WAGGONER ENGINEERING, INC.
ENGINEERS, PLANNERS, SCIENTISTS
825 N. PRESIDENT ST.
JACKSON, MS 39202
601-355-8526
FAX 601-352-3945

WEI #98-074

City of Ridgeland, Mississippi

WATER WELL ON OLD CANTON ROAD / MIDWAY AVENUE

1999 WATER WELL IMPROVEMENTS

CITY OFFICIALS

MAYOR
GENE F. McGEE

MAYOR PRO TEMPORE
GERALD STEEN

BOARD OF ALDERMEN
ANN BRAME HURD, WARD 1
LISA DeCELL WALTERS, WARD 2
CAROLE A. DAVIS, WARD 3
LARRY ROBERTS, WARD 4
LINDA DAVIS TRUNZLER, WARD 6
GERALD STEEN, AT-LARGE

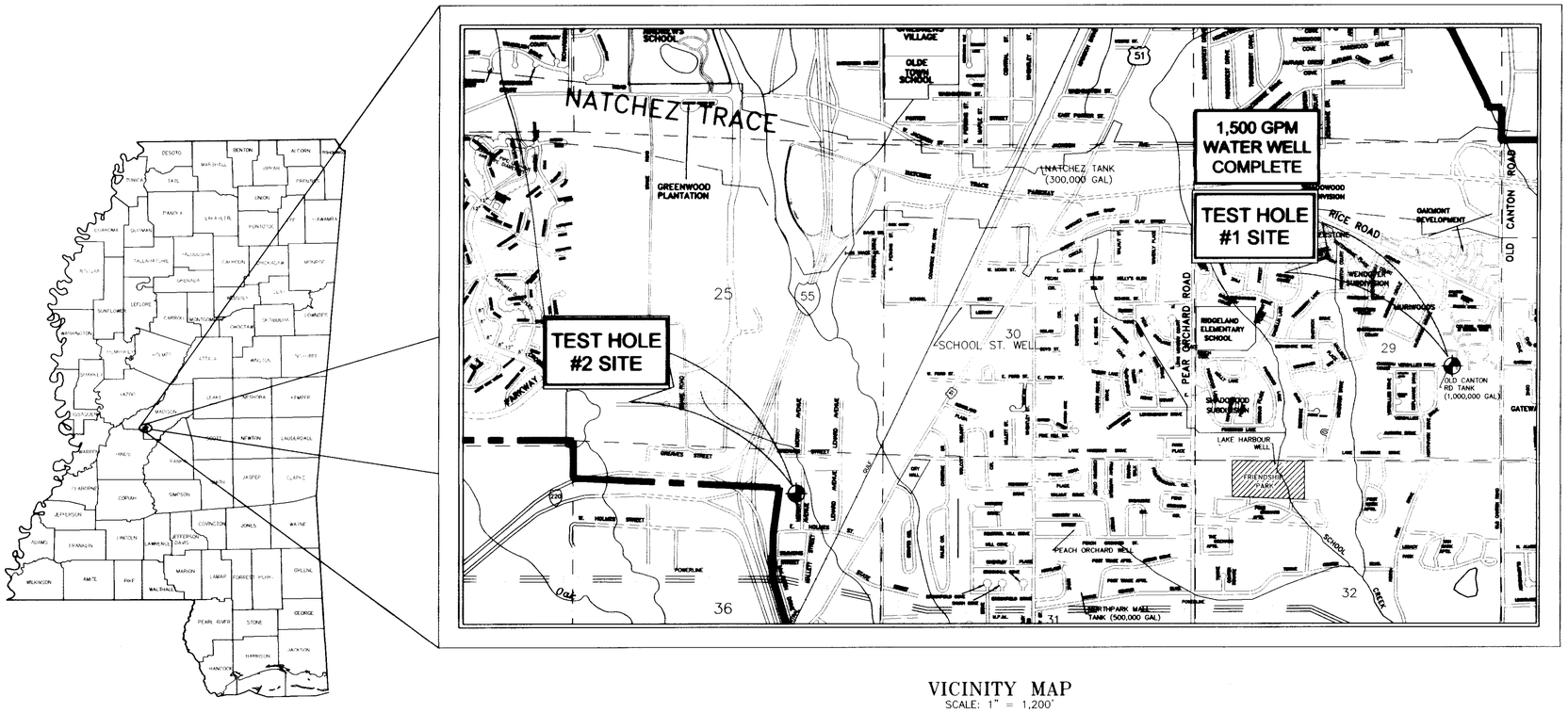
CITY CLERK
MICHAEL R. McPHEARSON

CITY ATTORNEY
JERRY MILLS

DIRECTOR OF PUBLIC WORKS
SAM C. VINSON, P.E.

ASST. DIRECTOR OF PUBLIC WORKS
SID HAWTHORNE

PUBLIC WORKS OPERATOR
DANNY WHITEHEAD



VICINITY MAP
SCALE: 1" = 1,200'

APRIL, 1999

CONTRACTOR
LAYNE-CENTRAL COMPANY
4560 HIGHWAY 80 WEST
JACKSON, MS 39209
C.O.R. # 181

RECORD DRAWINGS
DECEMBER 5, 2000

PWP-01525

SEAL

GENERAL CONSTRUCTION NOTES

1. Fertilize and seed all areas where the existing vegetation was removed or disturbed during construction.

2. Unsuitable bedding or backfill material which may be encountered shall be excavated to the limits required and backfilled with acceptable material to the lines and grades shown on the plans.

3. All buried exterior valves shall be installed complete with valve boxes.

4. All traffic control shall be in accordance with the most recently published "MANUAL ON UNIFORM TRAFFIC" CONTROL DEVICES".

5. The existing utility locations shown on plans are approximate only. The Contractor shall coordinate the location (horizontal and vertical) of any existing utilities (power, telephone, gas, water, sewer, etc.) with the appropriate utility company before construction begins.

6. Any utility line or service line encountered during construction, whether shown on plans or not, shall be protected by the Contractor and any repairs necessary due to damage to same by the Contractor shall be at no additional cost to the Owner.

7. Contractor shall follow Engineer's Specifications and Plans and the City of Ridgeland's subdivision requlations.

INDEX TO DRAWINGS

SHEET NO.	TITLE
1 OF 9	COVER SHEET
2 OF 9	INDEX AND GENERAL NOTES
3 OF 9	WELL AND TEST HOLE #1 OLD CANTON ROAD
4 OF 9	TEST HOLE #2 MIDWAY AVENUE
5 OF 9	TYPICAL WELL DETAILS
6 OF 9	WELL BUILDING PLAN, ELEVATIONS & ROOF PLAN
7 OF 9	WATER STANDARD DETAILS
8 OF 9	CHEMICAL FEED DETAILS
9 OF 9	ELECTRICAL CONTROLS

RECORD DRAWINGS
DECEMBER 5, 2000

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FAX 601-352-3945

WATER WELL ON OLD CANTON ROAD / MIDWAY AVENUE
RIDGELAND, MISSISSIPPI

DRAWING REVISIONS

NO.	REMARKS	DATE

SEAL:

DRAWN BY:	C.S.,L.H.	SCALE:	N/A
DESIGNED BY:	H.A.,L.H.	DATE:	12/01/98
CHECKED BY:	E.C.,L.H.	PROJECT:	98074
PATH NAME:	P:\98074\DWG\As-Built-INDEX.DWG		

DRAWING TITLE:
INDEX OF DRAWINGS AND GENERAL NOTES

SHEET NUMBER:
2 OF 9

WAGGONER ENGINEERING, INC.
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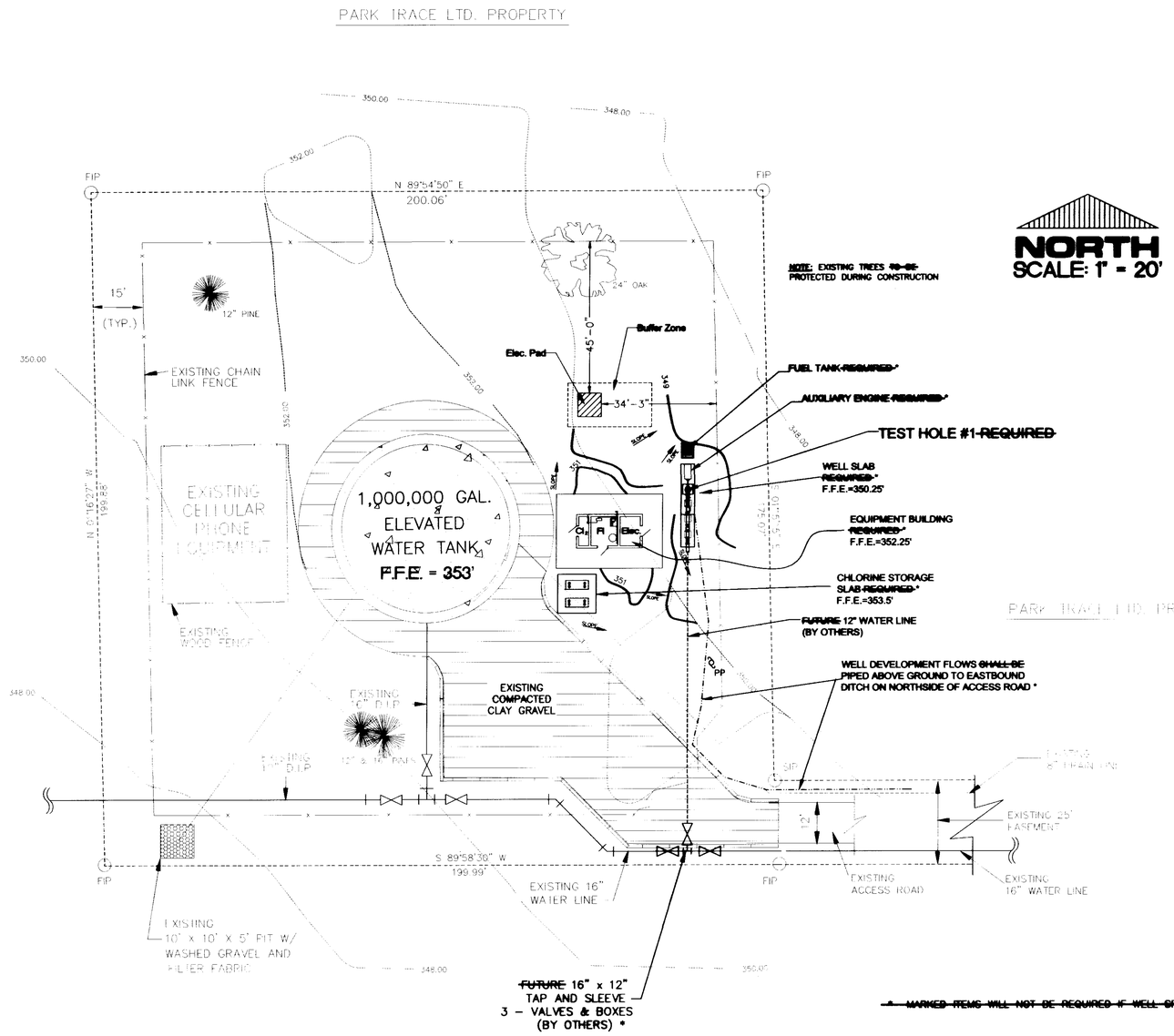
WATER WELL ON OLD CANTON ROAD / MIDWAY AVENUE
RIDGELAND, MISSISSIPPI



RECORD DRAWINGS
DECEMBER 5, 2000

DRAWING REVISIONS		
NO.	REMARKS	DATE
1	SEE ADDENDUM 1	4/8/99

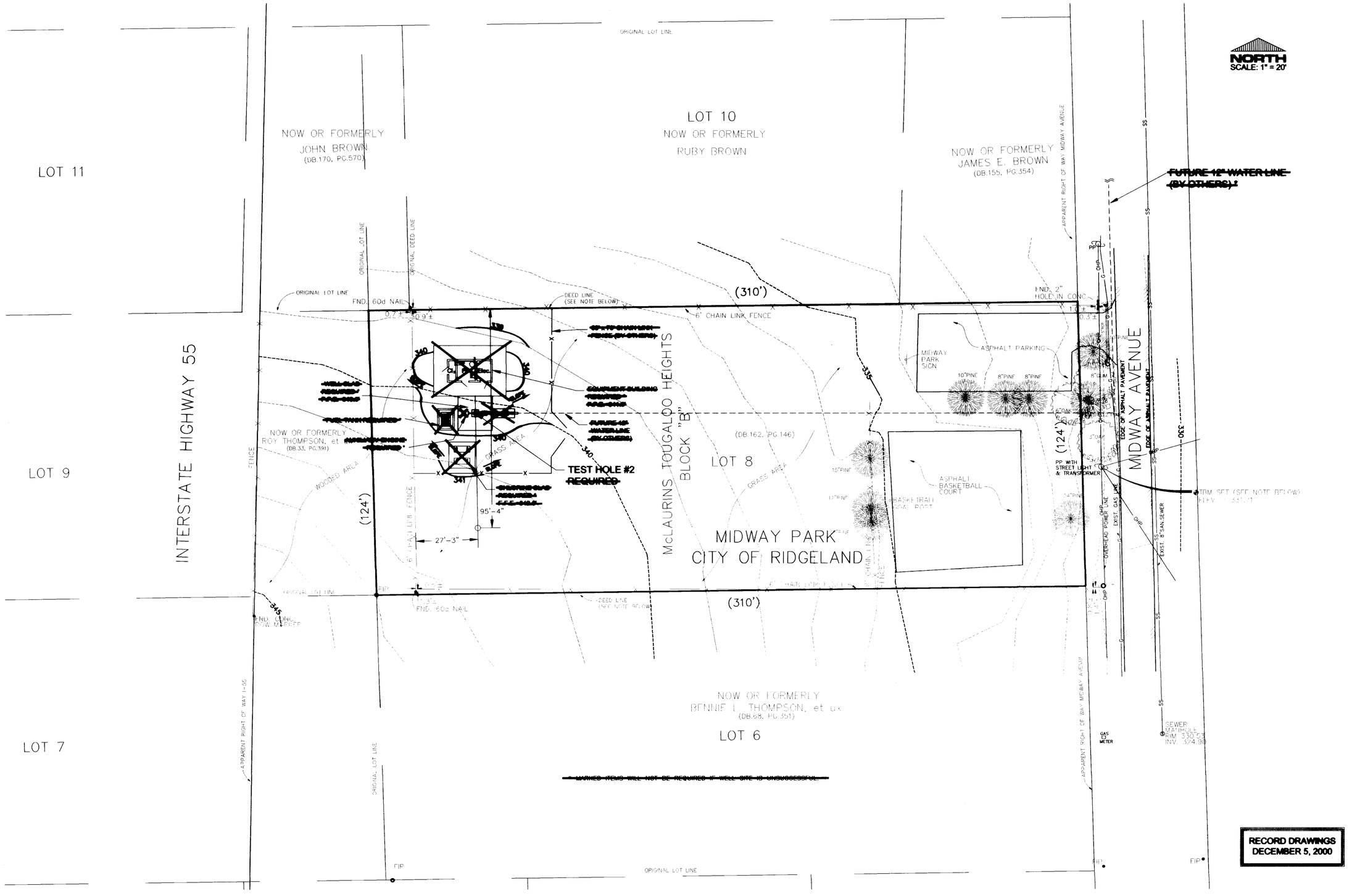
SEAL:

DRAWN BY:	C.S.,L.H.,B.G.	SCALE:	1" = 20'
DESIGNED BY:		DATE:	1/7/99
CHECKED BY:	H.A.	PROJECT:	98074
PATH NAME:	[illegible]		

DRAWING TITLE:

OLD CANTON ROAD WELL AND TEST HOLE NO. 1

SHEET NUMBER: 3 OF 9



RECORD DRAWINGS
DECEMBER 5, 2000

Situated in Lot 8, Block "B", McLaurins Tougaloo Heights, in the SE 1/4 of Section 24, T7N, R1E, City of Ridgeland, Madison County, Mississippi

Existing Gas Line location by Mississippi One Call.

Overhead Utilities:
Electric, Telephone and Cable T.V. as per Mississippi One Call.

This Topographic Survey does not represent a boundary survey. The "Deed" line as shown hereon was established by the recorded plat of McLaurins Tougaloo Heights, as recorded in Plat Book 27, Page 7.

Vertical Datum shown hereon is based upon F.E.M.A. reference mark R.M. 269.
Elevation = 334.26 (NGVD 1929)

TBM = Set 60d nail in sewer pole located on West side of Midway Avenue at approximate mid point on approximate mid point of the East side of subject property.

This property is situated in Zones A4, X (inside 500 year flood) and X (outside 500 year flood), according to Flood Insurance Rate Map Community Panel Number 280696 0320 D Dated April 16, 1994

Said parcel may be subject to recorded, unrecorded or this indexed instruments or facts which would be revealed by a competent title examination of said parcel.

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WATER WELL ON OLD CANTON ROAD / MIDWAY AVENUE
RIDGELAND, MISSISSIPPI

DRAWING REVISIONS

NO.	REMARKS	DATE
1	SEE ADDENDUM 1	4/8/99

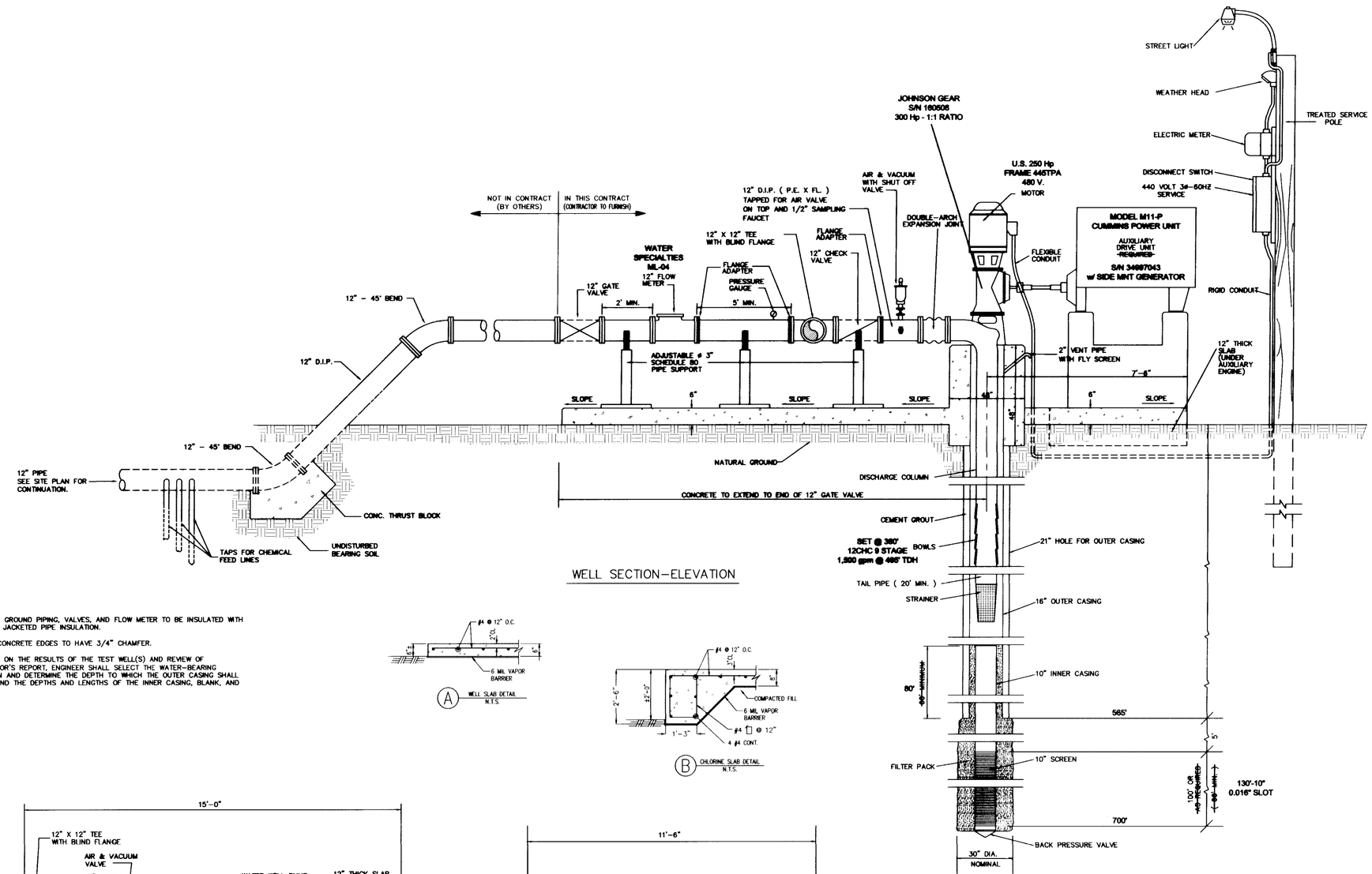
SEAL: JOHN THOMAS ALLEN, REGISTERED PROFESSIONAL ENGINEER, STATE OF MISSISSIPPI

DRAWN BY:	B.G., B.G.	SCALE:	1" = 20'
DESIGNED BY:	H.A., B.G.	DATE:	12/10/98
CHECKED BY:	J.W.M., H.A.	PROJECT:	98074

PATH NAME: [illegible]

DRAWING TITLE:
SITE PLAN FOR MIDWAY AVENUE TEST HOLE NO. 2

SHEET NUMBER: 4 OF 9



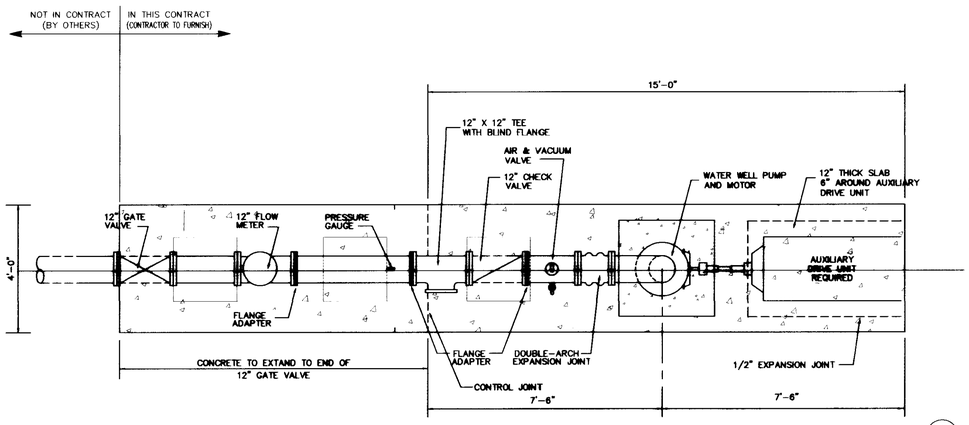
WELL SECTION-ELEVATION

NOTES:

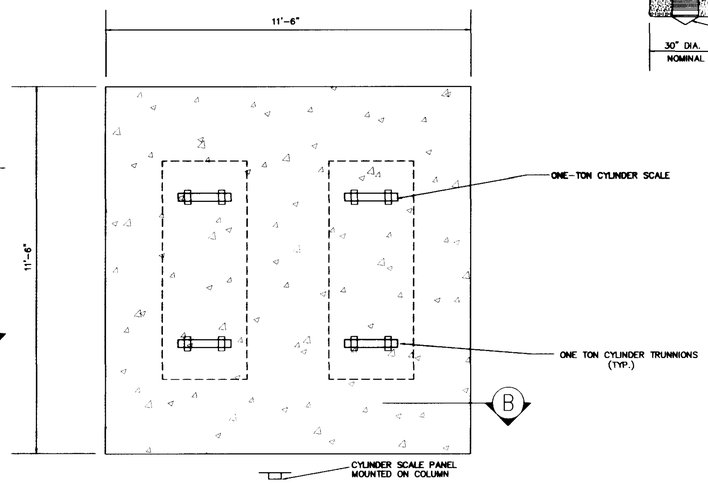
1. ALL ABOVE GROUND PIPING, VALVES, AND FLOW METER TO BE INSULATED WITH ALUMINUM JACKETED PIPE INSULATION.
2. EXPOSED CONCRETE EDGES TO HAVE 3/4" CHAMFER.
3. DEPENDING ON THE RESULTS OF THE TEST WELL(S) AND REVIEW OF CONTRACTOR'S REPORT, ENGINEER SHALL SELECT THE WATER-BEARING FORMATION AND DETERMINE THE DEPTH TO WHICH THE OUTER CASING SHALL BE SET, AND THE DEPTHS AND LENGTHS OF THE INNER CASING, BLANK, AND SCREEN.

A WELL SLAB DETAIL N.T.S.

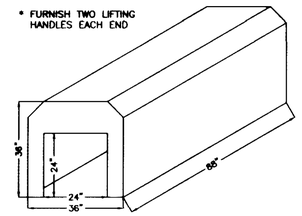
B CHLORINE SLAB DETAIL N.T.S.



WELL PLAN



CHLORINE STROAGE SLAB



FIBERGLASS COVER FOR TON CONTAINER
N.T.S.

RECORD DRAWINGS DECEMBER 5, 2000

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RIDGELAND, MISSISSIPPI

DRAWING REVISIONS

NO.	REMARKS	DATE
1	SEE ADDENDUM 1	4/8/99

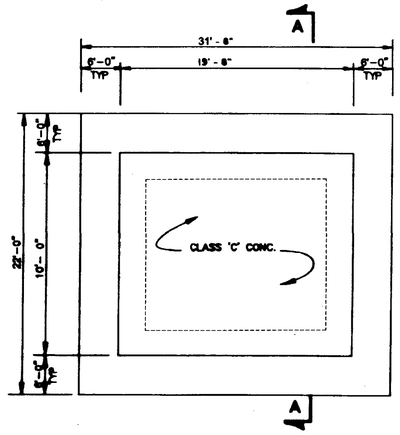
SEAL:

DRAWN BY:	C.S., B.G.	SCALE:	N.T.S.
DESIGNED BY:	H.A.	DATE:	12/2/98
CHECKED BY:		PROJECT:	98074
PATH NAME:	[illegible]		

DRAWING TITLE:

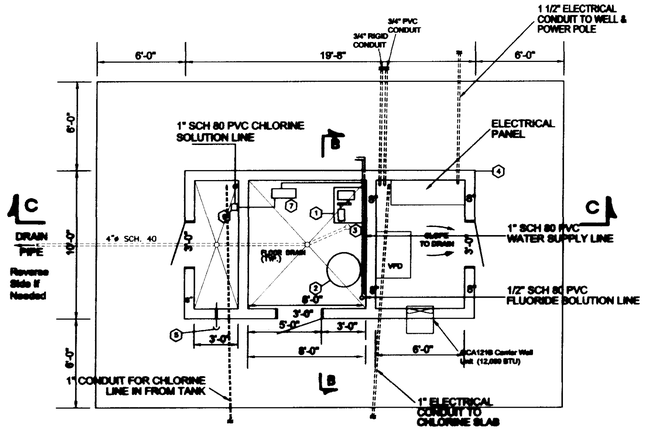
WELL DETAIL SHEET

SHEET NUMBER: 5 OF 9

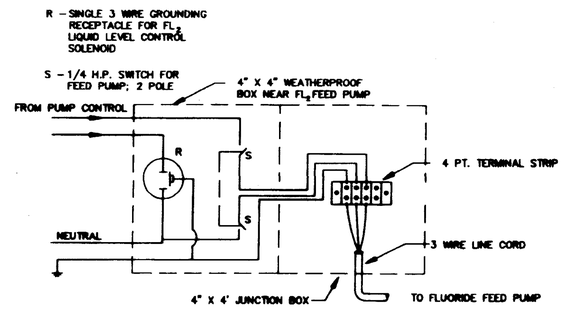


FOUNDATION PLAN
N.T.S.

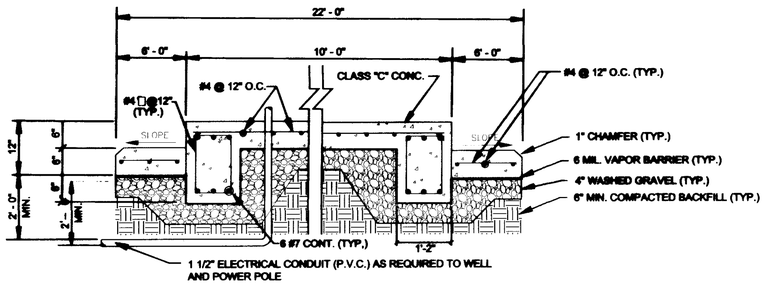
1. NEW SOLUTION PUMP AND TABLE
2. NEW SOLUTION TANK
3. CIRCUIT FOR FLUORIDATION SYSTEM
4. NEW TYPE "B" BUILDING
5. CHLORINE VENT
6. CHLORINE INJECTOR
7. CHLORINE BOOSTER PUMP



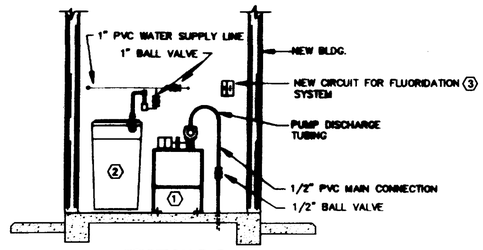
FLOOR PLAN - CHEMICAL EQUIPMENT
SCALE: 1" = 5'



FLUORIDE EQUIPMENT ELECTRICAL DETAIL
N.T.S.



SECTION A-A
N.T.S.



SECTION B-B
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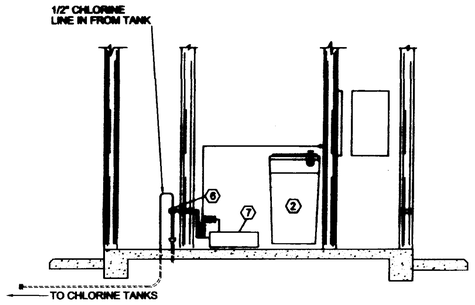
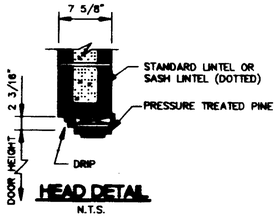
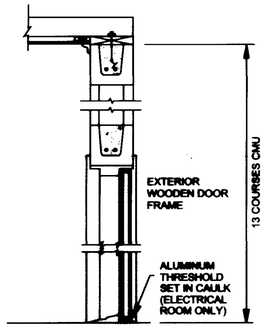


SECTION C-C
N.T.S.

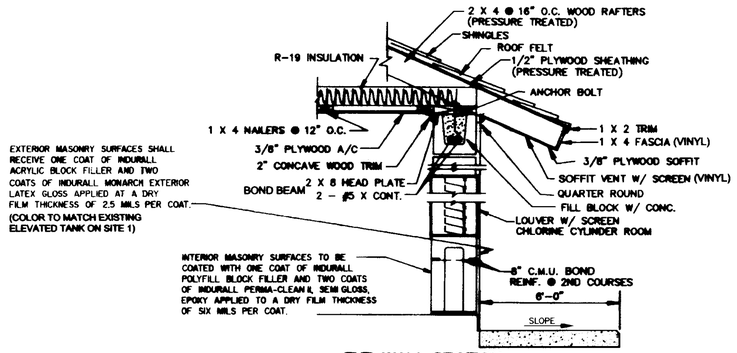
NOTE:
1. VINYL FASCIA, SOFFIT AND GABLES REQUIRED.
2. PAINTED PLYWOOD CEILING INSIDE REQUIRED.
3. ALL CONCRETE SURFACES TO RECEIVE BROOM FINISH.



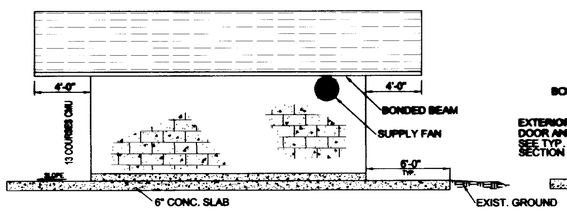
HEAD DETAIL
N.T.S.



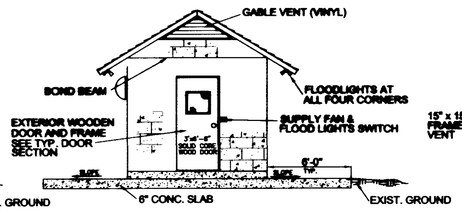
TYP. DOOR SECTION
N.T.S.



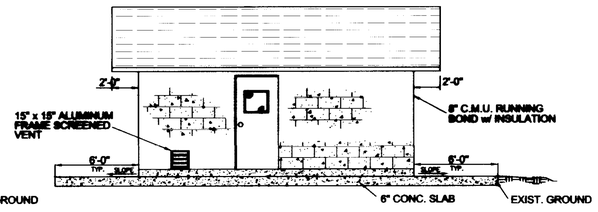
TYP. WALL SECTION
N.T.S.



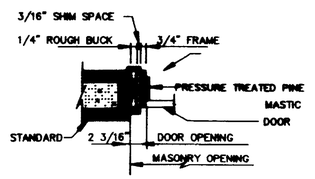
REAR ELEVATION
SCALE: 1" = 5'



LEFT SIDE ELEVATION - AS SHOWN
RIGHT SIDE ELEVATION - OPPOSITE HAND
SCALE: 1" = 5'



FRONT ELEVATION
SCALE: 1" = 5'



JAMB DETAIL
N.T.S.

RECORD DRAWINGS
DECEMBER 5, 2000

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WATER WELL ON OLD CANTON ROAD / MIDWAY AVENUE
RIDGELAND, MISSISSIPPI

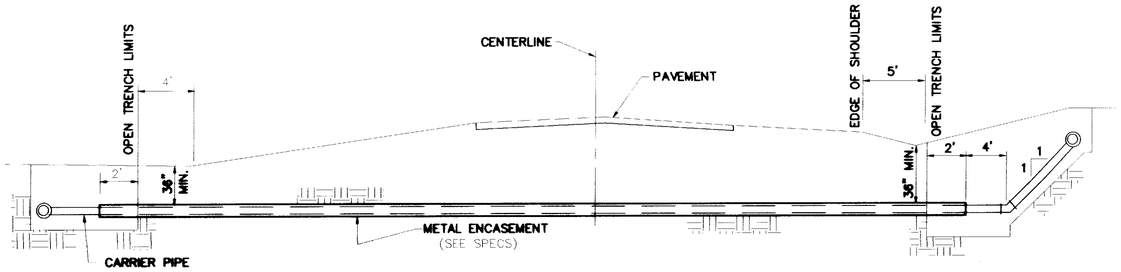
DRAWING REVISIONS

NO.	REMARKS	DATE
1	SEE ADDENDUM 1	4/8/99

DRAWN BY:	H.J.,B.G.	SCALE:	N.T.S.
DESIGNED BY:		DATE:	1/7/99
CHECKED BY:	H.A.	PROJECT:	98074

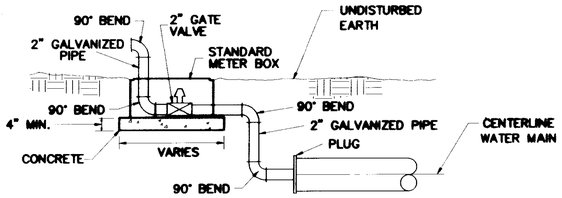
DRAWING TITLE:
WELL BUILDING PLAN & DETAILS

SHEET NUMBER:
6 OF 9

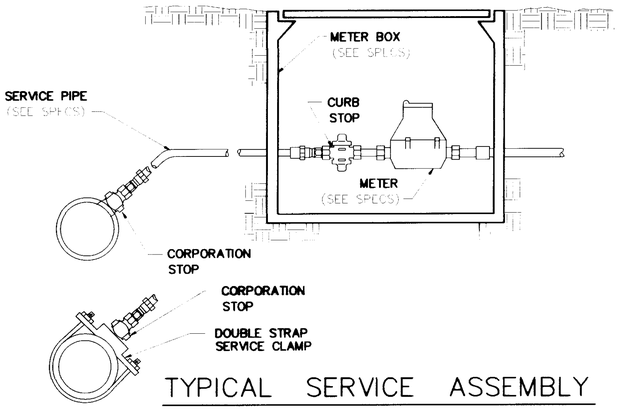


TYPICAL CASED CROSSING

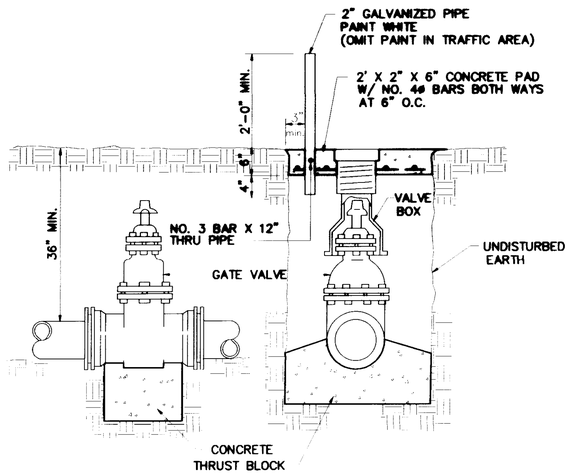
NOTE: COMPENSATION FOR CONCRETE THRUST BLOCKS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR VALVES, FIRE HYDRANTS AND FITTINGS.



TYPICAL 2" BLOW-OFF DETAIL

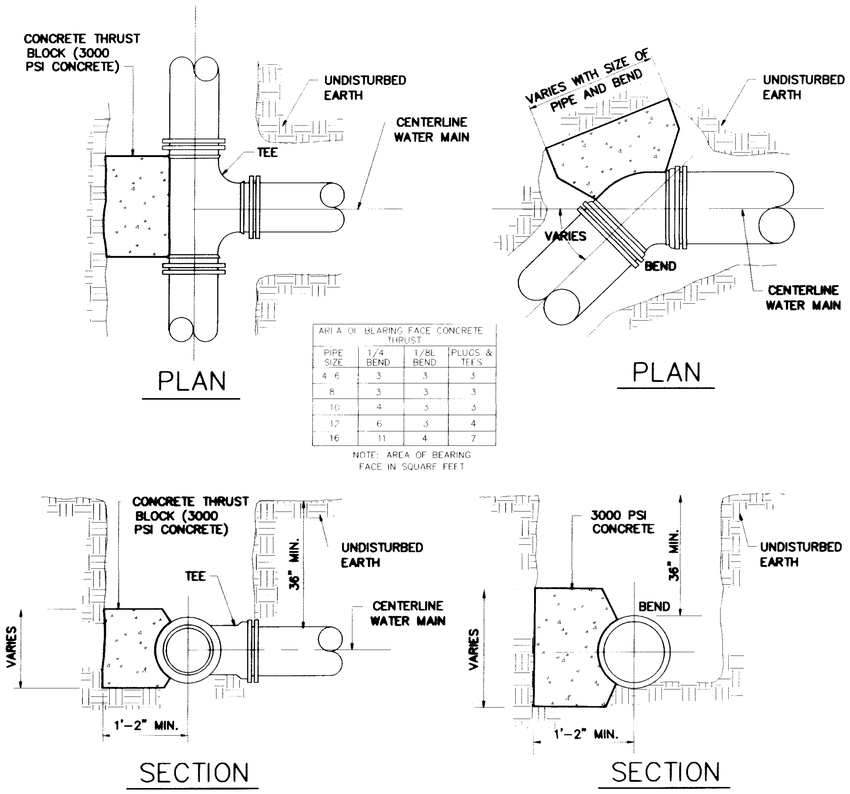


TYPICAL SERVICE ASSEMBLY



ELEVATION SECTION

TYPICAL VALVE & BOX



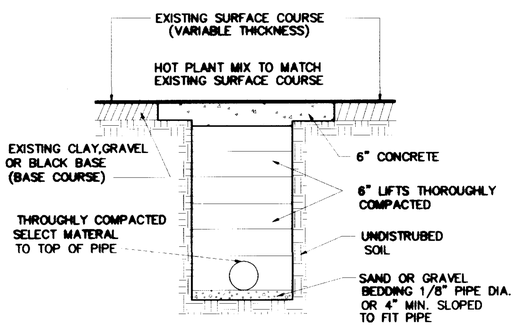
PLAN PLAN

AREA OF BEARING FACE CONCRETE THRUST			
PIPE SIZE	1/4 BEND	1/8L BEND	PLUGS & TEES
4 6	3	3	3
8	3	3	3
10	4	3	3
12	6	3	4
16	11	4	7

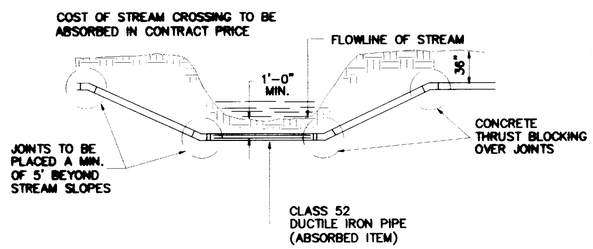
NOTE: AREA OF BEARING FACE IN SQUARE FEET

SECTION SECTION

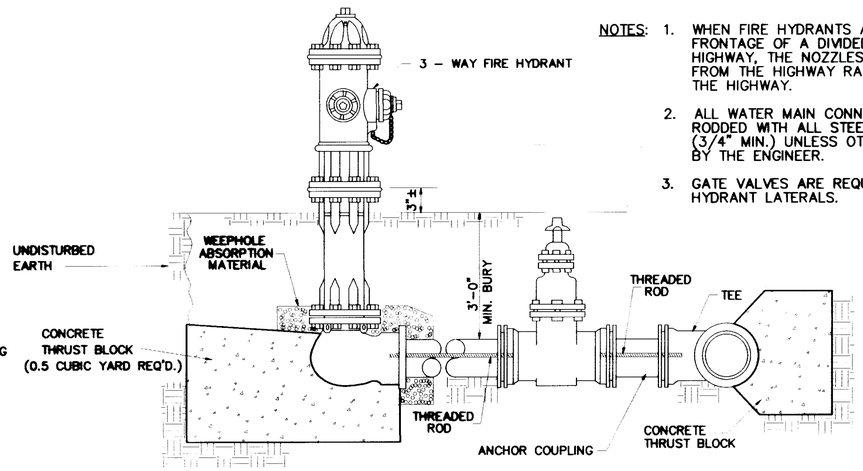
BLOCKING DETAILS FOR TEES & BENDS



STREET REPAIR OF OPEN CUT



TYPICAL STREAM CROSSING



TYPICAL FIRE HYDRANT

NOTES:

1. WHEN FIRE HYDRANTS ARE PLACED ON THE FRONTAGE OF A DIVIDED OR MULTI-LANE HIGHWAY, THE NOZZLES SHALL FACE AWAY FROM THE HIGHWAY RATHER THAN TOWARD THE HIGHWAY.
2. ALL WATER MAIN CONNECTIONS SHALL BE RODDED WITH ALL STEEL THREADED RODS (3/4" MIN.) UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER.
3. GATE VALVES ARE REQUIRED ON ALL FIRE HYDRANT LATERALS.

RECORD DRAWINGS
DECEMBER 5, 2000

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WATER WELL ON OLD CANTON ROAD / MIDWAY AVENUE
RIDGELAND, MISSISSIPPI

DRAWING REVISIONS		
NO.	REMARKS	DATE

SEAL:

DRAWN BY:	C.S.	SCALE:	AS SHOWN
DESIGNED BY:	H.A.	DATE:	12/2/98
CHECKED BY:	E.G.	PROJECT:	98074
PATH NAME:			

DRAWING TITLE:

WATER STANDARD DETAILS

SHEET NUMBER:

7 OF 9

WAGGONER ENGINEERING, INC.
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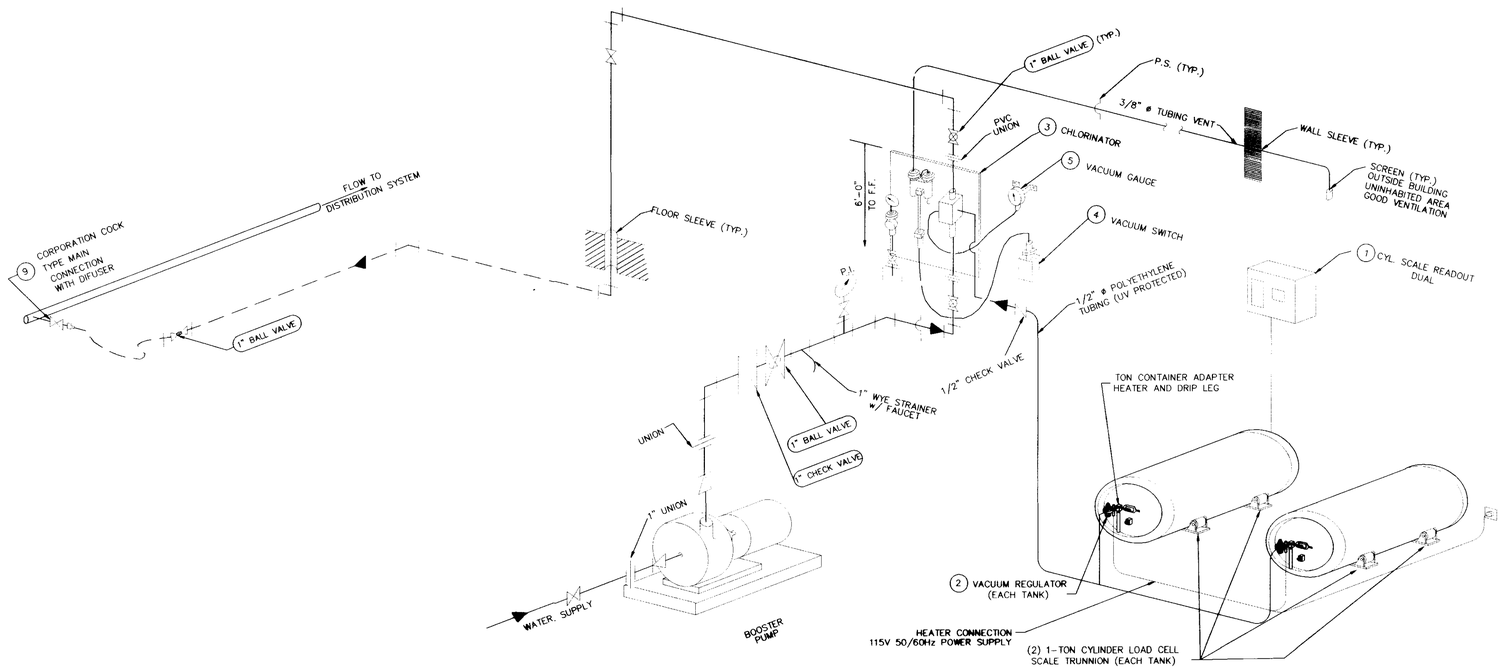
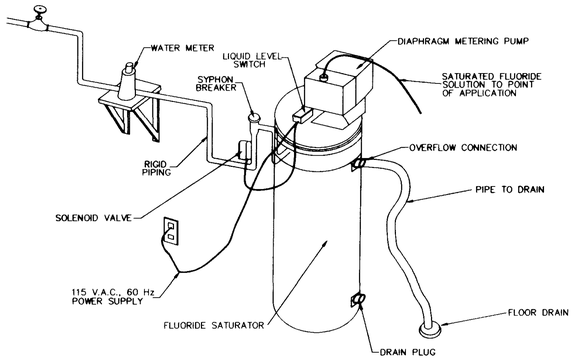
WATER WELL ON OLD CANTON ROAD / MIDWAY AVENUE
RIDGELAND, MISSISSIPPI

CHLORINE EQUIPMENT LIST:

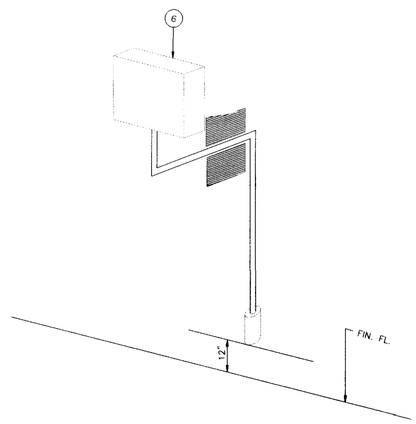
1. CYLINDER SCALE
2. VACUUM REGULATOR
3. CHLORINATOR
4. VACUUM SWITCH
5. VACUUM GAUGE
6. CHLORINE DETECTOR
9. CORPORATION COCK TYPE MAIN CONNECTION WITH DIFFUSER



TYPICAL
CHLORINE SYSTEM SCHEMATIC



TYPICAL
FLUORIDATION SYSTEM SCHEMATIC



TYPICAL
CHLORINE DETECTOR SCHEMATIC

RECORD DRAWINGS
DECEMBER 5, 2000

DRAWING REVISIONS

NO.	REMARKS	DATE
1	SEE ADDENDUM 1	4/8/99

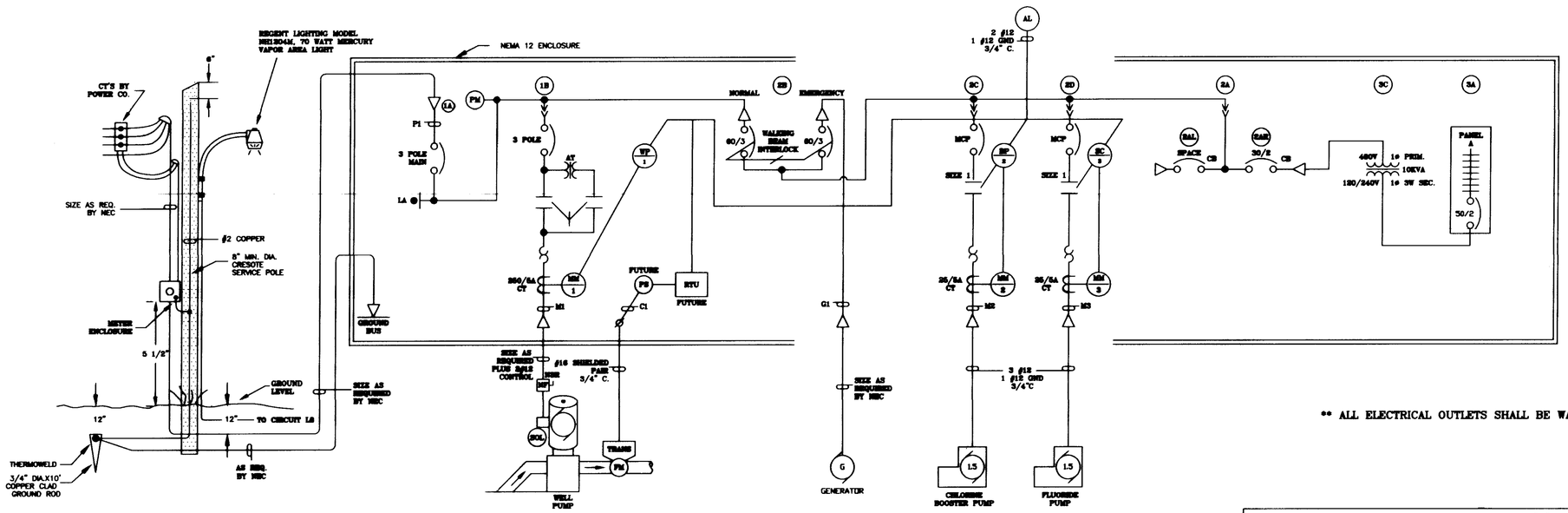
SEAL: WALTER THOMAS HARRIS, REGISTERED PROFESSIONAL ENGINEER, 11076, STATE OF MISSISSIPPI

DRAWN BY:	H.J.,B.G.	SCALE:	N.T.S.
DESIGNED BY:		DATE:	1/18/99
CHECKED BY:	H.A.	PROJECT:	98074
PATH NAME:	[illegible]		

DRAWING TITLE:
CHEMICAL FEED DETAILS

SHEET NUMBER: 8 OF 9

MOTOR CONTROL CENTER
ONE LINE POWER DIAGRAM
PROCESS AND INSTRUMENTATION DIAGRAM



** ALL ELECTRICAL OUTLETS SHALL BE WATERPROOF **

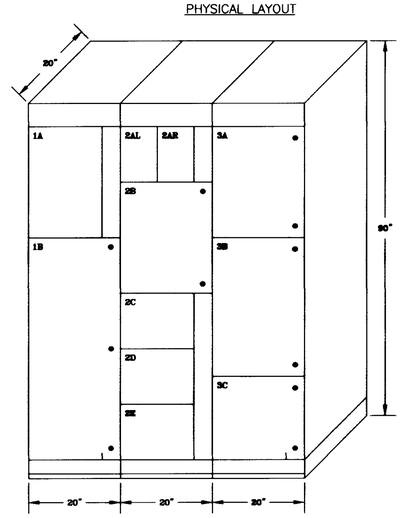
PANEL "A" SCHEDULE

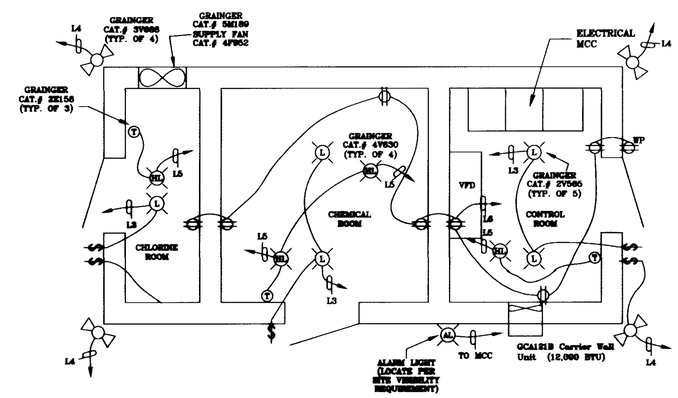
CIRCUIT NUMBER	WIRE SIZE	BREAKER SIZE	DESCRIPTION OF LOAD	LOAD	AMPS. PER PHASE A	AMPS. PER PHASE B	LOAD	DESCRIPTION OF LOAD	BREAKER SIZE	WIRE SIZE	CIRCUIT NUMBER
1		15A	CONTROL POWER	10	15		5	BLDG. EXH. FAN	15A	#12	2
3	#12	15A	BUILDING LIGHTS	7		12	5	OUTSIDE LIGHTING	15A	#12	4
5	#12	15A	BLDG. HEAT LAMPS	5	20		15	BLDG. RECEPTACLES	15A	#12	6
7		15A	SPARE	15		18	3	AREA LIGHT	15A	#12	8
9		15A	SPARE	15	15			SPACE			10
11		15A	SPARE	15		15		SPACE			12
PANEL A			TOTAL		50	45		SERVICE CHARACTERISTICS:		50/2 MB 120/240 VOLT 1ø, 3W	
			GRAND CONNECTED TOTAL					PROVIDE GROUND BUS			

LEGEND

BP/2	CHLORINE BOOSTER PUMP CONTROLLER –	SEE COMPONENT SPECIFICATIONS
SC/3	FLUORIDE PUMP CONTROLLER –	SEE COMPONENT SPECIFICATIONS
CT	CURRENT TRANSFORMER–	SEE COMPONENT SPECIFICATIONS
AL	COMMON ALARM LIGHT –	SEE COMPONENT SPECIFICATIONS
MM	MOTOR MONITOR –	SEE COMPONENT SPECIFICATIONS
PS	POWER SUPPLY –	SEE COMPONENT SPECIFICATIONS
FM	FLOWMETER –	SEE COMPONENT SPECIFICATIONS
WP/1	WELL PUMP CONTROLLER –	SEE COMPONENT SPECIFICATIONS MAGNETEK GPD 505V-B302 480 V. VARIABLE FREQUENCY DRIVE w/ BYPASS
PM	PHASE MONITOR –	SEE COMPONENT SPECIFICATIONS
LA	LIGHTNING ARRESTOR –	SEE COMPONENT SPECIFICATIONS

MOTOR CONTROL CENTER
PHYSICAL LAYOUT





RECORD DRAWINGS
DECEMBER 5, 2000

WAGGONER ENGINEERING, INC.
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JACKSON, MS 39202
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WATER WELL ON OLD CANTON ROAD / MIDWAY AVENUE
RIDGELAND, MISSISSIPPI

DRAWING REVISIONS

NO.	REMARKS	DATE
1	SEE ADDENDUM 1	4/8/99

SEAL:

DRAWN BY:	C.S.I.	SCALE:	N/A
DESIGNED BY:	C.S.I., H.A.	DATE:	03/08/99
CHECKED BY:	H.A.	PROJECT:	98074
PATH NAME:	[illegible]		

DRAWING TITLE:

ELECTRICAL CONTROLS

SHEET NUMBER: 9 OF 9