	10-Nov-72	1,092	171.09	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8716	11-Nov-72	1,092	170.97	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8717	12-Nov-72	1,092	170.95	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8718	13-Nov-72	1,092	171.36	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8719	14-Nov-72	1,092	171.13	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8720	15-Nov-72	1,092	171.33	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8721	16-Nov-72	1,092	171.40	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8722	17-Nov-72	1,092	172.10	0.03	0.13	2	1018.9	60.0%	58.8%	91.8%	86.2%	1,671.5	1,938.5	40,117
8723	18-Nov-72	1,092	172.32	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8724	19-Nov-72	1,091	172.52	0.12	0.22	2	1021.6	60.1%	59.0%	91.8%	86.3%	1,675.6	1,942.6	40,214
8725	20-Nov-72	1,092	172.70	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8726	21-Nov-72	1,092	172.73	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8727	22-Nov-72	1,091	172.92	0.23	0.33	2	1024.9	60.3%	59.2%	91.9%	86.3%	1,680.6	1,947.5	40,334
8728	23-Nov-72	1,092	173.01	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8729	24-Nov-72	1,092	172.92	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8730	25-Nov-72	1,092	172.78	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8731	26-Nov-72	1,092	172.75	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8732	27-Nov-72	1,092	172.58	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8733	28-Nov-72	1,092	172.27	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8734	29-Nov-72	1,092	171.70	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8735	30-Nov-72	1,092	171.29	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8736	01-Dec-72	1,092	170.58	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8737	02-Dec-72	1,092	170.28	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084

Tab "Power & Energy - 1000 cfs" of
File "Bayou Meto Study - 1000-cfs Pumping Station.XLS"

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8738	03-Dec-72	1,091	169.62	0.20	0.30	2	1024.0	60.3%	59.1%	91.9%	86.3%	1,679.2	1,946.2	40,301
8739	04-Dec-72	1,080	167.70	2.12	2.22	2	1081.0	63.6%	62.4%	92.2%	86.9%	1,765.3	2,030.8	42,368
8740	05-Dec-72	1,048	163.38	6.44	6.54	2	1205.2	70.9%	69.6%	93.1%	88.3%	1,950.6	2,208.3	46,815
8741	06-Dec-72	0	159.04		0.10	0	0.0	0.0%	0.0%					
8742	07-Dec-72	0	164.92		0.10	0	0.0	0.0%	0.0%					
8743	08-Dec-72	1,087	168.49	0.87	0.97	2	1043.9	61.4%	60.2%	92.0%	86.5%	1,709.4	1,976.0	41,026
8744	09-Dec-72	1,058	164.22	5.14	5.24	2	1168.5	68.8%	67.4%	92.8%	87.9%	1,896.2	2,156.8	45,508
8745	10-Dec-72	0	160.28		0.10	0	0.0	0.0%	0.0%					
8746	11-Dec-72	1,092	169.39	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8747	12-Dec-72	1,092	169.55	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8748	13-Dec-72	1,092	170.07	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8749	14-Dec-72	1,092	170.23	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8750	15-Dec-72	1,092	170.47	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8751	16-Dec-72	1,092	170.88	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8752	17-Dec-72	1,092	171.21	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8753	18-Dec-72	1,092	171.24	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8754	19-Dec-72	1,092	171.18	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8755	20-Dec-72	1,092	171.34	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8756	21-Dec-72	1,092	171.22	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8757	22-Dec-72	1,092	170.54	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8758	23-Dec-72	1,092	170.13	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8759	24-Dec-72	1,092	169.93	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8760	25-Dec-72	1,092	169.58	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8761	26-Dec-72	1,092	169.31	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8762	27-Dec-72	1,092	168.54	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8763	28-Dec-72	1,092	168.45	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8764	29-Dec-72	1,092	168.33	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8765	30-Dec-72	1,092	168.10	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8766	31-Dec-72	1,091	167.94	0.10	0.20	2	1021.0	60.1%	58.9%	91.8%	86.2%	1,674.7	1,941.7	40,193
8767	01-Jan-73	1,088	167.04	0.73	0.83	2	1039.8	61.2%	60.0%	92.0%	86.5%	1,703.1	1,969.8	40,875
8768	02-Jan-73	1,076	165.00	2.77	2.87	2	1099.9	64.7%	63.5%	92.4%	87.1%	1,793.8	2,058.4	43,051
8769	03-Jan-73	0	161.56		0.10	0	0.0	0.0%	0.0%					
8770	04-Jan-73	1,090	167.72	0.32	0.42	2	1027.6	60.5%	59.3%	91.9%	86.3%	1,684.6	1,951.5	40,431
8771	05-Jan-73	0	162.71		0.10	0	0.0	0.0%	0.0%					
8772	06-Jan-73	1,083	167.62	1.50	1.60	2	1062.7	62.5%	61.3%	92.1%	86.7%	1,737.7	2,003.8	41,706
8773	07-Jan-73	0	162.80		0.10	0	0.0	0.0%	0.0%					
8774	08-Jan-73	1,087	168.44	0.92	1.02	2	1045.4	61.5%	60.3%	92.0%	86.5%	1,711.7	1,978.2	41,080
8775	09-Jan-73	1,069	165.79	3.80	3.90	2	1129.9	66.5%	65.2%	92.6%	87.5%	1,838.7	2,101.8	44,128
8776	10-Jan-73	1,054	163.71	5.65	5.75	2	1183.1	69.6%	68.3%	92.9%	88.1%	1,917.9	2,177.4	46,030

Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8777	11-Jan-73	0	162.65		0.10	0	0.0	0.0%	0.0%					
8778	12-Jan-73	1,092	169.73	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8779	13-Jan-73	1,088	168.90	0.69	0.79	2	1038.6	61.1%	59.9%	92.0%	86.4%	1,701.3	1,968.0	40,831
8780	14-Jan-73	1,081	167.54	1.82	1.92	2	1072.2	63.1%	61.9%	92.2%	86.8%	1,752.1	2,017.9	42,050
8781	15-Jan-73	1,067	165.28	4.08	4.18	2	1138.0	67.0%	65.7%	92.6%	87.6%	1,850.8	2,113.5	44,420
8782	16-Jan-73	0	161.75		0.10	0	0.0	0.0%	0.0%					
8783	17-Jan-73	1,084	167.89	1.47	1.57	2	1061.8	62.5%	61.3%	92.1%	86.7%	1,736.4	2,002.5	41,673
8784	18-Jan-73	1,049	163.22	6.37	6.47	2	1203.5	70.8%	69.5%	93.1%	88.3%	1,948.2	2,205.9	46,756
8785	19-Jan-73	0	159.03		0.10	0	0.0	0.0%	0.0%					
8786	20-Jan-73	0	164.38		0.10	0	0.0	0.0%	0.0%					
8787	21-Jan-73	539	167.30	2.29	2.39	1	1085.9	63.9%	62.7%	92.3%	87.0%	886.4	1,019.0	21,273
8788	22-Jan-73	528	165.07	5.44	5.54	1	1177.1	69.3%	67.9%	92.9%	88.0%	954.5	1,084.5	22,908
8789	23-Jan-73	526	165.73	5.89	5.99	1	1190.0	70.0%	68.7%	93.0%	88.2%	964.1	1,093.5	23,138
8790	24-Jan-73	1,069	170.26	3.69	3.79	2	1126.7	66.3%	65.0%	92.5%	87.4%	1,833.9	2,097.2	44,013
8791	25-Jan-73	1,075	171.67	2.92	3.02	2	1104.3	65.0%	63.7%	92.4%	87.2%	1,800.3	2,064.8	43,208
8792	26-Jan-73	1,079	172.48	2.27	2.37	2	1085.4	63.9%	62.6%	92.3%	87.0%	1,771.9	2,037.2	42,526
8793	27-Jan-73	1,082	172.82	1.77	1.87	2	1070.7	63.0%	61.8%	92.2%	86.8%	1,749.8	2,015.7	41,996
8794	28-Jan-73	1,086	173.09	1.02	1.12	2	1048.4	61.7%	60.5%	92.0%	86.6%	1,716.2	1,982.6	41,188
8795	29-Jan-73	1,088	173.36	0.75	0.85	2	1040.3	61.2%	60.0%	92.0%	86.5%	1,704.0	1,970.7	40,896
8796	30-Jan-73	1,087	173.60	0.83	0.93	2	1042.7	61.4%	60.2%	92.0%	86.5%	1,707.6	1,974.2	40,983
8797	31-Jan-73	1,087	173.82	0.93	1.03	2	1045.7	61.5%	60.4%	92.0%	86.5%	1,712.1	1,978.7	41,091
8798	01-Feb-73	1,087	174.01	0.89	0.99	2	1044.5	61.5%	60.3%	92.0%	86.5%	1,710.3	1,976.9	41,047
8799	02-Feb-73	1,088	174.17	0.73	0.83	2	1039.8	61.2%	60.0%	92.0%	86.5%	1,703.1	1,969.8	40,875
8800	03-Feb-73	1,089	174.30	0.45	0.55	2	1031.4	60.7%	59.5%	91.9%	86.4%	1,690.5	1,957.3	40,572
8801	04-Feb-73	1,090	174.43	0.32	0.42	2	1027.6	60.5%	59.3%	91.9%	86.3%	1,684.6	1,951.5	40,431
8802	05-Feb-73	1,090	174.52	0.37	0.47	2	1029.0	60.6%	59.4%	91.9%	86.3%	1,686.9	1,953.8	40,485
8803	06-Feb-73	1,089	174.59	0.59	0.69	2	1035.6	61.0%	59.8%	91.9%	86.4%	1,696.8	1,963.6	40,723
8804	07-Feb-73	1,088	174.63	0.69	0.79	2	1038.6	61.1%	59.9%	92.0%	86.4%	1,701.3	1,968.0	40,831
8805	08-Feb-73	1,086	174.64	0.96	1.06	2	1046.6	61.6%	60.4%	92.0%	86.5%	1,713.5	1,980.0	41,123
8806	09-Feb-73	1,086	174.64	1.10	1.20	2	1050.8	61.8%	60.6%	92.0%	86.6%	1,719.8	1,986.2	41,274
8807	10-Feb-73	1,086	174.65	1.08	1.18	2	1050.2	61.8%	60.6%	92.0%	86.6%	1,718.9	1,985.3	41,253
8808	11-Feb-73	1,086	174.71	1.03	1.13	2	1048.7	61.7%	60.5%	92.0%	86.6%	1,716.6	1,983.1	41,199
8809	12-Feb-73	1,087	174.79	0.95	1.05	2	1046.3	61.6%	60.4%	92.0%	86.5%	1,713.0	1,979.5	41,112
8810	13-Feb-73	1,086	174.87	1.01	1.11	2	1048.1	61.7%	60.5%	92.0%	86.6%	1,715.7	1,982.2	41,177
8811	14-Feb-73	1,086	174.95	1.07	1.17	2	1049.9	61.8%	60.6%	92.0%	86.6%	1,718.4	1,984.9	41,242
8812	15-Feb-73	1,086	175.03	0.99	1.09	2	1047.5	61.7%	60.5%	92.0%	86.5%	1,714.8	1,981.3	41,155
8813	16-Feb-73	1,088	175.11	0.77	0.87	2	1040.9	61.3%	60.1%	92.0%	86.5%	1,704.9	1,971.6	40,918
8814	17-Feb-73	1,088	175.19	0.69	0.79	2	1038.6	61.1%	59.9%	92.0%	86.4%	1,701.3	1,968.0	40,831
8815	18-Feb-73	1,089	175.25	0.49	0.59	2	1032.6	60.8%	59.6%	91.9%	86.4%	1,692.3	1,959.1	40,615

Tab "Power & Energy - 1000 cfs" of
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Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8816	19-Feb-73	1,089	175.30	0.44	0.54	2	1031.1	60.7%	59.5%	91.9%	86.4%	1,690.0	1,956.9	40,561
8817	20-Feb-73	1,092	175.33	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8818	21-Feb-73	1,092	174.91	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8819	22-Feb-73	1,092	174.08	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8820	23-Feb-73	1,092	172.98	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8821	24-Feb-73	1,092	169.77	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8822	25-Feb-73	1,092	165.67	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8823	26-Feb-73	0	159.02		0.10	0	0.0	0.0%	0.0%					
8824	27-Feb-73	0	164.17		0.10	0	0.0	0.0%	0.0%					
8825	28-Feb-73	0	166.88		0.10	0	0.0	0.0%	0.0%					
8826	01-Mar-73	546	167.31	0.00	0.10	1	1018.0	59.9%	58.8%	91.8%	86.2%	835.1	968.6	20,042
8827	02-Mar-73	539	165.05	2.45	2.55	1	1090.6	64.2%	62.9%	92.3%	87.0%	889.9	1,022.4	21,357
8828	03-Mar-73	0	162.65		0.10	0	0.0	0.0%	0.0%					
8829	04-Mar-73	0	166.65		0.10	0	0.0	0.0%	0.0%					
8830	05-Mar-73	1,081	169.67	1.94	2.04	2	1075.7	63.3%	62.1%	92.2%	86.9%	1,757.5	2,023.1	42,179
8831	06-Mar-73	1,052	167.52	5.95	6.05	2	1191.7	70.1%	68.8%	93.0%	88.2%	1,930.7	2,189.5	46,337
8832	07-Mar-73	1,022	165.63	9.27	9.37	2	1272.3	74.9%	73.4%	93.5%	89.1%	2,049.3	2,300.2	49,184
8833	08-Mar-73	1,000	164.18	11.56	11.66	2	1329.4	78.2%	76.7%	93.8%	89.6%	2,135.8	2,384.3	51,260
8834	09-Mar-73	993	164.11	12.20	12.30	2	1347.3	79.3%	77.8%	93.8%	89.7%	2,163.8	2,412.7	51,932
8835	10-Mar-73	1,008	166.43	10.84	10.94	2	1309.2	77.1%	75.6%	93.7%	89.5%	2,104.3	2,352.3	50,504
8836	11-Mar-73	1,023	168.66	9.22	9.32	2	1271.1	74.8%	73.4%	93.5%	89.1%	2,047.6	2,298.6	49,143
8837	12-Mar-73	1,035	169.99	7.89	7.99	2	1239.8	73.0%	71.6%	93.3%	88.7%	2,001.6	2,255.9	48,037
8838	13-Mar-73	1,041	170.85	7.27	7.37	2	1225.0	72.1%	70.7%	93.2%	88.6%	1,979.8	2,235.6	47,516
8839	14-Mar-73	1,045	171.57	6.79	6.89	2	1213.6	71.4%	70.0%	93.1%	88.4%	1,963.0	2,219.8	47,111
8840	15-Mar-73	1,049	172.09	6.27	6.37	2	1200.9	70.7%	69.3%	93.0%	88.3%	1,944.3	2,202.3	46,663
8841	16-Mar-73	1,052	172.33	5.91	6.01	2	1190.6	70.1%	68.7%	93.0%	88.2%	1,929.0	2,187.9	46,296
8842	17-Mar-73	1,054	172.49	5.75	5.85	2	1186.0	69.8%	68.4%	92.9%	88.1%	1,922.2	2,181.4	46,132
8843	18-Mar-73	1,055	172.66	5.58	5.68	2	1181.1	69.5%	68.2%	92.9%	88.1%	1,914.9	2,174.6	45,959
8844	19-Mar-73	1,057	172.87	5.37	5.47	2	1175.1	69.2%	67.8%	92.9%	88.0%	1,906.0	2,166.1	45,744
8845	20-Mar-73	1,058	173.10	5.14	5.24	2	1168.5	68.8%	67.4%	92.8%	87.9%	1,896.2	2,156.8	45,508
8846	21-Mar-73	1,060	173.31	4.93	5.03	2	1162.4	68.4%	67.1%	92.8%	87.8%	1,887.2	2,148.2	45,293
8847	22-Mar-73	1,062	173.49	4.75	4.85	2	1157.3	68.1%	66.8%	92.7%	87.8%	1,879.5	2,140.9	45,109
8848	23-Mar-73	1,064	173.64	4.48	4.58	2	1149.5	67.7%	66.3%	92.7%	87.7%	1,868.0	2,129.9	44,831
8849	24-Mar-73	1,065	173.76	4.36	4.46	2	1146.1	67.5%	66.1%	92.7%	87.7%	1,862.8	2,125.0	44,708
8850	25-Mar-73	1,065	173.85	4.27	4.37	2	1143.5	67.3%	66.0%	92.7%	87.6%	1,859.0	2,121.3	44,616
8851	26-Mar-73	1,066	173.91	4.21	4.31	2	1141.8	67.2%	65.9%	92.6%	87.6%	1,856.4	2,118.8	44,554
8852	27-Mar-73	1,067	173.97	4.03	4.13	2	1136.6	66.9%	65.6%	92.6%	87.6%	1,848.7	2,111.4	44,368
8853	28-Mar-73	1,067	174.08	4.04	4.14	2	1136.9	66.9%	65.6%	92.6%	87.6%	1,849.1	2,111.8	44,378
8854	29-Mar-73	1,068	174.22	3.90	4.00	2	1132.8	66.7%	65.4%	92.6%	87.5%	1,843.0	2,106.0	44,232

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Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8855	30-Mar-73	1,069	174.35	3.77	3.87	2	1129.0	66.4%	65.2%	92.6%	87.5%	1,837.4	2,100.5	44,096
8856	31-Mar-73	1,070	174.47	3.53	3.63	2	1122.0	66.0%	64.8%	92.5%	87.4%	1,826.9	2,090.5	43,846
8857	01-Apr-73	1,071	174.56	3.44	3.54	2	1119.4	65.9%	64.6%	92.5%	87.4%	1,823.0	2,086.7	43,752
8858	02-Apr-73	1,072	174.65	3.35	3.45	2	1116.8	65.7%	64.5%	92.5%	87.3%	1,819.1	2,082.9	43,658
8859	03-Apr-73	1,072	174.75	3.25	3.35	2	1113.9	65.6%	64.3%	92.5%	87.3%	1,814.7	2,078.7	43,553
8860	04-Apr-73	1,074	174.84	3.04	3.14	2	1107.8	65.2%	63.9%	92.4%	87.2%	1,805.6	2,069.9	43,333
8861	05-Apr-73	1,075	174.91	2.83	2.93	2	1101.6	64.8%	63.6%	92.4%	87.2%	1,796.4	2,061.0	43,113
8862	06-Apr-73	1,076	174.98	2.77	2.87	2	1099.9	64.7%	63.5%	92.4%	87.1%	1,793.8	2,058.4	43,051
8863	07-Apr-73	1,075	175.03	2.85	2.95	2	1102.2	64.9%	63.6%	92.4%	87.2%	1,797.3	2,061.8	43,134
8864	08-Apr-73	1,074	175.06	2.94	3.04	2	1104.8	65.0%	63.8%	92.4%	87.2%	1,801.2	2,065.6	43,229
8865	09-Apr-73	1,075	175.07	2.81	2.91	2	1101.1	64.8%	63.5%	92.4%	87.2%	1,795.5	2,060.1	43,092
8866	10-Apr-73	1,074	175.07	2.93	3.03	2	1104.6	65.0%	63.7%	92.4%	87.2%	1,800.8	2,065.2	43,218
8867	11-Apr-73	1,074	175.07	2.93	3.03	2	1104.6	65.0%	63.7%	92.4%	87.2%	1,800.8	2,065.2	43,218
8868	12-Apr-73	1,074	175.08	3.04	3.14	2	1107.8	65.2%	63.9%	92.4%	87.2%	1,805.6	2,069.9	43,333
8869	13-Apr-73	1,073	175.09	3.15	3.25	2	1111.0	65.4%	64.1%	92.4%	87.3%	1,810.4	2,074.5	43,449
8870	14-Apr-73	1,071	175.10	3.50	3.60	2	1121.1	66.0%	64.7%	92.5%	87.4%	1,825.6	2,089.2	43,815
8871	15-Apr-73	1,067	175.09	4.04	4.14	2	1136.9	66.9%	65.6%	92.6%	87.6%	1,849.1	2,111.8	44,378
8872	16-Apr-73	1,067	175.08	4.05	4.15	2	1137.1	66.9%	65.6%	92.6%	87.6%	1,849.5	2,112.2	44,389
8873	17-Apr-73	1,067	175.06	4.07	4.17	2	1137.7	67.0%	65.7%	92.6%	87.6%	1,850.4	2,113.0	44,409
8874	18-Apr-73	1,064	175.04	4.45	4.55	2	1148.7	67.6%	66.3%	92.7%	87.7%	1,866.7	2,128.7	44,801
8875	19-Apr-73	1,063	175.05	4.62	4.72	2	1153.5	67.9%	66.6%	92.7%	87.7%	1,874.0	2,135.6	44,975
8876	20-Apr-73	1,056	175.11	5.46	5.56	2	1177.7	69.3%	68.0%	92.9%	88.0%	1,909.8	2,169.7	45,836
8877	21-Apr-73	1,045	175.24	6.78	6.88	2	1213.3	71.4%	70.0%	93.1%	88.4%	1,962.6	2,219.5	47,102
8878	22-Apr-73	1,046	175.46	6.70	6.80	2	1211.4	71.3%	69.9%	93.1%	88.4%	1,959.8	2,216.9	47,035
8879	23-Apr-73	1,046	175.77	6.70	6.80	2	1211.4	71.3%	69.9%	93.1%	88.4%	1,959.8	2,216.9	47,035
8880	24-Apr-73	1,042	176.10	7.17	7.27	2	1222.6	72.0%	70.6%	93.2%	88.5%	1,976.3	2,232.4	47,431
8881	25-Apr-73	1,038	176.44	7.56	7.66	2	1231.9	72.5%	71.1%	93.2%	88.6%	1,990.0	2,245.2	47,760
8882	26-Apr-73	1,030	176.79	8.47	8.57	2	1253.6	73.8%	72.3%	93.4%	88.9%	2,021.9	2,274.8	48,525
8883	27-Apr-73	1,026	177.15	8.86	8.96	2	1262.7	74.3%	72.9%	93.5%	89.0%	2,035.3	2,287.2	48,847
8884	28-Apr-73	1,030	177.51	8.50	8.60	2	1254.3	73.8%	72.4%	93.4%	88.9%	2,022.9	2,275.8	48,550
8885	29-Apr-73	1,034	177.85	8.01	8.11	2	1242.6	73.1%	71.7%	93.3%	88.8%	2,005.8	2,259.9	48,138
8886	30-Apr-73	1,045	178.16	6.80	6.90	2	1213.8	71.4%	70.1%	93.1%	88.4%	1,963.3	2,220.2	47,119
8887	01-May-73	1,052	178.43	5.93	6.03	2	1191.2	70.1%	68.7%	93.0%	88.2%	1,929.8	2,188.7	46,316
8888	02-May-73	1,056	178.67	5.45	5.55	2	1177.4	69.3%	68.0%	92.9%	88.0%	1,909.4	2,169.3	45,826
8889	03-May-73	1,075	178.87	2.87	2.97	2	1102.8	64.9%	63.6%	92.4%	87.2%	1,798.1	2,062.7	43,155
8890	04-May-73	1,071	179.03	3.44	3.54	2	1119.4	65.9%	64.6%	92.5%	87.4%	1,823.0	2,086.7	43,752
8891	05-May-73	1,071	179.16	3.47	3.57	2	1120.3	65.9%	64.7%	92.5%	87.4%	1,824.3	2,088.0	43,783
8892	06-May-73	1,071	179.28	3.51	3.61	2	1121.4	66.0%	64.7%	92.5%	87.4%	1,826.0	2,089.6	43,825
8893	07-May-73	1,072	179.37	3.26	3.36	2	1114.2	65.6%	64.3%	92.5%	87.3%	1,815.2	2,079.1	43,564

Tab "Power & Energy - 1000 cfs" of
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Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8894	08-May-73	1,075	179.44	2.86	2.96	2	1102.5	64.9%	63.6%	92.4%	87.2%	1,797.7	2,062.3	43,145
8895	09-May-73	1,074	179.50	2.97	3.07	2	1105.7	65.1%	63.8%	92.4%	87.2%	1,802.5	2,066.9	43,260
8896	10-May-73	1,072	179.53	3.26	3.36	2	1114.2	65.6%	64.3%	92.5%	87.3%	1,815.2	2,079.1	43,564
8897	11-May-73	1,069	179.56	3.71	3.81	2	1127.3	66.3%	65.1%	92.5%	87.5%	1,834.7	2,098.0	44,034
8898	12-May-73	1,076	179.57	2.74	2.84	2	1099.0	64.7%	63.4%	92.4%	87.1%	1,792.5	2,057.2	43,019
8899	13-May-73	1,080	179.58	2.16	2.26	2	1082.2	63.7%	62.5%	92.2%	86.9%	1,767.1	2,032.5	42,410
8900	14-May-73	1,080	179.57	2.03	2.13	2	1078.4	63.5%	62.2%	92.2%	86.9%	1,761.4	2,027.0	42,274
8901	15-May-73	1,079	179.57	2.31	2.41	2	1086.5	63.9%	62.7%	92.3%	87.0%	1,773.7	2,038.9	42,568
8902	16-May-73	1,076	179.55	2.76	2.86	2	1099.6	64.7%	63.5%	92.4%	87.1%	1,793.3	2,058.0	43,040
8903	17-May-73	1,073	179.53	3.10	3.20	2	1109.5	65.3%	64.0%	92.4%	87.3%	1,808.2	2,072.4	43,396
8904	18-May-73	1,072	179.51	3.28	3.38	2	1114.7	65.6%	64.3%	92.5%	87.3%	1,816.0	2,080.0	43,585
8905	19-May-73	1,078	179.48	2.40	2.50	2	1089.1	64.1%	62.9%	92.3%	87.0%	1,777.6	2,042.7	42,662
8906	20-May-73	1,084	179.44	1.31	1.41	2	1057.0	62.2%	61.0%	92.1%	86.7%	1,729.2	1,995.5	41,501
8907	21-May-73	1,085	179.41	1.16	1.26	2	1052.5	61.9%	60.7%	92.0%	86.6%	1,722.5	1,988.8	41,339
8908	22-May-73	1,087	179.37	0.84	0.94	2	1043.0	61.4%	60.2%	92.0%	86.5%	1,708.1	1,974.7	40,993
8909	23-May-73	1,089	179.35	0.50	0.60	2	1032.9	60.8%	59.6%	91.9%	86.4%	1,692.7	1,959.5	40,626
8910	24-May-73	1,091	179.34	0.15	0.25	2	1022.5	60.2%	59.0%	91.8%	86.3%	1,677.0	1,943.9	40,247
8911	25-May-73	1,092	179.27	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8912	26-May-73	1,092	179.13	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8913	27-May-73	1,092	178.99	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8914	28-May-73	1,092	178.79	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8915	29-May-73	1,092	178.58	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8916	30-May-73	1,092	178.33	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8917	31-May-73	1,092	178.04	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8918	01-Jun-73	1,092	177.65	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8919	02-Jun-73	1,092	177.18	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8920	03-Jun-73	1,092	176.69	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8921	04-Jun-73	1,092	176.23	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8922	05-Jun-73	1,092	175.86	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8923	06-Jun-73	1,085	175.85	1.25	1.35	2	1055.2	62.1%	60.9%	92.1%	86.6%	1,726.5	1,992.8	41,436
8924	07-Jun-73	1,084	175.86	1.41	1.51	2	1060.0	62.4%	61.2%	92.1%	86.7%	1,733.7	1,999.9	41,609
8925	08-Jun-73	1,080	175.86	2.02	2.12	2	1078.1	63.5%	62.2%	92.2%	86.9%	1,761.0	2,026.5	42,263
8926	09-Jun-73	1,051	175.85	6.03	6.13	2	1194.0	70.3%	68.9%	93.0%	88.2%	1,934.1	2,192.7	46,418
8927	10-Jun-73	1,049	175.83	6.33	6.43	2	1202.6	70.8%	69.4%	93.1%	88.3%	1,946.8	2,204.6	46,722
8928	11-Jun-73	1,049	175.79	6.36	6.46	2	1203.3	70.8%	69.4%	93.1%	88.3%	1,947.8	2,205.6	46,748
8929	12-Jun-73	1,084	175.75	1.36	1.46	2	1058.5	62.3%	61.1%	92.1%	86.7%	1,731.4	1,997.7	41,555
8930	13-Jun-73	1,086	175.69	1.10	1.20	2	1050.8	61.8%	60.6%	92.0%	86.6%	1,719.8	1,986.2	41,274
8931	14-Jun-73	1,086	175.62	1.01	1.11	2	1048.1	61.7%	60.5%	92.0%	86.6%	1,715.7	1,982.2	41,177
8932	15-Jun-73	1,086	175.55	1.08	1.18	2	1050.2	61.8%	60.6%	92.0%	86.6%	1,718.9	1,985.3	41,253

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Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8933	16-Jun-73	1,087	175.47	0.84	0.94	2	1043.0	61.4%	60.2%	92.0%	86.5%	1,708.1	1,974.7	40,993
8934	17-Jun-73	1,087	175.39	0.92	1.02	2	1045.4	61.5%	60.3%	92.0%	86.5%	1,711.7	1,978.2	41,080
8935	18-Jun-73	1,088	175.30	0.71	0.81	2	1039.2	61.2%	60.0%	92.0%	86.5%	1,702.2	1,968.9	40,853
8936	19-Jun-73	1,091	175.22	0.24	0.34	2	1025.2	60.3%	59.2%	91.9%	86.3%	1,681.0	1,947.9	40,344
8937	20-Jun-73	1,092	175.13	0.05	0.15	2	1019.5	60.0%	58.8%	91.8%	86.2%	1,672.4	1,939.4	40,138
8938	21-Jun-73	1,092	175.06	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8939	22-Jun-73	1,092	174.57	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8940	23-Jun-73	1,092	173.76	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8941	24-Jun-73	1,092	172.66	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8942	25-Jun-73	1,092	171.62	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
8943	26-Jun-73	1,091	171.04	0.16	0.26	2	1022.8	60.2%	59.0%	91.8%	86.3%	1,677.4	1,944.4	40,258
8944	27-Jun-73	1,089	170.04	0.47	0.57	2	1032.0	60.7%	59.6%	91.9%	86.4%	1,691.4	1,958.2	40,593
8945	28-Jun-73	1,078	167.64	2.41	2.51	2	1089.4	64.1%	62.9%	92.3%	87.0%	1,778.0	2,043.2	42,673
8946	29-Jun-73	0	162.82		0.10	0	0.0	0.0%	0.0%					
8947	30-Jun-73	540	167.47	2.12	2.22	1	1081.0	63.6%	62.4%	92.2%	86.9%	882.7	1,015.4	21,184
8948	01-Jul-73	538	166.76	2.60	2.70	1	1095.0	64.4%	63.2%	92.3%	87.1%	893.2	1,025.6	21,436
8949	02-Jul-73	535	165.63	3.73	3.83	1	1127.8	66.4%	65.1%	92.6%	87.5%	917.8	1,049.4	22,027
8950	03-Jul-73	533	164.27	4.04	4.14	1	1136.9	66.9%	65.6%	92.6%	87.6%	924.5	1,055.9	22,189
8951	04-Jul-73	0	162.78		0.10	0	0.0	0.0%	0.0%					
8952	05-Jul-73	0	166.05		0.10	0	0.0	0.0%	0.0%					
8953	06-Jul-73	0	165.35		0.10	0	0.0	0.0%	0.0%					
8954	07-Jul-73	0	164.40		0.10	0	0.0	0.0%	0.0%					
8955	08-Jul-73	0	163.50		0.10	0	0.0	0.0%	0.0%					
8956	09-Jul-73	0	163.42		0.10	0	0.0	0.0%	0.0%					
8957	10-Jul-73	0	163.39		0.10	0	0.0	0.0%	0.0%					
8958	11-Jul-73	0	163.36		0.10	0	0.0	0.0%	0.0%					
8959	12-Jul-73	0	163.35		0.10	0	0.0	0.0%	0.0%					
8960	13-Jul-73	0	163.35		0.10	0	0.0	0.0%	0.0%					
8961	14-Jul-73	0	163.35		0.10	0	0.0	0.0%	0.0%					
8962	15-Jul-73	0	163.35		0.10	0	0.0	0.0%	0.0%					
8963	16-Jul-73	0	163.38		0.10	0	0.0	0.0%	0.0%					
8964	17-Jul-73	0	163.36		0.10	0	0.0	0.0%	0.0%					
8965	18-Jul-73	0	164.00		0.10	0	0.0	0.0%	0.0%					
8966	19-Jul-73	0	164.70		0.10	0	0.0	0.0%	0.0%					
8967	20-Jul-73	0	165.36		0.10	0	0.0	0.0%	0.0%					
8968	21-Jul-73	0	165.94		0.10	0	0.0	0.0%	0.0%					
8969	22-Jul-73	0	166.79		0.10	0	0.0	0.0%	0.0%					
8970	23-Jul-73	0	166.83		0.10	0	0.0	0.0%	0.0%					
8971	24-Jul-73	0	166.83		0.10	0	0.0	0.0%	0.0%					

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	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8972	25-Jul-73	0	166.82		0.10	0	0.0	0.0%	0.0%					
8973	26-Jul-73	0	166.81		0.10	0	0.0	0.0%	0.0%					
8974	27-Jul-73	0	166.80		0.10	0	0.0	0.0%	0.0%					
8975	28-Jul-73	0	166.30		0.10	0	0.0	0.0%	0.0%					
8976	29-Jul-73	0	166.14		0.10	0	0.0	0.0%	0.0%					
8977	30-Jul-73	0	166.14		0.10	0	0.0	0.0%	0.0%					
8978	31-Jul-73	0	166.15		0.10	0	0.0	0.0%	0.0%					
8979	01-Aug-73	0	166.02		0.10	0	0.0	0.0%	0.0%					
8980	02-Aug-73	0	166.15		0.10	0	0.0	0.0%	0.0%					
8981	03-Aug-73	0	166.22		0.10	0	0.0	0.0%	0.0%					
8982	04-Aug-73	0	166.24		0.10	0	0.0	0.0%	0.0%					
8983	05-Aug-73	0	166.17		0.10	0	0.0	0.0%	0.0%					
8984	06-Aug-73	0	166.14		0.10	0	0.0	0.0%	0.0%					
8985	07-Aug-73	0	166.02		0.10	0	0.0	0.0%	0.0%					
8986	08-Aug-73	0	165.89		0.10	0	0.0	0.0%	0.0%					
8987	09-Aug-73	0	165.20		0.10	0	0.0	0.0%	0.0%					
8988	10-Aug-73	0	165.16		0.10	0	0.0	0.0%	0.0%					
8989	11-Aug-73	0	164.89		0.10	0	0.0	0.0%	0.0%					
8990	12-Aug-73	0	164.81		0.10	0	0.0	0.0%	0.0%					
8991	13-Aug-73	0	164.77		0.10	0	0.0	0.0%	0.0%					
8992	14-Aug-73	0	164.76		0.10	0	0.0	0.0%	0.0%					
8993	15-Aug-73	0	165.08		0.10	0	0.0	0.0%	0.0%					
8994	16-Aug-73	0	165.41		0.10	0	0.0	0.0%	0.0%					
8995	17-Aug-73	0	165.65		0.10	0	0.0	0.0%	0.0%					
8996	18-Aug-73	0	166.08		0.10	0	0.0	0.0%	0.0%					
8997	19-Aug-73	0	166.17		0.10	0	0.0	0.0%	0.0%					
8998	20-Aug-73	0	166.14		0.10	0	0.0	0.0%	0.0%					
8999	21-Aug-73	0	166.14		0.10	0	0.0	0.0%	0.0%					
9000	22-Aug-73	0	165.75		0.10	0	0.0	0.0%	0.0%					
9001	23-Aug-73	0	165.05		0.10	0	0.0	0.0%	0.0%					
9002	24-Aug-73	0	164.75		0.10	0	0.0	0.0%	0.0%					
9003	25-Aug-73	0	163.81		0.10	0	0.0	0.0%	0.0%					
9004	26-Aug-73	0	163.62		0.10	0	0.0	0.0%	0.0%					
9005	27-Aug-73	0	163.46		0.10	0	0.0	0.0%	0.0%					
9006	28-Aug-73	0	163.30		0.10	0	0.0	0.0%	0.0%					
9007	29-Aug-73	0	163.18		0.10	0	0.0	0.0%	0.0%					
9008	30-Aug-73	0	163.13		0.10	0	0.0	0.0%	0.0%					
9009	31-Aug-73	0	163.11		0.10	0	0.0	0.0%	0.0%					
9010	01-Sep-73	0	163.10		0.10	0	0.0	0.0%	0.0%					

Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
9011	02-Sep-73	0	163.10		0.10	0	0.0	0.0%	0.0%					
9012	03-Sep-73	0	163.10		0.10	0	0.0	0.0%	0.0%					
9013	04-Sep-73	0	163.10		0.10	0	0.0	0.0%	0.0%					
9014	05-Sep-73	0	163.52		0.10	0	0.0	0.0%	0.0%					
9015	06-Sep-73	0	164.35		0.10	0	0.0	0.0%	0.0%					
9016	07-Sep-73	0	165.04		0.10	0	0.0	0.0%	0.0%					
9017	08-Sep-73	0	165.43		0.10	0	0.0	0.0%	0.0%					
9018	09-Sep-73	0	165.84		0.10	0	0.0	0.0%	0.0%					
9019	10-Sep-73	0	166.04		0.10	0	0.0	0.0%	0.0%					
9020	11-Sep-73	0	166.07		0.10	0	0.0	0.0%	0.0%					
9021	12-Sep-73	0	166.25		0.10	0	0.0	0.0%	0.0%					
9022	13-Sep-73	0	166.26		0.10	0	0.0	0.0%	0.0%					
9023	14-Sep-73	0	166.22		0.10	0	0.0	0.0%	0.0%					
9024	15-Sep-73	0	166.20		0.10	0	0.0	0.0%	0.0%					
9025	16-Sep-73	0	166.51		0.10	0	0.0	0.0%	0.0%					
9026	17-Sep-73	0	166.50		0.10	0	0.0	0.0%	0.0%					
9027	18-Sep-73	0	166.50		0.10	0	0.0	0.0%	0.0%					
9028	19-Sep-73	0	166.37		0.10	0	0.0	0.0%	0.0%					
9029	20-Sep-73	0	166.10		0.10	0	0.0	0.0%	0.0%					
9030	21-Sep-73	0	165.80		0.10	0	0.0	0.0%	0.0%					
9031	22-Sep-73	0	165.45		0.10	0	0.0	0.0%	0.0%					
9032	23-Sep-73	0	165.10		0.10	0	0.0	0.0%	0.0%					
9033	24-Sep-73	0	164.89		0.10	0	0.0	0.0%	0.0%					
9034	25-Sep-73	0	164.81		0.10	0	0.0	0.0%	0.0%					
9035	26-Sep-73	0	164.77		0.10	0	0.0	0.0%	0.0%					
9036	27-Sep-73	0	165.06		0.10	0	0.0	0.0%	0.0%					
9037	28-Sep-73	0	165.12		0.10	0	0.0	0.0%	0.0%					
9038	29-Sep-73	0	165.10		0.10	0	0.0	0.0%	0.0%					
9039	30-Sep-73	0	165.10		0.10	0	0.0	0.0%	0.0%					
9040	01-Oct-73	0	165.10		0.10	0	0.0	0.0%	0.0%					
9041	02-Oct-73	0	165.10		0.10	0	0.0	0.0%	0.0%					
9042	03-Oct-73	0	165.44		0.10	0	0.0	0.0%	0.0%					
9043	04-Oct-73	0	165.49		0.10	0	0.0	0.0%	0.0%					
9044	05-Oct-73	0	165.69		0.10	0	0.0	0.0%	0.0%					
9045	06-Oct-73	0	165.82		0.10	0	0.0	0.0%	0.0%					
9046	07-Oct-73	0	165.81		0.10	0	0.0	0.0%	0.0%					
9047	08-Oct-73	0	165.80		0.10	0	0.0	0.0%	0.0%					
9048	09-Oct-73	0	166.11		0.10	0	0.0	0.0%	0.0%					
9049	10-Oct-73	0	166.15		0.10	0	0.0	0.0%	0.0%					

Tab "Power & Energy - 1000 cfs" of
File "Bayou Meto Study - 1000-cfs Pumping Station.XLS"

Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
9050	11-Oct-73	1,089	167.53	0.51	0.61	2	1033.2	60.8%	59.6%	91.9%	86.4%	1,693.2	1,960.0	40,637
9051	12-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9052	13-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9053	14-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9054	15-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9055	16-Oct-73	0	159.03		0.10	0	0.0	0.0%	0.0%					
9056	17-Oct-73	0	166.10		0.10	0	0.0	0.0%	0.0%					
9057	18-Oct-73	1,043	170.13	6.97	7.07	2	1217.8	71.7%	70.3%	93.2%	88.5%	1,969.3	2,225.8	47,263
9058	19-Oct-73	1,037	169.44	7.67	7.77	2	1234.5	72.7%	71.2%	93.3%	88.7%	1,993.9	2,248.8	47,852
9059	20-Oct-73	1,033	168.95	8.16	8.26	2	1246.2	73.3%	71.9%	93.3%	88.8%	2,011.0	2,264.7	48,264
9060	21-Oct-73	1,029	168.55	8.56	8.66	2	1255.7	73.9%	72.5%	93.4%	88.9%	2,025.0	2,277.7	48,600
9061	22-Oct-73	1,030	168.03	8.44	8.54	2	1252.9	73.7%	72.3%	93.4%	88.9%	2,020.8	2,273.8	48,499
9062	23-Oct-73	1,024	167.08	9.08	9.18	2	1267.9	74.6%	73.2%	93.5%	89.0%	2,042.8	2,294.2	49,028
9063	24-Oct-73	1,011	165.26	10.48	10.58	2	1300.6	76.5%	75.1%	93.7%	89.4%	2,090.8	2,338.5	50,178
9064	25-Oct-73	0	162.26		0.10	0	0.0	0.0%	0.0%					
9065	26-Oct-73	1,044	168.16	6.88	6.98	2	1215.7	71.6%	70.2%	93.1%	88.5%	1,966.1	2,222.8	47,187
9066	27-Oct-73	1,016	164.26	10.01	10.11	2	1289.6	75.9%	74.4%	93.6%	89.3%	2,074.6	2,323.5	49,791
9067	28-Oct-73	0	159.03		0.10	0	0.0	0.0%	0.0%					
9068	29-Oct-73	0	164.52		0.10	0	0.0	0.0%	0.0%					
9069	30-Oct-73	536	167.36	3.38	3.48	1	1117.6	65.8%	64.5%	92.5%	87.3%	910.2	1,042.1	21,845
9070	31-Oct-73	521	164.74	7.05	7.15	1	1219.7	71.8%	70.4%	93.2%	88.5%	986.0	1,114.2	23,665
9071	01-Nov-73	0	161.58		0.10	0	0.0	0.0%	0.0%					
9072	02-Nov-73	0	164.69		0.10	0	0.0	0.0%	0.0%					
9073	03-Nov-73	532	167.43	4.53	4.63	1	1151.0	67.7%	66.4%	92.7%	87.7%	935.1	1,066.0	22,441
9074	04-Nov-73	526	166.26	6.04	6.14	1	1194.3	70.3%	68.9%	93.0%	88.2%	967.3	1,096.5	23,214
9075	05-Nov-73	521	165.20	7.10	7.20	1	1220.9	71.9%	70.5%	93.2%	88.5%	986.9	1,115.0	23,686
9076	06-Nov-73	517	164.21	8.09	8.19	1	1244.5	73.2%	71.8%	93.3%	88.8%	1,004.3	1,131.2	24,103
9077	07-Nov-73	518	164.61	7.69	7.79	1	1235.0	72.7%	71.3%	93.3%	88.7%	997.3	1,124.7	23,935
9078	08-Nov-73	543	167.30	1.01	1.11	1	1048.1	61.7%	60.5%	92.0%	86.6%	857.9	991.1	20,589
9079	09-Nov-73	1,088	169.59	0.69	0.79	2	1038.6	61.1%	59.9%	92.0%	86.4%	1,701.3	1,968.0	40,831
9080	10-Nov-73	1,089	169.25	0.57	0.67	2	1035.0	60.9%	59.7%	91.9%	86.4%	1,695.9	1,962.7	40,702
9081	11-Nov-73	1,092	168.31	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
9082	12-Nov-73	1,091	167.93	0.11	0.21	2	1021.3	60.1%	58.9%	91.8%	86.3%	1,675.1	1,942.1	40,203
9083	13-Nov-73	1,092	163.78	0.00	0.10	2	1018.0	59.9%	58.8%	91.8%	86.2%	1,670.2	1,937.2	40,084
9084	14-Nov-73	0	161.18		0.10	0	0.0	0.0%	0.0%					
9085	15-Nov-73	0	164.40		0.10	0	0.0	0.0%	0.0%					
9086	16-Nov-73	0	164.33		0.10	0	0.0	0.0%	0.0%					
9087	17-Nov-73	0	164.26		0.10	0	0.0	0.0%	0.0%					
9088	18-Nov-73	0	164.20		0.10	0	0.0	0.0%	0.0%					

Tab "Power & Energy - 1000 cfs" of
File "Bayou Meto Study - 1000-cfs Pumping Station.XLS"

Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
17903		Q	Period-of-Record Pumping Station Operating Statistics											
17904	DATE	(kcfs)	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
17905	357.9	(cfs)	(ft)	(ft)	(ft)		(hp)					(kW)	(kVA)	(MWh)
17906	SUM/COUNT	5,898.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	233,453
17907	MIN	0.0	159.0	0.0	0.1	0.0	0.0	0.0%	0.0%	91.8%	86.2%	835.1	968.6	20.04
17908	AVG	329.6	165.6	2.3	0.9	0.6	362.4	21.3%	20.9%	92.2%	87.0%	1,625.8	1,867.8	39.02
17909	MAX	1,092.0	179.6	20.1	20.2	2.0	1,488.3	87.6%	85.9%	94.0%	90.5%	2,383.6	2,632.9	57.21
17910														
17911	17897	= No. of days pumped over POR												
17912	429528	= No. of hours pumped over POR												
17913	50.00	= Duration of POR in years												
17914	4.1%	= Days pumped per year as a percentage												

Tab "Power & Energy - 1000 cfs" of
File "Bayou Meto Study - 1000-cfs Pumping Station.XLS"

Cell: H17904
Comment: Total flow (in SUM/COUNT line) over the POR of pump station in 1000's of cfs

Cell: G17905
Comment: Average number of hours pumped annually over the POR

Cell: H17905
Comment: Min, avg, and max flows of pump station over the POR in cfs

Cell: J17905
Comment: Hydraulic static head is the negative of mechanical static head

Cell: L17905
Comment: Number of pumps operating

Cell: M17905
Comment: Pump brake hp

Cell: N17905
Comment: Diesel engine load as a percentage

Cell: O17905
Comment: Electric motor load as a percentage

Cell: P17905
Comment: Electric motor efficiency as a function of M_load

Cell: Q17905
Comment: Electric motor power factor as a function of M_load

Cell: R17905
Comment: Power demand in kW of pumping station

Cell: S17905
Comment: Power demand in kVA of pumping plant (accounts for power factor)

Little Bayou Meto
Flood Control Pumping Plant
3000-cfs (3 4000-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8704	30-Oct-72	0	164.67		0.10	0	0.0	0.0%	0.0%					
8705	31-Oct-72	0	164.77		0.10	0	0.0	0.0%	0.0%					
8706	01-Nov-72	0	165.41		0.10	0	0.0	0.0%	0.0%					
8707	02-Nov-72	1,225	167.20	0.30	0.40	2	1027.0	32.1%	25.9%	86.5%	76.0%	1,788.3	2,354.2	42,918
8708	03-Nov-72	3,633	168.22	1.60	1.70	7	1065.6	33.3%	26.9%	86.7%	76.3%	6,478.5	8,486.4	155,484
8709	04-Nov-72	0	159.05		0.10	0	0.0	0.0%	0.0%					
8710	05-Nov-72	3,642	170.92	1.21	1.31	7	1054.0	32.9%	26.6%	86.7%	76.2%	6,412.7	8,412.7	153,906
8711	06-Nov-72	0	159.01		0.10	0	0.0	0.0%	0.0%					
8712	07-Nov-72	3,676	170.74	0.23	0.33	7	1024.9	32.0%	25.9%	86.5%	75.9%	6,247.0	8,226.2	149,929
8713	08-Nov-72	0	159.03		0.10	0	0.0	0.0%	0.0%					
8714	09-Nov-72	3,684	171.01	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8715	10-Nov-72	3,583	167.00	3.74	3.84	7	1128.1	35.2%	28.5%	87.1%	77.0%	6,831.1	8,877.0	163,946
8716	11-Nov-72	3,507	164.05	6.46	6.56	7	1205.7	37.6%	30.4%	87.5%	77.7%	7,264.8	9,348.4	174,355
8717	12-Nov-72	0	162.13		0.10	0	0.0	0.0%	0.0%					
8718	13-Nov-72	3,684	171.64	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8719	14-Nov-72	3,684	170.88	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8720	15-Nov-72	3,612	168.67	2.53	2.63	7	1092.9	34.1%	27.6%	86.9%	76.6%	6,632.8	8,658.1	159,187
8721	16-Nov-72	0	162.63		0.10	0	0.0	0.0%	0.0%					
8722	17-Nov-72	3,684	172.20	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8723	18-Nov-72	3,624	170.16	1.97	2.07	7	1076.6	33.6%	27.2%	86.8%	76.4%	6,540.7	8,555.8	156,977
8724	19-Nov-72	0	159.08		0.10	0	0.0	0.0%	0.0%					
8725	20-Nov-72	3,639	171.32	1.32	1.42	7	1057.3	33.0%	26.7%	86.7%	76.3%	6,431.3	8,433.6	154,351
8726	21-Nov-72	0	161.24		0.10	0	0.0	0.0%	0.0%					
8727	22-Nov-72	3,631	171.50	1.65	1.75	7	1067.1	33.3%	26.9%	86.7%	76.4%	6,486.9	8,495.8	155,686
8728	23-Nov-72	0	162.75		0.10	0	0.0	0.0%	0.0%					
8729	24-Nov-72	3,645	171.52	1.12	1.22	7	1051.4	32.8%	26.5%	86.6%	76.2%	6,397.5	8,395.7	153,541
8730	25-Nov-72	0	160.43		0.10	0	0.0	0.0%	0.0%					
8731	26-Nov-72	3,628	170.84	1.80	1.90	7	1071.6	33.4%	27.1%	86.8%	76.4%	6,512.2	8,524.0	156,293
8732	27-Nov-72	0	159.02		0.10	0	0.0	0.0%	0.0%					
8733	28-Nov-72	3,633	170.36	1.60	1.70	7	1065.6	33.3%	26.9%	86.7%	76.3%	6,478.5	8,486.4	155,484
8734	29-Nov-72	0	159.02		0.10	0	0.0	0.0%	0.0%					
8735	30-Nov-72	3,653	169.84	0.90	1.00	7	1044.8	32.6%	26.4%	86.6%	76.1%	6,360.4	8,354.0	152,649
8736	01-Dec-72	0	159.01		0.10	0	0.0	0.0%	0.0%					
8737	02-Dec-72	0	159.01		0.10	0	0.0	0.0%	0.0%					
8738	03-Dec-72	0	159.01		0.10	0	0.0	0.0%	0.0%					
8739	04-Dec-72	0	159.01		0.10	0	0.0	0.0%	0.0%					
8740	05-Dec-72	0	159.01		0.10	0	0.0	0.0%	0.0%					
8741	06-Dec-72	0	159.01		0.10	0	0.0	0.0%	0.0%					

Tab "Power & Energy - 3000 cfs" of
File "Bayou Meto Study - 3000-cfs Pumping Station.XLS"

Little Bayou Meto
Flood Control Pumping Plant
3000-cfs (3 4000-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8742	07-Dec-72	0	159.01		0.10	0	0.0	0.0%	0.0%					
8743	08-Dec-72	0	159.01		0.10	0	0.0	0.0%	0.0%					
8744	09-Dec-72	0	159.01		0.10	0	0.0	0.0%	0.0%					
8745	10-Dec-72	0	159.01		0.10	0	0.0	0.0%	0.0%					
8746	11-Dec-72	0	159.03		0.10	0	0.0	0.0%	0.0%					
8747	12-Dec-72	3,684	169.85	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8748	13-Dec-72	3,602	166.64	2.95	3.05	7	1105.1	34.5%	27.9%	86.9%	76.7%	6,701.7	8,734.5	160,841
8749	14-Dec-72	3,625	167.64	1.94	2.04	7	1075.7	33.6%	27.2%	86.8%	76.4%	6,535.8	8,550.3	156,858
8750	15-Dec-72	3,684	169.93	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8751	16-Dec-72	3,684	170.34	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8752	17-Dec-72	3,684	170.62	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8753	18-Dec-72	3,684	170.61	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8754	19-Dec-72	3,684	170.61	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8755	20-Dec-72	3,680	170.85	0.12	0.22	7	1021.6	31.9%	25.8%	86.5%	75.9%	6,228.4	8,205.1	149,482
8756	21-Dec-72	3,684	170.93	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8757	22-Dec-72	3,684	170.49	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8758	23-Dec-72	3,645	168.47	1.11	1.21	7	1051.1	32.8%	26.5%	86.6%	76.2%	6,395.9	8,393.8	153,500
8759	24-Dec-72	0	162.18		0.10	0	0.0	0.0%	0.0%					
8760	25-Dec-72	3,684	169.88	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8761	26-Dec-72	0	159.54		0.10	0	0.0	0.0%	0.0%					
8762	27-Dec-72	3,684	168.79	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8763	28-Dec-72	0	159.05		0.10	0	0.0	0.0%	0.0%					
8764	29-Dec-72	3,684	168.43	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8765	30-Dec-72	0	159.01		0.10	0	0.0	0.0%	0.0%					
8766	31-Dec-72	3,684	168.33	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
8767	01-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8768	02-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8769	03-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8770	04-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8771	05-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8772	06-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8773	07-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8774	08-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8775	09-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8776	10-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8777	11-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8778	12-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8779	13-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					

Little Bayou Meto
Flood Control Pumping Plant
3000-cfs (3 4000-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8780	14-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8781	15-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8782	16-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8783	17-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8784	18-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8785	19-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8786	20-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8787	21-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8788	22-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8789	23-Jan-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8790	24-Jan-73	0	159.05		0.10	0	0.0	0.0%	0.0%					
8791	25-Jan-73	3,595	171.30	3.29	3.39	7	1115.0	34.8%	28.2%	87.0%	76.8%	6,757.4	8,796.0	162,178
8792	26-Jan-73	3,391	164.54	10.21	10.31	7	1294.3	40.4%	32.7%	88.0%	78.6%	7,754.9	9,868.8	186,119
8793	27-Jan-73	0	159.08		0.10	0	0.0	0.0%	0.0%					
8794	28-Jan-73	3,619	171.90	2.21	2.31	7	1083.6	33.8%	27.4%	86.8%	76.5%	6,580.2	8,599.7	157,924
8795	29-Jan-73	3,567	169.80	4.31	4.41	7	1144.6	35.7%	28.9%	87.2%	77.1%	6,923.8	8,978.6	166,170
8796	30-Jan-73	0	162.32		0.10	0	0.0	0.0%	0.0%					
8797	31-Jan-73	3,609	172.11	2.64	2.74	7	1096.1	34.2%	27.7%	86.9%	76.6%	6,650.8	8,678.2	159,620
8798	01-Feb-73	3,552	170.04	4.86	4.96	7	1160.4	36.2%	29.3%	87.2%	77.3%	7,012.2	9,075.1	168,294
8799	02-Feb-73	0	159.81		0.10	0	0.0	0.0%	0.0%					
8800	03-Feb-73	3,599	171.68	3.07	3.17	7	1108.6	34.6%	28.0%	87.0%	76.8%	6,721.4	8,756.2	161,313
8801	04-Feb-73	3,451	166.44	8.31	8.41	7	1249.8	39.0%	31.6%	87.7%	78.1%	7,509.3	9,609.6	180,223
8802	05-Feb-73	0	159.06		0.10	0	0.0	0.0%	0.0%					
8803	06-Feb-73	3,566	170.81	4.37	4.47	7	1146.4	35.8%	28.9%	87.2%	77.1%	6,933.4	8,989.2	166,402
8804	07-Feb-73	0	159.03		0.10	0	0.0	0.0%	0.0%					
8805	08-Feb-73	3,531	169.94	5.66	5.76	7	1183.4	36.9%	29.9%	87.4%	77.5%	7,140.6	9,214.5	171,375
8806	09-Feb-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8807	10-Feb-73	3,521	169.75	5.99	6.09	7	1192.9	37.2%	30.1%	87.4%	77.6%	7,193.5	9,271.5	172,644
8808	11-Feb-73	0	159.05		0.10	0	0.0	0.0%	0.0%					
8809	12-Feb-73	3,561	171.19	4.55	4.65	7	1151.5	35.9%	29.1%	87.2%	77.2%	6,962.4	9,020.8	167,097
8810	13-Feb-73	0	161.42		0.10	0	0.0	0.0%	0.0%					
8811	14-Feb-73	3,560	171.46	4.56	4.66	7	1151.8	36.0%	29.1%	87.2%	77.2%	6,964.0	9,022.6	167,136
8812	15-Feb-73	3,298	163.22	12.80	12.90	7	1364.1	42.6%	34.4%	88.4%	79.3%	8,137.2	10,266.0	195,292
8813	16-Feb-73	0	159.05		0.10	0	0.0	0.0%	0.0%					
8814	17-Feb-73	3,559	171.25	4.63	4.73	7	1153.8	36.0%	29.1%	87.2%	77.2%	6,975.3	9,034.8	167,406
8815	18-Feb-73	0	160.99		0.10	0	0.0	0.0%	0.0%					
8816	19-Feb-73	3,558	171.09	4.65	4.75	7	1154.4	36.0%	29.1%	87.2%	77.2%	6,978.5	9,038.3	167,483
8817	20-Feb-73	0	159.05		0.10	0	0.0	0.0%	0.0%					

Tab "Power & Energy - 3000 cfs" of
File "Bayou Meto Study - 3000-cfs Pumping Station.XLS"

Little Bayou Meto
Flood Control Pumping Plant
3000-cfs (3 4000-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8818	21-Feb-73	3,599	170.23	3.08	3.18	7	1108.9	34.6%	28.0%	87.0%	76.8%	6,723.0	8,758.0	161,352
8819	22-Feb-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8820	23-Feb-73	3,599	168.52	3.10	3.20	7	1109.5	34.6%	28.0%	87.0%	76.8%	6,726.3	8,761.6	161,431
8821	24-Feb-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8822	25-Feb-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8823	26-Feb-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8824	27-Feb-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8825	28-Feb-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8826	01-Mar-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8827	02-Mar-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8828	03-Mar-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8829	04-Mar-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8830	05-Mar-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8831	06-Mar-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8832	07-Mar-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8833	08-Mar-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8834	09-Mar-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8835	10-Mar-73	3,473	169.65	7.62	7.72	7	1233.3	38.5%	31.1%	87.7%	78.0%	7,418.3	9,512.7	178,038
8836	11-Mar-73	0	159.04		0.10	0	0.0	0.0%	0.0%					
8837	12-Mar-73	3,466	170.06	7.82	7.92	7	1238.1	38.6%	31.3%	87.7%	78.0%	7,444.7	9,540.8	178,672
8838	13-Mar-73	0	159.04		0.10	0	0.0	0.0%	0.0%					
8839	14-Mar-73	3,468	170.59	7.77	7.87	7	1236.9	38.6%	31.2%	87.7%	78.0%	7,438.1	9,533.8	178,514
8840	15-Mar-73	0	159.05		0.10	0	0.0	0.0%	0.0%					
8841	16-Mar-73	3,470	170.55	7.69	7.79	7	1235.0	38.5%	31.2%	87.7%	78.0%	7,427.5	9,522.6	178,260
8842	17-Mar-73	0	159.04		0.10	0	0.0	0.0%	0.0%					
8843	18-Mar-73	3,478	170.79	7.45	7.55	7	1229.3	38.4%	31.0%	87.6%	77.9%	7,395.8	9,488.7	177,500
8844	19-Mar-73	0	160.72		0.10	0	0.0	0.0%	0.0%					
8845	20-Mar-73	3,505	171.72	6.51	6.61	7	1206.9	37.7%	30.5%	87.5%	77.7%	7,271.4	9,355.5	174,514
8846	21-Mar-73	3,391	168.05	10.19	10.29	7	1293.8	40.4%	32.7%	88.0%	78.6%	7,752.4	9,866.1	186,057
8847	22-Mar-73	0	159.03		0.10	0	0.0	0.0%	0.0%					
8848	23-Mar-73	3,498	171.35	6.77	6.87	7	1213.1	37.9%	30.6%	87.5%	77.8%	7,305.9	9,392.5	175,341
8849	24-Mar-73	0	162.50		0.10	0	0.0	0.0%	0.0%					
8850	25-Mar-73	3,496	171.30	6.82	6.92	7	1214.3	37.9%	30.7%	87.5%	77.8%	7,312.5	9,399.6	175,500
8851	26-Mar-73	0	159.04		0.10	0	0.0	0.0%	0.0%					
8852	27-Mar-73	3,476	170.49	7.52	7.62	7	1230.9	38.4%	31.1%	87.6%	78.0%	7,405.1	9,498.6	177,721
8853	28-Mar-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8854	29-Mar-73	0	159.10		0.10	0	0.0	0.0%	0.0%					
8855	30-Mar-73	3,503	171.52	6.60	6.70	7	1209.0	37.7%	30.5%	87.5%	77.7%	7,283.4	9,368.3	174,801

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Little Bayou Meto
Flood Control Pumping Plant
3000-cfs (3 4000-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8856	31-Mar-73	3,307	165.43	12.57	12.67	7	1357.6	42.4%	34.3%	88.3%	79.2%	8,102.1	10,229.8	194,450
8857	01-Apr-73	0	159.06		0.10	0	0.0	0.0%	0.0%					
8858	02-Apr-73	3,497	171.20	6.80	6.90	7	1213.8	37.9%	30.6%	87.5%	77.8%	7,309.8	9,396.7	175,436
8859	03-Apr-73	0	162.74		0.10	0	0.0	0.0%	0.0%					
8860	04-Apr-73	3,515	171.71	6.17	6.27	7	1198.1	37.4%	30.3%	87.5%	77.6%	7,222.3	9,302.6	173,335
8861	05-Apr-73	3,299	164.98	12.77	12.87	7	1363.2	42.5%	34.4%	88.4%	79.3%	8,132.6	10,261.3	195,182
8862	06-Apr-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8863	07-Apr-73	3,484	170.65	7.23	7.33	7	1224.0	38.2%	30.9%	87.6%	77.9%	7,366.7	9,457.6	176,802
8864	08-Apr-73	0	159.02		0.10	0	0.0	0.0%	0.0%					
8865	09-Apr-73	3,454	169.68	8.20	8.30	7	1247.1	38.9%	31.5%	87.7%	78.1%	7,494.8	9,594.2	179,875
8866	10-Apr-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8867	11-Apr-73	3,441	169.35	8.65	8.75	7	1257.8	39.3%	31.8%	87.8%	78.2%	7,553.8	9,656.8	181,291
8868	12-Apr-73	0	159.02		0.10	0	0.0	0.0%	0.0%					
8869	13-Apr-73	3,446	169.76	8.48	8.58	7	1253.8	39.1%	31.7%	87.8%	78.2%	7,531.7	9,633.4	180,761
8870	14-Apr-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8871	15-Apr-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8872	16-Apr-73	3,381	168.64	10.49	10.59	7	1300.8	40.6%	32.8%	88.0%	78.6%	7,790.9	9,906.6	186,983
8873	17-Apr-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8874	18-Apr-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8875	19-Apr-73	3,400	169.72	9.95	10.05	7	1288.2	40.2%	32.5%	88.0%	78.5%	7,721.5	9,833.7	185,316
8876	20-Apr-73	0	159.09		0.10	0	0.0	0.0%	0.0%					
8877	21-Apr-73	3,393	171.88	10.14	10.24	7	1292.6	40.3%	32.6%	88.0%	78.6%	7,745.9	9,859.4	185,902
8878	22-Apr-73	3,391	171.96	10.20	10.30	7	1294.0	40.4%	32.7%	88.0%	78.6%	7,753.7	9,867.5	186,088
8879	23-Apr-73	3,404	172.63	9.84	9.94	7	1285.6	40.1%	32.5%	87.9%	78.5%	7,707.3	9,818.8	184,976
8880	24-Apr-73	3,394	173.15	10.11	10.21	7	1291.9	40.3%	32.6%	88.0%	78.6%	7,742.1	9,855.3	185,810
8881	25-Apr-73	3,386	173.67	10.33	10.43	7	1297.1	40.5%	32.8%	88.0%	78.6%	7,770.4	9,885.0	186,489
8882	26-Apr-73	3,362	174.24	11.02	11.12	7	1314.3	41.0%	33.2%	88.1%	78.8%	7,864.8	9,983.8	188,756
8883	27-Apr-73	3,355	174.79	11.22	11.32	7	1319.9	41.2%	33.3%	88.1%	78.8%	7,895.5	10,015.8	189,492
8884	28-Apr-73	3,372	175.28	10.73	10.83	7	1306.4	40.8%	33.0%	88.1%	78.7%	7,821.8	9,938.8	187,723
8885	29-Apr-73	3,391	175.67	10.19	10.29	7	1293.8	40.4%	32.7%	88.0%	78.6%	7,752.4	9,866.1	186,057
8886	30-Apr-73	3,431	175.98	8.98	9.08	7	1265.5	39.5%	32.0%	87.8%	78.3%	7,596.4	9,701.9	182,314
8887	01-May-73	3,457	176.22	8.14	8.24	7	1245.7	38.9%	31.5%	87.7%	78.1%	7,486.9	9,585.8	179,685
8888	02-May-73	3,470	176.40	7.72	7.82	7	1235.7	38.6%	31.2%	87.7%	78.0%	7,431.5	9,526.8	178,355
8889	03-May-73	3,543	176.53	5.21	5.31	7	1170.5	36.5%	29.6%	87.3%	77.4%	7,068.5	9,136.2	169,643
8890	04-May-73	3,524	176.60	5.87	5.97	7	1189.4	37.1%	30.0%	87.4%	77.6%	7,174.3	9,250.8	172,183
8891	05-May-73	3,521	176.64	5.99	6.09	7	1192.9	37.2%	30.1%	87.4%	77.6%	7,193.5	9,271.5	172,644
8892	06-May-73	3,516	176.66	6.13	6.23	7	1196.9	37.4%	30.2%	87.4%	77.6%	7,215.9	9,295.7	173,181
8893	07-May-73	3,521	176.65	5.99	6.09	7	1192.9	37.2%	30.1%	87.4%	77.6%	7,193.5	9,271.5	172,644

Tab "Power & Energy - 3000 cfs" of
File "Bayou Meto Study - 3000-cfs Pumping Station.XLS"

Little Bayou Meto
Flood Control Pumping Plant
3000-cfs (3 4000-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8894	08-May-73	3,529	176.60	5.71	5.81	7	1184.8	37.0%	29.9%	87.4%	77.5%	7,148.6	9,223.1	171,567
8895	09-May-73	3,522	176.53	5.94	6.04	7	1191.4	37.2%	30.1%	87.4%	77.6%	7,185.5	9,262.9	172,452
8896	10-May-73	3,510	176.44	6.35	6.45	7	1203.1	37.6%	30.4%	87.5%	77.7%	7,250.2	9,332.7	174,005
8897	11-May-73	3,492	176.32	6.95	7.05	7	1217.4	38.0%	30.7%	87.6%	77.8%	7,329.7	9,418.0	175,913
8898	12-May-73	3,517	176.19	6.12	6.22	7	1196.6	37.3%	30.2%	87.4%	77.6%	7,214.3	9,294.0	173,143
8899	13-May-73	3,529	176.03	5.71	5.81	7	1184.8	37.0%	29.9%	87.4%	77.5%	7,148.6	9,223.1	171,567
8900	14-May-73	3,528	175.85	5.75	5.85	7	1186.0	37.0%	29.9%	87.4%	77.5%	7,155.1	9,230.0	171,721
8901	15-May-73	3,514	175.65	6.23	6.33	7	1199.8	37.4%	30.3%	87.5%	77.7%	7,231.9	9,312.9	173,565
8902	16-May-73	3,494	175.42	6.89	6.99	7	1215.9	38.0%	30.7%	87.6%	77.8%	7,321.8	9,409.5	175,722
8903	17-May-73	3,477	175.16	7.47	7.57	7	1229.7	38.4%	31.1%	87.6%	77.9%	7,398.5	9,491.5	177,563
8904	18-May-73	3,462	174.84	7.95	8.05	7	1241.2	38.7%	31.3%	87.7%	78.1%	7,461.8	9,559.1	179,084
8905	19-May-73	3,479	174.48	7.40	7.50	7	1228.1	38.3%	31.0%	87.6%	77.9%	7,389.2	9,481.7	177,341
8906	20-May-73	3,499	174.04	6.71	6.81	7	1211.6	37.8%	30.6%	87.5%	77.8%	7,297.9	9,383.9	175,150
8907	21-May-73	3,489	173.51	7.06	7.16	7	1220.0	38.1%	30.8%	87.6%	77.9%	7,344.3	9,433.6	176,262
8908	22-May-73	3,482	172.91	7.30	7.40	7	1225.7	38.3%	30.9%	87.6%	77.9%	7,376.0	9,467.5	177,024
8909	23-May-73	3,446	171.38	8.47	8.57	7	1253.6	39.1%	31.7%	87.8%	78.2%	7,530.4	9,632.0	180,729
8910	24-May-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8911	25-May-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8912	26-May-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8913	27-May-73	0	159.03		0.10	0	0.0	0.0%	0.0%					
8914	28-May-73	3,470	170.18	7.70	7.80	7	1235.2	38.6%	31.2%	87.7%	78.0%	7,428.8	9,524.0	178,292
8915	29-May-73	0	159.05		0.10	0	0.0	0.0%	0.0%					
8916	30-May-73	3,530	171.27	5.68	5.78	7	1184.0	37.0%	29.9%	87.4%	77.5%	7,143.8	9,217.9	171,452
8917	31-May-73	3,334	164.35	11.81	11.91	7	1336.4	41.7%	33.7%	88.2%	79.0%	7,985.9	10,109.7	191,662
8918	01-Jun-73	0	159.08		0.10	0	0.0	0.0%	0.0%					
8919	02-Jun-73	3,662	171.50	0.63	0.73	7	1036.8	32.4%	26.2%	86.6%	76.1%	6,314.7	8,302.6	151,554
8920	03-Jun-73	3,359	163.31	11.12	11.22	7	1317.1	41.1%	33.3%	88.1%	78.8%	7,880.2	9,999.8	189,124
8921	04-Jun-73	0	159.04		0.10	0	0.0	0.0%	0.0%					
8922	05-Jun-73	3,558	170.66	4.66	4.76	7	1154.7	36.0%	29.2%	87.2%	77.2%	6,980.1	9,040.1	167,522
8923	06-Jun-73	0	159.05		0.10	0	0.0	0.0%	0.0%					
8924	07-Jun-73	3,478	169.82	7.44	7.54	7	1229.0	38.4%	31.0%	87.6%	77.9%	7,394.5	9,487.3	177,468
8925	08-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8926	09-Jun-73	3,283	168.67	13.21	13.31	7	1374.7	42.9%	34.7%	88.4%	79.4%	8,195.3	10,325.7	196,688
8927	10-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8928	11-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8929	12-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8930	13-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8931	14-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					

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Little Bayou Meto
Flood Control Pumping Plant
3000-cfs (3 4000-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8932	15-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8933	16-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8934	17-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8935	18-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8936	19-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8937	20-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8938	21-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8939	22-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8940	23-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8941	24-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8942	25-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8943	26-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8944	27-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8945	28-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8946	29-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8947	30-Jun-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8948	01-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8949	02-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8950	03-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8951	04-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8952	05-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8953	06-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8954	07-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8955	08-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8956	09-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8957	10-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8958	11-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8959	12-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8960	13-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8961	14-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8962	15-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8963	16-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8964	17-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8965	18-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8966	19-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8967	20-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8968	21-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8969	22-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					

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Little Bayou Meto
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3000-cfs (3 4000-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
8970	23-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8971	24-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8972	25-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8973	26-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8974	27-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8975	28-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8976	29-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8977	30-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8978	31-Jul-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8979	01-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8980	02-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8981	03-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8982	04-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8983	05-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8984	06-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8985	07-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8986	08-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8987	09-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8988	10-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8989	11-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8990	12-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8991	13-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8992	14-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8993	15-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8994	16-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8995	17-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8996	18-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8997	19-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8998	20-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
8999	21-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9000	22-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9001	23-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9002	24-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9003	25-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9004	26-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9005	27-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9006	28-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9007	29-Aug-73	0	159.01		0.10	0	0.0	0.0%	0.0%					

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Little Bayou Meto
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3000-cfs (3 4000-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
9008	30-Aug-73	0	159.55		0.10	0	0.0	0.0%	0.0%					
9009	31-Aug-73	0	160.54		0.10	0	0.0	0.0%	0.0%					
9010	01-Sep-73	0	161.20		0.10	0	0.0	0.0%	0.0%					
9011	02-Sep-73	0	161.66		0.10	0	0.0	0.0%	0.0%					
9012	03-Sep-73	0	162.00		0.10	0	0.0	0.0%	0.0%					
9013	04-Sep-73	0	162.24		0.10	0	0.0	0.0%	0.0%					
9014	05-Sep-73	0	162.77		0.10	0	0.0	0.0%	0.0%					
9015	06-Sep-73	0	164.04		0.10	0	0.0	0.0%	0.0%					
9016	07-Sep-73	0	165.03		0.10	0	0.0	0.0%	0.0%					
9017	08-Sep-73	0	165.42		0.10	0	0.0	0.0%	0.0%					
9018	09-Sep-73	0	165.84		0.10	0	0.0	0.0%	0.0%					
9019	10-Sep-73	0	166.04		0.10	0	0.0	0.0%	0.0%					
9020	11-Sep-73	0	166.07		0.10	0	0.0	0.0%	0.0%					
9021	12-Sep-73	0	166.25		0.10	0	0.0	0.0%	0.0%					
9022	13-Sep-73	0	166.26		0.10	0	0.0	0.0%	0.0%					
9023	14-Sep-73	0	166.24		0.10	0	0.0	0.0%	0.0%					
9024	15-Sep-73	0	166.21		0.10	0	0.0	0.0%	0.0%					
9025	16-Sep-73	0	166.51		0.10	0	0.0	0.0%	0.0%					
9026	17-Sep-73	0	166.50		0.10	0	0.0	0.0%	0.0%					
9027	18-Sep-73	0	166.50		0.10	0	0.0	0.0%	0.0%					
9028	19-Sep-73	0	166.37		0.10	0	0.0	0.0%	0.0%					
9029	20-Sep-73	0	166.10		0.10	0	0.0	0.0%	0.0%					
9030	21-Sep-73	0	165.80		0.10	0	0.0	0.0%	0.0%					
9031	22-Sep-73	0	165.45		0.10	0	0.0	0.0%	0.0%					
9032	23-Sep-73	0	165.10		0.10	0	0.0	0.0%	0.0%					
9033	24-Sep-73	0	164.89		0.10	0	0.0	0.0%	0.0%					
9034	25-Sep-73	0	164.81		0.10	0	0.0	0.0%	0.0%					
9035	26-Sep-73	0	164.77		0.10	0	0.0	0.0%	0.0%					
9036	27-Sep-73	0	165.06		0.10	0	0.0	0.0%	0.0%					
9037	28-Sep-73	0	165.12		0.10	0	0.0	0.0%	0.0%					
9038	29-Sep-73	0	165.10		0.10	0	0.0	0.0%	0.0%					
9039	30-Sep-73	0	165.10		0.10	0	0.0	0.0%	0.0%					
9040	01-Oct-73	0	165.10		0.10	0	0.0	0.0%	0.0%					
9041	02-Oct-73	0	165.10		0.10	0	0.0	0.0%	0.0%					
9042	03-Oct-73	0	165.44		0.10	0	0.0	0.0%	0.0%					
9043	04-Oct-73	0	165.49		0.10	0	0.0	0.0%	0.0%					
9044	05-Oct-73	0	165.69		0.10	0	0.0	0.0%	0.0%					
9045	06-Oct-73	0	165.82		0.10	0	0.0	0.0%	0.0%					

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	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
9046	07-Oct-73	0	165.81		0.10	0	0.0	0.0%	0.0%					
9047	08-Oct-73	0	165.80		0.10	0	0.0	0.0%	0.0%					
9048	09-Oct-73	0	166.11		0.10	0	0.0	0.0%	0.0%					
9049	10-Oct-73	0	166.15		0.10	0	0.0	0.0%	0.0%					
9050	11-Oct-73	2,444	167.53	0.51	0.61	5	1033.2	32.2%	26.1%	86.5%	76.0%	4,496.0	5,914.1	107,905
9051	12-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9052	13-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9053	14-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9054	15-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9055	16-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9056	17-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9057	18-Oct-73	0	159.02		0.10	0	0.0	0.0%	0.0%					
9058	19-Oct-73	3,426	168.00	9.11	9.21	7	1268.6	39.6%	32.0%	87.8%	78.3%	7,613.2	9,719.6	182,717
9059	20-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9060	21-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9061	22-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9062	23-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9063	24-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9064	25-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9065	26-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9066	27-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9067	28-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9068	29-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9069	30-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9070	31-Oct-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9071	01-Nov-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9072	02-Nov-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9073	03-Nov-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9074	04-Nov-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9075	05-Nov-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9076	06-Nov-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9077	07-Nov-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9078	08-Nov-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9079	09-Nov-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9080	10-Nov-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9081	11-Nov-73	0	159.01		0.10	0	0.0	0.0%	0.0%					
9082	12-Nov-73	3,684	168.25	0.00	0.10	7	1018.0	31.8%	25.7%	86.5%	75.9%	6,208.1	8,182.1	148,993
9083	13-Nov-73	0	159.01		0.10	0	0.0	0.0%	0.0%					

Tab "Power & Energy - 3000 cfs" of
File "Bayou Meto Study - 3000-cfs Pumping Station.XLS"

Little Bayou Meto
Flood Control Pumping Plant
3000-cfs (3 4000-hp)

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DATE	Q	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
17900														
17901														
17902														
17903		Q	Period-of-Record Pumping Station Operating Statistics											
17904	DATE	(kcfs)	h_sump	h_static	h_total	N	Bhp	E_Load	M_Load	M_eff	M_pf	P_In	S_In	W_e
17905	365.2	(cfs)	(ft)	(ft)	(ft)		(hp)					(kW)	(kVA)	(MWh)
17906	SUM/COUNT	7,488.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	336,795
17907	MIN	0.0	159.0	0.0	0.1	0.0	0.0	0.0%	0.0%	86.5%	75.9%	1,773.7	2,337.7	42.57
17908	AVG	418.4	163.2	3.0	0.5	0.8	158.0	4.9%	4.0%	86.9%	76.7%	5,471.0	7,111.2	131.30
17909	MAX	3,684.0	176.7	23.0	23.1	7.0	1,511.7	47.2%	38.2%	89.2%	80.7%	8,935.1	11,070.6	214.44
17910														
17911	17896	= No. of days pumped over POR												
17912	429504	= No. of hours pumped over POR												
17913	49.00	= Duration of POR in years												
17914	4.2%	= Days pumped per year as a percentage												

Cell: K1
Comment: The pumping system HQ curve was used, not the pump bowl curve. Total dynamic head is the static head plus the 0.1-foot minimum head loss input to HEC-IFH CSA.

Cell: P1
Comment: The values in this column must be linearly interpolated.

Cell: Q1
Comment: The values in this column must be linearly interpolated.

Cell: H17904
Comment: Total flow (in SUM/COUNT line) over the POR of pump station in 1000's of cfs

Cell: G17905
Comment: Average number of hours pumped annually over the POR

Cell: H17905
Comment: Min, avg, and max flows of pump station over the POR in cfs

Cell: J17905
Comment: Hydraulic static head is the negative of mechanical static head

Cell: L17905
Comment: Number of pumps operating

Cell: M17905
Comment: Pump brake hp

Cell: N17905
Comment: Diesel engine load as a percentage

Cell: O17905
Comment: Electric motor load as a percentage

Cell: P17905
Comment: Electric motor efficiency as a function of M_load

Cell: Q17905
Comment: Electric motor power factor as a function of M_load

Cell: R17905
Comment: Power demand in kW of pumping station

Cell: S17905
Comment: Power demand in kVA of
pumping plant (accounts for power factor)

APPENDIX C – ENGINEERING INVESTIGATIONS & ANALYSES
FLOOD CONTROL COMPONENT

SECTION IV – STRUCTURAL, MECHANICAL, ELECTRICAL & CIVIL DESIGN

APPENDIX IV-C-F

Braswell, Hank T MVK
From: Braswell, Hank T MVK
Sent: Wednesday, July 10, 2002 9:22 AM
To: Purvis, Nancy M MVK
Subject: RE: Little Bayou Meto Pump Station

Nancy,

Here are the weights and dimensions you need. They are based on G.E. switchgear, so a good, general figure to use would be 300 psf.

1000-cfs Pumping Station:
1 EA - 38"W x 30"D, 2000# (252 psf)
2 EA - 90"W x 30"D, 5000# (267 psf)

3000-cfs Pumping Station:
1 EA - 36"W x 94"D, 4000# (170 psf)
3 EA - 112"W x 30"D, 5200# (223 psf)

There is plenty of room in the pump house for the switchgear, so no external switchgear building will be required. If you need to, please see the CADD drawings for the location of the switchgear:

Hank, 1-5742
ED-DC, Rm 209

-----Original Message-----
From: **Purvis, Nancy M MVK**
Sent: Thursday, June 27, 2002 1:49 PM
To: Braswell, Hank T MVK
Subject: Little Bayou Meto Pump Station

In order to perform sliding stability analyses for the 1000 and 3000 cfs pump stations I need the weight of all components of the structure. I've gotten an estimate of the concrete from John Burnsworth and the pumps, motors and gears from Robert Hite. Could you give me an estimate of the weight of the electrical components and any building required to house them. A ball park figure would be sufficent at this time.

Thanks,
Nancy

APPENDIX C – ENGINEERING INVESTIGATIONS & ANALYSES FLOOD CONTROL COMPONENT

SECTION IV – STRUCTURAL, MECHANICAL, ELECTRICAL & CIVIL DESIGN

APPENDIX IV-C-G

	A	B	C	D
1	Value	Range Name	Range	Description
2	24	TIME	=$A$2	Duration of calculation period (hr)
3		MO	=$E$2	Month of the calculation period
4		YR	=$F$2	Year of the calculation period
5		DATE	=$G$2	Date of the calculation period
6	0.1	H_LOSS	=$A$6	Estimated constant (stray) head loss (ft.) input to IFH
7	2	N_MAX	=$A$7	Number of pumps for this configuration
8	8.823	K_1	=$A$8	Constant in denominator of Bhp equation
9	147	Pump_Speed	=$A$9	Rated pump speed (rpm); 2% slip assumed
10	48	Poles	=$A$10	Number of poles in motor
11	3300	P_O_ENGINE	=$A$11	Rated engine output (hp)
12	4000	P_O_MOTOR	=$A$12	Rated motor output (hp)
13	4000	Bhp_Min	=$A$13	Minimum Bhp
14	900	Syn_Speed	=$A$14	Rated motor synchronous speed (rpm)
15	1000	Engine_Speed	=$A$15	Rated engine speed (rpm)
16	6.122	Gear_ratio	=$A$29	Gear ratio
17		Q	=$I$2	Flow (cfs)
18		h_sump	=$J$2	Sump water level elevation (ft)
19		h_static	=$K$2	Hydrualic static head (ft) (negative of the mechanical)
20		h_river	=$L$2	River water level elevation (ft)
21		h_total	=$M$2	Total head (ft)
22		N	=$N$2	No. of pumps ON during calculation period
23		Pump_eff	=$P$2	Pump efficiency (%)
24		Bhp	=$Q$2	Brake horsepower/pump (hp)
25		E_Load	=$R$2	Engine load relative to its rated hp (%)
26		M_Load	=$S$2	Motor load relative to its rated hp (%)
27		M_eff	=$T$2	Motor efficiency at M_Load (%)
28		M_pf	=$U$2	Motor power factor at M_Load (%)
29		P_In	=$V$2	Pump station input real power (kW)
30		S_In	=$W$2	Pump station input apparent power (kVA)
31		W_e	=$X$2	Pump station electric energy usage (kWh)
32		Fuel_use	=$Y$2	Pump station diesel fuel usage (gal)
33		PUMP_DATA	=$X$24:$AA$41	Pump eff as a f(Q)
34		PUMP_DATA_1	=$AD$24:$AG$43	Pump eff as a f(H)
35		SYS_LOSS	=$AJ$24:$AM$38	Pump eff as a f(Q) accounting for system loss
36		LOAD_DATA	=$Z$52:$AE$57	Electric motor eff & pf as a f(M_LOAD)
37		PUMP_1_STOP	=$Y$3	Pump 1 OFF at this elev.
38		PUMP_1_START	=$Z$3	Pump 1 ON at this elev.
39		PUMP_2_STOP	=$AA$3	Pump 2 OFF at this elev.
40		PUMP_2_START	=$AB$3	Pump 2 ON at this elev.
41		PUMP_3_STOP	=$AC$3	Pump 3 OFF at this elev.
42		PUMP_3_START	=$AD$3	Pump 3 ON at this elev.
43		PUMP_4_STOP	=$AE$3	Pump 4 OFF at this elev.
44		PUMP_4_START	=$AF$3	Pump 4 ON at this elev.
45		PUMP_5_STOP	=$AG$3	Pump 5 OFF at this elev.
46		PUMP_5_START	=$AH$3	Pump 5 ON at this elev.
47	0.0449	Fuel_Rate	=$A$44	Fuel usage rate in gal/hp-hr
48	3.0%	Gear_Loss_Ehp	=$A$45	Gear hp loss as a percent of Engine BHP
49	1.0%	Gear_Loss_Mhp	=$A$46	Gear hp loss as a percent of Motor BHP
50		LEGEND	=$A$2:$D$47	This table of input data

	A	B	C	D
1	Value	Range Name	Range	Description
2	24	TIME	=$A$2	Duration of calculation period (hr)
3		MO	=$E$2	Month of the calculation period
4		YR	=$F$2	Year of the calculation period
5		DATE	=$G$2	Date of the calculation period
6	0.1	H_LOSS	=$A$6	Estimated constant (stray) head loss (ft.) input to IFH
7	2	N_MAX	=$A$7	Number of pumps for this configuration
8	8.823	K_1	=$A$8	Constant in denominator of Bhp equation
9	221	Pump_Speed	=$A$9	Rated pump speed (rpm); 2% slip assumed
10	32	Poles	=$A$10	Number of poles in motor
11	1750	P_O_ENGINE	=$A$11	Rated engine output (hp)
12	1750	P_O_MOTOR	=$A$12	Rated motor output (hp)
13	1750	Bhp_Min	=$A$13	Minimum Bhp
14	1200	Syn_Speed	=$A$14	Rated motor synchronous speed (rpm)
15	1200	Engine_Speed	=$A$15	Rated engine speed (rpm)
16	5.442	Gear_ratio	=$A$29	Gear ratio
17		Q	=$I$2	Flow (cfs)
18		h_sump	=$J$2	Sump water level elevation (ft)
19		h_static	=$K$2	Hydrualic static head (ft) (negative of the mechanical)
20		h_river	=$L$2	River water level elevation (ft)
21		h_total	=$M$2	Total head (ft)
22		N	=$N$2	No. of pumps ON during calculation period
23		Pump_eff	=$P$2	Pump efficiency (%)
24		Bhp	=$Q$2	Brake horsepower/pump (hp)
25		E_Load	=$R$2	Engine load relative to its rated hp (%)
26		M_Load	=$S$2	Motor load relative to its rated hp (%)
27		M_eff	=$T$2	Motor efficiency at M_Load (%)
28		M_pf	=$U$2	Motor power factor at M_Load (%)
29		P_In	=$V$2	Pump station input real power (kW)
30		S_In	=$W$2	Pump station input apparent power (kVA)
31		W_e	=$X$2	Pump station electric energy usage (kWh)
32		Fuel_use	=$Y$2	Pump station diesel fuel usage (gal)
33		PUMP_DATA	=$X$24:$AA$41	Pump eff as a f(Q)
34		PUMP_DATA_1	=$AD$24:$AG$43	Pump eff as a f(H)
35		SYS_LOSS	=$AJ$24:$AM$38	Pump eff as a f(Q) accounting for system loss
36		LOAD_DATA	=$Z$52:$AE$57	Electric motor eff & pf as a f(M_LOAD)
37		PUMP_1_STOP	=$Y$3	Pump 1 OFF at this elev.
38		PUMP_1_START	=$Z$3	Pump 1 ON at this elev.
39		PUMP_2_STOP	=$AA$3	Pump 2 OFF at this elev.
40		PUMP_2_START	=$AB$3	Pump 2 ON at this elev.
41		PUMP_3_STOP	=$AC$3	Pump 3 OFF at this elev.
42		PUMP_3_START	=$AD$3	Pump 3 ON at this elev.
43		PUMP_4_STOP	=$AE$3	Pump 4 OFF at this elev.
44		PUMP_4_START	=$AF$3	Pump 4 ON at this elev.
45		PUMP_5_STOP	=$AG$3	Pump 5 OFF at this elev.
46		PUMP_5_START	=$AH$3	Pump 5 ON at this elev.
47	120.0	Fuel_Rate	=$A$44	Fuel usage rate in gal/hr
48	3.0%	Gear_Loss_Ehp	=$A$45	Gear hp loss as a percent of Engine BHP
49	1.0%	Gear_Loss_Mhp	=$A$46	Gear hp loss as a percent of Motor BHP
50		LEGEND	=$A$2:$D$47	This table of input data

APPENDIX C – ENGINEERING INVESTIGATIONS & ANALYSES FLOOD CONTROL COMPONENT

SECTION IV – STRUCTURAL, MECHANICAL, ELECTRICAL & CIVIL DESIGN

APPENDIX IV-C-H

Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1										Minimum							
2										Monthly	Billing						
3				Metered			Billing	Ratchet	Customer	Demand	Demand	Incremental Energy		Energy			Monthly
4	Period-of-Record			Energy	Demands		Demand	Demand	Charge	Charge	Charge	Block 1	Block 2	Charge	Subtotal Bill	Total Bill	Load
5	YEAR	MO	DAYS	kWh	kWD	kVAD	kWD	kWD	$16.24	$1.97	$2.95	$0.05607	$0.04493	kWh			Factor
6	1949	1	31	240,320	2,018.0	2,271.2	2,044.1	2,044	$16.24	$4,026.68	$6,029.80	$306,618.00	$0.00	$13,474.77	$19,520.81	$19,520.81	16.0%
7	1949	2	28	1,168,793	2,166.0	2,414.9	2,173.4	2,173	$16.24	$4,280.81	$6,410.35	$326,007.00	$842,786.00	$56,145.59	$62,572.18	$62,572.18	80.3%
8	1949	3	31	415,355	1,871.8	2,133.6	1,920.2	2,173	$16.24	$4,280.81	$5,664.00	$288,031.00	$127,324.00	$21,870.57	$27,550.81	$27,550.81	29.8%
9	1949	4	30	320,674	1,670.2	1,937.2	1,743.5	2,173	$16.24	$4,280.81	$5,141.85	$261,522.00	$59,152.00	$17,321.24	$22,479.33	$22,479.33	26.7%
10	1949	5	31	450,219	2,242.2	2,491.6	2,242.5	2,242	$16.24	$4,416.74	$6,613.90	$336,372.00	$113,847.00	$23,975.52	$30,605.66	$30,605.66	27.0%
11	1949	6	30	698,928	2,015.9	2,269.3	2,042.4	2,242	$16.24	$4,416.74	$6,023.90	$306,354.00	$392,574.00	$34,815.62	$40,855.76	$40,855.76	48.2%
12	1949	7	31	0	0.0	0.0	0.0	2,242	$16.24	$4,416.74	$0.00	$0.00	$0.00	$0.00	$16.24	$4,416.74	0.0%
13	1949	8	31	0	0.0	0.0	0.0	2,242	$16.24	$4,416.74	$0.00	$0.00	$0.00	$0.00	$16.24	$4,416.74	0.0%
14	1949	9	30	0	0.0	0.0	0.0	2,242	$16.24	$4,416.74	$0.00	$0.00	$0.00	$0.00	$16.24	$4,416.74	0.0%
15	1949	10	31	0	0.0	0.0	0.0	2,242	$16.24	$4,416.74	$0.00	$0.00	$0.00	$0.00	$16.24	$4,416.74	0.0%
16	1949	11	30	0	0.0	0.0	0.0	2,242	$16.24	$4,416.74	$0.00	$0.00	$0.00	$0.00	$16.24	$4,416.74	0.0%
17	1949	12	31	0	0.0	0.0	0.0	2,242	$16.24	$4,416.74	$0.00	$0.00	$0.00	$0.00	$16.24	$4,416.74	0.0%
18	1950	1	31	524,167	1,738.6	2,004.7	1,804.2	2,242	$16.24	$4,416.74	$5,321.80	$270,635.00	$253,532.00	$26,565.70	$31,903.74	$31,903.74	40.5%
19	1950	2	28	983,126	1,863.7	2,125.8	1,913.2	2,242	$16.24	$4,416.74	$5,643.35	$286,981.00	$696,145.00	$47,368.82	$53,028.41	$53,028.41	78.5%
20	1950	3	31	260,547	835.1	968.6	871.7	2,242	$16.24	$4,416.74	$2,572.40	$130,761.00	$129,786.00	$13,163.05	$15,751.69	$15,751.69	41.9%
21	1950	4	30	280,590	835.1	968.6	871.7	2,242	$16.24	$4,416.74	$2,572.40	$130,761.00	$149,829.00	$14,063.59	$16,652.23	$16,652.23	46.7%
22	1950	5	31	543,738	2,184.8	2,433.9	2,190.5	2,190	$16.24	$4,314.30	$6,460.50	$328,572.00	$215,166.00	$28,090.44	$34,567.18	$34,567.18	33.5%
23	1950	6	30	0	0.0	0.0	0.0	2,190	$16.24	$4,314.30	$0.00	$0.00	$0.00	$0.00	$16.24	$4,314.30	0.0%
24	1950	7	31	97,135	2,053.4	2,304.0	2,073.6	2,190	$16.24	$4,314.30	$6,118.30	$311,042.00	$0.00	$5,446.34	$11,580.88	$11,580.88	6.4%
25	1950	8	31	603,784	2,221.8	2,471.1	2,224.0	2,224	$16.24	$4,381.28	$6,560.80	$333,602.00	$270,182.00	$30,844.34	$37,421.38	$37,421.38	36.5%
26	1950	9	30	300,258	1,934.1	2,192.7	1,973.4	2,224	$16.24	$4,381.28	$5,820.35	$296,012.00	$4,246.00	$16,788.17	$22,624.76	$22,624.76	21.6%
27	1950	10	31	0	0.0	0.0	0.0	2,224	$16.24	$4,381.28	$0.00	$0.00	$0.00	$0.00	$16.24	$4,381.28	0.0%
28	1950	11	30	0	0.0	0.0	0.0	2,224	$16.24	$4,381.28	$0.00	$0.00	$0.00	$0.00	$16.24	$4,381.28	0.0%
29	1950	12	31	0	0.0	0.0	0.0	2,224	$16.24	$4,381.28	$0.00	$0.00	$0.00	$0.00	$16.24	$4,381.28	0.0%
30	1951	1	31	541,137	1,670.2	1,937.2	1,743.5	2,224	$16.24	$4,381.28	$5,141.85	$261,522.00	$279,615.00	$27,226.64	$32,384.73	$32,384.73	43.5%
31	1951	2	28	259,309	1,881.2	2,142.5	1,928.3	2,224	$16.24	$4,381.28	$5,687.60	$289,242.00	$0.00	$14,539.46	$20,243.30	$20,243.30	20.5%
32	1951	3	31	80,168	1,670.2	1,937.2	1,743.5	2,224	$16.24	$4,381.28	$5,141.85	$261,522.00	$0.00	$4,495.04	$9,653.13	$9,653.13	6.5%
33	1951	4	30	0	0.0	0.0	0.0	2,224	$16.24	$4,381.28	$0.00	$0.00	$0.00	$0.00	$16.24	$4,381.28	0.0%
34	1951	5	31	85,586	1,805.1	2,069.4	1,862.5	2,224	$16.24	$4,381.28	$5,492.90	$279,374.00	$0.00	$4,798.82	$10,307.96	$10,307.96	6.4%
35	1951	6	30	286,922	1,775.0	2,040.2	1,836.2	2,224	$16.24	$4,381.28	$5,416.20	$275,426.00	$11,496.00	$15,959.65	$21,392.09	$21,392.09	22.5%
36	1951	7	31	1,095,877	2,277.9	2,527.5	2,274.8	2,275	$16.24	$4,481.75	$6,711.25	$341,217.00	$754,660.00	$53,038.91	$59,766.40	$59,766.40	64.7%
37	1951	8	31	45,519	1,896.6	2,157.2	1,941.5	2,275	$16.24	$4,481.75	$5,725.95	$291,218.00	$0.00	$2,552.23	$8,294.42	$8,294.42	3.2%
38	1951	9	30	40,528	1,688.7	1,955.5	1,760.0	2,275	$16.24	$4,481.75	$5,192.00	$263,997.00	$0.00	$2,272.43	$7,480.67	$7,480.67	3.3%
39	1951	10	31	0	0.0	0.0	0.0	2,275	$16.24	$4,481.75	$0.00	$0.00	$0.00	$0.00	$16.24	$4,481.75	0.0%
40	1951	11	30	0	0.0	0.0	0.0	2,275	$16.24	$4,481.75	$0.00	$0.00	$0.00	$0.00	$16.24	$4,481.75	0.0%
41	1951	12	31	0	0.0	0.0	0.0	2,275	$16.24	$4,481.75	$0.00	$0.00	$0.00	$0.00	$16.24	$4,481.75	0.0%
42	1952	1	31	0	0.0	0.0	0.0	2,275	$16.24	$4,481.75	$0.00	$0.00	$0.00	$0.00	$16.24	$4,481.75	0.0%
43	1952	2	29	0	0.0	0.0	0.0	2,275	$16.24	$4,481.75	$0.00	$0.00	$0.00	$0.00	$16.24	$4,481.75	0.0%
44	1952	3	31	566,467	1,782.9	2,047.8	1,843.1	2,275	$16.24	$4,481.75	$5,436.85	$276,459.00	$290,008.00	$28,531.12	$33,984.21	$33,984.21	42.7%
45	1952	4	30	608,339	2,022.2	2,275.1	2,047.6	2,275	$16.24	$4,481.75	$6,041.60	$307,143.00	$301,196.00	$30,754.24	$36,812.08	$36,812.08	41.8%
46	1952	5	31	85,845	925.0	1,056.3	950.7	2,275	$16.24	$4,481.75	$2,805.45	$142,602.00	$0.00	$4,813.31	$7,635.00	$7,635.00	12.5%
47	1952	6	30	0	0.0	0.0	0.0	2,275	$16.24	$4,481.75	$0.00	$0.00	$0.00	$0.00	$16.24	$4,481.75	0.0%
48	1952	7	31	0	0.0	0.0	0.0	2,048	$16.24	$4,034.56	$0.00	$0.00	$0.00	$0.00	$16.24	$4,034.56	0.0%
49	1952	8	31	0	0.0	0.0	0.0	2,048	$16.24	$4,034.56	$0.00	$0.00	$0.00	$0.00	$16.24	$4,034.56	0.0%
50	1952	9	30	0	0.0	0.0	0.0	2,048	$16.24	$4,034.56	$0.00	$0.00	$0.00	$0.00	$16.24	$4,034.56	0.0%
51	1952	10	31	0	0.0	0.0	0.0	2,048	$16.24	$4,034.56	$0.00	$0.00	$0.00	$0.00	$16.24	$4,034.56	0.0%
52	1952	11	30	0	0.0	0.0	0.0	2,048	$16.24	$4,034.56	$0.00	$0.00	$0.00	$0.00	$16.24	$4,034.56	0.0%
53	1952	12	31	0	0.0	0.0	0.0	2,048	$16.24	$4,034.56	$0.00	$0.00	$0.00	$0.00	$16.24	$4,034.56	0.0%
54	1953	1	31	0	0.0	0.0	0.0	2,048	$16.24	$4,034.56	$0.00	$0.00	$0.00	$0.00	$16.24	$4,034.56	0.0%
55	1953	2	28	0	0.0	0.0	0.0	2,048	$16.24	$4,034.56	$0.00	$0.00	$0.00	$0.00	$16.24	$4,034.56	0.0%
56	1953	3	31	486,431	1,821.7	2,085.4	1,876.9	2,048	$16.24	$4,034.56	$5,537.15	$281,534.00	$204,897.00	$24,991.63	$30,545.02	$30,545.02	35.9%
57	1953	4	30	323,014	1,762.7	2,028.3	1,825.4	1,877	$16.24	$3,697.69	$5,383.75	$273,814.00	$49,200.00	$17,563.31	$22,963.30	$22,963.30	25.5%
58	1953	5	31	1,243,889	1,705.4	1,972.0	1,774.8	1,877	$16.24	$3,697.69	$5,236.25	$266,220.00	$977,669.00	$58,853.62	$64,106.11	$64,106.11	98.0%
59	1953	6	30	80,168	1,670.2	1,937.2	1,743.5	1,877	$16.24	$3,697.69	$5,141.85	$261,522.00	$0.00	$4,495.04	$9,653.13	$9,653.13	6.7%
60	1953	7	31	0	0.0	0.0	0.0	1,877	$16.24	$3,697.69	$0.00	$0.00	$0.00	$0.00	$16.24	$3,697.69	0.0%
61	1953	8	31	0	0.0	0.0	0.0	1,877	$16.24	$3,697.69	$0.00	$0.00	$0.00	$0.00	$16.24	$3,697.69	0.0%

Tab "Metering & Billing - 1000 cfs" of
File "Bayou Meto Study - 1000-cfs Pumping Station.XLS"

Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1										Minimum							
2										Monthly	Billing						
3				Metered			Billing	Ratchet	Customer	Demand	Demand	Incremental Energy		Energy			Monthly
4	Period-of-Record			Energy	Demands		Demand	Demand	Charge	Charge	Charge	Block 1	Block 2	Charge	Subtotal Bill	Total Bill	Load
5	YEAR	MO	DAYS	kWh	kWD	kVAD	kWD	kWD	$16.24	$1.97	$2.95	$0.05607	$0.04493	kWh			Factor
62	1953	9	30	0	0.0	0.0	0.0	1,877	$16.24	$3,697.69	$0.00	$0.00	$0.00	$0.00	$16.24	$3,697.69	0.0%
63	1953	10	31	0	0.0	0.0	0.0	1,877	$16.24	$3,697.69	$0.00	$0.00	$0.00	$0.00	$16.24	$3,697.69	0.0%
64	1953	11	30	0	0.0	0.0	0.0	1,877	$16.24	$3,697.69	$0.00	$0.00	$0.00	$0.00	$16.24	$3,697.69	0.0%
65	1953	12	31	0	0.0	0.0	0.0	1,877	$16.24	$3,697.69	$0.00	$0.00	$0.00	$0.00	$16.24	$3,697.69	0.0%
66	1954	1	31	521,095	1,670.2	1,937.2	1,743.5	1,877	$16.24	$3,697.69	$5,141.85	$261,522.00	$259,573.00	$26,326.15	$31,484.24	$31,484.24	41.9%
67	1954	2	28	120,253	1,670.2	1,937.2	1,743.5	1,877	$16.24	$3,697.69	$5,141.85	$261,522.00	$0.00	$6,742.57	$11,900.66	$11,900.66	10.7%
68	1954	3	31	0	0.0	0.0	0.0	1,825	$16.24	$3,595.25	$0.00	$0.00	$0.00	$0.00	$16.24	$3,595.25	0.0%
69	1954	4	30	0	0.0	0.0	0.0	1,775	$16.24	$3,496.75	$0.00	$0.00	$0.00	$0.00	$16.24	$3,496.75	0.0%
70	1954	5	31	293,634	1,877.8	2,139.3	1,925.3	1,925	$16.24	$3,792.25	$5,678.75	$288,802.00	$4,832.00	$16,410.23	$22,105.22	$22,105.22	21.0%
71	1954	6	30	0	0.0	0.0	0.0	1,925	$16.24	$3,792.25	$0.00	$0.00	$0.00	$0.00	$16.24	$3,792.25	0.0%
72	1954	7	31	0	0.0	0.0	0.0	1,925	$16.24	$3,792.25	$0.00	$0.00	$0.00	$0.00	$16.24	$3,792.25	0.0%
73	1954	8	31	0	0.0	0.0	0.0	1,925	$16.24	$3,792.25	$0.00	$0.00	$0.00	$0.00	$16.24	$3,792.25	0.0%
74	1954	9	30	0	0.0	0.0	0.0	1,925	$16.24	$3,792.25	$0.00	$0.00	$0.00	$0.00	$16.24	$3,792.25	0.0%
75	1954	10	31	0	0.0	0.0	0.0	1,925	$16.24	$3,792.25	$0.00	$0.00	$0.00	$0.00	$16.24	$3,792.25	0.0%
76	1954	11	30	0	0.0	0.0	0.0	1,925	$16.24	$3,792.25	$0.00	$0.00	$0.00	$0.00	$16.24	$3,792.25	0.0%
77	1954	12	31	0	0.0	0.0	0.0	1,925	$16.24	$3,792.25	$0.00	$0.00	$0.00	$0.00	$16.24	$3,792.25	0.0%
78	1955	1	31	0	0.0	0.0	0.0	1,925	$16.24	$3,792.25	$0.00	$0.00	$0.00	$0.00	$16.24	$3,792.25	0.0%
79	1955	2	28	0	0.0	0.0	0.0	1,925	$16.24	$3,792.25	$0.00	$0.00	$0.00	$0.00	$16.24	$3,792.25	0.0%
80	1955	3	31	360,758	1,670.2	1,937.2	1,743.5	1,925	$16.24	$3,792.25	$5,141.85	$261,522.00	$99,236.00	$19,122.21	$24,280.30	$24,280.30	29.0%
81	1955	4	30	200,421	1,670.2	1,937.2	1,743.5	1,925	$16.24	$3,792.25	$5,141.85	$261,522.00	$0.00	$11,237.61	$16,395.70	$16,395.70	16.7%
82	1955	5	31	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
83	1955	6	30	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
84	1955	7	31	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
85	1955	8	31	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
86	1955	9	30	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
87	1955	10	31	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
88	1955	11	30	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
89	1955	12	31	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
90	1956	1	31	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
91	1956	2	29	440,926	835.1	968.6	871.7	1,743	$16.24	$3,433.71	$2,572.40	$130,761.00	$310,165.00	$21,267.48	$23,856.12	$23,856.12	75.9%
92	1956	3	31	140,295	835.1	968.6	871.7	1,743	$16.24	$3,433.71	$2,572.40	$130,761.00	$9,534.00	$7,760.13	$10,348.77	$10,348.77	22.6%
93	1956	4	30	0	0.0	0.0	0.0	872	$16.24	$1,717.84	$0.00	$0.00	$0.00	$0.00	$16.24	$1,717.84	0.0%
94	1956	5	31	0	0.0	0.0	0.0	872	$16.24	$1,717.84	$0.00	$0.00	$0.00	$0.00	$16.24	$1,717.84	0.0%
95	1956	6	30	0	0.0	0.0	0.0	872	$16.24	$1,717.84	$0.00	$0.00	$0.00	$0.00	$16.24	$1,717.84	0.0%
96	1956	7	31	0	0.0	0.0	0.0	872	$16.24	$1,717.84	$0.00	$0.00	$0.00	$0.00	$16.24	$1,717.84	0.0%
97	1956	8	31	0	0.0	0.0	0.0	872	$16.24	$1,717.84	$0.00	$0.00	$0.00	$0.00	$16.24	$1,717.84	0.0%
98	1956	9	30	0	0.0	0.0	0.0	872	$16.24	$1,717.84	$0.00	$0.00	$0.00	$0.00	$16.24	$1,717.84	0.0%
99	1956	10	31	0	0.0	0.0	0.0	872	$16.24	$1,717.84	$0.00	$0.00	$0.00	$0.00	$16.24	$1,717.84	0.0%
100	1956	11	30	0	0.0	0.0	0.0	872	$16.24	$1,717.84	$0.00	$0.00	$0.00	$0.00	$16.24	$1,717.84	0.0%
101	1956	12	31	0	0.0	0.0	0.0	872	$16.24	$1,717.84	$0.00	$0.00	$0.00	$0.00	$16.24	$1,717.84	0.0%
102	1957	1	31	0	0.0	0.0	0.0	872	$16.24	$1,717.84	$0.00	$0.00	$0.00	$0.00	$16.24	$1,717.84	0.0%
103	1957	2	28	1,062,232	1,670.2	1,937.2	1,743.5	1,743	$16.24	$3,433.71	$5,141.85	$261,522.00	$800,710.00	$50,639.44	$55,797.53	$55,797.53	94.6%
104	1957	3	31	481,011	1,670.2	1,937.2	1,743.5	1,743	$16.24	$3,433.71	$5,141.85	$261,522.00	$219,489.00	$24,525.18	$29,683.27	$29,683.27	38.7%
105	1957	4	30	889,466	2,039.4	2,291.0	2,061.9	2,062	$16.24	$4,062.14	$6,082.90	$309,292.00	$580,174.00	$43,409.22	$49,508.36	$49,508.36	60.6%
106	1957	5	31	1,413,608	2,252.9	2,502.4	2,252.2	2,252	$16.24	$4,436.44	$6,643.40	$337,828.00	$1,075,780.00	$67,276.81	$73,936.45	$73,936.45	84.3%
107	1957	6	30	1,500,326	2,291.1	2,540.7	2,286.7	2,287	$16.24	$4,505.39	$6,746.65	$342,998.00	$1,157,328.00	$71,230.64	$77,993.53	$77,993.53	91.0%
108	1957	7	31	798,138	1,876.1	2,137.6	1,923.9	2,287	$16.24	$4,505.39	$5,675.80	$288,582.00	$509,556.00	$39,075.14	$44,767.18	$44,767.18	57.2%
109	1957	8	31	0	0.0	0.0	0.0	2,287	$16.24	$4,505.39	$0.00	$0.00	$0.00	$0.00	$16.24	$4,505.39	0.0%
110	1957	9	30	0	0.0	0.0	0.0	2,287	$16.24	$4,505.39	$0.00	$0.00	$0.00	$0.00	$16.24	$4,505.39	0.0%
111	1957	10	31	0	0.0	0.0	0.0	2,287	$16.24	$4,505.39	$0.00	$0.00	$0.00	$0.00	$16.24	$4,505.39	0.0%
112	1957	11	30	0	0.0	0.0	0.0	2,287	$16.24	$4,505.39	$0.00	$0.00	$0.00	$0.00	$16.24	$4,505.39	0.0%
113	1957	12	31	0	0.0	0.0	0.0	2,287	$16.24	$4,505.39	$0.00	$0.00	$0.00	$0.00	$16.24	$4,505.39	0.0%
114	1958	1	31	0	0.0	0.0	0.0	2,287	$16.24	$4,505.39	$0.00	$0.00	$0.00	$0.00	$16.24	$4,505.39	0.0%
115	1958	2	28	0	0.0	0.0	0.0	2,287	$16.24	$4,505.39	$0.00	$0.00	$0.00	$0.00	$16.24	$4,505.39	0.0%
116	1958	3	31	120,491	1,677.9	1,944.8	1,750.3	2,287	$16.24	$4,505.39	$5,162.50	$262,550.00	$0.00	$6,755.94	$11,934.68	$11,934.68	9.7%
117	1958	4	30	403,495	1,778.9	2,044.0	1,839.6	2,287	$16.24	$4,505.39	$5,428.00	$275,943.00	$127,552.00	$21,203.04	$26,647.28	$26,647.28	31.5%

Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1										Minimum							
2										Monthly	Billing						
3				Metered			Billing	Ratchet	Customer	Demand	Demand	Incremental Energy		Energy			Monthly
4	Period-of-Record			Energy	Demands		Demand	Demand	Charge	Charge	Charge	Block 1	Block 2	Charge	Subtotal Bill	Total Bill	Load
5	YEAR	MO	DAYS	kWh	kWD	kVAD	kWD	kWD	$16.24	$1.97	$2.95	$0.05607	$0.04493	kWh			Factor
118	1958	5	31	1,088,925	1,752.1	2,017.9	1,816.1	2,287	$16.24	$4,505.39	$5,357.20	$272,412.00	$816,513.00	$51,960.07	$57,333.51	$57,333.51	83.5%
119	1958	6	30	41,404	1,725.2	1,991.5	1,792.3	1,924	$16.24	$3,790.28	$5,286.40	$268,850.00	$0.00	$2,321.50	$7,624.14	$7,624.14	3.3%
120	1958	7	31	443,063	1,759.2	2,024.8	1,822.4	1,840	$16.24	$3,624.80	$5,374.90	$273,353.00	$169,710.00	$22,951.97	$28,343.11	$28,343.11	33.9%
121	1958	8	31	0	0.0	0.0	0.0	1,840	$16.24	$3,624.80	$0.00	$0.00	$0.00	$0.00	$16.24	$3,624.80	0.0%
122	1958	9	30	0	0.0	0.0	0.0	1,840	$16.24	$3,624.80	$0.00	$0.00	$0.00	$0.00	$16.24	$3,624.80	0.0%
123	1958	10	31	0	0.0	0.0	0.0	1,840	$16.24	$3,624.80	$0.00	$0.00	$0.00	$0.00	$16.24	$3,624.80	0.0%
124	1958	11	30	0	0.0	0.0	0.0	1,840	$16.24	$3,624.80	$0.00	$0.00	$0.00	$0.00	$16.24	$3,624.80	0.0%
125	1958	12	31	0	0.0	0.0	0.0	1,840	$16.24	$3,624.80	$0.00	$0.00	$0.00	$0.00	$16.24	$3,624.80	0.0%
126	1959	1	31	0	0.0	0.0	0.0	1,840	$16.24	$3,624.80	$0.00	$0.00	$0.00	$0.00	$16.24	$3,624.80	0.0%
127	1959	2	28	0	0.0	0.0	0.0	1,840	$16.24	$3,624.80	$0.00	$0.00	$0.00	$0.00	$16.24	$3,624.80	0.0%
128	1959	3	31	0	0.0	0.0	0.0	1,840	$16.24	$3,624.80	$0.00	$0.00	$0.00	$0.00	$16.24	$3,624.80	0.0%
129	1959	4	30	0	0.0	0.0	0.0	1,822	$16.24	$3,589.34	$0.00	$0.00	$0.00	$0.00	$16.24	$3,589.34	0.0%
130	1959	5	31	0	0.0	0.0	0.0	1,822	$16.24	$3,589.34	$0.00	$0.00	$0.00	$0.00	$16.24	$3,589.34	0.0%
131	1959	6	30	0	0.0	0.0	0.0	1,822	$16.24	$3,589.34	$0.00	$0.00	$0.00	$0.00	$16.24	$3,589.34	0.0%
132	1959	7	31	100,249	1,670.2	1,937.2	1,743.5	1,743	$16.24	$3,433.71	$5,141.85	$261,522.00	$0.00	$5,620.93	$10,779.02	$10,779.02	8.1%
133	1959	8	31	167,731	1,766.7	2,032.1	1,828.9	1,829	$16.24	$3,603.13	$5,395.55	$274,333.00	$0.00	$9,404.70	$14,816.49	$14,816.49	12.8%
134	1959	9	30	0	0.0	0.0	0.0	1,829	$16.24	$3,603.13	$0.00	$0.00	$0.00	$0.00	$16.24	$3,603.13	0.0%
135	1959	10	31	373,818	2,331.3	2,580.9	2,322.8	2,323	$16.24	$4,576.31	$6,852.85	$348,416.00	$25,402.00	$20,677.00	$27,546.09	$27,546.09	21.6%
136	1959	11	30	0	0.0	0.0	0.0	2,323	$16.24	$4,576.31	$0.00	$0.00	$0.00	$0.00	$16.24	$4,576.31	0.0%
137	1959	12	31	0	0.0	0.0	0.0	2,323	$16.24	$4,576.31	$0.00	$0.00	$0.00	$0.00	$16.24	$4,576.31	0.0%
138	1960	1	31	0	0.0	0.0	0.0	2,323	$16.24	$4,576.31	$0.00	$0.00	$0.00	$0.00	$16.24	$4,576.31	0.0%
139	1960	2	29	0	0.0	0.0	0.0	2,323	$16.24	$4,576.31	$0.00	$0.00	$0.00	$0.00	$16.24	$4,576.31	0.0%
140	1960	3	31	0	0.0	0.0	0.0	2,323	$16.24	$4,576.31	$0.00	$0.00	$0.00	$0.00	$16.24	$4,576.31	0.0%
141	1960	4	30	0	0.0	0.0	0.0	2,323	$16.24	$4,576.31	$0.00	$0.00	$0.00	$0.00	$16.24	$4,576.31	0.0%
142	1960	5	31	720,874	2,042.1	2,293.6	2,064.2	2,323	$16.24	$4,576.31	$6,088.80	$309,634.00	$411,240.00	$35,838.19	$41,943.23	$41,943.23	47.4%
143	1960	6	30	220,463	1,670.2	1,937.2	1,743.5	2,323	$16.24	$4,576.31	$5,141.85	$261,522.00	$0.00	$12,361.37	$17,519.46	$17,519.46	18.3%
144	1960	7	31	481,011	1,670.2	1,937.2	1,743.5	2,323	$16.24	$4,576.31	$5,141.85	$261,522.00	$219,489.00	$24,525.18	$29,683.27	$29,683.27	38.7%
145	1960	8	31	0	0.0	0.0	0.0	2,323	$16.24	$4,576.31	$0.00	$0.00	$0.00	$0.00	$16.24	$4,576.31	0.0%
146	1960	9	30	0	0.0	0.0	0.0	2,323	$16.24	$4,576.31	$0.00	$0.00	$0.00	$0.00	$16.24	$4,576.31	0.0%
147	1960	10	31	0	0.0	0.0	0.0	2,064	$16.24	$4,066.08	$0.00	$0.00	$0.00	$0.00	$16.24	$4,066.08	0.0%
148	1960	11	30	0	0.0	0.0	0.0	2,064	$16.24	$4,066.08	$0.00	$0.00	$0.00	$0.00	$16.24	$4,066.08	0.0%
149	1960	12	31	0	0.0	0.0	0.0	2,064	$16.24	$4,066.08	$0.00	$0.00	$0.00	$0.00	$16.24	$4,066.08	0.0%
150	1961	1	31	0	0.0	0.0	0.0	2,064	$16.24	$4,066.08	$0.00	$0.00	$0.00	$0.00	$16.24	$4,066.08	0.0%
151	1961	2	28	0	0.0	0.0	0.0	2,064	$16.24	$4,066.08	$0.00	$0.00	$0.00	$0.00	$16.24	$4,066.08	0.0%
152	1961	3	31	0	0.0	0.0	0.0	2,064	$16.24	$4,066.08	$0.00	$0.00	$0.00	$0.00	$16.24	$4,066.08	0.0%
153	1961	4	30	886,821	1,762.7	2,028.3	1,825.4	2,064	$16.24	$4,066.08	$5,383.75	$273,814.00	$613,007.00	$42,895.16	$48,295.15	$48,295.15	69.9%
154	1961	5	31	1,052,124	1,901.7	2,162.0	1,945.8	1,946	$16.24	$3,833.62	$5,740.70	$291,875.00	$760,249.00	$50,523.42	$56,280.36	$56,280.36	74.4%
155	1961	6	30	321,443	1,691.8	1,958.7	1,762.8	1,946	$16.24	$3,833.62	$5,200.85	$264,419.00	$57,024.00	$17,388.06	$22,605.15	$22,605.15	26.4%
156	1961	7	31	80,775	1,693.2	1,960.0	1,764.0	1,946	$16.24	$3,833.62	$5,203.80	$264,599.00	$0.00	$4,529.06	$9,749.10	$9,749.10	6.4%
157	1961	8	31	0	0.0	0.0	0.0	1,946	$16.24	$3,833.62	$0.00	$0.00	$0.00	$0.00	$16.24	$3,833.62	0.0%
158	1961	9	30	0	0.0	0.0	0.0	1,946	$16.24	$3,833.62	$0.00	$0.00	$0.00	$0.00	$16.24	$3,833.62	0.0%
159	1961	10	31	0	0.0	0.0	0.0	1,946	$16.24	$3,833.62	$0.00	$0.00	$0.00	$0.00	$16.24	$3,833.62	0.0%
160	1961	11	30	0	0.0	0.0	0.0	1,946	$16.24	$3,833.62	$0.00	$0.00	$0.00	$0.00	$16.24	$3,833.62	0.0%
161	1961	12	31	601,263	1,670.2	1,937.2	1,743.5	1,946	$16.24	$3,833.62	$5,141.85	$261,522.00	$339,741.00	$29,928.10	$35,086.19	$35,086.19	48.4%
162	1962	1	31	521,095	1,670.2	1,937.2	1,743.5	1,946	$16.24	$3,833.62	$5,141.85	$261,522.00	$259,573.00	$26,326.15	$31,484.24	$31,484.24	41.9%
163	1962	2	28	0	0.0	0.0	0.0	1,946	$16.24	$3,833.62	$0.00	$0.00	$0.00	$0.00	$16.24	$3,833.62	0.0%
164	1962	3	31	360,758	835.1	968.6	871.7	1,946	$16.24	$3,833.62	$2,572.40	$130,761.00	$229,997.00	$17,665.53	$20,254.17	$20,254.17	58.1%
165	1962	4	30	0	0.0	0.0	0.0	1,946	$16.24	$3,833.62	$0.00	$0.00	$0.00	$0.00	$16.24	$3,833.62	0.0%
166	1962	5	31	0	0.0	0.0	0.0	1,764	$16.24	$3,475.08	$0.00	$0.00	$0.00	$0.00	$16.24	$3,475.08	0.0%
167	1962	6	30	0	0.0	0.0	0.0	1,764	$16.24	$3,475.08	$0.00	$0.00	$0.00	$0.00	$16.24	$3,475.08	0.0%
168	1962	7	31	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
169	1962	8	31	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
170	1962	9	30	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
171	1962	10	31	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
172	1962	11	30	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
173	1962	12	31	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%

Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1										Minimum							
2										Monthly	Billing						
3				Metered			Billing	Ratchet	Customer	Demand	Demand	Incremental Energy		Energy			Monthly
4	Period-of-Record			Energy	Demands		Demand	Demand	Charge	Charge	Charge	Block 1	Block 2	Charge	Subtotal Bill	Total Bill	Load
5	YEAR	MO	DAYS	kWh	kWD	kVAD	kWD	kWD	$16.24	$1.97	$2.95	$0.05607	$0.04493	kWh			Factor
174	1963	1	31	0	0.0	0.0	0.0	872	$16.24	$1,717.84	$0.00	$0.00	$0.00	$0.00	$16.24	$1,717.84	0.0%
175	1963	2	28	0	0.0	0.0	0.0	872	$16.24	$1,717.84	$0.00	$0.00	$0.00	$0.00	$16.24	$1,717.84	0.0%
176	1963	3	31	0	0.0	0.0	0.0	0	$16.24	$0.00	$0.00	$0.00	$0.00	$0.00	$16.24	$16.24	0.0%
177	1963	4	30	0	0.0	0.0	0.0	0	$16.24	$0.00	$0.00	$0.00	$0.00	$0.00	$16.24	$16.24	0.0%
178	1963	5	31	320,674	835.1	968.6	871.7	872	$16.24	$1,717.84	$2,572.40	$130,761.00	$189,913.00	$15,864.56	$18,453.20	$18,453.20	51.6%
179	1963	6	30	0	0.0	0.0	0.0	872	$16.24	$1,717.84	$0.00	$0.00	$0.00	$0.00	$16.24	$1,717.84	0.0%
180	1963	7	31	0	0.0	0.0	0.0	872	$16.24	$1,717.84	$0.00	$0.00	$0.00	$0.00	$16.24	$1,717.84	0.0%
181	1963	8	31	0	0.0	0.0	0.0	872	$16.24	$1,717.84	$0.00	$0.00	$0.00	$0.00	$16.24	$1,717.84	0.0%
182	1963	9	30	0	0.0	0.0	0.0	872	$16.24	$1,717.84	$0.00	$0.00	$0.00	$0.00	$16.24	$1,717.84	0.0%
183	1963	10	31	0	0.0	0.0	0.0	872	$16.24	$1,717.84	$0.00	$0.00	$0.00	$0.00	$16.24	$1,717.84	0.0%
184	1963	11	30	0	0.0	0.0	0.0	872	$16.24	$1,717.84	$0.00	$0.00	$0.00	$0.00	$16.24	$1,717.84	0.0%
185	1963	12	31	0	0.0	0.0	0.0	872	$16.24	$1,717.84	$0.00	$0.00	$0.00	$0.00	$16.24	$1,717.84	0.0%
186	1964	1	31	0	0.0	0.0	0.0	872	$16.24	$1,717.84	$0.00	$0.00	$0.00	$0.00	$16.24	$1,717.84	0.0%
187	1964	2	29	0	0.0	0.0	0.0	872	$16.24	$1,717.84	$0.00	$0.00	$0.00	$0.00	$16.24	$1,717.84	0.0%
188	1964	3	31	400,842	835.1	968.6	871.7	872	$16.24	$1,717.84	$2,572.40	$130,761.00	$270,081.00	$19,466.51	$22,055.15	$22,055.15	64.5%
189	1964	4	30	921,937	1,670.2	1,937.2	1,743.5	1,743	$16.24	$3,433.71	$5,141.85	$261,522.00	$660,415.00	$44,335.98	$49,494.07	$49,494.07	76.7%
190	1964	5	31	440,926	1,670.2	1,937.2	1,743.5	1,743	$16.24	$3,433.71	$5,141.85	$261,522.00	$179,404.00	$22,724.16	$27,882.25	$27,882.25	35.5%
191	1964	6	30	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
192	1964	7	31	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
193	1964	8	31	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
194	1964	9	30	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
195	1964	10	31	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
196	1964	11	30	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
197	1964	12	31	400,842	835.1	968.6	871.7	1,743	$16.24	$3,433.71	$2,572.40	$130,761.00	$270,081.00	$19,466.51	$22,055.15	$22,055.15	64.5%
198	1965	1	31	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
199	1965	2	28	601,263	1,670.2	1,937.2	1,743.5	1,743	$16.24	$3,433.71	$5,141.85	$261,522.00	$339,741.00	$29,928.10	$35,086.19	$35,086.19	53.6%
200	1965	3	31	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
201	1965	4	30	219,249	2,057.9	2,308.1	2,077.3	2,077	$16.24	$4,091.69	$6,127.15	$311,595.00	$0.00	$12,293.32	$18,436.71	$18,436.71	14.8%
202	1965	5	31	0	0.0	0.0	0.0	2,077	$16.24	$4,091.69	$0.00	$0.00	$0.00	$0.00	$16.24	$4,091.69	0.0%
203	1965	6	30	0	0.0	0.0	0.0	2,077	$16.24	$4,091.69	$0.00	$0.00	$0.00	$0.00	$16.24	$4,091.69	0.0%
204	1965	7	31	0	0.0	0.0	0.0	2,077	$16.24	$4,091.69	$0.00	$0.00	$0.00	$0.00	$16.24	$4,091.69	0.0%
205	1965	8	31	0	0.0	0.0	0.0	2,077	$16.24	$4,091.69	$0.00	$0.00	$0.00	$0.00	$16.24	$4,091.69	0.0%
206	1965	9	30	0	0.0	0.0	0.0	2,077	$16.24	$4,091.69	$0.00	$0.00	$0.00	$0.00	$16.24	$4,091.69	0.0%
207	1965	10	31	0	0.0	0.0	0.0	2,077	$16.24	$4,091.69	$0.00	$0.00	$0.00	$0.00	$16.24	$4,091.69	0.0%
208	1965	11	30	0	0.0	0.0	0.0	2,077	$16.24	$4,091.69	$0.00	$0.00	$0.00	$0.00	$16.24	$4,091.69	0.0%
209	1965	12	31	0	0.0	0.0	0.0	2,077	$16.24	$4,091.69	$0.00	$0.00	$0.00	$0.00	$16.24	$4,091.69	0.0%
210	1966	1	31	0	0.0	0.0	0.0	2,077	$16.24	$4,091.69	$0.00	$0.00	$0.00	$0.00	$16.24	$4,091.69	0.0%
211	1966	2	28	621,305	1,670.2	1,937.2	1,743.5	2,077	$16.24	$4,091.69	$5,141.85	$261,522.00	$359,783.00	$30,828.59	$35,986.68	$35,986.68	55.4%
212	1966	3	31	0	0.0	0.0	0.0	2,077	$16.24	$4,091.69	$0.00	$0.00	$0.00	$0.00	$16.24	$4,091.69	0.0%
213	1966	4	30	120,437	1,677.9	1,944.8	1,750.3	1,750	$16.24	$3,447.50	$5,162.50	$262,550.00	$0.00	$6,752.90	$11,931.64	$11,931.64	10.0%
214	1966	5	31	521,095	1,670.2	1,937.2	1,743.5	1,750	$16.24	$3,447.50	$5,141.85	$261,522.00	$259,573.00	$26,326.15	$31,484.24	$31,484.24	41.9%
215	1966	6	30	0	0.0	0.0	0.0	1,750	$16.24	$3,447.50	$0.00	$0.00	$0.00	$0.00	$16.24	$3,447.50	0.0%
216	1966	7	31	0	0.0	0.0	0.0	1,750	$16.24	$3,447.50	$0.00	$0.00	$0.00	$0.00	$16.24	$3,447.50	0.0%
217	1966	8	31	0	0.0	0.0	0.0	1,750	$16.24	$3,447.50	$0.00	$0.00	$0.00	$0.00	$16.24	$3,447.50	0.0%
218	1966	9	30	0	0.0	0.0	0.0	1,750	$16.24	$3,447.50	$0.00	$0.00	$0.00	$0.00	$16.24	$3,447.50	0.0%
219	1966	10	31	0	0.0	0.0	0.0	1,750	$16.24	$3,447.50	$0.00	$0.00	$0.00	$0.00	$16.24	$3,447.50	0.0%
220	1966	11	30	0	0.0	0.0	0.0	1,750	$16.24	$3,447.50	$0.00	$0.00	$0.00	$0.00	$16.24	$3,447.50	0.0%
221	1966	12	31	0	0.0	0.0	0.0	1,750	$16.24	$3,447.50	$0.00	$0.00	$0.00	$0.00	$16.24	$3,447.50	0.0%
222	1967	1	31	0	0.0	0.0	0.0	1,750	$16.24	$3,447.50	$0.00	$0.00	$0.00	$0.00	$16.24	$3,447.50	0.0%
223	1967	2	28	0	0.0	0.0	0.0	1,750	$16.24	$3,447.50	$0.00	$0.00	$0.00	$0.00	$16.24	$3,447.50	0.0%
224	1967	3	31	0	0.0	0.0	0.0	1,750	$16.24	$3,447.50	$0.00	$0.00	$0.00	$0.00	$16.24	$3,447.50	0.0%
225	1967	4	30	40,084	835.1	968.6	871.7	1,743	$16.24	$3,433.71	$2,572.40	$130,761.00	$0.00	$2,247.52	$4,836.16	$4,836.16	6.7%
226	1967	5	31	821,727	1,670.2	1,937.2	1,743.5	1,743	$16.24	$3,433.71	$5,141.85	$261,522.00	$560,205.00	$39,833.55	$44,991.64	$44,991.64	66.1%
227	1967	6	30	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
228	1967	7	31	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
229	1967	8	31	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%

Tab "Metering & Billing - 1000 cfs" of
File "Bayou Meto Study - 1000-cfs Pumping Station.XLS"

Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1										Minimum							
2										Monthly	Billing						
3				Metered			Billing	Ratchet	Customer	Demand	Demand	Incremental Energy		Energy			Monthly
4	Period-of-Record			Energy	Demands		Demand	Demand	Charge	Charge	Charge	Block 1	Block 2	Charge	Subtotal Bill	Total Bill	Load
5	YEAR	MO	DAYS	kWh	kWD	kVAD	kWD	kWD	$16.24	$1.97	$2.95	$0.05607	$0.04493	kWh			Factor
230	1967	9	30	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
231	1967	10	31	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
232	1967	11	30	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
233	1967	12	31	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
234	1968	1	31	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
235	1968	2	29	0	0.0	0.0	0.0	1,743	$16.24	$3,433.71	$0.00	$0.00	$0.00	$0.00	$16.24	$3,433.71	0.0%
236	1968	3	31	344,841	1,747.2	2,013.0	1,811.7	1,812	$16.24	$3,569.64	$5,345.40	$271,761.00	$73,080.00	$18,521.12	$23,882.76	$23,882.76	26.5%
237	1968	4	30	1,046,199	2,036.6	2,288.5	2,059.7	2,060	$16.24	$4,058.20	$6,077.00	$308,949.00	$737,250.00	$50,447.41	$56,540.65	$56,540.65	71.3%
238	1968	5	31	870,648	1,791.2	2,055.9	1,850.3	2,060	$16.24	$4,058.20	$5,457.50	$277,547.00	$593,101.00	$42,210.09	$47,683.83	$47,683.83	65.3%
239	1968	6	30	204,831	1,829.1	2,092.6	1,883.3	2,060	$16.24	$4,058.20	$5,554.85	$282,497.00	$0.00	$11,484.87	$17,055.96	$17,055.96	15.6%
240	1968	7	31	0	0.0	0.0	0.0	2,060	$16.24	$4,058.20	$0.00	$0.00	$0.00	$0.00	$16.24	$4,058.20	0.0%
241	1968	8	31	0	0.0	0.0	0.0	2,060	$16.24	$4,058.20	$0.00	$0.00	$0.00	$0.00	$16.24	$4,058.20	0.0%
242	1968	9	30	0	0.0	0.0	0.0	2,060	$16.24	$4,058.20	$0.00	$0.00	$0.00	$0.00	$16.24	$4,058.20	0.0%
243	1968	10	31	0	0.0	0.0	0.0	2,060	$16.24	$4,058.20	$0.00	$0.00	$0.00	$0.00	$16.24	$4,058.20	0.0%
244	1968	11	30	0	0.0	0.0	0.0	2,060	$16.24	$4,058.20	$0.00	$0.00	$0.00	$0.00	$16.24	$4,058.20	0.0%
245	1968	12	31	748,956	1,796.4	2,061.0	1,854.9	2,060	$16.24	$4,058.20	$5,472.25	$278,233.00	$470,723.00	$36,750.11	$42,238.60	$42,238.60	56.0%
246	1969	1	31	245,302	1,773.2	2,038.5	1,834.6	2,060	$16.24	$4,058.20	$5,413.25	$275,196.00	$0.00	$13,754.07	$19,183.56	$19,183.56	18.6%
247	1969	2	28	1,142,801	1,803.4	2,067.7	1,861.0	2,060	$16.24	$4,058.20	$5,489.95	$279,146.00	$863,655.00	$54,455.74	$59,961.93	$59,961.93	94.3%
248	1969	3	31	417,930	1,960.1	2,217.2	1,995.5	2,060	$16.24	$4,058.20	$5,885.25	$299,322.00	$118,608.00	$22,112.04	$28,013.53	$28,013.53	28.7%
249	1969	4	30	654,019	1,923.5	2,182.6	1,964.4	1,995	$16.24	$3,930.15	$5,793.80	$294,655.00	$359,364.00	$32,667.53	$38,477.57	$38,477.57	47.2%
250	1969	5	31	999,993	1,996.3	2,251.0	2,025.9	2,026	$16.24	$3,991.22	$5,976.70	$303,891.00	$696,102.00	$48,315.03	$54,307.97	$54,307.97	67.3%
251	1969	6	30	576,097	1,891.9	2,152.7	1,937.4	2,026	$16.24	$3,991.22	$5,714.15	$290,616.00	$285,481.00	$29,121.50	$34,851.89	$34,851.89	42.3%
252	1969	7	31	402,197	1,974.6	2,230.7	2,007.6	2,026	$16.24	$3,991.22	$5,923.60	$301,146.00	$101,051.00	$21,425.48	$27,365.32	$27,365.32	27.4%
253	1969	8	31	0	0.0	0.0	0.0	2,026	$16.24	$3,991.22	$0.00	$0.00	$0.00	$0.00	$16.24	$3,991.22	0.0%
254	1969	9	30	0	0.0	0.0	0.0	2,026	$16.24	$3,991.22	$0.00	$0.00	$0.00	$0.00	$16.24	$3,991.22	0.0%
255	1969	10	31	0	0.0	0.0	0.0	2,026	$16.24	$3,991.22	$0.00	$0.00	$0.00	$0.00	$16.24	$3,991.22	0.0%
256	1969	11	30	0	0.0	0.0	0.0	2,026	$16.24	$3,991.22	$0.00	$0.00	$0.00	$0.00	$16.24	$3,991.22	0.0%
257	1969	12	31	0	0.0	0.0	0.0	2,026	$16.24	$3,991.22	$0.00	$0.00	$0.00	$0.00	$16.24	$3,991.22	0.0%
258	1970	1	31	601,838	1,685.1	1,952.0	1,756.8	2,026	$16.24	$3,991.22	$5,183.15	$263,515.00	$338,323.00	$29,976.14	$35,175.53	$35,175.53	48.0%
259	1970	2	28	0	0.0	0.0	0.0	2,026	$16.24	$3,991.22	$0.00	$0.00	$0.00	$0.00	$16.24	$3,991.22	0.0%
260	1970	3	31	1,043,067	1,695.4	1,962.2	1,766.0	2,026	$16.24	$3,991.22	$5,209.70	$264,900.00	$778,167.00	$49,815.99	$55,041.93	$55,041.93	82.7%
261	1970	4	30	1,030,240	1,843.4	2,106.4	1,895.7	2,026	$16.24	$3,991.22	$5,593.20	$284,360.00	$745,880.00	$49,456.45	$55,065.89	$55,065.89	77.6%
262	1970	5	31	1,089,022	1,748.9	2,014.8	1,813.3	2,008	$16.24	$3,955.76	$5,348.35	$271,998.00	$817,024.00	$51,959.82	$57,324.41	$57,324.41	83.7%
263	1970	6	30	249,930	1,853.8	2,116.4	1,904.7	2,008	$16.24	$3,955.76	$5,619.75	$285,708.00	$0.00	$14,013.60	$19,649.59	$19,649.59	18.7%
264	1970	7	31	0	0.0	0.0	0.0	1,905	$16.24	$3,752.85	$0.00	$0.00	$0.00	$0.00	$16.24	$3,752.85	0.0%
265	1970	8	31	0	0.0	0.0	0.0	1,905	$16.24	$3,752.85	$0.00	$0.00	$0.00	$0.00	$16.24	$3,752.85	0.0%
266	1970	9	30	0	0.0	0.0	0.0	1,905	$16.24	$3,752.85	$0.00	$0.00	$0.00	$0.00	$16.24	$3,752.85	0.0%
267	1970	10	31	91,354	1,999.1	2,253.7	2,028.3	2,028	$16.24	$3,995.16	$5,982.60	$304,243.00	$0.00	$5,122.21	$11,121.05	$11,121.05	6.1%
268	1970	11	30	530,269	2,031.2	2,283.4	2,055.1	2,055	$16.24	$4,048.35	$6,062.25	$308,264.00	$222,005.00	$27,259.05	$33,337.54	$33,337.54	36.3%
269	1970	12	31	0	0.0	0.0	0.0	2,055	$16.24	$4,048.35	$0.00	$0.00	$0.00	$0.00	$16.24	$4,048.35	0.0%
270	1971	1	31	413,454	1,818.2	2,082.1	1,873.9	2,055	$16.24	$4,048.35	$5,528.30	$281,080.00	$132,374.00	$21,707.72	$27,252.26	$27,252.26	30.6%
271	1971	2	28	0	0.0	0.0	0.0	2,055	$16.24	$4,048.35	$0.00	$0.00	$0.00	$0.00	$16.24	$4,048.35	0.0%
272	1971	3	31	949,115	1,830.0	2,093.4	1,884.1	2,055	$16.24	$4,048.35	$5,557.80	$282,610.00	$666,505.00	$45,792.01	$51,366.05	$51,366.05	69.7%
273	1971	4	30	200,421	1,670.2	1,937.2	1,743.5	2,055	$16.24	$4,048.35	$5,141.85	$261,522.00	$0.00	$11,237.61	$16,395.70	$16,395.70	16.7%
274	1971	5	31	0	0.0	0.0	0.0	2,055	$16.24	$4,048.35	$0.00	$0.00	$0.00	$0.00	$16.24	$4,048.35	0.0%
275	1971	6	30	0	0.0	0.0	0.0	2,055	$16.24	$4,048.35	$0.00	$0.00	$0.00	$0.00	$16.24	$4,048.35	0.0%
276	1971	7	31	0	0.0	0.0	0.0	2,055	$16.24	$4,048.35	$0.00	$0.00	$0.00	$0.00	$16.24	$4,048.35	0.0%
277	1971	8	31	0	0.0	0.0	0.0	2,055	$16.24	$4,048.35	$0.00	$0.00	$0.00	$0.00	$16.24	$4,048.35	0.0%
278	1971	9	30	0	0.0	0.0	0.0	2,055	$16.24	$4,048.35	$0.00	$0.00	$0.00	$0.00	$16.24	$4,048.35	0.0%
279	1971	10	31	0	0.0	0.0	0.0	2,055	$16.24	$4,048.35	$0.00	$0.00	$0.00	$0.00	$16.24	$4,048.35	0.0%
280	1971	11	30	0	0.0	0.0	0.0	1,884	$16.24	$3,711.48	$0.00	$0.00	$0.00	$0.00	$16.24	$3,711.48	0.0%
281	1971	12	31	1,035,303	1,868.0	2,129.9	1,916.9	1,917	$16.24	$3,776.49	$5,655.15	$287,534.00	$747,769.00	$49,719.29	$55,390.68	$55,390.68	74.5%
282	1972	1	31	613,290	1,876.5	2,138.1	1,924.2	1,924	$16.24	$3,790.28	$5,675.80	$288,637.00	$324,653.00	$30,770.54	$36,462.58	$36,462.58	43.9%
283	1972	2	29	168,281	1,759.7	2,025.3	1,822.7	1,924	$16.24	$3,790.28	$5,377.85	$273,410.00	$0.00	$9,435.49	$14,829.58	$14,829.58	13.7%
284	1972	3	31	624,520	887.7	1,020.3	918.3	1,924	$16.24	$3,790.28	$2,708.10	$137,742.00	$486,778.00	$29,594.13	$32,318.47	$32,318.47	94.6%
285	1972	4	30	140,295	1,670.2	1,937.2	1,743.5	1,924	$16.24	$3,790.28	$5,141.85	$261,522.00	$0.00	$7,866.33	$13,024.42	$13,024.42	11.7%

Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1										Minimum							
2										Monthly	Billing						
3				Metered			Billing	Ratchet	Customer	Demand	Demand	Incremental Energy		Energy			Monthly
4	Period-of-Record			Energy	Demands		Demand	Demand	Charge	Charge	Charge	Block 1	Block 2	Charge	Subtotal Bill	Total Bill	Load
5	YEAR	MO	DAYS	kWh	kWD	kVAD	kWD	kWD	$16.24	$1.97	$2.95	$0.05607	$0.04493	kWh			Factor
286	1972	5	31	0	0.0	0.0	0.0	1,924	$16.24	$3,790.28	$0.00	$0.00	$0.00	$0.00	$16.24	$3,790.28	0.0%
287	1972	6	30	0	0.0	0.0	0.0	1,924	$16.24	$3,790.28	$0.00	$0.00	$0.00	$0.00	$16.24	$3,790.28	0.0%
288	1972	7	31	0	0.0	0.0	0.0	1,924	$16.24	$3,790.28	$0.00	$0.00	$0.00	$0.00	$16.24	$3,790.28	0.0%
289	1972	8	31	0	0.0	0.0	0.0	1,924	$16.24	$3,790.28	$0.00	$0.00	$0.00	$0.00	$16.24	$3,790.28	0.0%
290	1972	9	30	0	0.0	0.0	0.0	1,924	$16.24	$3,790.28	$0.00	$0.00	$0.00	$0.00	$16.24	$3,790.28	0.0%
291	1972	10	31	0	0.0	0.0	0.0	1,924	$16.24	$3,790.28	$0.00	$0.00	$0.00	$0.00	$16.24	$3,790.28	0.0%
292	1972	11	30	1,144,674	1,713.9	1,980.4	1,782.4	1,924	$16.24	$3,790.28	$5,256.90	$267,358.00	$877,316.00	$54,408.57	$59,681.71	$59,681.71	92.8%
293	1972	12	31	1,138,064	1,950.6	2,208.3	1,987.4	1,987	$16.24	$3,914.39	$5,861.65	$298,116.00	$839,948.00	$54,454.23	$60,332.12	$60,332.12	78.4%
294	1973	1	31	956,333	1,948.2	2,205.9	1,985.4	1,987	$16.24	$3,914.39	$5,855.75	$297,803.00	$658,530.00	$46,285.57	$52,157.56	$52,157.56	66.0%
295	1973	2	28	1,017,930	1,719.8	1,986.2	1,787.6	1,987	$16.24	$3,914.39	$5,274.60	$268,134.00	$749,796.00	$48,722.61	$54,013.45	$54,013.45	88.1%
296	1973	3	31	1,290,935	2,163.8	2,412.7	2,171.4	2,171	$16.24	$4,276.87	$6,404.45	$325,709.00	$965,226.00	$61,630.11	$68,050.80	$68,050.80	80.2%
297	1973	4	30	1,353,279	2,035.3	2,287.2	2,058.5	2,171	$16.24	$4,276.87	$6,074.05	$308,778.00	$1,044,501.00	$64,242.61	$70,332.90	$70,332.90	92.3%
298	1973	5	31	1,312,473	1,929.8	2,188.7	1,969.8	2,171	$16.24	$4,276.87	$5,811.50	$295,470.00	$1,017,003.00	$62,260.95	$68,088.69	$68,088.69	91.4%
299	1973	6	30	1,179,414	1,947.8	2,205.6	1,985.1	2,171	$16.24	$4,276.87	$5,855.75	$297,758.00	$881,656.00	$56,308.10	$62,180.09	$62,180.09	84.1%
300	1973	7	31	65,653	924.5	1,055.9	950.3	2,171	$16.24	$4,276.87	$2,802.50	$142,546.00	$0.00	$3,681.14	$6,499.88	$6,499.88	9.5%
301	1973	8	31	0	0.0	0.0	0.0	2,171	$16.24	$4,276.87	$0.00	$0.00	$0.00	$0.00	$16.24	$4,276.87	0.0%
302	1973	9	30	0	0.0	0.0	0.0	2,171	$16.24	$4,276.87	$0.00	$0.00	$0.00	$0.00	$16.24	$4,276.87	0.0%
303	1973	10	31	522,809	2,090.8	2,338.5	2,104.6	2,171	$16.24	$4,276.87	$6,209.75	$315,697.00	$207,112.00	$27,006.67	$33,232.66	$33,232.66	33.6%
304	1973	11	30	754,242	2,089.3	2,337.0	2,103.3	2,171	$16.24	$4,276.87	$6,203.85	$315,496.00	$438,746.00	$37,402.72	$43,622.81	$43,622.81	50.1%
305	1973	12	31	1,305,763	2,013.1	2,266.7	2,040.0	2,171	$16.24	$4,276.87	$6,018.00	$306,003.00	$999,760.00	$62,076.81	$68,111.05	$68,111.05	87.2%
306	1974	1	31	1,217,013	1,894.0	2,154.7	1,939.3	2,171	$16.24	$4,276.87	$5,720.05	$290,890.00	$926,123.00	$57,920.91	$63,657.20	$63,657.20	86.4%
307	1974	2	28	732,992	1,811.2	2,075.3	1,867.8	2,171	$16.24	$4,276.87	$5,510.60	$280,171.00	$452,821.00	$36,054.44	$41,581.28	$41,581.28	60.2%
308	1974	3	31	1,142,589	2,256.5	2,506.0	2,255.4	2,255	$16.24	$4,442.35	$6,652.25	$338,313.00	$804,276.00	$55,105.33	$61,773.82	$61,773.82	68.1%
309	1974	4	30	993,390	2,206.7	2,456.0	2,210.4	2,255	$16.24	$4,442.35	$6,519.50	$331,556.00	$661,834.00	$48,326.55	$54,862.29	$54,862.29	62.5%
310	1974	5	31	1,273,289	1,817.8	2,081.7	1,873.5	2,255	$16.24	$4,442.35	$5,525.35	$281,023.00	$992,266.00	$60,339.47	$65,881.06	$65,881.06	94.1%
311	1974	6	30	1,291,828	1,918.8	2,178.2	1,960.4	2,255	$16.24	$4,442.35	$5,782.00	$294,057.00	$997,771.00	$61,317.63	$67,115.87	$67,115.87	93.5%
312	1974	7	31	621,899	1,953.1	2,210.6	1,989.5	2,255	$16.24	$4,442.35	$5,870.50	$298,429.00	$323,470.00	$31,266.42	$37,153.16	$37,153.16	42.8%
313	1974	8	31	377,559	1,827.8	2,091.3	1,882.2	2,255	$16.24	$4,442.35	$5,551.90	$282,327.00	$95,232.00	$20,108.85	$25,676.99	$25,676.99	27.8%
314	1974	9	30	729,269	1,961.2	2,218.2	1,996.4	2,255	$16.24	$4,442.35	$5,888.20	$299,456.00	$429,813.00	$36,102.00	$42,006.44	$42,006.44	51.6%
315	1974	10	31	141,915	880.9	1,013.7	912.3	2,255	$16.24	$4,442.35	$2,690.40	$136,849.00	$5,066.00	$7,900.74	$10,607.38	$10,607.38	21.7%
316	1974	11	30	1,360,712	2,009.6	2,263.4	2,037.1	2,255	$16.24	$4,442.35	$6,009.15	$305,564.00	$1,055,148.00	$64,540.77	$70,566.16	$70,566.16	94.0%
317	1974	12	31	1,073,458	2,048.0	2,299.0	2,069.1	2,255	$16.24	$4,442.35	$6,103.55	$310,360.00	$763,098.00	$51,687.88	$57,807.67	$57,807.67	70.5%
318	1975	1	31	1,044,885	1,719.8	1,986.2	1,787.6	2,255	$16.24	$4,442.35	$5,274.60	$268,134.00	$776,751.00	$49,933.70	$55,224.54	$55,224.54	81.7%
319	1975	2	28	1,084,119	2,050.3	2,301.2	2,071.1	2,255	$16.24	$4,442.35	$6,109.45	$310,658.00	$773,461.00	$52,170.20	$58,295.89	$58,295.89	78.7%
320	1975	3	31	1,162,975	2,152.5	2,401.1	2,161.0	2,210	$16.24	$4,353.70	$6,374.95	$324,155.00	$838,820.00	$55,863.55	$62,254.74	$62,254.74	72.6%
321	1975	4	30	1,072,554	1,770.2	2,035.5	1,832.0	2,161	$16.24	$4,257.17	$5,404.40	$274,793.00	$797,761.00	$51,251.05	$56,671.69	$56,671.69	84.2%
322	1975	5	31	1,249,637	1,985.4	2,240.9	2,016.8	2,161	$16.24	$4,257.17	$5,950.15	$302,521.00	$947,116.00	$59,516.27	$65,482.66	$65,482.66	84.6%
323	1975	6	30	1,146,394	2,098.8	2,346.7	2,112.0	2,161	$16.24	$4,257.17	$6,230.40	$316,805.00	$829,589.00	$55,036.69	$61,283.33	$61,283.33	75.9%
324	1975	7	31	244,287	1,752.1	2,017.9	1,816.1	2,161	$16.24	$4,257.17	$5,357.20	$272,412.00	$0.00	$13,697.18	$19,070.62	$19,070.62	18.7%
325	1975	8	31	371,755	1,759.7	2,025.3	1,822.7	2,161	$16.24	$4,257.17	$5,377.85	$273,410.00	$98,345.00	$19,748.74	$25,142.83	$25,142.83	28.4%
326	1975	9	30	40,084	1,670.2	1,937.2	1,743.5	2,161	$16.24	$4,257.17	$5,141.85	$261,522.00	$0.00	$2,247.52	$7,405.61	$7,405.61	3.3%
327	1975	10	31	0	0.0	0.0	0.0	2,161	$16.24	$4,257.17	$0.00	$0.00	$0.00	$0.00	$16.24	$4,257.17	0.0%
328	1975	11	30	104,056	909.5	1,041.5	937.3	2,161	$16.24	$4,257.17	$2,764.15	$140,597.00	$0.00	$5,834.44	$8,614.83	$8,614.83	15.9%
329	1975	12	31	0	0.0	0.0	0.0	2,161	$16.24	$4,257.17	$0.00	$0.00	$0.00	$0.00	$16.24	$4,257.17	0.0%
330	1976	1	31	349,343	1,805.1	2,069.4	1,862.5	2,161	$16.24	$4,257.17	$5,492.90	$279,374.00	$69,969.00	$18,808.21	$24,317.35	$24,317.35	26.0%
331	1976	2	29	604,292	1,670.2	1,937.2	1,743.5	2,161	$16.24	$4,257.17	$5,141.85	$261,522.00	$342,770.00	$30,064.19	$35,222.28	$35,222.28	52.0%
332	1976	3	31	729,254	1,748.9	2,014.8	1,813.3	2,112	$16.24	$4,160.64	$5,348.35	$271,998.00	$457,256.00	$35,795.44	$41,160.03	$41,160.03	56.0%
333	1976	4	30	813,249	2,025.3	2,278.0	2,050.2	2,112	$16.24	$4,160.64	$6,047.50	$307,534.00	$505,715.00	$39,965.21	$46,028.95	$46,028.95	55.8%
334	1976	5	31	1,182,595	1,900.9	2,161.2	1,945.1	2,112	$16.24	$4,160.64	$5,737.75	$291,766.00	$890,829.00	$56,384.27	$62,138.26	$62,138.26	83.6%
335	1976	6	30	610,917	1,847.3	2,110.1	1,899.1	2,050	$16.24	$4,038.50	$5,602.05	$284,867.00	$326,050.00	$30,621.92	$36,240.21	$36,240.21	45.9%
336	1976	7	31	715,991	2,048.0	2,299.0	2,069.1	2,069	$16.24	$4,075.93	$6,103.55	$310,360.00	$405,631.00	$35,626.89	$41,746.68	$41,746.68	47.0%
337	1976	8	31	61,799	897.1	1,029.4	926.5	2,069	$16.24	$4,075.93	$2,731.70	$138,974.00	$0.00	$3,465.07	$6,213.01	$6,213.01	9.3%
338	1976	9	30	0	0.0	0.0	0.0	2,069	$16.24	$4,075.93	$0.00	$0.00	$0.00	$0.00	$16.24	$4,075.93	0.0%
339	1976	10	31	100,211	835.1	968.6	871.7	2,069	$16.24	$4,075.93	$2,572.40	$130,761.00	$0.00	$5,618.81	$8,207.45	$8,207.45	16.1%
340	1976	11	30	222,359	895.4	1,027.7	925.0	2,069	$16.24	$4,075.93	$2,728.75	$138,745.00	$83,614.00	$11,536.21	$14,281.20	$14,281.20	34.5%
341	1976	12	31	0	0.0	0.0	0.0	2,069	$16.24	$4,075.93	$0.00	$0.00	$0.00	$0.00	$16.24	$4,075.93	0.0%

Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1										Minimum							
2										Monthly	Billing						
3				Metered			Billing	Ratchet	Customer	Demand	Demand	Incremental Energy		Energy			Monthly
4	Period-of-Record			Energy	Demands		Demand	Demand	Charge	Charge	Charge	Block 1	Block 2	Charge	Subtotal Bill	Total Bill	Load
5	YEAR	MO	DAYS	kWh	kWD	kVAD	kWD	kWD	$16.24	$1.97	$2.95	$0.05607	$0.04493	kWh			Factor
342	1977	1	31	260,596	837.1	970.6	873.6	2,069	$16.24	$4,075.93	$2,578.30	$131,033.00	$129,563.00	$13,168.29	$15,762.83	$15,762.83	41.8%
343	1977	2	28	41,918	890.8	1,023.3	921.0	2,069	$16.24	$4,075.93	$2,716.95	$138,144.00	$0.00	$2,350.36	$5,083.55	$5,083.55	7.0%
344	1977	3	31	916,862	2,138.9	2,387.4	2,148.7	2,149	$16.24	$4,233.53	$6,339.55	$322,300.00	$594,562.00	$44,785.03	$51,140.82	$51,140.82	57.6%
345	1977	4	30	924,784	2,050.0	2,300.9	2,070.8	2,149	$16.24	$4,233.53	$6,109.45	$310,616.00	$614,168.00	$45,010.81	$51,136.50	$51,136.50	62.7%
346	1977	5	31	262,723	889.7	1,022.2	920.0	2,149	$16.24	$4,233.53	$2,714.00	$138,000.00	$124,723.00	$13,341.46	$16,071.70	$16,071.70	39.7%
347	1977	6	30	120,961	864.6	997.7	898.0	2,149	$16.24	$4,233.53	$2,649.10	$134,693.00	$0.00	$6,782.28	$9,447.62	$9,447.62	19.4%
348	1977	7	31	561,262	2,008.6	2,262.5	2,036.2	2,149	$16.24	$4,233.53	$6,006.20	$305,432.00	$255,830.00	$28,620.01	$34,642.45	$34,642.45	37.6%
349	1977	8	31	255,319	1,856.4	2,118.8	1,906.9	2,149	$16.24	$4,233.53	$5,625.65	$286,040.00	$0.00	$14,315.73	$19,957.62	$19,957.62	18.5%
350	1977	9	30	581,876	1,878.2	2,139.7	1,925.7	2,149	$16.24	$4,233.53	$5,681.70	$288,857.00	$293,019.00	$29,361.56	$35,059.50	$35,059.50	43.0%
351	1977	10	31	442,785	1,929.0	2,187.9	1,969.1	2,149	$16.24	$4,233.53	$5,808.55	$295,361.00	$147,424.00	$23,184.65	$29,009.44	$29,009.44	30.9%
352	1977	11	30	910,146	1,880.0	2,141.3	1,927.2	2,149	$16.24	$4,233.53	$5,684.65	$289,077.00	$621,069.00	$44,113.18	$49,814.07	$49,814.07	67.2%
353	1977	12	31	820,360	1,837.8	2,100.9	1,890.8	2,149	$16.24	$4,233.53	$5,578.45	$283,627.00	$536,733.00	$40,018.38	$45,613.07	$45,613.07	60.0%
354	1978	1	31	120,253	1,670.2	1,937.2	1,743.5	2,149	$16.24	$4,233.53	$5,141.85	$261,522.00	$0.00	$6,742.57	$11,900.66	$11,900.66	9.7%
355	1978	2	28	531,851	1,919.6	2,179.0	1,961.1	2,149	$16.24	$4,233.53	$5,784.95	$294,166.00	$237,685.00	$27,173.07	$32,974.26	$32,974.26	41.2%
356	1978	3	31	894,720	2,005.1	2,259.2	2,033.3	2,071	$16.24	$4,079.87	$5,997.35	$304,992.00	$589,728.00	$43,597.38	$49,610.97	$49,610.97	60.0%
357	1978	4	30	666,231	2,035.6	2,287.6	2,058.8	2,059	$16.24	$4,056.23	$6,074.05	$308,821.00	$357,410.00	$33,374.02	$39,464.31	$39,464.31	45.5%
358	1978	5	31	1,275,405	1,890.6	2,151.5	1,936.3	2,059	$16.24	$4,056.23	$5,711.20	$290,451.00	$984,954.00	$60,539.57	$66,267.01	$66,267.01	90.7%
359	1978	6	30	1,107,579	1,870.5	2,132.3	1,919.1	2,059	$16.24	$4,056.23	$5,661.05	$287,865.00	$819,714.00	$52,970.34	$58,647.63	$58,647.63	82.2%
360	1978	7	31	145,466	1,858.1	2,120.5	1,908.4	2,059	$16.24	$4,056.23	$5,628.60	$286,262.00	$0.00	$8,156.29	$13,801.13	$13,801.13	10.5%
361	1978	8	31	0	0.0	0.0	0.0	2,059	$16.24	$4,056.23	$0.00	$0.00	$0.00	$0.00	$16.24	$4,056.23	0.0%
362	1978	9	30	0	0.0	0.0	0.0	2,059	$16.24	$4,056.23	$0.00	$0.00	$0.00	$0.00	$16.24	$4,056.23	0.0%
363	1978	10	31	0	0.0	0.0	0.0	2,059	$16.24	$4,056.23	$0.00	$0.00	$0.00	$0.00	$16.24	$4,056.23	0.0%
364	1978	11	30	0	0.0	0.0	0.0	2,059	$16.24	$4,056.23	$0.00	$0.00	$0.00	$0.00	$16.24	$4,056.23	0.0%
365	1978	12	31	721,830	1,683.3	1,950.2	1,755.2	2,059	$16.24	$4,056.23	$5,177.25	$263,274.00	$458,556.00	$35,364.69	$40,558.18	$40,558.18	57.6%
366	1979	1	31	1,153,311	1,857.7	2,120.0	1,908.0	2,059	$16.24	$4,056.23	$5,628.60	$286,207.00	$867,104.00	$55,006.61	$60,651.45	$60,651.45	83.4%
367	1979	2	28	282,180	1,720.7	1,987.1	1,788.4	2,059	$16.24	$4,056.23	$5,274.60	$268,254.00	$13,926.00	$15,666.70	$20,957.54	$20,957.54	24.4%
368	1979	3	31	1,039,310	2,013.1	2,266.7	2,040.0	2,059	$16.24	$4,056.23	$6,018.00	$306,003.00	$733,307.00	$50,105.07	$56,139.31	$56,139.31	69.4%
369	1979	4	30	1,235,185	2,022.9	2,275.8	2,048.2	2,048	$16.24	$4,034.56	$6,041.60	$307,231.00	$927,954.00	$58,919.42	$64,977.26	$64,977.26	84.8%
370	1979	5	31	1,292,786	1,847.3	2,110.1	1,899.1	2,048	$16.24	$4,034.56	$5,602.05	$284,867.00	$1,007,919.00	$61,258.29	$66,876.58	$66,876.58	94.1%
371	1979	6	30	1,155,375	1,867.5	2,129.5	1,916.5	2,048	$16.24	$4,034.56	$5,655.15	$287,479.00	$867,896.00	$55,113.51	$60,784.90	$60,784.90	85.9%
372	1979	7	31	170,296	1,865.4	2,127.4	1,914.7	2,048	$16.24	$4,034.56	$5,649.25	$287,202.00	$0.00	$9,548.49	$15,213.98	$15,213.98	12.3%
373	1979	8	31	289,361	1,962.3	2,219.2	1,997.3	2,048	$16.24	$4,034.56	$5,891.15	$299,589.00	$0.00	$16,224.45	$22,131.84	$22,131.84	19.8%
374	1979	9	30	0	0.0	0.0	0.0	2,048	$16.24	$4,034.56	$0.00	$0.00	$0.00	$0.00	$16.24	$4,034.56	0.0%
375	1979	10	31	0	0.0	0.0	0.0	2,048	$16.24	$4,034.56	$0.00	$0.00	$0.00	$0.00	$16.24	$4,034.56	0.0%
376	1979	11	30	200,735	1,683.3	1,950.2	1,755.2	2,048	$16.24	$4,034.56	$5,177.25	$263,274.00	$0.00	$11,255.23	$16,448.72	$16,448.72	16.6%
377	1979	12	31	1,010,081	1,900.4	2,160.8	1,944.7	2,048	$16.24	$4,034.56	$5,737.75	$291,711.00	$718,370.00	$48,632.60	$54,386.59	$54,386.59	71.4%
378	1980	1	31	726,907	1,824.3	2,088.0	1,879.2	2,048	$16.24	$4,034.56	$5,543.05	$281,874.00	$445,033.00	$35,800.01	$41,359.30	$41,359.30	53.6%
379	1980	2	29	481,806	865.0	998.2	898.4	2,048	$16.24	$4,034.56	$2,649.10	$134,753.00	$347,053.00	$23,148.69	$25,814.03	$25,814.03	80.0%
380	1980	3	31	440,926	1,670.2	1,937.2	1,743.5	2,048	$16.24	$4,034.56	$5,141.85	$261,522.00	$179,404.00	$22,724.16	$27,882.25	$27,882.25	35.5%
381	1980	4	30	1,214,561	1,833.0	2,096.3	1,886.7	1,997	$16.24	$3,934.09	$5,566.65	$283,006.00	$931,555.00	$57,722.91	$63,305.80	$63,305.80	92.0%
382	1980	5	31	853,938	1,778.5	2,043.6	1,839.2	1,997	$16.24	$3,934.09	$5,425.05	$275,885.00	$578,053.00	$41,440.79	$46,882.08	$46,882.08	64.5%
383	1980	6	30	102,645	1,709.4	1,976.0	1,778.4	1,997	$16.24	$3,934.09	$5,245.10	$266,760.00	$0.00	$5,755.33	$11,016.67	$11,016.67	8.3%
384	1980	7	31	0	0.0	0.0	0.0	1,997	$16.24	$3,934.09	$0.00	$0.00	$0.00	$0.00	$16.24	$3,934.09	0.0%
385	1980	8	31	0	0.0	0.0	0.0	1,945	$16.24	$3,831.65	$0.00	$0.00	$0.00	$0.00	$16.24	$3,831.65	0.0%
386	1980	9	30	0	0.0	0.0	0.0	1,945	$16.24	$3,831.65	$0.00	$0.00	$0.00	$0.00	$16.24	$3,831.65	0.0%
387	1980	10	31	0	0.0	0.0	0.0	1,945	$16.24	$3,831.65	$0.00	$0.00	$0.00	$0.00	$16.24	$3,831.65	0.0%
388	1980	11	30	0	0.0	0.0	0.0	1,945	$16.24	$3,831.65	$0.00	$0.00	$0.00	$0.00	$16.24	$3,831.65	0.0%
389	1980	12	31	0	0.0	0.0	0.0	1,887	$16.24	$3,717.39	$0.00	$0.00	$0.00	$0.00	$16.24	$3,717.39	0.0%
390	1981	1	31	0	0.0	0.0	0.0	1,887	$16.24	$3,717.39	$0.00	$0.00	$0.00	$0.00	$16.24	$3,717.39	0.0%
391	1981	2	28	0	0.0	0.0	0.0	1,887	$16.24	$3,717.39	$0.00	$0.00	$0.00	$0.00	$16.24	$3,717.39	0.0%
392	1981	3	31	0	0.0	0.0	0.0	1,887	$16.24	$3,717.39	$0.00	$0.00	$0.00	$0.00	$16.24	$3,717.39	0.0%
393	1981	4	30	0	0.0	0.0	0.0	1,839	$16.24	$3,622.83	$0.00	$0.00	$0.00	$0.00	$16.24	$3,622.83	0.0%
394	1981	5	31	300,632	1,670.2	1,937.2	1,743.5	1,778	$16.24	$3,502.66	$5,141.85	$261,522.00	$39,110.00	$16,420.75	$21,578.84	$21,578.84	24.2%
395	1981	6	30	846,254	1,803.8	2,068.2	1,861.4	1,861	$16.24	$3,666.17	$5,489.95	$279,203.00	$567,051.00	$41,132.51	$46,638.70	$46,638.70	65.2%
396	1981	7	31	0	0.0	0.0	0.0	1,861	$16.24	$3,666.17	$0.00	$0.00	$0.00	$0.00	$16.24	$3,666.17	0.0%
397	1981	8	31	0	0.0	0.0	0.0	1,861	$16.24	$3,666.17	$0.00	$0.00	$0.00	$0.00	$16.24	$3,666.17	0.0%

Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1										Minimum							
2										Monthly	Billing						
3				Metered			Billing	Ratchet	Customer	Demand	Demand	Incremental Energy		Energy			Monthly
4	Period-of-Record			Energy	Demands		Demand	Demand	Charge	Charge	Charge	Block 1	Block 2	Charge	Subtotal Bill	Total Bill	Load
5	YEAR	MO	DAYS	kWh	kWD	kVAD	kWD	kWD	$16.24	$1.97	$2.95	$0.05607	$0.04493	kWh			Factor
398	1981	9	30	0	0.0	0.0	0.0	1,861	$16.24	$3,666.17	$0.00	$0.00	$0.00	$0.00	$16.24	$3,666.17	0.0%
399	1981	10	31	335,622	1,808.6	2,072.8	1,865.5	1,866	$16.24	$3,676.02	$5,504.70	$279,830.00	$55,792.00	$18,196.80	$23,717.74	$23,717.74	24.9%
400	1981	11	30	330,484	1,834.7	2,098.0	1,888.2	1,888	$16.24	$3,719.36	$5,569.60	$283,232.00	$47,252.00	$18,003.85	$23,589.69	$23,589.69	25.0%
401	1981	12	31	0	0.0	0.0	0.0	1,888	$16.24	$3,719.36	$0.00	$0.00	$0.00	$0.00	$16.24	$3,719.36	0.0%
402	1982	1	31	243,823	887.3	1,019.9	917.9	1,888	$16.24	$3,719.36	$2,708.10	$137,684.00	$106,139.00	$12,488.77	$15,213.11	$15,213.11	36.9%
403	1982	2	28	1,114,884	2,010.3	2,264.1	2,037.7	2,038	$16.24	$4,014.86	$6,012.10	$305,652.00	$809,232.00	$53,496.70	$59,525.04	$59,525.04	82.5%
404	1982	3	31	950,356	1,989.6	2,244.8	2,020.3	2,038	$16.24	$4,014.86	$5,959.00	$303,051.00	$647,305.00	$46,075.48	$52,050.72	$52,050.72	64.2%
405	1982	4	30	1,097,364	1,823.0	2,086.7	1,878.0	2,038	$16.24	$4,014.86	$5,540.10	$281,704.00	$815,660.00	$52,442.75	$57,999.09	$57,999.09	83.6%
406	1982	5	31	1,021,757	2,153.3	2,402.0	2,161.8	2,162	$16.24	$4,259.14	$6,377.90	$324,274.00	$697,483.00	$49,519.95	$55,914.09	$55,914.09	63.8%
407	1982	6	30	1,354,791	1,937.9	2,196.3	1,976.7	2,162	$16.24	$4,259.14	$5,832.15	$296,499.00	$1,058,292.00	$64,173.76	$70,022.15	$70,022.15	97.1%
408	1982	7	31	628,436	1,868.4	2,130.3	1,917.3	2,162	$16.24	$4,259.14	$5,655.15	$287,589.00	$340,847.00	$31,439.37	$37,110.76	$37,110.76	45.2%
409	1982	8	31	370,731	1,670.2	1,937.2	1,743.5	2,162	$16.24	$4,259.14	$5,141.85	$261,522.00	$109,209.00	$19,570.30	$24,728.39	$24,728.39	29.8%
410	1982	9	30	0	0.0	0.0	0.0	2,162	$16.24	$4,259.14	$0.00	$0.00	$0.00	$0.00	$16.24	$4,259.14	0.0%
411	1982	10	31	0	0.0	0.0	0.0	2,162	$16.24	$4,259.14	$0.00	$0.00	$0.00	$0.00	$16.24	$4,259.14	0.0%
412	1982	11	30	61,852	1,714.4	1,980.9	1,782.8	2,162	$16.24	$4,259.14	$5,259.85	$267,418.00	$0.00	$3,468.04	$8,744.13	$8,744.13	5.0%
413	1982	12	31	1,334,749	2,220.0	2,469.3	2,222.4	2,222	$16.24	$4,377.34	$6,554.90	$333,358.00	$1,001,391.00	$63,683.88	$70,255.02	$70,255.02	80.8%
414	1983	1	31	566,864	1,814.3	2,078.3	1,870.5	2,222	$16.24	$4,377.34	$5,516.50	$280,569.00	$286,295.00	$28,594.74	$34,127.48	$34,127.48	42.0%
415	1983	2	28	871,160	1,967.2	2,223.8	2,001.4	2,222	$16.24	$4,377.34	$5,902.95	$300,213.00	$570,947.00	$42,485.59	$48,404.78	$48,404.78	65.9%
416	1983	3	31	647,827	1,975.3	2,231.4	2,008.2	2,222	$16.24	$4,377.34	$5,923.60	$301,235.00	$346,592.00	$32,462.63	$38,402.47	$38,402.47	44.1%
417	1983	4	30	1,156,644	1,961.5	2,218.5	1,996.7	2,222	$16.24	$4,377.34	$5,891.15	$299,500.00	$857,144.00	$55,304.44	$61,211.83	$61,211.83	81.9%
418	1983	5	31	1,308,215	1,898.3	2,158.8	1,942.9	2,222	$16.24	$4,377.34	$5,731.85	$291,437.00	$1,016,778.00	$62,024.71	$67,772.80	$67,772.80	92.6%
419	1983	6	30	664,018	1,861.1	2,123.3	1,911.0	2,222	$16.24	$4,377.34	$5,637.45	$286,649.00	$377,369.00	$33,027.60	$38,681.29	$38,681.29	49.6%
420	1983	7	31	496,701	2,006.8	2,260.8	2,034.7	2,222	$16.24	$4,377.34	$6,003.25	$305,212.00	$191,489.00	$25,716.84	$31,736.33	$31,736.33	33.3%
421	1983	8	31	311,852	1,848.7	2,111.4	1,900.2	2,222	$16.24	$4,377.34	$5,605.00	$285,036.00	$26,816.00	$17,186.81	$22,808.05	$22,808.05	22.7%
422	1983	9	30	140,295	835.1	968.6	871.7	2,222	$16.24	$4,377.34	$2,572.40	$130,761.00	$9,534.00	$7,760.13	$10,348.77	$10,348.77	23.3%
423	1983	10	31	479,631	1,821.7	2,085.4	1,876.9	2,222	$16.24	$4,377.34	$5,537.15	$281,534.00	$198,097.00	$24,686.11	$30,239.50	$30,239.50	35.4%
424	1983	11	30	607,342	1,950.6	2,208.3	1,987.4	2,222	$16.24	$4,377.34	$5,861.65	$298,116.00	$309,226.00	$30,608.89	$36,486.78	$36,486.78	43.2%
425	1983	12	31	1,243,662	1,685.1	1,952.0	1,756.8	2,035	$16.24	$4,008.95	$5,183.15	$263,515.00	$980,147.00	$58,813.29	$64,012.68	$64,012.68	99.2%
426	1984	1	31	408,232	1,824.7	2,088.4	1,879.5	2,035	$16.24	$4,008.95	$5,546.00	$281,931.00	$126,301.00	$21,482.58	$27,044.82	$27,044.82	30.1%
427	1984	2	29	671,395	1,785.0	2,050.0	1,845.0	2,035	$16.24	$4,008.95	$5,442.75	$276,746.00	$394,649.00	$33,248.73	$38,707.72	$38,707.72	54.0%
428	1984	3	31	1,209,296	2,069.2	2,318.5	2,086.6	2,087	$16.24	$4,111.39	$6,156.65	$312,997.00	$896,299.00	$57,820.46	$63,993.35	$63,993.35	78.6%
429	1984	4	30	1,390,419	2,211.4	2,460.7	2,214.6	2,215	$16.24	$4,363.55	$6,534.25	$332,190.00	$1,058,229.00	$66,172.12	$72,722.61	$72,722.61	87.3%
430	1984	5	31	1,248,372	1,939.2	2,197.5	1,977.7	2,215	$16.24	$4,363.55	$5,835.10	$296,661.00	$951,711.00	$59,394.16	$65,245.50	$65,245.50	86.5%
431	1984	6	30	539,179	1,963.7	2,220.5	1,998.4	2,215	$16.24	$4,363.55	$5,894.10	$299,767.00	$239,412.00	$27,564.72	$33,475.06	$33,475.06	38.1%
432	1984	7	31	481,661	1,684.2	1,951.1	1,756.0	2,215	$16.24	$4,363.55	$5,180.20	$263,395.00	$218,266.00	$24,575.25	$29,771.69	$29,771.69	38.4%
433	1984	8	31	0	0.0	0.0	0.0	2,215	$16.24	$4,363.55	$0.00	$0.00	$0.00	$0.00	$16.24	$4,363.55	0.0%
434	1984	9	30	0	0.0	0.0	0.0	2,215	$16.24	$4,363.55	$0.00	$0.00	$0.00	$0.00	$16.24	$4,363.55	0.0%
435	1984	10	31	860,276	1,919.6	2,179.0	1,961.1	2,215	$16.24	$4,363.55	$5,784.95	$294,166.00	$566,110.00	$41,929.21	$47,730.40	$47,730.40	60.2%
436	1984	11	30	892,319	2,037.0	2,288.8	2,059.9	2,215	$16.24	$4,363.55	$6,077.00	$308,992.00	$583,327.00	$43,534.06	$49,627.30	$49,627.30	60.8%
437	1984	12	31	1,278,673	2,095.2	2,343.0	2,108.7	2,215	$16.24	$4,363.55	$6,221.55	$316,301.00	$962,372.00	$60,974.37	$67,212.16	$67,212.16	82.0%
438	1985	1	31	1,198,587	2,203.5	2,452.7	2,207.4	2,215	$16.24	$4,363.55	$6,510.65	$331,117.00	$867,470.00	$57,541.16	$64,068.05	$64,068.05	73.1%
439	1985	2	28	1,042,225	2,180.4	2,429.5	2,186.5	2,215	$16.24	$4,363.55	$6,451.65	$327,976.00	$714,249.00	$50,480.82	$56,948.71	$56,948.71	71.1%
440	1985	3	31	1,217,860	2,165.6	2,414.4	2,173.0	2,215	$16.24	$4,363.55	$6,410.35	$325,947.00	$891,913.00	$58,349.50	$64,776.09	$64,776.09	75.6%
441	1985	4	30	1,372,891	2,083.5	2,331.7	2,098.5	2,207	$16.24	$4,347.79	$6,189.10	$314,774.00	$1,058,117.00	$65,190.57	$71,395.91	$71,395.91	91.5%
442	1985	5	31	1,146,676	1,954.9	2,212.2	1,991.0	2,207	$16.24	$4,347.79	$5,873.45	$298,652.00	$848,024.00	$54,847.14	$60,736.83	$60,736.83	78.8%
443	1985	6	30	762,679	2,020.8	2,273.8	2,046.5	2,207	$16.24	$4,347.79	$6,035.70	$306,968.00	$455,711.00	$37,686.79	$43,738.73	$43,738.73	52.4%
444	1985	7	31	316,742	1,998.4	2,253.0	2,027.7	2,207	$16.24	$4,347.79	$5,982.60	$304,155.00	$12,587.00	$17,619.50	$23,618.34	$23,618.34	21.3%
445	1985	8	31	63,366	909.8	1,041.7	937.5	2,207	$16.24	$4,347.79	$2,767.10	$140,625.00	$0.00	$3,552.95	$6,336.29	$6,336.29	9.4%
446	1985	9	30	0	0.0	0.0	0.0	2,207	$16.24	$4,347.79	$0.00	$0.00	$0.00	$0.00	$16.24	$4,347.79	0.0%
447	1985	10	31	565,134	2,073.9	2,322.9	2,090.6	2,207	$16.24	$4,347.79	$6,168.45	$313,590.00	$251,544.00	$28,884.86	$35,069.55	$35,069.55	36.6%
448	1985	11	30	635,934	2,278.3	2,527.9	2,275.1	2,275	$16.24	$4,481.75	$6,711.25	$341,266.00	$294,668.00	$32,374.22	$39,101.71	$39,101.71	38.8%
449	1985	12	31	1,249,578	2,241.5	2,490.9	2,241.8	2,275	$16.24	$4,481.75	$6,613.90	$336,275.00	$913,303.00	$59,889.64	$66,519.78	$66,519.78	74.9%
450	1986	1	31	251,617	1,718.9	1,985.3	1,786.8	2,275	$16.24	$4,481.75	$5,271.65	$268,015.00	$0.00	$14,108.15	$19,396.04	$19,396.04	19.7%
451	1986	2	28	730,387	1,824.3	2,088.0	1,879.2	2,275	$16.24	$4,481.75	$5,543.05	$281,874.00	$448,513.00	$35,956.36	$41,515.65	$41,515.65	59.6%
452	1986	3	31	411,030	1,869.3	2,131.1	1,918.0	2,275	$16.24	$4,481.75	$5,658.10	$287,699.00	$123,331.00	$21,672.54	$27,346.88	$27,346.88	29.6%
453	1986	4	30	992,116	2,232.5	2,481.9	2,233.7	2,275	$16.24	$4,481.75	$6,590.30	$335,061.00	$657,055.00	$48,308.35	$54,914.89	$54,914.89	61.7%

Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1										Minimum							
2										Monthly	Billing						
3				Metered			Billing	Ratchet	Customer	Demand	Demand	Incremental Energy		Energy			Monthly
4	Period-of-Record			Energy	Demands		Demand	Demand	Charge	Charge	Charge	Block 1	Block 2	Charge	Subtotal Bill	Total Bill	Load
5	YEAR	MO	DAYS	kWh	kWD	kVAD	kWD	kWD	$16.24	$1.97	$2.95	$0.05607	$0.04493	kWh			Factor
454	1986	5	31	788,469	1,949.2	2,206.9	1,986.2	2,275	$16.24	$4,481.75	$5,858.70	$297,937.00	$490,532.00	$38,744.93	$44,619.87	$44,619.87	54.4%
455	1986	6	30	984,937	2,009.6	2,263.4	2,037.1	2,275	$16.24	$4,481.75	$6,009.15	$305,564.00	$679,373.00	$47,657.20	$53,682.59	$53,682.59	68.1%
456	1986	7	31	0	0.0	0.0	0.0	2,275	$16.24	$4,481.75	$0.00	$0.00	$0.00	$0.00	$16.24	$4,481.75	0.0%
457	1986	8	31	41,599	898.2	1,030.5	927.4	2,275	$16.24	$4,481.75	$2,734.65	$139,117.00	$0.00	$2,332.45	$5,083.34	$5,083.34	6.2%
458	1986	9	30	40,463	850.7	984.0	885.6	2,275	$16.24	$4,481.75	$2,613.70	$132,840.00	$0.00	$2,268.77	$4,898.71	$4,898.71	6.6%
459	1986	10	31	487,238	2,134.5	2,383.0	2,144.7	2,275	$16.24	$4,481.75	$6,327.75	$321,701.00	$165,537.00	$25,475.35	$31,819.34	$31,819.34	30.7%
460	1986	11	30	1,223,801	2,266.1	2,515.7	2,264.1	2,264	$16.24	$4,460.08	$6,678.80	$339,621.00	$884,180.00	$58,768.76	$65,463.80	$65,463.80	75.0%
461	1986	12	31	1,118,707	1,999.8	2,254.3	2,028.9	2,264	$16.24	$4,460.08	$5,985.55	$304,332.00	$814,375.00	$53,653.76	$59,655.55	$59,655.55	75.2%
462	1987	1	31	526,705	1,966.1	2,222.8	2,000.5	2,264	$16.24	$4,460.08	$5,902.95	$300,079.00	$226,626.00	$27,007.74	$32,926.93	$32,926.93	36.0%
463	1987	2	28	1,025,894	2,154.2	2,402.9	2,162.6	2,264	$16.24	$4,460.08	$6,380.85	$324,394.00	$701,500.00	$49,707.17	$56,104.26	$56,104.26	70.9%
464	1987	3	31	1,393,655	2,095.2	2,343.0	2,108.7	2,264	$16.24	$4,460.08	$6,221.55	$316,301.00	$1,077,354.00	$66,140.51	$72,378.30	$72,378.30	89.4%
465	1987	4	30	879,611	1,937.1	2,195.5	1,975.9	2,264	$16.24	$4,460.08	$5,829.20	$296,391.00	$583,220.00	$42,822.72	$48,668.16	$48,668.16	63.1%
466	1987	5	31	553,986	1,797.7	2,062.3	1,856.0	2,264	$16.24	$4,460.08	$5,475.20	$278,405.00	$275,581.00	$27,992.02	$33,483.46	$33,483.46	41.4%
467	1987	6	30	1,273,642	1,943.9	2,201.9	1,981.7	2,264	$16.24	$4,460.08	$5,846.90	$297,256.00	$976,386.00	$60,536.17	$66,399.31	$66,399.31	91.0%
468	1987	7	31	497,980	1,863.7	2,125.8	1,913.2	2,264	$16.24	$4,460.08	$5,643.35	$286,981.00	$210,999.00	$25,571.21	$31,230.80	$31,230.80	35.9%
469	1987	8	31	0	0.0	0.0	0.0	2,264	$16.24	$4,460.08	$0.00	$0.00	$0.00	$0.00	$16.24	$4,460.08	0.0%
470	1987	9	30	0	0.0	0.0	0.0	2,264	$16.24	$4,460.08	$0.00	$0.00	$0.00	$0.00	$16.24	$4,460.08	0.0%
471	1987	10	31	0	0.0	0.0	0.0	2,264	$16.24	$4,460.08	$0.00	$0.00	$0.00	$0.00	$16.24	$4,460.08	0.0%
472	1987	11	30	530,422	1,761.0	2,026.5	1,823.9	2,163	$16.24	$4,261.11	$5,380.80	$273,583.00	$256,839.00	$26,879.58	$32,276.62	$32,276.62	41.8%
473	1987	12	31	1,112,774	2,242.5	2,492.0	2,242.8	2,243	$16.24	$4,418.71	$6,616.85	$336,421.00	$776,353.00	$53,744.67	$60,377.76	$60,377.76	66.7%
474	1988	1	31	1,276,171	1,949.2	2,206.9	1,986.2	2,243	$16.24	$4,418.71	$5,858.70	$297,937.00	$978,234.00	$60,657.38	$66,532.32	$66,532.32	88.0%
475	1988	2	29	781,161	2,015.2	2,268.6	2,041.8	2,243	$16.24	$4,418.71	$6,023.90	$306,267.00	$474,894.00	$38,509.38	$44,549.52	$44,549.52	55.7%
476	1988	3	31	841,876	2,071.5	2,320.7	2,088.6	2,243	$16.24	$4,418.71	$6,162.55	$313,293.00	$528,583.00	$41,315.57	$47,494.36	$47,494.36	54.6%
477	1988	4	30	1,376,008	2,019.4	2,272.5	2,045.3	2,243	$16.24	$4,418.71	$6,032.75	$306,793.00	$1,069,215.00	$65,241.71	$71,290.70	$71,290.70	94.6%
478	1988	5	31	896,502	1,809.0	2,073.2	1,865.9	2,243	$16.24	$4,418.71	$5,504.70	$279,887.00	$616,615.00	$43,397.78	$48,918.72	$48,918.72	66.6%
479	1988	6	30	144,405	1,670.2	1,937.2	1,743.5	2,243	$16.24	$4,418.71	$5,141.85	$261,522.00	$0.00	$8,096.81	$13,254.90	$13,254.90	12.0%
480	1988	7	31	0	0.0	0.0	0.0	2,243	$16.24	$4,418.71	$0.00	$0.00	$0.00	$0.00	$16.24	$4,418.71	0.0%
481	1988	8	31	0	0.0	0.0	0.0	2,243	$16.24	$4,418.71	$0.00	$0.00	$0.00	$0.00	$16.24	$4,418.71	0.0%
482	1988	9	30	0	0.0	0.0	0.0	2,243	$16.24	$4,418.71	$0.00	$0.00	$0.00	$0.00	$16.24	$4,418.71	0.0%
483	1988	10	31	0	0.0	0.0	0.0	2,243	$16.24	$4,418.71	$0.00	$0.00	$0.00	$0.00	$16.24	$4,418.71	0.0%
484	1988	11	30	408,618	1,776.3	2,041.5	1,837.3	2,243	$16.24	$4,418.71	$5,419.15	$275,598.00	$133,020.00	$21,429.37	$26,864.76	$26,864.76	32.0%
485	1988	12	31	464,787	1,811.2	2,075.3	1,867.8	2,089	$16.24	$4,115.33	$5,510.60	$280,171.00	$184,616.00	$24,003.98	$29,530.82	$29,530.82	34.5%
486	1989	1	31	1,266,431	1,953.8	2,211.2	1,990.1	2,089	$16.24	$4,115.33	$5,870.50	$298,518.00	$967,913.00	$60,226.24	$66,112.98	$66,112.98	87.1%
487	1989	2	28	1,104,474	2,014.5	2,268.0	2,041.2	2,089	$16.24	$4,115.33	$6,020.95	$306,179.00	$798,295.00	$53,034.85	$59,072.04	$59,072.04	81.6%
488	1989	3	31	1,249,561	2,038.0	2,289.8	2,060.8	2,061	$16.24	$4,060.17	$6,079.95	$309,121.00	$940,440.00	$59,586.38	$65,682.57	$65,682.57	82.4%
489	1989	4	30	836,896	1,953.8	2,211.2	1,990.1	2,061	$16.24	$4,060.17	$5,870.50	$298,518.00	$538,378.00	$40,927.23	$46,813.97	$46,813.97	59.5%
490	1989	5	31	823,819	1,791.2	2,055.9	1,850.3	2,061	$16.24	$4,060.17	$5,457.50	$277,547.00	$546,272.00	$40,106.06	$45,579.80	$45,579.80	61.8%
491	1989	6	30	1,192,690	2,014.5	2,268.0	2,041.2	2,061	$16.24	$4,060.17	$6,020.95	$306,179.00	$886,511.00	$56,998.40	$63,035.59	$63,035.59	82.2%
492	1989	7	31	906,710	1,893.6	2,154.3	1,938.9	2,061	$16.24	$4,060.17	$5,720.05	$290,835.00	$615,875.00	$43,978.38	$49,714.67	$49,714.67	64.4%
493	1989	8	31	0	0.0	0.0	0.0	2,061	$16.24	$4,060.17	$0.00	$0.00	$0.00	$0.00	$16.24	$4,060.17	0.0%
494	1989	9	30	220,142	1,849.1	2,111.8	1,900.6	2,061	$16.24	$4,060.17	$5,607.95	$285,092.00	$0.00	$12,343.38	$17,967.57	$17,967.57	16.5%
495	1989	10	31	40,798	864.6	997.7	898.0	2,061	$16.24	$4,060.17	$2,649.10	$134,693.00	$0.00	$2,287.54	$4,952.88	$4,952.88	6.3%
496	1989	11	30	0	0.0	0.0	0.0	2,061	$16.24	$4,060.17	$0.00	$0.00	$0.00	$0.00	$16.24	$4,060.17	0.0%
497	1989	12	31	0	0.0	0.0	0.0	2,061	$16.24	$4,060.17	$0.00	$0.00	$0.00	$0.00	$16.24	$4,060.17	0.0%
498	1990	1	31	474,897	1,881.2	2,142.5	1,928.3	2,061	$16.24	$4,060.17	$5,687.60	$289,242.00	$185,655.00	$24,559.28	$30,263.12	$30,263.12	33.9%
499	1990	2	28	1,167,685	1,964.7	2,221.5	1,999.3	2,061	$16.24	$4,060.17	$5,897.05	$299,901.00	$867,784.00	$55,804.98	$61,718.27	$61,718.27	88.4%
500	1990	3	31	1,438,291	2,110.9	2,359.0	2,123.1	2,123	$16.24	$4,182.31	$6,262.85	$318,460.00	$1,119,831.00	$68,170.06	$74,449.15	$74,449.15	91.6%
501	1990	4	30	1,327,614	1,931.5	2,190.3	1,971.2	2,123	$16.24	$4,182.31	$5,814.45	$295,687.00	$1,031,927.00	$62,943.65	$68,774.34	$68,774.34	95.5%
502	1990	5	31	1,382,699	2,069.2	2,318.5	2,086.6	2,123	$16.24	$4,182.31	$6,156.65	$312,997.00	$1,069,702.00	$65,611.45	$71,784.34	$71,784.34	89.8%
503	1990	6	30	1,093,550	1,823.9	2,087.5	1,878.8	2,123	$16.24	$4,182.31	$5,543.05	$281,817.00	$811,733.00	$52,272.64	$57,831.93	$57,831.93	83.3%
504	1990	7	31	512,187	1,684.2	1,951.1	1,756.0	2,123	$16.24	$4,182.31	$5,180.20	$263,395.00	$248,792.00	$25,946.78	$31,143.22	$31,143.22	40.9%
505	1990	8	31	280,779	841.0	974.4	877.0	2,123	$16.24	$4,182.31	$2,587.15	$131,547.00	$149,232.00	$14,080.83	$16,684.22	$16,684.22	44.9%
506	1990	9	30	0	0.0	0.0	0.0	2,123	$16.24	$4,182.31	$0.00	$0.00	$0.00	$0.00	$16.24	$4,182.31	0.0%
507	1990	10	31	322,049	1,710.3	1,976.9	1,779.2	2,123	$16.24	$4,182.31	$5,248.05	$266,879.00	$55,170.00	$17,442.69	$22,706.98	$22,706.98	25.3%
508	1990	11	30	0	0.0	0.0	0.0	2,123	$16.24	$4,182.31	$0.00	$0.00	$0.00	$0.00	$16.24	$4,182.31	0.0%
509	1990	12	31	442,800	1,707.6	1,974.2	1,776.8	2,123	$16.24	$4,182.31	$5,242.15	$266,520.00	$176,280.00	$22,864.04	$28,122.43	$28,122.43	34.9%

Tab "Metering & Billing - 1000 cfs" of
File "Bayou Meto Study - 1000-cfs Pumping Station.XLS"

Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1										Minimum							
2										Monthly	Billing						
3				Metered			Billing	Ratchet	Customer	Demand	Demand	Incremental Energy		Energy			Monthly
4	Period-of-Record			Energy	Demands		Demand	Demand	Charge	Charge	Charge	Block 1	Block 2	Charge	Subtotal Bill	Total Bill	Load
5	YEAR	MO	DAYS	kWh	kWD	kVAD	kWD	kWD	$16.24	$1.97	$2.95	$0.05607	$0.04493	kWh			Factor
510	1991	1	31	1,112,658	1,924.7	2,183.8	1,965.5	2,123	$16.24	$4,182.31	$5,796.75	$294,818.00	$817,840.00	$53,276.00	$59,088.99	$59,088.99	77.7%
511	1991	2	28	323,985	1,733.2	1,999.4	1,799.5	2,123	$16.24	$4,182.31	$5,307.05	$269,922.00	$54,063.00	$17,563.58	$22,886.87	$22,886.87	27.8%
512	1991	3	31	501,519	1,689.6	1,956.4	1,760.8	2,087	$16.24	$4,111.39	$5,194.95	$264,118.00	$237,401.00	$25,475.52	$30,686.71	$30,686.71	39.9%
513	1991	4	30	1,232,578	1,939.2	2,197.5	1,977.7	2,087	$16.24	$4,111.39	$5,835.10	$296,661.00	$935,917.00	$58,684.53	$64,535.87	$64,535.87	88.3%
514	1991	5	31	932,999	1,815.2	2,079.1	1,871.2	1,978	$16.24	$3,896.66	$5,519.45	$280,683.00	$652,316.00	$45,046.45	$50,582.14	$50,582.14	69.1%
515	1991	6	30	325,633	1,871.4	2,133.2	1,919.8	1,978	$16.24	$3,896.66	$5,664.00	$287,975.00	$37,658.00	$17,838.73	$23,518.97	$23,518.97	24.2%
516	1991	7	31	0	0.0	0.0	0.0	1,978	$16.24	$3,896.66	$0.00	$0.00	$0.00	$0.00	$16.24	$3,896.66	0.0%
517	1991	8	31	0	0.0	0.0	0.0	1,978	$16.24	$3,896.66	$0.00	$0.00	$0.00	$0.00	$16.24	$3,896.66	0.0%
518	1991	9	30	0	0.0	0.0	0.0	1,978	$16.24	$3,896.66	$0.00	$0.00	$0.00	$0.00	$16.24	$3,896.66	0.0%
519	1991	10	31	89,974	2,067.4	2,316.9	2,085.2	2,085	$16.24	$4,107.45	$6,150.75	$312,785.00	$0.00	$5,044.84	$11,211.83	$11,211.83	5.8%
520	1991	11	30	1,022,882	2,099.9	2,347.8	2,113.0	2,113	$16.24	$4,162.61	$6,233.35	$316,955.00	$705,927.00	$49,488.97	$55,738.56	$55,738.56	67.7%
521	1991	12	31	1,335,963	1,998.1	2,252.7	2,027.4	2,113	$16.24	$4,162.61	$5,979.65	$304,111.00	$1,031,852.00	$63,412.61	$69,408.50	$69,408.50	89.9%
522	1992	1	31	620,498	2,045.6	2,296.7	2,067.1	2,113	$16.24	$4,162.61	$6,097.65	$310,061.00	$310,437.00	$31,333.05	$37,446.94	$37,446.94	40.8%
523	1992	2	29	144,508	1,681.5	1,948.4	1,753.6	2,113	$16.24	$4,162.61	$5,174.30	$263,033.00	$0.00	$8,102.55	$13,293.09	$13,293.09	12.3%
524	1992	3	31	883,583	1,737.3	2,003.4	1,803.0	2,113	$16.24	$4,162.61	$5,318.85	$270,457.00	$613,126.00	$42,712.28	$48,047.37	$48,047.37	68.4%
525	1992	4	30	454,153	1,949.6	2,207.3	1,986.5	2,113	$16.24	$4,162.61	$5,861.65	$297,982.00	$156,171.00	$23,724.61	$29,602.50	$29,602.50	32.4%
526	1992	5	31	501,502	1,670.2	1,937.2	1,743.5	2,113	$16.24	$4,162.61	$5,141.85	$261,522.00	$239,980.00	$25,445.84	$30,603.93	$30,603.93	40.4%
527	1992	6	30	1,239,468	1,843.0	2,106.0	1,895.4	2,113	$16.24	$4,162.61	$5,590.25	$284,304.00	$955,164.00	$58,856.44	$64,462.93	$64,462.93	93.4%
528	1992	7	31	1,127,980	1,910.7	2,170.5	1,953.5	2,113	$16.24	$4,162.61	$5,761.35	$293,022.00	$834,958.00	$53,944.41	$59,722.00	$59,722.00	79.3%
529	1992	8	31	456,994	2,124.9	2,373.2	2,135.9	2,136	$16.24	$4,207.92	$6,301.20	$320,382.00	$136,612.00	$24,101.80	$30,419.24	$30,419.24	28.9%
530	1992	9	30	141,965	1,670.2	1,937.2	1,743.5	2,136	$16.24	$4,207.92	$5,141.85	$261,522.00	$0.00	$7,959.97	$13,118.06	$13,118.06	11.8%
531	1992	10	31	0	0.0	0.0	0.0	2,136	$16.24	$4,207.92	$0.00	$0.00	$0.00	$0.00	$16.24	$4,207.92	0.0%
532	1992	11	30	678,255	2,191.8	2,440.9	2,196.8	2,197	$16.24	$4,328.09	$6,481.15	$329,525.00	$348,730.00	$34,144.91	$40,642.30	$40,642.30	43.0%
533	1992	12	31	1,139,291	2,223.9	2,473.3	2,226.0	2,226	$16.24	$4,385.22	$6,566.70	$333,894.00	$805,397.00	$54,907.92	$61,490.86	$61,490.86	68.9%
534	1993	1	31	1,301,668	2,270.8	2,520.4	2,268.3	2,268	$16.24	$4,467.96	$6,690.60	$340,250.00	$961,418.00	$62,274.33	$68,981.17	$68,981.17	77.0%
535	1993	2	28	807,337	2,157.7	2,406.5	2,165.8	2,268	$16.24	$4,467.96	$6,389.70	$324,872.00	$482,465.00	$39,892.73	$46,298.67	$46,298.67	55.7%
536	1993	3	31	1,042,272	2,230.4	2,479.8	2,231.8	2,268	$16.24	$4,467.96	$6,584.40	$334,769.00	$707,503.00	$50,558.61	$57,159.25	$57,159.25	62.8%
537	1993	4	30	1,327,620	2,155.5	2,404.2	2,163.8	2,268	$16.24	$4,467.96	$6,383.80	$324,573.00	$1,003,047.00	$63,265.71	$69,665.75	$69,665.75	85.5%
538	1993	5	31	1,395,450	1,948.2	2,205.9	1,985.4	2,268	$16.24	$4,467.96	$5,855.75	$297,803.00	$1,097,647.00	$66,015.09	$71,887.08	$71,887.08	96.3%
539	1993	6	30	1,333,199	1,923.0	2,182.2	1,964.0	2,268	$16.24	$4,467.96	$5,793.80	$294,601.00	$1,038,598.00	$63,182.49	$68,992.53	$68,992.53	96.3%
540	1993	7	31	332,871	1,836.5	2,099.7	1,889.7	2,268	$16.24	$4,467.96	$5,575.50	$283,458.00	$49,413.00	$18,113.62	$23,705.36	$23,705.36	24.4%
541	1993	8	31	246,868	1,795.5	2,060.1	1,854.1	2,268	$16.24	$4,467.96	$5,469.30	$278,119.00	$0.00	$13,841.91	$19,327.45	$19,327.45	18.5%
542	1993	9	30	66,223	1,843.0	2,106.0	1,895.4	2,268	$16.24	$4,467.96	$5,590.25	$284,304.00	$0.00	$3,713.12	$9,319.61	$9,319.61	5.0%
543	1993	10	31	128,673	1,899.6	2,160.0	1,944.0	2,268	$16.24	$4,467.96	$5,734.80	$291,602.00	$0.00	$7,214.69	$12,965.73	$12,965.73	9.1%
544	1993	11	30	543,272	1,951.0	2,208.6	1,987.7	2,268	$16.24	$4,467.96	$5,864.60	$298,161.00	$245,111.00	$27,730.72	$33,611.56	$33,611.56	38.7%
545	1993	12	31	1,026,440	1,969.3	2,225.8	2,003.2	2,268	$16.24	$4,467.96	$5,908.85	$300,480.00	$725,960.00	$49,465.30	$55,390.39	$55,390.39	70.1%
546	1994	1	31	211,430	984.3	1,112.6	1,001.3	2,232	$16.24	$4,397.04	$2,952.95	$150,195.00	$61,235.00	$11,172.72	$14,141.91	$14,141.91	28.9%
547	1994	2	28	523,629	1,906.0	2,166.1	1,949.5	2,232	$16.24	$4,397.04	$5,749.55	$292,422.00	$231,207.00	$26,784.23	$32,550.02	$32,550.02	40.9%
548	1994	3	31	1,166,957	1,856.4	2,118.8	1,906.9	2,164	$16.24	$4,263.08	$5,625.65	$286,040.00	$880,917.00	$55,617.86	$61,259.75	$61,259.75	84.5%
549	1994	4	30	1,073,858	2,238.2	2,487.7	2,238.9	2,239	$16.24	$4,410.83	$6,605.05	$335,838.00	$738,020.00	$51,989.68	$58,610.97	$58,610.97	66.6%
550	1994	5	31	1,264,942	2,036.3	2,288.2	2,059.4	2,239	$16.24	$4,410.83	$6,074.05	$308,907.00	$956,035.00	$60,275.07	$66,365.36	$66,365.36	83.5%
551	1994	6	30	970,012	1,758.8	2,024.4	1,822.0	2,239	$16.24	$4,410.83	$5,374.90	$273,295.00	$696,717.00	$46,627.15	$52,018.29	$52,018.29	76.6%
552	1994	7	31	371,726	1,909.4	2,169.3	1,952.4	2,239	$16.24	$4,410.83	$5,758.40	$292,858.00	$78,868.00	$19,964.09	$25,738.73	$25,738.73	26.2%
553	1994	8	31	0	0.0	0.0	0.0	2,239	$16.24	$4,410.83	$0.00	$0.00	$0.00	$0.00	$16.24	$4,410.83	0.0%
554	1994	9	30	0	0.0	0.0	0.0	2,239	$16.24	$4,410.83	$0.00	$0.00	$0.00	$0.00	$16.24	$4,410.83	0.0%
555	1994	10	31	0	0.0	0.0	0.0	2,239	$16.24	$4,410.83	$0.00	$0.00	$0.00	$0.00	$16.24	$4,410.83	0.0%
556	1994	11	30	712,250	2,247.2	2,496.7	2,247.0	2,247	$16.24	$4,426.59	$6,628.65	$337,052.00	$375,198.00	$35,756.15	$42,401.04	$42,401.04	44.0%
557	1994	12	31	888,018	2,042.8	2,294.2	2,064.8	2,247	$16.24	$4,426.59	$6,091.75	$309,719.00	$578,299.00	$43,348.92	$49,456.91	$49,456.91	58.4%
558	1995	1	31	868,167	2,204.6	2,453.8	2,208.4	2,247	$16.24	$4,426.59	$6,513.60	$331,264.00	$536,903.00	$42,697.02	$49,226.86	$49,226.86	52.9%
559	1995	2	28	256,196	1,973.8	2,230.1	2,007.0	2,247	$16.24	$4,426.59	$5,920.65	$301,057.00	$0.00	$14,364.92	$20,301.81	$20,301.81	19.3%
560	1995	3	31	967,465	2,017.7	2,270.9	2,043.8	2,247	$16.24	$4,426.59	$6,029.80	$306,574.00	$660,891.00	$46,883.44	$52,929.48	$52,929.48	64.4%
561	1995	4	30	794,282	1,893.6	2,154.3	1,938.9	2,247	$16.24	$4,426.59	$5,720.05	$290,835.00	$503,447.00	$38,926.99	$44,663.28	$44,663.28	58.3%
562	1995	5	31	1,422,716	2,022.9	2,275.8	2,048.2	2,247	$16.24	$4,426.59	$6,041.60	$307,231.00	$1,115,485.00	$67,345.18	$73,403.02	$73,403.02	94.5%
563	1995	6	30	778,476	2,383.6	2,632.9	2,369.6	2,370	$16.24	$4,668.90	$6,991.50	$355,444.00	$423,032.00	$38,936.57	$45,944.31	$45,944.31	45.4%
564	1995	7	31	617,315	2,289.7	2,539.3	2,285.4	2,370	$16.24	$4,668.90	$6,740.75	$342,803.00	$274,512.00	$31,554.79	$38,311.78	$38,311.78	36.2%
565	1995	8	31	213,922	1,873.5	2,135.2	1,921.7	2,370	$16.24	$4,668.90	$5,669.90	$288,251.00	$0.00	$11,994.62	$17,680.76	$17,680.76	15.3%

Little Bayou Meto
Flood Control Pumping Plant
1000-cfs (2 1750-hp)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1										Minimum							
2										Monthly	Billing						
3				Metered			Billing	Ratchet	Customer	Demand	Demand	Incremental Energy		Energy			Monthly
4	Period-of-Record			Energy	Demands		Demand	Demand	Charge	Charge	Charge	Block 1	Block 2	Charge	Subtotal Bill	Total Bill	Load
5	YEAR	MO	DAYS	kWh	kWD	kVAD	kWD	kWD	$16.24	$1.97	$2.95	$0.05607	$0.04493	kWh			Factor
566	1995	9	30	0	0.0	0.0	0.0	2,370	$16.24	$4,668.90	$0.00	$0.00	$0.00	$0.00	$16.24	$4,668.90	0.0%
567	1995	10	31	0	0.0	0.0	0.0	2,370	$16.24	$4,668.90	$0.00	$0.00	$0.00	$0.00	$16.24	$4,668.90	0.0%
568	1995	11	30	0	0.0	0.0	0.0	2,370	$16.24	$4,668.90	$0.00	$0.00	$0.00	$0.00	$16.24	$4,668.90	0.0%
569	1995	12	31	0	0.0	0.0	0.0	2,370	$16.24	$4,668.90	$0.00	$0.00	$0.00	$0.00	$16.24	$4,668.90	0.0%
570	1996	1	31	0	0.0	0.0	0.0	2,370	$16.24	$4,668.90	$0.00	$0.00	$0.00	$0.00	$16.24	$4,668.90	0.0%
571	1996	2	29	0	0.0	0.0	0.0	2,370	$16.24	$4,668.90	$0.00	$0.00	$0.00	$0.00	$16.24	$4,668.90	0.0%
572	1996	3	31	20,648	860.3	993.5	894.2	2,370	$16.24	$4,668.90	$2,637.30	$134,127.00	$0.00	$1,157.73	$3,811.27	$4,668.90	3.2%
573	1996	4	30	393,769	2,194.4	2,443.6	2,199.2	2,370	$16.24	$4,668.90	$6,487.05	$329,882.00	$63,887.00	$21,366.93	$27,870.22	$27,870.22	24.9%
574	1996	5	31	844,931	1,878.2	2,139.7	1,925.7	2,370	$16.24	$4,668.90	$5,681.70	$288,857.00	$556,074.00	$41,180.62	$46,878.56	$46,878.56	60.5%
575	1996	6	30	641,007	1,840.4	2,103.4	1,893.1	2,285	$16.24	$4,501.45	$5,584.35	$283,965.00	$357,042.00	$31,963.81	$37,564.40	$37,564.40	48.4%
576	1996	7	31	0	0.0	0.0	0.0	2,199	$16.24	$4,332.03	$0.00	$0.00	$0.00	$0.00	$16.24	$4,332.03	0.0%
577	1996	8	31	406,004	1,770.2	2,035.5	1,832.0	2,199	$16.24	$4,332.03	$5,404.40	$274,793.00	$131,211.00	$21,302.95	$26,723.59	$26,723.59	30.8%
578	1996	9	30	156,325	2,057.9	2,308.1	2,077.3	2,199	$16.24	$4,332.03	$6,127.15	$311,595.00	$0.00	$8,765.13	$14,908.52	$14,908.52	10.6%
579	1996	10	31	382,045	2,013.1	2,266.7	2,040.0	2,199	$16.24	$4,332.03	$6,018.00	$306,003.00	$76,042.00	$20,574.16	$26,608.40	$26,608.40	25.5%
580	1996	11	30	1,073,287	2,236.1	2,485.5	2,237.0	2,237	$16.24	$4,406.89	$6,599.15	$335,547.00	$737,740.00	$51,960.78	$58,576.17	$58,576.17	66.7%
581	1996	12	31	1,329,040	2,154.6	2,403.4	2,163.0	2,237	$16.24	$4,406.89	$6,380.85	$324,454.00	$1,004,586.00	$63,328.18	$69,725.27	$69,725.27	82.9%
582	1997	1	31	645,200	1,809.9	2,074.1	1,866.7	2,237	$16.24	$4,406.89	$5,507.65	$280,000.00	$365,200.00	$32,108.04	$37,631.93	$37,631.93	47.9%
583	1997	2	28	1,033,671	2,052.4	2,303.1	2,072.8	2,237	$16.24	$4,406.89	$6,115.35	$310,914.00	$722,757.00	$49,906.42	$56,038.01	$56,038.01	74.9%
584	1997	3	31	1,319,641	1,992.8	2,247.8	2,023.0	2,237	$16.24	$4,406.89	$5,967.85	$303,449.00	$1,016,192.00	$62,671.89	$68,655.98	$68,655.98	89.0%
585	1997	4	30	1,133,410	1,986.5	2,241.9	2,017.7	2,237	$16.24	$4,406.89	$5,953.10	$302,653.00	$830,757.00	$54,295.67	$60,265.01	$60,265.01	79.2%
586	1997	5	31	748,215	1,783.7	2,048.7	1,843.8	2,237	$16.24	$4,406.89	$5,439.80	$276,574.00	$471,641.00	$36,698.33	$42,154.37	$42,154.37	56.4%
587	1997	6	30	858,612	1,892.3	2,153.1	1,937.8	2,237	$16.24	$4,406.89	$5,717.10	$290,670.00	$567,942.00	$41,815.50	$47,548.84	$47,548.84	63.0%
588	1997	7	31	617,843	1,865.0	2,127.0	1,914.3	2,237	$16.24	$4,406.89	$5,646.30	$287,147.00	$330,696.00	$30,958.50	$36,621.04	$36,621.04	44.5%
589	1997	8	31	84,001	1,761.0	2,026.5	1,823.9	2,237	$16.24	$4,406.89	$5,380.80	$273,583.00	$0.00	$4,709.94	$10,106.98	$10,106.98	6.4%
590	1997	9	30	60,126	835.1	968.6	871.7	2,237	$16.24	$4,406.89	$2,572.40	$130,761.00	$0.00	$3,371.28	$5,959.92	$5,959.92	10.0%
591	1997	10	31	124,894	1,773.7	2,038.9	1,835.0	2,237	$16.24	$4,406.89	$5,413.25	$275,254.00	$0.00	$7,002.83	$12,432.32	$12,432.32	9.5%
592	1997	11	30	0	0.0	0.0	0.0	2,163	$16.24	$4,261.11	$0.00	$0.00	$0.00	$0.00	$16.24	$4,261.11	0.0%
593	1997	12	31	531,865	1,943.4	2,201.5	1,981.3	2,073	$16.24	$4,083.81	$5,843.95	$297,202.00	$234,663.00	$27,207.52	$33,067.71	$33,067.71	36.8%
594	1998	1	31	42,368	1,765.3	2,030.8	1,827.7	2,073	$16.24	$4,083.81	$5,392.60	$274,160.00	$0.00	$2,375.59	$7,784.43	$7,784.43	3.2%
595																	
596	MONTHS	589	SUM	233,452,583	#N/A	#N/A	#N/A	#N/A	$9,565.36	$2,352,999.52	$1,875,763.40	$95,381,125.00	$145,413,261.00	$11,469,782.46	$13,355,111.22	$14,269,866.72	#N/A
597	YEARS	49.08	MIN	0	0.0	0.0	0.0	0	$16.24	$0.00	$0.00	$0.00	$0.00	$0.00	$16.24	$16.24	0.0%
598	DAYS	17,928	AVG	396,354	1,055.5	1,199.5	1,079.6	2,028	$16.24	$3,994.91	$3,184.66	$161,937.39	$246,881.60	$19,473.31	$22,674.21	$24,227.28	29.0%
599	kHOURS	430.3	MAX	1,500,326	2,383.6	2,632.9	2,369.6	2,370	$16.24	$4,668.90	$6,991.50	$355,444.00	$1,157,328.00	$71,230.64	$77,993.53	$77,993.53	99.2%
600			ANNUAL	4,756,250	#N/A	#N/A	#N/A	#N/A	$194.88	$47,938.87	$38,215.89	$1,943,248.73	$2,962,579.17	$233,679.78	$272,090.55	$290,727.34	#N/A
601																Lifetime LF:	22.8%

Tab "Metering & Billing - 1000 cfs" of
File "Bayou Meto Study - 1000-cfs Pumping Station.XLS"

Little Bayou Meto
Flood Control Pumping Plant
3000-cfs (2 4000-hp)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1										Minimum							
2										Monthly	Billing						
3				Metered			Billing	Ratchet	Customer	Demand	Demand	Incremental Energy		Energy			Monthly
4	Period-of-Record			Energy	Demands		Demand	Demand	Charge	Charge	Charge	Block 1	Block 2	Charge	Subtotal Bill	Total Bill	Load
5	YEAR	MO	DAYS	kWh	kWD	kVAD	kWD	kWD	$16.24	$1.97	$2.95	$0.05607	$0.04493	kWh			Factor
6	1949	1	31	743,884	8,451.9	10,587.3	8,452	8,452	$16.24	$16,650.44	$24,933.40	$1,267,788.00	$0.00	$41,709.57	$66,659.21	$66,659.21	11.8%
7	1949	2	28	2,296,878	7,871.0	9,990.2	7,871	8,452	$16.24	$16,650.44	$23,219.45	$1,180,646.00	$1,116,232.00	$116,351.12	$139,586.81	$139,586.81	43.4%
8	1949	3	31	468,207	7,092.5	9,162.4	7,093	8,452	$16.24	$16,650.44	$20,924.35	$1,063,880.00	$0.00	$26,252.39	$47,192.98	$47,192.98	8.9%
9	1949	4	30	148,993	6,208.1	8,182.1	6,208	8,452	$16.24	$16,650.44	$18,313.60	$931,209.00	$0.00	$8,354.06	$26,683.90	$26,683.90	3.3%
10	1949	5	31	447,410	6,590.0	8,610.7	6,590	8,452	$16.24	$16,650.44	$19,440.50	$988,507.00	$0.00	$25,086.30	$44,543.04	$44,543.04	9.1%
11	1949	6	30	762,444	7,148.6	9,223.1	7,149	8,452	$16.24	$16,650.44	$21,089.55	$1,072,297.00	$0.00	$42,750.25	$63,856.04	$63,856.04	14.8%
12	1949	7	31	0	0.0	0.0	0	8,452	$16.24	$16,650.44	$0.00	$0.00	$0.00	$0.00	$16.24	$16,650.44	0.0%
13	1949	8	31	0	0.0	0.0	0	8,452	$16.24	$16,650.44	$0.00	$0.00	$0.00	$0.00	$16.24	$16,650.44	0.0%
14	1949	9	30	0	0.0	0.0	0	8,452	$16.24	$16,650.44	$0.00	$0.00	$0.00	$0.00	$16.24	$16,650.44	0.0%
15	1949	10	31	0	0.0	0.0	0	8,452	$16.24	$16,650.44	$0.00	$0.00	$0.00	$0.00	$16.24	$16,650.44	0.0%
16	1949	11	30	0	0.0	0.0	0	8,452	$16.24	$16,650.44	$0.00	$0.00	$0.00	$0.00	$16.24	$16,650.44	0.0%
17	1949	12	31	0	0.0	0.0	0	8,452	$16.24	$16,650.44	$0.00	$0.00	$0.00	$0.00	$16.24	$16,650.44	0.0%
18	1950	1	31	1,315,773	6,793.4	8,835.7	6,793	7,871	$16.24	$15,505.87	$20,039.35	$1,019,017.00	$296,756.00	$70,469.53	$90,525.12	$90,525.12	26.0%
19	1950	2	28	1,780,766	7,286.0	9,371.1	7,286	7,286	$16.24	$14,353.42	$21,493.70	$1,092,901.00	$687,865.00	$92,184.73	$113,694.67	$113,694.67	36.4%
20	1950	3	31	553,404	1,773.7	2,337.7	1,774	7,286	$16.24	$14,353.42	$5,233.30	$266,060.00	$287,344.00	$27,828.35	$33,077.89	$33,077.89	41.9%
21	1950	4	30	297,987	1,773.7	2,337.7	1,774	7,286	$16.24	$14,353.42	$5,233.30	$266,060.00	$31,927.00	$16,352.46	$21,602.00	$21,602.00	23.3%
22	1950	5	31	740,705	8,281.4	10,413.9	8,281	8,281	$16.24	$16,313.57	$24,428.95	$1,242,217.00	$0.00	$41,531.35	$65,976.54	$65,976.54	12.0%
23	1950	6	30	0	0.0	0.0	0	8,281	$16.24	$16,313.57	$0.00	$0.00	$0.00	$0.00	$16.24	$16,313.57	0.0%
24	1950	7	31	131,131	5,463.8	6,969.8	5,464	8,281	$16.24	$16,313.57	$16,118.80	$819,571.00	$0.00	$7,352.54	$23,487.58	$23,487.58	3.2%
25	1950	8	31	300,530	7,278.1	9,362.6	7,278	8,281	$16.24	$16,313.57	$21,470.10	$1,091,709.00	$0.00	$16,850.69	$38,337.03	$38,337.03	5.6%
26	1950	9	30	331,022	7,250.2	9,332.7	7,250	8,281	$16.24	$16,313.57	$21,387.50	$1,087,534.00	$0.00	$18,560.39	$39,964.13	$39,964.13	6.3%
27	1950	10	31	0	0.0	0.0	0	8,281	$16.24	$16,313.57	$0.00	$0.00	$0.00	$0.00	$16.24	$16,313.57	0.0%
28	1950	11	30	0	0.0	0.0	0	8,281	$16.24	$16,313.57	$0.00	$0.00	$0.00	$0.00	$16.24	$16,313.57	0.0%
29	1950	12	31	0	0.0	0.0	0	8,281	$16.24	$16,313.57	$0.00	$0.00	$0.00	$0.00	$16.24	$16,313.57	0.0%
30	1951	1	31	1,042,954	4,434.3	5,844.4	4,434	8,281	$16.24	$16,313.57	$13,080.30	$665,149.00	$377,805.00	$54,269.68	$67,366.22	$67,366.22	31.6%
31	1951	2	28	331,282	7,246.2	9,328.4	7,246	8,281	$16.24	$16,313.57	$21,375.70	$1,086,937.00	$0.00	$18,574.97	$39,966.91	$39,966.91	6.8%
32	1951	3	31	0	0.0	0.0	0	8,281	$16.24	$16,313.57	$0.00	$0.00	$0.00	$0.00	$16.24	$16,313.57	0.0%
33	1951	4	30	0	0.0	0.0	0	8,281	$16.24	$16,313.57	$0.00	$0.00	$0.00	$0.00	$16.24	$16,313.57	0.0%
34	1951	5	31	115,111	4,796.3	6,249.3	4,796	7,278	$16.24	$14,337.66	$14,148.20	$719,445.00	$0.00	$6,454.29	$20,618.73	$20,618.73	3.2%
35	1951	6	30	450,068	6,336.7	8,327.4	6,337	7,278	$16.24	$14,337.66	$18,694.15	$950,509.00	$0.00	$25,235.32	$43,945.71	$43,945.71	9.9%
36	1951	7	31	1,246,917	7,946.1	10,068.4	7,946	7,946	$16.24	$15,653.62	$23,440.70	$1,191,915.00	$55,002.00	$69,301.91	$92,758.85	$92,758.85	21.1%
37	1951	8	31	0	0.0	0.0	0	7,946	$16.24	$15,653.62	$0.00	$0.00	$0.00	$0.00	$16.24	$15,653.62	0.0%
38	1951	9	30	107,615	4,483.9	5,900.4	4,484	7,946	$16.24	$15,653.62	$13,227.80	$672,591.00	$0.00	$6,033.95	$19,277.99	$19,277.99	3.3%
39	1951	10	31	0	0.0	0.0	0	7,946	$16.24	$15,653.62	$0.00	$0.00	$0.00	$0.00	$16.24	$15,653.62	0.0%
40	1951	11	30	0	0.0	0.0	0	7,946	$16.24	$15,653.62	$0.00	$0.00	$0.00	$0.00	$16.24	$15,653.62	0.0%
41	1951	12	31	0	0.0	0.0	0	7,946	$16.24	$15,653.62	$0.00	$0.00	$0.00	$0.00	$16.24	$15,653.62	0.0%
42	1952	1	31	0	0.0	0.0	0	7,946	$16.24	$15,653.62	$0.00	$0.00	$0.00	$0.00	$16.24	$15,653.62	0.0%
43	1952	2	29	0	0.0	0.0	0	7,946	$16.24	$15,653.62	$0.00	$0.00	$0.00	$0.00	$16.24	$15,653.62	0.0%
44	1952	3	31	824,856	6,631.1	8,656.3	6,631	7,946	$16.24	$15,653.62	$19,561.45	$994,670.00	$0.00	$46,249.67	$65,827.36	$65,827.36	16.7%
45	1952	4	30	902,106	7,248.9	9,331.2	7,249	7,946	$16.24	$15,653.62	$21,384.55	$1,087,335.00	$0.00	$50,581.07	$71,981.86	$71,981.86	17.3%
46	1952	5	31	0	0.0	0.0	0	7,946	$16.24	$15,653.62	$0.00	$0.00	$0.00	$0.00	$16.24	$15,653.62	0.0%
47	1952	6	30	0	0.0	0.0	0	7,946	$16.24	$15,653.62	$0.00	$0.00	$0.00	$0.00	$16.24	$15,653.62	0.0%
48	1952	7	31	0	0.0	0.0	0	7,249	$16.24	$14,280.53	$0.00	$0.00	$0.00	$0.00	$16.24	$14,280.53	0.0%
49	1952	8	31	0	0.0	0.0	0	7,249	$16.24	$14,280.53	$0.00	$0.00	$0.00	$0.00	$16.24	$14,280.53	0.0%
50	1952	9	30	0	0.0	0.0	0	7,249	$16.24	$14,280.53	$0.00	$0.00	$0.00	$0.00	$16.24	$14,280.53	0.0%
51	1952	10	31	0	0.0	0.0	0	7,249	$16.24	$14,280.53	$0.00	$0.00	$0.00	$0.00	$16.24	$14,280.53	0.0%
52	1952	11	30	0	0.0	0.0	0	7,249	$16.24	$14,280.53	$0.00	$0.00	$0.00	$0.00	$16.24	$14,280.53	0.0%
53	1952	12	31	0	0.0	0.0	0	7,249	$16.24	$14,280.53	$0.00	$0.00	$0.00	$0.00	$16.24	$14,280.53	0.0%
54	1953	1	31	0	0.0	0.0	0	7,249	$16.24	$14,280.53	$0.00	$0.00	$0.00	$0.00	$16.24	$14,280.53	0.0%
55	1953	2	28	0	0.0	0.0	0	7,249	$16.24	$14,280.53	$0.00	$0.00	$0.00	$0.00	$16.24	$14,280.53	0.0%
56	1953	3	31	1,224,297	6,875.2	8,925.4	6,875	7,249	$16.24	$14,280.53	$20,281.25	$1,031,279.00	$193,018.00	$66,496.11	$86,793.60	$86,793.60	23.9%
57	1953	4	30	255,865	6,226.7	8,203.2	6,227	6,875	$16.24	$13,543.75	$18,369.65	$934,005.00	$0.00	$14,346.33	$32,732.22	$32,732.22	5.7%
58	1953	5	31	3,060,576	6,980.1	9,040.1	6,980	6,980	$16.24	$13,750.60	$20,591.00	$1,047,013.00	$2,013,563.00	$149,175.40	$169,782.64	$169,782.64	58.9%
59	1953	6	30	0	0.0	0.0	0	6,980	$16.24	$13,750.60	$0.00	$0.00	$0.00	$0.00	$16.24	$13,750.60	0.0%
60	1953	7	31	0	0.0	0.0	0	6,980	$16.24	$13,750.60	$0.00	$0.00	$0.00	$0.00	$16.24	$13,750.60	0.0%
61	1953	8	31	0	0.0	0.0	0	6,980	$16.24	$13,750.60	$0.00	$0.00	$0.00	$0.00	$16.24	$13,750.60	0.0%

Little Bayou Meto
Flood Control Pumping Plant
3000-cfs (2 4000-hp)

POR Metering and
Billing History

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1										Minimum							
2										Monthly	Billing						
3				Metered			Billing	Ratchet	Customer	Demand	Demand	Incremental Energy		Energy			Monthly
4	Period-of-Record			Energy	Demands		Demand	Demand	Charge	Charge	Charge	Block 1	Block 2	Charge	Subtotal Bill	Total Bill	Load
5	YEAR	MO	DAYS	kWh	kWD	kVAD	kWD	kWD	$16.24	$1.97	$2.95	$0.05607	$0.04493	kWh			Factor
62	1953	9	30	0	0.0	0.0	0	6,980	$16.24	$13,750.60	$0.00	$0.00	$0.00	$0.00	$16.24	$13,750.60	0.0%
63	1953	10	31	0	0.0	0.0	0	6,980	$16.24	$13,750.60	$0.00	$0.00	$0.00	$0.00	$16.24	$13,750.60	0.0%
64	1953	11	30	0	0.0	0.0	0	6,980	$16.24	$13,750.60	$0.00	$0.00	$0.00	$0.00	$16.24	$13,750.60	0.0%
65	1953	12	31	0	0.0	0.0	0	6,980	$16.24	$13,750.60	$0.00	$0.00	$0.00	$0.00	$16.24	$13,750.60	0.0%
66	1954	1	31	1,362,225	6,208.1	8,182.1	6,208	6,980	$16.24	$13,750.60	$18,313.60	$931,209.00	$431,016.00	$71,578.44	$89,908.28	$89,908.28	29.5%
67	1954	2	28	0	0.0	0.0	0	6,980	$16.24	$13,750.60	$0.00	$0.00	$0.00	$0.00	$16.24	$13,750.60	0.0%
68	1954	3	31	0	0.0	0.0	0	6,980	$16.24	$13,750.60	$0.00	$0.00	$0.00	$0.00	$16.24	$13,750.60	0.0%
69	1954	4	30	0	0.0	0.0	0	6,980	$16.24	$13,750.60	$0.00	$0.00	$0.00	$0.00	$16.24	$13,750.60	0.0%
70	1954	5	31	477,692	6,891.5	8,943.3	6,892	6,892	$16.24	$13,577.24	$20,331.40	$1,033,729.00	$0.00	$26,784.19	$47,131.83	$47,131.83	9.3%
71	1954	6	30	0	0.0	0.0	0	6,892	$16.24	$13,577.24	$0.00	$0.00	$0.00	$0.00	$16.24	$13,577.24	0.0%
72	1954	7	31	0	0.0	0.0	0	6,892	$16.24	$13,577.24	$0.00	$0.00	$0.00	$0.00	$16.24	$13,577.24	0.0%
73	1954	8	31	0	0.0	0.0	0	6,892	$16.24	$13,577.24	$0.00	$0.00	$0.00	$0.00	$16.24	$13,577.24	0.0%
74	1954	9	30	0	0.0	0.0	0	6,892	$16.24	$13,577.24	$0.00	$0.00	$0.00	$0.00	$16.24	$13,577.24	0.0%
75	1954	10	31	0	0.0	0.0	0	6,892	$16.24	$13,577.24	$0.00	$0.00	$0.00	$0.00	$16.24	$13,577.24	0.0%
76	1954	11	30	0	0.0	0.0	0	6,892	$16.24	$13,577.24	$0.00	$0.00	$0.00	$0.00	$16.24	$13,577.24	0.0%
77	1954	12	31	0	0.0	0.0	0	6,892	$16.24	$13,577.24	$0.00	$0.00	$0.00	$0.00	$16.24	$13,577.24	0.0%
78	1955	1	31	0	0.0	0.0	0	6,892	$16.24	$13,577.24	$0.00	$0.00	$0.00	$0.00	$16.24	$13,577.24	0.0%
79	1955	2	28	0	0.0	0.0	0	6,892	$16.24	$13,577.24	$0.00	$0.00	$0.00	$0.00	$16.24	$13,577.24	0.0%
80	1955	3	31	854,603	6,284.3	8,268.3	6,284	6,892	$16.24	$13,577.24	$18,537.80	$942,643.00	$0.00	$47,917.58	$66,471.62	$66,471.62	18.3%
81	1955	4	30	0	0.0	0.0	0	6,892	$16.24	$13,577.24	$0.00	$0.00	$0.00	$0.00	$16.24	$13,577.24	0.0%
82	1955	5	31	0	0.0	0.0	0	6,284	$16.24	$12,379.48	$0.00	$0.00	$0.00	$0.00	$16.24	$12,379.48	0.0%
83	1955	6	30	0	0.0	0.0	0	6,284	$16.24	$12,379.48	$0.00	$0.00	$0.00	$0.00	$16.24	$12,379.48	0.0%
84	1955	7	31	0	0.0	0.0	0	6,284	$16.24	$12,379.48	$0.00	$0.00	$0.00	$0.00	$16.24	$12,379.48	0.0%
85	1955	8	31	0	0.0	0.0	0	6,284	$16.24	$12,379.48	$0.00	$0.00	$0.00	$0.00	$16.24	$12,379.48	0.0%
86	1955	9	30	0	0.0	0.0	0	6,284	$16.24	$12,379.48	$0.00	$0.00	$0.00	$0.00	$16.24	$12,379.48	0.0%
87	1955	10	31	0	0.0	0.0	0	6,284	$16.24	$12,379.48	$0.00	$0.00	$0.00	$0.00	$16.24	$12,379.48	0.0%
88	1955	11	30	0	0.0	0.0	0	6,284	$16.24	$12,379.48	$0.00	$0.00	$0.00	$0.00	$16.24	$12,379.48	0.0%
89	1955	12	31	0	0.0	0.0	0	6,284	$16.24	$12,379.48	$0.00	$0.00	$0.00	$0.00	$16.24	$12,379.48	0.0%
90	1956	1	31	0	0.0	0.0	0	6,284	$16.24	$12,379.48	$0.00	$0.00	$0.00	$0.00	$16.24	$12,379.48	0.0%
91	1956	2	29	936,530	1,773.7	2,337.7	1,774	6,284	$16.24	$12,379.48	$5,233.30	$266,060.00	$670,470.00	$45,042.20	$50,291.74	$50,291.74	75.9%
92	1956	3	31	127,709	1,773.7	2,337.7	1,774	1,774	$16.24	$3,494.78	$5,233.30	$266,060.00	$0.00	$7,160.62	$12,410.16	$12,410.16	9.7%
93	1956	4	30	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
94	1956	5	31	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
95	1956	6	30	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
96	1956	7	31	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
97	1956	8	31	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
98	1956	9	30	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
99	1956	10	31	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
100	1956	11	30	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
101	1956	12	31	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
102	1957	1	31	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
103	1957	2	28	1,724,066	6,208.1	8,182.1	6,208	6,208	$16.24	$12,229.76	$18,313.60	$931,209.00	$792,857.00	$87,835.95	$106,165.79	$106,165.79	41.3%
104	1957	3	31	0	0.0	0.0	0	6,208	$16.24	$12,229.76	$0.00	$0.00	$0.00	$0.00	$16.24	$12,229.76	0.0%
105	1957	4	30	2,288,704	8,454.4	10,589.8	8,454	8,454	$16.24	$16,654.38	$24,939.30	$1,268,161.00	$1,020,543.00	$116,958.78	$141,914.32	$141,914.32	37.6%
106	1957	5	31	2,372,983	8,581.3	10,717.8	8,581	8,581	$16.24	$16,904.57	$25,313.95	$1,287,190.00	$1,085,793.00	$120,957.42	$146,287.61	$146,287.61	37.2%
107	1957	6	30	2,616,748	8,818.1	10,954.7	8,818	8,818	$16.24	$17,371.46	$26,013.10	$1,322,721.00	$1,294,027.00	$132,305.60	$158,334.94	$158,334.94	41.2%
108	1957	7	31	1,099,282	8,444.5	10,579.7	8,444	8,818	$16.24	$17,371.46	$24,909.80	$1,266,670.00	$0.00	$61,636.76	$86,562.80	$86,562.80	17.5%
109	1957	8	31	0	0.0	0.0	0	8,818	$16.24	$17,371.46	$0.00	$0.00	$0.00	$0.00	$16.24	$17,371.46	0.0%
110	1957	9	30	0	0.0	0.0	0	8,818	$16.24	$17,371.46	$0.00	$0.00	$0.00	$0.00	$16.24	$17,371.46	0.0%
111	1957	10	31	0	0.0	0.0	0	8,818	$16.24	$17,371.46	$0.00	$0.00	$0.00	$0.00	$16.24	$17,371.46	0.0%
112	1957	11	30	0	0.0	0.0	0	8,818	$16.24	$17,371.46	$0.00	$0.00	$0.00	$0.00	$16.24	$17,371.46	0.0%
113	1957	12	31	0	0.0	0.0	0	8,818	$16.24	$17,371.46	$0.00	$0.00	$0.00	$0.00	$16.24	$17,371.46	0.0%
114	1958	1	31	0	0.0	0.0	0	8,818	$16.24	$17,371.46	$0.00	$0.00	$0.00	$0.00	$16.24	$17,371.46	0.0%
115	1958	2	28	0	0.0	0.0	0	8,818	$16.24	$17,371.46	$0.00	$0.00	$0.00	$0.00	$16.24	$17,371.46	0.0%
116	1958	3	31	298,068	6,211.4	8,185.9	6,211	8,818	$16.24	$17,371.46	$18,322.45	$931,717.00	$0.00	$16,712.68	$35,051.37	$35,051.37	6.4%
117	1958	4	30	532,119	6,208.1	8,182.1	6,208	8,818	$16.24	$17,371.46	$18,313.60	$931,209.00	$0.00	$29,835.92	$48,165.76	$48,165.76	11.9%

Tab "Metering & Billing - 3000 cfs" of
File "Bayou Meto Study - 3000-cfs Pumping Station.XLS"

Little Bayou Meto
Flood Control Pumping Plant
3000-cfs (2 4000-hp)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1										Minimum							
2										Monthly	Billing						
3				Metered			Billing	Ratchet	Customer	Demand	Demand	Incremental Energy		Energy			Monthly
4	Period-of-Record			Energy	Demands		Demand	Demand	Charge	Charge	Charge	Block 1	Block 2	Charge	Subtotal Bill	Total Bill	Load
5	YEAR	MO	DAYS	kWh	kWD	kVAD	kWD	kWD	$16.24	$1.97	$2.95	$0.05607	$0.04493	kWh			Factor
118	1958	5	31	2,698,387	6,718.1	8,752.6	6,718	8,818	$16.24	$17,371.46	$19,818.10	$1,007,715.00	$1,690,672.00	$132,464.47	$152,298.81	$152,298.81	54.0%
119	1958	6	30	153,946	6,414.4	8,414.6	6,414	8,444	$16.24	$16,634.68	$18,921.30	$962,163.00	$0.00	$8,631.76	$27,569.30	$27,569.30	3.3%
120	1958	7	31	662,381	6,867.0	8,916.5	6,867	6,867	$16.24	$13,527.99	$20,257.65	$1,030,054.00	$0.00	$37,139.71	$57,413.60	$57,413.60	13.0%
121	1958	8	31	0	0.0	0.0	0	6,867	$16.24	$13,527.99	$0.00	$0.00	$0.00	$0.00	$16.24	$13,527.99	0.0%
122	1958	9	30	0	0.0	0.0	0	6,867	$16.24	$13,527.99	$0.00	$0.00	$0.00	$0.00	$16.24	$13,527.99	0.0%
123	1958	10	31	0	0.0	0.0	0	6,867	$16.24	$13,527.99	$0.00	$0.00	$0.00	$0.00	$16.24	$13,527.99	0.0%
124	1958	11	30	0	0.0	0.0	0	6,867	$16.24	$13,527.99	$0.00	$0.00	$0.00	$0.00	$16.24	$13,527.99	0.0%
125	1958	12	31	0	0.0	0.0	0	6,867	$16.24	$13,527.99	$0.00	$0.00	$0.00	$0.00	$16.24	$13,527.99	0.0%
126	1959	1	31	0	0.0	0.0	0	6,867	$16.24	$13,527.99	$0.00	$0.00	$0.00	$0.00	$16.24	$13,527.99	0.0%
127	1959	2	28	0	0.0	0.0	0	6,867	$16.24	$13,527.99	$0.00	$0.00	$0.00	$0.00	$16.24	$13,527.99	0.0%
128	1959	3	31	0	0.0	0.0	0	6,867	$16.24	$13,527.99	$0.00	$0.00	$0.00	$0.00	$16.24	$13,527.99	0.0%
129	1959	4	30	0	0.0	0.0	0	6,867	$16.24	$13,527.99	$0.00	$0.00	$0.00	$0.00	$16.24	$13,527.99	0.0%
130	1959	5	31	0	0.0	0.0	0	6,867	$16.24	$13,527.99	$0.00	$0.00	$0.00	$0.00	$16.24	$13,527.99	0.0%
131	1959	6	30	0	0.0	0.0	0	6,867	$16.24	$13,527.99	$0.00	$0.00	$0.00	$0.00	$16.24	$13,527.99	0.0%
132	1959	7	31	176,561	1,915.7	2,496.6	1,916	1,916	$16.24	$3,774.52	$5,652.20	$287,356.00	$0.00	$9,899.78	$15,568.22	$15,568.22	12.4%
133	1959	8	31	197,342	6,208.1	8,182.1	6,208	6,208	$16.24	$12,229.76	$18,313.60	$931,209.00	$0.00	$11,064.95	$29,394.79	$29,394.79	4.3%
134	1959	9	30	0	0.0	0.0	0	6,208	$16.24	$12,229.76	$0.00	$0.00	$0.00	$0.00	$16.24	$12,229.76	0.0%
135	1959	10	31	357,836	6,014.0	7,538.9	6,014	6,208	$16.24	$12,229.76	$17,741.30	$902,102.00	$0.00	$20,063.88	$37,821.42	$37,821.42	8.0%
136	1959	11	30	0	0.0	0.0	0	6,208	$16.24	$12,229.76	$0.00	$0.00	$0.00	$0.00	$16.24	$12,229.76	0.0%
137	1959	12	31	0	0.0	0.0	0	6,208	$16.24	$12,229.76	$0.00	$0.00	$0.00	$0.00	$16.24	$12,229.76	0.0%
138	1960	1	31	0	0.0	0.0	0	6,208	$16.24	$12,229.76	$0.00	$0.00	$0.00	$0.00	$16.24	$12,229.76	0.0%
139	1960	2	29	0	0.0	0.0	0	6,208	$16.24	$12,229.76	$0.00	$0.00	$0.00	$0.00	$16.24	$12,229.76	0.0%
140	1960	3	31	0	0.0	0.0	0	6,208	$16.24	$12,229.76	$0.00	$0.00	$0.00	$0.00	$16.24	$12,229.76	0.0%
141	1960	4	30	0	0.0	0.0	0	6,208	$16.24	$12,229.76	$0.00	$0.00	$0.00	$0.00	$16.24	$12,229.76	0.0%
142	1960	5	31	1,086,227	7,526.4	9,627.8	7,526	7,526	$16.24	$14,826.22	$22,201.70	$1,128,964.00	$0.00	$60,904.75	$83,122.69	$83,122.69	19.4%
143	1960	6	30	127,709	1,773.7	2,337.7	1,774	7,526	$16.24	$14,826.22	$5,233.30	$266,060.00	$0.00	$7,160.62	$12,410.16	$14,826.22	10.0%
144	1960	7	31	851,391	4,434.3	5,844.4	4,434	7,526	$16.24	$14,826.22	$13,080.30	$665,149.00	$186,242.00	$45,662.76	$58,759.30	$58,759.30	25.8%
145	1960	8	31	0	0.0	0.0	0	7,526	$16.24	$14,826.22	$0.00	$0.00	$0.00	$0.00	$16.24	$14,826.22	0.0%
146	1960	9	30	0	0.0	0.0	0	7,526	$16.24	$14,826.22	$0.00	$0.00	$0.00	$0.00	$16.24	$14,826.22	0.0%
147	1960	10	31	0	0.0	0.0	0	7,526	$16.24	$14,826.22	$0.00	$0.00	$0.00	$0.00	$16.24	$14,826.22	0.0%
148	1960	11	30	0	0.0	0.0	0	7,526	$16.24	$14,826.22	$0.00	$0.00	$0.00	$0.00	$16.24	$14,826.22	0.0%
149	1960	12	31	0	0.0	0.0	0	7,526	$16.24	$14,826.22	$0.00	$0.00	$0.00	$0.00	$16.24	$14,826.22	0.0%
150	1961	1	31	0	0.0	0.0	0	7,526	$16.24	$14,826.22	$0.00	$0.00	$0.00	$0.00	$16.24	$14,826.22	0.0%
151	1961	2	28	0	0.0	0.0	0	7,526	$16.24	$14,826.22	$0.00	$0.00	$0.00	$0.00	$16.24	$14,826.22	0.0%
152	1961	3	31	0	0.0	0.0	0	7,526	$16.24	$14,826.22	$0.00	$0.00	$0.00	$0.00	$16.24	$14,826.22	0.0%
153	1961	4	30	1,857,973	6,901.2	8,953.9	6,901	7,526	$16.24	$14,826.22	$20,357.95	$1,035,181.00	$822,792.00	$95,010.64	$115,384.83	$115,384.83	37.4%
154	1961	5	31	2,680,198	8,524.1	10,660.2	8,524	8,524	$16.24	$16,792.28	$25,145.80	$1,278,618.00	$1,401,580.00	$134,665.10	$159,827.14	$159,827.14	42.3%
155	1961	6	30	0	0.0	0.0	0	8,524	$16.24	$16,792.28	$0.00	$0.00	$0.00	$0.00	$16.24	$16,792.28	0.0%
156	1961	7	31	106,569	4,440.4	5,851.2	4,440	8,524	$16.24	$16,792.28	$13,098.00	$666,057.00	$0.00	$5,975.33	$19,089.57	$19,089.57	3.2%
157	1961	8	31	0	0.0	0.0	0	8,524	$16.24	$16,792.28	$0.00	$0.00	$0.00	$0.00	$16.24	$16,792.28	0.0%
158	1961	9	30	0	0.0	0.0	0	8,524	$16.24	$16,792.28	$0.00	$0.00	$0.00	$0.00	$16.24	$16,792.28	0.0%
159	1961	10	31	0	0.0	0.0	0	8,524	$16.24	$16,792.28	$0.00	$0.00	$0.00	$0.00	$16.24	$16,792.28	0.0%
160	1961	11	30	0	0.0	0.0	0	8,524	$16.24	$16,792.28	$0.00	$0.00	$0.00	$0.00	$16.24	$16,792.28	0.0%
161	1961	12	31	1,064,238	4,434.3	5,844.4	4,434	8,524	$16.24	$16,792.28	$13,080.30	$665,149.00	$399,089.00	$55,225.97	$68,322.51	$68,322.51	32.3%
162	1962	1	31	0	0.0	0.0	0	8,524	$16.24	$16,792.28	$0.00	$0.00	$0.00	$0.00	$16.24	$16,792.28	0.0%
163	1962	2	28	0	0.0	0.0	0	8,524	$16.24	$16,792.28	$0.00	$0.00	$0.00	$0.00	$16.24	$16,792.28	0.0%
164	1962	3	31	383,126	1,773.7	2,337.7	1,774	8,524	$16.24	$16,792.28	$5,233.30	$266,060.00	$117,066.00	$20,177.76	$25,427.30	$25,427.30	29.0%
165	1962	4	30	0	0.0	0.0	0	8,524	$16.24	$16,792.28	$0.00	$0.00	$0.00	$0.00	$16.24	$16,792.28	0.0%
166	1962	5	31	0	0.0	0.0	0	4,440	$16.24	$8,746.80	$0.00	$0.00	$0.00	$0.00	$16.24	$8,746.80	0.0%
167	1962	6	30	0	0.0	0.0	0	4,440	$16.24	$8,746.80	$0.00	$0.00	$0.00	$0.00	$16.24	$8,746.80	0.0%
168	1962	7	31	0	0.0	0.0	0	4,434	$16.24	$8,734.98	$0.00	$0.00	$0.00	$0.00	$16.24	$8,734.98	0.0%
169	1962	8	31	0	0.0	0.0	0	4,434	$16.24	$8,734.98	$0.00	$0.00	$0.00	$0.00	$16.24	$8,734.98	0.0%
170	1962	9	30	0	0.0	0.0	0	4,434	$16.24	$8,734.98	$0.00	$0.00	$0.00	$0.00	$16.24	$8,734.98	0.0%
171	1962	10	31	0	0.0	0.0	0	4,434	$16.24	$8,734.98	$0.00	$0.00	$0.00	$0.00	$16.24	$8,734.98	0.0%
172	1962	11	30	0	0.0	0.0	0	4,434	$16.24	$8,734.98	$0.00	$0.00	$0.00	$0.00	$16.24	$8,734.98	0.0%
173	1962	12	31	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%

Little Bayou Meto
Flood Control Pumping Plant
3000-cfs (2 4000-hp)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1										Minimum							
2										Monthly	Billing						
3				Metered			Billing	Ratchet	Customer	Demand	Demand	Incremental Energy		Energy			Monthly
4	Period-of-Record			Energy	Demands		Demand	Demand	Charge	Charge	Charge	Block 1	Block 2	Charge	Subtotal Bill	Total Bill	Load
5	YEAR	MO	DAYS	kWh	kWD	kVAD	kWD	kWD	$16.24	$1.97	$2.95	$0.05607	$0.04493	kWh			Factor
174	1963	1	31	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
175	1963	2	28	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
176	1963	3	31	0	0.0	0.0	0	0	$16.24	$0.00	$0.00	$0.00	$0.00	$0.00	$16.24	$16.24	0.0%
177	1963	4	30	0	0.0	0.0	0	0	$16.24	$0.00	$0.00	$0.00	$0.00	$0.00	$16.24	$16.24	0.0%
178	1963	5	31	510,834	1,773.7	2,337.7	1,774	1,774	$16.24	$3,494.78	$5,233.30	$266,060.00	$244,774.00	$25,915.68	$31,165.22	$31,165.22	38.7%
179	1963	6	30	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
180	1963	7	31	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
181	1963	8	31	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
182	1963	9	30	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
183	1963	10	31	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
184	1963	11	30	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
185	1963	12	31	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
186	1964	1	31	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
187	1964	2	29	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
188	1964	3	31	553,404	1,773.7	2,337.7	1,774	1,774	$16.24	$3,494.78	$5,233.30	$266,060.00	$287,344.00	$27,828.35	$33,077.89	$33,077.89	41.9%
189	1964	4	30	2,000,768	6,208.1	8,182.1	6,208	6,208	$16.24	$12,229.76	$18,313.60	$931,209.00	$1,069,559.00	$100,268.17	$118,598.01	$118,598.01	44.8%
190	1964	5	31	1,064,238	6,208.1	8,182.1	6,208	6,208	$16.24	$12,229.76	$18,313.60	$931,209.00	$133,029.00	$58,189.88	$76,519.72	$76,519.72	23.0%
191	1964	6	30	0	0.0	0.0	0	6,208	$16.24	$12,229.76	$0.00	$0.00	$0.00	$0.00	$16.24	$12,229.76	0.0%
192	1964	7	31	0	0.0	0.0	0	6,208	$16.24	$12,229.76	$0.00	$0.00	$0.00	$0.00	$16.24	$12,229.76	0.0%
193	1964	8	31	0	0.0	0.0	0	6,208	$16.24	$12,229.76	$0.00	$0.00	$0.00	$0.00	$16.24	$12,229.76	0.0%
194	1964	9	30	0	0.0	0.0	0	6,208	$16.24	$12,229.76	$0.00	$0.00	$0.00	$0.00	$16.24	$12,229.76	0.0%
195	1964	10	31	0	0.0	0.0	0	6,208	$16.24	$12,229.76	$0.00	$0.00	$0.00	$0.00	$16.24	$12,229.76	0.0%
196	1964	11	30	0	0.0	0.0	0	6,208	$16.24	$12,229.76	$0.00	$0.00	$0.00	$0.00	$16.24	$12,229.76	0.0%
197	1964	12	31	723,682	1,773.7	2,337.7	1,774	6,208	$16.24	$12,229.76	$5,233.30	$266,060.00	$457,622.00	$35,478.94	$40,728.48	$40,728.48	54.8%
198	1965	1	31	0	0.0	0.0	0	6,208	$16.24	$12,229.76	$0.00	$0.00	$0.00	$0.00	$16.24	$12,229.76	0.0%
199	1965	2	28	1,064,238	4,434.3	5,844.4	4,434	6,208	$16.24	$12,229.76	$13,080.30	$665,149.00	$399,089.00	$55,225.97	$68,322.51	$68,322.51	35.7%
200	1965	3	31	0	0.0	0.0	0	6,208	$16.24	$12,229.76	$0.00	$0.00	$0.00	$0.00	$16.24	$12,229.76	0.0%
201	1965	4	30	153,095	6,379.0	8,374.9	6,379	6,379	$16.24	$12,566.63	$18,818.05	$956,845.00	$0.00	$8,584.05	$27,418.34	$27,418.34	3.3%
202	1965	5	31	0	0.0	0.0	0	6,379	$16.24	$12,566.63	$0.00	$0.00	$0.00	$0.00	$16.24	$12,566.63	0.0%
203	1965	6	30	0	0.0	0.0	0	6,379	$16.24	$12,566.63	$0.00	$0.00	$0.00	$0.00	$16.24	$12,566.63	0.0%
204	1965	7	31	0	0.0	0.0	0	6,379	$16.24	$12,566.63	$0.00	$0.00	$0.00	$0.00	$16.24	$12,566.63	0.0%
205	1965	8	31	0	0.0	0.0	0	6,379	$16.24	$12,566.63	$0.00	$0.00	$0.00	$0.00	$16.24	$12,566.63	0.0%
206	1965	9	30	0	0.0	0.0	0	6,379	$16.24	$12,566.63	$0.00	$0.00	$0.00	$0.00	$16.24	$12,566.63	0.0%
207	1965	10	31	0	0.0	0.0	0	6,379	$16.24	$12,566.63	$0.00	$0.00	$0.00	$0.00	$16.24	$12,566.63	0.0%
208	1965	11	30	0	0.0	0.0	0	6,379	$16.24	$12,566.63	$0.00	$0.00	$0.00	$0.00	$16.24	$12,566.63	0.0%
209	1965	12	31	0	0.0	0.0	0	6,379	$16.24	$12,566.63	$0.00	$0.00	$0.00	$0.00	$16.24	$12,566.63	0.0%
210	1966	1	31	0	0.0	0.0	0	6,379	$16.24	$12,566.63	$0.00	$0.00	$0.00	$0.00	$16.24	$12,566.63	0.0%
211	1966	2	28	1,149,377	4,434.3	5,844.4	4,434	6,379	$16.24	$12,566.63	$13,080.30	$665,149.00	$484,228.00	$59,051.27	$72,147.81	$72,147.81	38.6%
212	1966	3	31	0	0.0	0.0	0	6,379	$16.24	$12,566.63	$0.00	$0.00	$0.00	$0.00	$16.24	$12,566.63	0.0%
213	1966	4	30	452,581	6,441.4	8,444.9	6,441	6,441	$16.24	$12,688.77	$19,000.95	$966,212.00	$0.00	$25,376.20	$44,393.39	$44,393.39	9.8%
214	1966	5	31	1,255,801	6,208.1	8,182.1	6,208	6,441	$16.24	$12,688.77	$18,313.60	$931,209.00	$324,592.00	$66,796.81	$85,126.65	$85,126.65	27.2%
215	1966	6	30	0	0.0	0.0	0	6,441	$16.24	$12,688.77	$0.00	$0.00	$0.00	$0.00	$16.24	$12,688.77	0.0%
216	1966	7	31	0	0.0	0.0	0	6,441	$16.24	$12,688.77	$0.00	$0.00	$0.00	$0.00	$16.24	$12,688.77	0.0%
217	1966	8	31	0	0.0	0.0	0	6,441	$16.24	$12,688.77	$0.00	$0.00	$0.00	$0.00	$16.24	$12,688.77	0.0%
218	1966	9	30	0	0.0	0.0	0	6,441	$16.24	$12,688.77	$0.00	$0.00	$0.00	$0.00	$16.24	$12,688.77	0.0%
219	1966	10	31	0	0.0	0.0	0	6,441	$16.24	$12,688.77	$0.00	$0.00	$0.00	$0.00	$16.24	$12,688.77	0.0%
220	1966	11	30	0	0.0	0.0	0	6,441	$16.24	$12,688.77	$0.00	$0.00	$0.00	$0.00	$16.24	$12,688.77	0.0%
221	1966	12	31	0	0.0	0.0	0	6,441	$16.24	$12,688.77	$0.00	$0.00	$0.00	$0.00	$16.24	$12,688.77	0.0%
222	1967	1	31	0	0.0	0.0	0	6,441	$16.24	$12,688.77	$0.00	$0.00	$0.00	$0.00	$16.24	$12,688.77	0.0%
223	1967	2	28	0	0.0	0.0	0	6,441	$16.24	$12,688.77	$0.00	$0.00	$0.00	$0.00	$16.24	$12,688.77	0.0%
224	1967	3	31	0	0.0	0.0	0	6,441	$16.24	$12,688.77	$0.00	$0.00	$0.00	$0.00	$16.24	$12,688.77	0.0%
225	1967	4	30	85,139	1,773.7	2,337.7	1,774	6,208	$16.24	$12,229.76	$5,233.30	$266,060.00	$0.00	$4,773.75	$10,023.29	$12,229.76	6.7%
226	1967	5	31	893,960	1,773.7	2,337.7	1,774	1,774	$16.24	$3,494.78	$5,233.30	$266,060.00	$627,900.00	$43,129.53	$48,379.07	$48,379.07	67.7%
227	1967	6	30	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
228	1967	7	31	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
229	1967	8	31	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%

Little Bayou Meto
Flood Control Pumping Plant
3000-cfs (2 4000-hp)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1										Minimum							
2										Monthly	Billing						
3				Metered			Billing	Ratchet	Customer	Demand	Demand	Incremental Energy		Energy			Monthly
4	Period-of-Record			Energy	Demands		Demand	Demand	Charge	Charge	Charge	Block 1	Block 2	Charge	Subtotal Bill	Total Bill	Load
5	YEAR	MO	DAYS	kWh	kWD	kVAD	kWD	kWD	$16.24	$1.97	$2.95	$0.05607	$0.04493	kWh			Factor
230	1967	9	30	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
231	1967	10	31	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
232	1967	11	30	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
233	1967	12	31	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
234	1968	1	31	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
235	1968	2	29	0	0.0	0.0	0	1,774	$16.24	$3,494.78	$0.00	$0.00	$0.00	$0.00	$16.24	$3,494.78	0.0%
236	1968	3	31	833,135	7,480.3	9,578.8	7,480	7,480	$16.24	$14,735.60	$22,066.00	$1,122,044.00	$0.00	$46,713.88	$68,796.12	$68,796.12	15.0%
237	1968	4	30	1,027,113	6,749.2	8,787.0	6,749	7,480	$16.24	$14,735.60	$19,909.55	$1,012,385.00	$14,728.00	$57,426.16	$77,351.95	$77,351.95	21.1%
238	1968	5	31	2,206,146	6,988.1	9,048.9	6,988	7,480	$16.24	$14,735.60	$20,614.60	$1,048,219.00	$1,157,927.00	$110,799.30	$131,430.14	$131,430.14	42.4%
239	1968	6	30	0	0.0	0.0	0	7,480	$16.24	$14,735.60	$0.00	$0.00	$0.00	$0.00	$16.24	$14,735.60	0.0%
240	1968	7	31	0	0.0	0.0	0	7,480	$16.24	$14,735.60	$0.00	$0.00	$0.00	$0.00	$16.24	$14,735.60	0.0%
241	1968	8	31	0	0.0	0.0	0	7,480	$16.24	$14,735.60	$0.00	$0.00	$0.00	$0.00	$16.24	$14,735.60	0.0%
242	1968	9	30	0	0.0	0.0	0	7,480	$16.24	$14,735.60	$0.00	$0.00	$0.00	$0.00	$16.24	$14,735.60	0.0%
243	1968	10	31	0	0.0	0.0	0	7,480	$16.24	$14,735.60	$0.00	$0.00	$0.00	$0.00	$16.24	$14,735.60	0.0%
244	1968	11	30	0	0.0	0.0	0	7,480	$16.24	$14,735.60	$0.00	$0.00	$0.00	$0.00	$16.24	$14,735.60	0.0%
245	1968	12	31	1,293,254	6,508.8	8,520.2	6,509	7,480	$16.24	$14,735.60	$19,201.55	$976,323.00	$316,931.00	$68,982.14	$88,199.93	$88,199.93	26.7%
246	1969	1	31	199,467	6,537.4	8,552.1	6,537	7,480	$16.24	$14,735.60	$19,284.15	$980,611.00	$0.00	$11,184.13	$30,484.52	$30,484.52	4.1%
247	1969	2	28	2,611,280	7,044.4	9,110.1	7,044	7,480	$16.24	$14,735.60	$20,779.80	$1,056,656.00	$1,554,624.00	$129,095.96	$149,892.00	$149,892.00	55.2%
248	1969	3	31	485,821	7,618.4	9,725.1	7,618	7,618	$16.24	$15,007.46	$22,473.10	$1,142,756.00	$0.00	$27,239.97	$49,729.31	$49,729.31	8.6%
249	1969	4	30	615,520	6,547.3	8,563.1	6,547	7,618	$16.24	$15,007.46	$19,313.65	$982,092.00	$0.00	$34,512.18	$53,842.07	$53,842.07	13.1%
250	1969	5	31	314,550	6,749.2	8,787.0	6,749	7,618	$16.24	$15,007.46	$19,909.55	$1,012,385.00	$0.00	$17,636.81	$37,562.60	$37,562.60	6.3%
251	1969	6	30	153,338	6,389.1	8,386.2	6,389	7,618	$16.24	$15,007.46	$18,847.55	$958,365.00	$0.00	$8,597.68	$27,461.47	$27,461.47	3.3%
252	1969	7	31	0	0.0	0.0	0	7,618	$16.24	$15,007.46	$0.00	$0.00	$0.00	$0.00	$16.24	$15,007.46	0.0%
253	1969	8	31	0	0.0	0.0	0	7,618	$16.24	$15,007.46	$0.00	$0.00	$0.00	$0.00	$16.24	$15,007.46	0.0%
254	1969	9	30	0	0.0	0.0	0	7,618	$16.24	$15,007.46	$0.00	$0.00	$0.00	$0.00	$16.24	$15,007.46	0.0%
255	1969	10	31	0	0.0	0.0	0	7,618	$16.24	$15,007.46	$0.00	$0.00	$0.00	$0.00	$16.24	$15,007.46	0.0%
256	1969	11	30	0	0.0	0.0	0	7,618	$16.24	$15,007.46	$0.00	$0.00	$0.00	$0.00	$16.24	$15,007.46	0.0%
257	1969	12	31	0	0.0	0.0	0	7,618	$16.24	$15,007.46	$0.00	$0.00	$0.00	$0.00	$16.24	$15,007.46	0.0%
258	1970	1	31	817,842	7,291.3	9,376.8	7,291	7,618	$16.24	$15,007.46	$21,508.45	$1,093,696.00	$0.00	$45,856.42	$67,381.11	$67,381.11	15.1%
259	1970	2	28	0	0.0	0.0	0	7,618	$16.24	$15,007.46	$0.00	$0.00	$0.00	$0.00	$16.24	$15,007.46	0.0%
260	1970	3	31	596,154	6,208.1	8,182.1	6,208	7,291	$16.24	$14,363.27	$18,313.60	$931,209.00	$0.00	$33,426.33	$51,756.17	$51,756.17	12.9%
261	1970	4	30	1,119,630	7,601.6	9,707.4	7,602	7,602	$16.24	$14,975.94	$22,425.90	$1,140,239.00	$0.00	$62,777.67	$85,219.81	$85,219.81	20.5%
262	1970	5	31	1,515,043	7,508.0	9,608.2	7,508	7,602	$16.24	$14,975.94	$22,148.60	$1,126,197.00	$388,846.00	$80,616.72	$102,781.56	$102,781.56	27.1%
263	1970	6	30	405,433	4,434.3	5,844.4	4,434	7,602	$16.24	$14,975.94	$13,080.30	$665,149.00	$0.00	$22,732.62	$35,829.16	$35,829.16	12.7%
264	1970	7	31	0	0.0	0.0	0	7,602	$16.24	$14,975.94	$0.00	$0.00	$0.00	$0.00	$16.24	$14,975.94	0.0%
265	1970	8	31	0	0.0	0.0	0	7,602	$16.24	$14,975.94	$0.00	$0.00	$0.00	$0.00	$16.24	$14,975.94	0.0%
266	1970	9	30	0	0.0	0.0	0	7,602	$16.24	$14,975.94	$0.00	$0.00	$0.00	$0.00	$16.24	$14,975.94	0.0%
267	1970	10	31	161,352	6,723.0	8,758.0	6,723	7,602	$16.24	$14,975.94	$19,832.85	$1,008,453.00	$0.00	$9,047.03	$28,896.12	$28,896.12	3.2%
268	1970	11	30	0	0.0	0.0	0	7,602	$16.24	$14,975.94	$0.00	$0.00	$0.00	$0.00	$16.24	$14,975.94	0.0%
269	1970	12	31	0	0.0	0.0	0	7,602	$16.24	$14,975.94	$0.00	$0.00	$0.00	$0.00	$16.24	$14,975.94	0.0%
270	1971	1	31	643,295	6,277.5	8,260.6	6,278	7,602	$16.24	$14,975.94	$18,520.10	$941,627.00	$0.00	$36,069.55	$54,605.89	$54,605.89	13.8%
271	1971	2	28	0	0.0	0.0	0	7,602	$16.24	$14,975.94	$0.00	$0.00	$0.00	$0.00	$16.24	$14,975.94	0.0%
272	1971	3	31	1,068,377	6,208.1	8,182.1	6,208	7,602	$16.24	$14,975.94	$18,313.60	$931,209.00	$137,168.00	$58,375.85	$76,705.69	$76,705.69	23.1%
273	1971	4	30	213,115	1,784.9	2,350.3	1,785	7,508	$16.24	$14,790.76	$5,265.75	$267,730.00	$0.00	$11,949.35	$17,231.34	$17,231.34	16.6%
274	1971	5	31	0	0.0	0.0	0	6,723	$16.24	$13,244.31	$0.00	$0.00	$0.00	$0.00	$16.24	$13,244.31	0.0%
275	1971	6	30	0	0.0	0.0	0	6,723	$16.24	$13,244.31	$0.00	$0.00	$0.00	$0.00	$16.24	$13,244.31	0.0%
276	1971	7	31	0	0.0	0.0	0	6,723	$16.24	$13,244.31	$0.00	$0.00	$0.00	$0.00	$16.24	$13,244.31	0.0%
277	1971	8	31	0	0.0	0.0	0	6,723	$16.24	$13,244.31	$0.00	$0.00	$0.00	$0.00	$16.24	$13,244.31	0.0%
278	1971	9	30	0	0.0	0.0	0	6,723	$16.24	$13,244.31	$0.00	$0.00	$0.00	$0.00	$16.24	$13,244.31	0.0%
279	1971	10	31	0	0.0	0.0	0	6,278	$16.24	$12,367.66	$0.00	$0.00	$0.00	$0.00	$16.24	$12,367.66	0.0%
280	1971	11	30	0	0.0	0.0	0	6,278	$16.24	$12,367.66	$0.00	$0.00	$0.00	$0.00	$16.24	$12,367.66	0.0%
281	1971	12	31	2,010,811	7,684.1	9,794.4	7,684	7,684	$16.24	$15,137.48	$22,667.80	$1,152,620.00	$858,191.00	$103,185.93	$125,869.97	$125,869.97	35.2%
282	1972	1	31	772,751	6,358.7	8,352.1	6,359	7,684	$16.24	$15,137.48	$18,759.05	$953,804.00	$0.00	$43,328.18	$62,103.47	$62,103.47	16.3%
283	1972	2	29	85,139	1,773.7	2,337.7	1,774	7,684	$16.24	$15,137.48	$5,233.30	$266,060.00	$0.00	$4,773.75	$10,023.29	$15,137.48	6.9%
284	1972	3	31	0	0.0	0.0	0	7,684	$16.24	$15,137.48	$0.00	$0.00	$0.00	$0.00	$16.24	$15,137.48	0.0%
285	1972	4	30	106,424	4,434.3	5,844.4	4,434	7,684	$16.24	$15,137.48	$13,080.30	$665,149.00	$0.00	$5,967.18	$19,063.72	$19,063.72	3.3%

Little Bayou Meto
Flood Control Pumping Plant
3000-cfs (2 4000-hp)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1										Minimum							
2										Monthly	Billing						
3				Metered			Billing	Ratchet	Customer	Demand	Demand	Incremental Energy		Energy			Monthly
4	Period-of-Record			Energy	Demands		Demand	Demand	Charge	Charge	Charge	Block 1	Block 2	Charge	Subtotal Bill	Total Bill	Load
5	YEAR	MO	DAYS	kWh	kWD	kVAD	kWD	kWD	$16.24	$1.97	$2.95	$0.05607	$0.04493	kWh			Factor
286	1972	5	31	0	0.0	0.0	0	7,684	$16.24	$15,137.48	$0.00	$0.00	$0.00	$0.00	$16.24	$15,137.48	0.0%
287	1972	6	30	0	0.0	0.0	0	7,684	$16.24	$15,137.48	$0.00	$0.00	$0.00	$0.00	$16.24	$15,137.48	0.0%
288	1972	7	31	0	0.0	0.0	0	7,684	$16.24	$15,137.48	$0.00	$0.00	$0.00	$0.00	$16.24	$15,137.48	0.0%
289	1972	8	31	0	0.0	0.0	0	7,684	$16.24	$15,137.48	$0.00	$0.00	$0.00	$0.00	$16.24	$15,137.48	0.0%
290	1972	9	30	0	0.0	0.0	0	7,684	$16.24	$15,137.48	$0.00	$0.00	$0.00	$0.00	$16.24	$15,137.48	0.0%
291	1972	10	31	0	0.0	0.0	0	7,684	$16.24	$15,137.48	$0.00	$0.00	$0.00	$0.00	$16.24	$15,137.48	0.0%
292	1972	11	30	2,680,678	7,264.8	9,348.4	7,265	7,684	$16.24	$15,137.48	$21,431.75	$1,089,721.00	$1,590,957.00	$132,582.35	$154,030.34	$154,030.34	51.2%
293	1972	12	31	2,408,601	6,701.7	8,734.5	6,702	7,265	$16.24	$14,312.05	$19,770.90	$1,005,256.00	$1,403,345.00	$119,416.99	$139,204.13	$139,204.13	48.3%
294	1973	1	31	832,011	7,754.9	9,868.8	7,755	7,755	$16.24	$15,277.35	$22,877.25	$1,163,241.00	$0.00	$46,650.88	$69,544.37	$69,544.37	14.4%
295	1973	2	28	2,207,450	8,137.2	10,266.0	8,137	8,137	$16.24	$16,029.89	$24,004.15	$1,220,577.00	$986,873.00	$112,777.96	$136,798.35	$136,798.35	40.4%
296	1973	3	31	2,149,368	8,102.1	10,229.8	8,102	8,137	$16.24	$16,029.89	$23,900.90	$1,215,313.00	$934,055.00	$110,109.69	$134,026.83	$134,026.83	35.7%
297	1973	4	30	3,498,587	8,132.6	10,261.3	8,133	8,137	$16.24	$16,029.89	$23,992.35	$1,219,890.00	$2,278,697.00	$170,781.09	$194,789.68	$194,789.68	59.7%
298	1973	5	31	4,562,550	7,985.9	10,109.7	7,986	8,137	$16.24	$16,029.89	$23,558.70	$1,197,887.00	$3,364,663.00	$218,339.83	$241,914.77	$241,914.77	76.8%
299	1973	6	30	882,356	8,195.3	10,325.7	8,195	8,195	$16.24	$16,144.15	$24,175.25	$1,229,300.00	$0.00	$49,473.69	$73,665.18	$73,665.18	15.0%
300	1973	7	31	0	0.0	0.0	0	8,195	$16.24	$16,144.15	$0.00	$0.00	$0.00	$0.00	$16.24	$16,144.15	0.0%
301	1973	8	31	0	0.0	0.0	0	8,195	$16.24	$16,144.15	$0.00	$0.00	$0.00	$0.00	$16.24	$16,144.15	0.0%
302	1973	9	30	0	0.0	0.0	0	8,195	$16.24	$16,144.15	$0.00	$0.00	$0.00	$0.00	$16.24	$16,144.15	0.0%
303	1973	10	31	290,622	7,613.2	9,719.6	7,613	8,195	$16.24	$16,144.15	$22,458.35	$1,141,981.00	$0.00	$16,295.16	$38,769.75	$38,769.75	5.1%
304	1973	11	30	890,790	8,782.0	10,918.7	8,782	8,782	$16.24	$17,300.54	$25,906.90	$1,317,299.00	$0.00	$49,946.61	$75,869.75	$75,869.75	14.1%
305	1973	12	31	2,078,054	7,680.3	9,790.4	7,680	8,782	$16.24	$17,300.54	$22,656.00	$1,152,040.00	$926,014.00	$106,200.69	$128,872.93	$128,872.93	36.4%
306	1974	1	31	2,395,226	7,325.7	9,413.7	7,326	8,782	$16.24	$17,300.54	$21,611.70	$1,098,859.00	$1,296,367.00	$119,858.79	$141,486.73	$141,486.73	43.9%
307	1974	2	28	902,568	6,433.0	8,435.4	6,433	8,782	$16.24	$17,300.54	$18,977.35	$964,947.00	$0.00	$50,606.99	$69,600.58	$69,600.58	20.9%
308	1974	3	31	1,037,173	7,650.6	9,759.1	7,651	8,782	$16.24	$17,300.54	$22,570.45	$1,147,593.00	$0.00	$58,154.27	$80,740.96	$80,740.96	18.2%
309	1974	4	30	728,101	6,208.1	8,182.1	6,208	8,782	$16.24	$17,300.54	$18,313.60	$931,209.00	$0.00	$40,824.64	$59,154.48	$59,154.48	16.3%
310	1974	5	31	1,911,794	7,166.3	9,242.2	7,166	8,782	$16.24	$17,300.54	$21,139.70	$1,074,940.00	$836,854.00	$97,871.74	$119,027.68	$119,027.68	35.9%
311	1974	6	30	3,241,267	8,341.3	10,474.9	8,341	8,782	$16.24	$17,300.54	$24,605.95	$1,251,188.00	$1,990,079.00	$159,568.36	$184,190.55	$184,190.55	54.0%
312	1974	7	31	415,738	4,434.3	5,844.4	4,434	8,782	$16.24	$17,300.54	$13,080.30	$665,149.00	$0.00	$23,310.41	$36,406.95	$36,406.95	12.6%
313	1974	8	31	439,029	6,208.1	8,182.1	6,208	8,782	$16.24	$17,300.54	$18,313.60	$931,209.00	$0.00	$24,616.36	$42,946.20	$42,946.20	9.5%
314	1974	9	30	301,116	6,326.6	8,315.9	6,327	8,782	$16.24	$17,300.54	$18,664.65	$948,987.00	$0.00	$16,883.58	$35,564.47	$35,564.47	6.6%
315	1974	10	31	43,046	1,793.6	2,360.2	1,794	8,782	$16.24	$17,300.54	$5,292.30	$269,036.00	$0.00	$2,413.58	$7,722.12	$17,300.54	3.2%
316	1974	11	30	1,811,442	7,838.7	9,956.6	7,839	8,341	$16.24	$16,431.77	$23,125.05	$1,175,810.00	$635,632.00	$94,486.61	$117,627.90	$117,627.90	32.1%
317	1974	12	31	297,987	6,208.1	8,182.1	6,208	8,341	$16.24	$16,431.77	$18,313.60	$931,209.00	$0.00	$16,708.12	$35,037.96	$35,037.96	6.5%
318	1975	1	31	1,579,312	7,204.7	9,283.6	7,205	8,341	$16.24	$16,431.77	$21,254.75	$1,080,703.00	$498,609.00	$82,997.52	$104,268.51	$104,268.51	29.5%
319	1975	2	28	834,364	7,373.3	9,464.7	7,373	8,341	$16.24	$16,431.77	$21,750.35	$1,106,002.00	$0.00	$46,782.80	$68,549.39	$68,549.39	16.8%
320	1975	3	31	2,489,604	7,654.5	9,763.2	7,654	8,341	$16.24	$16,431.77	$22,579.30	$1,148,173.00	$1,341,431.00	$124,648.55	$147,244.09	$147,244.09	43.7%
321	1975	4	30	1,258,034	8,246.5	10,378.2	8,247	8,341	$16.24	$16,431.77	$24,328.65	$1,236,978.00	$21,056.00	$70,303.40	$94,648.29	$94,648.29	21.2%
322	1975	5	31	2,298,965	7,715.0	9,827.0	7,715	8,341	$16.24	$16,431.77	$22,759.25	$1,157,257.00	$1,141,708.00	$116,184.34	$138,959.83	$138,959.83	40.1%
323	1975	6	30	1,392,699	7,637.7	9,745.5	7,638	8,247	$16.24	$16,246.59	$22,532.10	$1,145,658.00	$247,041.00	$75,336.60	$97,884.94	$97,884.94	25.3%
324	1975	7	31	0	0.0	0.0	0	8,247	$16.24	$16,246.59	$0.00	$0.00	$0.00	$0.00	$16.24	$16,246.59	0.0%
325	1975	8	31	42,581	1,774.2	2,338.3	1,774	8,247	$16.24	$16,246.59	$5,233.30	$266,132.00	$0.00	$2,387.53	$7,637.07	$16,246.59	3.2%
326	1975	9	30	0	0.0	0.0	0	8,247	$16.24	$16,246.59	$0.00	$0.00	$0.00	$0.00	$16.24	$16,246.59	0.0%
327	1975	10	31	0	0.0	0.0	0	8,247	$16.24	$16,246.59	$0.00	$0.00	$0.00	$0.00	$16.24	$16,246.59	0.0%
328	1975	11	30	42,570	1,773.7	2,337.7	1,774	8,247	$16.24	$16,246.59	$5,233.30	$266,060.00	$0.00	$2,386.87	$7,636.41	$16,246.59	3.3%
329	1975	12	31	0	0.0	0.0	0	8,247	$16.24	$16,246.59	$0.00	$0.00	$0.00	$0.00	$16.24	$16,246.59	0.0%
330	1976	1	31	282,876	4,434.3	5,844.4	4,434	8,247	$16.24	$16,246.59	$13,080.30	$665,149.00	$0.00	$15,860.84	$28,957.38	$28,957.38	8.6%
331	1976	2	29	440,169	1,937.2	2,520.4	1,937	8,247	$16.24	$16,246.59	$5,714.15	$290,586.00	$149,583.00	$23,013.92	$28,744.31	$28,744.31	32.6%
332	1976	3	31	1,288,017	6,436.4	8,439.2	6,436	8,247	$16.24	$16,246.59	$18,986.20	$965,453.00	$322,564.00	$68,625.75	$87,628.19	$87,628.19	26.9%
333	1976	4	30	1,094,466	7,531.7	9,633.4	7,532	7,715	$16.24	$15,198.55	$22,219.40	$1,129,755.00	$0.00	$61,366.70	$83,602.34	$83,602.34	20.2%
334	1976	5	31	1,474,234	6,350.2	8,342.6	6,350	7,638	$16.24	$15,046.86	$18,732.50	$952,537.00	$521,697.00	$76,848.60	$95,597.34	$95,597.34	31.2%
335	1976	6	30	705,509	6,247.0	8,226.2	6,247	7,532	$16.24	$14,838.04	$18,428.65	$937,055.00	$0.00	$39,557.92	$58,002.81	$58,002.81	15.7%
336	1976	7	31	1,079,624	7,179.1	9,256.0	7,179	7,532	$16.24	$14,838.04	$21,178.05	$1,076,861.00	$2,763.00	$60,503.74	$81,698.03	$81,698.03	20.2%
337	1976	8	31	42,570	1,773.7	2,337.7	1,774	7,532	$16.24	$14,838.04	$5,233.30	$266,060.00	$0.00	$2,386.87	$7,636.41	$14,838.04	3.2%
338	1976	9	30	0	0.0	0.0	0	7,532	$16.24	$14,838.04	$0.00	$0.00	$0.00	$0.00	$16.24	$14,838.04	0.0%
339	1976	10	31	130,812	1,903.1	2,482.6	1,903	7,532	$16.24	$14,838.04	$5,613.85	$285,458.00	$0.00	$7,334.65	$12,964.74	$14,838.04	9.2%
340	1976	11	30	266,678	1,944.3	2,528.1	1,944	7,532	$16.24	$14,838.04	$5,734.80	$291,638.00	$0.00	$14,952.63	$20,703.67	$20,703.67	19.1%
341	1976	12	31	0	0.0	0.0	0	7,532	$16.24	$14,838.04	$0.00	$0.00	$0.00	$0.00	$16.24	$14,838.04	0.0%

Little Bayou Meto
Flood Control Pumping Plant
3000-cfs (2 4000-hp)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1										Minimum							
2										Monthly	Billing						
3				Metered			Billing	Ratchet	Customer	Demand	Demand	Incremental Energy		Energy			Monthly
4	Period-of-Record			Energy	Demands		Demand	Demand	Charge	Charge	Charge	Block 1	Block 2	Charge	Subtotal Bill	Total Bill	Load
5	YEAR	MO	DAYS	kWh	kWD	kVAD	kWD	kWD	$16.24	$1.97	$2.95	$0.05607	$0.04493	kWh			Factor
342	1977	1	31	300,374	1,865.4	2,440.8	1,865	7,532	$16.24	$14,838.04	$5,501.75	$279,815.00	$20,559.00	$16,612.94	$22,130.93	$22,130.93	21.6%
343	1977	2	28	0	0.0	0.0	0	7,532	$16.24	$14,838.04	$0.00	$0.00	$0.00	$16.24	$14,838.04	$14,838.04	0.0%
344	1977	3	31	1,619,193	7,722.8	9,835.1	7,723	7,723	$16.24	$15,214.31	$22,782.85	$1,158,415.00	$460,778.00	$85,655.08	$108,454.17	$108,454.17	28.2%
345	1977	4	30	1,510,912	6,956.0	9,013.8	6,956	7,723	$16.24	$15,214.31	$20,520.20	$1,043,393.00	$467,519.00	$79,508.67	$100,045.11	$100,045.11	30.2%
346	1977	5	31	173,545	1,887.1	2,464.9	1,887	7,723	$16.24	$15,214.31	$5,566.65	$283,065.00	$0.00	$9,730.66	$15,313.55	$15,313.55	12.4%
347	1977	6	30	176,595	1,973.6	2,560.3	1,974	7,723	$16.24	$15,214.31	$5,823.30	$296,042.00	$0.00	$9,901.66	$15,741.20	$15,741.20	12.4%
348	1977	7	31	418,433	4,434.3	5,844.4	4,434	7,723	$16.24	$15,214.31	$13,080.30	$665,149.00	$0.00	$23,461.52	$36,558.06	$36,558.06	12.7%
349	1977	8	31	297,987	4,434.3	5,844.4	4,434	7,723	$16.24	$15,214.31	$13,080.30	$665,149.00	$0.00	$16,708.12	$29,804.66	$29,804.66	9.0%
350	1977	9	30	532,119	4,434.3	5,844.4	4,434	7,723	$16.24	$15,214.31	$13,080.30	$665,149.00	$0.00	$29,835.92	$42,932.46	$42,932.46	16.7%
351	1977	10	31	148,993	6,208.1	8,182.1	6,208	7,723	$16.24	$15,214.31	$18,313.60	$931,209.00	$0.00	$8,354.06	$26,683.90	$26,683.90	3.2%
352	1977	11	30	1,045,637	6,289.4	8,274.0	6,289	7,723	$16.24	$15,214.31	$18,552.55	$943,405.00	$102,232.00	$57,490.00	$76,058.79	$76,058.79	23.1%
353	1977	12	31	1,070,503	6,208.1	8,182.1	6,208	7,723	$16.24	$15,214.31	$18,313.60	$931,209.00	$139,294.00	$58,471.37	$76,801.21	$76,801.21	23.2%
354	1978	1	31	255,417	6,208.1	8,182.1	6,208	7,723	$16.24	$15,214.31	$18,313.60	$931,209.00	$0.00	$14,321.24	$32,651.08	$32,651.08	5.5%
355	1978	2	28	662,170	6,208.1	8,182.1	6,208	7,723	$16.24	$15,214.31	$18,313.60	$931,209.00	$0.00	$37,127.90	$55,457.74	$55,457.74	15.9%
356	1978	3	31	320,640	6,994.6	9,055.9	6,995	6,995	$16.24	$13,780.15	$20,635.25	$1,049,184.00	$0.00	$17,978.30	$38,629.79	$38,629.79	6.2%
357	1978	4	30	591,451	7,126.2	9,198.8	7,126	7,126	$16.24	$14,038.22	$21,021.70	$1,068,931.00	$0.00	$33,162.65	$54,200.59	$54,200.59	11.5%
358	1978	5	31	2,811,975	8,470.9	10,606.5	8,471	8,471	$16.24	$16,687.87	$24,989.45	$1,270,637.00	$1,541,338.00	$140,496.93	$165,502.62	$165,502.62	44.6%
359	1978	6	30	1,662,952	6,652.5	8,680.0	6,652	8,471	$16.24	$16,687.87	$19,623.40	$997,872.00	$665,080.00	$85,832.73	$105,472.37	$105,472.37	34.7%
360	1978	7	31	0	0.0	0.0	0	8,471	$16.24	$16,687.87	$0.00	$0.00	$0.00	$0.00	$16.24	$16,687.87	0.0%
361	1978	8	31	0	0.0	0.0	0	8,471	$16.24	$16,687.87	$0.00	$0.00	$0.00	$0.00	$16.24	$16,687.87	0.0%
362	1978	9	30	0	0.0	0.0	0	8,471	$16.24	$16,687.87	$0.00	$0.00	$0.00	$0.00	$16.24	$16,687.87	0.0%
363	1978	10	31	0	0.0	0.0	0	8,471	$16.24	$16,687.87	$0.00	$0.00	$0.00	$0.00	$16.24	$16,687.87	0.0%
364	1978	11	30	0	0.0	0.0	0	8,471	$16.24	$16,687.87	$0.00	$0.00	$0.00	$0.00	$16.24	$16,687.87	0.0%
365	1978	12	31	1,721,131	6,588.4	8,608.9	6,588	8,471	$16.24	$16,687.87	$19,434.60	$988,261.00	$732,870.00	$88,339.64	$107,790.48	$107,790.48	35.1%
366	1979	1	31	1,683,748	6,965.6	9,024.3	6,966	8,471	$16.24	$16,687.87	$20,549.70	$1,044,841.00	$638,907.00	$87,290.33	$107,856.27	$107,856.27	32.5%
367	1979	2	28	150,295	6,262.3	8,243.4	6,262	8,471	$16.24	$16,687.87	$18,472.90	$939,342.00	$0.00	$8,427.02	$26,916.16	$26,916.16	3.6%
368	1979	3	31	1,500,268	7,543.5	9,645.8	7,543	8,471	$16.24	$16,687.87	$22,251.85	$1,131,519.00	$368,749.00	$80,012.16	$102,280.25	$102,280.25	26.7%
369	1979	4	30	3,081,044	7,725.3	9,837.8	7,725	8,471	$16.24	$16,687.87	$22,788.75	$1,158,802.00	$1,922,242.00	$151,340.36	$174,145.35	$174,145.35	55.4%
370	1979	5	31	3,671,267	7,889.4	10,009.4	7,889	7,889	$16.24	$15,541.33	$23,272.55	$1,183,407.00	$2,487,860.00	$178,133.18	$201,421.97	$201,421.97	62.5%
371	1979	6	30	2,586,574	7,246.2	9,328.4	7,246	7,889	$16.24	$15,541.33	$21,375.70	$1,086,937.00	$1,499,637.00	$128,323.25	$149,715.19	$149,715.19	49.6%
372	1979	7	31	0	0.0	0.0	0	7,889	$16.24	$15,541.33	$0.00	$0.00	$0.00	$0.00	$16.24	$15,541.33	0.0%
373	1979	8	31	0	0.0	0.0	0	7,889	$16.24	$15,541.33	$0.00	$0.00	$0.00	$0.00	$16.24	$15,541.33	0.0%
374	1979	9	30	0	0.0	0.0	0	7,889	$16.24	$15,541.33	$0.00	$0.00	$0.00	$0.00	$16.24	$15,541.33	0.0%
375	1979	10	31	0	0.0	0.0	0	7,889	$16.24	$15,541.33	$0.00	$0.00	$0.00	$0.00	$16.24	$15,541.33	0.0%
376	1979	11	30	446,980	6,208.1	8,182.1	6,208	7,889	$16.24	$15,541.33	$18,313.60	$931,209.00	$0.00	$25,062.17	$43,392.01	$43,392.01	10.0%
377	1979	12	31	1,988,881	7,409.0	9,502.8	7,409	7,889	$16.24	$15,541.33	$21,856.55	$1,111,354.00	$877,527.00	$101,740.91	$123,613.70	$123,613.70	36.1%
378	1980	1	31	319,271	4,434.3	5,844.4	4,434	7,889	$16.24	$15,541.33	$13,080.30	$665,149.00	$0.00	$17,901.55	$30,998.09	$30,998.09	9.7%
379	1980	2	29	214,437	1,835.6	2,407.4	1,836	7,889	$16.24	$15,541.33	$5,416.20	$275,338.00	$0.00	$12,023.47	$17,455.91	$17,455.91	16.8%
380	1980	3	31	1,489,934	6,208.1	8,182.1	6,208	7,889	$16.24	$15,541.33	$18,313.60	$931,209.00	$558,725.00	$77,316.40	$95,646.24	$95,646.24	32.3%
381	1980	4	30	2,326,646	7,484.3	9,583.0	7,484	7,889	$16.24	$15,541.33	$22,077.80	$1,122,638.00	$1,204,008.00	$117,042.39	$139,136.43	$139,136.43	43.2%
382	1980	5	31	1,638,615	7,097.3	9,167.6	7,097	7,484	$16.24	$14,743.48	$20,936.15	$1,064,601.00	$574,014.00	$85,482.63	$106,435.02	$106,435.02	31.0%
383	1980	6	30	0	0.0	0.0	0	7,484	$16.24	$14,743.48	$0.00	$0.00	$0.00	$0.00	$16.24	$14,743.48	0.0%
384	1980	7	31	0	0.0	0.0	0	7,484	$16.24	$14,743.48	$0.00	$0.00	$0.00	$0.00	$16.24	$14,743.48	0.0%
385	1980	8	31	0	0.0	0.0	0	7,484	$16.24	$14,743.48	$0.00	$0.00	$0.00	$0.00	$16.24	$14,743.48	0.0%
386	1980	9	30	0	0.0	0.0	0	7,484	$16.24	$14,743.48	$0.00	$0.00	$0.00	$0.00	$16.24	$14,743.48	0.0%
387	1980	10	31	0	0.0	0.0	0	7,484	$16.24	$14,743.48	$0.00	$0.00	$0.00	$0.00	$16.24	$14,743.48	0.0%
388	1980	11	30	0	0.0	0.0	0	7,484	$16.24	$14,743.48	$0.00	$0.00	$0.00	$0.00	$16.24	$14,743.48	0.0%
389	1980	12	31	0	0.0	0.0	0	7,484	$16.24	$14,743.48	$0.00	$0.00	$0.00	$0.00	$16.24	$14,743.48	0.0%
390	1981	1	31	0	0.0	0.0	0	7,484	$16.24	$14,743.48	$0.00	$0.00	$0.00	$0.00	$16.24	$14,743.48	0.0%
391	1981	2	28	0	0.0	0.0	0	7,484	$16.24	$14,743.48	$0.00	$0.00	$0.00	$0.00	$16.24	$14,743.48	0.0%
392	1981	3	31	0	0.0	0.0	0	7,484	$16.24	$14,743.48	$0.00	$0.00	$0.00	$0.00	$16.24	$14,743.48	0.0%
393	1981	4	30	0	0.0	0.0	0	7,097	$16.24	$13,981.09	$0.00	$0.00	$0.00	$0.00	$16.24	$13,981.09	0.0%
394	1981	5	31	468,335	1,776.6	2,341.0	1,777	1,777	$16.24	$3,500.69	$5,242.15	$266,496.00	$201,839.00	$24,011.06	$29,269.45	$29,269.45	35.4%
395	1981	6	30	1,373,308	6,989.7	9,050.6	6,990	6,990	$16.24	$13,770.30	$20,620.50	$1,048,460.00	$324,848.00	$73,382.57	$94,019.31	$94,019.31	27.3%
396	1981	7	31	0	0.0	0.0	0	6,990	$16.24	$13,770.30	$0.00	$0.00	$0.00	$0.00	$16.24	$13,770.30	0.0%
397	1981	8	31	0	0.0	0.0	0	6,990	$16.24	$13,770.30	$0.00	$0.00	$0.00	$0.00	$16.24	$13,770.30	0.0%

Little Bayou Meto
Flood Control Pumping Plant
3000-cfs (2 4000-hp)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1										Minimum							
2										Monthly	Billing						
3				Metered			Billing	Ratchet	Customer	Demand	Demand	Incremental Energy		Energy			Monthly
4	Period-of-Record			Energy	Demands		Demand	Demand	Charge	Charge	Charge	Block 1	Block 2	Charge	Subtotal Bill	Total Bill	Load
5	YEAR	MO	DAYS	kWh	kWD	kVAD	kWD	kWD	$16.24	$1.97	$2.95	$0.05607	$0.04493	kWh			Factor
398	1981	9	30	0	0.0	0.0	0	6,990	$16.24	$13,770.30	$0.00	$0.00	$0.00	$0.00	$16.24	$13,770.30	0.0%
399	1981	10	31	361,841	6,208.1	8,182.1	6,208	6,990	$16.24	$13,770.30	$18,313.60	$931,209.00	$0.00	$20,288.43	$38,618.27	$38,618.27	7.8%
400	1981	11	30	388,668	6,208.1	8,182.1	6,208	6,990	$16.24	$13,770.30	$18,313.60	$931,209.00	$0.00	$21,792.59	$40,122.43	$40,122.43	8.7%
401	1981	12	31	0	0.0	0.0	0	6,990	$16.24	$13,770.30	$0.00	$0.00	$0.00	$0.00	$16.24	$13,770.30	0.0%
402	1982	1	31	354,987	1,951.7	2,536.3	1,952	6,990	$16.24	$13,770.30	$5,758.40	$292,760.00	$62,227.00	$19,210.91	$24,985.55	$24,985.55	24.4%
403	1982	2	28	1,860,720	7,348.2	9,437.8	7,348	7,348	$16.24	$14,475.56	$21,676.60	$1,102,233.00	$758,487.00	$95,881.03	$117,573.87	$117,573.87	37.7%
404	1982	3	31	0	0.0	0.0	0	7,348	$16.24	$14,475.56	$0.00	$0.00	$0.00	$0.00	$16.24	$14,475.56	0.0%
405	1982	4	30	1,821,032	6,208.1	8,182.1	6,208	7,348	$16.24	$14,475.56	$18,313.60	$931,209.00	$889,823.00	$92,192.64	$110,522.48	$110,522.48	40.7%
406	1982	5	31	1,148,148	7,439.4	9,535.2	7,439	7,439	$16.24	$14,654.83	$21,945.05	$1,115,909.00	$32,239.00	$64,017.52	$85,978.81	$85,978.81	20.7%
407	1982	6	30	2,129,997	7,636.4	9,744.2	7,636	7,636	$16.24	$15,042.92	$22,526.20	$1,145,465.00	$984,532.00	$108,461.25	$131,003.69	$131,003.69	38.7%
408	1982	7	31	971,069	7,970.6	10,093.9	7,971	7,971	$16.24	$15,702.87	$23,514.45	$1,195,591.00	$0.00	$54,447.85	$77,978.54	$77,978.54	16.4%
409	1982	8	31	0	0.0	0.0	0	7,971	$16.24	$15,702.87	$0.00	$0.00	$0.00	$0.00	$16.24	$15,702.87	0.0%
410	1982	9	30	0	0.0	0.0	0	7,971	$16.24	$15,702.87	$0.00	$0.00	$0.00	$0.00	$16.24	$15,702.87	0.0%
411	1982	10	31	0	0.0	0.0	0	7,971	$16.24	$15,702.87	$0.00	$0.00	$0.00	$0.00	$16.24	$15,702.87	0.0%
412	1982	11	30	207,235	6,801.6	8,844.7	6,802	7,971	$16.24	$15,702.87	$20,065.90	$1,020,244.00	$0.00	$11,619.68	$31,701.82	$31,701.82	4.2%
413	1982	12	31	2,989,235	8,482.0	10,617.7	8,482	8,482	$16.24	$16,709.54	$25,021.90	$1,272,294.00	$1,716,941.00	$148,479.68	$173,517.82	$173,517.82	47.4%
414	1983	1	31	1,431,897	7,580.9	9,685.5	7,581	8,482	$16.24	$16,709.54	$22,363.95	$1,137,140.00	$294,757.00	$77,002.87	$99,383.06	$99,383.06	25.4%
415	1983	2	28	1,092,654	7,199.9	9,278.4	7,200	8,482	$16.24	$16,709.54	$21,240.00	$1,079,983.00	$12,671.00	$61,123.95	$82,380.19	$82,380.19	22.6%
416	1983	3	31	495,062	7,142.2	9,216.2	7,142	8,482	$16.24	$16,709.54	$21,068.90	$1,071,335.00	$0.00	$27,758.10	$48,843.24	$48,843.24	9.3%
417	1983	4	30	2,791,124	7,959.9	10,082.7	7,960	8,482	$16.24	$16,709.54	$23,482.00	$1,193,983.00	$1,597,141.00	$138,706.17	$162,204.41	$162,204.41	48.7%
418	1983	5	31	3,510,237	8,399.7	10,534.3	8,400	8,482	$16.24	$16,709.54	$24,780.00	$1,259,960.00	$2,250,277.00	$171,750.90	$196,547.14	$196,547.14	56.2%
419	1983	6	30	520,409	7,498.8	9,598.4	7,499	8,482	$16.24	$16,709.54	$22,122.05	$1,124,813.00	$0.00	$29,179.34	$51,317.63	$51,317.63	9.6%
420	1983	7	31	0	0.0	0.0	0	8,482	$16.24	$16,709.54	$0.00	$0.00	$0.00	$0.00	$16.24	$16,709.54	0.0%
421	1983	8	31	0	0.0	0.0	0	8,482	$16.24	$16,709.54	$0.00	$0.00	$0.00	$0.00	$16.24	$16,709.54	0.0%
422	1983	9	30	85,139	1,773.7	2,337.7	1,774	8,482	$16.24	$16,709.54	$5,233.30	$266,060.00	$0.00	$4,773.75	$10,023.29	$16,709.54	6.7%
423	1983	10	31	340,556	6,208.1	8,182.1	6,208	8,482	$16.24	$16,709.54	$18,313.60	$931,209.00	$0.00	$19,094.99	$37,424.83	$37,424.83	7.4%
424	1983	11	30	446,980	6,208.1	8,182.1	6,208	8,482	$16.24	$16,709.54	$18,313.60	$931,209.00	$0.00	$25,062.17	$43,392.01	$43,392.01	10.0%
425	1983	12	31	2,971,215	6,780.3	8,821.2	6,780	8,400	$16.24	$16,548.00	$20,001.00	$1,017,052.00	$1,954,163.00	$144,826.65	$164,843.89	$164,843.89	58.9%
426	1984	1	31	457,300	4,454.9	5,867.6	4,455	8,400	$16.24	$16,548.00	$13,142.25	$668,236.00	$0.00	$25,640.84	$38,799.33	$38,799.33	13.8%
427	1984	2	29	599,797	6,208.1	8,182.1	6,208	8,400	$16.24	$16,548.00	$18,313.60	$931,209.00	$0.00	$33,630.60	$51,960.44	$51,960.44	13.9%
428	1984	3	31	1,724,094	6,803.3	8,846.5	6,803	8,400	$16.24	$16,548.00	$20,068.85	$1,020,489.00	$703,605.00	$88,831.79	$108,916.88	$108,916.88	34.1%
429	1984	4	30	1,582,758	7,498.8	9,598.4	7,499	8,400	$16.24	$16,548.00	$22,122.05	$1,124,813.00	$457,945.00	$83,643.73	$105,782.02	$105,782.02	29.3%
430	1984	5	31	2,683,659	7,050.8	9,117.1	7,051	7,499	$16.24	$14,773.03	$20,800.45	$1,057,620.00	$1,626,039.00	$132,358.69	$153,175.38	$153,175.38	51.2%
431	1984	6	30	610,824	7,348.2	9,437.8	7,348	7,499	$16.24	$14,773.03	$21,676.60	$1,102,233.00	$0.00	$34,248.88	$55,941.72	$55,941.72	11.5%
432	1984	7	31	566,952	4,861.8	6,321.5	4,862	7,499	$16.24	$14,773.03	$14,342.90	$729,271.00	$0.00	$31,789.00	$46,148.14	$46,148.14	15.7%
433	1984	8	31	0	0.0	0.0	0	7,499	$16.24	$14,773.03	$0.00	$0.00	$0.00	$0.00	$16.24	$14,773.03	0.0%
434	1984	9	30	0	0.0	0.0	0	7,499	$16.24	$14,773.03	$0.00	$0.00	$0.00	$0.00	$16.24	$14,773.03	0.0%
435	1984	10	31	1,945,930	7,766.5	9,881.0	7,767	7,767	$16.24	$15,300.99	$22,912.65	$1,164,977.00	$780,953.00	$100,408.48	$123,337.37	$123,337.37	33.7%
436	1984	11	30	519,419	7,668.7	9,778.2	7,669	7,767	$16.24	$15,300.99	$22,623.55	$1,150,300.00	$0.00	$29,123.84	$51,763.63	$51,763.63	9.4%
437	1984	12	31	1,349,268	7,525.1	9,626.4	7,525	7,767	$16.24	$15,300.99	$22,198.75	$1,128,767.00	$220,501.00	$73,197.08	$95,412.07	$95,412.07	24.1%
438	1985	1	31	0	0.0	0.0	0	7,767	$16.24	$15,300.99	$0.00	$0.00	$0.00	$0.00	$16.24	$15,300.99	0.0%
439	1985	2	28	1,425,928	8,007.3	10,131.9	8,007	8,007	$16.24	$15,773.79	$23,620.65	$1,201,101.00	$224,827.00	$77,447.21	$101,084.10	$101,084.10	26.5%
440	1985	3	31	1,472,902	7,808.9	9,925.4	7,809	8,007	$16.24	$15,773.79	$23,036.55	$1,171,340.00	$301,562.00	$79,226.21	$102,279.00	$102,279.00	25.4%
441	1985	4	30	1,830,538	8,065.4	10,192.0	8,065	8,065	$16.24	$15,888.05	$23,791.75	$1,209,815.00	$620,723.00	$95,723.41	$119,531.40	$119,531.40	31.5%
442	1985	5	31	2,065,135	8,001.2	10,125.6	8,001	8,065	$16.24	$15,888.05	$23,602.95	$1,200,183.00	$864,952.00	$106,156.55	$129,775.74	$129,775.74	34.7%
443	1985	6	30	0	0.0	0.0	0	8,065	$16.24	$15,888.05	$0.00	$0.00	$0.00	$0.00	$16.24	$15,888.05	0.0%
444	1985	7	31	0	0.0	0.0	0	8,065	$16.24	$15,888.05	$0.00	$0.00	$0.00	$0.00	$16.24	$15,888.05	0.0%
445	1985	8	31	0	0.0	0.0	0	8,065	$16.24	$15,888.05	$0.00	$0.00	$0.00	$0.00	$16.24	$15,888.05	0.0%
446	1985	9	30	0	0.0	0.0	0	8,065	$16.24	$15,888.05	$0.00	$0.00	$0.00	$0.00	$16.24	$15,888.05	0.0%
447	1985	10	31	484,524	7,282.0	9,366.9	7,282	8,065	$16.24	$15,888.05	$21,481.90	$1,092,305.00	$0.00	$27,167.28	$48,665.42	$48,665.42	8.9%
448	1985	11	30	0	0.0	0.0	0	8,065	$16.24	$15,888.05	$0.00	$0.00	$0.00	$0.00	$16.24	$15,888.05	0.0%
449	1985	12	31	1,231,493	8,025.7	10,150.9	8,026	8,065	$16.24	$15,888.05	$23,676.70	$1,203,854.00	$27,639.00	$68,741.91	$92,434.85	$92,434.85	20.6%
450	1986	1	31	43,081	1,795.0	2,361.8	1,795	8,065	$16.24	$15,888.05	$5,295.25	$269,254.00	$0.00	$2,415.53	$7,727.02	$15,888.05	3.2%
451	1986	2	28	1,395,699	7,294.0	9,379.7	7,294	8,065	$16.24	$15,888.05	$21,517.30	$1,094,093.00	$301,606.00	$74,896.95	$96,430.49	$96,430.49	28.5%
452	1986	3	31	449,053	6,294.4	8,279.7	6,294	8,065	$16.24	$15,888.05	$18,567.30	$944,166.00	$0.00	$25,178.42	$43,761.96	$43,761.96	9.6%
453	1986	4	30	1,363,779	7,333.7	9,422.2	7,334	8,026	$16.24	$15,811.22	$21,635.30	$1,100,050.00	$263,729.00	$73,529.15	$95,180.69	$95,180.69	25.8%

Little Bayou Meto
Flood Control Pumping Plant
3000-cfs (2 4000-hp)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1										Minimum							
2										Monthly	Billing						
3				Metered			Billing	Ratchet	Customer	Demand	Demand	Incremental Energy		Energy			Monthly
4	Period-of-Record			Energy	Demands		Demand	Demand	Charge	Charge	Charge	Block 1	Block 2	Charge	Subtotal Bill	Total Bill	Load
5	YEAR	MO	DAYS	kWh	kWD	kVAD	kWD	kWD	$16.24	$1.97	$2.95	$0.05607	$0.04493	kWh			Factor
454	1986	5	31	673,012	7,345.6	9,435.0	7,346	8,026	$16.24	$15,811.22	$21,670.70	$1,101,836.00	$0.00	$37,735.79	$59,422.73	$59,422.73	12.3%
455	1986	6	30	1,503,175	7,863.3	9,982.2	7,863	8,026	$16.24	$15,811.22	$23,195.85	$1,179,494.00	$323,681.00	$80,677.22	$103,889.31	$103,889.31	26.6%
456	1986	7	31	0	0.0	0.0	0	8,026	$16.24	$15,811.22	$0.00	$0.00	$0.00	$0.00	$16.24	$15,811.22	0.0%
457	1986	8	31	42,570	1,773.7	2,337.7	1,774	8,026	$16.24	$15,811.22	$5,233.30	$266,060.00	$0.00	$2,386.87	$7,636.41	$15,811.22	3.2%
458	1986	9	30	0	0.0	0.0	0	8,026	$16.24	$15,811.22	$0.00	$0.00	$0.00	$0.00	$16.24	$15,811.22	0.0%
459	1986	10	31	363,210	7,697.0	9,808.0	7,697	8,026	$16.24	$15,811.22	$22,706.15	$1,154,552.00	$0.00	$20,365.21	$43,087.60	$43,087.60	6.3%
460	1986	11	30	842,108	7,632.6	9,740.1	7,633	8,026	$16.24	$15,811.22	$22,517.35	$1,144,884.00	$0.00	$47,216.99	$69,750.58	$69,750.58	15.3%
461	1986	12	31	1,434,836	7,851.0	9,969.4	7,851	7,863	$16.24	$15,490.11	$23,160.45	$1,177,652.00	$257,184.00	$77,586.22	$100,762.91	$100,762.91	24.6%
462	1987	1	31	0	0.0	0.0	0	7,863	$16.24	$15,490.11	$0.00	$0.00	$0.00	$0.00	$16.24	$15,490.11	0.0%
463	1987	2	28	317,175	6,700.1	8,732.7	6,700	7,863	$16.24	$15,490.11	$19,765.00	$1,005,010.00	$0.00	$17,784.00	$37,565.24	$37,565.24	7.0%
464	1987	3	31	3,168,249	8,251.5	10,383.3	8,252	8,252	$16.24	$16,256.44	$24,343.40	$1,237,727.00	$1,930,522.00	$156,137.71	$180,497.35	$180,497.35	51.6%
465	1987	4	30	710,494	7,505.3	9,605.4	7,505	8,252	$16.24	$16,256.44	$22,139.75	$1,125,802.00	$0.00	$39,837.41	$61,993.40	$61,993.40	13.1%
466	1987	5	31	341,265	6,235.2	8,212.8	6,235	8,252	$16.24	$16,256.44	$18,393.25	$935,276.00	$0.00	$19,134.74	$37,544.23	$37,544.23	7.4%
467	1987	6	30	2,079,942	7,344.3	9,433.6	7,344	8,252	$16.24	$16,256.44	$21,664.80	$1,101,638.00	$978,304.00	$105,724.04	$127,405.08	$127,405.08	39.3%
468	1987	7	31	587,293	6,208.1	8,182.1	6,208	8,252	$16.24	$16,256.44	$18,313.60	$931,209.00	$0.00	$32,929.50	$51,259.34	$51,259.34	12.7%
469	1987	8	31	0	0.0	0.0	0	8,252	$16.24	$16,256.44	$0.00	$0.00	$0.00	$0.00	$16.24	$16,256.44	0.0%
470	1987	9	30	0	0.0	0.0	0	8,252	$16.24	$16,256.44	$0.00	$0.00	$0.00	$0.00	$16.24	$16,256.44	0.0%
471	1987	10	31	0	0.0	0.0	0	8,252	$16.24	$16,256.44	$0.00	$0.00	$0.00	$0.00	$16.24	$16,256.44	0.0%
472	1987	11	30	1,097,444	6,747.6	8,785.1	6,748	8,252	$16.24	$16,256.44	$19,906.60	$1,012,140.00	$85,304.00	$60,583.40	$80,506.24	$80,506.24	22.6%
473	1987	12	31	1,560,841	8,558.2	10,694.6	8,558	8,558	$16.24	$16,859.26	$25,246.10	$1,283,733.00	$277,108.00	$84,429.37	$109,691.71	$109,691.71	24.5%
474	1988	1	31	4,028,451	7,872.5	9,991.8	7,873	8,558	$16.24	$16,859.26	$23,225.35	$1,180,876.00	$2,847,575.00	$194,153.26	$217,394.85	$217,394.85	68.8%
475	1988	2	29	0	0.0	0.0	0	8,558	$16.24	$16,859.26	$0.00	$0.00	$0.00	$0.00	$16.24	$16,859.26	0.0%
476	1988	3	31	176,484	7,353.5	9,443.5	7,354	8,558	$16.24	$16,859.26	$21,694.30	$1,103,027.00	$0.00	$9,895.47	$31,606.01	$31,606.01	3.2%
477	1988	4	30	1,978,740	7,686.7	9,797.1	7,687	8,558	$16.24	$16,859.26	$22,676.65	$1,153,006.00	$825,734.00	$101,749.28	$124,442.17	$124,442.17	35.8%
478	1988	5	31	664,030	6,208.1	8,182.1	6,208	8,558	$16.24	$16,859.26	$18,313.60	$931,209.00	$0.00	$37,232.18	$55,562.02	$55,562.02	14.4%
479	1988	6	30	85,197	1,776.2	2,340.5	1,776	8,558	$16.24	$16,859.26	$5,239.20	$266,423.00	$0.00	$4,777.01	$10,032.45	$16,859.26	6.7%
480	1988	7	31	0	0.0	0.0	0	8,558	$16.24	$16,859.26	$0.00	$0.00	$0.00	$0.00	$16.24	$16,859.26	0.0%
481	1988	8	31	0	0.0	0.0	0	8,558	$16.24	$16,859.26	$0.00	$0.00	$0.00	$0.00	$16.24	$16,859.26	0.0%
482	1988	9	30	0	0.0	0.0	0	8,558	$16.24	$16,859.26	$0.00	$0.00	$0.00	$0.00	$16.24	$16,859.26	0.0%
483	1988	10	31	0	0.0	0.0	0	8,558	$16.24	$16,859.26	$0.00	$0.00	$0.00	$0.00	$16.24	$16,859.26	0.0%
484	1988	11	30	1,080,191	6,839.2	8,886.0	6,839	8,558	$16.24	$16,859.26	$20,175.05	$1,025,886.00	$54,305.00	$59,961.35	$80,152.64	$80,152.64	21.9%
485	1988	12	31	780,472	6,746.0	8,783.3	6,746	7,873	$16.24	$15,509.81	$19,900.70	$1,011,894.00	$0.00	$43,761.07	$63,678.01	$63,678.01	15.6%
486	1989	1	31	2,587,962	6,973.7	9,033.1	6,974	7,687	$16.24	$15,143.39	$20,573.30	$1,046,048.00	$1,541,914.00	$127,930.11	$148,519.65	$148,519.65	49.9%
487	1989	2	28	2,554,940	7,526.4	9,627.8	7,526	7,687	$16.24	$15,143.39	$22,201.70	$1,128,964.00	$1,425,976.00	$127,370.11	$149,588.05	$149,588.05	50.5%
488	1989	3	31	1,601,014	7,716.3	9,828.3	7,716	7,716	$16.24	$15,200.52	$22,762.20	$1,157,450.00	$443,564.00	$84,827.55	$107,605.99	$107,605.99	27.9%
489	1989	4	30	2,099,970	7,304.5	9,391.0	7,305	7,716	$16.24	$15,200.52	$21,549.75	$1,095,682.00	$1,004,288.00	$106,557.55	$128,123.54	$128,123.54	39.9%
490	1989	5	31	2,374,735	7,407.7	9,501.4	7,408	7,716	$16.24	$15,200.52	$21,853.60	$1,111,156.00	$1,263,579.00	$119,075.12	$140,944.96	$140,944.96	43.1%
491	1989	6	30	1,568,846	8,290.2	10,422.8	8,290	8,290	$16.24	$16,331.30	$24,455.50	$1,243,526.00	$325,320.00	$84,341.13	$108,812.87	$108,812.87	26.3%
492	1989	7	31	852,666	6,762.3	8,801.4	6,762	8,290	$16.24	$16,331.30	$19,947.90	$1,014,351.00	$0.00	$47,809.00	$67,773.14	$67,773.14	16.9%
493	1989	8	31	0	0.0	0.0	0	8,290	$16.24	$16,331.30	$0.00	$0.00	$0.00	$0.00	$16.24	$16,331.30	0.0%
494	1989	9	30	42,906	1,787.8	2,353.6	1,788	8,290	$16.24	$16,331.30	$5,274.60	$268,166.00	$0.00	$2,405.77	$7,696.61	$16,331.30	3.3%
495	1989	10	31	0	0.0	0.0	0	8,290	$16.24	$16,331.30	$0.00	$0.00	$0.00	$0.00	$16.24	$16,331.30	0.0%
496	1989	11	30	0	0.0	0.0	0	8,290	$16.24	$16,331.30	$0.00	$0.00	$0.00	$0.00	$16.24	$16,331.30	0.0%
497	1989	12	31	0	0.0	0.0	0	8,290	$16.24	$16,331.30	$0.00	$0.00	$0.00	$0.00	$16.24	$16,331.30	0.0%
498	1990	1	31	911,398	7,250.2	9,332.7	7,250	8,290	$16.24	$16,331.30	$21,387.50	$1,087,534.00	$0.00	$51,102.09	$72,505.83	$72,505.83	16.9%
499	1990	2	28	3,211,643	7,995.1	10,119.2	7,995	8,290	$16.24	$16,331.30	$23,585.25	$1,199,265.00	$2,012,378.00	$157,658.93	$181,260.42	$181,260.42	59.8%
500	1990	3	31	2,616,278	8,650.3	10,787.2	8,650	8,650	$16.24	$17,040.50	$25,517.50	$1,297,552.00	$1,318,726.00	$132,004.10	$157,537.84	$157,537.84	40.7%
501	1990	4	30	3,359,596	8,590.3	10,726.9	8,590	8,650	$16.24	$17,040.50	$25,340.50	$1,288,543.00	$2,071,053.00	$165,301.02	$190,657.76	$190,657.76	54.3%
502	1990	5	31	3,236,966	8,935.1	11,070.6	8,935	8,935	$16.24	$17,601.95	$26,358.25	$1,340,267.00	$1,896,699.00	$160,367.46	$186,741.95	$186,741.95	48.7%
503	1990	6	30	2,064,564	8,449.4	10,584.7	8,449	8,935	$16.24	$17,601.95	$24,924.55	$1,267,416.00	$797,148.00	$106,879.87	$131,820.66	$131,820.66	33.9%
504	1990	7	31	170,278	1,773.7	2,337.7	1,774	8,935	$16.24	$17,601.95	$5,233.30	$266,060.00	$0.00	$9,547.49	$14,797.03	$17,601.95	12.9%
505	1990	8	31	0	0.0	0.0	0	8,935	$16.24	$17,601.95	$0.00	$0.00	$0.00	$0.00	$16.24	$17,601.95	0.0%
506	1990	9	30	0	0.0	0.0	0	8,935	$16.24	$17,601.95	$0.00	$0.00	$0.00	$0.00	$16.24	$17,601.95	0.0%
507	1990	10	31	107,527	4,480.3	5,896.4	4,480	8,935	$16.24	$17,601.95	$13,216.00	$672,047.00	$0.00	$6,029.07	$19,261.31	$19,261.31	3.2%
508	1990	11	30	0	0.0	0.0	0	8,935	$16.24	$17,601.95	$0.00	$0.00	$0.00	$0.00	$16.24	$17,601.95	0.0%
509	1990	12	31	618,338	6,208.1	8,182.1	6,208	8,935	$16.24	$17,601.95	$18,313.60	$931,209.00	$0.00	$34,670.18	$53,000.02	$53,000.02	13.4%

Tab "Metering & Billing - 3000 cfs" of
File "Bayou Meto Study - 3000-cfs Pumping Station.XLS"

Little Bayou Meto
Flood Control Pumping Plant
3000-cfs (2 4000-hp)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1										Minimum							
2										Monthly	Billing						
3				Metered			Billing	Ratchet	Customer	Demand	Demand	Incremental Energy		Energy			Monthly
4	Period-of-Record			Energy	Demands		Demand	Demand	Charge	Charge	Charge	Block 1	Block 2	Charge	Subtotal Bill	Total Bill	Load
5	YEAR	MO	DAYS	kWh	kWD	kVAD	kWD	kWD	$16.24	$1.97	$2.95	$0.05607	$0.04493	kWh			Factor
510	1991	1	31	2,055,148	7,180.7	9,257.7	7,181	8,935	$16.24	$17,601.95	$21,183.95	$1,077,102.00	$978,046.00	$104,336.72	$125,536.91	$125,536.91	38.5%
511	1991	2	28	546,896	4,731.8	6,177.9	4,732	8,935	$16.24	$17,601.95	$13,959.40	$709,774.00	$0.00	$30,664.47	$44,640.11	$44,640.11	17.2%
512	1991	3	31	559,846	4,629.9	6,064.4	4,630	8,935	$16.24	$17,601.95	$13,658.50	$694,486.00	$0.00	$31,390.58	$45,065.32	$45,065.32	16.3%
513	1991	4	30	2,844,188	7,560.3	9,663.6	7,560	8,935	$16.24	$17,601.95	$22,302.00	$1,134,039.00	$1,710,149.00	$140,422.56	$162,740.80	$162,740.80	52.3%
514	1991	5	31	2,503,585	7,171.1	9,247.3	7,171	8,449	$16.24	$16,644.53	$21,154.45	$1,075,660.00	$1,427,925.00	$124,468.93	$145,639.62	$145,639.62	46.9%
515	1991	6	30	362,828	4,434.3	5,844.4	4,434	7,560	$16.24	$14,893.20	$13,080.30	$665,149.00	$0.00	$20,343.75	$33,440.29	$33,440.29	11.4%
516	1991	7	31	0	0.0	0.0	0	7,560	$16.24	$14,893.20	$0.00	$0.00	$0.00	$0.00	$16.24	$14,893.20	0.0%
517	1991	8	31	0	0.0	0.0	0	7,560	$16.24	$14,893.20	$0.00	$0.00	$0.00	$0.00	$16.24	$14,893.20	0.0%
518	1991	9	30	0	0.0	0.0	0	7,560	$16.24	$14,893.20	$0.00	$0.00	$0.00	$0.00	$16.24	$14,893.20	0.0%
519	1991	10	31	150,010	6,250.4	8,230.0	6,250	7,560	$16.24	$14,893.20	$18,437.50	$937,563.00	$0.00	$8,411.07	$26,864.81	$26,864.81	3.2%
520	1991	11	30	1,635,984	7,644.2	9,752.3	7,644	7,644	$16.24	$15,058.68	$22,549.80	$1,146,626.00	$489,358.00	$86,278.17	$108,844.21	$108,844.21	29.7%
521	1991	12	31	2,836,628	7,653.2	9,761.8	7,653	7,653	$16.24	$15,076.41	$22,576.35	$1,147,980.00	$1,688,648.00	$140,238.19	$162,830.78	$162,830.78	49.8%
522	1992	1	31	448,159	6,257.2	8,237.7	6,257	7,653	$16.24	$15,076.41	$18,458.15	$938,580.00	$0.00	$25,128.30	$43,602.69	$43,602.69	9.6%
523	1992	2	29	150,010	6,250.4	8,230.0	6,250	7,653	$16.24	$15,076.41	$18,437.50	$937,563.00	$0.00	$8,411.07	$26,864.81	$26,864.81	3.4%
524	1992	3	31	1,921,986	7,111.8	9,183.2	7,112	7,653	$16.24	$15,076.41	$20,980.40	$1,066,767.00	$855,219.00	$98,238.62	$119,235.26	$119,235.26	36.3%
525	1992	4	30	357,544	6,660.7	8,689.1	6,661	7,653	$16.24	$15,076.41	$19,649.95	$999,103.00	$0.00	$20,047.49	$39,713.68	$39,713.68	7.5%
526	1992	5	31	919,552	6,795.1	8,837.5	6,795	7,653	$16.24	$15,076.41	$20,045.25	$1,019,262.00	$0.00	$51,559.26	$71,620.75	$71,620.75	18.2%
527	1992	6	30	1,876,486	7,807.6	9,924.1	7,808	7,808	$16.24	$15,381.76	$23,033.60	$1,171,147.00	$705,339.00	$97,357.09	$120,406.93	$120,406.93	33.4%
528	1992	7	31	1,008,673	6,362.1	8,355.9	6,362	7,808	$16.24	$15,381.76	$18,767.90	$954,311.00	$54,362.00	$55,950.70	$74,734.84	$74,734.84	21.3%
529	1992	8	31	0	0.0	0.0	0	7,808	$16.24	$15,381.76	$0.00	$0.00	$0.00	$0.00	$16.24	$15,381.76	0.0%
530	1992	9	30	149,957	4,434.3	5,844.4	4,434	7,808	$16.24	$15,381.76	$13,080.30	$665,149.00	$0.00	$8,408.08	$21,504.62	$21,504.62	4.7%
531	1992	10	31	0	0.0	0.0	0	7,808	$16.24	$15,381.76	$0.00	$0.00	$0.00	$0.00	$16.24	$15,381.76	0.0%
532	1992	11	30	507,011	7,509.3	9,609.6	7,509	7,808	$16.24	$15,381.76	$22,151.55	$1,126,395.00	$0.00	$28,428.11	$50,595.90	$50,595.90	9.4%
533	1992	12	31	725,325	7,662.2	9,771.4	7,662	7,808	$16.24	$15,381.76	$22,602.90	$1,149,333.00	$0.00	$40,668.95	$63,288.09	$63,288.09	12.7%
534	1993	1	31	1,608,075	7,794.8	9,910.6	7,795	7,808	$16.24	$15,381.76	$22,995.25	$1,169,220.00	$438,855.00	$85,275.92	$108,287.41	$108,287.41	27.7%
535	1993	2	28	332,746	7,020.3	9,083.9	7,020	7,808	$16.24	$15,381.76	$20,709.00	$1,053,042.00	$0.00	$18,657.08	$39,382.32	$39,382.32	7.1%
536	1993	3	31	673,512	7,539.6	9,641.7	7,540	7,808	$16.24	$15,381.76	$22,243.00	$1,130,938.00	$0.00	$37,763.83	$60,023.07	$60,023.07	12.0%
537	1993	4	30	2,603,434	8,045.6	10,171.5	8,046	8,046	$16.24	$15,850.62	$23,735.70	$1,206,835.00	$1,396,599.00	$130,416.43	$154,168.37	$154,168.37	44.9%
538	1993	5	31	2,201,497	8,177.8	10,307.8	8,178	8,178	$16.24	$16,110.66	$24,125.10	$1,226,676.00	$974,821.00	$112,578.43	$136,719.77	$136,719.77	36.2%
539	1993	6	30	1,068,586	7,887.8	10,007.8	7,888	8,178	$16.24	$16,110.66	$23,269.60	$1,183,177.00	$0.00	$59,915.61	$83,201.45	$83,201.45	18.8%
540	1993	7	31	215,768	7,054.0	9,120.6	7,054	8,178	$16.24	$16,110.66	$20,809.30	$1,058,102.00	$0.00	$12,098.09	$32,923.63	$32,923.63	4.1%
541	1993	8	31	148,993	6,208.1	8,182.1	6,208	8,178	$16.24	$16,110.66	$18,313.60	$931,209.00	$0.00	$8,354.06	$26,683.90	$26,683.90	3.2%
542	1993	9	30	45,234	1,884.7	2,462.3	1,885	8,178	$16.24	$16,110.66	$5,560.75	$282,712.00	$0.00	$2,536.27	$8,113.26	$16,110.66	3.3%
543	1993	10	31	148,993	6,208.1	8,182.1	6,208	8,178	$16.24	$16,110.66	$18,313.60	$931,209.00	$0.00	$8,354.06	$26,683.90	$26,683.90	3.2%
544	1993	11	30	950,309	7,637.7	9,745.5	7,638	8,178	$16.24	$16,110.66	$22,532.10	$1,145,658.00	$0.00	$53,283.83	$75,832.17	$75,832.17	17.3%
545	1993	12	31	1,984,036	6,744.3	8,781.5	6,744	8,178	$16.24	$16,110.66	$19,894.80	$1,011,648.00	$972,388.00	$100,412.50	$120,323.54	$120,323.54	39.5%
546	1994	1	31	0	0.0	0.0	0	8,178	$16.24	$16,110.66	$0.00	$0.00	$0.00	$0.00	$16.24	$16,110.66	0.0%
547	1994	2	28	928,115	7,284.7	9,369.7	7,285	8,178	$16.24	$16,110.66	$21,490.75	$1,092,702.00	$0.00	$52,039.40	$73,546.39	$73,546.39	19.0%
548	1994	3	31	1,678,740	7,575.8	9,680.1	7,576	8,178	$16.24	$16,110.66	$22,349.20	$1,136,365.00	$542,375.00	$88,084.89	$110,450.33	$110,450.33	29.8%
549	1994	4	30	1,038,348	7,784.5	9,899.8	7,785	8,178	$16.24	$16,110.66	$22,965.75	$1,167,678.00	$0.00	$58,220.18	$81,202.17	$81,202.17	18.5%
550	1994	5	31	2,100,786	7,978.3	10,101.8	7,978	7,978	$16.24	$15,716.66	$23,535.10	$1,196,739.00	$904,047.00	$107,719.99	$131,271.33	$131,271.33	35.4%
551	1994	6	30	796,570	6,208.1	8,182.1	6,208	7,978	$16.24	$15,716.66	$18,313.60	$931,209.00	$0.00	$44,663.67	$62,993.51	$62,993.51	17.8%
552	1994	7	31	450,477	6,287.7	8,272.1	6,288	7,978	$16.24	$15,716.66	$18,549.60	$943,151.00	$0.00	$25,258.24	$43,824.08	$43,824.08	9.6%
553	1994	8	31	0	0.0	0.0	0	7,978	$16.24	$15,716.66	$0.00	$0.00	$0.00	$0.00	$16.24	$15,716.66	0.0%
554	1994	9	30	0	0.0	0.0	0	7,978	$16.24	$15,716.66	$0.00	$0.00	$0.00	$0.00	$16.24	$15,716.66	0.0%
555	1994	10	31	0	0.0	0.0	0	7,978	$16.24	$15,716.66	$0.00	$0.00	$0.00	$0.00	$16.24	$15,716.66	0.0%
556	1994	11	30	193,314	8,054.7	10,181.0	8,055	8,055	$16.24	$15,868.35	$23,762.25	$1,208,210.00	$0.00	$10,839.10	$34,617.59	$34,617.59	3.3%
557	1994	12	31	1,280,364	7,442.0	9,538.0	7,442	8,055	$16.24	$15,868.35	$21,953.90	$1,116,305.00	$164,059.00	$69,962.39	$91,932.53	$91,932.53	23.1%
558	1995	1	31	1,150,077	7,707.3	9,818.8	7,707	8,055	$16.24	$15,868.35	$22,735.65	$1,156,098.00	$0.00	$64,484.79	$87,236.68	$87,236.68	20.1%
559	1995	2	28	155,241	6,468.4	8,475.1	6,468	8,055	$16.24	$15,868.35	$19,080.60	$970,258.00	$0.00	$8,704.38	$27,801.22	$27,801.22	3.6%
560	1995	3	31	1,175,249	6,898.0	8,950.4	6,898	8,055	$16.24	$15,868.35	$20,349.10	$1,034,697.00	$140,552.00	$64,330.46	$84,695.80	$84,695.80	22.9%
561	1995	4	30	1,667,814	7,967.5	10,090.7	7,968	8,055	$16.24	$15,868.35	$23,505.60	$1,195,132.00	$472,682.00	$88,248.65	$111,770.49	$111,770.49	29.1%
562	1995	5	31	1,247,468	8,051.7	10,177.8	8,052	8,055	$16.24	$15,868.35	$23,753.40	$1,207,752.00	$39,716.00	$69,503.09	$93,272.73	$93,272.73	20.8%
563	1995	6	30	196,388	8,182.8	10,312.9	8,183	8,183	$16.24	$16,120.51	$24,139.85	$1,227,425.00	$0.00	$11,011.48	$35,167.57	$35,167.57	3.3%
564	1995	7	31	376,043	7,840.3	9,958.2	7,840	8,183	$16.24	$16,120.51	$23,128.00	$1,176,040.00	$0.00	$21,084.75	$44,228.99	$44,228.99	6.4%
565	1995	8	31	43,336	1,805.7	2,373.8	1,806	8,183	$16.24	$16,120.51	$5,327.70	$270,849.00	$0.00	$2,429.84	$7,773.78	$16,120.51	3.2%

Little Bayou Meto
Flood Control Pumping Plant
3000-cfs (2 4000-hp)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1										Minimum							
2										Monthly	Billing						
3				Metered			Billing	Ratchet	Customer	Demand	Demand	Incremental Energy		Energy			Monthly
4	Period-of-Record			Energy	Demands		Demand	Demand	Charge	Charge	Charge	Block 1	Block 2	Charge	Subtotal Bill	Total Bill	Load
5	YEAR	MO	DAYS	kWh	kWD	kVAD	kWD	kWD	$16.24	$1.97	$2.95	$0.05607	$0.04493	kWh			Factor
566	1995	9	30	0	0.0	0.0	0	8,183	$16.24	$16,120.51	$0.00	$0.00	$0.00	$0.00	$16.24	$16,120.51	0.0%
567	1995	10	31	0	0.0	0.0	0	8,183	$16.24	$16,120.51	$0.00	$0.00	$0.00	$0.00	$16.24	$16,120.51	0.0%
568	1995	11	30	0	0.0	0.0	0	8,183	$16.24	$16,120.51	$0.00	$0.00	$0.00	$0.00	$16.24	$16,120.51	0.0%
569	1995	12	31	0	0.0	0.0	0	8,183	$16.24	$16,120.51	$0.00	$0.00	$0.00	$0.00	$16.24	$16,120.51	0.0%
570	1996	1	31	0	0.0	0.0	0	8,183	$16.24	$16,120.51	$0.00	$0.00	$0.00	$0.00	$16.24	$16,120.51	0.0%
571	1996	2	29	0	0.0	0.0	0	8,183	$16.24	$16,120.51	$0.00	$0.00	$0.00	$0.00	$16.24	$16,120.51	0.0%
572	1996	3	31	43,869	1,827.9	2,398.8	1,828	8,183	$16.24	$16,120.51	$5,392.60	$274,180.00	$0.00	$2,459.73	$7,868.57	$16,120.51	3.2%
573	1996	4	30	425,955	7,094.1	9,164.1	7,094	8,183	$16.24	$16,120.51	$20,927.30	$1,064,120.00	$0.00	$23,883.32	$44,826.86	$44,826.86	8.3%
574	1996	5	31	905,874	6,208.1	8,182.1	6,208	8,183	$16.24	$16,120.51	$18,313.60	$931,209.00	$0.00	$50,792.35	$69,122.19	$69,122.19	19.6%
575	1996	6	30	538,605	6,287.7	8,272.1	6,288	7,840	$16.24	$15,444.80	$18,549.60	$943,151.00	$0.00	$30,199.56	$48,765.40	$48,765.40	11.9%
576	1996	7	31	0	0.0	0.0	0	7,094	$16.24	$13,975.18	$0.00	$0.00	$0.00	$0.00	$16.24	$13,975.18	0.0%
577	1996	8	31	532,944	4,461.0	5,874.5	4,461	7,094	$16.24	$13,975.18	$13,159.95	$669,144.00	$0.00	$29,882.19	$43,058.38	$43,058.38	16.1%
578	1996	9	30	151,270	6,302.9	8,289.3	6,303	7,094	$16.24	$13,975.18	$18,593.85	$945,435.00	$0.00	$8,481.69	$27,091.78	$27,091.78	3.3%
579	1996	10	31	482,557	7,235.1	9,316.4	7,235	7,235	$16.24	$14,252.95	$21,343.25	$1,085,262.00	$0.00	$27,056.99	$48,416.48	$48,416.48	9.0%
580	1996	11	30	693,198	7,979.8	10,103.4	7,980	7,980	$16.24	$15,720.60	$23,541.00	$1,196,969.00	$0.00	$38,867.60	$62,424.84	$62,424.84	12.1%
581	1996	12	31	1,373,140	7,779.4	9,894.5	7,779	7,980	$16.24	$15,720.60	$22,948.05	$1,166,906.00	$206,234.00	$74,694.51	$97,658.80	$97,658.80	23.7%
582	1997	1	31	425,951	6,208.1	8,182.1	6,208	7,980	$16.24	$15,720.60	$18,313.60	$931,209.00	$0.00	$23,883.07	$42,212.91	$42,212.91	9.2%
583	1997	2	28	1,598,161	7,534.3	9,636.1	7,534	7,980	$16.24	$15,720.60	$22,225.30	$1,130,150.00	$468,011.00	$84,395.24	$106,636.78	$106,636.78	31.6%
584	1997	3	31	3,556,481	7,766.5	9,881.0	7,767	7,980	$16.24	$15,720.60	$22,912.65	$1,164,977.00	$2,391,504.00	$172,770.54	$195,699.43	$195,699.43	61.5%
585	1997	4	30	2,893,665	7,765.2	9,879.6	7,765	7,980	$16.24	$15,720.60	$22,906.75	$1,164,785.00	$1,728,880.00	$142,988.07	$165,911.06	$165,911.06	51.8%
586	1997	5	31	1,643,920	6,416.1	8,416.5	6,416	7,980	$16.24	$15,720.60	$18,927.20	$962,416.00	$681,504.00	$84,582.64	$103,526.08	$103,526.08	34.4%
587	1997	6	30	1,441,029	7,309.8	9,396.7	7,310	7,980	$16.24	$15,720.60	$21,564.50	$1,096,477.00	$344,552.00	$76,960.19	$98,540.93	$98,540.93	27.4%
588	1997	7	31	744,967	6,208.1	8,182.1	6,208	7,980	$16.24	$15,720.60	$18,313.60	$931,209.00	$0.00	$41,770.29	$60,100.13	$60,100.13	16.1%
589	1997	8	31	87,871	1,887.6	2,465.4	1,888	7,980	$16.24	$15,720.60	$5,569.60	$283,135.00	$0.00	$4,926.94	$10,512.78	$15,720.60	6.3%
590	1997	9	30	89,086	1,938.2	2,521.4	1,938	7,980	$16.24	$15,720.60	$5,717.10	$290,727.00	$0.00	$4,995.04	$10,728.38	$15,720.60	6.4%
591	1997	10	31	106,424	4,434.3	5,844.4	4,434	7,980	$16.24	$15,720.60	$13,080.30	$665,149.00	$0.00	$5,967.18	$19,063.72	$19,063.72	3.2%
592	1997	11	30	0	0.0	0.0	0	7,779	$16.24	$15,324.63	$0.00	$0.00	$0.00	$0.00	$16.24	$15,324.63	0.0%
593	1997	12	31	679,355	7,307.2	9,393.9	7,307	7,767	$16.24	$15,300.99	$21,555.65	$1,096,079.00	$0.00	$38,091.44	$59,663.33	$59,663.33	12.5%
594	1998	1	31	0	0.0	0.0	0	7,767	$16.24	$15,300.99	$0.00	$0.00	$0.00	$0.00	$16.24	$15,300.99	0.0%
595																	
596	MONTHS	589	SUM	336,794,569	#N/A	#N/A	#N/A	#N/A	$9,565.36	$8,459,438.07	$5,663,053.05	$287,952,907.00	$117,109,751.00	$17,579,468.66	$23,252,087.07	$27,130,148.48	#N/A
597	YEARS	49.08	MIN	0	0.0	0.0	0	0	$16.24	$0.00	$0.00	$0.00	$0.00	$0.00	$16.24	$16.24	0.0%
598	DAYS	17,928	AVG	571,807	3,259.2	4,202.3	3,259	7,291	$16.24	$14,362.37	$9,614.69	$488,884.39	$198,828.10	$29,846.30	$39,477.23	$46,061.37	11.7%
599	kHOURS	430.3	MAX	4,562,550	8,935.1	11,070.6	8,935	8,935	$16.24	$17,601.95	$26,358.25	$1,340,267.00	$3,364,663.00	$218,339.83	$241,914.77	$241,914.77	76.8%
600			ANNUAL	6,861,689	#N/A	#N/A	#N/A	#N/A	$194.88	$172,348.48	$115,376.29	$5,866,612.71	$2,385,937.20	$358,155.56	$473,726.73	$552,736.47	#N/A
601																Lifetime LF:	8.8%

Tab "Metering & Billing - 3000 cfs" of
File "Bayou Meto Study - 3000-cfs Pumping Station.XLS"

BAYOU METO COMPREHENSIVE STUDY
BAYOU METO BASIN, ARKANSAS

APPENDIX C

ENGINEERING INVESTIGATIONS & ANALYSES
FLOOD CONTROL COMPONENT

SECTION V

RELOCATIONS

Appendix C - Engineering Investigations & Analyses
Flood Control Component

Section V - Relocations

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Flood Control Component

Section V - Relocations

LIST OF PLATES

Plate No.	Title
V-01	Map Showing Location of Bridge Relocation, Proposed Big Bayou Meto Diversion Channel
V-02	Map Showing Locations of Bridge Relocations, Little Bayou Meto Connection Channel

Appendix C - Engineering Investigations & Analyses
Flood Control Component

SECTION V - RELOCATIONS

V-1. GENERAL. The public facility data for this section were compiled through field reconnaissance and investigations, aerial photographs, engineering drawings, maps and conversations with facility owners and local residents.

V-1-a. Purpose. The purpose of the relocations studies included in this report is to identify the public road, bridge and utility facilities which will be impacted by the flood control component of the Bayou Meto Project, and to establish a basis for an estimate of the cost of providing for the continuing function of those facilities requiring relocation and/or alteration to permit the construction of the project.

V-1-b. Criteria for Relocated Facilities. New or replacement bridge designs would be based upon current Arkansas State Highway Department and county road standards. Relocated utilities would be of the same number of lines, types and capacities of the existing utilities.

V-1-c. Estimates. The estimates for the relocation of affected facilities were developed on the basis of field investigations at the site of each facility; the best available current unit prices; estimates from facility owners; and, cost records of similar relocation work previously performed in the project vicinity.

V-2. ROADS AND BRIDGES.

V-2-a. Arkansas State Highway 70 Bridge. Each of the alternative improvement plans (Alternatives 2, 2A, 3A, and 3B) will require construction of a highway bridge and approaches near channel mile 2.4, where the proposed Big Bayou Meto Diversion Channel is to be constructed across Highway 70. Plate No. V-01 shows the location of the Highway 70 crossing. The estimated cost of constructing the bridge and approaches for each alternative is $645,000.

V-2-b. Arkansas State Highway 88 Bridge. This bridge, located near mile 1.45 on Little Bayou Meto Connection Channel, will require replacement to permit the channel enlargement planned under Alternatives 3A and 3B. The location of the bridge is shown in Plate No. V-02. The estimated cost of replacing the bridge for Alternative 3A is $329,000, and for Alternative 3B is $389,800.

V-2-c. Private Bridge. This bridge off Reydel Road crosses the Little Bayou Meto Connection Channel near mile 2.3 and will need to be removed or replaced to allow the channel enlargement planned for Alternatives 3A and 3B. The bridge location is shown on Plate No. V-02. Since the bridge is privately owned, its disposition is a real estate matter. Therefore, the cost of resolving its conflict with the planned channel work will be included in the Lands and Damages estimates for Alternates 3A and 3B.

V-2-d. Wrape Plantation Road Bridge. This Jefferson County, Arkansas bridge crosses the Little Bayou Meto Connection Channel near mile 5.5 and will require replacement to provide for the channel enlargement planned for Alternatives 3A and 3B. Plate No. V-02 contains a map showing the bridge location. The cost of replacing the bridge for the Alternative 3A channel is estimated at $238,000, and $290,000 for Alternative 3B.

V-3 RAILROADS. No railway bridges, railway lines or embankments will be affected by any of the alternative plans for the flood control project.

V-4 UTILITIES.

V-4-a. Powerlines.

V-4-a-1. Big Bayou Meto Diversion Channel (Mile 2.4). A 4-wire, electric powerline lies parallel and adjacent to Arkansas State Highway 70. This powerline will interfere with the construction of the proposed Big Bayou Meto Diversion Channel at this location and will require relocation for Alternatives 2, 2A, 3A and 3B. The estimated cost of altering the powerline for each alternative is $18,690.

V-4-a-2. Little Bayou Meto Connection Channel(Mile 1.45). A 3-wire, electric powerline crosses the connection channel in the vicinity of the State Highway 88 bridge

crossing that will require relocation to allow the channel enlargement activities planned under Alternatives 3A and 3B of the flood control project. The cost of relocating the powerline is estimated at $17,000 for each alternative.

V-4-a-3. Little Bayou Meto Connection Channel (Mile 5.5). A 3-wire, electric powerline crossing the connection channel near the Wrape Plantation Road bridge crossing at this location will need alteration. The powerline work is necessary to avoid interference with the channel enlargement planned for Alternatives 3A and 3B. The estimated cost of the powerline work for each alternative plan is $17,000.

V-4-b. Telephone Cables.

V-4-b-1. Big Bayou Meto Diversion Channel (Mile 2.4). A buried telephone cable lying in the ditch along Arkansas State Highway 70 will have to be relocated to permit the construction of the diversion channel at this location. The telephone cable will require relocation for each of the alternative flood control plans, and the estimated relocation cost is $12,460 for each. An underground fiber optic cable also lies in the path of the proposed diversion channel in this vicinity and will need to be lowered to allow channel construction. This cable will also require relocation to permit construction of each of the alternative plans. The estimated relocation cost for each plan is $82,770.

V-4-b-2. Little Bayou Meto Connection Channel (Mile 1.45). An underground telephone cable crosses the connection channel near the Highway 88 bridge at this location. The cable crossing will require alteration to provide clearance for the channel enlargement work planned for flood control Alternatives 3A and 3B. The estimated cost of the telephone cable alteration is $11,100 for each alternative.

V-4-b-3. Little Bayou Meto Connection Channel (Mile 5.5). The telephone cable crossing under the connection channel near the Wrape Plantation Road bridge at this location will require relocation to provide clearance for the channel enlargement work planned for under flood control Alternatives 3A and 3B. The estimated cost of the

telephone cable relocation work is $11,100 for each alternative.

V-4-c. Pipelines.

V-4-c-1. Big Bayou Meto Diversion Channel (Mile 2.4). A natural gas pipeline and a waterline buried in the roadside ditch along Arkansas State Highway 70 will require relocation to allow construction of the proposed diversion channel through the highway at this location. The pipelines will require relocation for each of the flood control alternative plans. The estimated relocation cost for the gas pipeline is $7,740, and the waterline relocation is estimated to be $5,340.

V-4-c-2. Little Bayou Meto Connection Channel (Mile 1.45). A waterline crossing under the connection channel at the site of the Arkansas State Highway 88 bridge at this location will require relocation. Its relocation is necessary to resolve its conflict with construction of the proposed channel enlargement under Alternative plans 3A and 3B. The estimated cost of the waterline relocation work is $4,000 for each alternative.

V-5. SUMMARY AND COMPARISON OF RELOCATION COSTS

V-5-a. Alternative 2. The improvements for this plan will require construction of one bridge, and the relocation or alteration of one powerline, one waterline, one natural gas pipeline, one telephone cable and one fiber optic cable. The estimated cost of the relocation activities for this alternative is $772,000.

V-5-b. Alternative 2A. The relocation requirements and associated costs for this plan are the same as shown for Alternate A, above.

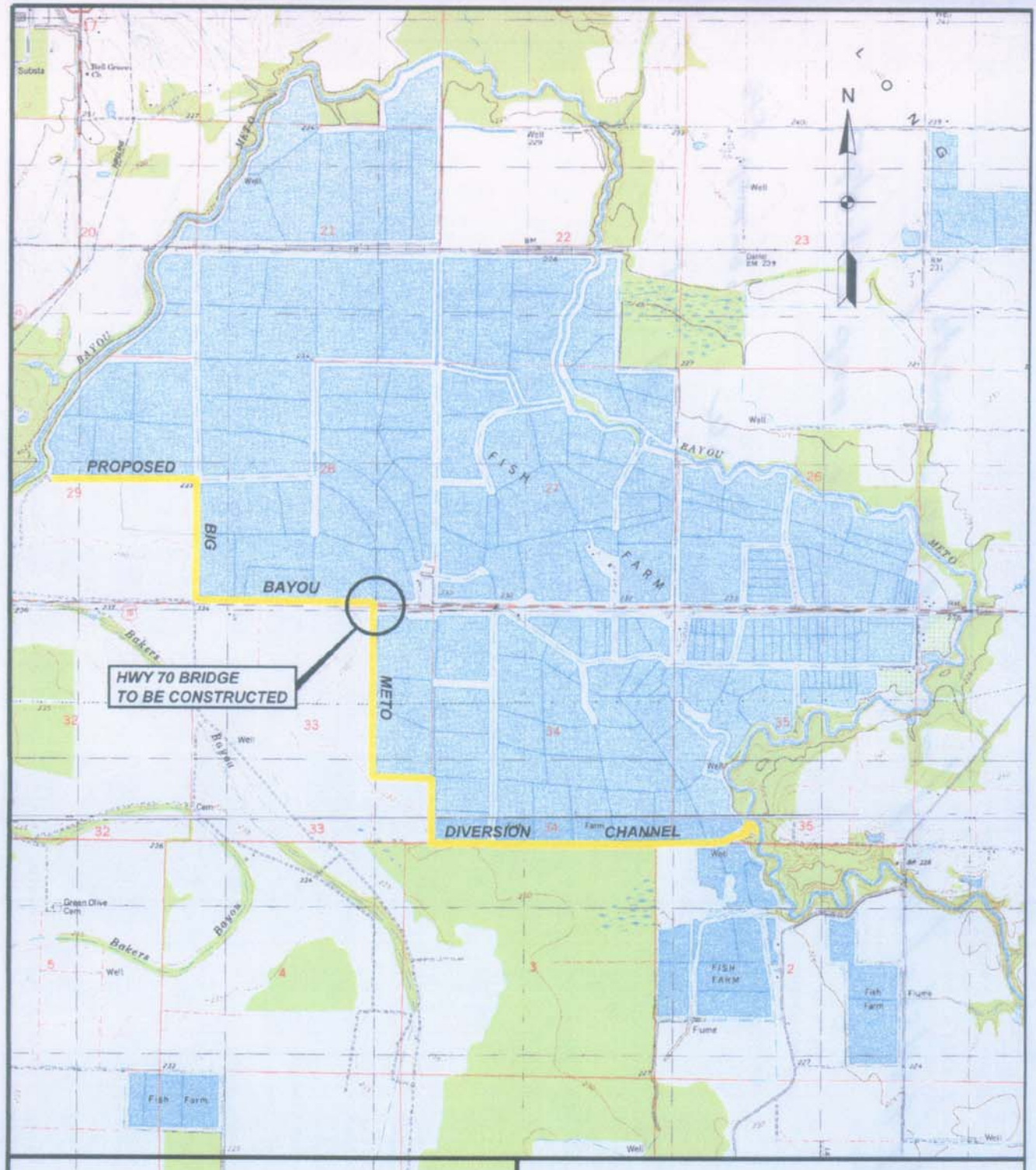
V-5-c. Alternative 3A. The planned improvements will require construction and/or replacement of three bridges, and the relocation or alteration of three powerlines, two waterlines, one gas pipeline, three telephone cables and one fiber optic cable. The total estimated cost of relocations for this alternative is $1,399,200.

V-5-d. Alternative 3B. Construction of this alternative will require the construction and/or replacement of three bridges, and the relocation or alteration of three

powerlines, two waterlines, one gas pipeline, three telephone lines and one fiber optic cable. The total estimated cost of the relocations for this alternative is $1,512,000.

V-5-e. Comparison of Relocation Costs. A comparison of the cost of relocating public facilities for the various plans of improvement is listed below.

ALTERNATIVE	ITEM	DESCRIPTION	COST ESTIMATE ($)
2	8	Bridge	645,000
		Utilities	127,000
		TOTAL	772,000
2A	8	Bridge	645,000
		Utilities	127,000
		TOTAL	772,000
3A	2	2 Bridges	567,000
		Utilities	60,200
		subtotal	627,200
	9	Bridge	645,000
		Utilities	127,000
		subtotal	772,000
		TOTAL	1,399,200
3B	2	2 Bridges	679,800
		Utilities	60,200
		subtotal	740,000
	9	Bridge	645,000
		Utilities	127,000
		subtotal	772,000
		TOTAL	1,512,000



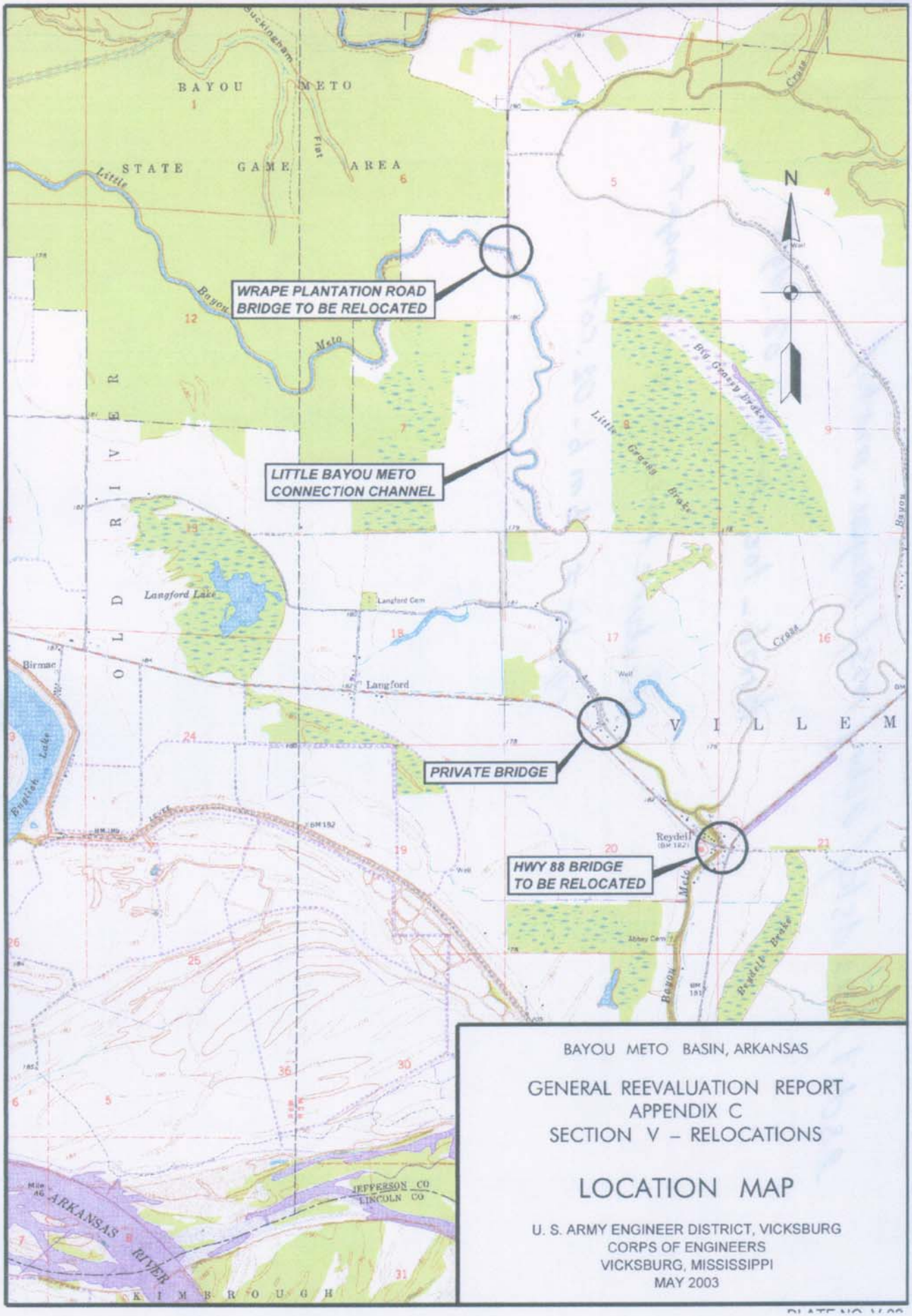
BAYOU METO BASIN, ARKANSAS

GENERAL REEVALUATION REPORT
APPENDIX C
SECTION V – RELOCATIONS

LOCATION MAP

U. S. ARMY ENGINEER DISTRICT, VICKSBURG
CORPS OF ENGINEERS
VICKSBURG, MISSISSIPPI
MAY 2003

PLATE NO. V-01



BAYOU METO BASIN, ARKANSAS

GENERAL REEVALUATION REPORT
APPENDIX C
SECTION V – RELOCATIONS

LOCATION MAP

U. S. ARMY ENGINEER DISTRICT, VICKSBURG
CORPS OF ENGINEERS
VICKSBURG, MISSISSIPPI
MAY 2003

PLATE NO. V-20

BAYOU METO COMPREHENSIVE STUDY
BAYOU METO BASIN, ARKANSAS

APPENDIX C

ENGINEERING INVESTIGATIONS & ANALYSES
FLOOD CONTROL COMPONENT

SECTION VI

GEOSPATIAL

Appendix C - Engineering Investigations & Analyses
Flood Control Component

Section VI - Geospatial

SEE APPENDIX C, ENGINEERING INVESTIGATIONS AND ANALYSES, FLOOD CONTROL COMPONENT, VOLUME 8, SECTION I, HYDROLOGY AND HYDRAULICS, PARAGRAPHS I-13 THROUGH I-15, FOR GEOSPATIAL METHODOLOGY AND TECHNIQUES USED IN THIS STUDY.

BAYOU METO COMPREHENSIVE STUDY
BAYOU METO BASIN, ARKANSAS

APPENDIX C

ENGINEERING INVESTIGATIONS & ANALYSES
FLOOD CONTROL COMPONENT

SECTION VII

COST ENGINEERING REPORT

Appendix C - Engineering Investigations & Analyses
Flood Control Component

Section VII - Cost Engineering Report

Revisions to the Flood Control Component Cost Estimate

The following Flood Control Component cost estimate (October 2005 price levels) reflects items that are included in the recommended flood control plan (2A) as well as some features in the recommended waterfowl plan. Items 1 and 2, the Little Bayou Meto Pump Station and Connecting Channel, are justified as part of the waterfowl plan along with Item 7, Salt Bayou Channel. Item 3 Boggy Slough includes some features that are included in the recommended flood control plan and some from the recommended waterfowl plan. The remaining items are associated strictly with the recommended flood control plan.

Bayou Meto Selected Plan

Designed By: CELMK
Estimated By: CELMK-ED-CC

Prepared By: Phillip G. Hegwood
Chief, Cost Engineering Section

Preparation Date: 10/01/05
Effective Date of Pricing: 10/01/05

Sales Tax: 0.00%

** PROJECT OWNER SUMMARY Contract **

		QUANTY	UOM	CONTRACT COST	CONTINGN	ESCALATN	TOTAL COST
01	Little Bayou Meto 1000 CFS Pump	1.00	EA	17,879,706	4,299,798	1,451,855	23,631,359
02	Item No. 2, Little Bayou Meto CC	1.00	EA	7,800,881	1,677,551	615,216	10,093,648
03	Item No. 3, Boggy Slough	1.00	EA	4,254,584	846,932	498,397	5,599,913
04	Item No. 4, Wabbaseka Bayou Chan	1.00	EA	3,106,428	651,610	494,051	4,252,089
05	Item No. 5, Indian Bayou Ditch	1.00	EA	1,743,153	315,509	424,708	2,483,370
06	Item No. 6, Indian Bayou Channel	1.00	EA	2,513,772	502,068	624,306	3,640,146
07	Item No. 7, Salt Bayou Channel	1.00	EA	1,327,610	248,640	333,754	1,910,004
08	Item No. 8, Crooked Creek	1.00	EA	3,648,534	737,017	826,747	5,212,298
09	Item No. 9, Big Bayou Meto Div.	1.00	EA	4,812,919	982,336	909,105	6,704,360
10	Item No. 10, Mitigation	1.00	EA	3,565,762	761,761	233,769	4,561,292
TOTAL	Bayou Meto Selected Plan	1.00	EA	50,653,349	11,023,222	6,411,908	68,088,479

** PROJECT OWNER SUMMARY - Feature **

		QUANTY	UOM	CONTRACT COST	CONTINGN	ESCALATN	TOTAL COST
01	Little Bayou Meto 1000 CFS Pump						
01.01	Lands and Damages	1.00	EA	39,995	10,170	2,103	52,268
01.15	Pumping Plant	1.00	EA	13,959,326	3,489,832	933,530	18,382,688
01.30	Planning, Engineering and Design	1.00	EA	2,177,385	544,346	189,160	2,910,892
01.31	Construction Management	1.00	EA	1,703,000	255,450	327,061	2,285,511
TOTAL	Little Bayou Meto 1000 CFS Pump	1.00	EA	17,879,706	4,299,798	1,451,855	23,631,359
02	Item No. 2, Little Bayou Meto CC						
02.01	Lands and Damages	1.00	EA	310,570	78,170	11,828	400,568
02.02	Relocations	1.00	EA	515,200	112,000	50,803	678,003
02.09	Channels and Canals	1.00	EA	3,896,525	974,131	255,709	5,126,365
02.11	Levees and Floodwalls	1.00	EA	293,610	73,403	19,268	386,281
02.15	Floodway Control & Diversion Str	1.00	EA	687,667	171,917	45,128	904,711
02.30	Planning, Engineering and Design	1.00	EA	1,515,309	151,531	115,845	1,782,685
02.31	Construction Management	1.00	EA	582,000	116,400	116,633	815,033
TOTAL	Item No. 2, Little Bayou Meto CC	1.00	EA	7,800,881	1,677,551	615,216	10,093,648
03	Item No. 3, Boggy Slough						
03.01	Lands and Damages	1.00	EA	67,795	17,170	4,600	89,565
03.09	Channels and Canals	1.00	EA	1,691,897	422,974	152,271	2,267,142
03.11	Levees and Floodwalls	1.00	EA	275,117	68,779	24,760	368,656
03.15	Floodway Control & Diversion Str	1.00	EA	575,872	143,968	51,828	771,668
03.30	Planning, Engineering and Design	1.00	EA	1,347,403	134,740	184,527	1,666,670
03.31	Construction Management	1.00	EA	296,500	59,300	80,411	436,211
TOTAL	Item No. 3, Boggy Slough	1.00	EA	4,254,584	846,932	498,397	5,599,913
04	Item No. 4, Wabbaseka Bayou Chan						
04.01	Lands and Damages	1.00	EA	552,130	137,760	81,848	771,738
04.09	Channels and Canals	1.00	EA	1,601,805	400,451	201,227	2,203,482
04.30	Planning, Engineering and Design	1.00	EA	770,993	77,099	150,536	998,629
04.31	Construction Management	1.00	EA	181,500	36,300	60,440	278,240
TOTAL	Item No. 4, Wabbaseka Bayou Chan	1.00	EA	3,106,428	651,610	494,051	4,252,089
05	Item No. 5, Indian Bayou Ditch						
05.01	Lands and Damages	1.00	EA	239,223	60,100	62,576	361,899
05.09	Channels and Canals	1.00	EA	524,178	131,044	76,006	731,228
05.15	Flood Control and Diversion Strs	1.00	EA	125,397	31,349	18,183	174,929

		QUANTY	UOM	CONTRACT COST	CONTINGN	ESCALATN	TOTAL COST
05.30	Planning, Engineering and Design	1.00	EA	778,555	77,856	237,654	1,094,064
05.31	Construction Management	1.00	EA	75,800	15,160	30,290	121,250
TOTAL	Item No. 5, Indian Bayou Ditch	1.00	EA	1,743,153	315,509	424,708	2,483,370
06	Item No. 6, Indian Bayou Channel						
06.01	Lands and Damages	1.00	EA	617,738	154,440	185,142	957,320
06.09	Channels and Canals	1.00	EA	815,866	203,966	122,890	1,142,722
06.15	Flood Control and Diversion Strs	1.00	EA	158,963	39,741	23,944	222,648
06.30	Planning, Engineering and Design	1.00	EA	803,205	80,321	245,178	1,128,704
06.31	Construction Management	1.00	EA	118,000	23,600	47,153	188,753
TOTAL	Item No. 6, Indian Bayou Channel	1.00	EA	2,513,772	502,068	624,306	3,640,146
07	Item No. 7, Salt Bayou Channel						
07.01	Lands and Damages	1.00	EA	129,430	32,360	44,897	206,687
07.09	Channels and Canals	1.00	EA	565,743	141,436	84,862	792,041
07.30	Planning, Engineering and Design	1.00	EA	516,437	51,644	157,642	725,723
07.31	Construction Management	1.00	EA	116,000	23,200	46,354	185,554
TOTAL	Item No. 7, Salt Bayou Channel	1.00	EA	1,327,610	248,640	333,754	1,910,004
08	Item No. 8, Crooked Creek						
08.01	Lands and Damages	1.00	EA	412,652	102,910	117,759	633,321
08.09	Channels and Canals	1.00	EA	1,895,376	473,844	283,122	2,652,341
08.15	Flood Control and Diversion Strs	1.00	EA	27,086	6,772	4,046	37,904
08.30	Planning, Engineering and Design	1.00	EA	1,091,920	109,192	333,309	1,534,421
08.31	Construction Management	1.00	EA	221,500	44,300	88,511	354,311
TOTAL	Item No. 8, Crooked Creek	1.00	EA	3,648,534	737,017	826,747	5,212,298
09	Item No. 9, Big Bayou Meto Div.						
09.01	Lands and Damages	1.00	EA	158,843	40,180	28,429	227,452
09.02	Relocations	1.00	EA	634,000	138,000	173,700	945,700
09.09	Channels and Canals	1.00	EA	1,935,791	483,948	258,912	2,678,650
09.11	Levees and Floodwalls	1.00	EA	432,314	108,079	57,822	598,215
09.15	Flood Control and Diversion Strs	1.00	EA	115,884	28,971	15,499	160,354
09.30	Planning, Engineering and Design	1.00	EA	1,240,588	124,059	276,341	1,640,988
09.31	Construction Management	1.00	EA	295,500	59,100	98,402	453,002
TOTAL	Item No. 9, Big Bayou Meto Div.	1.00	EA	4,812,919	982,336	909,105	6,704,360

		QUANTY	UOM	CONTRACT COST	CONTINGN	ESCALATN	TOTAL COST
10	Item No. 10, Mitigation						
10.01	Lands and Damages	1.00	EA	2,698,450	675,030	19,109	3,392,589
10.06	Fish and Wildlife Facilities	1.00	EA	562,512	56,251	139,222	757,985
10.30	Planning, Engineering & Design	1.00	EA	203,200	20,320	50,292	273,812
10.31	Construction Management	1.00	EA	101,600	10,160	25,146	136,906
TOTAL	Item No. 10, Mitigation	1.00	EA	3,565,762	761,761	233,769	4,561,292
TOTAL	Bayou Meto Selected Plan	1.00	EA	50,653,349	11,023,222	6,411,908	68,088,479

4,232,432

		QUANTY	UOM	CONTRACT COST	CONTINGN	ESCALATN	TOTAL COST
01	Little Bayou Meto 1000 CFS Pump						
01.01	Lands and Damages						
01.01.02	Acquisitions			14,385	3,600	1,457	19,442
01.01.05	Appraisals			3,675	920	372	4,967
01.01.06	PL 91-646 Assistance			600	150	61	811
01.01.07	Temporary Permits/Rights of Enty			450	110	45	605
01.01.13	Project Related Administration	1.00	EA	360	90	36	486
01.01.18	Real Estate Payments			20,525	5,300	132	25,957
	TOTAL Lands and Damages	1.00	EA	39,995	10,170	2,103	52,268
01.15	Pumping Plant						
01.15.10	Little Bayou Meto 1000 CFS Pumps	1.00	EA	13,959,326	3,489,832	933,530	18,382,688
	TOTAL Pumping Plant	1.00	EA	13,959,326	3,489,832	933,530	18,382,688
01.30	Planning, Engineering and Design						
01.30.04	Construction Contract P, E, & D	1.00	EA	2,094,808	523,702	181,986	2,800,496
01.30.05	Programs and Project Management	1.00	EA	82,577	20,644	7,174	110,395
	TOTAL Planning, Engineering and Design	1.00	EA	2,177,385	544,346	189,160	2,910,892
01.31	Construction Management						
01.31.02	Area Office S & A	1.00	EA	1,200,000	180,000	230,460	1,610,460
01.31.03	District Office S & A			503,000	75,450	96,601	675,051
	TOTAL Construction Management	1.00	EA	1,703,000	255,450	327,061	2,285,511
	TOTAL Little Bayou Meto 1000 CFS Pump	1.00	EA	17,879,706	4,299,798	1,451,855	23,631,359
02	Item No. 2, Little Bayou Meto CC						
02.01	Lands and Damages						
02.01.01	Project Planning	1.00	EA	3,800	956	350	5,106
02.01.02	Acquisitions			86,310	21,724	7,941	115,975
02.01.05	Appraisals			22,050	5,550	2,029	29,629
02.01.06	PL 91-646 Assistance			3,600	906	331	4,837
02.01.07	Temporary Permits/Rights of Enty			2,700	680	248	3,628
02.01.13	Project Related Administration	1.00	EA	2,160	544	199	2,902

	QUANTY UOM	CONTRACT COST	CONTINGN	ESCALATN	TOTAL COST
02.01.18 Real Estate Payments		189,950	47,810	731	238,492
TOTAL Lands and Damages	1.00 EA	310,570	78,170	11,828	400,568
02.02 Relocations					
02.02.01 Roads, Construction Activities		453,000	98,478	44,670	596,148
02.02.03 Cemetery, Utilities, & Structure		62,200	13,522	6,133	81,855
TOTAL Relocations	1.00 EA	515,200	112,000	50,803	678,003
02.09 Channels and Canals					
02.09.01 Channels	1.00 EA	3,896,525	974,131	255,709	5,126,365
TOTAL Channels and Canals	1.00 EA	3,896,525	974,131	255,709	5,126,365
02.11 Levees and Floodwalls					
02.11.01 Levees		293,610	73,403	19,268	386,281
TOTAL Levees and Floodwalls	1.00 EA	293,610	73,403	19,268	386,281
02.15 Floodway Control & Diversion Str					
02.15.15 Cannon Break Control Stru (1K)	1.00 EA	687,667	171,917	45,128	904,711
TOTAL Floodway Control & Diversion Str	1.00 EA	687,667	171,917	45,128	904,711
02.30 Planning, Engineering and Design					
02.30.04 Construction Contract P, E, & D	1.00 EA	1,431,732	143,173	109,456	1,684,361
02.30.05 Programs and Project Management	1.00 EA	83,577	8,358	6,389	98,324
TOTAL Planning, Engineering and Design	1.00 EA	1,515,309	151,531	115,845	1,782,685
02.31 Construction Management					
02.31.02 Area Office S & A	1.00 EA	400,000	80,000	80,160	560,160
02.31.03 District Office S & A	1.00 EA	182,000	36,400	36,473	254,873
TOTAL Construction Management	1.00 EA	582,000	116,400	116,633	815,033
TOTAL Item No. 2, Little Bayou Meto CC	1.00 EA	7,800,881	1,677,551	615,216	10,093,648

		QUANTY	UOM	CONTRACT COST	CONTINGN	ESCALATN	TOTAL COST
03	Item No. 3, Boggy Slough						
03.01	Lands and Damages						
03.01.02	Acquisitions			14,385	3,643	3,182	21,210
03.01.05	Appraisals			3,675	931	813	5,419
03.01.06	PL 91-646 Assistance			600	152	133	885
03.01.07	Temporary Permits/Rights of Enty			450	114	100	664
03.01.13	Project Related Administration	1.00	EA	360	91	80	531
03.01.18	Real Estate Payments			48,325	12,239	293	60,857
	TOTAL Lands and Damages	1.00	EA	67,795	17,170	4,600	89,565
03.09	Channels and Canals						
03.09.01	Channels	1.00	EA	1,691,897	422,974	152,271	2,267,142
	TOTAL Channels and Canals	1.00	EA	1,691,897	422,974	152,271	2,267,142
03.11	Levees and Floodwalls						
03.11.01	Levees			275,117	68,779	24,760	368,656
	TOTAL Levees and Floodwalls	1.00	EA	275,117	68,779	24,760	368,656
03.15	Floodway Control & Diversion Str						
03.15.01	Castor Bayou Low Drop Structure	1.00	EA	47,684	11,921	4,292	63,897
03.15.02	L.B.M. Boggy Slough @ Mi 17.65	1.00	EA	297,891	74,473	26,810	399,174
03.15.03	Boggy Slough Div. Weir @mi 5.0	1.00	EA	96,602	24,150	8,694	129,446
03.15.04	Boggy Slough Div. Weir @Mi 0.1	1.00	EA	133,695	33,424	12,033	179,151
	TOTAL Floodway Control & Diversion Str	1.00	EA	575,872	143,968	51,828	771,668
03.30	Planning, Engineering and Design						
03.30.04	Construction Contract P, E, & D	1.00	EA	1,264,826	126,483	173,218	1,564,527
03.30.05	Programs and Project Management	1.00	EA	82,577	8,258	11,309	102,144
	TOTAL Planning, Engineering and Design	1.00	EA	1,347,403	134,740	184,527	1,666,670
03.31	Construction Management						
03.31.02	Area Office S & A	1.00	EA	200,000	40,000	54,240	294,240
03.31.03	District Office S & A	1.00	EA	96,500	19,300	26,171	141,971

		QUANTY	UOM	CONTRACT COST	CONTINGN	ESCALATN	TOTAL COST
	TOTAL Construction Management	1.00	EA	296,500	59,300	80,411	436,211
	TOTAL Item No. 3, Boggy Slough	1.00	EA	4,254,584	846,932	498,397	5,599,913
04	Item No. 4, Wabbaseka Bayou Chan						
04.01	Lands and Damages						
04.01.02	Acquisitions			201,390	50,248	56,619	308,257
04.01.05	Appraisals			51,450	12,837	14,465	78,752
04.01.06	PL 91-646 Assistance			8,400	2,096	2,362	12,857
04.01.07	Temporary Permits/Rights of Enty			6,300	1,572	1,771	9,643
04.01.13	Project Related Administration	1.00	EA	5,040	1,258	1,417	7,714
04.01.18	Real Estate Payments			279,550	69,750	5,215	354,515
	TOTAL Lands and Damages	1.00	EA	552,130	137,760	81,848	771,738
04.09	Channels and Canals						
04.09.01	Channels	1.00	EA	1,601,805	400,451	201,227	2,203,482
	TOTAL Channels and Canals	1.00	EA	1,601,805	400,451	201,227	2,203,482
04.30	Planning, Engineering and Design						
04.30.04	Construction Contract P, E, & D	1.00	EA	688,416	68,842	134,413	891,671
04.30.05	Programs and Project Management	1.00	EA	82,577	8,258	16,123	106,958
	TOTAL Planning, Engineering and Design	1.00	EA	770,993	77,099	150,536	998,629
04.31	Construction Management						
04.31.02	Area Office S & A	1.00	EA	120,000	24,000	39,960	183,960
04.31.03	Districe Office S & A	1.00	EA	61,500	12,300	20,480	94,280
	TOTAL Construction Management	1.00	EA	181,500	36,300	60,440	278,240
	TOTAL Item No. 4, Wabbaseka Bayou Chan	1.00	EA	3,106,428	651,610	494,051	4,252,089
05	Item No. 5, Indian Bayou Ditch						
05.01	Lands and Damages						
05.01.02	Acquisitions			124,670	31,321	43,287	199,278
05.01.05	Appraisals			31,850	8,002	11,059	50,911
05.01.06	PL 91-646 Assistance			5,200	1,306	1,806	8,312

		QUANTY	UOM	CONTRACT COST	CONTINGN	ESCALATN	TOTAL COST
05.01.07	Temporary Permits/Rights of Enty			3,900	980	1,354	6,234
05.01.13	Project Related Administration	1.00	EA	3,120	784	1,083	4,987
05.01.18	Real Estate Payments			70,483	17,707	3,987	92,178
TOTAL	Lands and Damages	1.00	EA	239,223	60,100	62,576	361,899
05.09	Channels and Canals						
05.09.03	Channels	1.00	EA	524,178	131,044	76,006	731,228
TOTAL	Channels and Canals	1.00	EA	524,178	131,044	76,006	731,228
05.15	Flood Control and Diversion Strs						
05.15.01	Indian Bayou Ditch @ Mi 58.3	1.00	EA	125,397	31,349	18,183	174,929
TOTAL	Flood Control and Diversion Strs	1.00	EA	125,397	31,349	18,183	174,929
05.30	Planning, Engineering and Design						
05.30.04	Construction Contract P, E, & D	1.00	EA	695,978	69,598	212,447	978,023
05.30.05	Programs and Project Management	1.00	EA	82,577	8,258	25,207	116,041
TOTAL	Planning, Engineering and Design	1.00	EA	778,555	77,856	237,654	1,094,064
05.31	Construction Management						
05.31.02	Area Office S & A	1.00	EA	50,000	10,000	19,980	79,980
05.31.03	Districe Office S & A	1.00	EA	25,800	5,160	10,310	41,270
TOTAL	Construction Management	1.00	EA	75,800	15,160	30,290	121,250
TOTAL	Item No. 5, Indian Bayou Ditch	1.00	EA	1,743,153	315,509	424,708	2,483,370
06	Item No. 6, Indian Bayou Channel						
06.01	Lands and Damages						
06.01.02	Acquisitions			369,215	92,307	128,072	589,594
06.01.05	Appraisals			94,325	23,582	32,719	150,626
06.01.06	PL 91-646 Assistance			15,400	3,850	5,342	24,592
06.01.07	Temporary Permits/Rights of Enty			11,550	2,888	4,006	18,444
06.01.13	Project Related Administration	2.00	EA	9,240	2,310	3,205	14,755
06.01.18	Real Estate Payments			118,008	29,503	11,797	159,308
TOTAL	Lands and Damages	1.00	EA	617,738	154,440	185,142	957,320

		QUANTY	UOM	CONTRACT COST	CONTINGN	ESCALATN	TOTAL COST
06.09	Channels and Canals						
06.09.01	Channels	1.00	EA	815,866	203,966	122,890	1,142,722
	TOTAL Channels and Canals	1.00	EA	815,866	203,966	122,890	1,142,722
06.15	Flood Control and Diversion Strs						
06.15.03	Indian Bayou @ Mi 16.4	1.00	EA	158,963	39,741	23,944	222,648
	TOTAL Flood Control and Diversion Strs	1.00	EA	158,963	39,741	23,944	222,648
06.30	Planning, Engineering and Design						
06.30.04	Construction Contract P, E, & D	1.00	EA	720,628	72,063	219,972	1,012,662
06.30.05	Programs and Project Management	1.00	EA	82,577	8,258	25,207	116,041
	TOTAL Planning, Engineering and Design	1.00	EA	803,205	80,321	245,178	1,128,704
06.31	Construction Management						
06.31.02	Area Office S & A	1.00	EA	80,000	16,000	31,968	127,968
06.31.03	District Office S & A			38,000	7,600	15,185	60,785
	TOTAL Construction Management	1.00	EA	118,000	23,600	47,153	188,753
	TOTAL Item No. 6, Indian Bayou Channel	1.00	EA	2,513,772	502,068	624,306	3,640,146
07	Item No. 7, Salt Bayou Channel						
07.01	Lands and Damages						
07.01.02	Acquisitions			33,565	8,392	11,643	53,600
07.01.05	Appraisals			8,575	2,144	2,974	13,693
07.01.06	PL 91-646 Assistance			1,400	350	486	2,236
07.01.07	Temporary Permits/Rights of Enty			1,050	263	364	1,677
07.01.13	Project Related Administration	1.00	EA	840	210	291	1,341
07.01.18	Real Estate Payments			84,000	21,002	29,138	134,140
	TOTAL Lands and Damages	1.00	EA	129,430	32,360	44,897	206,687
07.09	Channels and Canals						
07.09.01	Channels	1.00	EA	565,743	141,436	84,862	792,041
	TOTAL Channels and Canals	1.00	EA	565,743	141,436	84,862	792,041

		QUANTY	UOM	CONTRACT COST	CONTINGN	ESCALATN	TOTAL COST
07.30	Planning, Engineering and Design						
07.30.04	Construction Contract P, E, & D	1.00	EA	433,860	43,386	132,436	609,682
07.30.05	Programs and Project Management	1.00	EA	82,577	8,258	25,207	116,041
	TOTAL Planning, Engineering and Design	1.00	EA	516,437	51,644	157,642	725,723
07 31	Construction Management						
07.31.02	Area Office S & A	1.00	EA	80,000	16,000	31,968	127,968
07.31.03	Districe Office S & A	1.00	EA	36,000	7,200	14,386	57,586
	TOTAL Construction Management	1.00	EA	116,000	23,200	46,354	185,554
	TOTAL Item No. 7, Salt Bayou Channel	1.00	EA	1,327,610	248,640	333,754	1,910,004
08	Item No. 8, Crooked Creek						
08 01	Lands and Damages						
08.01.02	Acquisitions			234,955	58,595	81,460	375,010
08.01.05	Appraisals			60,025	14,969	20,811	95,805
08.01.06	PL 91-646 Assistance			9,800	2,444	3,398	15,642
08.01.07	Temporary Permits/Rights of Enty			7,350	1,833	2,548	11,731
08.01.13	Project Related Administration	1.00	EA	5,880	1,466	2,039	9,385
08.01.18	Real Estate Payments			94,642	23,602	7,503	125,748
	TOTAL Lands and Damages	1.00	EA	412,652	102,910	117,759	633,321
08.09	Channels and Canals						
08 09 01	Channels	1.00	EA	1,895,376	473,844	283,122	2,652,341
	TOTAL Channels and Canals	1.00	EA	1,895,376	473,844	283,122	2,652,341
08.15	Flood Control and Diversion Strs						
08.15.01	Wier @ Mi. 4.3	1.00	EA	13,543	3,386	2,023	18,952
08.15.02	Wier @ Mi. 13.3	1.00	EA	13,543	3,386	2,023	18,952
	TOTAL Flood Control and Diversion Strs	1.00	EA	27,086	6,772	4,046	37,904
08 30	Planning, Engineering and Design						
08.30 04	Construction Contract P, E, & D	1.00	EA	1,009,343	100,934	308,102	1,418,379

		QUANTY	UOM	CONTRACT COST	CONTINGN	ESCALATN	TOTAL COST
08.30.05	Programs and Project Management	1.00	EA	82,577	8,258	25,207	116,041
	TOTAL Planning, Engineering and Design	1.00	EA	1,091,920	109,192	333,309	1,534,421
08.31	Construction Management						
08.31.02	Area Office S & A	1.00	EA	150,000	30,000	59,940	239,940
08.31.03	District Office S & A			71,500	14,300	28,571	114,371
	TOTAL Construction Management	1.00	EA	221,500	44,300	88,511	354,311
	TOTAL Item No. 8, Crooked Creek	1.00	EA	3,648,534	737,017	826,747	5,212,298
09	Item No. 9, Big Bayou Meto Div.						
09.01	Lands and Damages						
09.01.01	Project Planning	1.00	EA	3,800	961	1,071	5,833
09.01.02	Acquisitions			67,130	16,981	18,925	103,036
09.01.05	Appraisals			17,150	4,338	4,835	26,323
09.01.06	PL 91-646 Assistance			2,800	708	789	4,298
09.01.07	Temporary Permits/Rights of Entry			2,100	531	592	3,223
09.01.13	Project Related Administration	1.00	EA	1,680	425	474	2,579
09.01.18	Real Estate Payments			64,183	16,235	1,743	82,161
	TOTAL Lands and Damages	1.00	EA	158,843	40,180	28,429	227,452
09.02	Relocations						
09.02.01	Roads, Construction Activities			519,000	112,968	142,193	774,161
09.02.03	Cemetery, Utilities, & Structure			115,000	25,032	31,507	171,539
	TOTAL Relocations	1.00	EA	634,000	138,000	173,700	945,700
09.09	Channels and Canals						
09.09.01	Channels	1.00	EA	1,935,791	483,948	258,912	2,678,650
	TOTAL Channels and Canals	1.00	EA	1,935,791	483,948	258,912	2,678,650
09.11	Levees and Floodwalls						
09.11.01	Levees			432,314	108,079	57,822	598,215
	TOTAL Levees and Floodwalls	1.00	EA	432,314	108,079	57,822	598,215

		QUANTY	UOM	CONTRACT COST	CONTINGN	ESCALATN	TOTAL COST
09.15	Flood Control and Diversion Strs						
09.15.01	B.B.M. Diversion Wier Mi 0.0	1.00	EA	57,942	14,485	7,750	80,177
09.15.02	B.B.M. Diversion Mi 2.5 Low Wier	1.00	EA	57,942	14,485	7,750	80,177
	TOTAL Flood Control and Diversion Strs	1.00	EA	115,884	28,971	15,499	160,354
09.30	Planning, Engineering and Design						
09.30.04	Construction Contract P, E, & D	1.00	EA	1,158,011	115,801	257,947	1,531,759
09.30.05	Programs and Project Management	1.00	EA	82,577	8,258	18,394	109,229
	TOTAL Planning, Engineering and Design	1.00	EA	1,240,588	124,059	276,341	1,640,988
09.31	Construction Management						
09.31.02	Area Office S & A	1.00	EA	200,000	40,000	66,600	306,600
09.31.03	Districe Office S & A			95,500	19,100	31,802	146,402
	TOTAL Construction Management	1.00	EA	295,500	59,100	98,402	453,002
	TOTAL Item No 9, Big Bayou Meto Div.	1.00	EA	4,812,919	982,336	909,105	6,704,360
10	Item No. 10, Mitigation						
10.01	Lands and Damages						
10.01.02	Acquisitions	1.00	EA	47,950	11,990	13,487	73,427
10.01.05	Appraisal	1.00	EA	12,250	3,060	3,445	18,755
10.01.06	PL 91-646 Assistance	1.00	EA	2,000	530	569	3,099
10.01.07	Temp Permits/Licenses/Rights	1.00	EA	1,500	400	427	2,328
10.01.13	Project Related Admin	1.00	EA	1,200	300	338	1,838
10.01.18	Real Estate Payments			2,633,550	658,750	844	3,293,144
	TOTAL Lands and Damages	1.00	EA	2,698,450	675,030	19,109	3,392,589
10.06	Fish and Wildlife Facilities						
10.06.03	Wildlife Facilities	1.00	EA	562,512	56,251	139,222	757,985
	TOTAL Fish and Wildlife Facilities	1.00	EA	562,512	56,251	139,222	757,985
10.30	Planning, Engineering & Design	1.00	EA	203,200	20,320	50,292	273,812
10.31	Construction Management	1.00	EA	101,600	10,160	25,146	136,906
	TOTAL Item No. 10, Mitigation	1.00	EA	3,565,762	761,761	233,769	4,561,292

		QUANTY	UOM	CONTRACT COST	CONTINGN	ESCALATN	TOTAL COST
	TOTAL Bayou Meto Selected Plan	1.00	EA	50,653,349	11,023,222	6,411,908	68,088,479

** PROJECT INDIRECT SUMMARY - Contract **

		QUANTY	UOM	TOTAL DIRECT	OVERHEAD	HOME OFC	PROFIT	BOND	TOTAL COST
01	Little Bayou Meto 1000 CFS Pump	1.00	EA	14,227,722	1,546,101	711,207	1,256,465	138,211	17,879,706
02	Item No. 2, Little Bayou Meto CC	1.00	EA	6,524,769	540,254	248,517	439,046	48,295	7,800,881
03	Item No. 3, Boggy Slough	1.00	EA	3,589,324	281,644	129,556	228,883	25,177	4,254,584
04	Item No 4, Wabbaseka Bayou Chan	1.00	EA	2,687,370	177,412	81,610	144,177	15,859	3,106,428
05	Item No 5, Indian Bayou Ditch	1.00	EA	1,573,213	71,945	33,095	58,468	6,431	1,743,153
06	Item No. 6, Indian Bayou Channel	1.00	EA	2,258,741	107,970	49,666	87,743	9,652	2,513,772
07	Item No. 7, Salt Bayou Channel	1.00	EA	1,179,603	62,660	28,824	50,929	5,601	1,327,610
08	Item No. 8, Crooked Creek	1.00	EA	3,145,587	212,927	97,947	173,039	19,034	3,648,534
09	Item No. 9, Big Bayou Meto Div.	1.00	EA	4,163,068	275,121	126,555	223,581	24,594	4,812,919
10	Item No. 10, Mitigation	1.00	EA	3,418,600	62,303	28,659	50,631	5,569	3,565,762
TOTAL	Bayou Meto Selected Plan	1.00	EA	42,767,998	3,338,336	1,535,635	2,712,955	298,425	50,653,349
	CONTINGENCIES								11,023,222
	SUBTOTAL								61,676,571
	ESCALATION								6,411,908
	TOTAL INCL OWNER COSTS								68,088,479

** PROJECT INDIRECT SUMMARY Feature **

	QUANTY	UOM	TOTAL DIRECT	OVERHEAD	HOME OFC	PROFIT	BOND	TOTAL COST
01 Little Bayou Meto 1000 CFS Pump								
01.01 Lands and Damages	1.00	EA	39,995	0	0	0	0	39,995
01.15 Pumping Plant	1.00	EA	10,307,342	1,546,101	711,207	1,256,465	138,211	13,959,326
01.30 Planning, Engineering and Design	1.00	EA	2,177,385	0	0	0	0	2,177,385
01.31 Construction Management	1.00	EA	1,703,000	0	0	0	0	1,703,000
TOTAL Little Bayou Meto 1000 CFS Pump	1.00	EA	14,227,722	1,546,101	711,207	1,256,465	138,211	17,879,706
02 Item No. 2, Little Bayou Meto CC								
02.01 Lands and Damages	1.00	EA	310,570	0	0	0	0	310,570
02.02 Relocations	1.00	EA	515,200	0	0	0	0	515,200
02.09 Channels and Canals	1.00	EA	2,877,131	431,570	198,522	350,722	38,579	3,896,525
02.11 Levees and Floodwalls	1.00	EA	216,797	32,520	14,959	26,428	2,907	293,610
02.15 Floodway Control & Diversion Str	1.00	EA	507,762	76,164	35,036	61,896	6,809	687,667
02.30 Planning, Engineering and Design	1.00	EA	1,515,309	0	0	0	0	1,515,309
02.31 Construction Management	1.00	EA	582,000	0	0	0	0	582,000
TOTAL Item No. 2, Little Bayou Meto CC	1.00	EA	6,524,769	540,254	248,517	439,046	48,295	7,800,881
03 Item No. 3, Boggy Slough								
03.01 Lands and Damages	1.00	EA	67,795	0	0	0	0	67,795
03.09 Channels and Canals	1.00	EA	1,249,270	187,390	86,200	152,286	16,751	1,691,897
03.11 Levees and Floodwalls	1.00	EA	203,142	30,471	14,017	24,763	2,724	275,117
03.15 Floodway Control & Diversion Str	1.00	EA	425,215	63,782	29,340	51,834	5,702	575,872
03.30 Planning, Engineering and Design	1.00	EA	1,347,403	0	0	0	0	1,347,403
03.31 Construction Management	1.00	EA	296,500	0	0	0	0	296,500
TOTAL Item No. 3, Boggy Slough	1.00	EA	3,589,324	281,644	129,556	228,883	25,177	4,254,584
04 Item No. 4, Wabbaseka Bayou Chan								
04.01 Lands and Damages	1.00	EA	552,130	0	0	0	0	552,130
04.09 Channels and Canals	1.00	EA	1,182,747	177,412	81,610	144,177	15,859	1,601,805
04.30 Planning, Engineering and Design	1.00	EA	770,993	0	0	0	0	770,993
04.31 Construction Management	1.00	EA	181,500	0	0	0	0	181,500
TOTAL Item No. 4, Wabbaseka Bayou Chan	1.00	EA	2,687,370	177,412	81,610	144,177	15,859	3,106,428
05 Item No. 5, Indian Bayou Ditch								
05.01 Lands and Damages	1.00	EA	239,223	0	0	0	0	239,223
05.09 Channels and Canals	1.00	EA	387,044	58,057	26,706	47,181	5,190	524,178
05.15 Flood Control and Diversion Strs	1.00	EA	92,591	13,889	6,389	11,287	1,242	125,397

** PROJECT INDIRECT SUMMARY Feature **

		QUANTY	UOM	TOTAL DIRECT	OVERHEAD	HOME OFC	PROFIT	BOND	TOTAL COST
05.30	Planning, Engineering and Design	1.00	EA	778,555	0	0	0	0	778,555
05.31	Construction Management	1.00	EA	75,800	0	0	0	0	75,800
TOTAL	Item No. 5, Indian Bayou Ditch	1.00	EA	1,573,213	71,945	33,095	58,468	6,431	1,743,153
06	Item No. 6, Indian Bayou Channel								
06.01	Lands and Damages	1.00	EA	617,738	0	0	0	0	617,738
06.09	Channels and Canals	1.00	EA	602,422	90,363	41,567	73,435	8,078	815,866
06.15	Flood Control and Diversion Strs	1.00	EA	117,376	17,606	8,099	14,308	1,574	158,963
06.30	Planning, Engineering and Design	1.00	EA	803,205	0	0	0	0	803,205
06.31	Construction Management	1.00	EA	118,000	0	0	0	0	118,000
TOTAL	Item No. 6, Indian Bayou Channel	1.00	EA	2,258,741	107,970	49,666	87,743	9,652	2,513,772
07	Item No. 7, Salt Bayou Channel								
07.01	Lands and Damages	1.00	EA	129,430	0	0	0	0	129,430
07.09	Channels and Canals	1.00	EA	417,736	62,660	28,824	50,922	5,601	565,743
07.30	Planning, Engineering and Design	1.00	EA	516,437	0	0	0	0	516,437
07.31	Construction Management	1.00	EA	116,000	0	0	0	0	116,000
TOTAL	Item No. 7, Salt Bayou Channel	1.00	EA	1,179,603	62,660	28,824	50,922	5,601	1,327,610
08	Item No. 8, Crooked Creek								
08.01	Lands and Damages	1.00	EA	412,652	0	0	0	0	412,652
08.09	Channels and Canals	1.00	EA	1,399,515	209,927	96,567	170,601	18,766	1,895,376
08.15	Flood Control and Diversion Strs	1.00	EA	20,000	3,000	1,380	2,438	268	27,086
08.30	Planning, Engineering and Design	1.00	EA	1,091,920	0	0	0	0	1,091,920
08.31	Construction Management	1.00	EA	221,500	0	0	0	0	221,500
TOTAL	Item No. 8, Crooked Creek	1.00	EA	3,145,587	212,927	97,947	173,039	19,034	3,648,534
09	Item No. 9, Big Bayou Meto Div.								
09.01	Lands and Damages	1.00	EA	158,843	0	0	0	0	158,843
09.02	Relocations	1.00	EA	634,000	0	0	0	0	634,000
09.09	Channels and Canals	1.00	EA	1,429,357	214,403	98,626	174,239	19,166	1,935,791
09.11	Levees and Floodwalls	1.00	EA	319,214	47,882	22,026	38,912	4,280	432,314
09.15	Flood Control and Diversion Strs	1.00	EA	85,567	12,835	5,904	10,431	1,147	115,884
09.30	Planning, Engineering and Design	1.00	EA	1,240,588	0	0	0	0	1,240,588
09.31	Construction Management	1.00	EA	295,500	0	0	0	0	295,500
TOTAL	Item No. 9, Big Bayou Meto Div.	1.00	EA	4,163,068	275,121	126,555	223,581	24,594	4,812,919

	QUANTY	UOM	TOTAL DIRECT	OVERHEAD	HOME OFC	PROFIT	BOND	TOTAL COST
10 Item No. 10, Mitigation								
10 01 Lands and Damages	1.00	EA	2,698,450	0	0	0	0	2,698,450
10.06 Fish and Wildlife Facilities	1.00	EA	415,350	62,303	28,659	50,631	5,569	562,512
10.30 Planning, Engineering & Design	1.00	EA	203,200	0	0	0	0	203,200
10.31 Construction Management	1.00	EA	101,600	0	0	0	0	101,600
TOTAL Item No. 10, Mitigation	1.00	EA	3,418,600	62,303	28,659	50,631	5,569	3,565,762
TOTAL Bayou Meto Selected Plan	1.00	EA	42,767,998	3,338,336	1,535,635	2,712,955	298,425	50,653,349
CONTINGENCIES								11,023,222
SUBTOTAL								61,676,571
ESCALATION								6,411,908
TOTAL INCL OWNER COSTS								68,088,479

	QUANTY	UOM	TOTAL DIRECT	OVERHEAD	HOME OFC	PROFIT	BOND	TOTAL COST
01 Little Bayou Meto 1000 CFS Pump								
01.01 Lands and Damages								
01.01.02 Acquisitions			14,385	0	0	0	0	14,385
01.01.05 Appraisals			3,675	0	0	0	0	3,675
01.01.06 PL 91-646 Assistance			600	0	0	0	0	600
01.01.07 Temporary Permits/Rights of Enty			450	0	0	0	0	450
01.01.13 Project Related Administration	1.00	EA	360	0	0	0	0	360
01.01.18 Real Estate Payments			20,525	0	0	0	0	20,525
TOTAL Lands and Damages	1.00	EA	39,995	0	0	0	0	39,995
01.15 Pumping Plant								
01.15.10 Little Bayou Meto 1000 CFS Pumps	1.00	EA	10,307,342	1,546,101	711,207	1,256,465	138,211	13,959,326
TOTAL Pumping Plant	1.00	EA	10,307,342	1,546,101	711,207	1,256,465	138,211	13,959,326
01.30 Planning, Engineering and Design								
01.30.04 Construction Contract P, E, & D	1.00	EA	2,094,808	0	0	0	0	2,094,808
01.30.05 Programs and Project Management	1.00	EA	82,577	0	0	0	0	82,577
TOTAL Planning, Engineering and Design	1.00	EA	2,177,385	0	0	0	0	2,177,385
01.31 Construction Management								
01.31.02 Area Office S & A	1.00	EA	1,200,000	0	0	0	0	1,200,000
01.31.03 District Office S & A			503,000	0	0	0	0	503,000
TOTAL Construction Management	1.00	EA	1,703,000	0	0	0	0	1,703,000
TOTAL Little Bayou Meto 1000 CFS Pump	1.00	EA	14,227,722	1,546,101	711,207	1,256,465	138,211	17,879,706
02 Item No 2, Little Bayou Meto CC								
02.01 Lands and Damages								
02.01.01 Project Planning	1.00	EA	3,800	0	0	0	0	3,800
02.01.02 Acquisitions			86,310	0	0	0	0	86,310
02.01.05 Appraisals			22,050	0	0	0	0	22,050
02.01.06 PL 91-646 Assistance			3,600	0	0	0	0	3,600
02.01.07 Temporary Permits/Rights of Enty			2,700	0	0	0	0	2,700
02.01.13 Project Related Administration	1.00	EA	2,160	0	0	0	0	2,160

	QUANTY UOM	TOTAL DIRECT	OVERHEAD	HOME OFC	PROFIT	BOND	TOTAL COST
02.01.18 Real Estate Payments		189,950	0	0	0	0	189,950
TOTAL Lands and Damages	1.00 EA	310,570	0	0	0	0	310,570
02.02 Relocations							
02.02.01 Roads, Construction Activities		453,000	0	0	0	0	453,000
02.02.03 Cemetery, Utilities, & Structure		62,200	0	0	0	0	62,200
TOTAL Relocations	1.00 EA	515,200	0	0	0	0	515,200
02.09 Channels and Canals							
02.09.01 Channels	1.00 EA	2,877,131	431,570	198,522	350,722	38,579	3,896,525
TOTAL Channels and Canals	1.00 EA	2,877,131	431,570	198,522	350,722	38,579	3,896,525
02.11 Levees and Floodwalls							
02.11.01 Levees		216,797	32,520	14,959	26,428	2,907	293,610
TOTAL Levees and Floodwalls	1.00 EA	216,797	32,520	14,959	26,428	2,907	293,610
02.15 Floodway Control & Diversion Str							
02.15.15 Cannon Break Control Stru (1K)	1.00 EA	507,762	76,164	35,036	61,896	6,809	687,667
TOTAL Floodway Control & Diversion Str	1.00 EA	507,762	76,164	35,036	61,896	6,809	687,667
02.30 Planning, Engineering and Design							
02.30.04 Construction Contract P, E, & D	1.00 EA	1,431,732	0	0	0	0	1,431,732
02.30.05 Programs and Project Management	1.00 EA	83,577	0	0	0	0	83,577
TOTAL Planning, Engineering and Design	1.00 EA	1,515,309	0	0	0	0	1,515,309
02 31 Construction Management							
02 31 02 Area Office S & A	1.00 EA	400,000	0	0	0	0	400,000
02.31 03 District Office S & A	1.00 EA	182,000	0	0	0	0	182,000
TOTAL Construction Management	1.00 EA	582,000	0	0	0	0	582,000
TOTAL Item No 2, Little Bayou Meto CC	1.00 EA	6,524,769	540,254	248,517	439,046	48,295	7,800,881

		QUANTY UOM	TOTAL DIRECT	OVERHEAD	HOME OFC	PROFIT	BOND	TOTAL COST
03	Item No. 3, Boggy Slough							
03.01	Lands and Damages							
03.01.02	Acquisitions		14,385	0	0	0	0	14,385
03.01.05	Appraisals		3,675	0	0	0	0	3,675
03.01.06	PL 91-646 Assistance		600	0	0	0	0	600
03.01.07	Temporary Permits/Rights of Enty		450	0	0	0	0	450
03.01.13	Project Related Administration	1.00 EA	360	0	0	0	0	360
03.01.18	Real Estate Payments		48,325	0	0	0	0	48,325
	TOTAL Lands and Damages	1.00 EA	67,795	0	0	0	0	67,795
03.09	Channels and Canals							
03.09.01	Channels	1.00 EA	1,249,270	187,390	86,200	152,286	16,751	1,691,897
	TOTAL Channels and Canals	1.00 EA	1,249,270	187,390	86,200	152,286	16,751	1,691,897
03.11	Levees and Floodwalls							
03.11.01	Levees		203,142	30,471	14,017	24,763	2,724	275,117
	TOTAL Levees and Floodwalls	1.00 EA	203,142	30,471	14,017	24,763	2,724	275,117
03.15	Floodway Control & Diversion Str							
03.15.01	Castor Bayou Low Drop Structure	1.00 EA	35,209	5,281	2,429	4,292	472	47,684
03.15.02	L B.M. Boggy Slough @ Mi 17.65	1.00 EA	219,958	32,994	15,177	26,813	2,949	297,891
03.15.03	Boggy Slough Div. Weir @mi 5.0	1.00 EA	71,329	10,699	4,922	8,695	956	96,602
03.15.04	Boggy Slough Div Weir @Mi 0.1	1.00 EA	98,718	14,808	6,812	12,034	1,324	133,695
	TOTAL Floodway Control & Diversion Str	1.00 EA	425,215	63,782	29,340	51,834	5,702	575,872
03.30	Planning, Engineering and Design							
03.30.04	Construction Contract P, E, & D	1.00 EA	1,264,826	0	0	0	0	1,264,826
03.30.05	Programs and Project Management	1.00 EA	82,577	0	0	0	0	82,577
	TOTAL Planning, Engineering and Design	1.00 EA	1,347,403	0	0	0	0	1,347,403
03.31	Construction Management							
03.31.02	Area Office S & A	1.00 EA	200,000	0	0	0	0	200,000
03.31.03	District Office S & A	1.00 EA	96,500	0	0	0	0	96,500

	QUANTY	UOM	TOTAL DIRECT	OVERHEAD	HOME OFC	PROFIT	BOND	TOTAL COST
TOTAL Construction Management	1.00	EA	296,500	0	0	0	0	296,500
TOTAL Item No. 3, Boggy Slough	1.00	EA	3,589,724	281,644	129,556	228,883	25,177	4,254,584
04 Item No. 4, Wabbaseka Bayou Chan								
04 01 Lands and Damages								
04.01.02 Acquisitions			201,390	0	0	0	0	201,390
04.01.05 Appraisals			51,450	0	0	0	0	51,450
04.01.06 PL 91-646 Assistance			8,400	0	0	0	0	8,400
04.01.07 Temporary Permits/Rights of Enty			6,300	0	0	0	0	6,300
04.01 13 Project Related Administration	1.00	EA	5,040	0	0	0	0	5,040
04.01.18 Real Estate Payments			279,550	0	0	0	0	279,550
TOTAL Lands and Damages	1.00	EA	552,130	0	0	0	0	552,130
04.09 Channels and Canals								
04.09.01 Channels	1.00	EA	1,182,747	177,412	81,610	144,177	15,859	1,601,805
TOTAL Channels and Canals	1.00	EA	1,182,747	177,412	81,610	144,177	15,859	1,601,805
04.30 Planning, Engineering and Design								
04.30.04 Construction Contract P, E, & D	1.00	EA	688,416	0	0	0	0	688,416
04.30.05 Programs and Project Management	1.00	EA	82,577	0	0	0	0	82,577
TOTAL Planning, Engineering and Design	1.00	EA	770,993	0	0	0	0	770,993
04.31 Construction Management								
04.31.02 Area Office S & A	1.00	EA	120,000	0	0	0	0	120,000
04.31.03 Districe Office S & A	1.00	EA	61,500	0	0	0	0	61,500
TOTAL Construction Management	1.00	EA	181,500	0	0	0	0	181,500
TOTAL Item No. 4, Wabbaseka Bayou Chan	1.00	EA	2,687,370	177,412	81,610	144,177	15,859	3,106,428
05 Item No. 5, Indian Bayou Ditch								
05.01 Lands and Damages								
05.01.02 Acquisitions			124,670	0	0	0	0	124,670
05.01.05 Appraisals			31,850	0	0	0	0	31,850
05.01.06 PL 91-646 Assistance			5,200	0	0	0	0	5,200

		QUANTY UOM	TOTAL DIRECT	OVERHEAD	HOME OFC	PROFIT	BOND	TOTAL COST
05.01.07	Temporary Permits/Rights of Enty		3,900	0	0	0	0	3,900
05.01.13	Project Related Administration	1.00 EA	3,120	0	0	0	0	3,120
05.01.18	Real Estate Payments		70,483	0	0	0	0	70,483
	TOTAL Lands and Damages	1.00 EA	239,223	0	0	0	0	239,223
05.09	Channels and Canals							
05.09.03	Channels	1.00 EA	387,044	58,057	26,706	47,181	5,190	524,178
	TOTAL Channels and Canals	1.00 EA	387,044	58,057	26,706	47,181	5,190	524,178
05.15	Flood Control and Diversion Strs							
05.15.01	Indian Bayou Ditch @ Mi 58.3	1.00 EA	92,591	13,889	6,389	11,287	1,242	125,397
	TOTAL Flood Control and Diversion Strs	1.00 EA	92,591	13,889	6,389	11,287	1,242	125,397
05.30	Planning, Engineering and Design							
05.30.04	Construction Contract P, E, & D	1.00 EA	695,978	0	0	0	0	695,978
05.30.05	Programs and Project Management	1.00 EA	82,577	0	0	0	0	82,577
	TOTAL Planning, Engineering and Design	1.00 EA	778,555	0	0	0	0	778,555
05.31	Construction Management							
05.31.02	Area Office S & A	1.00 EA	50,000	0	0	0	0	50,000
05.31.03	District Office S & A	1.00 EA	25,800	0	0	0	0	25,800
	TOTAL Construction Management	1.00 EA	75,800	0	0	0	0	75,800
	TOTAL Item No. 5, Indian Bayou Ditch	1.00 EA	1,573,213	71,945	33,095	58,468	6,431	1,743,153
06	Item No. 6, Indian Bayou Channel							
06 01	Lands and Damages							
06 01.02	Acquisitions		369,215	0	0	0	0	369,215
06 01.05	Appraisals		94,325	0	0	0	0	94,325
06 01 06	PL 91-646 Assistance		15,400	0	0	0	0	15,400
06.01.07	Temporary Permits/Rights of Enty		11,550	0	0	0	0	11,550
06.01.13	Project Related Administration	1.00 EA	9,240	0	0	0	0	9,240
06.01.18	Real Estate Payments		118,008	0	0	0	0	118,008
	TOTAL Lands and Damages	1.00 EA	617,738	0	0	0	0	617,738

	QUANTY	UOM	TOTAL DIRECT	OVERHEAD	HOME OFC	PROFIT	BOND	TOTAL COST
06.09 Channels and Canals								
06.09.01 Channels	1.00	EA	602,422	90,363	41,567	73,435	8,078	815,866
TOTAL Channels and Canals	1.00	EA	602,422	90,363	41,567	73,435	8,078	815,866
06.15 Flood Control and Diversion Strs								
06.15.03 Indian Bayou @ Mi 16.4	1.00	EA	117,376	17,606	8,099	14,308	1,574	158,963
TOTAL Flood Control and Diversion Strs	1.00	EA	117,376	17,606	8,099	14,308	1,574	158,963
06.30 Planning, Engineering and Design								
06.30.04 Construction Contract P, E, & D	1.00	EA	720,628	0	0	0	0	720,628
06.30.05 Programs and Project Management	1.00	EA	82,577	0	0	0	0	82,577
TOTAL Planning, Engineering and Design	1.00	EA	803,205	0	0	0	0	803,205
06.31 Construction Management								
06.31.02 Area Office S & A	1.00	EA	80,000	0	0	0	0	80,000
06.31.03 District Office S & A			38,000	0	0	0	0	38,000
TOTAL Construction Management	1.00	EA	118,000	0	0	0	0	118,000
TOTAL Item No. 6, Indian Bayou Channel	1.00	EA	2,258,741	107,970	49,666	87,743	9,652	2,513,772
07 Item No. 7, Salt Bayou Channel								
07.01 Lands and Damages								
07.01.02 Acquisitions			33,565	0	0	0	0	33,565
07.01.05 Appraisals			8,575	0	0	0	0	8,575
07.01.06 PL 91-646 Assistance			1,400	0	0	0	0	1,400
07.01.07 Temporary Permits/Rights of Enty			1,050	0	0	0	0	1,050
07.01.13 Project Related Administration	1.00	EA	840	0	0	0	0	840
07.01.18 Real Estate Payments			84,000	0	0	0	0	84,000
TOTAL Lands and Damages	1.00	EA	129,430	0	0	0	0	129,430
07.09 Channels and Canals								
07.09.01 Channels	1.00	EA	417,736	62,660	28,824	50,922	5,601	565,743
TOTAL Channels and Canals	1.00	EA	417,736	62,660	28,824	50,922	5,601	565,743

		QUANTY	UOM	TOTAL DIRECT	OVERHEAD	HOME OFC	PROFIT	BOND	TOTAL COST
07.30	Planning, Engineering and Design								
07.30.04	Construction Contract P, E, & D	1.00	EA	433,860	0	0	0	0	433,860
07.30.05	Programs and Project Management	1.00	EA	82,577	0	0	0	0	82,577
	TOTAL Planning, Engineering and Design	1.00	EA	516,437	0	0	0	0	516,437
07.31	Construction Management								
07.31.02	Area Office S & A	1.00	EA	80,000	0	0	0	0	80,000
07.31.03	District Office S & A	1.00	EA	36,000	0	0	0	0	36,000
	TOTAL Construction Management	1.00	EA	116,000	0	0	0	0	116,000
	TOTAL Item No. 7, Salt Bayou Channel	1.00	EA	1,179,603	62,660	28,824	50,922	5,601	1,327,610
08	Item No. 8, Crooked Creek								
08.01	Lands and Damages								
08.01.02	Acquisitions			234,955	0	0	0	0	234,955
08.01.05	Appraisals			60,025	0	0	0	0	60,025
08.01.06	PL 91-646 Assistance			9,800	0	0	0	0	9,800
08.01.07	Temporary Permits/Rights of Enty			7,350	0	0	0	0	7,350
08.01.13	Project Related Administration	1.00	EA	5,880	0	0	0	0	5,880
08.01.18	Real Estate Payments			94,642	0	0	0	0	94,642
	TOTAL Lands and Damages	1.00	EA	412,652	0	0	0	0	412,652
08.09	Channels and Canals								
08.09.01	Channels	1.00	EA	1,399,515	209,927	96,567	170,601	18,766	1,895,376
	TOTAL Channels and Canals	1.00	EA	1,399,515	209,927	96,567	170,601	18,766	1,895,376
08.15	Flood Control and Diversion Strs								
08.15.01	Wier @ Mi 4.3	1.00	EA	10,000	1,500	690	1,219	134	13,543
08.15.02	Wier @ Mi. 13.3	1.00	EA	10,000	1,500	690	1,219	134	13,543
	TOTAL Flood Control and Diversion Strs	1.00	EA	20,000	3,000	1,380	2,438	268	27,086
08.30	Planning, Engineering and Design								
08.30.04	Construction Contract P, E, & D	1.00	EA	1,009,343	0	0	0	0	1,009,343

	QUANTY UOM	TOTAL DIRECT	OVERHEAD	HOME OFC	PROFIT	BOND	TOTAL COST
08.30 05 Programs and Project Management	1.00 EA	82,577	0	0	0	0	82,577
TOTAL Planning, Engineering and Design	1.00 EA	1,091,920	0	0	0	0	1,091,920
08.31 Construction Management							
08.31.02 Area Office S & A	1.00 EA	150,000	0	0	0	0	150,000
08.31.03 Districe Office S & A		71,500	0	0	0	0	71,500
TOTAL Construction Management	1.00 EA	221,500	0	0	0	0	221,500
TOTAL Item No. 8, Crooked Creek	1.00 EA	3,145,587	212,927	97,947	173,039	19,034	3,648,534
09 Item No. 9, Big Bayou Meto Div							
09.01 Lands and Damages							
09.01.01 Project Planning	1.00 EA	3,800	0	0	0	0	3,800
09.01.02 Acquisitions		67,130	0	0	0	0	67,130
09.01.05 Appraisals		17,150	0	0	0	0	17,150
09.01.06 PL 91-646 Assistance		2,800	0	0	0	0	2,800
09.01.07 Temporary Permits/Rights of Enty		2,100	0	0	0	0	2,100
09.01.13 Project Related Administration	1.00 EA	1,680	0	0	0	0	1,680
09.01.18 Real Estate Payments		64,183	0	0	0	0	64,183
TOTAL Lands and Damages	1.00 EA	158,843	0	0	0	0	158,843
09.02 Relocations							
09.02.01 Roads, Construction Activities		519,000	0	0	0	0	519,000
09.02.03 Cemetery, Utilities, & Structure		115,000	0	0	0	0	115,000
TOTAL Relocations	1.00 EA	634,000	0	0	0	0	634,000
09.09 Channels and Canals							
09.09.01 Channels	1.00 EA	1,429,357	214,403	98,626	174,239	19,166	1,935,791
TOTAL Channels and Canals	1.00 EA	1,429,357	214,403	98,626	174,239	19,166	1,935,791
09 11 Levees and Floodwalls							
09.11.01 Levees		319,214	47,882	22,026	38,912	4,280	432,314
TOTAL Levees and Floodwalls	1.00 EA	319,214	47,882	22,026	38,912	4,280	432,314

		QUANTY	UOM	TOTAL DIRECT	OVERHEAD	HOME OFC	PROFIT	BOND	TOTAL COST
09.15	Flood Control and Diversion Strs								
09.15.01	B.B.M. Diversion Wier Mi 0.0	1.00	EA	42,783	6,418	2,952	5,215	574	57,942
09.15.02	B.B.M. Diversion Mi 2.5 Low Wier	1.00	EA	42,783	6,418	2,952	5,215	574	57,942
	TOTAL Flood Control and Diversion Strs	1.00	EA	85,567	12,835	5,904	10,431	1,147	115,884
09.30	Planning, Engineering and Design								
09.30.04	Construction Contract P, E, & D	1.00	EA	1,158,011	0	0	0	0	1,158,011
09.30.05	Programs and Project Management	1.00	EA	82,577	0	0	0	0	82,577
	TOTAL Planning, Engineering and Design	1.00	EA	1,240,588	0	0	0	0	1,240,588
09.31	Construction Management								
09.31.02	Area Office S & A	1.00	EA	200,000	0	0	0	0	200,000
09.31.03	Districe Office S & A			95,500	0	0	0	0	95,500
	TOTAL Construction Management	1.00	EA	295,500	0	0	0	0	295,500
	TOTAL Item No. 9, Big Bayou Meto Div.	1.00	EA	4,163,068	275,121	126,555	223,581	24,594	4,812,919
10	Item No. 10, Mitigation								
10.01	Lands and Damages								
10.01.02	Acquisitions	1.00	EA	47,950	0	0	0	0	47,950
10.01.05	Appraisal	1.00	EA	12,250	0	0	0	0	12,250
10.01.06	PL 91-646 Assistance	1.00	EA	2,000	0	0	0	0	2,000
10.01.07	Temp Permits/Licenses/Rights	1.00	EA	1,500	0	0	0	0	1,500
10.01.13	Project Related Admin	1.00	EA	1,200	0	0	0	0	1,200
10.01.18	Real Estate Payments			2,633,550	0	0	0	0	2,633,550
	TOTAL Lands and Damages	1.00	EA	2,698,450	0	0	0	0	2,698,450
10.06	Fish and Wildlife Facilities								
10.06.03	Wildlife Facilities	1.00	EA	415,350	62,303	28,659	50,631	5,569	562,512
	TOTAL Fish and Wildlife Facilities	1.00	EA	415,350	62,303	28,659	50,631	5,569	562,512
10.30	Planning, Engineering & Design	1.00	EA	203,200	0	0	0	0	203,200
10.31	Construction Management	1.00	EA	101,600	0	0	0	0	101,600
	TOTAL Item No. 10, Mitigation	1.00	EA	3,418,600	62,303	28,659	50,631	5,569	3,565,762

	QUANTY	UOM	TOTAL DIRECT	OVERHEAD	HOME OFC	PROFIT	BOND	TOTAL COST
TOTAL Bayou Meto Selected Plan	1.00	EA	42,767,998	3,338,336	1,535,635	2,712,955	298,425	50,653,349
CONTINGENCIES								11,023,222
SUBTOTAL								61,676,571
ESCALATION								6,411,908
TOTAL INCL OWNER COSTS								68,088,479

** PROJECT DIRECT SUMMARY - Contract **

		QUANTY	UOM	LABOR	EQUIPMNT	MATERIAL	OTHER	TOTAL COST
01	Little Bayou Meto 1000 CFS Pump	1.00	EA	4,227,294	692,179	5,481,049	3,827,200	14,227,722
02	Item No. 2, Little Bayou Meto CC	1.00	EA	2,717,067	2,288,564	207,763	1,311,375	6,524,769
03	Item No. 3, Boggy Slough	1.00	EA	1,885,839	917,840	304,189	481,455	3,589,324
04	Item No. 4, Wabbaseka Bayou Chan	1.00	EA	885,906	239,954	0	1,561,510	2,687,370
05	Item No. 5, Indian Bayou Ditch	1.00	EA	878,766	240,175	59,330	394,943	1,573,213
06	Item No. 6, Indian Bayou Channel	1.00	EA	881,734	45,839	77,790	1,253,378	2,258,741
07	Item No. 7, Salt Bayou Channel	1.00	EA	635,617	12,656	0	531,330	1,179,603
08	Item No. 8, Crooked Creek	1.00	EA	1,512,028	931,467	0	702,092	3,145,587
09	Item No. 9, Big Bayou Meto Div.	1.00	EA	1,939,439	1,178,121	66,825	1,078,683	4,163,068
10	Item No. 10, Mitigation	1.00	EA	0	0	0	3,418,600	3,418,600
TOTAL	Bayou Meto Selected Plan	1.00	EA	15463690	6,546,795	6,196,946	14,560,566	42,767,998
	Prime Contractor's Field Overhead							3,338,336
	SUBTOTAL							46,106,334
	Prime's Home Office Expense							1,535,635
	SUBTOTAL							47,641,969
	Prime Contractor's PROFIT							2,712,955
	SUBTOTAL							50,354,924
	BOND							298,425
	TOTAL INCL INDIRECTS							50,653,349
	CONTINGENCIES							11,023,222
	SUBTOTAL							61,676,571
	ESCALATION							6,411,908
	TOTAL INCL OWNER COSTS							68,088,479

		QUANTY	UOM	LABOR	EQUIPMNT	MATERIAL	OTHER	TOTAL COST
01	Little Bayou Meto 1000 CFS Pump							
01.01	Lands and Damages	1.00	EA	0	0	0	39,995	39,995
01.15	Pumping Plant	1.00	EA	356,189	692,179	5,481,049	3,777,925	10,307,342
01.30	Planning, Engineering and Design	1.00	EA	2,168,105	0	0	9,280	2,177,385
01.31	Construction Management	1.00	EA	1,703,000	0	0	0	1,703,000
TOTAL	Little Bayou Meto 1000 CFS Pump	1.00	EA	4,227,294	692,179	5,481,049	3,827,200	14,227,722
02	Item No. 2, Little Bayou Meto CC							
02.01	Lands and Damages	1.00	EA	0	0	0	310,570	310,570
02.02	Relocations	1.00	EA	0	0	0	515,200	515,200
02.09	Channels and Canals	1.00	EA	512,998	2,041,634	0	322,500	2,877,131
02.11	Levees and Floodwalls	1.00	EA	34,278	112,519	0	70,000	216,797
02.15	Floodway Control & Diversion Str	1.00	EA	118,882	134,412	207,763	46,705	507,762
02.30	Planning, Engineering and Design	1.00	EA	1,468,909	0	0	46,400	1,515,309
02.31	Construction Management	1.00	EA	582,000	0	0	0	582,000
TOTAL	Item No. 2, Little Bayou Meto CC	1.00	EA	2,717,067	2,288,564	207,763	1,311,375	6,524,769
03	Item No 3, Boggy Slough							
03.01	Lands and Damages	1.00	EA	0	0	0	67,795	67,795
03.09	Channels and Canals	1.00	EA	186,507	742,263	0	320,500	1,249,270
03.11	Levees and Floodwalls	1.00	EA	31,090	102,052	0	70,000	203,142
03.15	Floodway Control & Diversion Str	1.00	EA	36,500	73,526	304,189	11,000	425,215
03.30	Planning, Engineering and Design	1.00	EA	1,335,243	0	0	12,160	1,347,403
03.31	Construction Management	1.00	EA	296,500	0	0	0	296,500
TOTAL	Item No. 3, Boggy Slough	1.00	EA	1,885,839	917,840	304,189	481,455	3,589,324
04	Item No. 4, Wabbaseka Bayou Chan							
04.01	Lands and Damages	1.00	EA	0	0	0	552,130	552,130
04.09	Channels and Canals	1.00	EA	60,293	239,954	0	882,500	1,182,747
04.30	Planning, Engineering and Design	1.00	EA	644,113	0	0	126,880	770,993
04.31	Construction Management	1.00	EA	181,500	0	0	0	181,500
TOTAL	Item No. 4, Wabbaseka Bayou Chan	1.00	EA	885,906	239,954	0	1,561,510	2,687,370
05	Item No. 5, Indian Bayou Ditch							
05.01	Lands and Damages	1.00	EA	0	0	0	239,223	239,223
05.09	Channels and Canals	1.00	EA	57,240	227,804	0	102,000	387,044
05.15	Flood Control and Diversion Strs	1.00	EA	5,891	12,371	59,330	15,000	92,591

		QUANTY	UOM	LABOR	EQUIPMNT	MATERIAL	OTHER	TOTAL COST
05.30	Planning, Engineering and Design	1.00	EA	739,835	0	0	38,720	778,555
05.31	Construction Management	1.00	EA	75,800	0	0	0	75,800
TOTAL	Item No. 5, Indian Bayou Ditch	1.00	EA	878,766	240,175	59,330	394,943	1,573,213
06	Item No 6, Indian Bayou Channel							
06.01	Lands and Damages	1.00	EA	0	0	0	617,738	617,738
06.09	Channels and Canals	1.00	EA	7,314	29,108	0	566,000	602,422
06.15	Flood Control and Diversion Strs	1.00	EA	7,855	16,731	77,790	15,000	117,376
06.30	Planning, Engineering and Design	1.00	EA	748,565	0	0	54,640	803,205
06.31	Construction Management	1.00	EA	118,000	0	0	0	118,000
TOTAL	Item No. 6, Indian Bayou Channel	1.00	EA	881,734	45,839	77,790	1,253,378	2,258,741
07	Item No. 7, Salt Bayou Channel							
07.01	Lands and Damages	1.00	EA	0	0	0	129,430	129,430
07.09	Channels and Canals	1.00	EA	3,180	12,656	0	401,900	417,736
07.30	Planning, Engineering and Design	1.00	EA	516,437	0	0	0	516,437
07.31	Construction Management	1.00	EA	116,000	0	0	0	116,000
TOTAL	Item No. 7, Salt Bayou Channel	1.00	EA	635,617	12,656	0	531,330	1,179,603
08	Item No. 8, Crooked Creek							
08.01	Lands and Damages	1.00	EA	0	0	0	412,652	412,652
08.09	Channels and Canals	1.00	EA	234,048	931,467	0	234,000	1,399,515
08.15	Flood Control and Diversion Strs	1.00	EA	0	0	0	20,000	20,000
08.30	Planning, Engineering and Design	1.00	EA	1,056,480	0	0	35,440	1,091,920
08.31	Construction Management	1.00	EA	221,500	0	0	0	221,500
TOTAL	Item No. 8, Crooked Creek	1.00	EA	1,512,028	931,467	0	702,092	3,145,587
09	Item No. 9, Big Bayou Meto Div.							
09.01	Lands and Damages	1.00	EA	0	0	0	158,843	158,843
09.02	Relocations	1.00	EA	0	0	0	634,000	634,000
09.09	Channels and Canals	1.00	EA	244,860	974,497	0	210,000	1,429,357
09.11	Levees and Floodwalls	1.00	EA	58,193	191,020	0	70,000	319,214
09.15	Flood Control and Diversion Strs	1.00	EA	6,137	12,604	66,825	0	85,567
09.30	Planning, Engineering and Design	1.00	EA	1,234,748	0	0	5,840	1,240,588
09.31	Construction Management	1.00	EA	295,500	0	0	0	295,500
TOTAL	Item No. 9, Big Bayou Meto Div.	1.00	EA	1,839,439	1,178,121	66,825	1,078,683	4,163,068

** PROJECT DIRECT SUMMARY - Feature **

		QUANTY	UOM	LABOR	EQUIPMNT	MATERIAL	OTHER	TOTAL COST
10	Item No. 10, Mitigation							
10.01	Lands and Damages	1.00	EA	0	0	0	2,698,450	2,698,450
10.06	Fish and Wildlife Facilities	1.00	EA	0	0	0	415,350	415,350
10.30	Planning, Engineering & Design	1.00	EA	0	0	0	203,200	203,200
10.31	Construction Management	1.00	EA	0	0	0	101,600	101,600
TOTAL	Item No. 10, Mitigation	1.00	EA	0	0	0	3,418,600	3,418,600
TOTAL	Bayou Meto Selected Plan	1.00	EA	15463690	6,546,795	6,196,946	14,560,566	42,767,998
	Prime Contractor's Field Overhead							3,338,336
	SUBTOTAL							46,106,334
	Prime's Home Office Expense							1,535,635
	SUBTOTAL							47,641,969
	Prime Contractor's PROFIT							2,712,955
	SUBTOTAL							50,354,924
	BOND							298,425
	TOTAL INCL INDIRECTS							50,653,349
	CONTINGENCIES							11,023,222
	SUBTOTAL							61,676,571
	ESCALATION							6,411,908
	TOTAL INCL OWNER COSTS							68,088,479

		QUANTY	UOM	LABOR	EQUIPMNT	MATERIAL	OTHER	TOTAL COST
01	Little Bayou Meto 1000 CFS Pump							
01.01	Lands and Damages							
01 01.02	Acquisitions			0	0	0	14,385	14,385
01.01.05	Appraisals			0	0	0	3,675	3,675
01.01.06	PL 91-646 Assistance			0	0	0	600	600
01.01.07	Temporary Permits/Rights of Enty			0	0	0	450	450
01.01.13	Project Related Administration	1.00	EA	0	0	0	360	360
01.01.18	Real Estate Payments			0	0	0	20,525	20,525
	TOTAL Lands and Damages	1.00	EA	0	0	0	39,995	39,995
01.15	Pumping Plant							
01.15.10	Little Bayou Meto 1000 CFS Pumps	1.00	EA	356,189	692,179	5,481,049	3,777,925	10,307,342
	TOTAL Pumping Plant	1.00	EA	356,189	692,179	5,481,049	3,777,925	10,307,342
01.30	Planning, Engineering and Design							
01.30.04	Construction Contract P, E, & D	1.00	EA	2,085,528	0	0	9,280	2,094,808
01.30.05	Programs and Project Management	1.00	EA	82,577	0	0	0	82,577
	TOTAL Planning, Engineering and Design	1.00	EA	2,168,105	0	0	9,280	2,177,385
01.31	Construction Management							
01.31.02	Area Office S & A	1.00	EA	1,200,000	0	0	0	1,200,000
01.31.03	District Office S & A			503,000	0	0	0	503,000
	TOTAL Construction Management	1.00	EA	1,703,000	0	0	0	1,703,000
	TOTAL Little Bayou Meto 1000 CFS Pump	1.00	EA	4,227,294	692,179	5,481,049	3,827,200	14,227,722
02	Item No. 2, Little Bayou Meto CC							
02.01	Lands and Damages							
02.01.01	Project Planning	1.00	EA	0	0	0	3,800	3,800
02.01.02	Acquisitions			0	0	0	86,310	86,310
02.01.05	Appraisals			0	0	0	22,050	22,050
02.01.06	PL 91-646 Assistance			0	0	0	3,600	3,600
02.01.07	Temporary Permits/Rights of Enty			0	0	0	2,700	2,700
02.01.13	Project Related Administration	1.00	EA	0	0	0	2,160	2,160

		QUANTY	UOM	LABOR	EQUIPMNT	MATERIAL	OTHER	TOTAL COST
02.01.18	Real Estate Payments			0	0	0	189,950	189,950
	TOTAL Lands and Damages	1.00	EA	0	0	0	310,570	310,570
02.02	Relocations							
02.02.01	Roads, Construction Activities			0	0	0	453,000	453,000
02.02.03	Cemetery, Utilities, & Structure			0	0	0	62,200	62,200
	TOTAL Relocations	1.00	EA	0	0	0	515,200	515,200
02.09	Channels and Canals							
02.09.01	Channels	1.00	EA	512,998	2,041,634	0	322,500	2,877,131
	TOTAL Channels and Canals	1.00	EA	512,998	2,041,634	0	322,500	2,877,131
02.11	Levees and Floodwalls							
02.11.01	Levees			34,278	112,519	0	70,000	216,797
	TOTAL Levees and Floodwalls	1.00	EA	34,278	112,519	0	70,000	216,797
02.15	Floodway Control & Diversion Str							
02.15.15	Cannon Break Control Stru (1K)	1.00	EA	118,882	134,412	207,763	46,705	507,762
	TOTAL Floodway Control & Diversion Str	1.00	EA	118,882	134,412	207,763	46,705	507,762
02.30	Planning, Engineering and Design							
02.30.04	Construction Contract P, E, & D	1.00	EA	1,385,332	0	0	46,400	1,431,732
02.30.05	Programs and Project Management	1.00	EA	83,577	0	0	0	83,577
	TOTAL Planning, Engineering and Design	1.00	EA	1,468,909	0	0	46,400	1,515,309
02.31	Construction Management							
02.31.02	Area Office S & A	1.00	EA	400,000	0	0	0	400,000
02.31.03	District Office S & A	1.00	EA	182,000	0	0	0	182,000
	TOTAL Construction Management	1.00	EA	582,000	0	0	0	582,000
	TOTAL Item No. 2, Little Bayou Meto CC	1.00	EA	2,717,067	2,288,564	207,763	1,311,375	6,524,769

	QUANTY	UOM	LABOR	EQUIPMNT	MATERIAL	OTHER	TOTAL COST
03 Item No. 3, Boggy Slough							
03.01 Lands and Damages							
03.01.02 Acquisitions			0	0	0	14,385	14,385
03.01.05 Appraisals			0	0	0	3,675	3,675
03.01.06 PL 91-646 Assistance			0	0	0	600	600
03.01.07 Temporary Permits/Rights of Entry			0	0	0	450	450
03.01.13 Project Related Administration	1.00	EA	0	0	0	360	360
03.01.18 Real Estate Payments			0	0	0	48,325	48,325
TOTAL Lands and Damages	1.00	EA	0	0	0	67,795	67,795
03.09 Channels and Canals							
03.09.01 Channels	1.00	EA	186,507	742,263	0	320,500	1,249,270
TOTAL Channels and Canals	1.00	EA	186,507	742,263	0	320,500	1,249,270
03.11 Levees and Floodwalls							
03.11.01 Levees			31,090	102,052	0	70,000	203,142
TOTAL Levees and Floodwalls	1.00	EA	31,090	102,052	0	70,000	203,142
03.15 Floodway Control & Diversion Str							
03.15.01 Castor Bayou Low Drop Structure	1.00	EA	2,378	2,479	28,353	2,000	35,209
03.15.02 L.B.M. Boggy Slough @ Mi 17.65	1.00	EA	22,056	47,429	145,473	5,000	219,958
03.15.03 Boggy Slough Div. Weir @mi 5.0	1.00	EA	5,372	11,482	52,476	2,000	71,329
03.15.04 Boggy Slough Div. Weir @Mi 0.1	1.00	EA	6,694	12,136	77,888	2,000	98,718
TOTAL Floodway Control & Diversion Str	1.00	EA	36,500	73,526	304,189	11,000	425,215
03.30 Planning, Engineering and Design							
03.30.04 Construction Contract P, E, & D	1.00	EA	1,252,666	0	0	12,160	1,264,826
03.30.05 Programs and Project Management	1.00	EA	82,577	0	0	0	82,577
TOTAL Planning, Engineering and Design	1.00	EA	1,335,243	0	0	12,160	1,347,403
03.31 Construction Management							
03.31.02 Area Office S & A	1.00	EA	200,000	0	0	0	200,000
03.31.03 District Office S & A	1.00	EA	96,500	0	0	0	96,500

	QUANTY	UOM	LABOR	EQUIPMNT	MATERIAL	OTHER	TOTAL COST
TOTAL Construction Management	1.00	EA	296,500	0	0	0	296,500
TOTAL Item No. 3, Boggy Slough	1.00	EA	1,885,839	917,840	304,189	481,455	3,589,324
04 Item No. 4, Wabbaseka Bayou Chan							
04.01 Lands and Damages							
04.01.02 Acquisitions			0	0	0	201,390	201,390
04.01.05 Appraisals			0	0	0	51,450	51,450
04.01.06 PL 91 646 Assistance			0	0	0	8,400	8,400
04.01.07 Temporary Permits/Rights of Enty			0	0	0	6,300	6,300
04.01.13 Project Related Administration	1.00	EA	0	0	0	5,040	5,040
04.01.18 Real Estate Payments			0	0	0	279,550	279,550
TOTAL Lands and Damages	1.00	EA	0	0	0	552,130	552,130
04.09 Channels and Canals							
04.09.01 Channels	1.00	EA	60,293	239,954	0	882,500	1,182,747
TOTAL Channels and Canals	1.00	EA	60,293	239,954	0	882,500	1,182,747
04.30 Planning, Engineering and Design							
04.30.04 Construction Contract P, E, & D	1.00	EA	561,536	0	0	126,880	688,416
04.30.05 Programs and Project Management	1.00	EA	82,577	0	0	0	82,577
TOTAL Planning, Engineering and Design	1.00	EA	644,113	0	0	126,880	770,993
04.31 Construction Management							
04.31.02 Area Office S & A	1.00	EA	120,000	0	0	0	120,000
04.31.03 Districe Office S & A	1.00	EA	61,500	0	0	0	61,500
TOTAL Construction Management	1.00	EA	181,500	0	0	0	181,500
TOTAL Item No 4, Wabbaseka Bayou Chan	1.00	EA	885,906	239,954	0	1,561,510	2,687,370
05 Item No. 5, Indian Bayou Ditch							
05.01 Lands and Damages							
05.01.02 Acquisitions			0	0	0	124,670	124,670
05.01.05 Appraisals			0	0	0	31,850	31,850
05.01.06 PL 91 646 Assistance			0	0	0	5,200	5,200

	QUANTY	UOM	LABOR	EQUIPMNT	MATERIAL	OTHER	TOTAL COST
05.01.07 Temporary Permits/Rights of Enty			0	0	0	3,900	3,900
05.01.13 Project Related Administration	1.00	EA	0	0	0	3,120	3,120
05 01.18 Real Estate Payments			0	0	0	70,483	70,483
TOTAL Lands and Damages	1.00	EA	0	0	0	239,223	239,223
05.09 Channels and Canals							
05.09.03 Channels	1.00	EA	57,240	227,804	0	102,000	387,044
TOTAL Channels and Canals	1.00	EA	57,240	227,804	0	102,000	387,044
05.15 Flood Control and Diversion Strs							
05.15.01 Indian Bayou Ditch @ Mi 58.3	1.00	EA	5,891	12,371	59,330	15,000	92,591
TOTAL Flood Control and Diversion Strs	1.00	EA	5,891	12,371	59,330	15,000	92,591
05.30 Planning, Engineering and Design							
05.30.04 Construction Contract P, E, & D	1.00	EA	657,258	0	0	38,720	695,978
05.30.05 Programs and Project Management	1.00	EA	82,577	0	0	0	82,577
TOTAL Planning, Engineering and Design	1.00	EA	739,835	0	0	38,720	778,555
05.31 Construction Management							
05.31.02 Area Office S & A	1.00	EA	50,000	0	0	0	50,000
05.31.03 Districe Office S & A	1.00	EA	25,800	0	0	0	25,800
TOTAL Construction Management	1.00	EA	75,800	0	0	0	75,800
TOTAL Item No 5, Indian Bayou Ditch	1.00	EA	878,766	240,175	59,330	394,943	1,573,213
06 Item No. 6, Indian Bayou Channel							
06.01 Lands and Damages							
06.01.02 Acquisitions			0	0	0	369,215	369,215
06.01.05 Appraisals			0	0	0	94,325	94,325
06.01.06 PL 91-646 Assistance			0	0	0	15,400	15,400
06.01.07 Temporary Permits/Rights of Enty			0	0	0	11,550	11,550
06.01.13 Project Related Administration	1.00	EA	0	0	0	9,240	9,240
06.01.18 Real Estate Payments			0	0	0	118,008	118,008
TOTAL Lands and Damages	1.00	EA	0	0	0	617,738	617,738

	QUANTY	UOM	LABOR	EQUIPMNT	MATERIAL	OTHER	TOTAL COST
06.09 Channels and Canals							
06.09.01 Channels	1.00	EA	7,314	29,108	0	566,000	602,422
TOTAL Channels and Canals	1.00	EA	7,314	29,108	0	566,000	602,422
06.15 Flood Control and Diversion Strs							
06.15.03 Indian Bayou @ Mi 16.4	1.00	EA	7,855	16,731	77,790	15,000	117,376
TOTAL Flood Control and Diversion Strs	1.00	EA	7,855	16,731	77,790	15,000	117,376
06.30 Planning, Engineering and Design							
06.30.04 Construction Contract P, E, & D	1.00	EA	665,988	0	0	54,640	720,628
06.30.05 Programs and Project Management	1.00	EA	82,577	0	0	0	82,577
TOTAL Planning, Engineering and Design	1.00	EA	748,565	0	0	54,640	803,205
06.31 Construction Management							
06.31.02 Area Office S & A	1.00	EA	80,000	0	0	0	80,000
06.31.03 District Office S & A			38,000	0	0	0	38,000
TOTAL Construction Management	1.00	EA	118,000	0	0	0	118,000
TOTAL Item No. 6, Indian Bayou Channel	1.00	EA	881,734	45,839	77,790	1,253,378	2,258,741
07 Item No. 7, Salt Bayou Channel							
07.01 Lands and Damages							
07.01.02 Acquisitions			0	0	0	33,565	33,565
07.01.05 Appraisals			0	0	0	8,575	8,575
07.01.06 PL 91-646 Assistance			0	0	0	1,400	1,400
07.01.07 Temporary Permits/Rights of Enty			0	0	0	1,050	1,050
07.01.13 Project Related Administration	1.00	EA	0	0	0	840	840
07.01.18 Real Estate Payments			0	0	0	84,000	84,000
TOTAL Lands and Damages	1.00	EA	0	0	0	129,430	129,430
07.09 Channels and Canals							
07.09.01 Channels	1.00	EA	3,180	12,656	0	401,900	417,736
TOTAL Channels and Canals	1.00	EA	3,180	12,656	0	401,900	417,736

		QUANTY	UOM	LABOR	EQUIPMNT	MATERIAL	OTHER	TOTAL COST
07.30	Planning, Engineering and Design							
07.30.04	Construction Contract P, E, & D	1.00	EA	433,860	0	0	0	433,860
07.30.05	Programs and Project Management	1.00	EA	82,577	0	0	0	82,577
	TOTAL Planning, Engineering and Design	1.00	EA	516,437	0	0	0	516,437
07.31	Construction Management							
07.31.02	Area Office S & A	1.00	EA	80,000	0	0	0	80,000
07.31.03	District Office S & A	1.00	EA	36,000	0	0	0	36,000
	TOTAL Construction Management	1.00	EA	116,000	0	0	0	116,000
	TOTAL Item No. 7, Salt Bayou Channel	1.00	EA	635,617	12,656	0	531,330	1,179,603
08	Item No. 8, Crooked Creek							
08.01	Lands and Damages							
08.01.02	Acquisitions			0	0	0	234,955	234,955
08.01.05	Appraisals			0	0	0	60,025	60,025
08.01.06	PL 91-646 Assistance			0	0	0	9,800	9,800
08.01.07	Temporary Permits/Rights of Enty			0	0	0	7,350	7,350
08.01.13	Project Related Administration	1.00	EA	0	0	0	5,880	5,880
08.01.18	Real Estate Payments			0	0	0	94,642	94,642
	TOTAL Lands and Damages	1.00	EA	0	0	0	412,652	412,652
08.09	Channels and Canals							
08.09.01	Channels	1.00	EA	234,048	931,467	0	234,000	1,399,515
	TOTAL Channels and Canals	1.00	EA	234,048	931,467	0	234,000	1,399,515
08.15	Flood Control and Diversion Strs							
08.15.01	Wier @ Mi. 4.3	1.00	EA	0	0	0	10,000	10,000
08.15.02	Wier @ Mi. 13.3	1.00	EA	0	0	0	10,000	10,000
	TOTAL Flood Control and Diversion Strs	1.00	EA	0	0	0	20,000	20,000
08.30	Planning, Engineering and Design							
08.30.04	Construction Contract P, E, & D	1.00	EA	973,903	0	0	35,440	1,009,343

		QUANTY	UOM	LABOR	EQUIPMNT	MATERIAL	OTHER	TOTAL COST
08.30.05	Programs and Project Management	1.00	EA	82,577	0	0	0	82,577
TOTAL	Planning, Engineering and Design	1.00	EA	1,056,480	0	0	35,440	1,091,920
08.31	Construction Management							
08.31.02	Area Office S & A	1.00	EA	150,000	0	0	0	150,000
08.31.03	District Office S & A			71,500	0	0	0	71,500
TOTAL	Construction Management	1.00	EA	221,500	0	0	0	221,500
TOTAL	Item No. 8, Crooked Creek	1.00	EA	1,512,028	931,467	0	702,092	3,145,587
09	Item No. 9, Big Bayou Meto Div.							
09.01	Lands and Damages							
09.01.01	Project Planning	1.00	EA	0	0	0	3,800	3,800
09.01.02	Acquisitions			0	0	0	67,130	67,130
09.01.05	Appraisals			0	0	0	17,150	17,150
09.01.06	PL 91 646 Assistance			0	0	0	2,800	2,800
09.01.07	Temporary Permits/Rights of Entry			0	0	0	2,100	2,100
09.01.13	Project Related Administration	1.00	EA	0	0	0	1,680	1,680
09.01.18	Real Estate Payments			0	0	0	64,183	64,183
TOTAL	Lands and Damages	1.00	EA	0	0	0	158,843	158,843
09.02	Relocations							
09.02.01	Roads, Construction Activities			0	0	0	519,000	519,000
09.02.03	Cemetery, Utilities, & Structure			0	0	0	115,000	115,000
TOTAL	Relocations	1.00	EA	0	0	0	634,000	634,000
09.09	Channels and Canals							
09.09.01	Channels	1.00	EA	244,860	974,497	0	210,000	1,429,357
TOTAL	Channels and Canals	1.00	EA	244,860	974,497	0	210,000	1,429,357
09.11	Levees and Floodwalls							
09.11.01	Levees			58,193	191,020	0	70,000	319,214
TOTAL	Levees and Floodwalls	1.00	EA	58,193	191,020	0	70,000	319,214

	QUANTY	UOM	LABOR	EQUIPMNT	MATERIAL	OTHER	TOTAL COST
09.15 Flood Control and Diversion Strs							
09.15.01 B.B M. Diversion Wier Mi 0.0	1.00	EA	3,069	6,302	33,413	0	42,783
09.15.02 B.B.M. Diversion Mi 2.5 Low Wier	1.00	EA	3,069	6,302	33,413	0	42,783
TOTAL Flood Control and Diversion Strs	1.00	EA	6,137	12,604	66,825	0	85,567
09.30 Planning, Engineering and Design							
09 30 04 Construction Contract P, E, & D	1.00	EA	1,152,171	0	0	5,840	1,158,011
09.30 05 Programs and Project Management	1.00	EA	82,577	0	0	0	82,577
TOTAL Planning, Engineering and Design	1.00	EA	1,234,748	0	0	5,840	1,240,588
09.31 Construction Management							
09.31.02 Area Office S & A	1.00	EA	200,000	0	0	0	200,000
09.31.03 District Office S & A			95,500	0	0	0	95,500
TOTAL Construction Management	1.00	EA	295,500	0	0	0	295,500
TOTAL Item No. 9, Big Bayou Meto Div.	1.00	EA	1,839,439	1,178,121	66,825	1,078,683	4,163,068
10 Item No. 10, Mitigation							
10.01 Lands and Damages							
10.01 02 Acquisitions	1.00	EA	0	0	0	47,950	47,950
10.01.05 Appraisal	1.00	EA	0	0	0	12,250	12,250
10.01.06 PL 91-646 Assistance	1.00	EA	0	0	0	2,000	2,000
10.01.07 Temp Permits/Licenses/Rights	1.00	EA	0	0	0	1,500	1,500
10.01.13 Project Related Admin	1.00	EA	0	0	0	1,200	1,200
10.01.18 Real Estate Payments			0	0	0	2,633,550	2,633,550
TOTAL Lands and Damages	1.00	EA	0	0	0	2,698,450	2,698,450
10 06 Fish and Wildlife Facilities							
10.06.03 Wildlife Facilities	1.00	EA	0	0	0	415,350	415,350
TOTAL Fish and Wildlife Facilities	1.00	EA	0	0	0	415,350	415,350
10 30 Planning, Engineering & Design	1.00	EA	0	0	0	203,200	203,200
10.31 Construction Management	1.00	EA	0	0	0	101,600	101,600
TOTAL Item No. 10, Mitigation	1.00	EA	0	0	0	3,418,600	3,418,600

	QUANTY UOM	LABOR	EQUIPMNT	MATERIAL	OTHER	TOTAL COST
TOTAL Bayou Meto Selected Plan	1.00 EA	15463690	6,546,795	6,196,946	14,560,566	42,767,998
Prime Contractor's Field Overhead						3,338,336
SUBTOTAL						46,106,334
Prime's Home Office Expense						1,535,635
SUBTOTAL						47,641,969
Prime Contractor's PROFIT						2,712,955
SUBTOTAL						50,354,924
BOND						298,425
TOTAL INCL INDIRECTS						50,653,349
CONTINGENCIES						11,023,222
SUBTOTAL						61,676,571
ESCALATION						6,411,908
TOTAL INCL OWNER COSTS						68,088,479

No errors detected...

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SUMMARY REPORTS SUMMARY PAGE

No Detailed Estimate...

No Backup Reports...

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