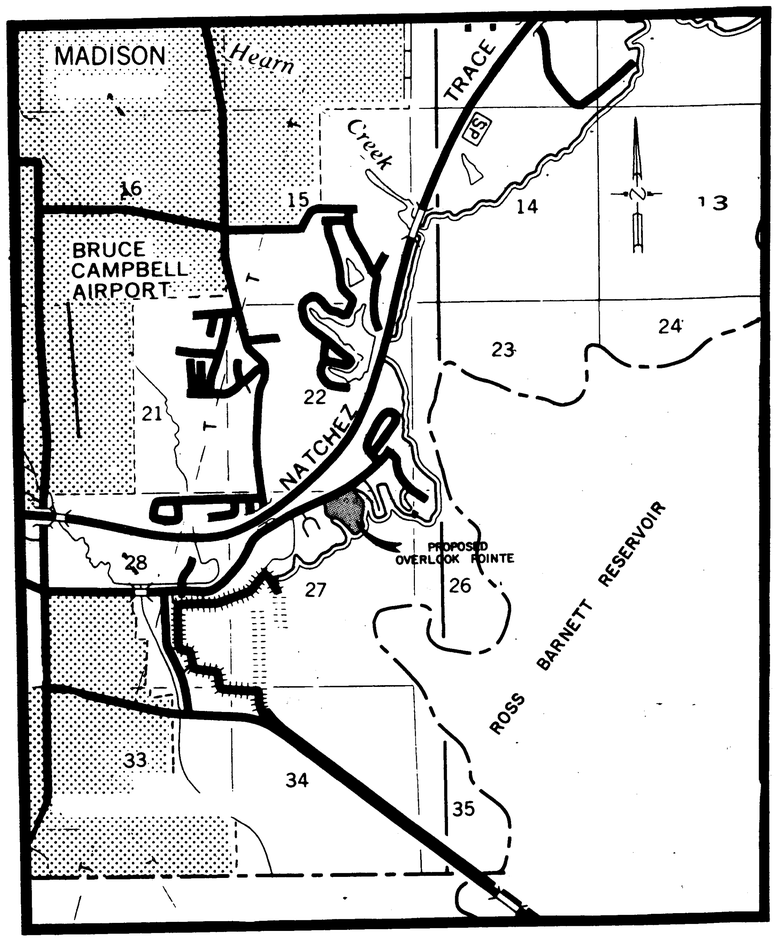
OVERLOOK POINTE



VICINITY MAP

SCALE: 1" = 2000'

OWNER AND DEVELOPER:

OVERLOOK POINTE
MANAGING PARTNER, RAYFORD R. HUDSON, III
6295 OLD CANTON ROAD
JACKSON, MISS. 39211-2999
TELEPHONE: 601-956-2664

CONTENTS

PWP-1521

LESTER ENGINEERING CO.
JACKSON, MISSISSIPPI

JOB NO. 90-263
SHT. NO. 1 OF 11

℄ CURVE DATA

Ⓐ Δ = 78°23'01"
D = 31 7794°
T = 147.00'
L = 246.65'
R = 180.29'

PC STA. 0+29 15
PI STA. 1+76 15
PT STA. 2+75 80

Ⓑ Δ = 104°00'47"
D = 24.458°
T = 300.00'
L = 425.40'
R = 234.33'

PC STA. 3+38.42
PI STA. 6+38.42
PT STA. 7+63.82

Ⓒ Δ = 87°56'40"
D = 36.6992°
T = 150.62'
L = 239.64'
R = 156.12'

PC STA. 8+17.20
PI STA. 9+67.82
PCC STA. 10+56.84

Ⓓ Δ = 87°45'15"
D = 36.5775°
T = 150.62'
L = 239.91'
R = 156.62'

PCC STA. 10+56.84
PI STA. 12+07.46
PT STA. 12+96.75

Ⓔ Δ = 34°16'26"
D = 18.5968°
T = 95.00'
L = 184.30'
R = 308.10'

PC STA. 14+56.40
PI STA. 15+51.40
PT STA. 16.40.70

Ⓕ Δ = 128°18'16"
D = 26.2541°
T = 450.48'
L = 488.70'
R = 218.24'

PC STA. 16+75.70
PI STA. 21+26.18
PT STA. 21+64.40

Ⓖ Δ = 66°33'47"
D = 31.3415°
T = 120.00'
L = 212.38'
R = 182.81'

PC STA. 0+43.58
PI STA. 1+63.58
PT STA. 2+55.96

Ⓗ Δ = 44°48'31"
D = 31.4942°
T = 75.00'
L = 142.28'
R = 181.92'

PC STA. 4+27.44
PI STA. 5+02.44
PT STA. 5+69.72

Ⓙ Δ = 90°00'00"
D = 54.5674°
T = 105.00'
L = 164.93'
R = 105.00'

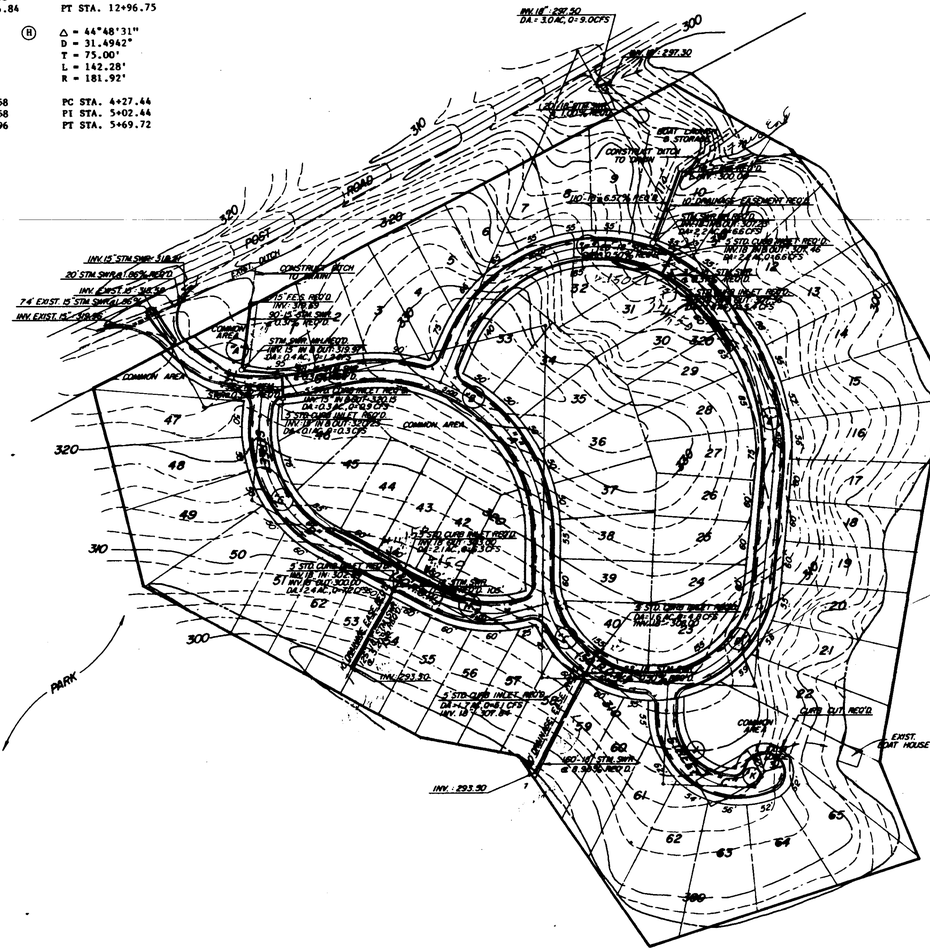
PC. STA. 0+35
PI. STA. 1+40
PCC.STA. 1+99.93

Ⓚ Δ = 55°07'36"
D = 115.0263°
T = 26.00'
L = 47.92'
R = 49.81'

PCC. STA. 1+99.93
PI. STA. 2+25.93
PT. STA. 2+47.85

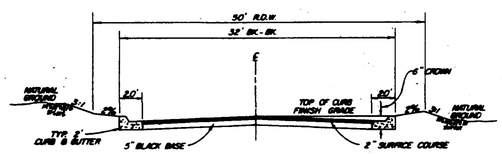
NO. 645
B. M. ELEVATION = 325.03
NAIL IN ROOT 18" CHERRY
35' LT. STA. 2+25 ON ST. "A"

NO. 644
B. M. ELEVATION = 313.88
NAIL IN ROOT 36" PINE
70' RT. STA. 11+50 ON ST. "A"



NOTES FOR STREET AND STORM DRAINAGE CONSTRUCTION

1. Lot dimensions are subject to minor adjustments.
2. Materials and construction shall conform to the appropriate section and subsection of the Mississippi Standard Specifications for Road and Bridge Construction and the Mississippi State Highway Department Design Manual or the Contract Documents and Specifications for Over Look Pointe.
3. Storm sewers shall be ASTM C-76 reinforced concrete pipe and joined with ASTM C-443 "O" ring rubber gaskets.
4. The radius at street intersections shall be a minimum of 20 feet.



TYPICAL STREET SECTION
N.T.S.

DESIGNED:		SCALE: 1"=100'	LESTER ENGINEERING COMPANY
DRAWN: B. TEASLEY, Jr.		DRWG. NO: 90-263	CONSULTING ENGINEERS
APPROVED:			JACKSON, MISSISSIPPI
DATE: NOV., 1990			

REV. NO.	DATE	NATURE OF REVISION	BY	CHKD	APPD

LOT LAYOUT AND DRAINAGE OVERLOOK POINTE

SHEET NO. 2

JOB NO. 90-263
SHT. NO. 2 OF 11

℄ CURVE DATA

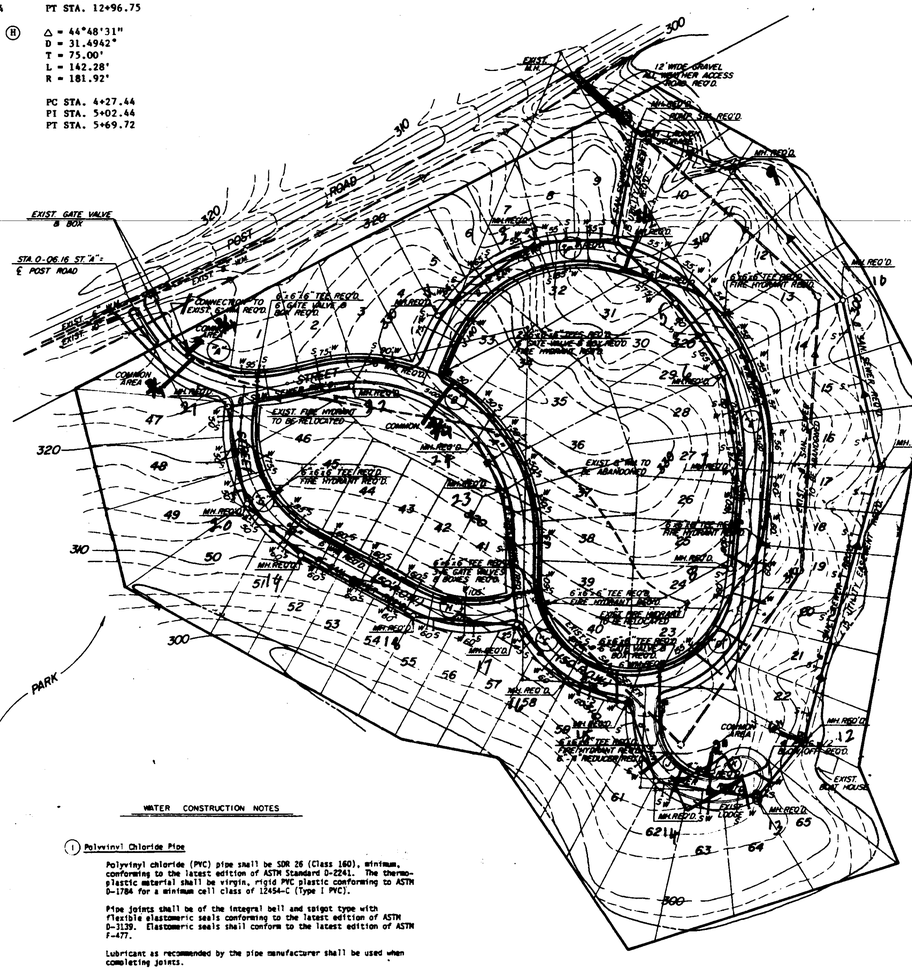
(A)	(B)	(C)	(D)
Δ = 78°23'01"	Δ = 106°00'47"	Δ = 87°56'40"	Δ = 87°45'15"
D = 31.7794°	D = 24.458°	D = 36.6992°	D = 36.5775°
T = 147.00'	T = 300.00'	T = 150.62'	T = 150.62'
L = 246.65'	L = 425.40'	L = 239.64'	L = 239.91'
R = 180.29'	R = 234.33'	R = 156.12'	R = 156.62'
PC STA. 0+29.15	PC STA. 3+38.42	PC STA. 8+17.20	PCC STA. 10+56.84
PI STA. 1+76.15	PI STA. 6+38.42	PI STA. 9+67.82	PI STA. 12+07.46
PT STA. 2+75.80	PT STA. 7+63.82	PCC STA. 10+56.84	PT STA. 12+96.75

(E)	(F)	(G)	(H)
Δ = 34°16'26"	Δ = 128°18'16"	Δ = 66°33'47"	Δ = 44°48'31"
D = 18.5968°	D = 26.2541°	D = 31.3615°	D = 31.4942°
T = 95.00'	T = 450.48'	T = 120.00'	T = 75.00'
L = 184.30'	L = 488.70'	L = 212.38'	L = 142.28'
R = 308.10'	R = 218.24'	R = 182.81'	R = 181.92'
PC STA. 14+56.40	PC STA. 16+75.70	PC STA. 0+43.58	PC STA. 4+27.44
PI STA. 15+51.40	PI STA. 21+26.18	PI STA. 1+63.58	PI STA. 5+02.44
PT STA. 16.40.70	PT STA. 21+64.40	PT STA. 2+55.96	PT STA. 5+69.72

(J)	(K)	
Δ = 90°00'00"	Δ = 55°07'36"	
D = 54.5674°	D = 115.0263°	
T = 105.00'	T = 26.00'	
L = 164.93'	L = 47.92'	
R = 105.00'	R = 49.81'	
PC STA. 0+35	PCC STA. 1+99.93	
PI STA. 1+40	PI STA. 2+25.93	
PCC. STA. 1+99.93	PT STA. 2+47.85	

NO. 645
B.M. ELEVATION = 325.03
NAIL IN ROOT 18" CHERRY
35' LT. STA. 2+25 ON ST. "A"

NO. 644
B.M. ELEVATION = 313.88
NAIL IN ROOT 36" PINE
70' RT. STA. 11+50 ON ST. "A"



WATER CONSTRUCTION NOTES

(1) **Polyvinyl Chloride Pipe**

Polyvinyl chloride (PVC) pipe shall be SDR 26 (Class 160), minimum, conforming to the latest edition of ASTM Standard D-2241. The thermoplastic material shall be virgin, rigid PVC plastic conforming to ASTM D-1784 for a minimum cell class of 12454-C (Type I PVC).

Pipe joints shall be of the integral bell and spigot type with flexible elastomeric seals conforming to the latest edition of ASTM D-3139. Elastomeric seals shall conform to the latest edition of ASTM F-477.

Lubricant as recommended by the pipe manufacturer shall be used when completing joints.

(2) **Service Saddles**

Service saddles for PVC pipe shall be FORD Style 304, or approved equal.

(3) **Corporation Stops**

Corporation stops shall be 3/4-inch, minimum, FORD Type F600, or approved equal, AWWA taper, compression coupling for copper tubing.

(4) **Service Tubing**

Service tubing shall be 3/4-inch, minimum, annealed copper tube ASTM B88, Type K, 3/4-inch, minimum, polyethylene (PE) conforming to AWWA C901, or 3/4-inch polybutylene (PB) conforming to AWWA C902.

(5) **Thrust Blocks**

Thrust blocks shall be constructed at all bends, tees, valves, hydrant junctions or branches. Concrete shall be Class "C" in accordance with Section 804.5 of the Mississippi State Highway Department Standard Specifications. Thrust blocks shall be sized in accordance with AWWA M23.

(6) **Valves and Valve Boxes**

Gate valves shall be double disc, parallel seat, non-rising stem, 200 psi working pressure conforming to AWWA Standard C500-80. Valves shall be suitable for underground service and provided with 2-inch square operating nuts. Gate valves shall be Series 67 as manufactured by Dresser, or approved equal. End connection style shall be mechanical joint or flanged.

Valve boxes shall be three piece adjustable, cast iron, Pattern No. MB-2 or MB-4 as manufactured by Vulcan Foundry, or approved equal. Valve boxes shall be adjusted to grade.

(7) **Meter Boxes and Meter Yoke**

(1) Meter boxes shall be Vulcan Model YMB-1, Harper Standard Meterbox, or approved equal.

(2) Meter yokes shall be for 5/8" x 3/4" meters and shall have angle inlet valve with padlock wings, compression couplings for 3/4" copper tubing or neck joints for PE/PB tubing inlet and 1PT outlet. Meter yokes shall be Ford Series 70 or 170, Hayes Unit-Setter, or approved equal.

SANITARY SEWER CONSTRUCTION NOTES

(1) **COMPOSITE PIPE**

Semi-rigid composite pipe shall be of the solid wall ABS type (SDR 26) conforming to the latest edition of ASTM Standard D-2680, as applicable.

(2) **LEAKAGE TESTS**

General

Before any backfill is placed, the sewer line shall be checked by the Engineer for line, grade and workmanship. Before acceptance, each section of line between manholes or such other length as determined by the Engineer to be suitable, shall be thoroughly inspected and any defects in workmanship shall be immediately corrected.

The Contractor shall conduct either an infiltration or low-pressure air tests (after backfilling) of each reach of sewer between manholes. An infiltration test will be required where the crown of the entire reach of sewer being tested lies one foot (1') or more under the existing water table; otherwise, the air test shall be used.

Leakage tests shall be conducted in the presence of the District Engineer.

Any section of pipe exceeding an infiltration rate of 200 gallons/day/inch diameter/mile of pipe shall be relaid at the Contractor's expense. The Contractor shall locate and repair leaks as necessary to pass the leakage tests.

(3) **SELECT BEDDING**

Select granular material for pipe Class "B" and "C" bedding shall be a well graded granular-sand clay material conforming to Class 6, Group C, of Section 703.06 of the Mississippi Standard Specifications for Road and Bridge Construction, 1976 Edition.

A select well-graded, sand-gravel shall be substituted for the above when specified and approved by the Engineer.

(4) **EPOXY LINING FOR PRECAST CONCRETE MANHOLES**

General

All interior and joint surfaces of each precast concrete manhole section shall be prepared, coated and cured as necessary to complete the installation of a coal tar epoxy lining system in each cured concrete unit at the concrete casting facilities. No exterior surface coatings will be required. Before coating work is commenced, the Contractor shall submit to the Engineer the proposed coating supplier's complete material and application specifications specifically prepared for the particular application.

(5) **Precast Concrete Manholes**

Precast concrete manhole shall consist of precast reinforced riser sections, an eccentric cone and a base section conforming to the typical manhole details shown on the Drawings.

Precast reinforced concrete manhole sections shall conform to the requirements of the latest edition of ASTM Serial Designation C-478.

The interior surfaces of a precast concrete manhole section shall be coated with coal tar epoxy in the manner prescribed in the section on epoxy lining for precast manholes.

Joints for precast concrete manhole sections shall be a combination of rubber gaskets, and preformed bituminous joint compound or a mastic joint material.

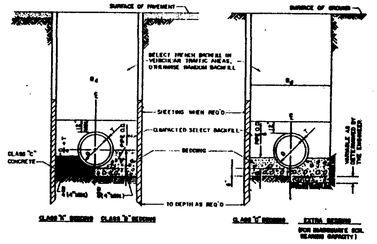
Base and riser sections shall be 48 inches in diameter unless otherwise specified on plans.

Manhole steps shall be cast as an integral part of the manhole section when formed.

(6) **Pipe Connections to Manholes**

When the Plans indicate connections to existing manholes, these connections shall be watertight using approved water stops and all work performed in an acceptable manner in accordance with details shown on the Drawings. Approved water stops equal to Kor-N-Seal connectors shall be used.

Pipe connections to new manholes shall be made with water stops equal to Kor-N-Seal flexible connectors and shall be watertight. The annular space between pipe and connector shall be filled with flexible nitrite and PVC material.



TYPICAL TRENCH DETAILS
NOT TO SCALE

NOTE: ALL CONSTRUCTION TO BE BUILT IN ACCORDANCE WITH THE PEARL RIVER VALLEY WATER SUPPLY DISTRICT.

NOTE: CONTRACTOR TO VERIFY LOCATION OF EXIST. UTILITIES PRIOR TO CONSTRUCTION.

60 6"
5 4"

DESIGNED:		SCALE: 1"=100'	
DRAWN: B. TEASLEY, Jr.		DRWG. NO: 90-263	
APPROVED:			
DATE: SEPT., 1990			

REV. NO.	DATE	NATURE OF REVISION	BY	CHKD	APPD

LESTER ENGINEERING COMPANY
CONSULTING ENGINEERS
JACKSON, MISSISSIPPI

WATER AND SEWER LAYOUT OVERLOOK POINTE

SHEET NO. 3

JOB NO. 90-26
SHT. NO. 3 OF

℄ CURVE DATA

(A) Δ = 78°23'01" | D = 31.7794° | T = 147.00' | L = 246.65' | R = 180.29'
PC STA. 0+29.15 | PI STA. 1+76.15 | PT STA. 2+75.80

(B) Δ = 104°00'47" | D = 24.458° | T = 300.00' | L = 425.40' | R = 234.33'
PC STA. 3+38.42 | PI STA. 6+38.42 | PT STA. 7+63.82

(C) Δ = 87°56'40" | D = 36.6992° | T = 150.62' | L = 239.64' | R = 156.12'
PC STA. 8+17.20 | PI STA. 9+67.82 | PCC STA. 10+56.84

(D) Δ = 87°45'15" | D = 36.5775° | T = 150.62' | L = 239.91' | R = 156.62'
PCC STA. 10+56.84 | PI STA. 12+07.46 | PT STA. 12+96.75

(E) Δ = 34°16'26" | D = 18.5968° | T = 95.00' | L = 184.30' | R = 308.10'
PC STA. 14+56.40 | PI STA. 15+91.40 | PT STA. 16.40.70

(F) Δ = 128°18'16" | D = 26.2541° | T = 450.48' | L = 488.70' | R = 218.24'
PC STA. 16+75.70 | PI STA. 21+26.18 | PT STA. 21+64.40

(G) Δ = 66°33'47" | D = 31.3415° | T = 120.00' | L = 212.38' | R = 182.81'
PC STA. 0+43.58 | PI STA. 1+63.58 | PT STA. 2+55.96

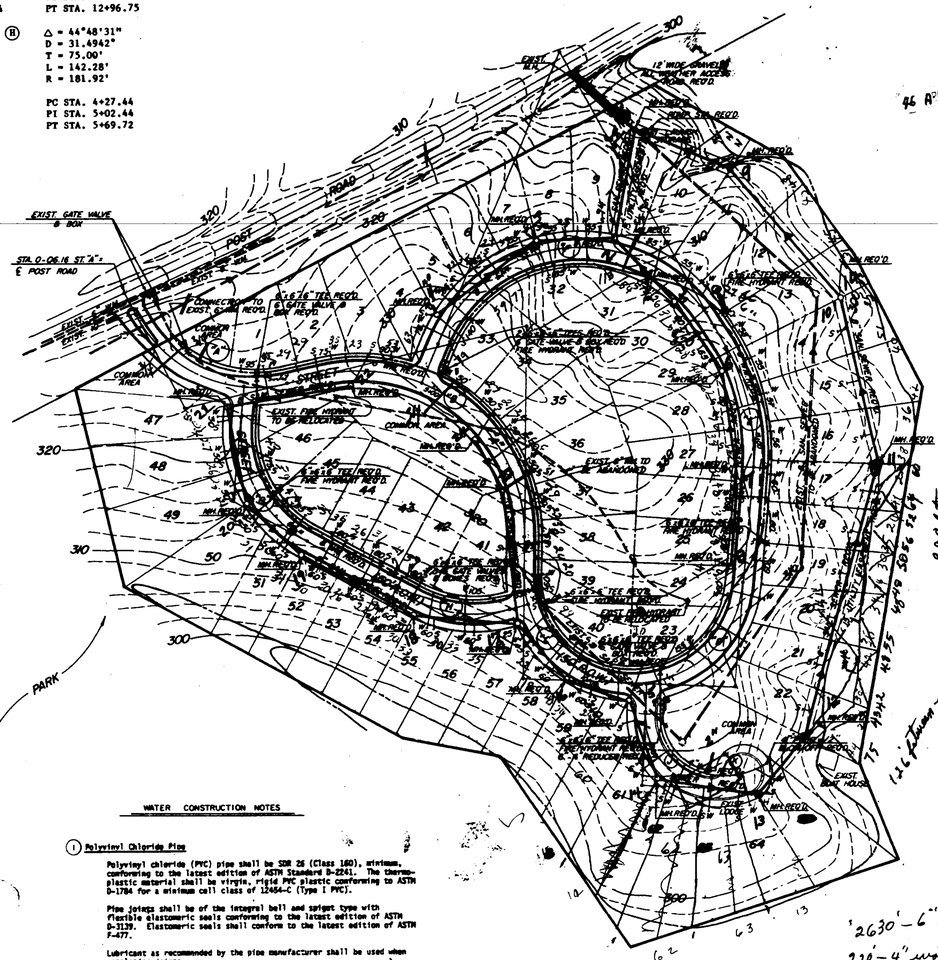
(H) Δ = 44°48'31" | D = 31.4942° | T = 75.00' | L = 142.28' | R = 181.92'
PC STA. 4+27.44 | PI STA. 5+02.44 | PT STA. 5+69.72

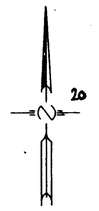
(J) Δ = 90°00'00" | D = 54.5674° | T = 105.00' | L = 164.93' | R = 105.00'
PC STA. 0+35 | PI STA. 1+40 | PCC STA. 1+99.93

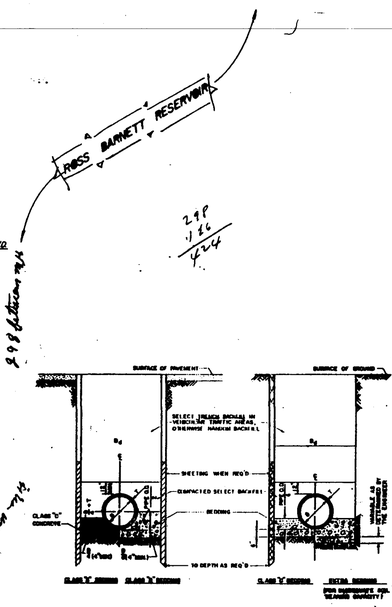
(K) Δ = 55°07'36" | D = 115.0263° | T = 26.00' | L = 47.92' | R = 49.81'
PCC STA. 1+99.93 | PI STA. 2+25.93 | PT STA. 2+47.85

NO. 645
B.M. ELEVATION = 325.03
NAIL IN ROOT 18" CHERRY
35' LT. STA. 2+25 ON ST."A"

NO. 644
B.M. ELEVATION = 313.08
NAIL IN ROOT 36" PINE
70' RT. STA. 11+50 ON ST."A"







TYPICAL TRENCH DETAILS
NOT TO SCALE

"2630'-6" PVC water main
220'-4" water PVC
1-4" cap
1-4x6 Reducer
1-4x2 T
6'-2" PVC pipe
1-2" Valve

WATER CONSTRUCTION NOTES

(1) **Polyvinyl Chloride Pipe**

Polyvinyl chloride (PVC) pipe shall be SDR 26 (Class 160), minimum, conforming to the latest edition of ASTM Standard D-2241. The thermoplastic material shall be virgin, rigid PVC plastic conforming to ASTM D-1784 for a minimum cell class of 12454-C (Type I PVC).

Pipe joings shall be of the integral bell and spigot type with flexible elastomeric seals conforming to the latest edition of ASTM D-3139. Elastomeric seals shall conform to the latest edition of ASTM F-477.

Lubricant as recommended by the pipe manufacturer shall be used when completing joints.

(2) **Service Saddles**

Service saddles for PVC pipe shall be FORD Style 304, or approved equal.

(3) **Corporation Stops**

Corporation stops shall be 3/4-inch, minimum, FORD Type F600, or approved equal, AWWA taper, compression coupling for copper tubing.

(4) **Service Tubing**

Service tubing shall be 3/4-inch, minimum, annealed copper tube ASTM B88, Type K, 3/4-inch, minimum, polyethylene (PE) conforming to AWWA C901, or 3/4-inch polybutylene (PB) conforming to AWWA C902.

(5) **Thrust Blocks**

Thrust blocks shall be constructed at all bends, tees, valves, hydrant junctions or branches. Concrete shall be Class "C" in accordance with Section 804.5 of the Mississippi State Highway Department Standard Specifications. Thrust blocks shall be sized in accordance with AWWA M23.

(6) **Valves and Valve Boxes**

Gate valves shall be double disc, parallel seat, non-rising stem, 200 psi working pressure conforming to AWWA Standard C500-80. Valves shall be suitable for underground service and provided with 2-inch square operating nuts. Gate valves shall be Series 67 as manufactured by Dresser, or approved equal. End connection style shall be mechanical joint or flanged.

Valve boxes shall be three piece adjustable, cast iron, Pattern No. WB-1 or WB-4 as manufactured by Vulcan Foundry, or approved equal. Valve boxes shall be adjusted to grade.

(7) **Meter Boxes and Meter Yoke**

(1) Meter boxes shall be Vulcan Model VMB-1, Harper Standard Meterbox, or approved equal.

(2) Meter yokes shall be for 5/8" x 3/4" meters and shall have angle inlet valve with padlock wings, compression couplings for 3/4" copper tubing or pack joints for PE/PB tubing inlet and IPT outlet. Meter yokes shall be Ford Series 70 or 170, Hayes Unit-Setter, or approved equal.

SANITARY SEWER CONSTRUCTION NOTES

(1) **COMPOSITE PIPE**

Semi-rigid composite pipe shall be of the solid wall ABS type (SDR 26) conforming to the latest edition of ASTM Standard D-2680, as applicable.

(2) **LEAKAGE TESTS**

General

Before any backfill is placed, the sewer line shall be checked by the Engineer for line, grade and workmanship. Before acceptance, each section of line between manholes or such other length as determined by the Engineer to be suitable, shall be thoroughly inspected and any defects in workmanship shall be immediately corrected.

The Contractor shall conduct either an infiltration or low-pressure air tests (after backfilling) of each reach of sewer between manholes. An infiltration test will be required where the crown of the entire reach of sewer being tested lies one foot (1') or more under the existing water table; otherwise, the air test shall be used.

Leakage tests shall be conducted in the presence of the District Engineer.

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General

All interior and joint surfaces of each precast concrete manhole section shall be prepared, coated and cured as necessary to complete the installation of a coal tar epoxy lining system in each cured concrete unit at the concrete casting facilities. No exterior surface coatings will be required. Before coating work is commenced, the Contractor shall submit to the Engineer the proposed coating supplier's complete material and application specifications specifically prepared for the particular application.

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Precast concrete manholes shall consist of precast reinforced riser sections, an eccentric cone and a base section conforming to the typical manhole details shown on the Drawings.

Precast reinforced concrete manhole sections shall conform to the requirements of the latest edition of ASTM Serial Designation C-478.

The interior surfaces of a precast concrete manhole section shall be coated with coal tar epoxy in the manner prescribed in the section on epoxy lining for precast manholes.

Joints for precast concrete manhole sections shall be a combination of rubber gaskets, and preformed bituminous joint compound or a mastic joint material.

Base and riser sections shall be 48 inches in diameter unless otherwise specified on plans.

Manhole steps shall be cast as an integral part of the manhole section when formed.

(6) **Pipe Connections to Manholes**

When the Plans indicate connections to existing manholes, these connections shall be watertight using approved water stops and all work performed in an acceptable manner in accordance with details shown on the Drawings. Approved water stops equal to Kor-N-Seal connectors shall be used.

Pipe connections to new manholes shall be made with water stops equal to Kor-N-Seal flexible connectors and shall be watertight. The annular space between pipe and connector shall be filled with flexible nitrite and PVC material.

NOTE: ALL CONSTRUCTION TO BE BUILT IN ACCORDANCE WITH THE PEARL RIVER VALLEY WATER SUPPLY DISTRICT.

NOTE: CONTRACTOR TO VERIFY LOCATION OF EXIST. UTILITIES PRIOR TO CONSTRUCTION.

DESIGNED:			SCALE: 1"=100'				LESTER ENGINEERING
DRAWN: B.TEASLEY, Jr.			DRWG. NO: 90-263				CONSULTING ENGINE
APPROVED:							JACKSON, MISSISSIP
DATE: SEPT., 1990							WATER AND SEWER LAYOUT
REV. NO.	DATE	NATURE OF REVISION	BY	CHKD	APPD		OVERLOOK POINTE

B.M. ELEVATION : 323.03
NAIL IN ROOT 18" CHERRY
35' LT. STA. 2+25
ON ST. "A"
B.M. ELEVATION : 313.88
NAIL IN ROOT 36" PINE
70' RT. STA. 11+50
ON ST. "A"
EXIST GATE VALVE & BOX
STA 0-06½ ST. "A"
℄ POST ROAD
COMMON AREA
MATCH LINE STA 16+50
SEE SHT NO 6
PLAN: STREET "A"
Scale: 1" = 50' Horiz.
1" = 5' Vert.
℄ CURVE DATA
(A) Δ = 78°23'01" D = 31.7794° T = 147.00' L = 246.65' R = 180.29'
PC STA. 0+29.15 PI STA. 1+76.15 PT STA. 2+75.80
(B) Δ = 104°00'47" D = 24.458° T = 300.00' L = 425.40' R = 234.33'
PC STA. 3+38.42 PI STA. 6+38.42 PT STA. 7+63.82
(C) Δ = 87°56'40" D = 36.6992° T = 150.62' L = 239.64' R = 156.12'
PC STA. 8+17.20 PI STA. 9+67.82 PCC STA. 10+56.84
(D) Δ = 87°45'15" D = 36.5775° T = 150.62' L = 239.91' R = 156.62'
PCC STA. 10+56.84 PI STA. 12+07.46 PT STA. 12+96.75
(E) Δ = 34°16'26" D = 18.5968° T = 95.00' L = 184.30' R = 308.10'
PC STA. 14+56.40 PI STA. 15+51.40 PT STA. 16.40.70
PLAN
PROFILE
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT OF WAY CHECKED
GRADES CHECKED
B.M. NOTED
NOTE BOOK
NO.
DATE
BY
330
325
320
315
310
305
2+00
5+00
10+00
HIGHWAY FEDERAL AID SHEET
PLATE 1-SINGLE PLAN AND PROFILE-FULL DOT
PRINTED IN U.S.A.

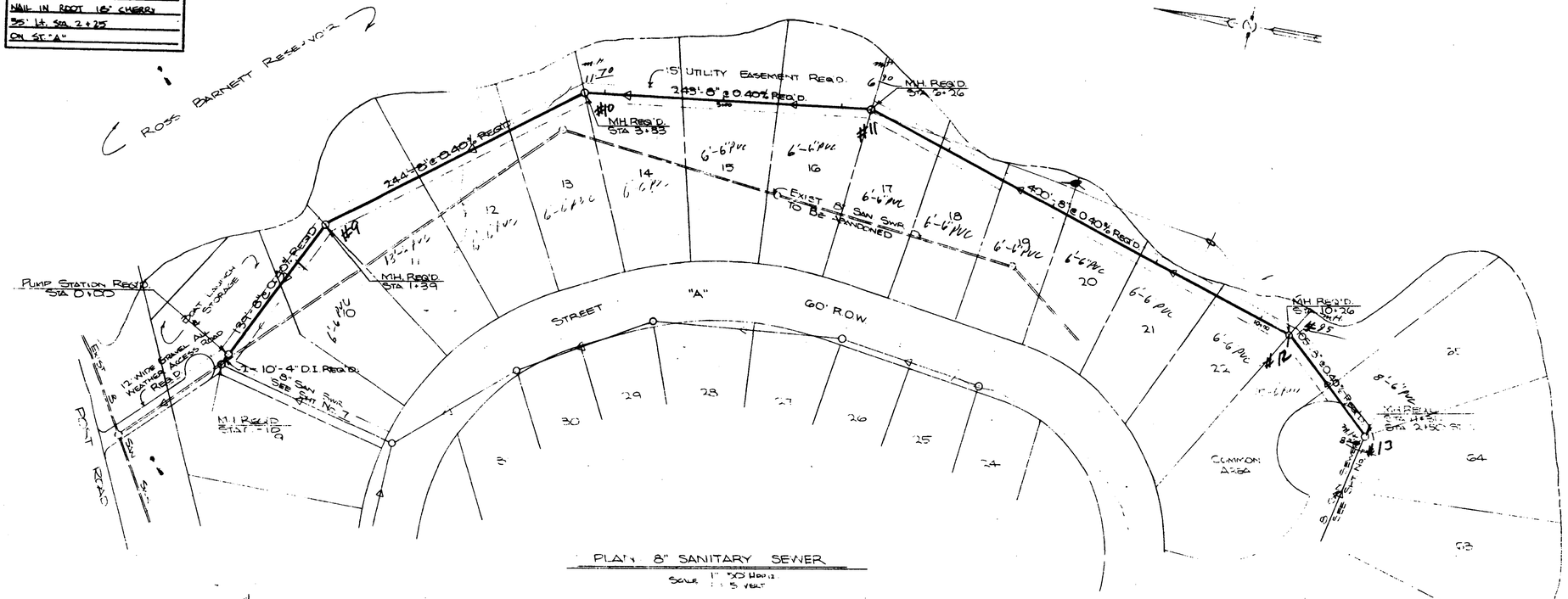

℄ CURVE DATA
(E) Δ = 34°16'26" D = 18.5068° T = 95.00' L = 184.30' R = 308.10'
PC STA. 14+56.40 PI STA. 15+51.40 PT STA. 16.40.70
(F) Δ = 120°18'16" D = 26.2541° T = 450.48' L = 400.70' R = 218.24'
PC STA. 16+75.70 PI STA. 21+26.18 PT STA. 21+64.40
B.M. ELEVATION : 313.80
NAIL IN ROOT 36" PINE
70' Rt. STA. 11+50
ON ST. "A"
B.M. ELEVATION : 325.08
NAIL IN ROOT 18" CHERRY
36' Lt. STA. 2+25
ON STREET "A"
SEE SHT. NO. 4
MATCH LINE STA. 15+00
COMMON AREA
STREET "A"
SEE THIS SHT.
STA 21+24.67 ST."A" = STA. 4+84.38 ST."A"
2-6"-6"-6" TEES REQ'D. FIRE HYDRANT REQ'D. 6" GATE VALVE & BOX REQ'D.
MH. REQ'D. STA. 16+10
MH. REQ'D. STA. 17+40
125'-8" @ 2.28% REQ'D.
20 LF 8" DI REQ'D.
STA. 18+10.33 (LT) 5' STD. CURB INLET REQ'D. DA: 1.8Ac, Q: 5.4CFS
STA. 18+10.33 (Rt) 5' STD. CURB INLET REQ'D. DA. 2.2Ac, Q: 6.6CFS
32'-18" STM/SWR @ 0.31% REQ'D.
STM/SWR MH. REQ'D. STA. 18+35 DA: 2.2Ac, Q: 6.6CFS
10' DRAINAGE EASEMENT REQ'D
18" F.E.S. REQ'D. INV 300.00
PC STA. 16+75.70
6"x6"x6" TEE REQ'D FIRE HYDRANT REQ'D
112'-8" @ 7.50% REQ'D.
MH. REQ'D. STA. 19+63
175'-8" @ 6.51% REQ'D.
(50' R.O.W.)
6" WM REQ'D
MH REQ'D. STA. 21+27
PT. STA. 21+64.40
PLAN STREET "A"
SCALE 1" = 50' HORIZ 1" = 5' VERT.
℄ CURVE DATA
(G) Δ = 66°33'47" D = 31.3415° T = 120.00' L = 212.38' R = 182.81'
PC STA. 0+43.58 PI STA. 1+63.58 PT STA. 2+55.96
(H) Δ = 44°48'31" D = 31.4942° T = 75.00' L = 142.28' R = 181.92'
PC STA. 4+27.44 PI STA. 5+02.44 PT STA. 5+69.72
STA. 2+25.75 ST. A = STA. 0+03.43 ST. B
SEE SHT. NO. 4
STA 5+97.53 ST. B = STA 8+61.36 ST. A
MH. REQ'D. STA. 0+29
MH. REQ'D. STA. 1+62
MH. REQ'D. STA. 2+65
MH. REQ'D. STA. 4+38
MH REQ'D. STA. 5+75
6"x6"x6" TEE REQ'D. FIRE HYDRANT REQ'D
STA. 3+76.52 (Lt) 5' STD. CURB INLET REQ'D DA. 2.1Ac, Q: 6.3 CFS
STA. 3+76.52 (Rt) 5' STD. CURB INLET REQ'D DA. 2.4Ac, Q: 6.8 CFS
6" WM REQ'D
STREET "B" (50' R.O.W.)
110'-8" @ 5.07% REQ'D.
180'-8" @ 0.40% REQ'D.
145'-8" @ 0.40% REQ'D.
32'-18" STM/SWR @ 0.50% REQ'D.
10' DRAINAGE EASEMENT REQ'D
125'-18" STM/SWR @ 5.20% REQ'D.
INV 293.50
ROSS BARNETT RESERVOIR
PLAN STREET "B"
SCALE 1" = 50' HORIZ 1" = 5' VERT.
℄ Rt. Side Lt. Side
200' VC
160' VC
3' MINIMUM DEPTH REQ'D.
160'-8" @ 0.40% REQ'D
120'-8" @ 2.28% REQ'D.
20 LF 8" DUCTILE IRON REQ'D
20 LF 6" DUCTILE IRON REQ'D
6" WM REQ'D.
175'-8" @ 6.51% REQ'D.
PVC STA. 20+50 ELEV. 321.45
PVT STA. 22+50 ELEV. 328.75
110'-8" @ 5.07% REQ'D.
148'-8" @ 0.40% REQ'D.
PVI STA. 3+75 ELEV. 304.00
#1 #2 #3 #4 #5 #6 #17 #18 #19 #20 #21
15+00 16 17 18 19 20+00 21 22
0+00 1 2 3 4 5+00
PLAN: SURVEYED, PLOTTED, ALIGNMENT CHECKED, RT. OF WAY CHECKED
PROFILE: SURVEYED, PLOTTED, GRADES CHECKED, B. M.S NOTED, STRUCTURE NOTAT'NS CH'KD
NOTE BOOK NO. BY DATE

B.M. ELEVATION : 315.88
NAIL IN ROOT 36" PINE
70' Rt. STA. 114+50
ON ST. "A"

B.M. ELEVATION : 325.03
NAIL IN ROOT 16" CHERRY
35' Lt. STA. 2+25
ON ST. "A"

PLAN

SURVEYED	BY	DATE
PLOTTED		
PLOTTED ALIGNMENT CHECKED		
NOTE BOOK		
NO.		
BK. OF MAT CHECKED		

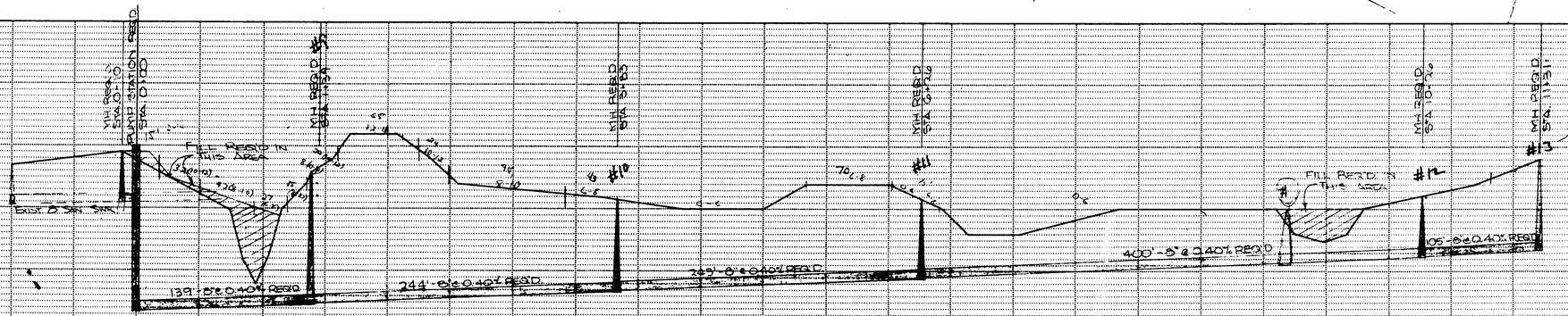


PLAN 8" SANITARY SEWER

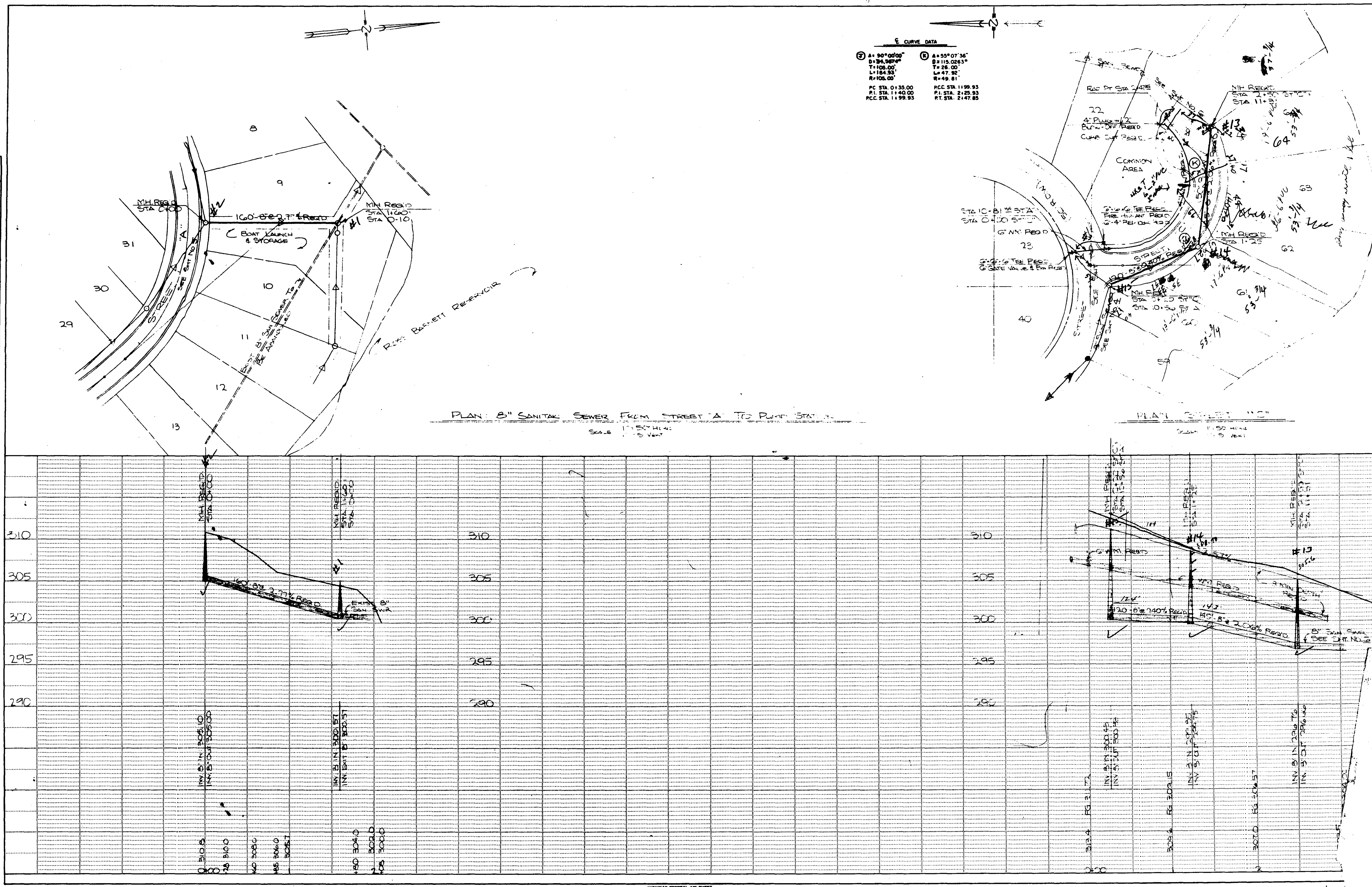
SCALE 1" = 50' Horiz. / 5' Vert.

PROFILE

SURVEYED	BY	DATE
PLOTTED		
PLOTTED ALIGNMENT CHECKED		
NOTE BOOK		
NO.		
B.M.'S NOTED		
STRUCTURE NOTATIONS CHKD.		



HIGHWAY FEDERAL AID SHEET
PLATE 1-SINGLE PLAN AND PROFILE-FULL DOT
"F"TILEDYNE
PRINTED IN U.S.A.



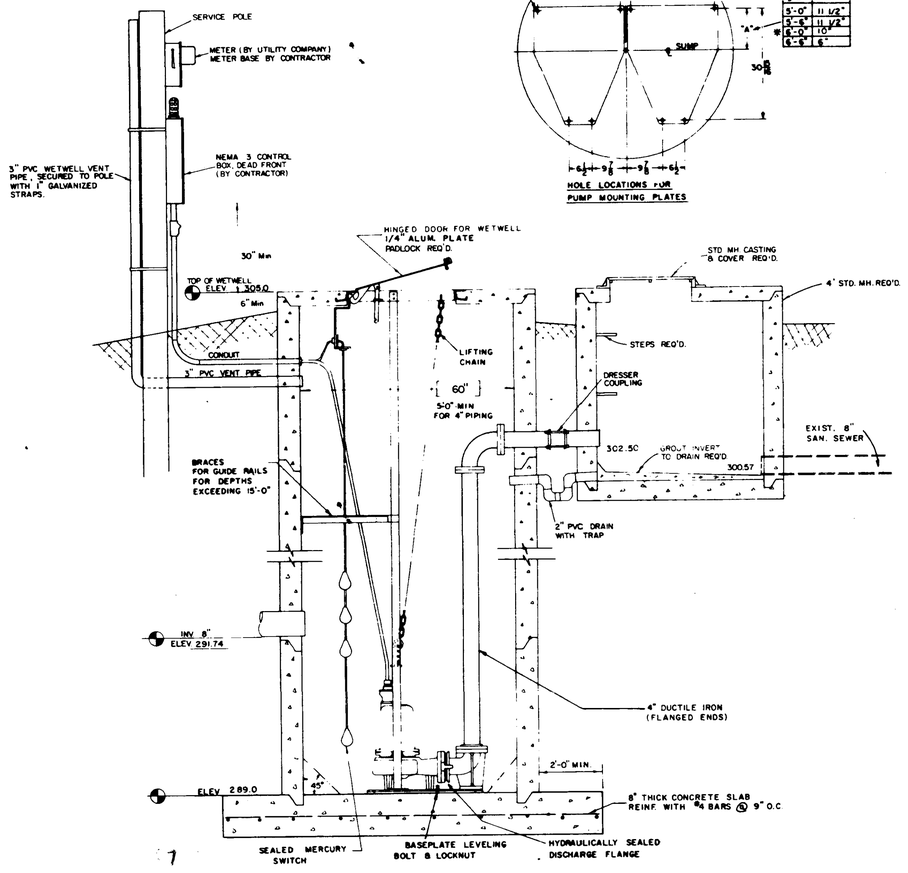
HIGHWAY FEDERAL AID SHEET
PLATE 1-SINGLE PLAN AND PROFILE-FULL DOT
"R" TELEDYNE
PRINTED IN U.S.A.

PLAN	BY	DATE
NOTE BOOK ___ NO. ___ SURVEYED PLOTTED ALIGNMENT CHECKED RT. OF WAY CHECKED		

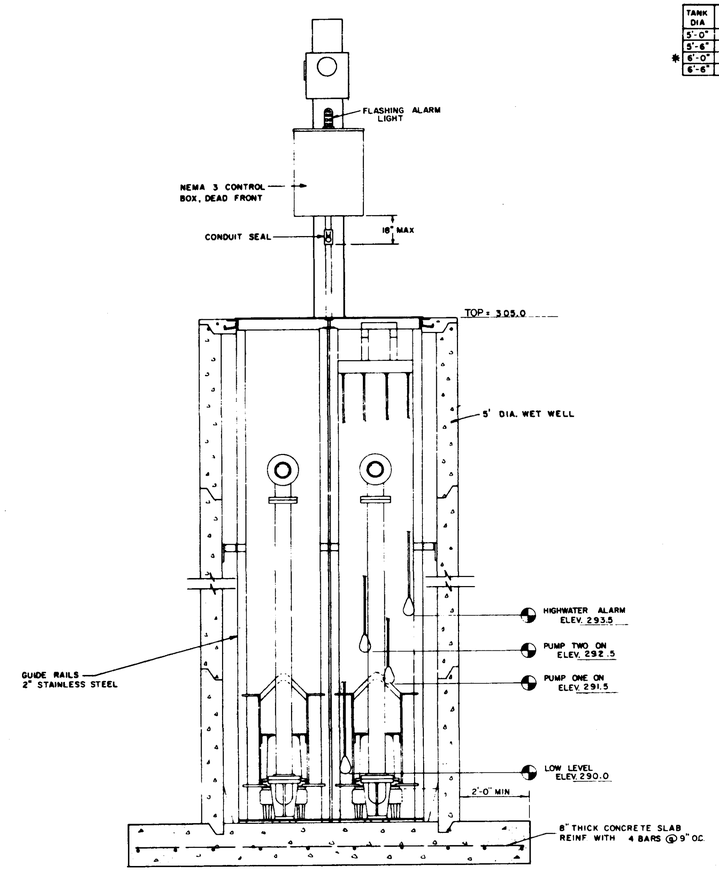
PROFILE	BY	DATE
NOTE BOOK ___ NO. ___ SURVEYED PLOTTED GRADES CHECKED B. M.'s NOTED STRUCTURE NOTAT'NS CH'KD		

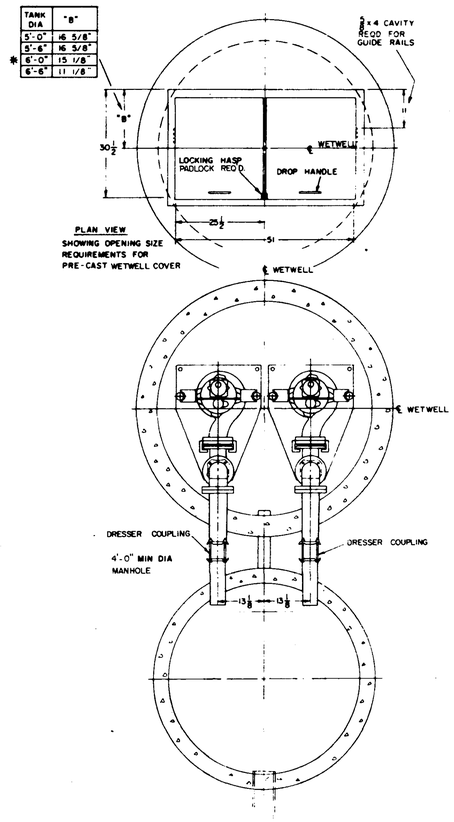
30500
30057
.43

DUPLEX SUBMERSIBLE WASTEWATER PUMPING STATION

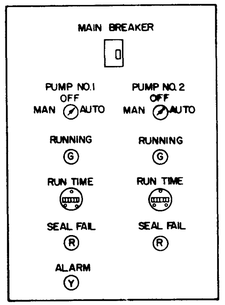


TANK DIA	"A"
5'-0"	11 1/2"
5'-6"	11 1/2"
6'-0"	10"
6'-6"	6"





TANK DIA	"B"
5'-0"	16 5/8"
5'-6"	16 5/8"
6'-0"	15 1/8
6'-6"	11 1/8



INTERIOR PANEL DETAIL

PERFORMANCE REQUIREMENTS

50 GPM AT 12.5 FT. TDH

ONE H.P. MOTORS AT 1150 RPM

3 PHASE, 240 VOLT, 60 Hz

PUMP MODEL: HYDROMATIC S4NX

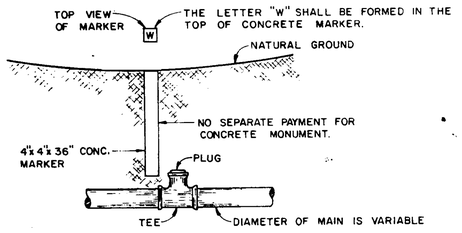
DESIGNED:		SCALE:				
DRAWN:		DRWG. NO: 90-263				
APPROVED:						
DATE:						
REV. NO.	DATE	NATURE OF REVISION	BY	CHKD	APPD	

LESTER ENGINEERING COMPANY
CONSULTING ENGINEERS
JACKSON, MISSISSIPPI

WASTEWATER PUMPING STATION

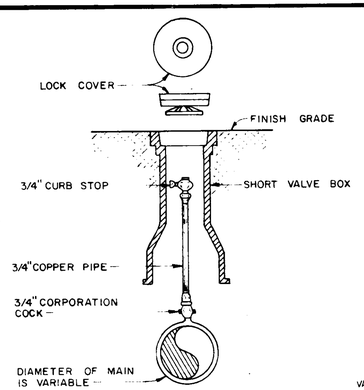
SHEET NO. 8

JOB NO. 90-263
SHT NO. 8 OF

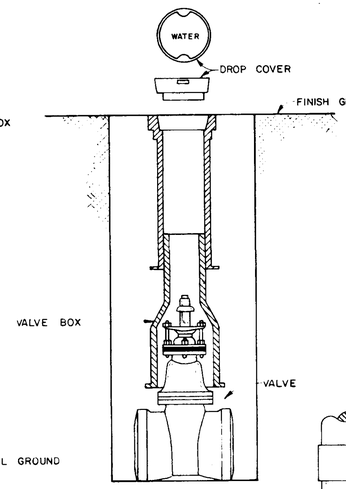


DETAIL OF EMERGENCY DRAIN

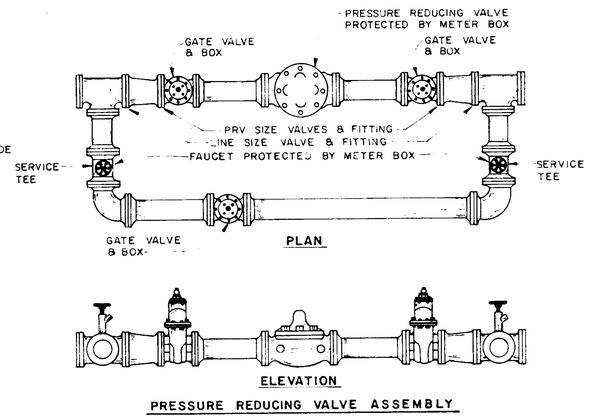
TO BE PLACED IN LOW PLACES AS DIRECTED BY THE ENGINEER.



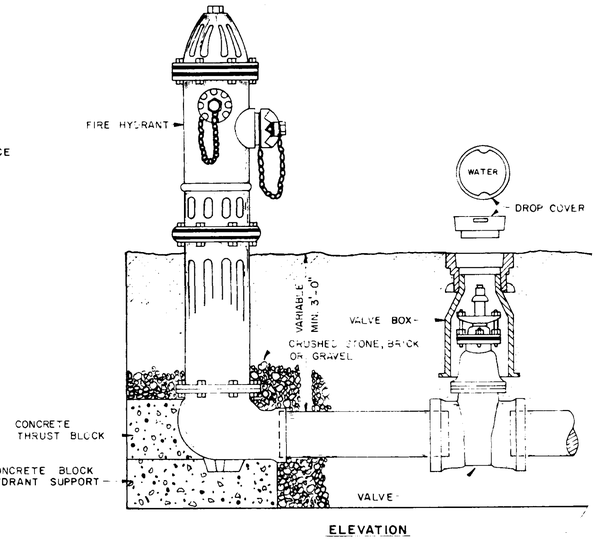
DETAIL OF AIR RELEASE VALVE



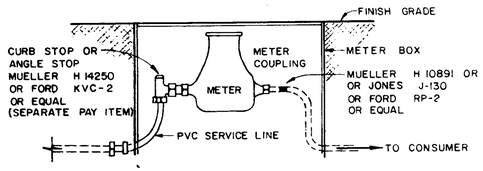
DETAIL OF VALVE AND VALVE BOX INSTALLATION



PRESSURE REDUCING VALVE ASSEMBLY

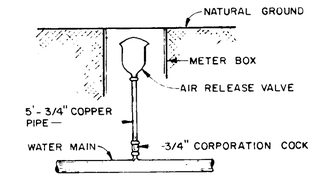


FIRE HYDRANT INSTALLATION DETAIL

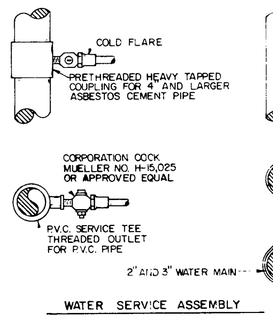


TYPICAL SERVICE ASSEMBLY

TYPE "A" FOR 3/4"x 5/8" METER
TYPE "B" FOR 3/4" METER
TYPE "C" FOR 1" METER
TYPE "D" FOR 11/2" METER



DETAIL OF AUTOMATIC AIR RELEASE VALVE ASSEMBLY

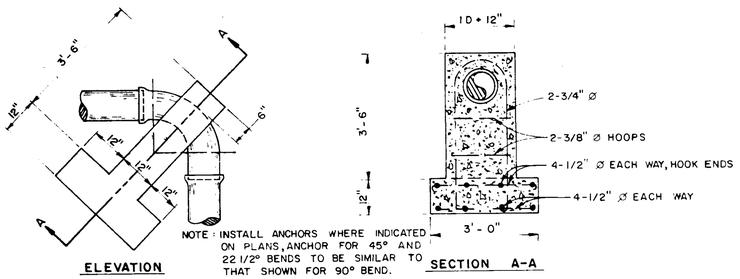


WATER SERVICE ASSEMBLY

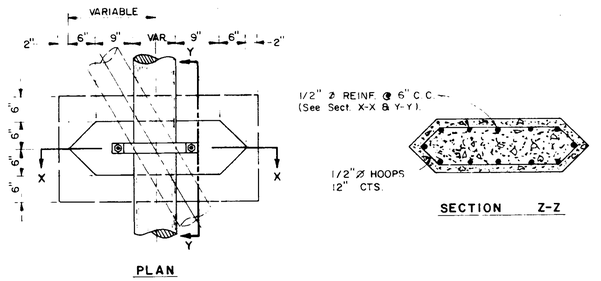
AREA OF BEARING FACE OF CONCRETE THRUST BLOCK

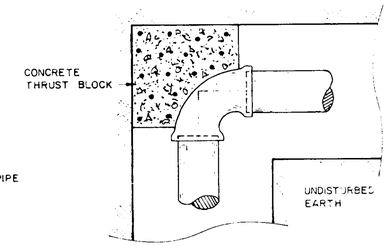
PIPE SIZE	1/4 Bend			1/8 Bend			Plugs & Tees		
	C.I. (M.J.)	AC	PVC	C.I. (M.J.)	AC	PVC	C.I. (M.J.)	AC	PVC
4-6	3	3	3	3	3	3	3	3	3
8	3	4		3	3		3	3	
10	4	6		3	3		3	3	
12	6	8		3	5		4	4	
16	11			4			7		
20	18			8			12		
24	27			12			18		

NOTE: AREA OF BEARING FACE IN SQUARE FEET.

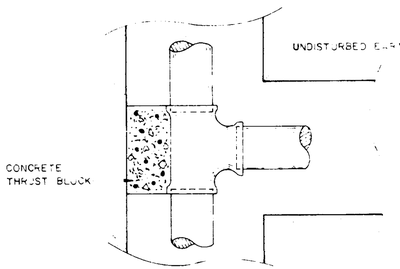


DETAILS OF CONCRETE ANCHOR FOR VERTICAL BENDS



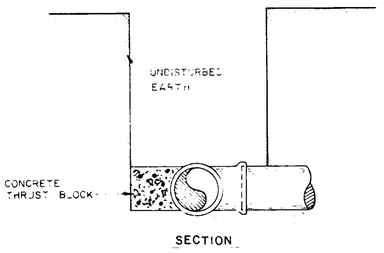


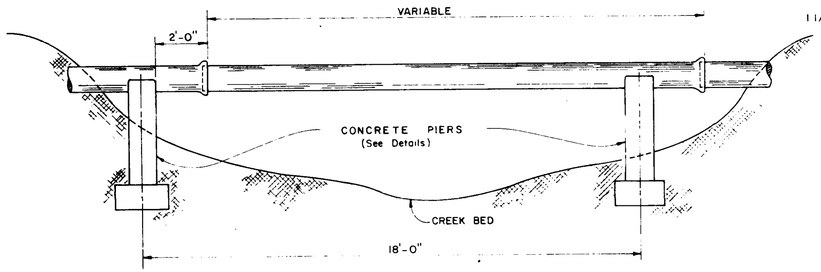
BLOCKING FOR 90° BENDS



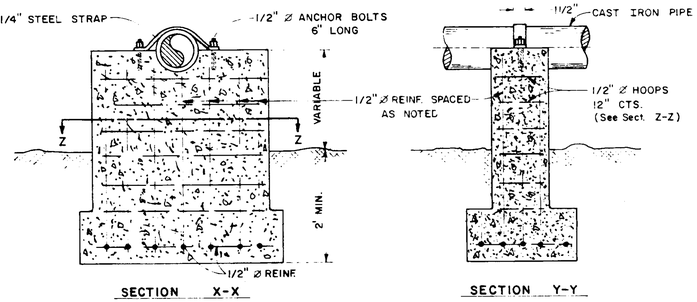
BLOCKING FOR TEE

(DETAILS OF CONCRETE BLOCKING FOR PIPE AND FITTINGS)





TYPICAL CREEK CROSSING INSTALLATION



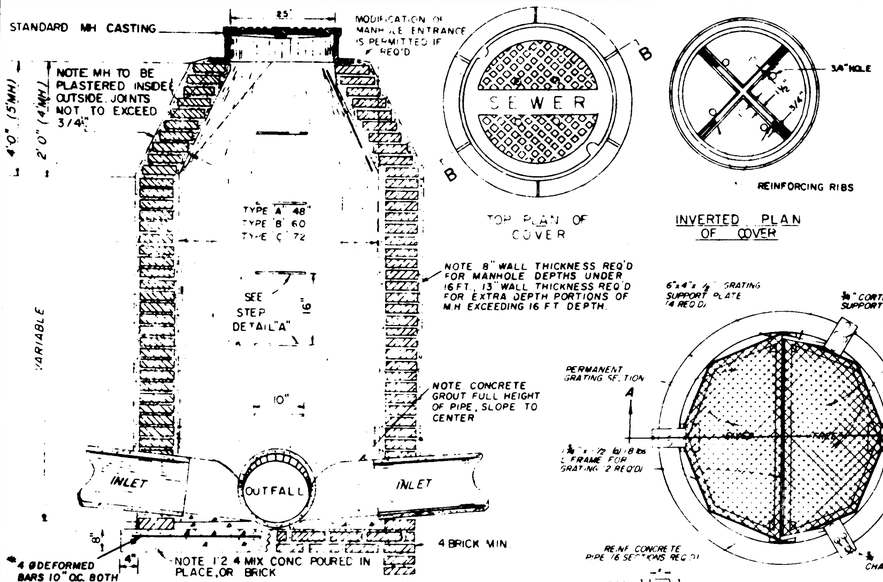
CONCRETE PIER DETAILS

DESIGNED:		SCALE:	
DRAWN:		DRWG. NO:	
APPROVED:			
DATE:			

REV. NO.	DATE	NATURE OF REVISION	BY	CHKD	APPD

LESTER ENGINEERING CO
CONSULTING ENGINEER
JACKSON, MISSISSIPPI

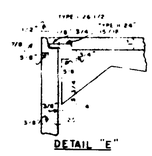
CONSTRUCTION DETAILS
WATER DISTRIBUTION SYSTEM

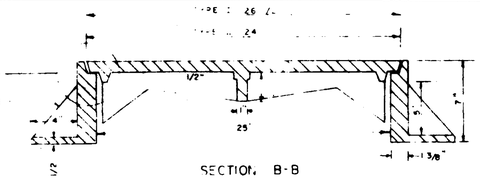


SECTION OF BRICK MANHOLE

TOP PLAN OF COVER

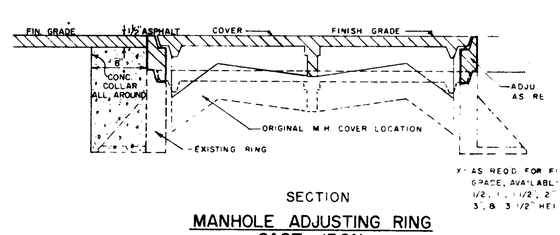
INVERTED PLAN OF COVER





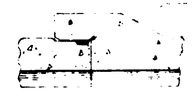
TYPE I RING & COVER - EXPOSED TO TRAFFIC - 420 LBS.
TYPE II RING & COVER - NOT EXPOSED TO TRAFFIC - 330 LBS.

STANDARD MANHOLE CASTING

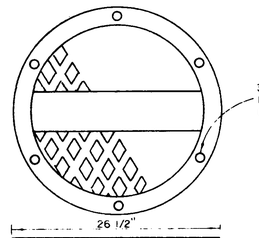


SECTION
MANHOLE ADJUSTING RING
CAST IRON

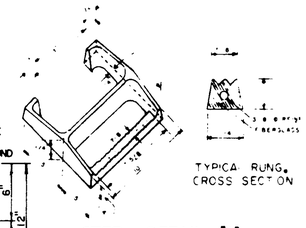
PLAN



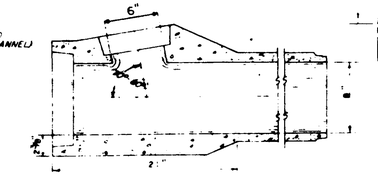
TONGUE & GROOVE PIPE JOINT DETAIL



MANHOLE SEAL ASSEMBLY

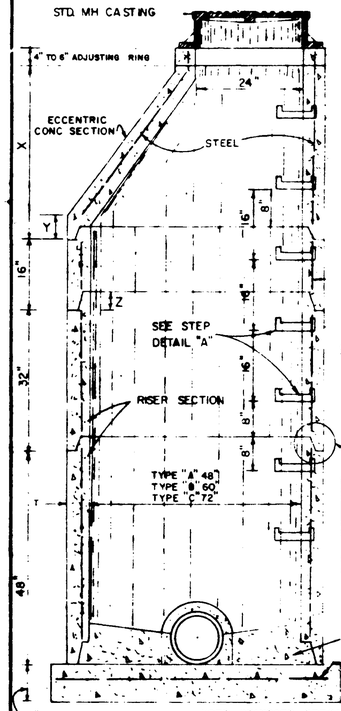


STEP DETAIL "A"
FIBERGLASS DUCTILE STEEL RODS



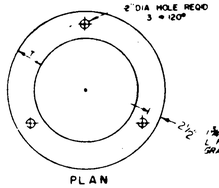
TYPICAL SECTION MODIFIED TEE JOINT

NOTE UNLESS OTHERWISE SPECIFIED, USE
1 TYPE "A" (4' DIA M.H.) FOR 24" DIA & SMALLER SEWERS
2 TYPE "B" (5' DIA M.H.) FOR 27" TO 42" SEWERS
3 TYPE "C" (6' DIA M.H.) FOR 48" TO 60" SEWERS

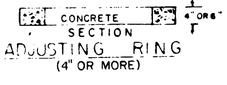


NOTE STANDARD PRECAST CONC M.H. RISER SECTIONS ARE IN 16", 32", AND 48" LENGTHS

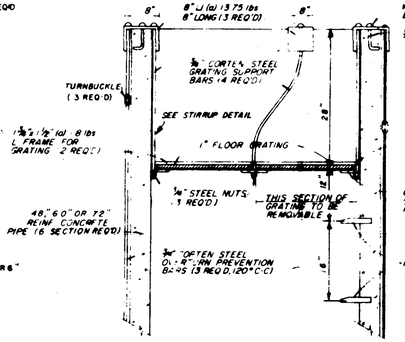
SECTION OF PRECAST CONCRETE MANHOLE



PLAN



SECTION
ADJUSTING RING
(4" OR MORE)

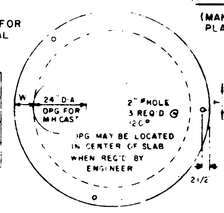


TYPE AG, BG, & CG MANHOLES
(MANHOLE MODIFICATION FOR FLOOD PLAIN AREAS)

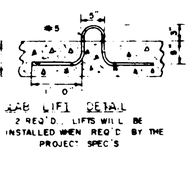
TYPICAL JOINT

SAME AS REQUIRED FOR SEWER MAIN OF EQUAL DIAMETER

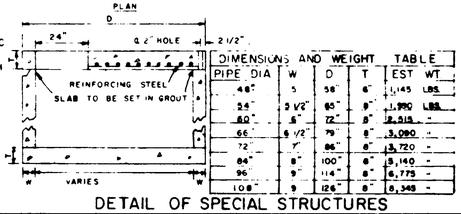
TYPE	X	Y	Z	T
A (48")	38"	5"	3 1/2"	5"
B (60")	36"	9"	5"	6"
C (72")				



PLAN

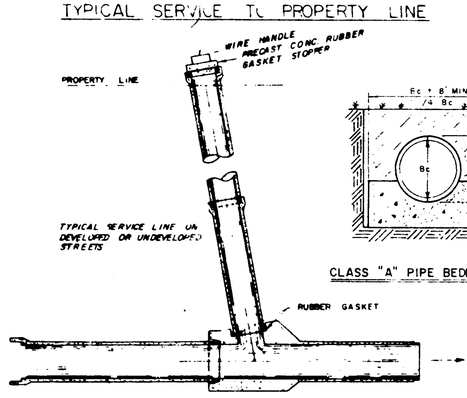


LIFT DETAIL
2 REQ'D. LIFTS WILL BE INSTALLED WHEN REQ'D BY THE PROJECT SPEC'S

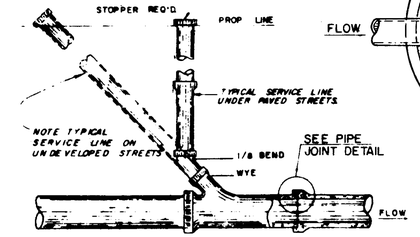


DIMENSIONS AND WEIGHT TABLE				
PIPE DIA	W	D	T	EST WT
48"	5	58"	6"	1,145 LBS
54"	5 1/2"	65"	9"	1,920 LBS
60"	6"	72"	8"	2,515 "
66"	6 1/2"	79"	8"	3,080 "
72"	7"	86"	8"	3,720 "
84"	8"	100"	8"	5,140 "
96"	9"	114"	8"	6,775 "
108"	9	126"	8"	8,348 "

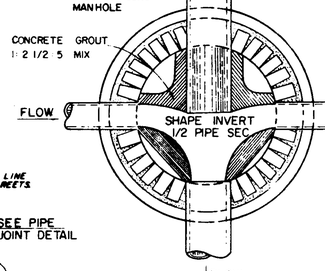
DETAIL OF SPECIAL STRUCTURES



TYPICAL SERVICE TO PROPERTY LINE
WITH MODIFIED TEE JOINT

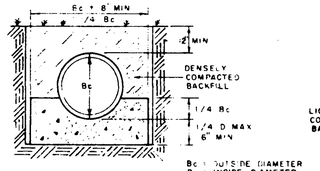


TYPICAL SERVICE TO PROPERTY LINE



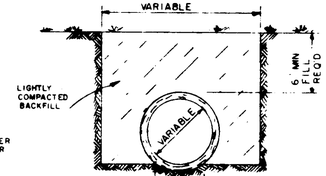
PLAN OF MANHOLE
FLOW CHANNELS

NOTE:
FOR BRICK OR PRECAST CONC MANHOLE

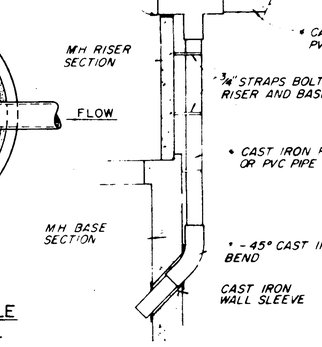


Bc = OUTSIDE DIAMETER
D = INSIDE DIAMETER

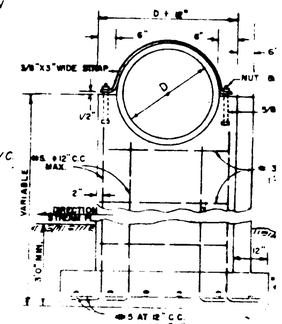
CLASS "A" PIPE BEDDING DETAIL



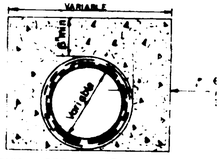
CLASS "C" PIPE BEDDING DETAIL



DETAIL - SEWER DROP
* PIPE DIAMETER AS REQ'D



TYPICAL CONC. PIER DETAIL FOR SEWER DITCH CROSSINGS



TYPICAL DETAIL OF CONCRETE ENCASEMENT

DESIGNED		SCALE AS SHOWN	
DRAWN		DRWG NO	
APPROVED			
DATE			

REV NO	DATE	NATURE OF REVISION	BY	CHKD	APPD

LESTER ENGINEERING COMPANY
CONSULTING ENGINEERS
JACKSON, MISSISSIPPI

CONSTRUCTION DETAILS FOR SEWER APPURTENANCES

DIMENSIONS		
	4' INLET	5' INLET
"L"	55"	67"
Ⓛ	49¾"	61⅜"

CONCRETE JUNCTION BOX									
DIMENSIONS				QUANTITIES					
				MIN. DEPTH		EA. ADDED FT			
DIA. OF PIPE	"T"	"W" IN.	"X" IN.	CONC. CU. YD.	STEEL POUND	CONC. CU. YD.	STEEL POUND	DEDUCT FOR EACH OPENING	BAR LIST NO. 4
12"	2"	25"	20"	0.67	18	0.19	–	0.024	10 @ 2'-9"
15"	2"	28"	23"	0.81	20	0.21	–	0.036	10 @ 3'-0"
18"	2"	31"	26"	0.91	26	0.23	–	0.049	12 @ 3'-3"
21"	2¼"	34.5"	29½"	1.17	28	[illegible]	–	0.066	12 @ 3'-6½"
24"	2½"	38"	32½"	1.38	31	0.27	–	0.085	12 @ 3'-10"
27"	3"	42"	36"	1.64	38	0.30	–	0.111	14 @ 4'-2"
30"	3¼"	45.5"	39½"	1.91	42	0.32	–	0.135	14 @ 4'-5½"
36"	3½"	52"	45½"	2.41	53	0.36	–	0.187	16 @ 5'-0"
42"	4"	59"	52"	3.04	67	0.40	–	0.253	18 @ 5'-7"
48"	4½"	66"	58½"	3.73	82	0.44	–	0.328	20 @ 6'-2"
54"	5½"	74"	65½"	4.60	100	0.49	–	0.427	22 @ 6'-10"
60"	6"	81"	72"	5.45	109	0.54	–	0.524	22 @ 7'-5"

DEDUCTION FOR EACH ADDITIONAL PIPE OPENING	QUANTITIES FOR GRATE INLET						QUANTITIES & DIM. FOR BAR GRATE			
	SIZE PIPE	MIN. DEPTH TO INLET F.L.	MINIMUM DEPTH		EACH ADDED FOOT					
			CONC.*	STEEL	CONC.	STEEL	"Y"	"X"	NO. X-SPANS	WT. LBS.
.036	15"	2.417	0.630	41	0.201	13	2'-3 1/2"	1'-1 3/4"	2	116
.049	18"	2.667	0.708	44	0.210	13	2'-6 1/2"	1'-3 1/4"	2	124
.066	21"	2.937	0.799	48	0.221	14	2'-10"	1'-5"	2	135
.085	24"	3.208	0.894	57	0.231	14	3'-1 1/2"	1'-6 3/4"	2	145
.110	27"	3.500	1.005	61	0.244	14	3'-5 1/2"	1'-1 5/[illegible]	3	168
.135	30"	3.771	1.107	74	0.255	16	3'-9"	1'-3"	3	178
.187	36"	4.292	1.310	86	0.275	17	4'-3 1/2"	1'-5 5/32"	3	197
.253	42"	4.833	1.539	97	0.296	18	4'-10 1/2"	1'-2 5/8"	4	229
.328	48"	5.375	1.783	112	0.318	18	5'-5 1/2"	1'-4 3/8"	4	249
.427	54"	5.958	2.072	141	0.343	21	6'-1 1/2"	1'-6 3/8"	4	272
.524	60"	6.500	2.348	150	0.364	21	6'-8 1/2"	1'-4 3/32"	5	305

* DEDUCTION HAS BEEN MADE FOR ONE PIPE OPENING

DESIGNED:			SCALE: NONE		
DRAWN: T. B.			DRWG. NO: 89 - 284		
APPROVED:					
DATE:					
REV. NO.	DATE	NATURE OF REVISION	BY	CHKD.	APPD.

LESTER ENGINEERING COMPANY
CONSULTING ENGINEERS
JACKSON, MISSISSIPPI

STANDARD STORM SEWER APPURTENANCES

SHEET NO.

JOB NO.
SHT. NO.