

CITY OF RIDGELAND

MADISON COUNTY, MISSISSIPPI

RICHARDSON ROAD WATER SYSTEM IMPROVEMENTS

N.S. ACCOUNT NO. 3-1914-01

MAYOR

GENE F. McGEE

MAYOR PRO TEM

HARVEY CARR, JR.

CITY ATTORNEY

JERRY MILLS

BOARD OF ALDERMEN

BRIAN BARCELLONA
AL BIBLE
HARVEY CARR, JR.
LINDA DAVIS
DARYL SMITH

PUBLIC WORKS DIRECTOR

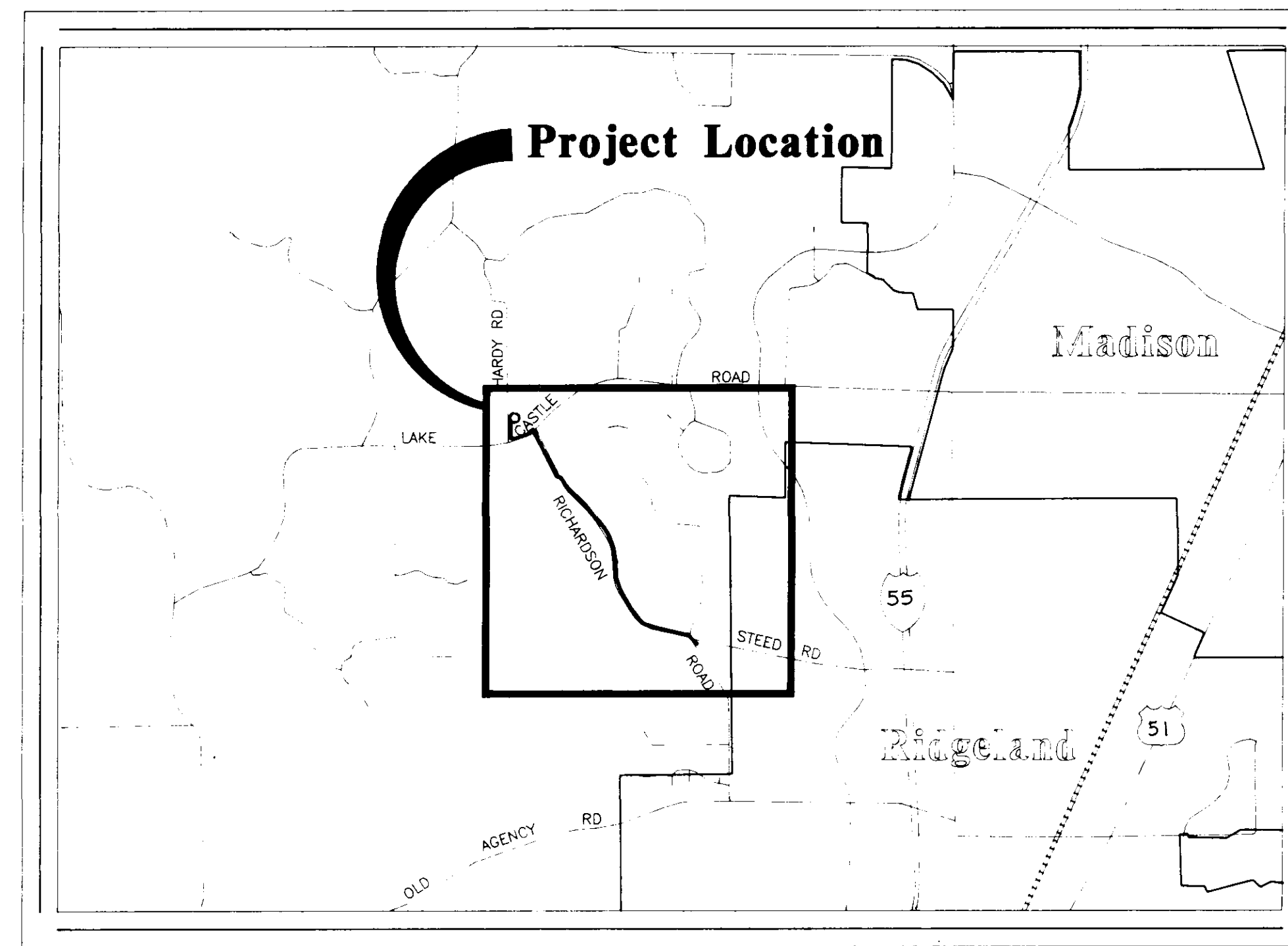
SAM VINSON, P.E.

ASSISTANT PUBLIC WORKS DIRECTOR

SID HAWTHORNE

CITY CLERK

MICHAEL McPHEARSON

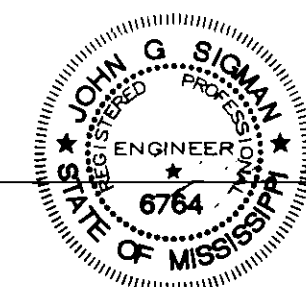


VICINITY MAP

SEPTEMBER 1992

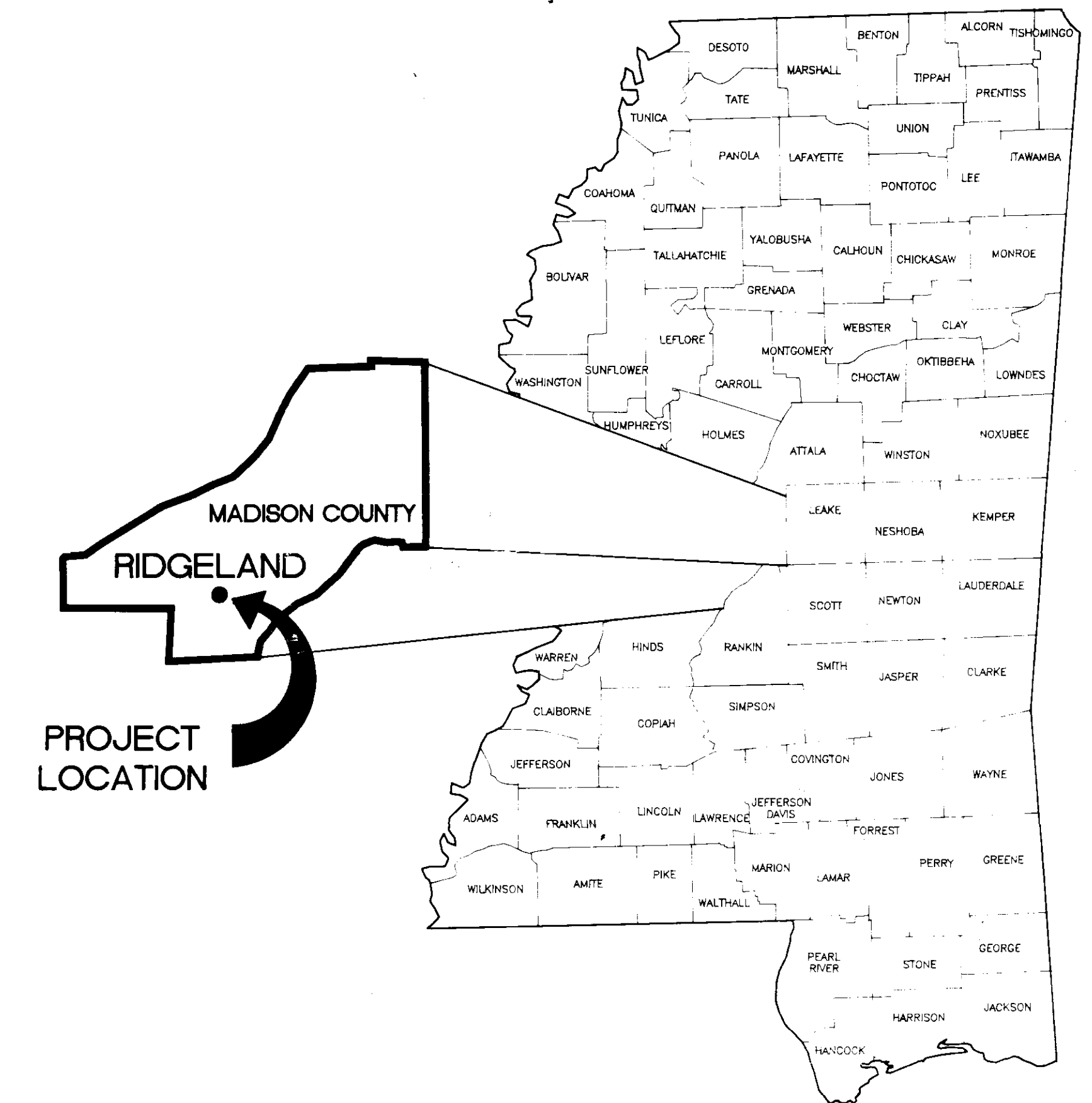
PREPARED BY :

NEEL-SCHAFFER, INC.
ENGINEERS * PLANNERS
Jackson, Mississippi

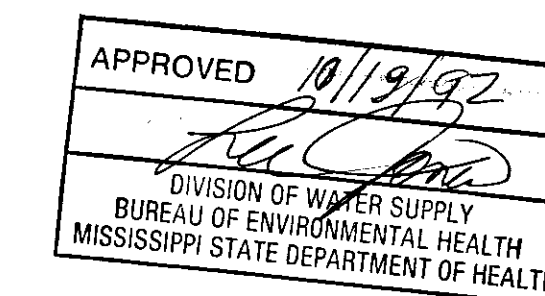


DATE: *10/19/92*

JOHN G. SIGMAN, P.E.
MISSISSIPPI LICENSE NO. 6764



LOCATION MAP



THE CITY OF








RIDGELAND

PWP-01817

INDEX TO DRAWINGS

1. COVER SHEET
2. INDEX TO DRAWINGS, LEGEND, GENERAL NOTES AND ABBREVIATIONS
3. 6" AND 16" WATER LINES
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7. 16" WATER LINE
8. 8" WATER LINE
9. DETAILS – BOOSTER PUMPING STATION
10. MISCELLANEOUS DETAILS
11. TRAFFIC CONTROL PLAN

LEGEND

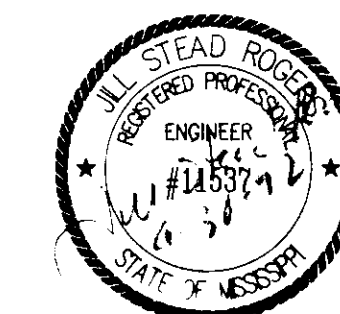
----- x -----	EXISTING FENCE
-----	PROPOSED WATER LINE
-----	CENTER LINE STREET
-----	PERMANENT EASEMENT
-----	TEMPORARY EASEMENT
-----	RIGHT OF WAY
----- GAS -----	EXISTING GAS LINE
----- TEL -----	EXISTING TELEPHONE
----- WL -----	EXISTING WATER LINE
-----	EXISTING CONTOUR
	PROPOSED FIRE HYDRANT
	EXISTING FIRE HYDRANT
o	IRON PIN
	UTILITY POLE
•	GUY
WV	GATE VALVE
	ROAD SIGN
	WATER METER
	TELEPHONE PEDESTAL
	PIPE LINE VENT

GENERAL NOTES

- 1 ALL DIMENSIONS SHOWN ON THE PLANS (SCALED OR COMPUTED), OR STAKED IN THE FIELD, SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IN THE EVENT THE CONTRACTOR DISCOVERS ANY APPARENT ERROR OR DISCREPANCY, HE SHALL NOTIFY THE ENGINEER IMMEDIATELY IN WRITING, REQUESTING HIS INTERPRETATION AND THE ENGINEER WILL MAKE SUCH CORRECTIONS AND DECISIONS IN WRITING AS MAY BE DEEMED NECESSARY TO CARRY OUT THE INTENT OF THE PLANS.
- 2 THE CONTRACT DRAWINGS ARE SCHEMATIC AND MAY SHOW PLUMBING AND PIPING IN A GENERAL WAY ONLY, AND ALL PIPING AND DETAILS ARE NOT NECESSARILY SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FURNISH COMPLETE MATERIALS AND COMPLETE ALL WORK NECESSARY FOR A SATISFACTORY INSTALLATION.
- 3 PIPING ROUTES SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT.
- 4 WATER LINES INSTALLED UNDERGROUND SHALL HAVE A MINIMUM OF 3'-0" OF COVER UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
- 5 ELECTRICAL CONDUIT INSTALLED UNDERGROUND SHALL HAVE A MINIMUM OF 24" OF COVER UNLESS OTHERWISE SHOWN OF THE DRAWINGS.
- 6 ALL PLUMBING, INCLUDING WATER LINES, ABOVE GROUND EITHER INSIDE OR OUTSIDE OF BUILDINGS SHALL BE INSULATED WITH 1-INCH THICK THERMOZIP SERIES 375 INSULATION (INCLUDING FITTINGS FOR ALL VALVES, ETC.) OR APPROVED EQUAL.
- 7 CONTRACTOR TO MAKE CONNECTIONS TO EXISTING SYSTEM DURING OFF PEAK HOURS, AND COORDINATE WITH CITY PERSONNEL.
- 8 STEEL SHEET PILING OR TRENCH JACKS WILL BE REQUIRED FOR BRACING TRENCH WALLS DURING EXCAVATION IN ALL STREETS EXCEPT WHERE OTHER METHODS OF EXCAVATION ARE SPECIFIED ON CONSTRUCTION PLAN. COST OF SHEET PILING OR TRENCH JACKS SHALL BE INCLUDED IN UNIT PRICE BID FOR INSTALLING WATER LINE.
- 9 SELECT BACKFILL SHALL BE USED TO BACKFILL ALL OPEN-CUT TRENCHES IN PAVED AREAS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- 10 EXISTING WATER MAINS, STORM SEWER, SANITARY SEWERS, TELEPHONE CABLES, GAS MAINS, ELECTRICAL CONDUITS, AND OTHER UTILITIES ARE SHOWN FOR CONTRACTOR'S INFORMATION ONLY. LOCATION OF UTILITIES MAY VARY FROM THAT SHOWN ON CONSTRUCTION PLANS. CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR LOCATING AND PROTECTING ALL UTILITIES INCLUDING ANY NOT SHOWN ON CONSTRUCTION PLANS.
- 11 CONTRACTOR SHALL RESTORE ALL AREAS DAMAGED OR DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL CONDITION.
- 12 ALL EXISTING DRIVEWAYS SHOWN ARE GRAVEL UNLESS OTHERWISE NOTED.
- 13 CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL LIVESTOCK LOCATED ON THE PROJECT SITE ARE NOT INJURED DUE TO HIS ACTIVITIES OR ALLOWED TO PASS THROUGH AREAS OF THE CONSTRUCTION WHERE FENCES HAVE BEEN REMOVED. CONTRACTOR IS RESPONSIBLE FOR ANY TEMPORARY FENCING OR OTHER SECURITY MEASURES NECESSARY TO PREVENT LOSS OR INJURY TO LIVESTOCK.

ABBREVIATIONS

DWG.	DRAWING
EX. OR EXIST.	EXISTING
T.B.R.	TO BE REMOVED
U.G.	UNDERGROUND
I.A.W.	IN ACCORDANCE WITH
W.W.F.	WELDED WIRE FABRIC
D.I.P.	DUCTILE IRON PIPE
M.J.	MECHANICAL JOINT PIPE
REQ'D.	REQUIRED
DET.	DETAIL
O.D.	OUTSIDE DIAMETER
E.W.O.C.	EACH WAY ON CENTER
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
ADJ.	ADJUSTMENT
R.	RADIUS
P.P.	POWER POLE
OPG.	OPENING
S/W	SIDEWALK
MOD.	MODIFICATION
N.T.S.	NOT TO SCALE
O.H.	OVERHEAD



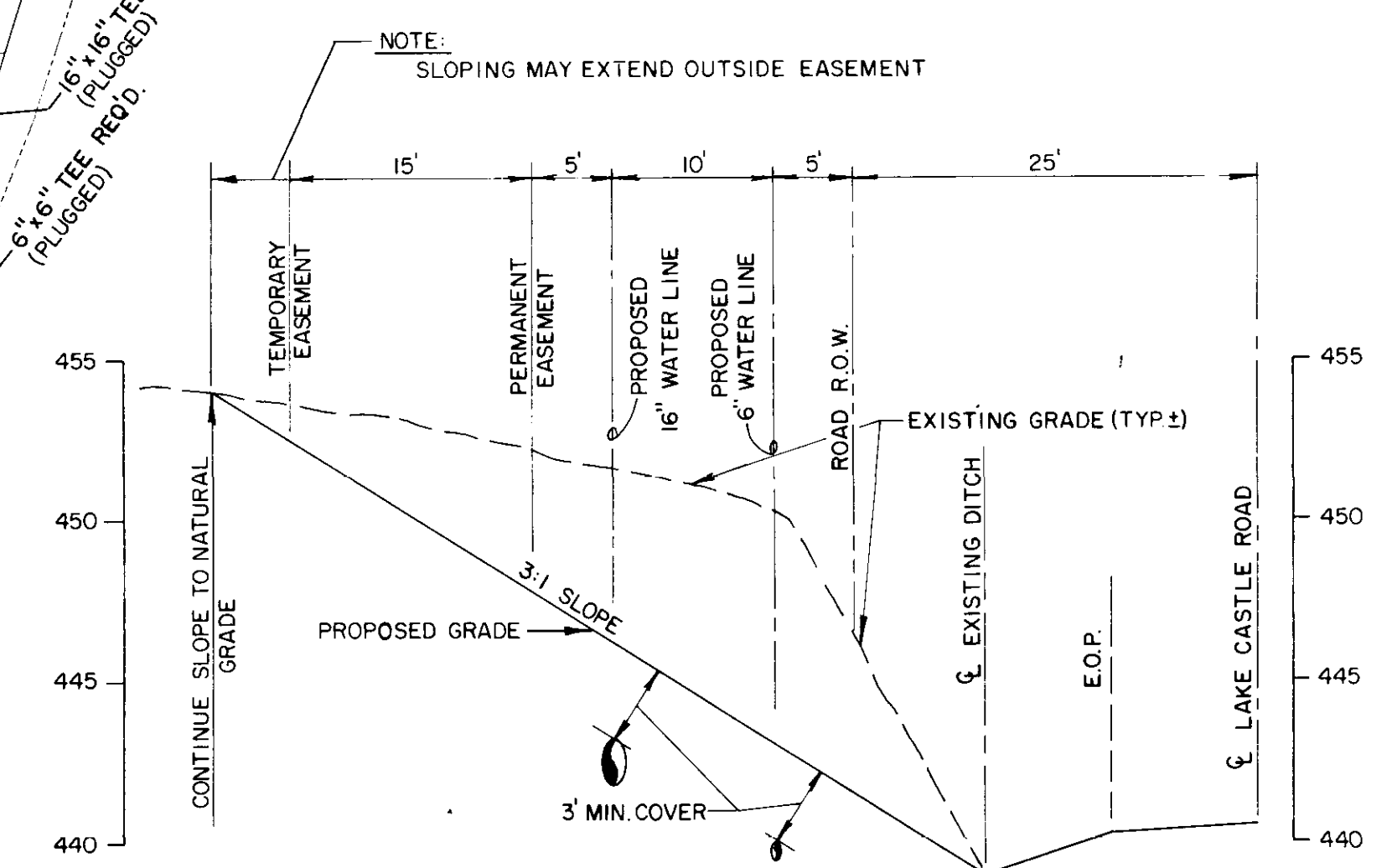
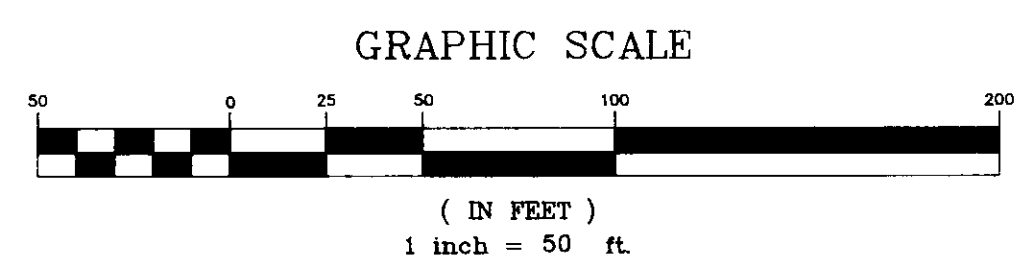
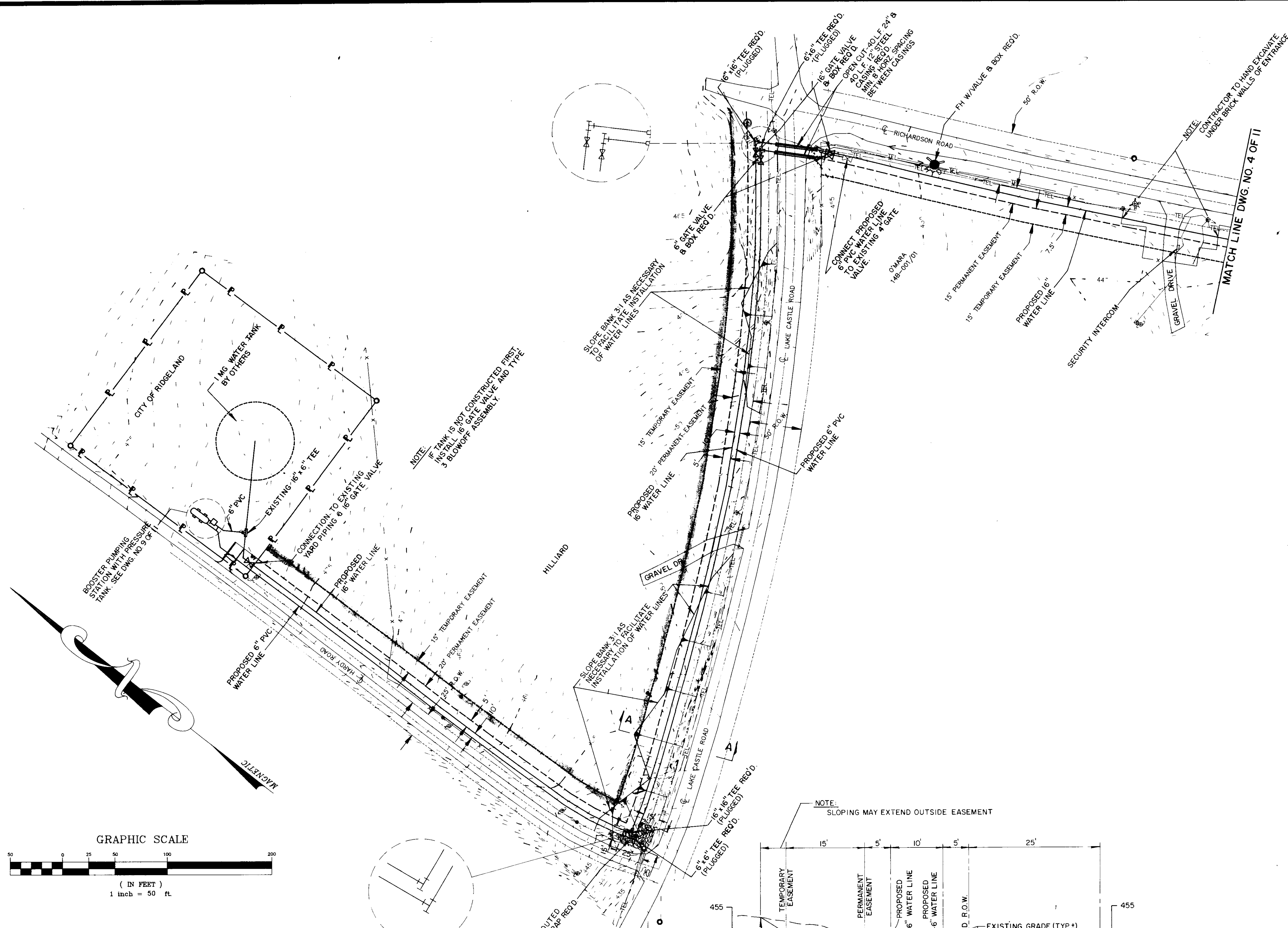
RICHARDSON ROAD WATER SYSTEM IMPROVEMENTS
NS ACCOUNT NO. 3-1914-01

INDEX TO DRAWINGS, LEGEND
GENERAL NOTES AND ABBREVIATIONS

CITY OF RIDGELAND, MISSISSIPPI

DSGN	NS	NS	DRAWING NO.
DRWN	NS	NS	2 OF 11
CHKD	NS	NS	
SCALE	AS SHOWN		

NEEL-SCHAFFER, INC.
REGISTERED PROFESSIONAL ENGINEERS
JACKSON, MISSISSIPPI



TYPICAL SECTION A-A
 HORZ. SCALE 1" = 10'
 VERT. SCALE 1" = 5'

NOTE:
 IF TANK IS NOT CONSTRUCTED FIRST
 INSTALL 16" GATE VALVE AND TYPE
 3 BLOWOFF ASSEMBLY.

NOTE:
 SLOPE BANK 3:1 AS NECESSARY
 TO FACILITATE INSTALLATION
 OF WATER LINES

NOTE:
 SLOPING MAY EXTEND OUTSIDE EASEMENT

NOTE:
 CONTRACTOR TO HAND EXCAVATE
 UNDER BRICK WALLS OF ENTRANCE

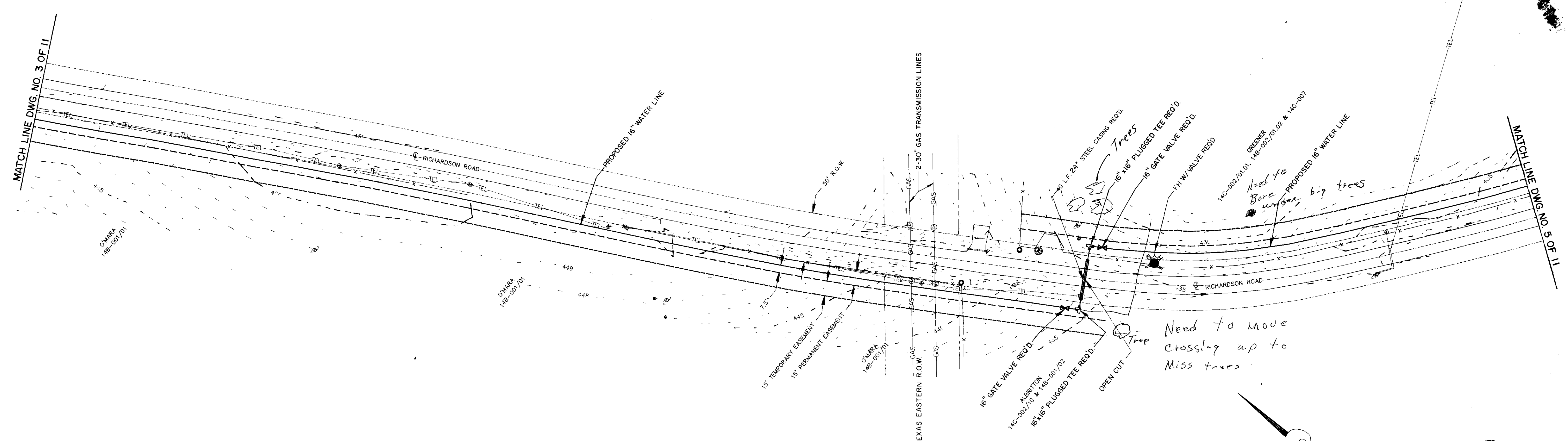


RICHARDSON ROAD WATER SYSTEM IMPROVEMENTS
 NS ACCOUNT NO. 3-1914-01

6" AND 16" WATER LINES

CITY OF RIDGELAND, MISSISSIPPI

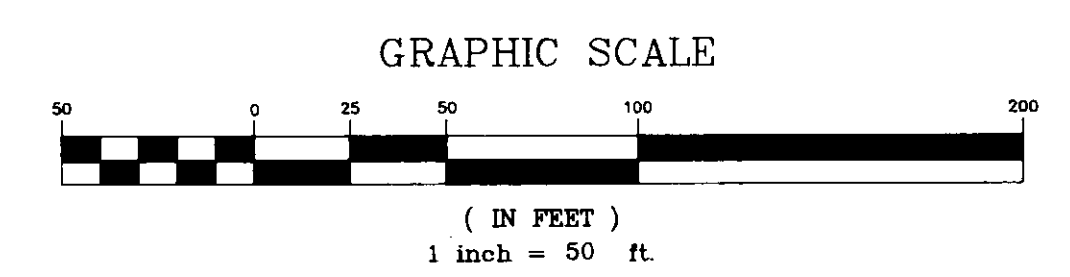
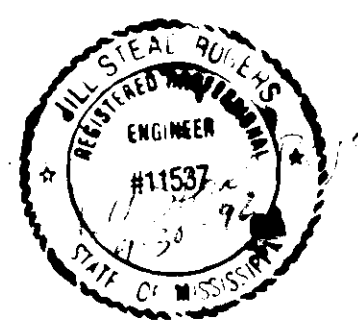
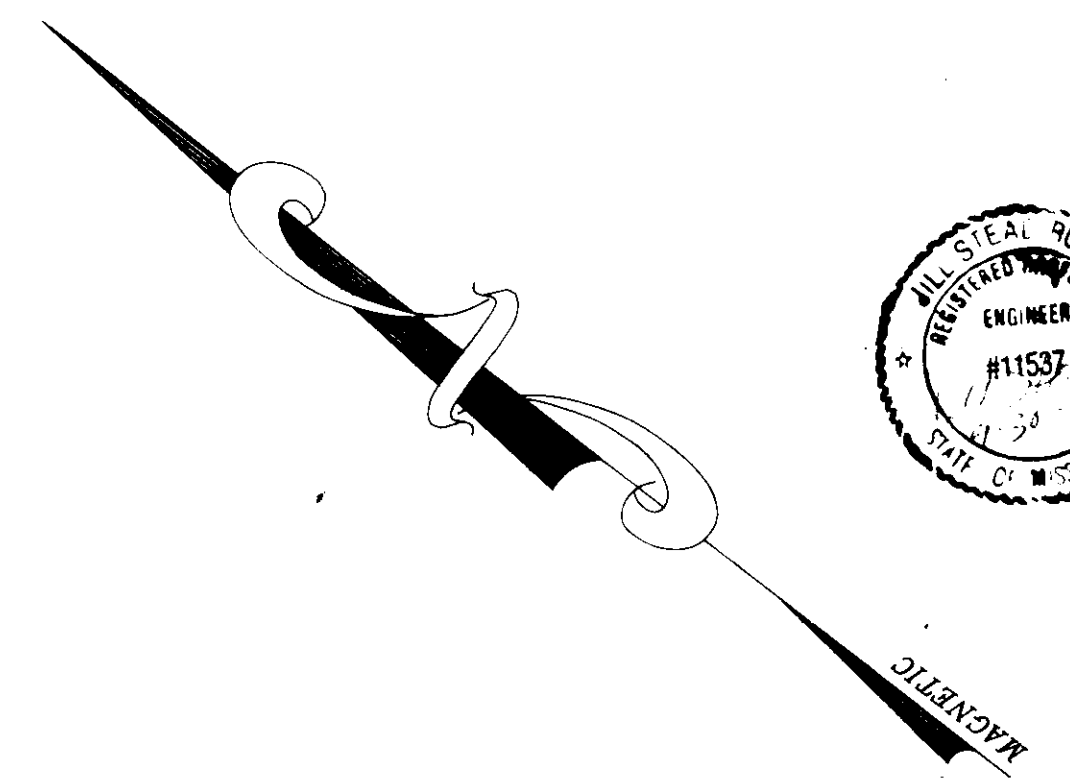
DSGN JSR 8/92		DRAWING NO.
DRWN RDB 9/92		3 OF 11
CHKD DRB 9/92		
SCALE 1"=50'		



NOTE:
 ONLY PVC C-900 PIPE MAY
 BE USED FOR GAS LINE CROSSING

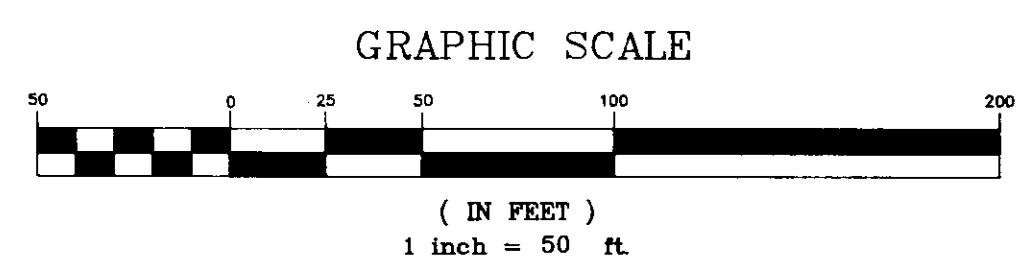
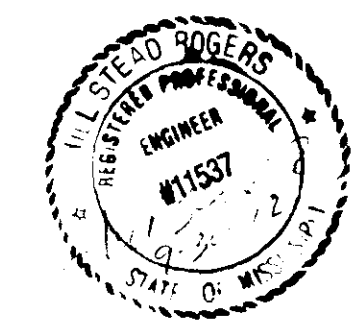
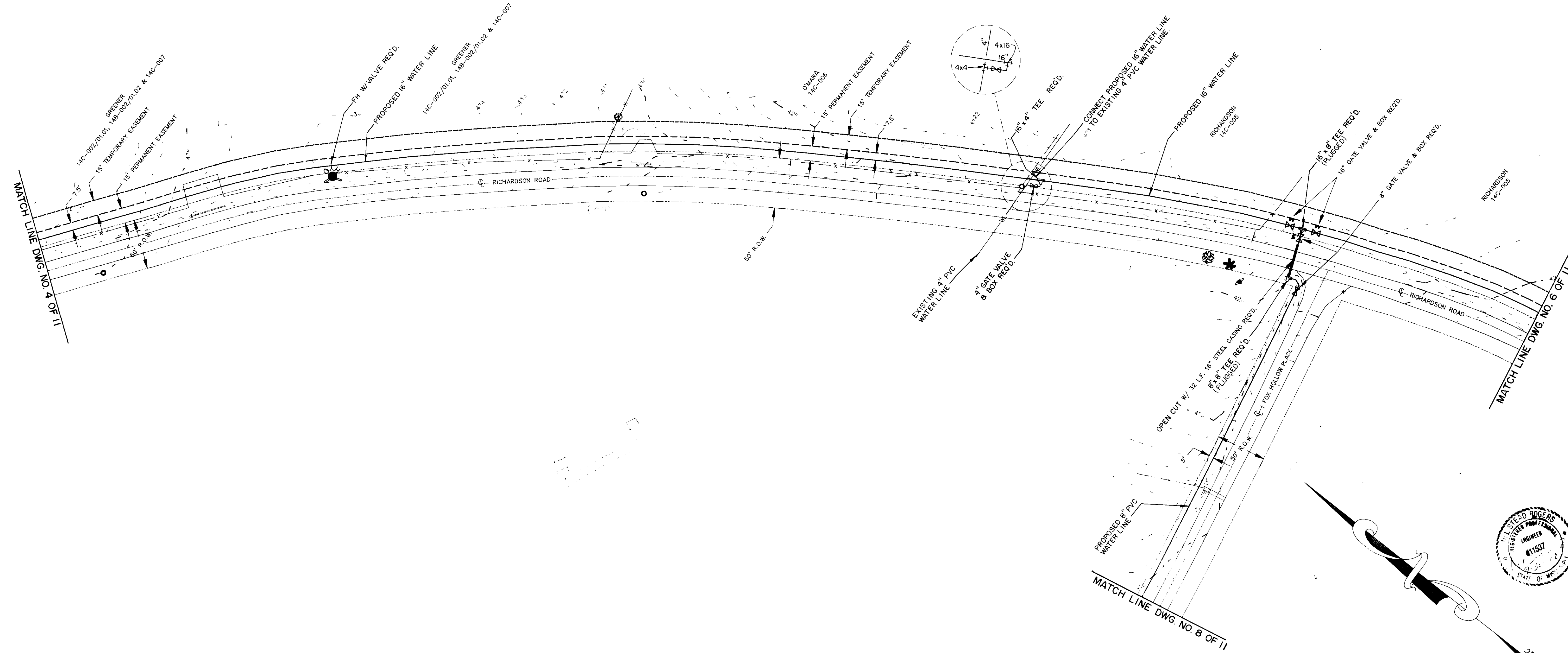
50
 50
 31
 25

Need to move
 crossing up to
 Miss trees



RICHARDSON ROAD WATER SYSTEM IMPROVEMENTS NS ACCOUNT NO. 3-1914-01	
16" WATER LINE	
CITY OF RIDGELAND, MISSISSIPPI	
DSGN: JSR 9/92 DRWN: RDP 9/92 CHKD: DRB 9/92 SCALE: 1"=50'	NEEL-SCHAFFER, INC. ENGINEERS, PLANNERS JACKSON, MISSISSIPPI
DRAWING NO. 4 OF 11	

33283

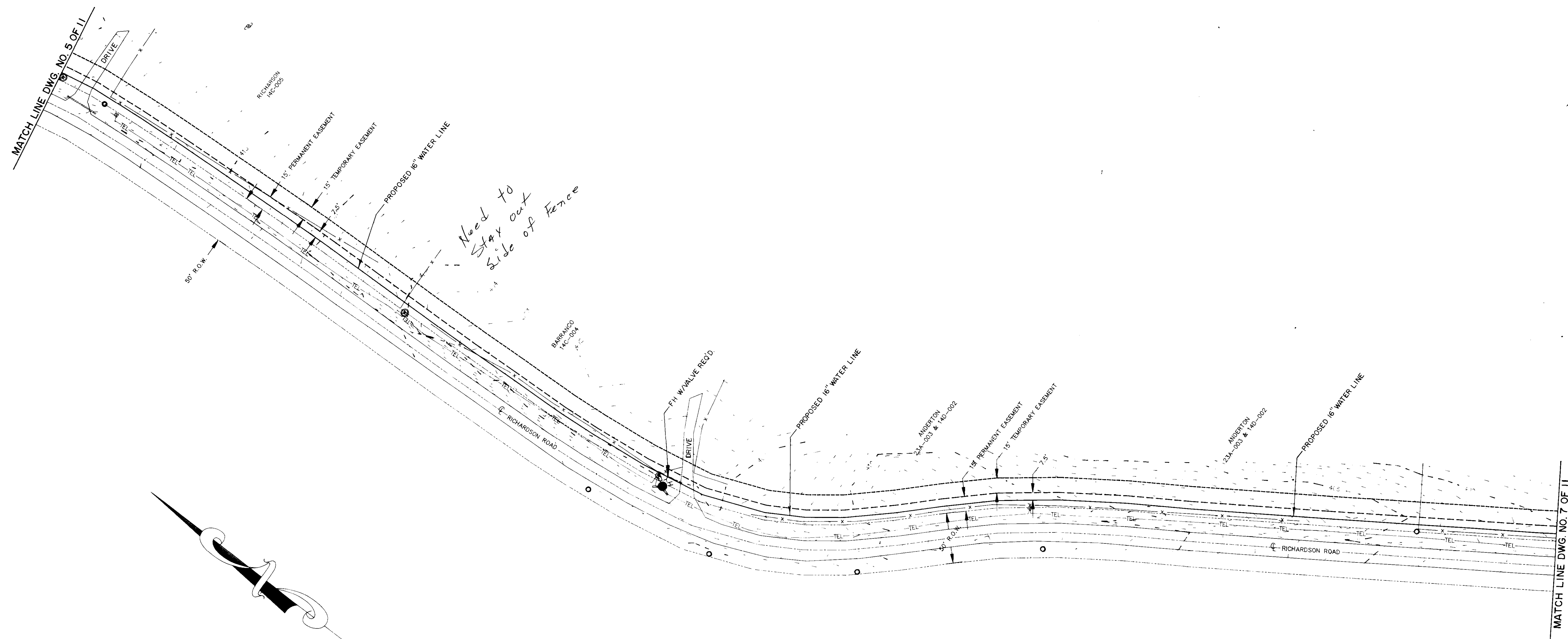


RICHARDSON ROAD WATER SYSTEM IMPROVEMENTS
NS ACCOUNT NO. 3-1914-01

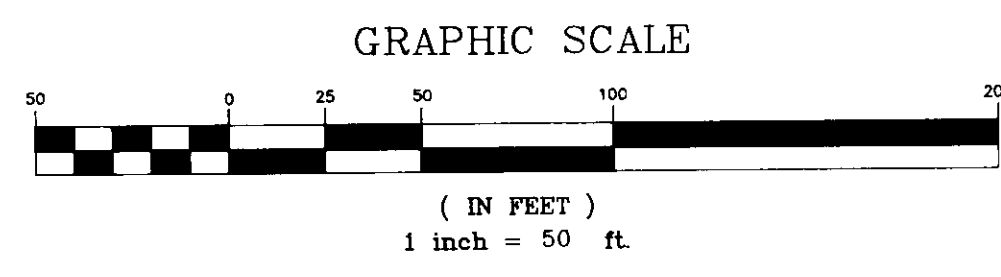
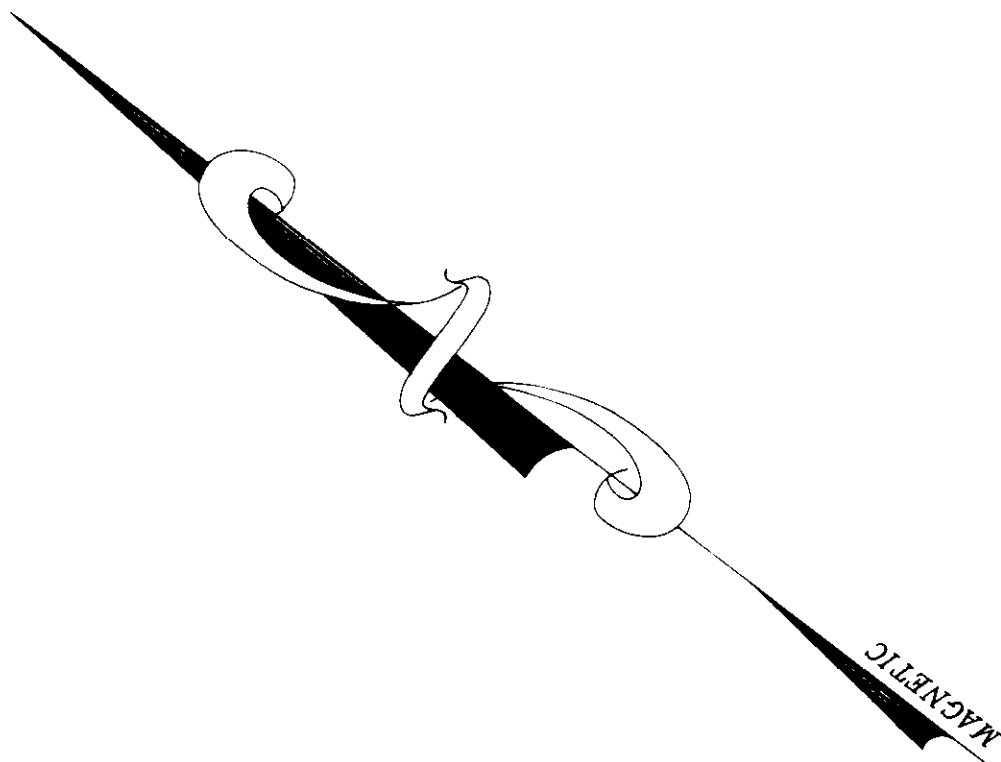
16" AND 8" WATER LINES

CITY OF RIDGELAND, MISSISSIPPI

DSGN: JSR 9/02	NEEL-SCHAFFER, INC. ENGINEERS - PLANNERS JACKSON, MISSISSIPPI	DRAWING NO.
DRWN: RDB 9/02		5 OF 11
CHKD: DEB 9/02		
SCALE: 1"=50'		

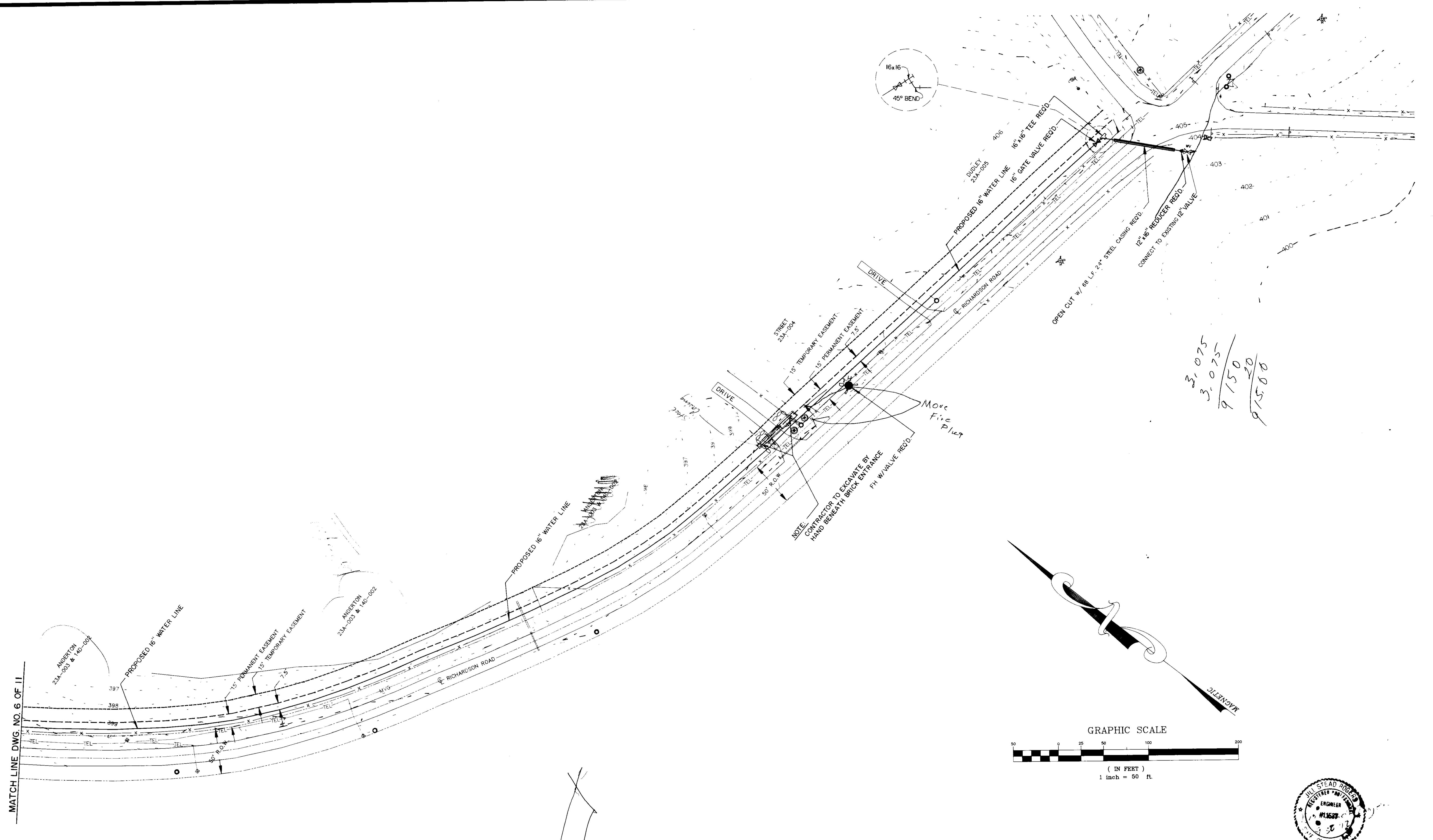


Need to stay out side of fence



RICHARDSON ROAD WATER SYSTEM IMPROVEMENTS NS ACCOUNT NO. 3-1914-01	
16" WATER LINE	
CITY OF RIDGELAND, MISSISSIPPI	
DSGN: JSR 9/82 DRWN: RDB 9/82 CHKD: DRB 9/82 SCALE: 1"=50'	NEEL-SCHAFFER, INC. ENGINEERS - PLANNERS JACKSON, MISSISSIPPI
DRAWING NO. 6 OF 11	

MATCH LINE DWG. NO. 6 OF 11

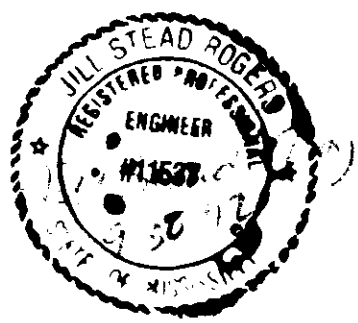


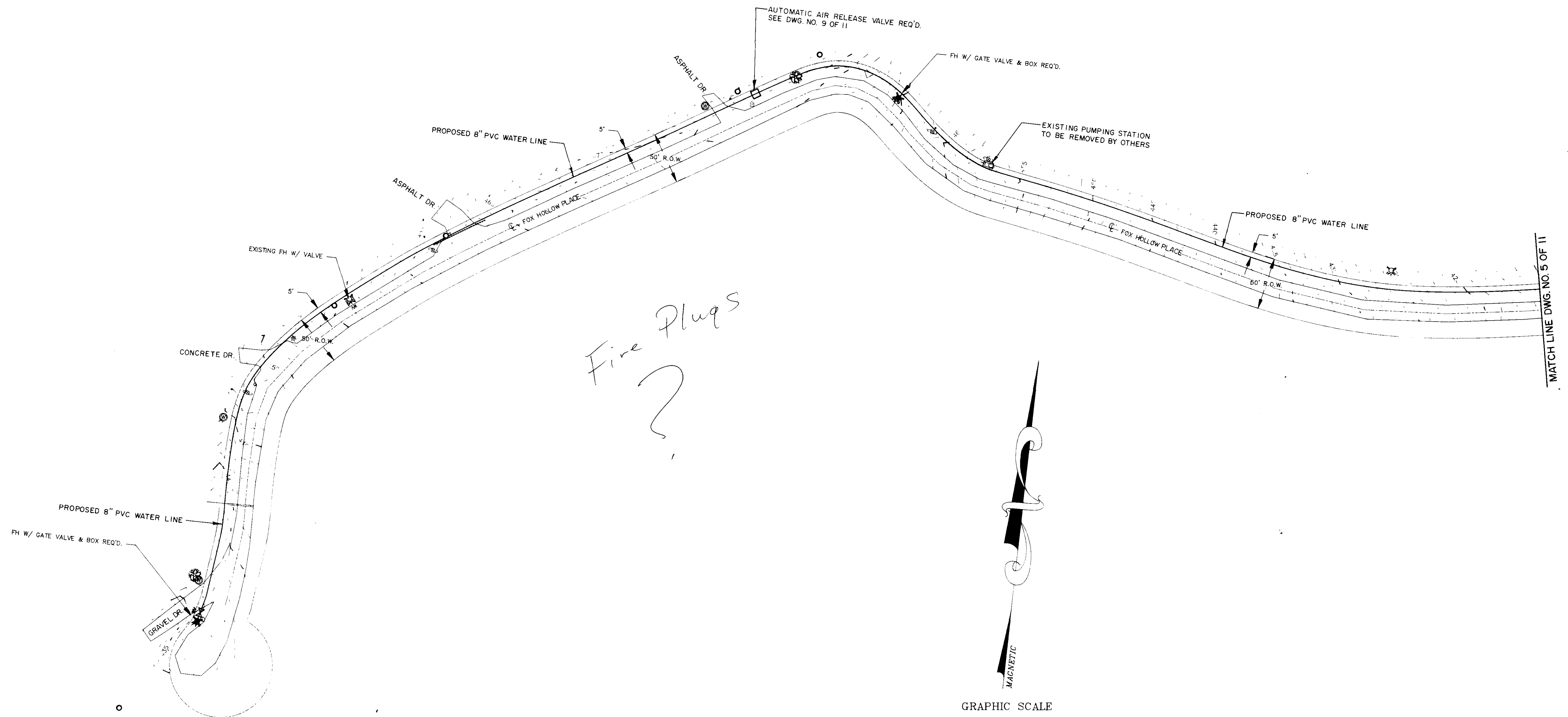
RICHARDSON ROAD WATER SYSTEM IMPROVEMENTS
NS ACCOUNT NO. 3-1914-01

16" WATER LINE

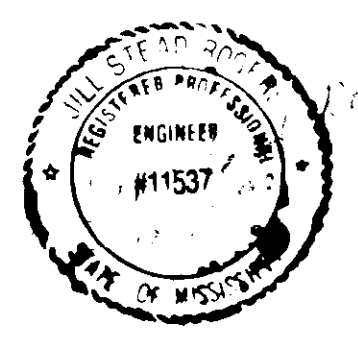
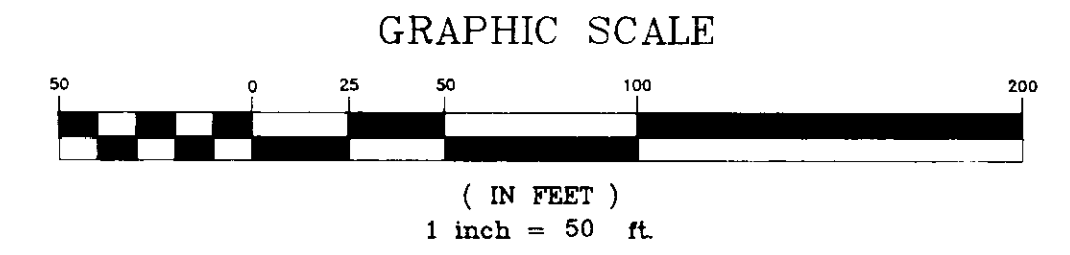
CITY OF RIDGELAND, MISSISSIPPI

DSGN: JSR 9/92		DRAWING NO.
DRWN: ROB 9/92		7 OF 11
CHKD: DRB 9/92		
SCALE: 1"=50'		





Fire Plugs ?



RICHARDSON ROAD WATER SYSTEM IMPROVEMENTS NS ACCOUNT NO. 3-1914-01	
8" WATER LINE	
CITY OF RIDGELAND, MISSISSIPPI	
DSGN: <i>JSR</i> / 9/82 DRWN: <i>RDB</i> / 9/82 CHKD: <i>DEB</i> / 9/82 SCALE: 1"=50'	DRAWING NO. 8 of 11



BEARING AREA IN SQ. FT.

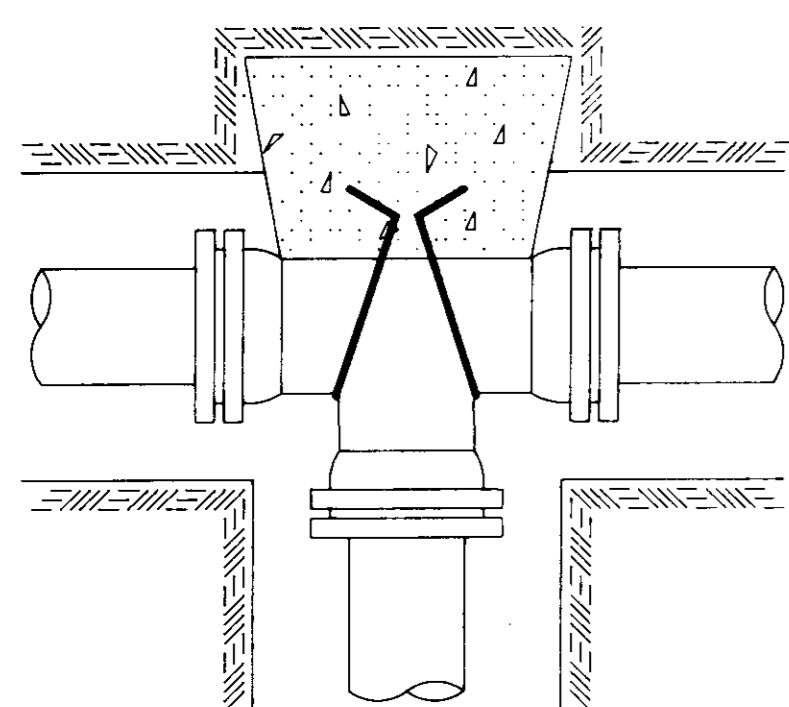
NOMINAL PIPE DIAMETER (IN)	DEAD-END OR TEE	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND	NOMINAL PIPE DIAMETER (IN)	DEAD-END OR TEE	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND
6	2.5	3.0	2.0	2.0	2.0	6	—	—	26.0(1.0)	14.0(.5)	7.0(.3)
8	4.0	6.0	3.0	2.0	2.0	8	—	—	45.0(1.7)	25.0(.9)	13.0(.5)
10	6.0	9.0	5.0	2.5	2.0	10	—	—	68.0(2.5)	37.0(1.4)	19.0(.7)
12	9.0	11.0	6.0	3.5	2.0	12	—	—	97.0(3.6)	52.0(1.9)	27.0(1.0)
14	12.0	18.0	9.0	5.0	2.5	14	—	—	130(4.8)	70.0(2.6)	36.0(1.3)
16	16.0	22.5	12.0	6.0	3.0	16	—	—	168(6.2)	91.0(3.4)	46.0(1.7)
18	20.0	28.0	15.0	8.0	4.0	18	—	—	211(7.8)	114(4.2)	58.0(2.2)
20	24.5	34.0	19.0	10.0	5.0	20	—	—	259(9.6)	140(5.2)	72.0(2.6)
24	35.0	49.0	27.0	14.0	7.0	24	—	—	370(13.7)	200(7.4)	102(3.8)
30	54.0	76.0	41.0	21.0	10.0	30	—	—	568(21.1)	308(11.4)	156(5.8)
36	77.0	108.0	59.0	30.0	15.0	36	—	—	814(30.1)	440(16.3)	225(8.3)
42	104.0	146.0	79.0	40.0	20.0	42	—	—	1100(40.7)	595(22.0)	303(11.2)

VERTICAL BENDS

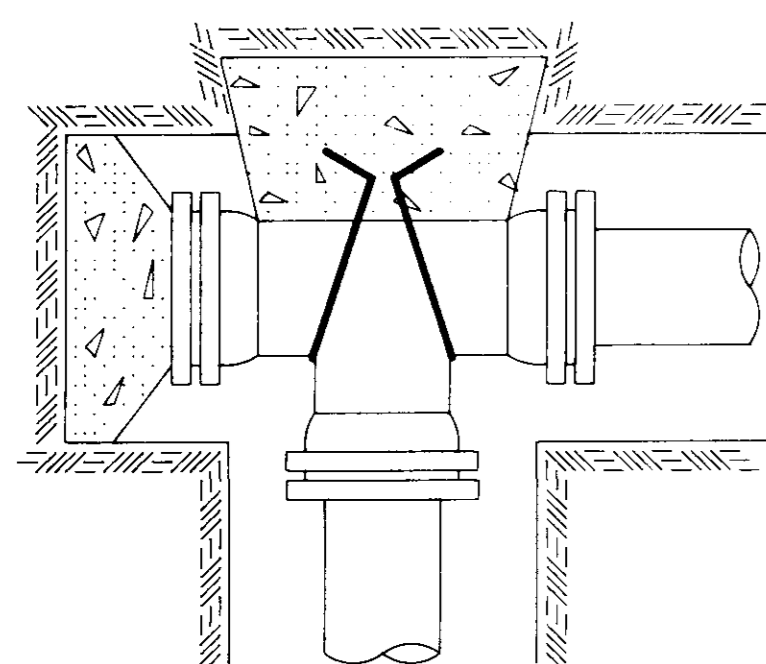
VOLUME OF BLOCKS INCLUDING SOIL LOAD CU. FT. (CU. YDS.)

NOTE: ABOVE VALUES CALCULATED USING P=100 AND ALLOWANCE SOIL BRG. = 1500 PSF. FOR DIFFERENT P, MULTIPLY ABOVE VALUES BY P/100. FOR DIFFERENT SOIL BRG, MULTIPLY ABOVE VALUES BY 1500/S.B.

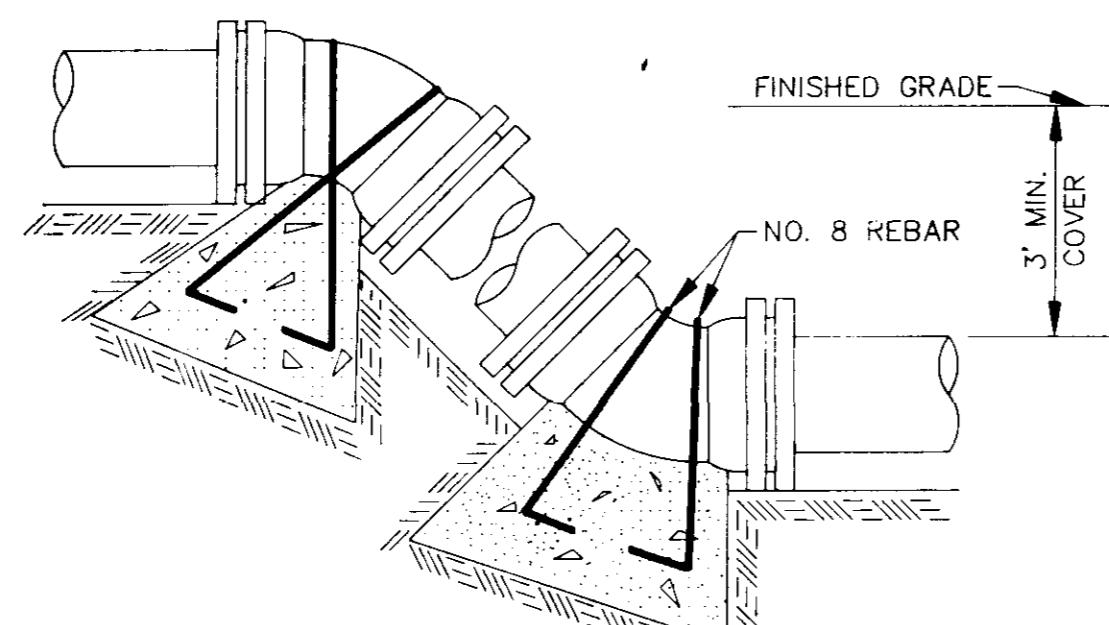
NOTE: ABOVE VALUES REPRESENT THE VOLUME OF BLOCKS INCLUDING SOIL LOAD IN CU.FT. (CU.YDS.) THE VALUES WERE CALCULATED USING A P=100 PSI AND A S.F.=1.5. FOR DIFFERENT P, MULTIPLY VALUES BY P/100.



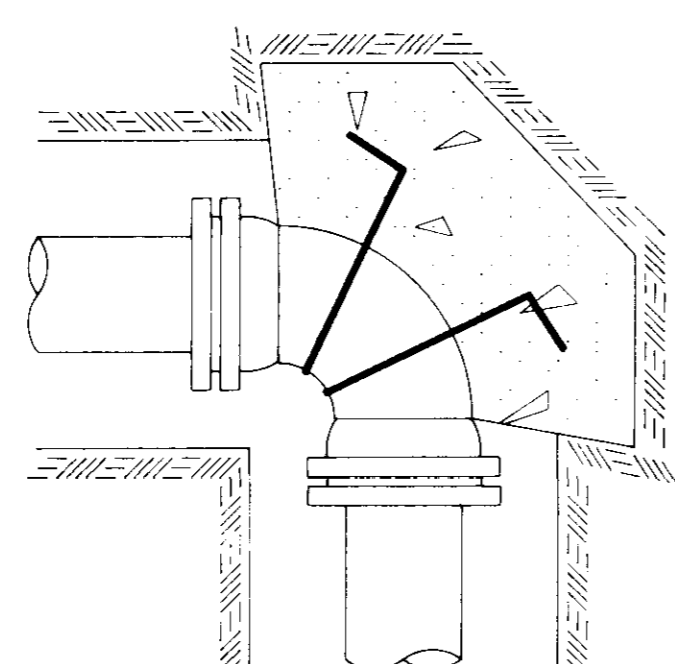
TEE



PLUGGED TEE



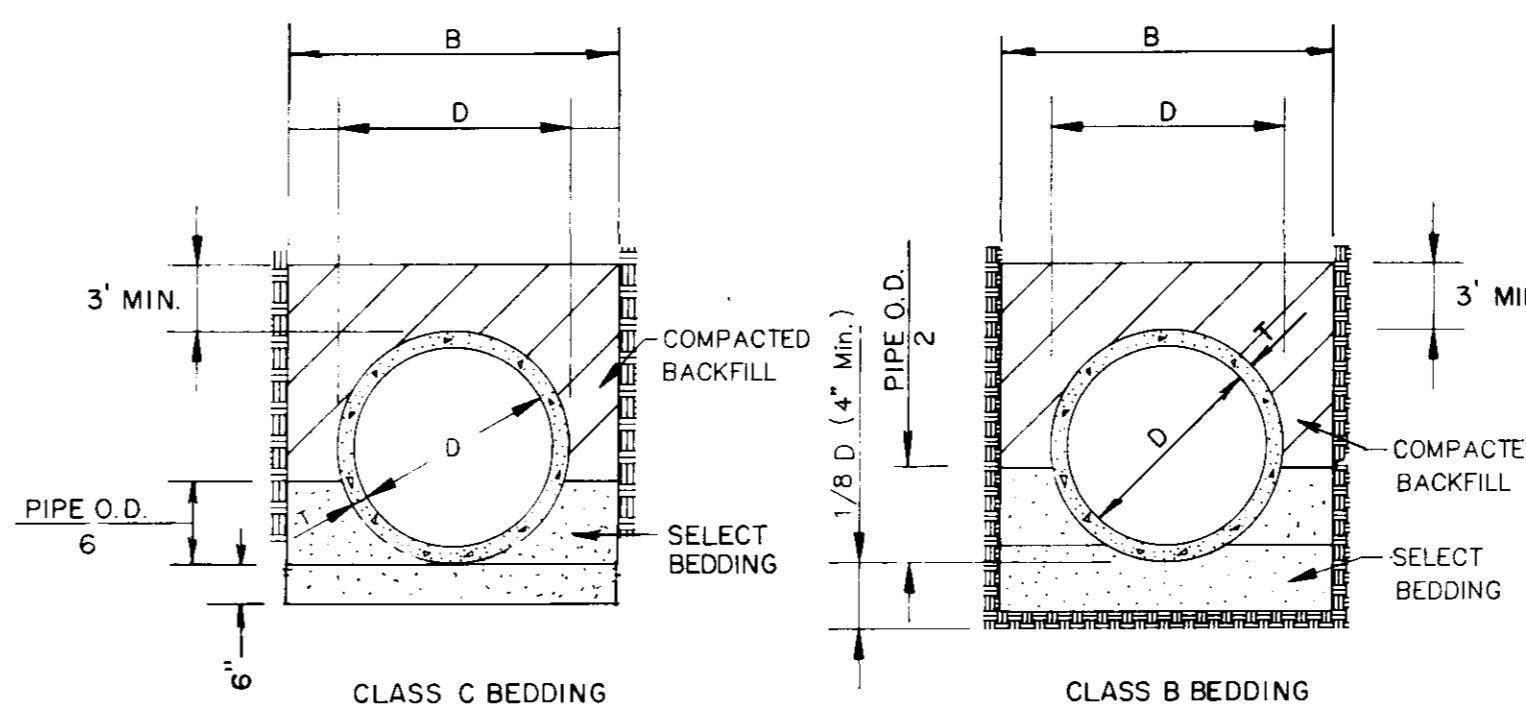
VERTICAL BENDS



90° BEND

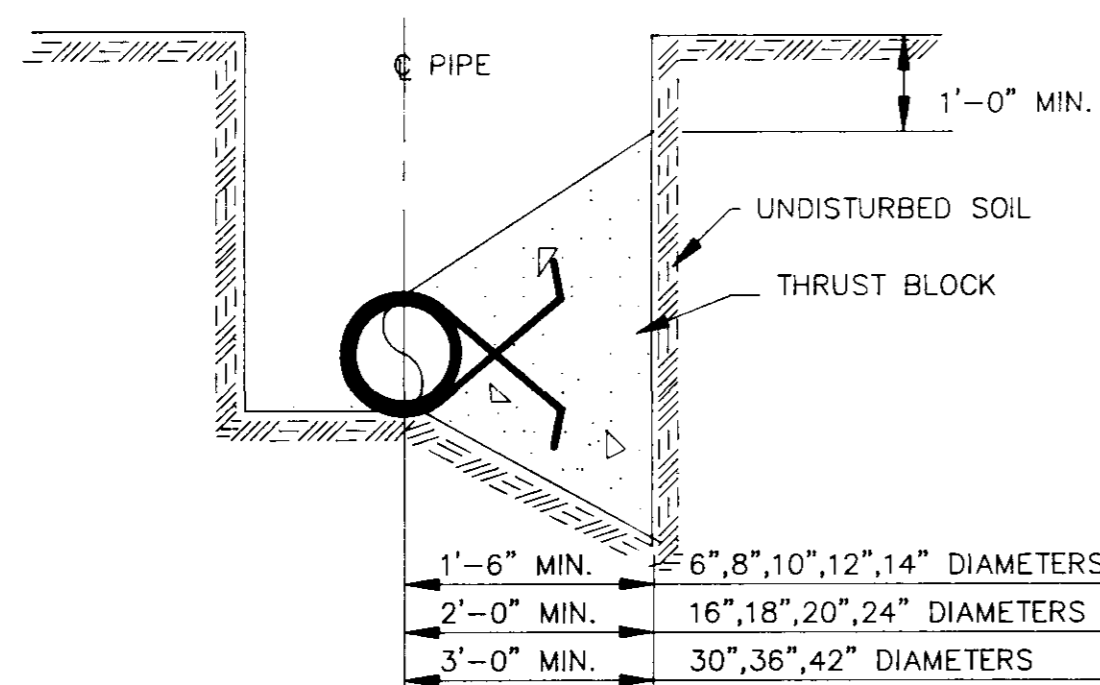
PIPE SIZE D (IN.)	TRENCH WIDTH "B" (FT.)
4	2.50
6	2.50
8	2.50
10	3.00
12	3.50
16	3.75

SCHEDULE OF BEDDING



TYPICAL TRENCH DETAILS

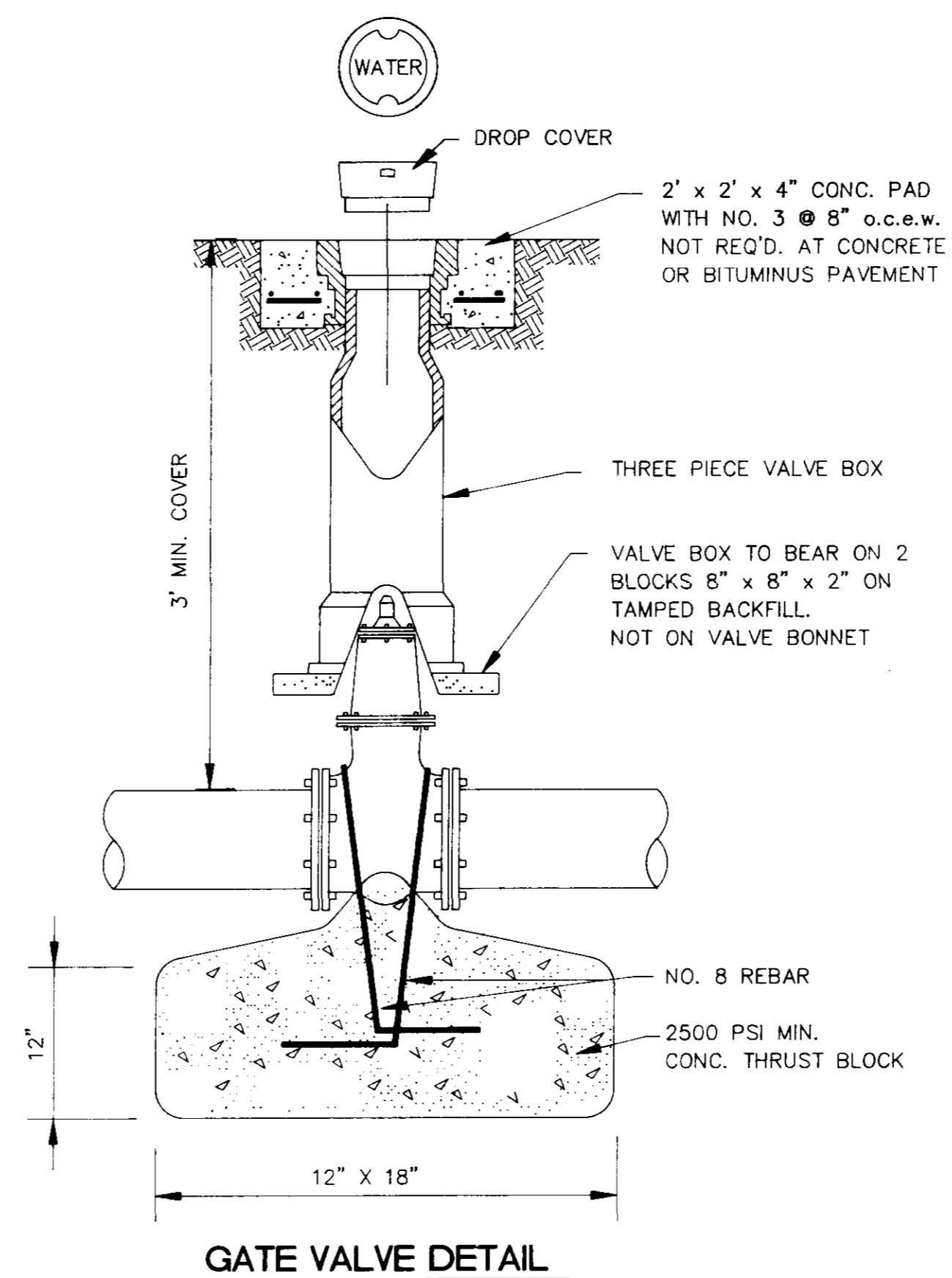
N.T.S.



TYPICAL CROSS SECTION

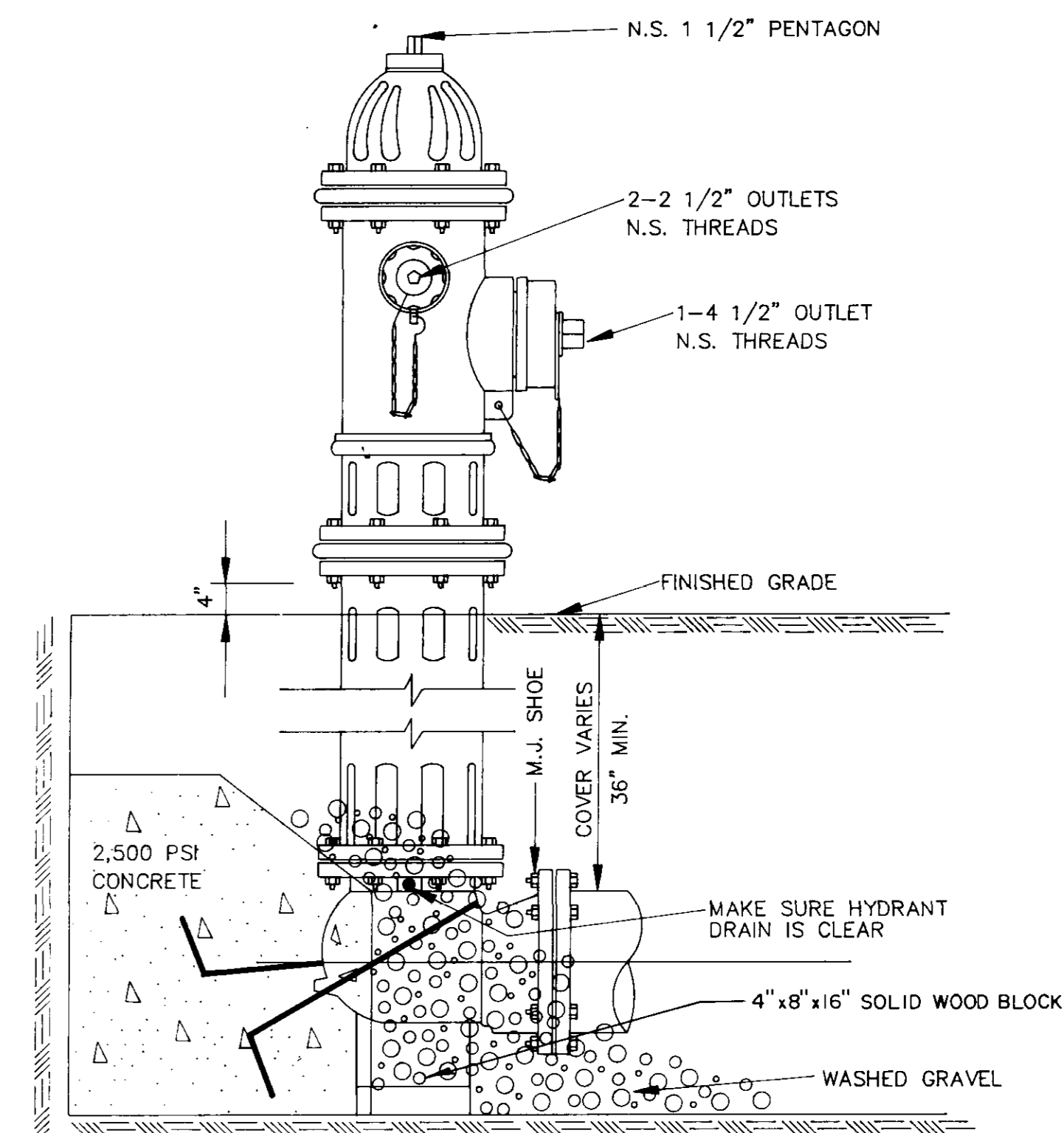
TYPICAL THRUST BLOCKING IN WATER MAINS

N.T.S. NOTE: ALL THRUST BLOCKS 2,500 PSI CONCRETE AGAINST UNDISTURBED EARTH

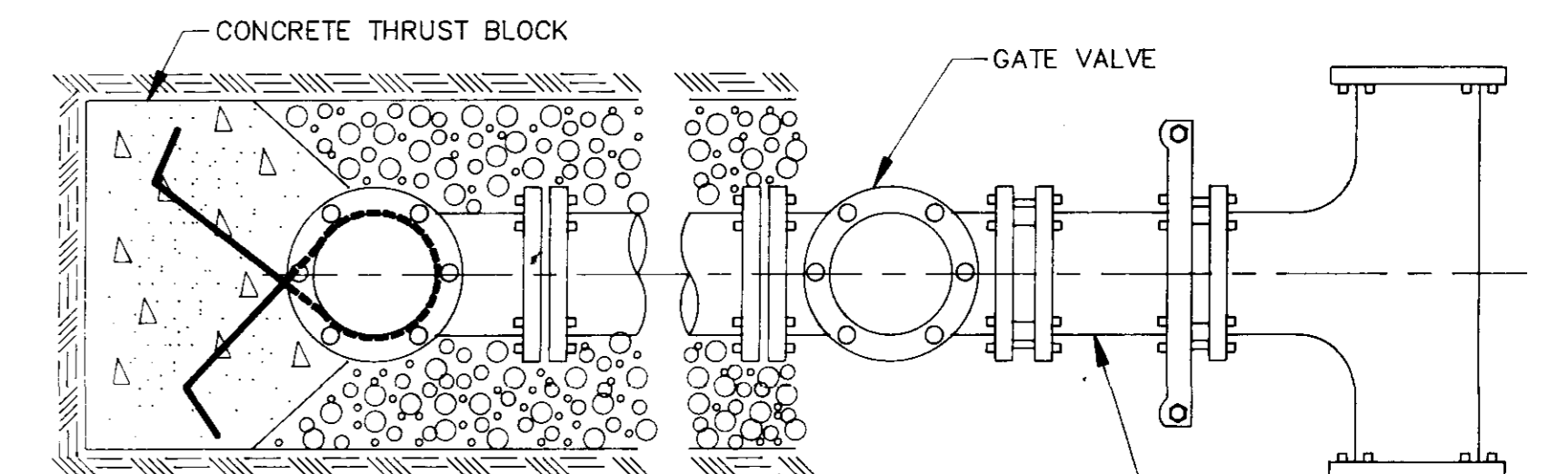


GATE VALVE DETAIL

N.T.S.

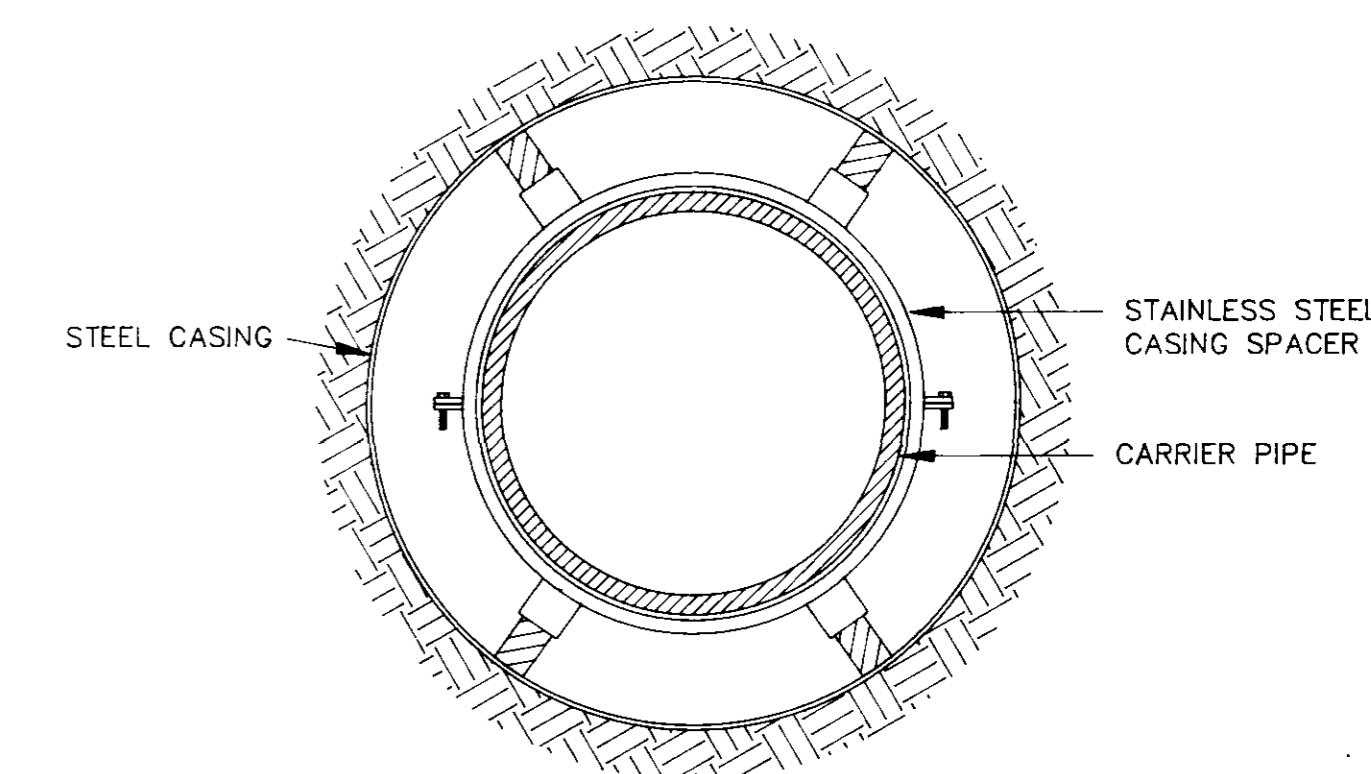


ELEVATION



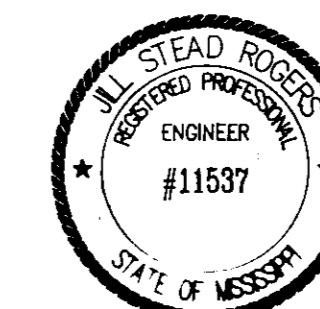
TYPICAL FIRE HYDRANT INSTALLATION

NOTE: GATE VALVES WILL BE REQUIRED ON ALL FIRE HYDRANT LEGS. N.T.S.



CASING DETAIL

N.T.S.



RICHARDSON ROAD WATER SYSTEM IMPROVEMENTS
NS ACCOUNT NO. 3-1914-01

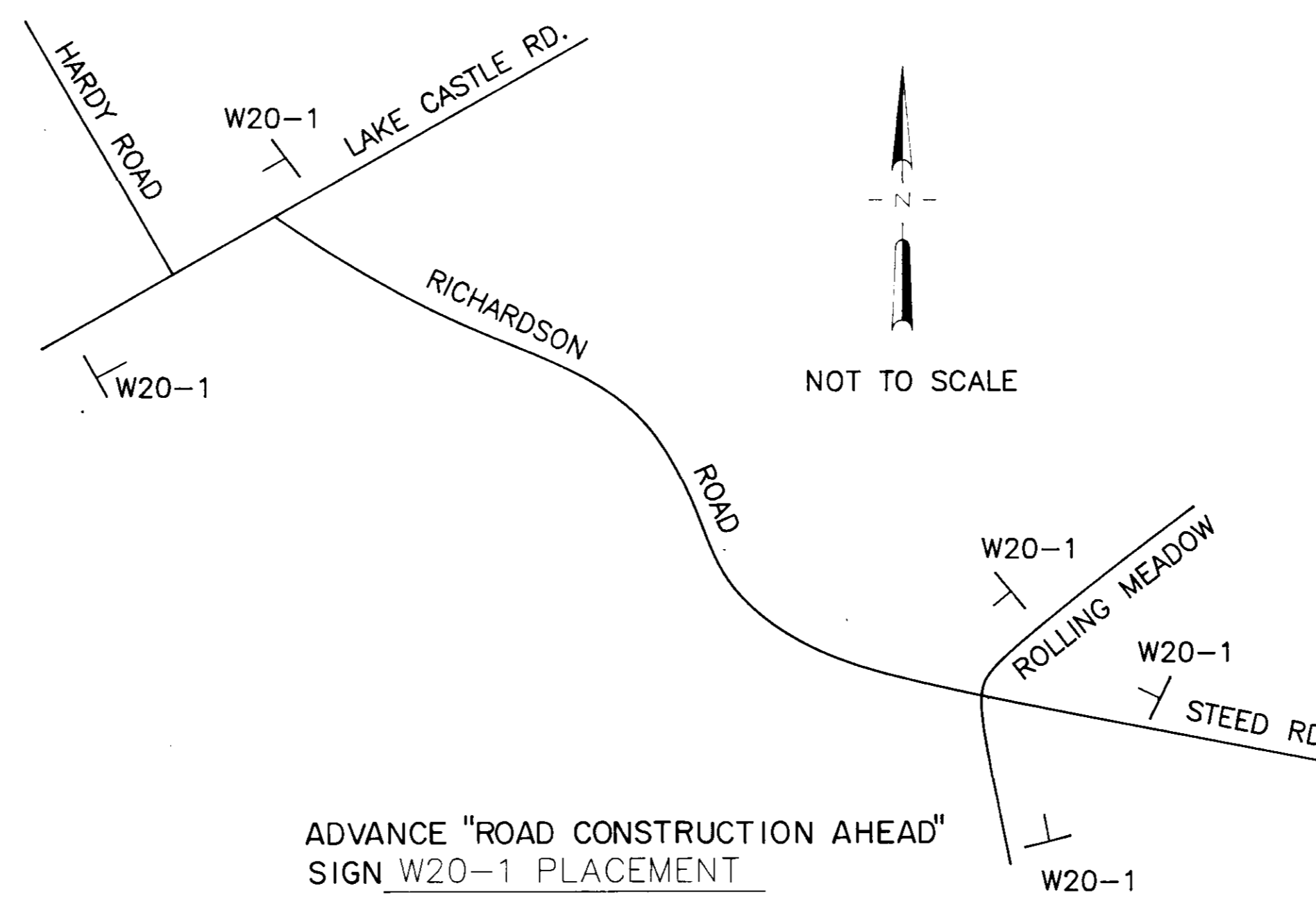
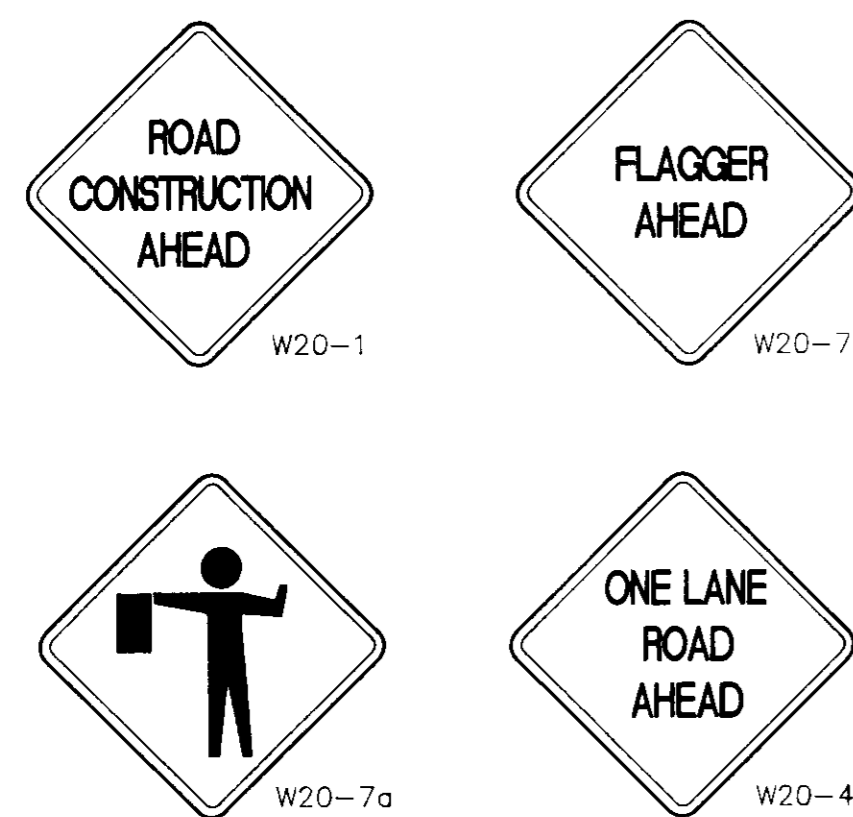
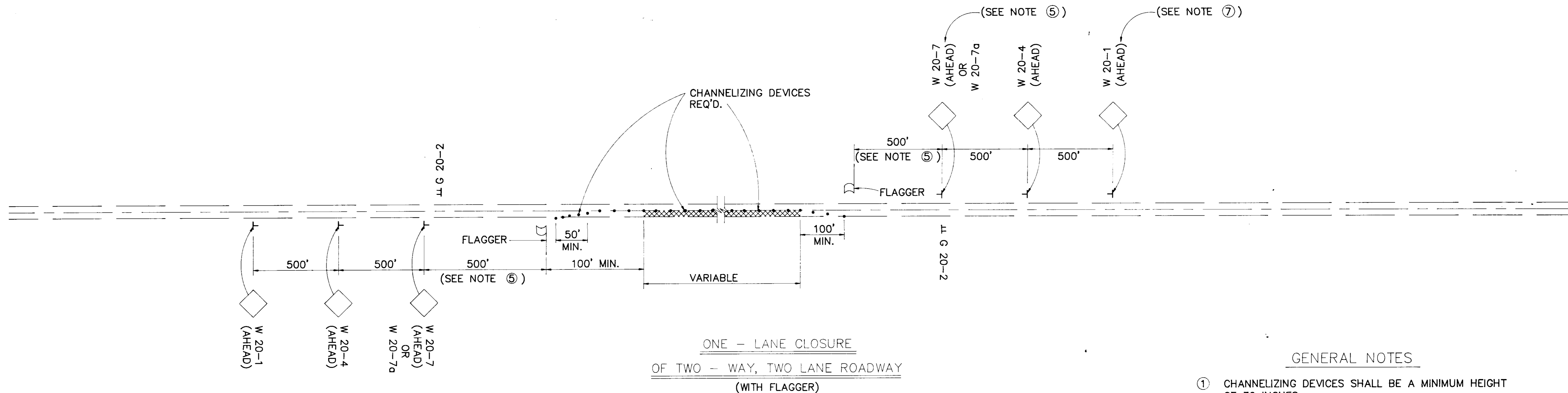
MISCELLANEOUS DETAILS

CITY OF RIDGELAND, MISSISSIPPI

DSGN: J.S.R. 9/92
DRWN: M.O.U. 9/92
CHKD: D.L.B. 9/92
SCALE: N.T.S.

NEEL-SCHAFFER, INC.
ENGINEERS - PLANNERS
JACKSON, MISSISSIPPI

DRAWING NO.
10 OF 11



ADVANCE "ROAD CONSTRUCTION AHEAD"
SIGN W20-1 PLACEMENT
SEE NOTES 7 & 8

GENERAL NOTES

- ① CHANNELIZING DEVICES SHALL BE A MINIMUM HEIGHT OF 36 INCHES.
- ② DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 36" x 36".
- ③ SPACING OF CHANNELIZING DEVICES ALONG LANE LINE AND WORK ZONE TO BE EQUAL TO THE POSTED SPEED (M.P.H.) IN FEET.
- ④ WHEN THERE IS NO EXISTING HAZARD OR AT THE END OF THE WORK DAY, ALL SIGNS SHALL BE COVERED OR REMOVED AND ALL CHANNELIZING DEVICES SHALL BE MOVED TO THE SHOULDER EDGE.
- ⑤ WHEN THE WORK ZONE IS STATIONARY, THE W20-7 OR W20-7a SIGN SHOULD BE PLACED 500' IN ADVANCE OF THE FLAGGER AND SHOULD INDICATE (500') AS THE DISTANCE.
- ⑥ ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.
- ⑦ INSTALL W 20-1 SIGN ON BOTH APPROACHES OF LAKE CASTLE RD., AND APPROACHES OF ROLLING MEADOW AND STEED ROADS TO RICHARDSON RD. A MIN. OF 500' IN ADVANCE OF INTERSECTION. COORDINATE W/SIGNING FOR FLAGGING OPERATIONS.
- ⑧ W 20-1 SIGNS ARE TO BE INSTALLED ONCE WORK BEGINS NEAR RICHARDSON RD.

Mark D. Bailey
9/30/92

RICHARDSON ROAD WATER SYSTEM IMPROVEMENTS NS ACCOUNT NO. 3-1914-01	
TRAFFIC CONTROL PLAN	
CITY OF RIDGELAND, MISSISSIPPI	
DSGN: M.G.B. 9/92	DRAWING NO. 11 OF 11
DRWN: J.M. 9/92	
CHKD: D.E.B. 9/92	
SCALE: N.T.S.	

NEEL-SCHAFFER INC.
ENGINEERS, PLANNERS, ARCHITECTS
JACKSON, MISSISSIPPI