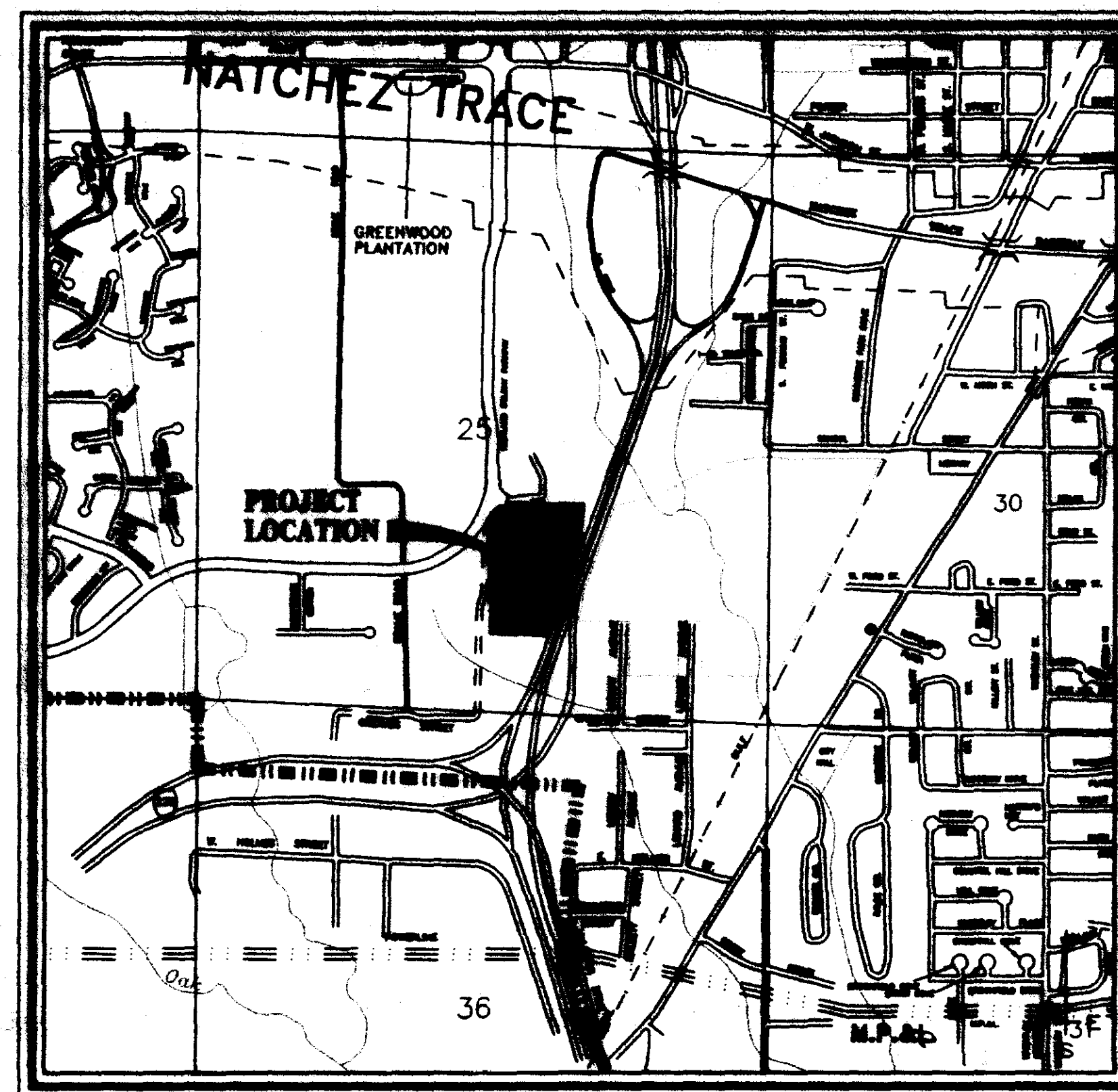
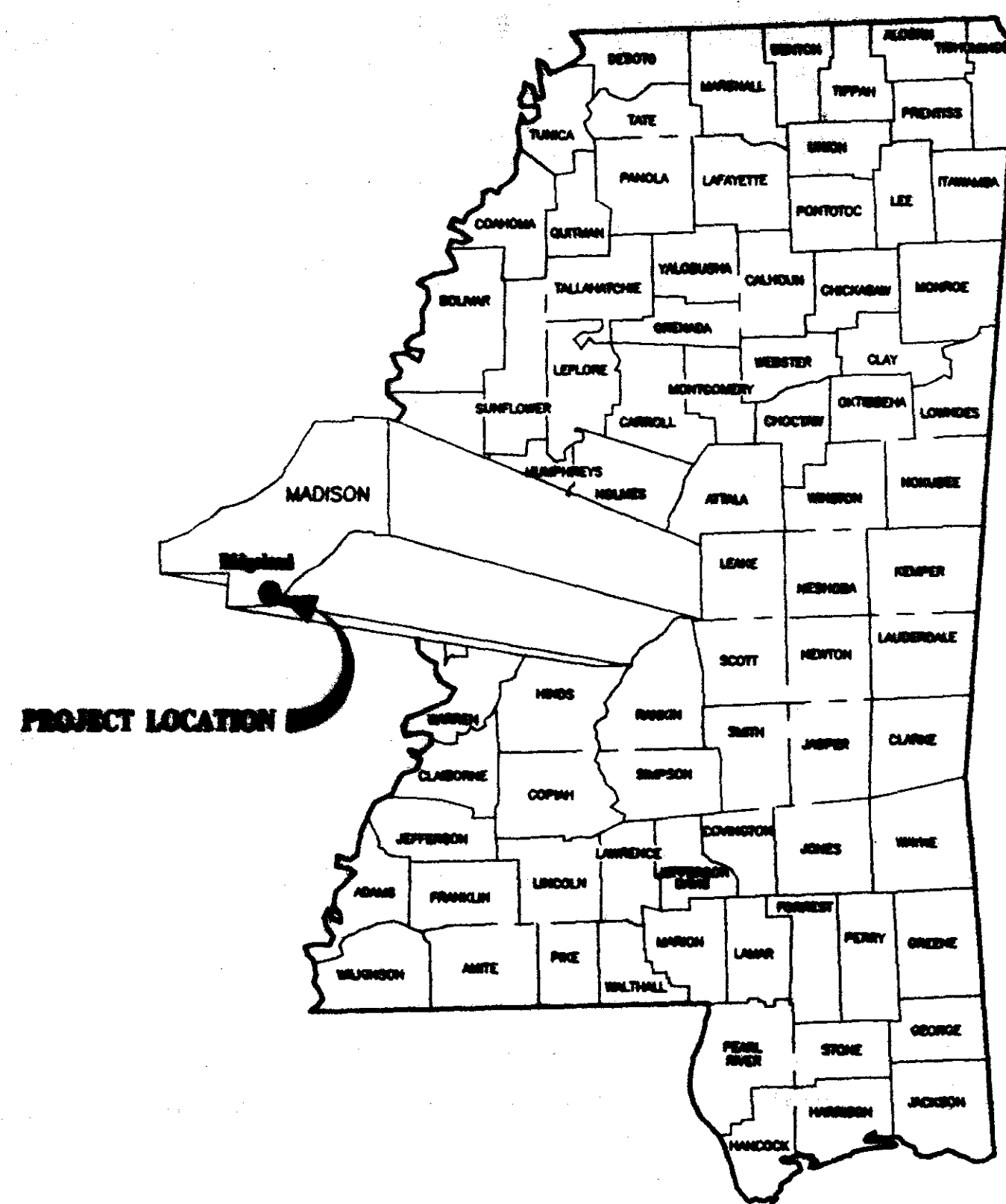


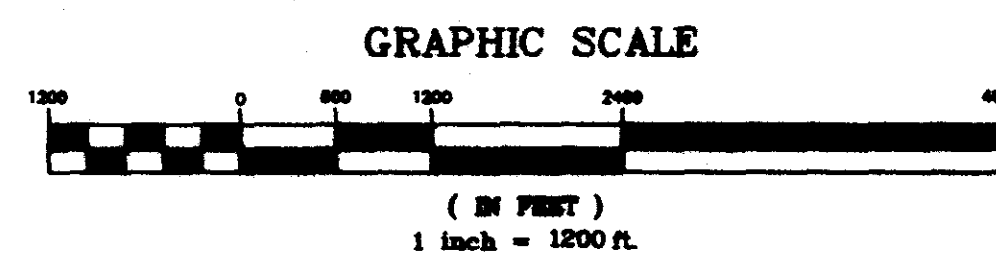
CONSTRUCTION PLANS
FOR

NEWPOINTE BUSINESS PARK

CITY OF RIDGELAND MADISON COUNTY, MISSISSIPPI



VICINITY MAP



A DEVELOPMENT BY

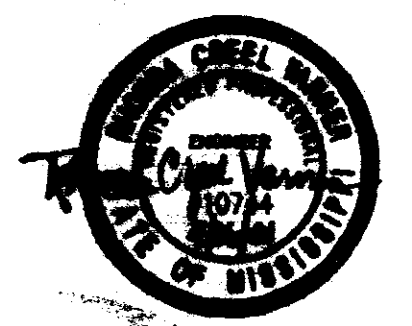
GARY B. CRESS
WILLIAM E. CLARK
LAKE HARBOUR ROAD, L.P.
RETSUB PARTNERS, L.P.
CURTIS PARTNERS, L.P.
CJB PARTNERS, L.P.

RECORD DRAWING

BY: *R. Hanna* DATE: *4/1/01*

Prepared By:

STERLING
Consultants
INCORPORATED



PWP-01405

MATERIAL REQUIREMENTS

STREETS

1. CONCRETE FOR CURB AND GUTTER SHALL BE 3,000 PSI MINIMUM.
2. HOT BITUMINOUS PAVEMENT BASE COURSE MIXTURES AND MATERIALS SHALL MEET SPECIFICATION BB-1 OF THE MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
3. HOT BITUMINOUS PAVEMENT SURFACE COURSE MIXTURES AND MATERIALS SHALL MEET SPECIFICATION SC-1 OF THE MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.

STORM DRAINAGE

1. PIPE - REINFORCED CONCRETE PIPE, ROUND ASTM C-76 OR ARCH. ASTM C-506.
2. JOINTS - O-RING RUBBER GASKETS, BITUMINOUS PLASTIC CEMENT OR PRE FORMED JOINT COMPOUND.
3. INLETS AND JUNCTION BOXES - PRE CAST CONCRETE, ASTM C-478 OR CONCRETE CAST-IN-PLACE. (CITY OF RIDGELAND STANDARD)
4. INLET CASTINGS - VULCAN RCB-7, C.L. DEWS NO. 2450, OR EQUAL AS APPROVED BY ENGINEER.

WATER

- MAIN - C-900 PVC CLASS 150 OR DUCTILE IRON, CEMENT LINED MORTAR PRESSURE CLASS 350 - ANSI/AWWA C151/A21.5.
- ENCASEMENT - POLYETHYLENE FILM ANSI/AWWA A21.5/C105.
- JOINTS - TYLON JOINTS WITH RUBBER GASKET ANSI/AWWA STANDARDS.
- FITTINGS - DUCTILE IRON, COMPACT FITTINGS MECHANICAL JOINT - ANSI/AWWA C153/A21.53-88.
- FIRE HYDRANTS - DRY BARREL TYPE TRAFFIC MODEL, 4-1/2" MAIN VALVE SIZE, 3 WAY NOZZLE W/ 2 EACH 2-1/2" HOSE NOZZLES AND 1 5-1/4" PUMPER NOZZLE, AWWA C502-80.
- ANCHOR COUPLINGS - TYLER/UNION MECHANICAL JOINT ADAPTERS FOR VALVE & HYDRANT CONNECTIONS ANSI/AWWA C110/A21.10
- VALVES - DUCTILE IRON METROSEAL 250 RESILIENT SEATED GATE VALVES - AWWA C509.
- VALVE BOXES - CAST IRON, 3 PIECE ADJUSTABLE STAMPED W/ "WATER".
- SERVICE LINE - 3/4" MINIMUM, TYPE K COPPER, ASTM B88; POLYETHYLENE (PE), AWWA C901; OR POLYBUTYLENE (PB), AWWA C902.
- SVC SADDLE - FORD STYLE 304, OR APPROVED EQUAL.
- CORP. STOPS - MUELLER NO. H-15000 OR APPROVED EQUAL.
- CURB STOPS - MUELLER H-15175 OR APPROVED EQUAL.
- METER BOX - CAST IRON METER BOX W/ FLIP TOP READING COVER.

SEWER

- MAIN & SERVICE - PVC, SDR-26, ASTM D-3034 OR DUCTILE IRON, PROTECTO 401 CERAMIC EPOXY LINED.
- JOINTS - SLIP ON W/LOCKED-IN RUBBER GASKET, ASTM F-477.
- MANHOLES - PRE CAST CONCRETE, ASTM C-478. COAL TAR EPOXY COATING. REQUIRED ON INTERIOR AND EXTERIOR OF MANHOLE SECTIONS AND ON MANHOLE STEPS.
- PIPE BOOTS - KOR-N-SEAL MOLDED RUBBER CONNECTORS, OR EQUAL.
- FRAME & COVER - CAST IRON, ASTM A-78 OR EQUAL.
- STEPS - RUBBER COATED

GENERAL NOTES

STREET

1. STREET SUB GRADE AREAS WHERE EXPANSIVE CLAYS (CH) ARE ENCOUNTERED WITHIN 4' OF FINISHED GRADE SHALL BE UNDERCUT AND BACK FILLED AS REQUIRED TO SEPARATE PAVEMENT FROM EXPANSIVE CLAYS BY A MINIMUM 3 FOOT THICK LAYER OF SELECT SILTY CLAYS (CL) OR SANDY CLAYS (CL) HAVING A LIQUID LIMIT OF LESS THAN 40 AND A PI WITHIN THE RANGE OF 8 TO 20. THE BACK FILL AND FILL MATERIALS SHOULD BE SPREAD IN LOOSE LIFTS HAVING A MAXIMUM THICKNESS OF 9 IN. AND COMPACTED TO NOT LESS THAN 95 PERCENT OF STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D 698) AT MOISTURE CONTENTS WITHIN 3 PERCENTAGE POINTS OF THE OPTIMUM MOISTURE CONTENT. STABILITY MUST BE EVIDENT DURING COMPACTION OF EACH LIFT BEFORE ANY SUBSEQUENT LIFTS OF FILL OR BACK FILL MATERIAL ARE ADDED.
2. UNDERCUTTING AND BACK FILLING SHALL EXTEND A MINIMUM OF 2 FEET BEYOND BACK OF CURB.
3. PRIOR TO PLACING ASPHALT BASE MATERIAL, PAVING CONTRACTOR SHALL 1) FINE-GRADE THE SUB GRADE MATERIAL TO THE PROPER SECTION TO PERMIT PLACEMENT OF THE REQUIRED THICKNESS OF BASE COURSE; 2) COMPACT AND PROOF-ROLL SUB GRADE TO ACHIEVE STABILITY; AND ENSURE REQUIRED SUB GRADE DENSITY HAS BEEN ACHIEVED AND VERIFIED BY SOILS TESTING LABORATORY.

CURB AND GUTTER

1. CURB AND GUTTER SHALL BE 24" STANDARD (SEE DETAIL).
2. SUB GRADE BENEATH CURB AND GUTTER SHALL BE FINE GRADED AND COMPACTED TO ACHIEVE STABILITY UNDER PRESSURE OF THE REAR WHEEL LOADING OF A MOTOR GRADER MOVING SLOWLY OVER THE CURB AND GUTTER SUB GRADE.
3. AFTER FORMS AND/OR CURB AND GUTTER STRING LINES HAVE BEEN SET AND BEFORE CONCRETE IS POURED, CONTRACTOR SHALL VERIFY THAT ALL GUTTERS DRAIN TO INLETS. MINIMUM SLOPE: 9" PER 100'
4. EXPANSION JOINTS IN CURB AND GUTTER SHALL BE 3/4" JOINT MATERIAL PLACED AT 30' (MAXIMUM) INTERVALS.
5. CONTRACTION JOINTS IN CURB AND GUTTER SHALL BE SCORED AT INTERVALS NOT GREATER THAN 10 FEET AND SPACED EQUALLY BETWEEN EXPANSION JOINTS.
6. CONCRETE FOR CURB AND GUTTER SHALL BE 3,000 PSI MINIMUM.
7. 48" SIDEWALKS SHALL BE CONSTRUCTED BY THE BUILDER ON EACH LOT AFTER ALL UTILITY SERVICES ARE INSTALLED AND THE SITE HAS BEEN GRADED AND SHAPED TO ITS FINISHED TOPOGRAPHY. NOT A PART OF THIS PROJECT.

STORM DRAINAGE & EROSION CONTROL

1. ALL STORM DRAINAGE PIPE AND INLETS SHALL BE FLUSHED AND CLEARED OF ANY CONSTRUCTION MATERIALS AND/OR SEDIMENT UPON PROJECT COMPLETION.
2. THE CONSTRUCTION EXIT SHALL BE MAINTAINED SUCH THAT ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES OR SITE ONTO ROADWAYS MUST BE REMOVED IMMEDIATELY.
3. INLET SEDIMENT TRAPS SHALL CONSIST OF HAY BALES FULLY SURROUNDING EACH INLET.
4. SEDIMENT BARRIERS SHALL BE HAY BALES PLACED IN ALL DRAINAGE WAYS TO PREVENT SEDIMENT FROM LEAVING CONSTRUCTION SITE.

WATER & SEWER

1. ALL WATER AND SANITARY SEWER CONSTRUCTION TO BE IN ACCORDANCE WITH THE CITY OF RIDGELAND STANDARD SPECIFICATIONS.
2. WHERE A SANITARY SEWER MAIN OR SERVICE LINE CROSSES ABOVE A WATER MAIN OR WITHIN 18 INCHES BELOW A WATER MAIN, OR WITHIN 10 FEET ON EITHER SIDE OF A WATER MAIN THE SEWER MAIN OR SERVICE LINE SHALL BE CONSTRUCTED OF DUCTILE IRON.
3. SEWER SERVICE LINES SHALL BE 6"; SEWER MAINS SHALL BE 8" SDR-26 PVC.
4. WATER SERVICE LINES SHALL BE 1" POLYBUTYLENE.
5. SERVICES FOR WATER AND SEWER SHALL BE LOCATED NEAR THE CENTER OF ALL LOTS WITH 10 FOOT SEPARATION.
6. BACK FILL OF ALL TRENCHES UNDER EXISTING OR PROPOSED PAVEMENTS AND CURB AND GUTTER SHALL BE MECHANICALLY COMPACTED IN 9" MAXIMUM LOOSE LIFTS TO A MINIMUM OF 95% STANDARD PROCTOR PEAK DRY DENSITY.
7. DEFLECTION TEST SHALL BE PERFORMED ON ALL FLEXIBLE PIPE. THE TEST SHALL BE CONDUCTED AFTER THE FINAL BACK FILL HAS BEEN IN PLACE AT LEAST 30 DAYS. DEFLECTION TEST SHALL BE RUN USING A RIGID BALL OR MANHOLE HAVING A DIAMETER EQUAL TO 95% OF THE INSIDE DIAMETER OF THE PIPE. THE TEST SHALL BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES.
8. WATER MAINS SHALL BE INSTALLED WITH 4' MINIMUM COVER UNDER ROADWAY SECTIONS AND 3' MINIMUM COVER ELSEWHERE.
9. CONTRACTOR SHALL MAINTAIN RECORDS DURING CONSTRUCTION OF HORIZONTAL LOCATION OF ALL WATER AND SEWER SERVICES FOR AS BUILT RECORDS.

INDEX TO DRAWINGS

- 1 COVER SHEET
- 2 GENERAL NOTES AND INDEX TO DRAWINGS
- 3 STREETS & LOT LAYOUT
- 4 WATER & SEWER LAYOUT
- 5 STORM DRAINAGE LAYOUT
- 6 PLAN AND PROFILE - NEWPOINTE DRIVE STA. 0+00 - STA. 15+16.41
- 7 PLAN AND PROFILE - SANITARY SEWER OUTFALL STA. 0+00 - STA. 14+50
- 8 PLAN AND PROFILE - SANITARY SEWER OUTFALL STA. 14+50 - STA. 18+03.23
- 9 STANDARD SEWER DETAILS
- 10 STANDARD MISCELLANEOUS DETAILS

LEGEND

	PROPERTY LINE
	LOT LINE
	RIGHT OF WAY LINE
	EASEMENT
	SETBACK LINE
	CENTER LINE
	EDGE OF PAVEMENT
	BACK OF CURB
	EXISTING CONTOUR
	PROPOSED SANITARY SEWER & MANHOLE
	PROPOSED STORM SEWER & CATCH BASIN
	SANITARY SEWER
	WATER LINE
	PROPOSED WATER VALVE
	PROPOSED FIRE HYDRANT
	PROPOSED TEE

RECORD DRAWING

BY: *R. Nason* DATE: 4/6/01



NEWPOINTE BUSINESS PARK
A DEVELOPMENT OF
GARY B. CRESS, ET AL

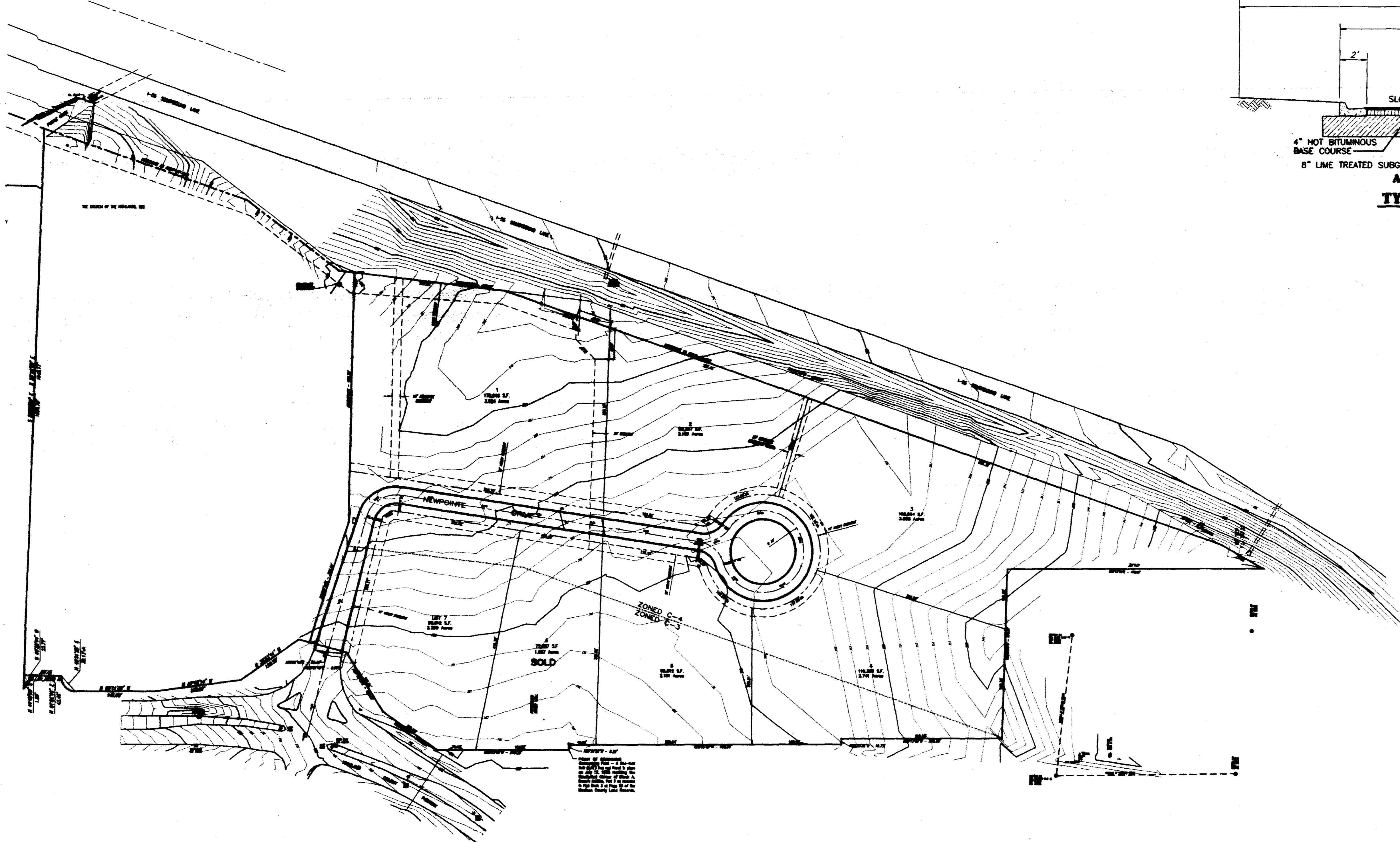
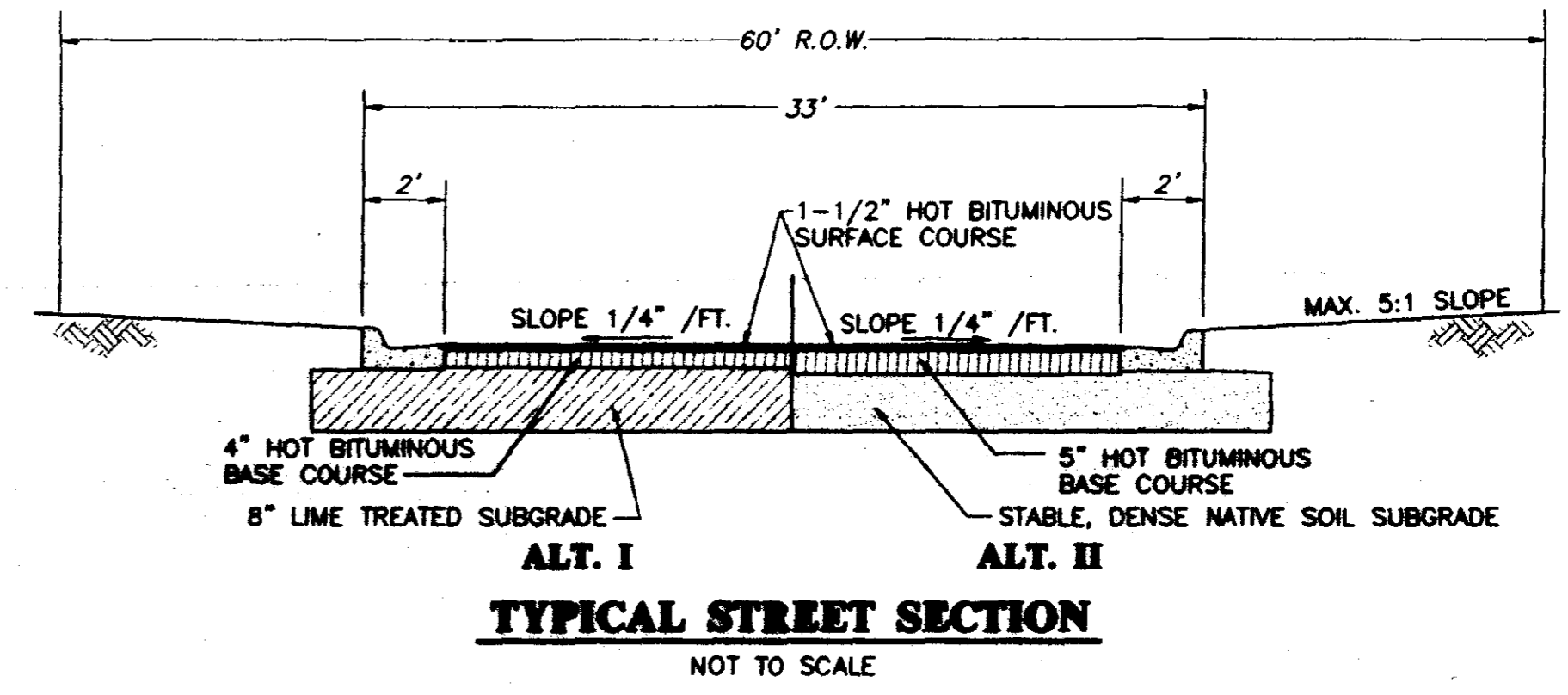
GENERAL NOTES AND INDEX TO DRAWINGS

CITY OF RIDGELAND
MADISON COUNTY, MISSISSIPPI

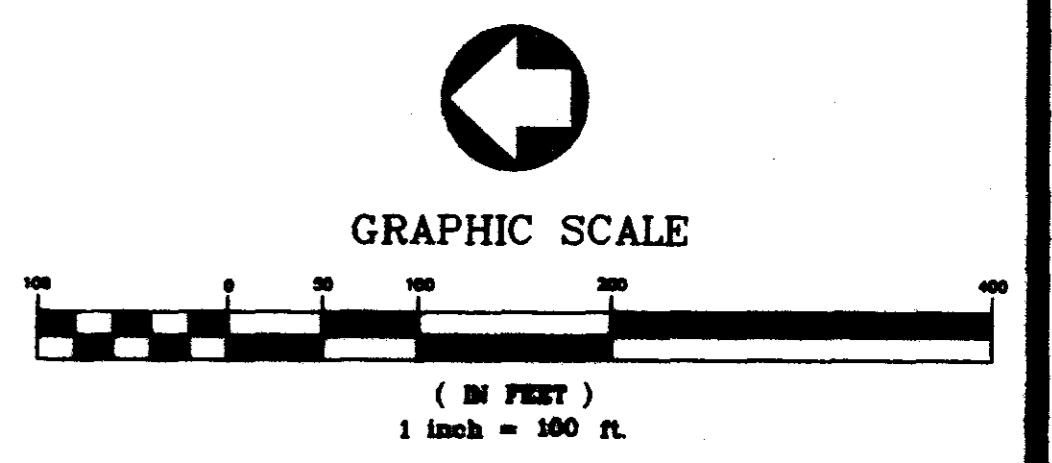
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STERLING
Consultants

DRAWING NO.
2 - 10



RECORD DRAWING
BY: *R. H. ...* DATE: 4/16/01



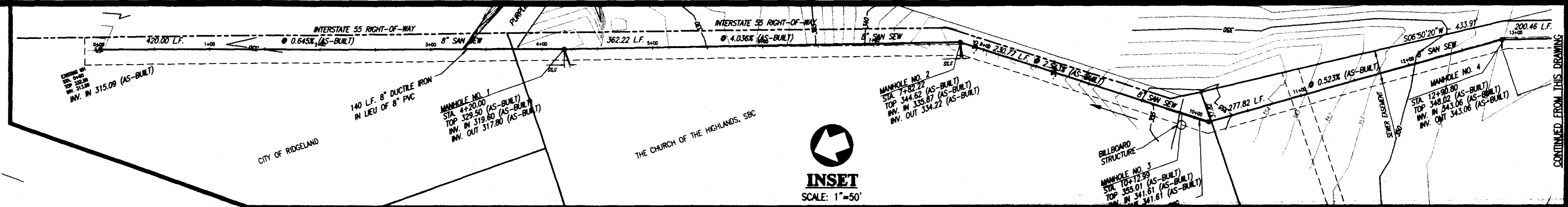
NEWPOINTE BUSINESS PARK A DEVELOPMENT OF GARY B. CRESS, ET AL			
STREET & LOT LAYOUT			
CITY OF RIDGELAND MADISON COUNTY, MISSISSIPPI			
DESIGN: R.C.V.	DATE: 02/22/00		DRAWING NO.
DESIGN: R.C.V.	DATE: 02/22/00		3 of 10
CHECK: R.C.V.	DATE: 8/10/00		
SCALE: 1"=100'			



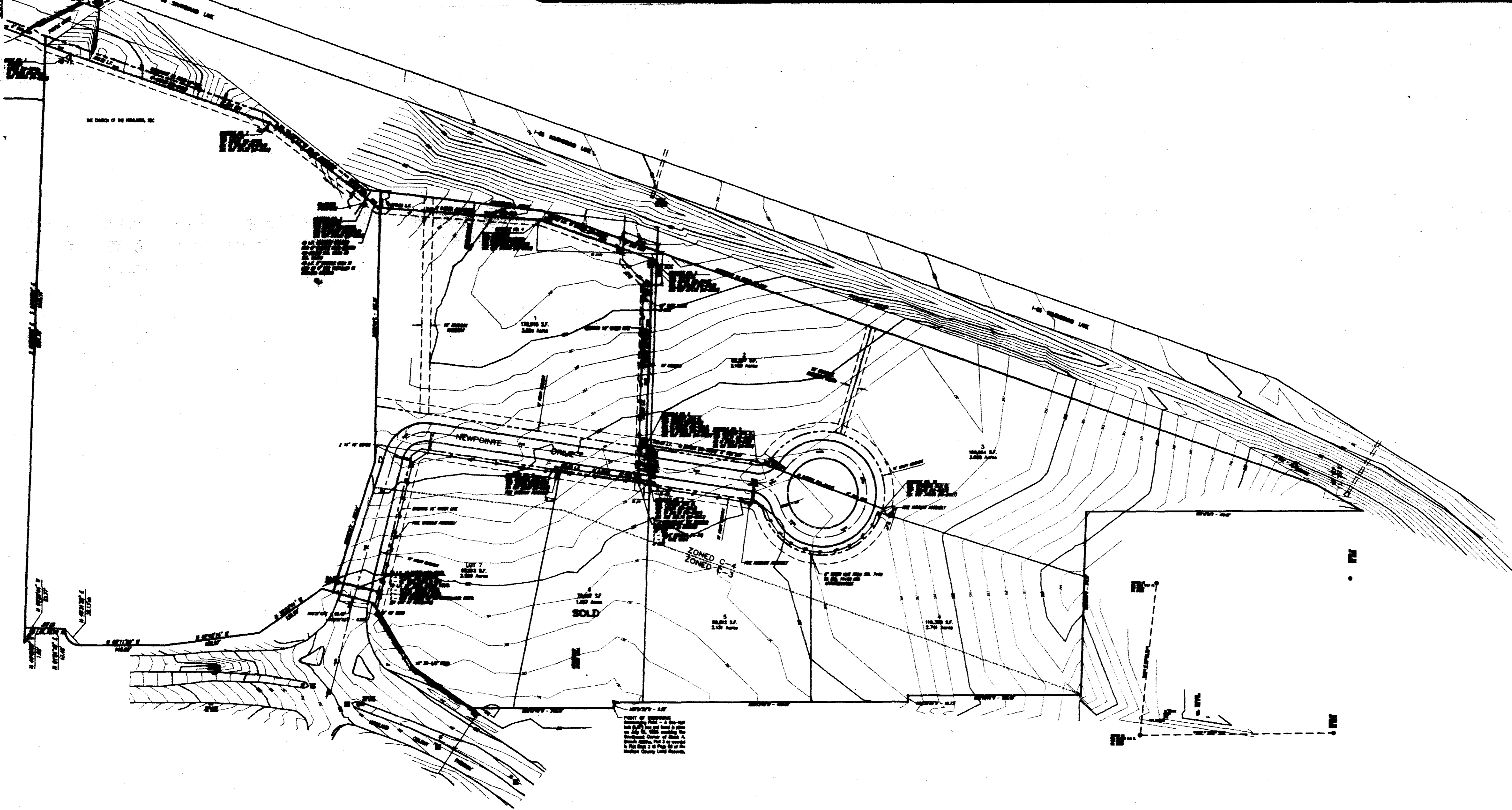
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REVISED PER CITY OF RIDGELAND COMMENTS 1/04/01	R.C.V.	DATE: 04/16/01
REVISION	BY	DATE

CONTINUED INSET THIS DRAWING

CONTINUED FROM THIS DRAWING



INSET
SCALE: 1"=50'



NOTES:

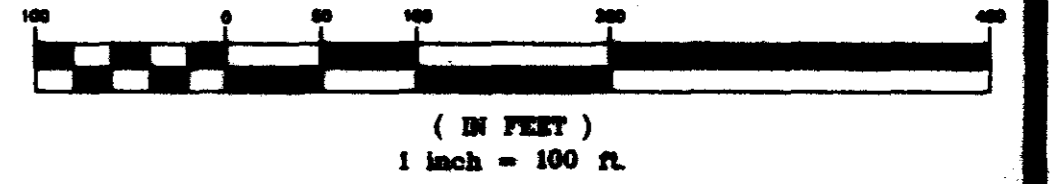
1. SANITARY SEWER SERVICES SHALL BE STUBBED OUT FOR EACH LOT AT THE MANHOLES SHOWN.
2. CONNECTIONS FOR WATER AND IRRIGATION SERVICES SHALL BE MADE AT THE TIME EACH LOT IS DEVELOPED AND SHALL BE MADE WITHOUT CUTTING ANY STREET.

RECORD DRAWING

BY: *R. Korman* DATE: 4/16/01



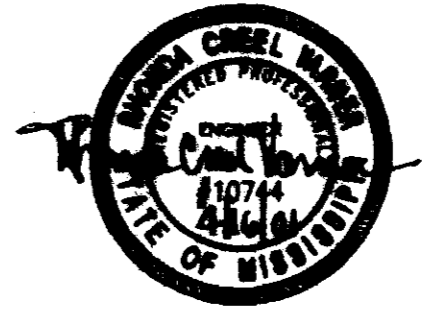
GRAPHIC SCALE



**NEWPOINTE BUSINESS PARK
A DEVELOPMENT OF
GARY B. CRENS, ET AL**

**WATER & SEWER
LAYOUT**

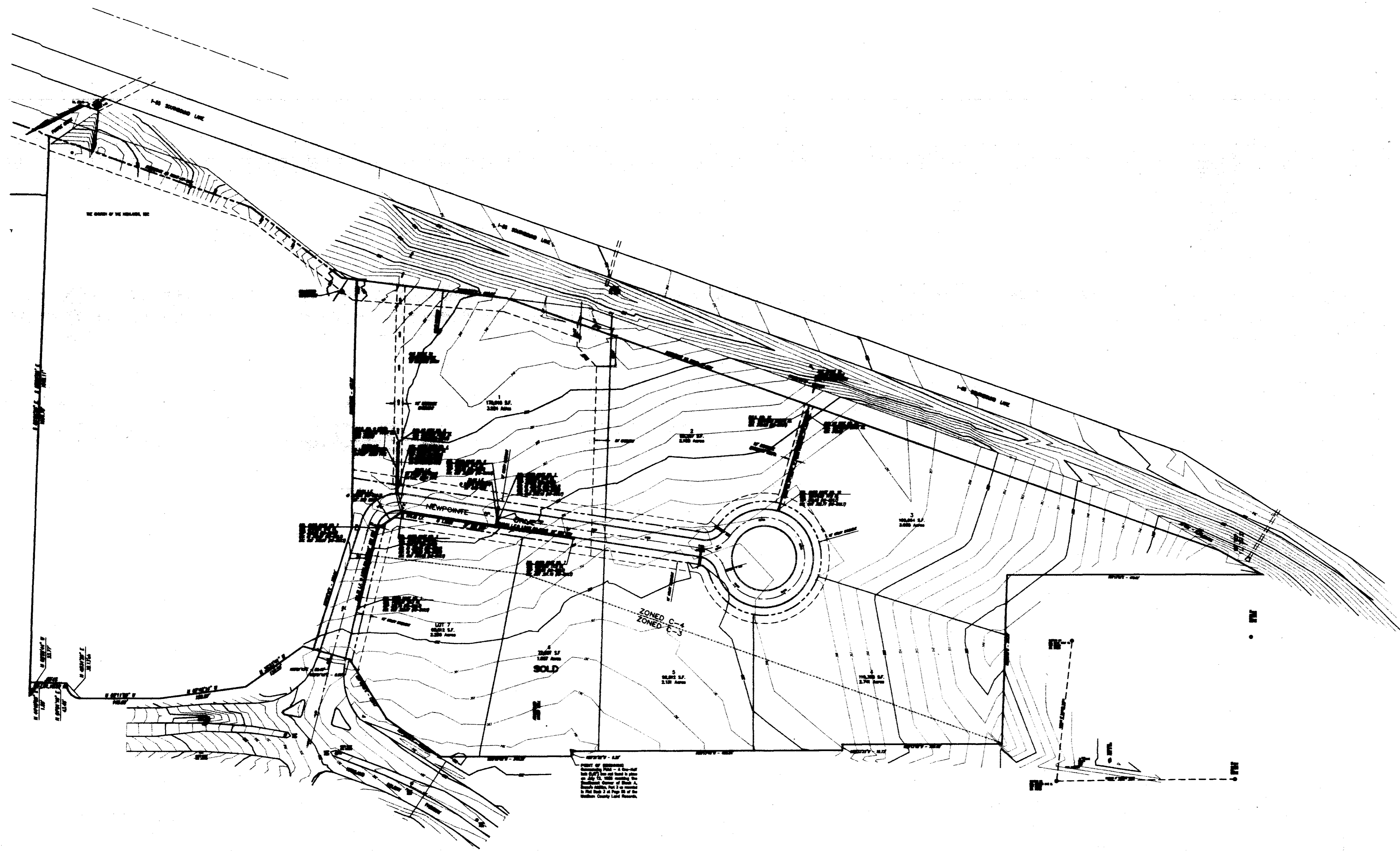
**CITY OF RIDGELAND
MADISON COUNTY, MISSISSIPPI**



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REVISION	BY	DATE

ISSUED R.C.V.	DATE 07/11/00	STERLING Consultants	DRAWING NO. 4 - 10
DESIGNED R.D.B.	DATE 07/11/00		
CHECKED R.C.V.	DATE 07/11/00		
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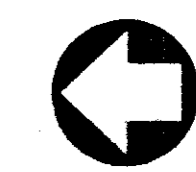
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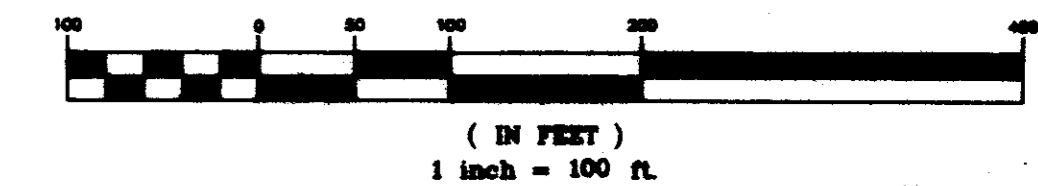
NOTES:
 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.
 2. THE DESIGNER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE DATA PROVIDED BY THE CLIENT.
 3. THE DESIGNER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE DATA PROVIDED BY THE CLIENT.

RECORD DRAWING

BY: *R. Bates* DATE: 4/16/01



GRAPHIC SCALE



**NEWPOINTE BUSINESS PARK
 A DEVELOPMENT OF
 GARY B. CRESS, ET AL**

**STORM DRAINAGE
 LAYOUT**

**CITY OF RIDGELAND
 MADISON COUNTY, MISSISSIPPI**

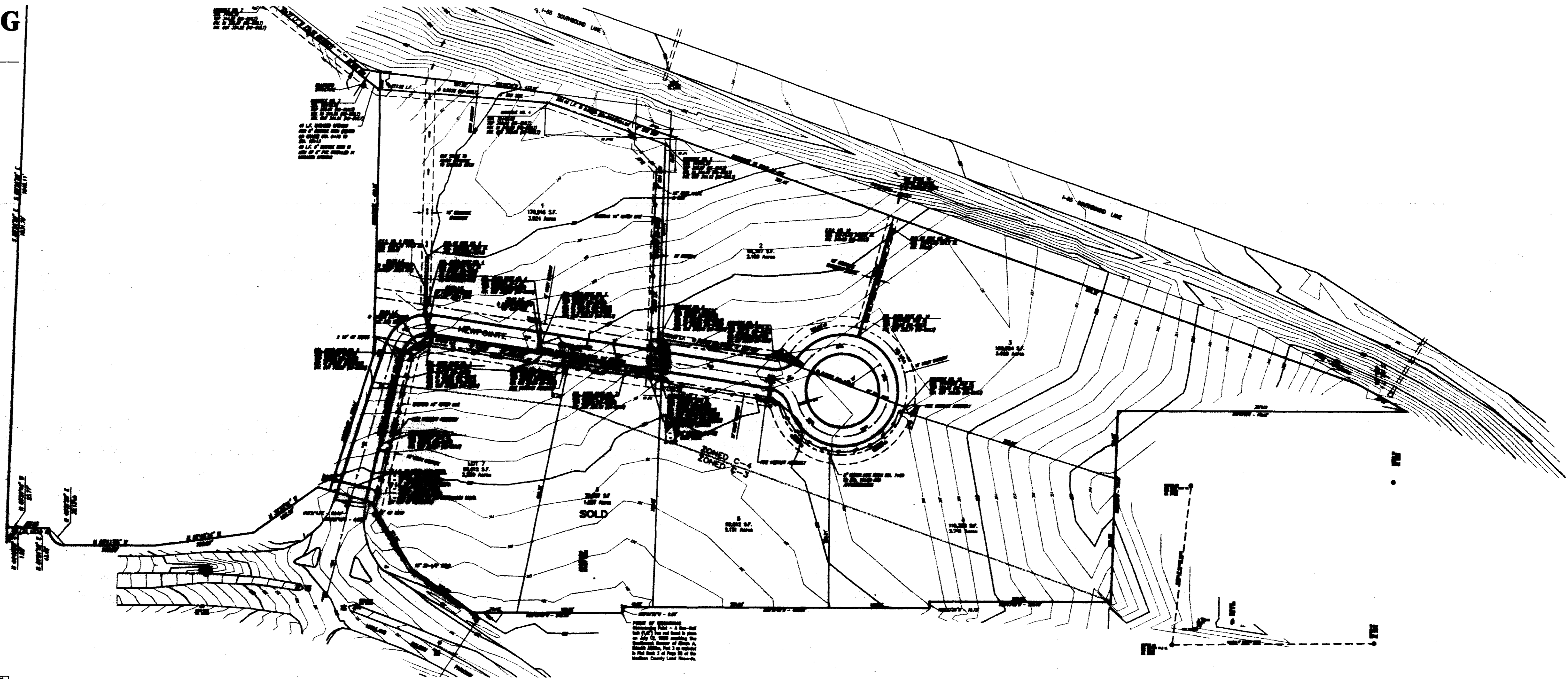


AS-BUILT DRAWINGS	RDB	04/16/01
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REVISION	BY	DATE

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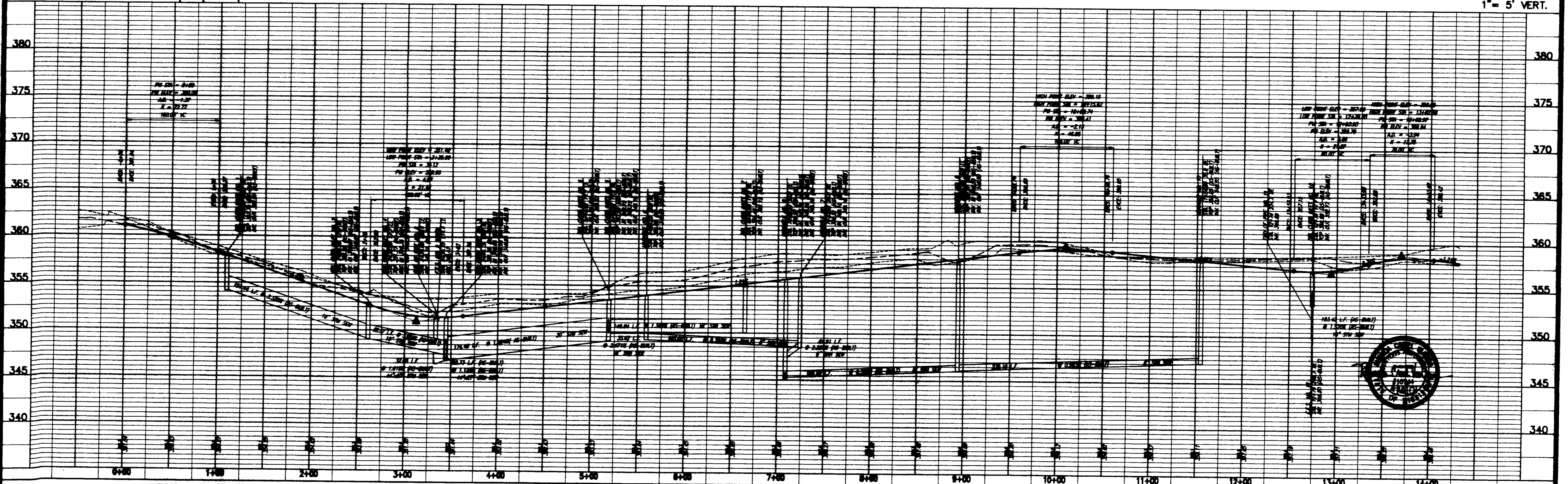
BY: *R. Williams* DATE: 4/16/01



AS-BUILT DRAWINGS
REVISED PER CITY OF RIDGELAND COMMENTS 1/04/01



SCALE 1" = 50' HORIZ.
1" = 5' VERT.



NEWPOINTE BUSINESS PARK
CITY OF RIDGELAND
MADISON COUNTY, MISSISSIPPI

PLAN AND PROFILE - NEWPOINTE DRIVE
STA. 0+00 - STA. 15+16.41

Prepared For:
GARY B. CHEN, ET AL
RIDGELAND, MISSISSIPPI

Checked By	RCV	DATE	07/23/02
Drawn By	RDP	DATE	07/23/02
Checked By	RCV	DATE	8/12/02
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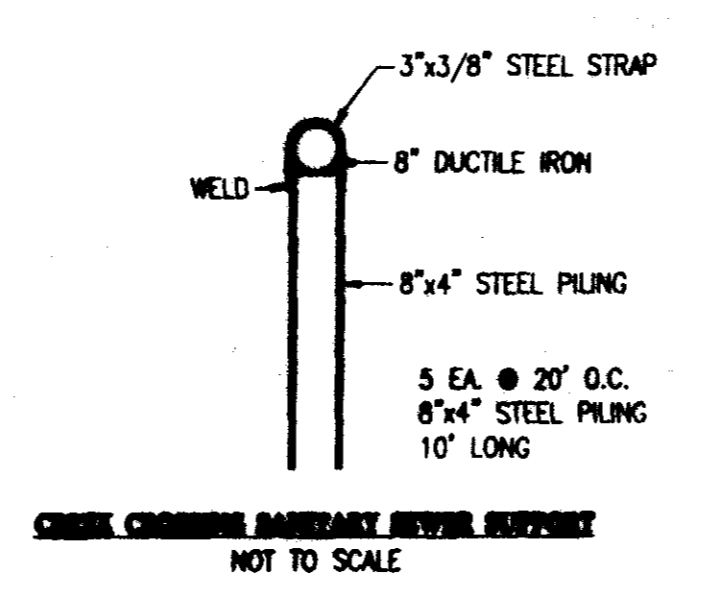
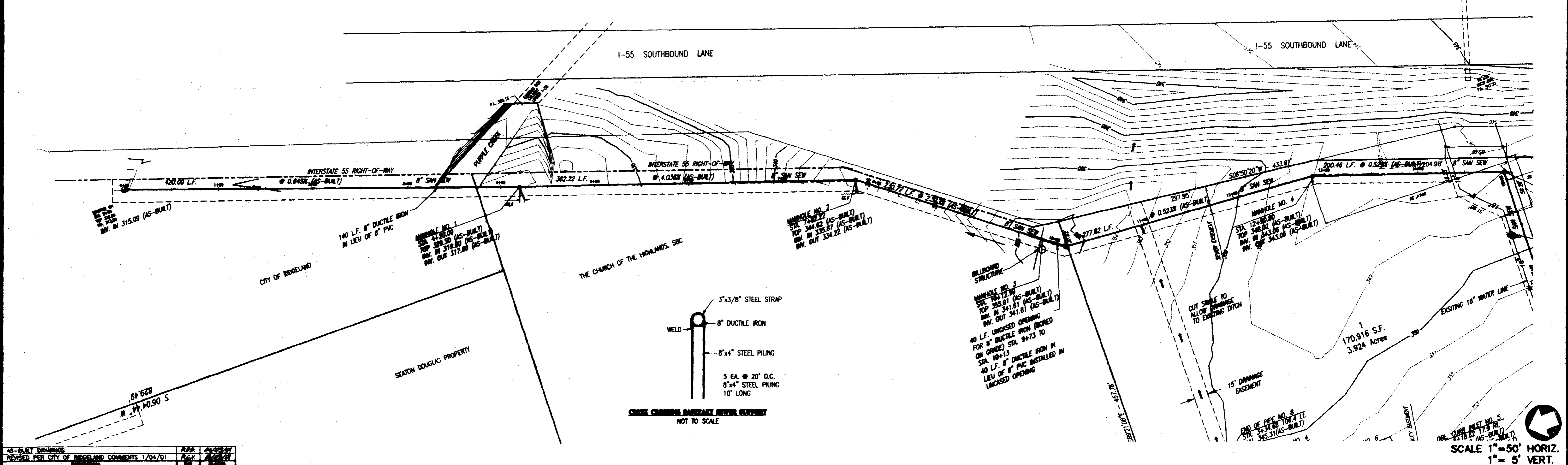


Drawing No.
6 of 10

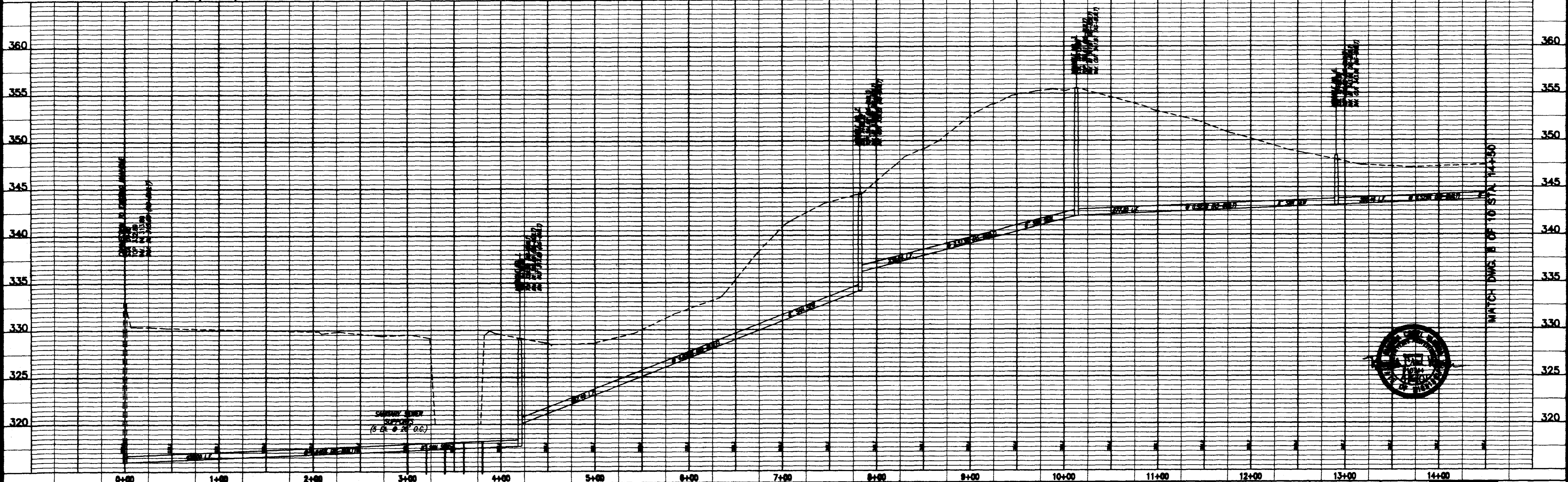
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RECORD DRAWING

BY: *R. Warner* DATE: 4/6/01



AS-BUILT DRAWINGS	RWS	AW/SL
REVISED PER CITY OF RIDGELAND COMMENTS 1/04/01	R/W	AW/SL



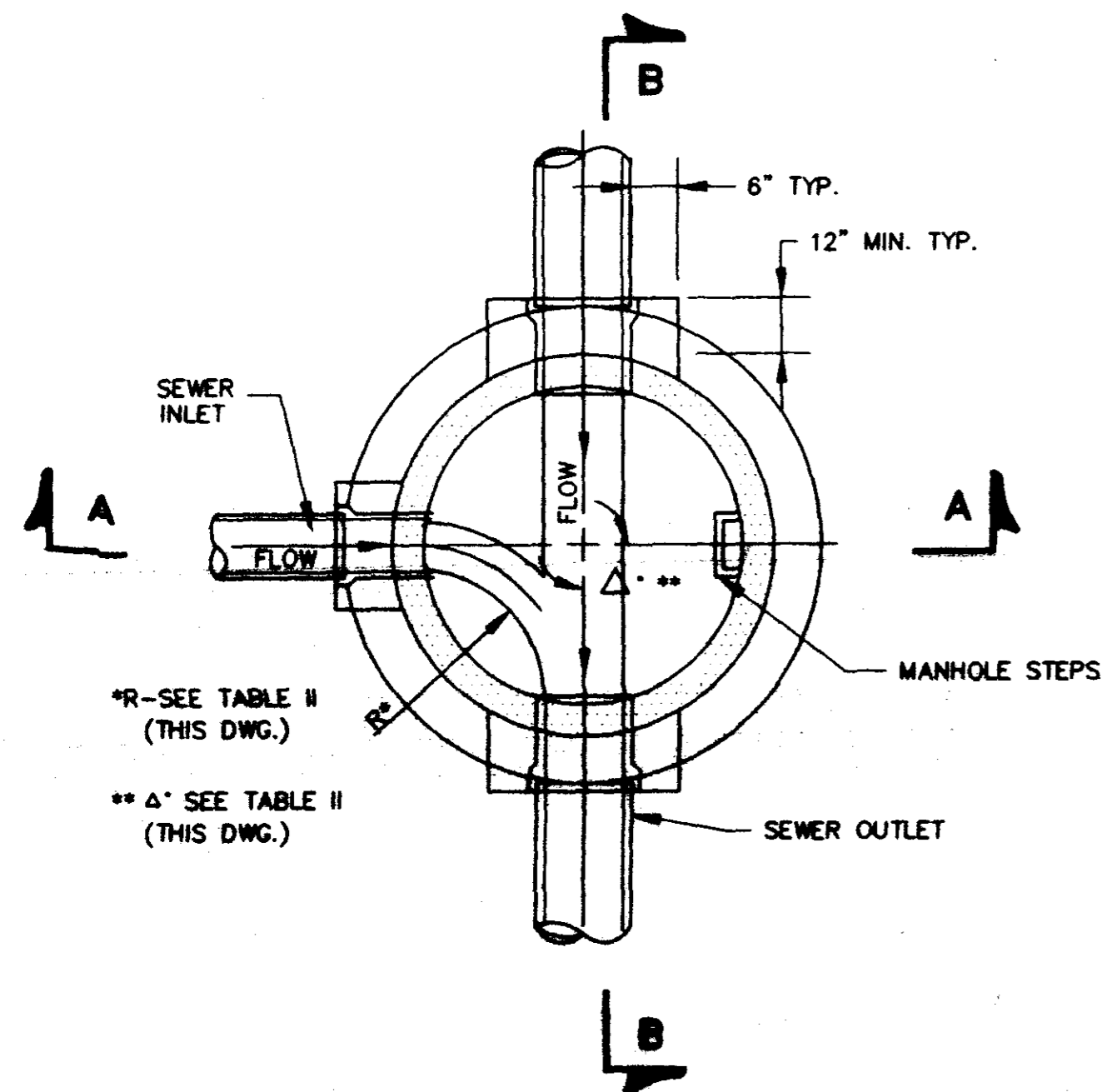
NEWPOINTE BUSINESS PARK
 CITY OF RIDGELAND
 MADISON COUNTY, MISSISSIPPI

PLAN AND PROFILE - SANITARY SEWER OUTFALL STA. 0+00 - STA. 14+50

Prepared For:
 GARY B. CRESS, ET AL
 RIDGELAND, MISSISSIPPI

Checked By	RCV	DATE	02/21/02
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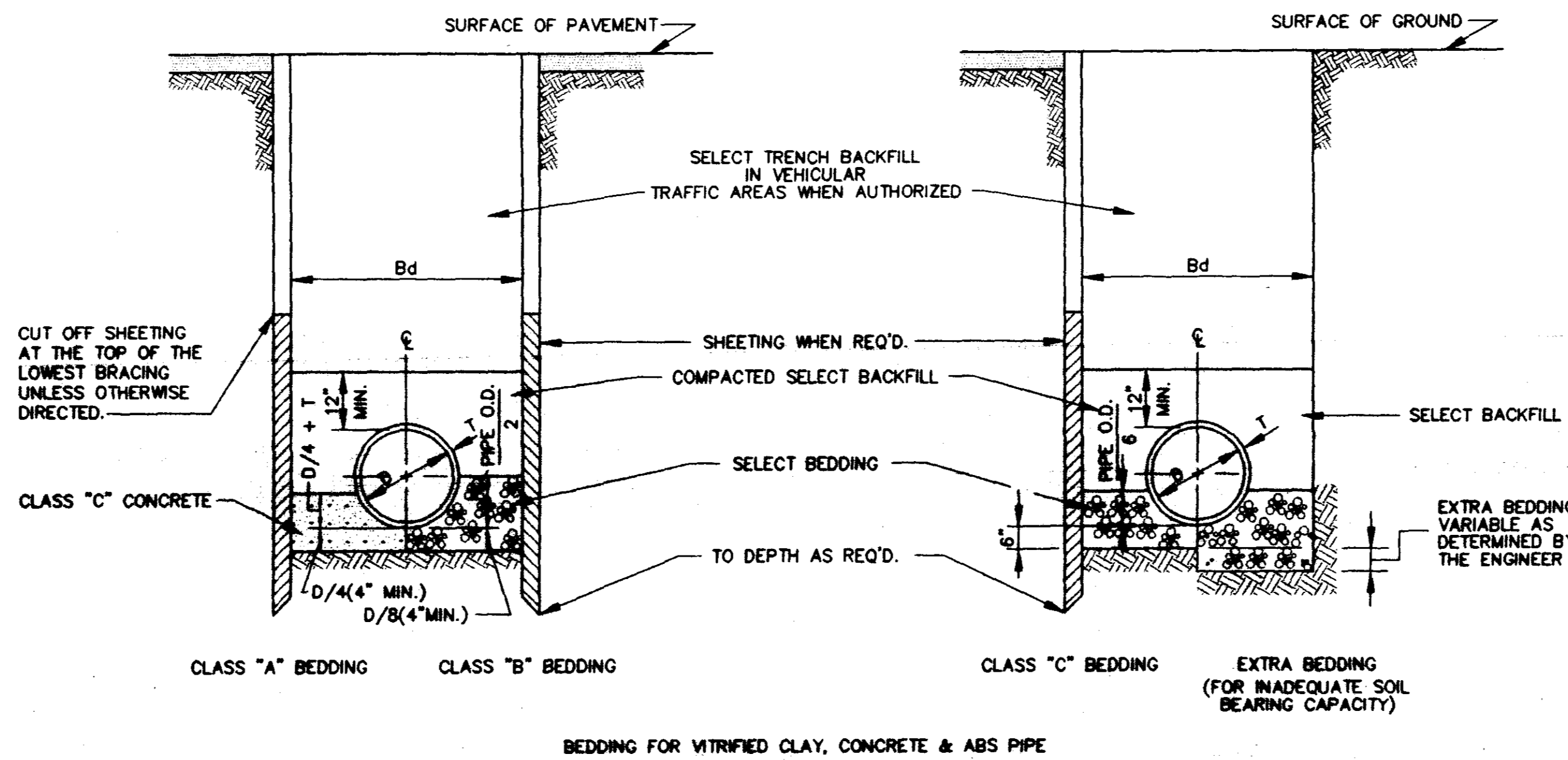


*R-SEE TABLE II (THIS DWG.)
 ** Δ SEE TABLE II (THIS DWG.)

**SECTIONAL PLAN
 STANDARD MANHOLE**
 NOT TO SCALE

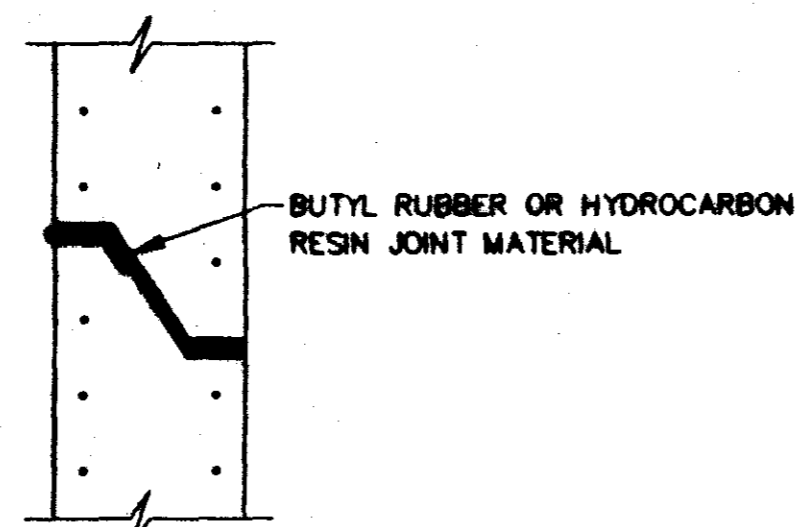
TABLE II GOVERNING DIMENSIONS FOR MANHOLES			
PIPE SIZE	Δ ANGLE	BASE DIAMETER **	R *
12" THRU 12"	0° TO 90°	4'	1'-8"
15"	0° TO 90°	4'	1'-10"
18"	0° TO 90°	4'	1'-10"
18"	0° TO 90°	4'	2'-3"
21"	0° TO 90°	4'	1'-10"
21"	0° TO 90°	4'	2'-7"
24"	0° TO 90°	5'	2'-4"
24"	45° TO 90°	5'	2'-3"
30"	0° TO 90°	5'	3'-9"
30"	60° TO 90°	6'	2'-8"
36"	0° TO 90°	6'	4'-8"
36"	60° TO 90°	7'	3'-11"
42"	0° TO 90°	7'	5'-3"
42"	60° TO 90°	8'	4'-7"
48"	0° TO 90°	8'	6'-0"
48"	60° TO 90°	9'	5'-3"

* SEE SECTIONAL PLAN, STANDARD MANHOLE
 ** PRECAST MANHOLE

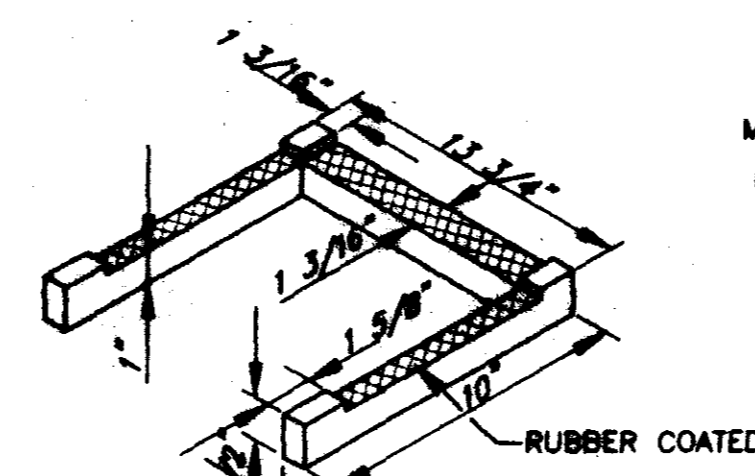


BEDDING FOR VITRIFIED CLAY, CONCRETE & ABS PIPE

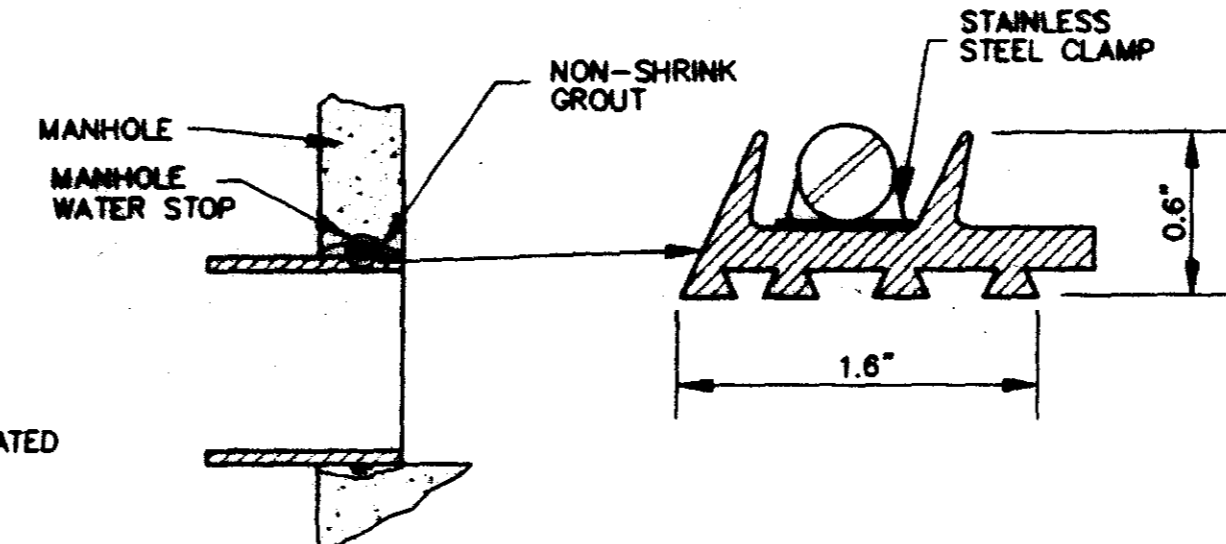
TYPICAL TRENCH DETAILS
 NOT TO SCALE



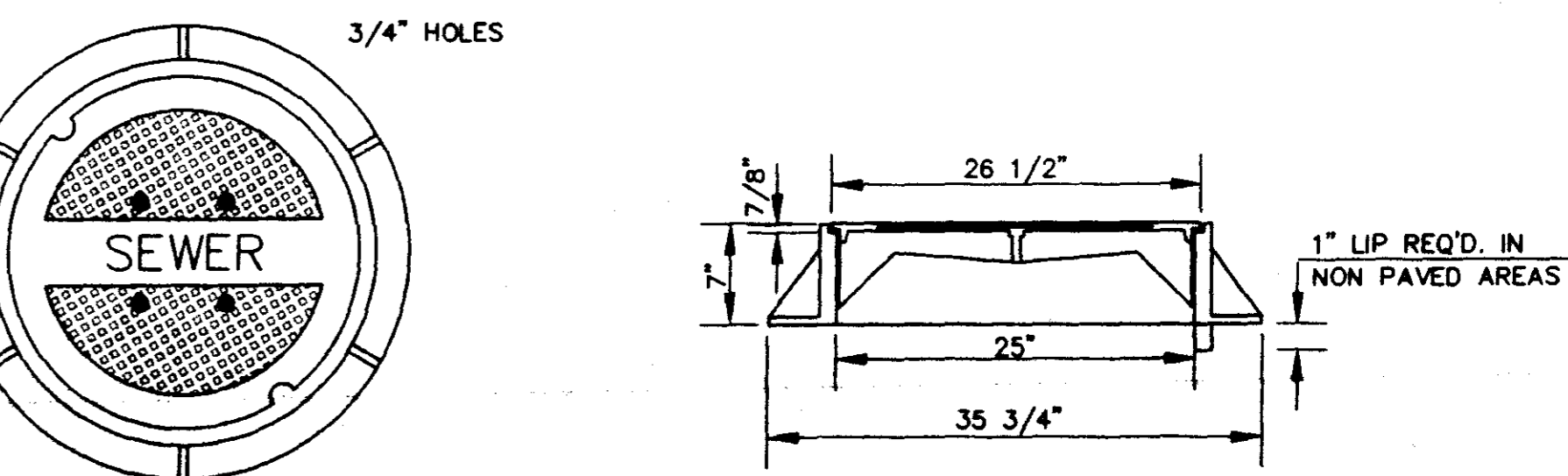
**TYPICAL PRECAST CONCRETE
 MANHOLE JOINT DETAIL**
 N.T.S.



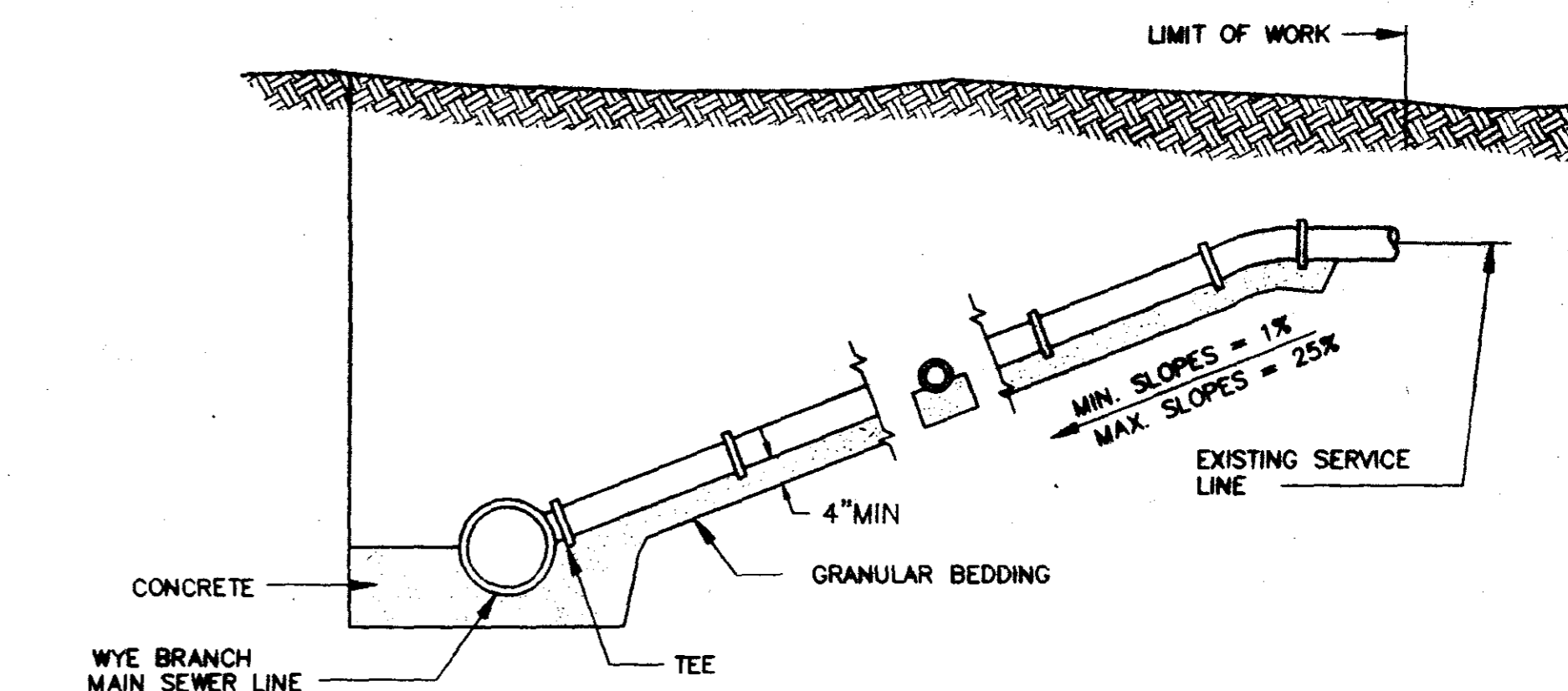
MANHOLE STEP DETAIL
 NOT TO SCALE



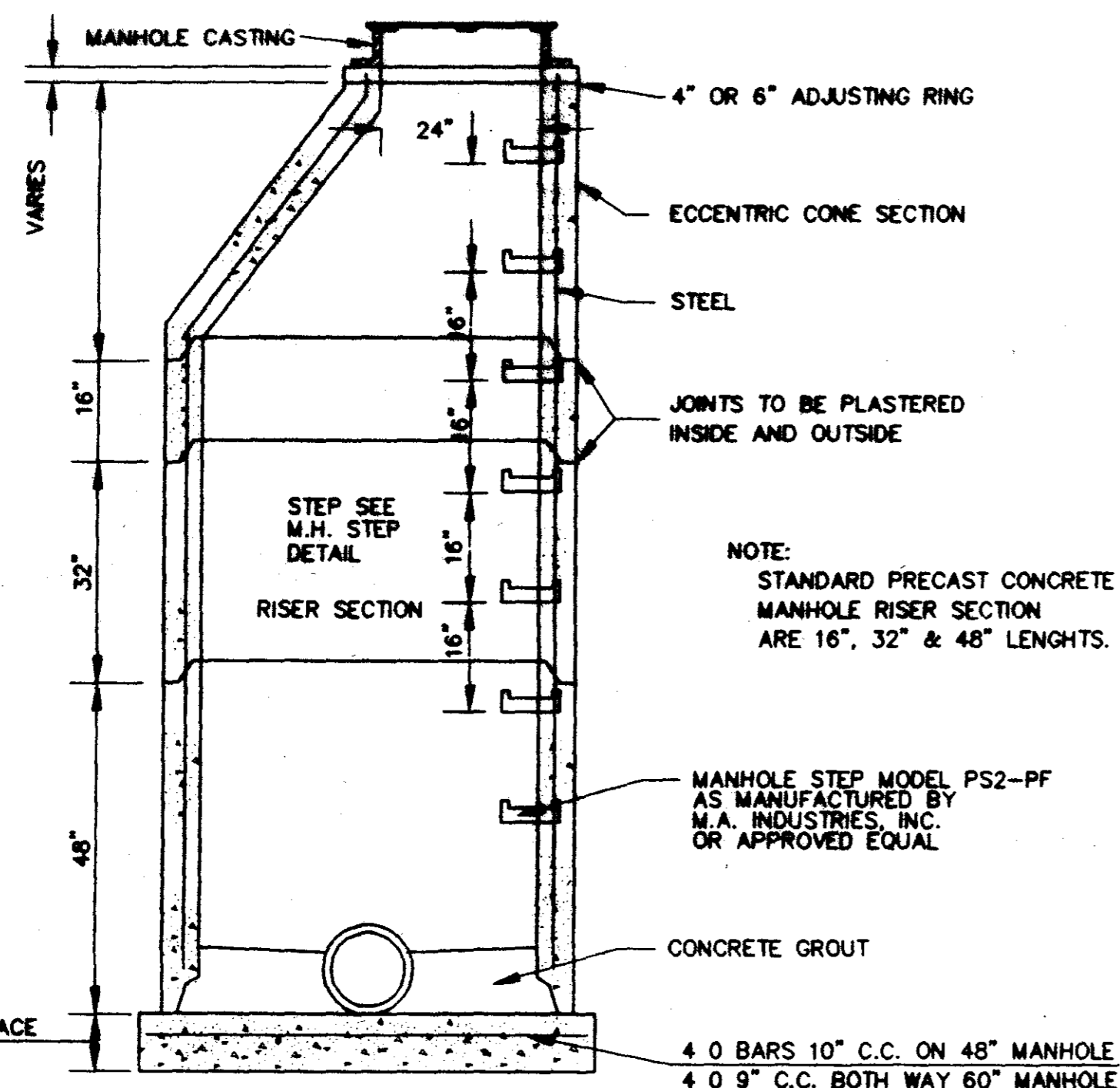
**TYPICAL MANHOLE WATER STOP
 FOR ABS, CLAY OR PVC PIPE**
 EXISTING AND "STRADDLE" MANHOLES
 N.T.S.



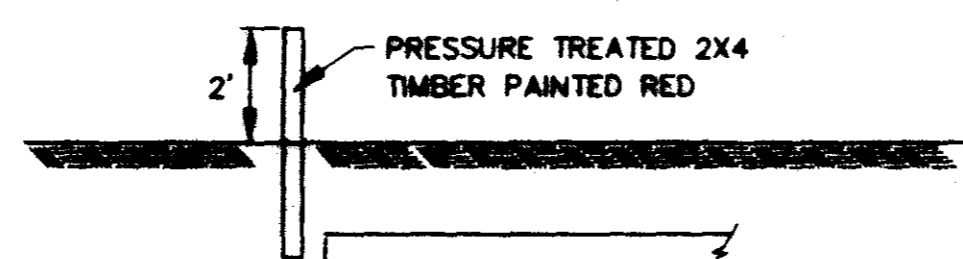
TOP PLAN OF COVER
SECTION
 FRAME & COVER WEIGHT 420 LBS.
STANDARD MANHOLE FRAME AND COVER
 N.T.S.



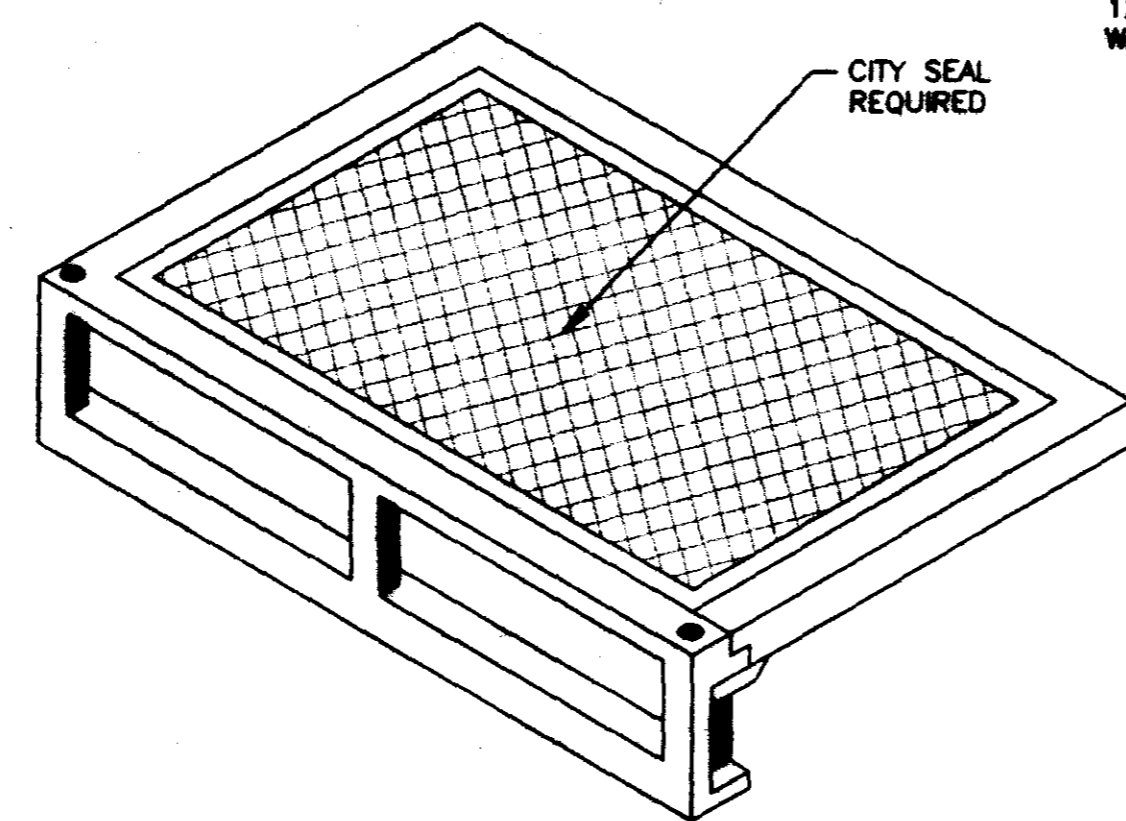
TYPICAL SERVICE LINE CONNECTION
 NOT TO SCALE



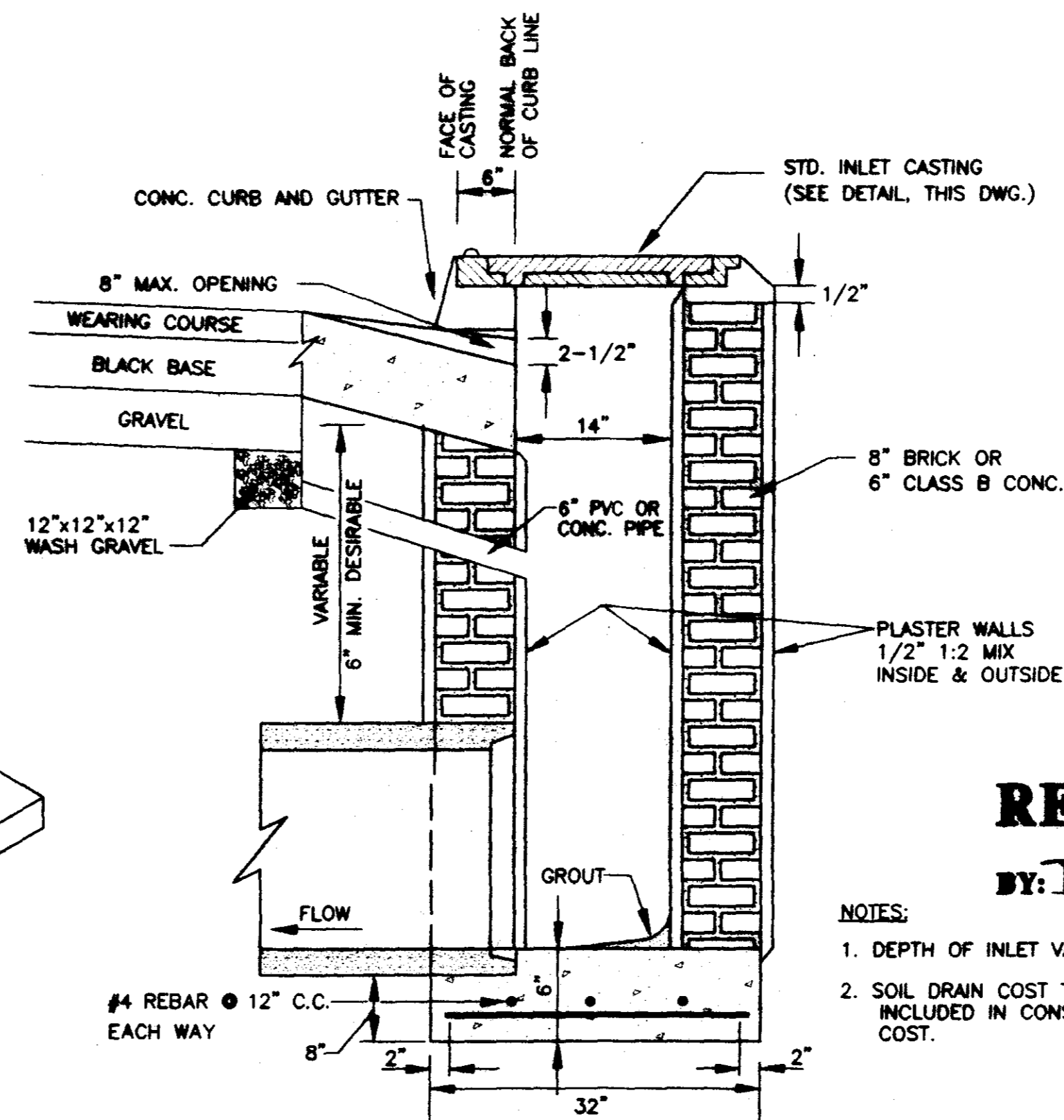
SECTION OF PRECAST CONCRETE MANHOLE
 N.T.S.



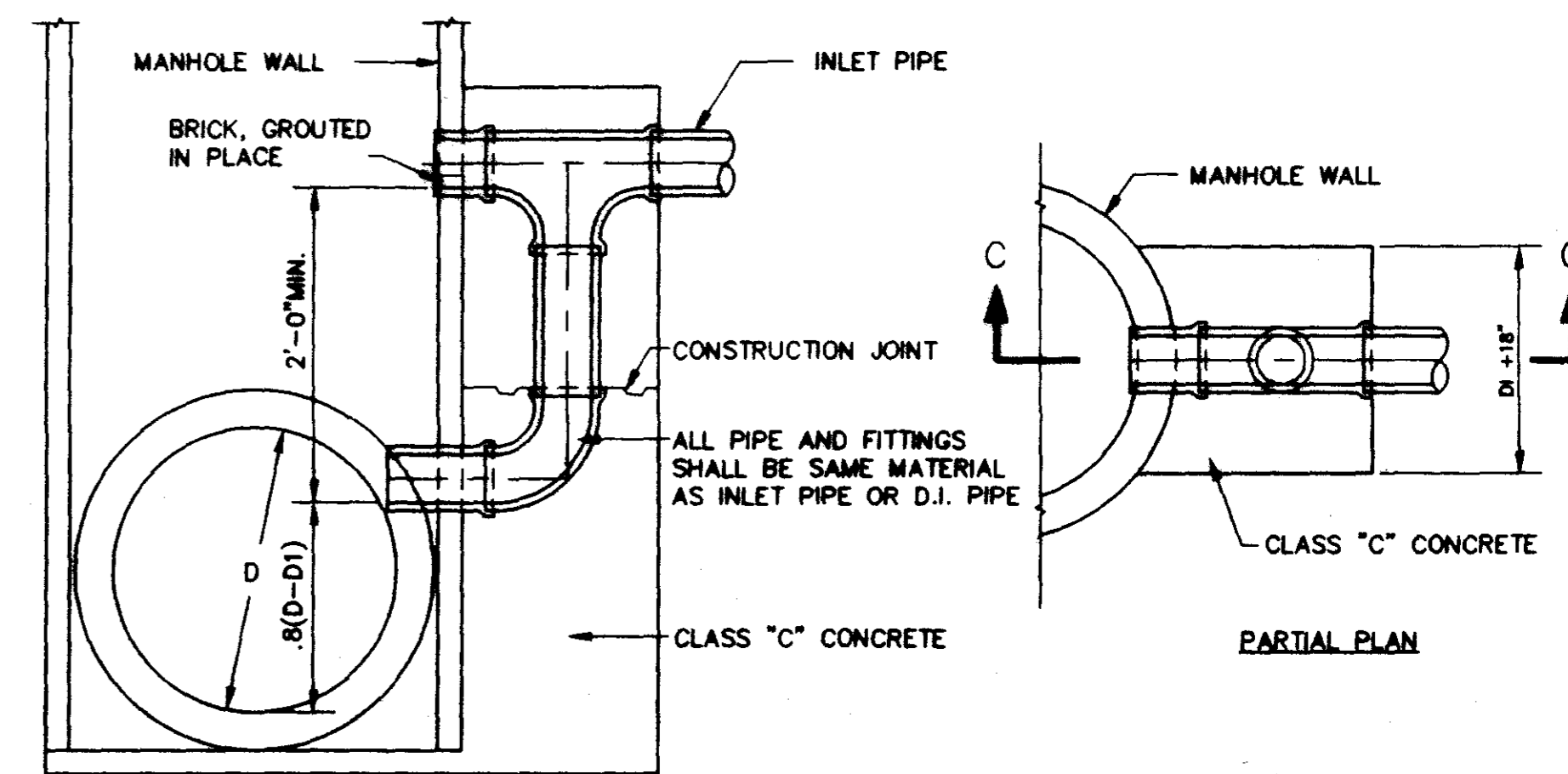
SERVICE LINE MARKER
 NOT TO SCALE



STANDARD CURB INLET CASTING
 (VULCAN V-4302-1 OR HARPER RCB-7)
 N.T.S.



SECTION OF STANDARD CURB INLET



TYPICAL VERTICAL DROP INLET AT MANHOLE
 N.T.S.

RECORD DRAWING

BY: *[Signature]* DATE: 4/16/01

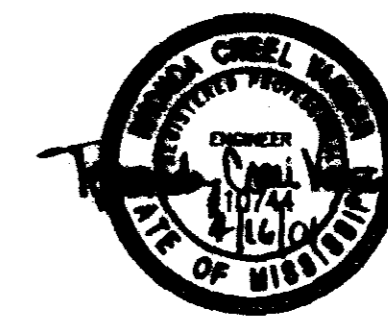
- NOTES:
 1. DEPTH OF INLET VARIABLE.
 2. SOIL DRAIN COST TO BE INCLUDED IN CONSTRUCTION COST.

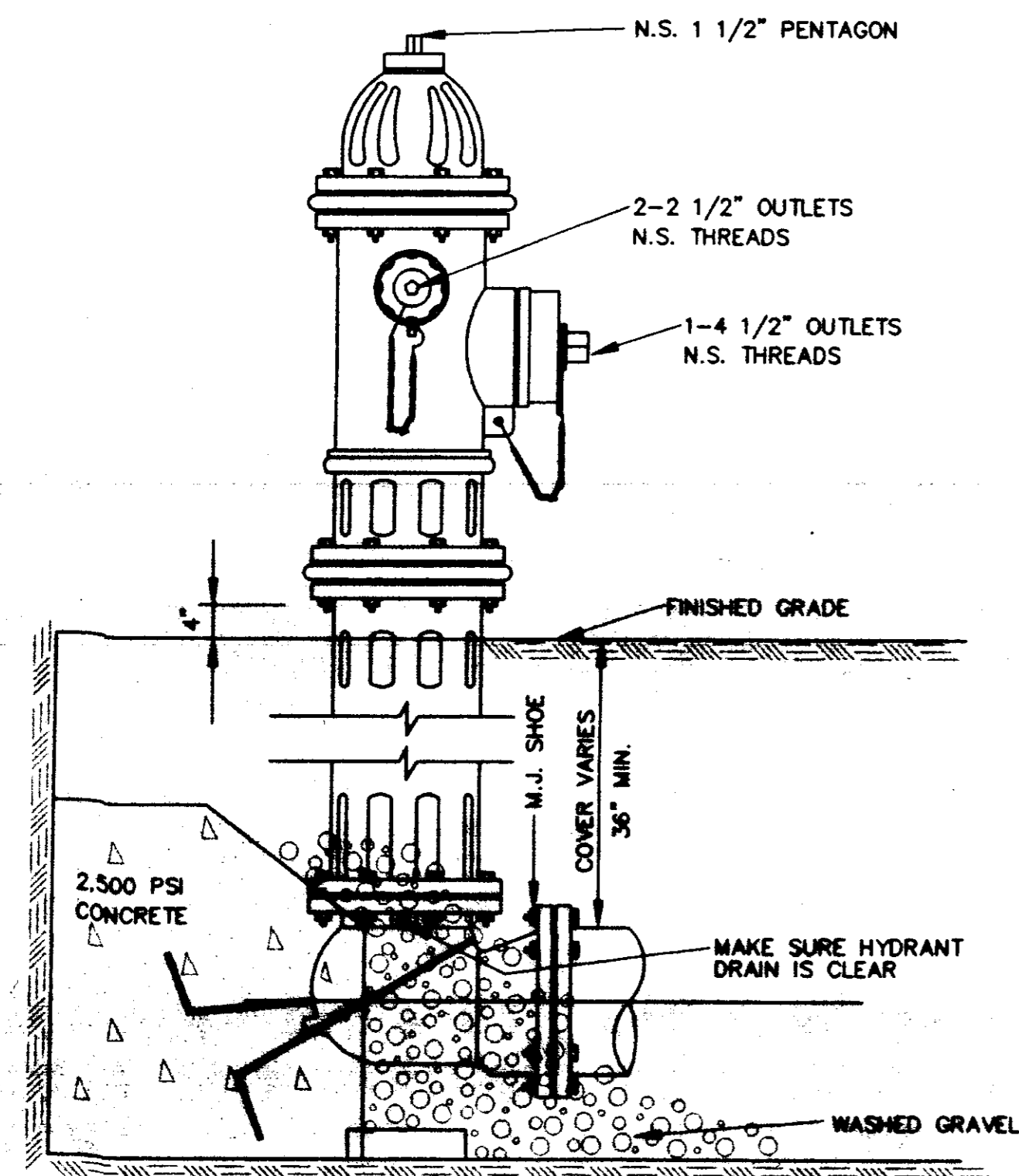
NEWPOINTE BUSINESS PARK
 A DEVELOPMENT OF
 CRESS DEVELOPMENT, INC. G.P.

**STANDARD
 SEWER DETAILS**

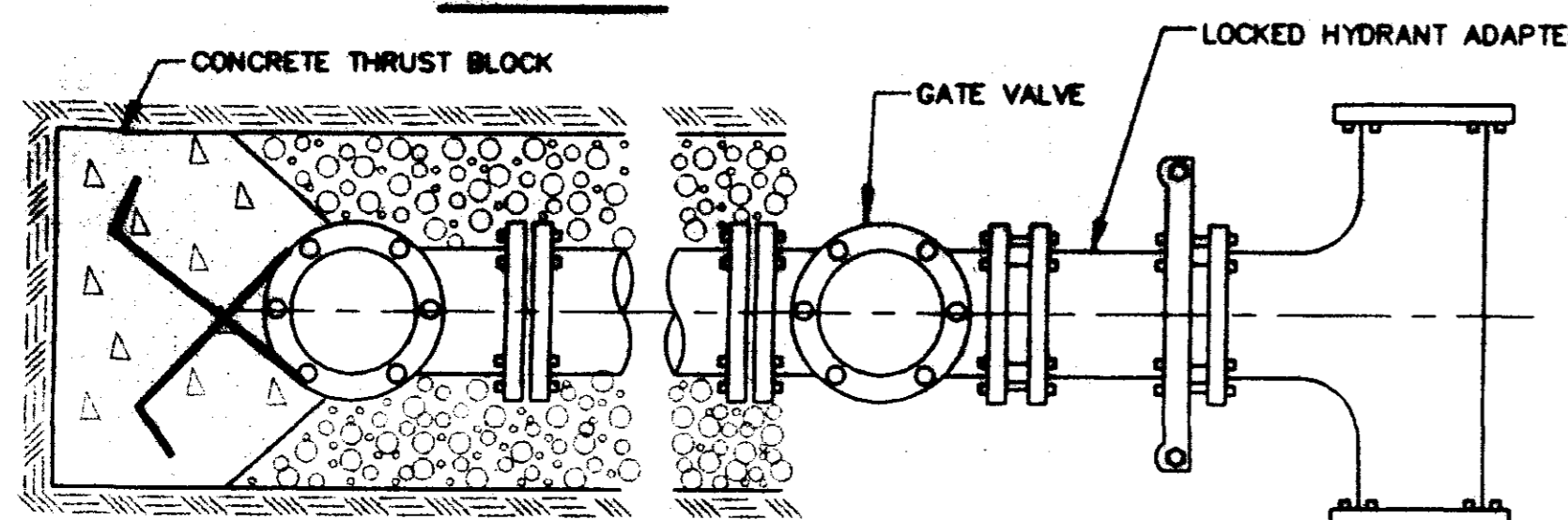
CITY OF RIDGELAND
 MADISON COUNTY, MISSISSIPPI

DESIGN R.C.V.	DATE 01/22/99	STERLING Consultants	DRAWING NO. 9 of 10
SEWER R.D.D.	DATE 03/29/99		
CHECK R.C.V.	DATE 03/27/99		





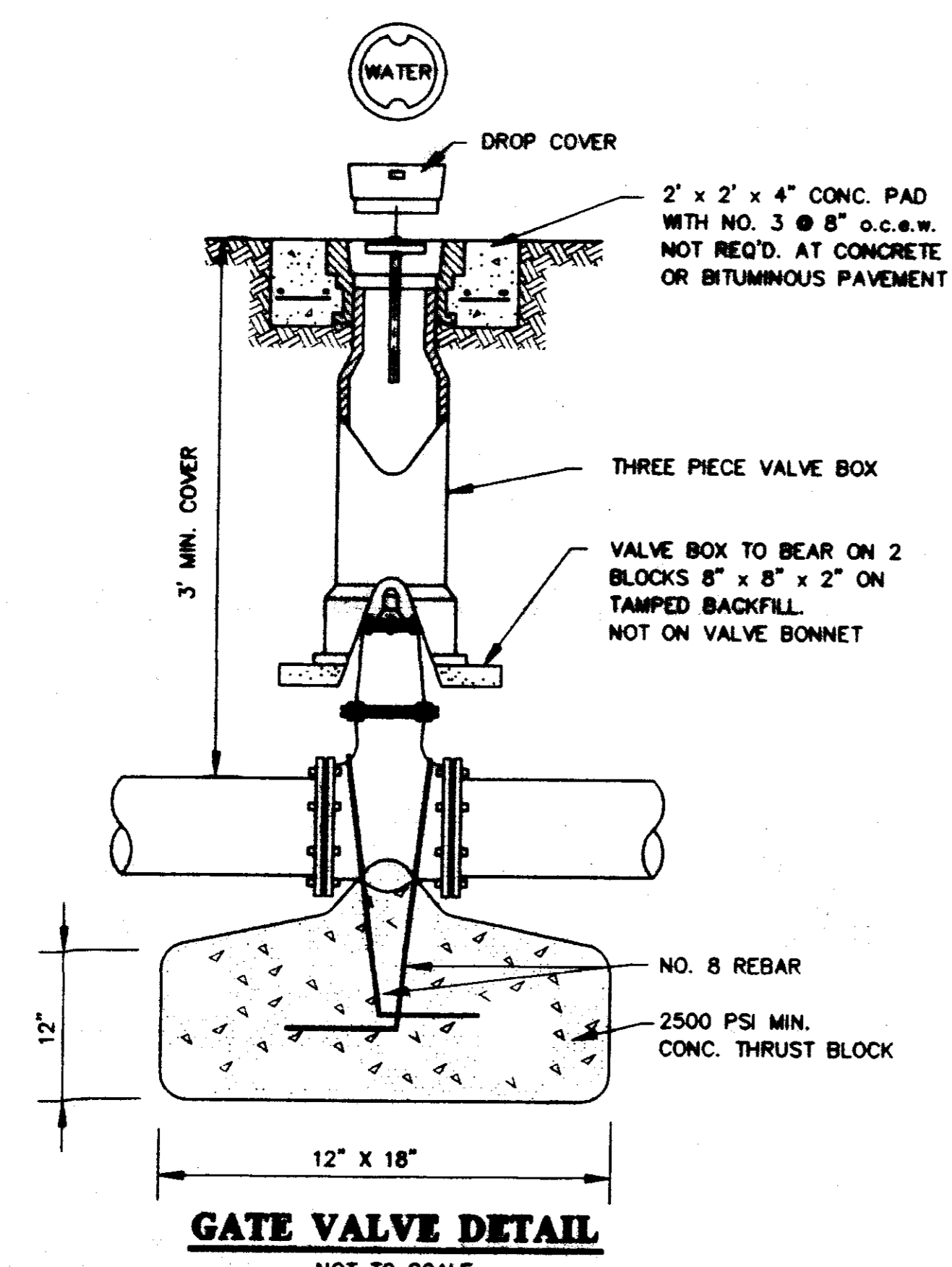
ELEVATION



PLAN

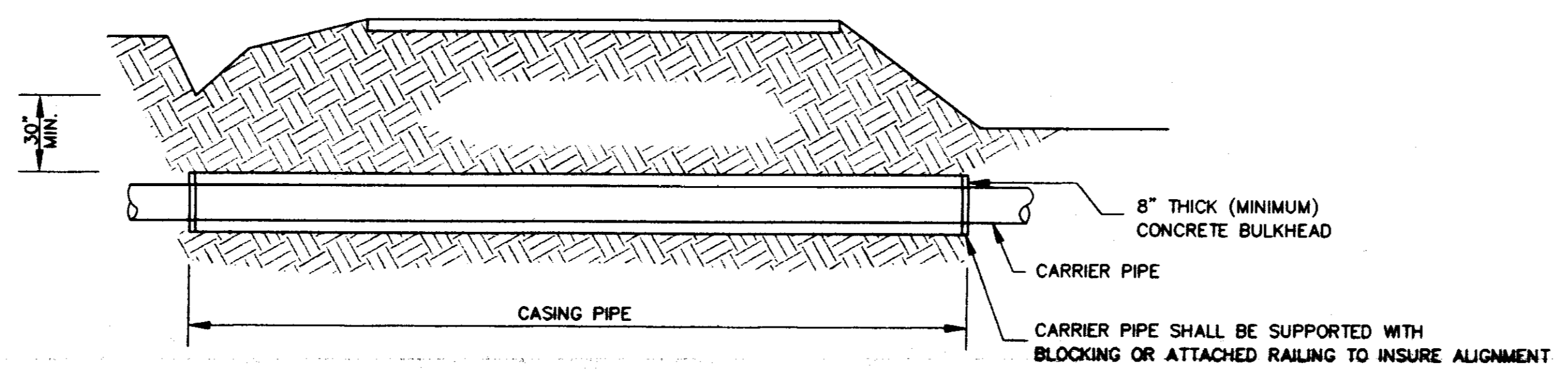
TYPICAL FIRE HYDRANT INSTALLATION

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



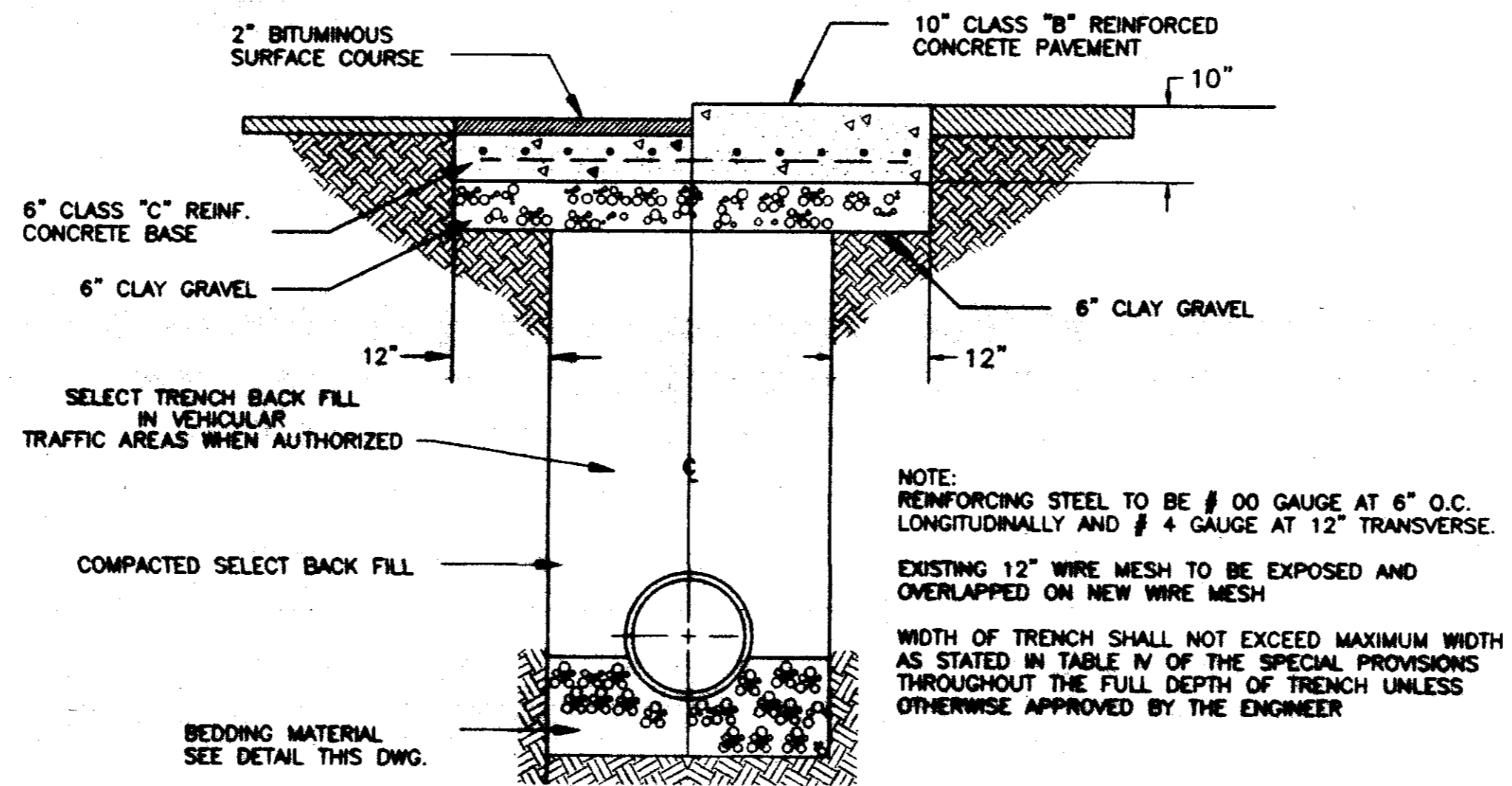
GATE VALVE DETAIL

NOT TO SCALE



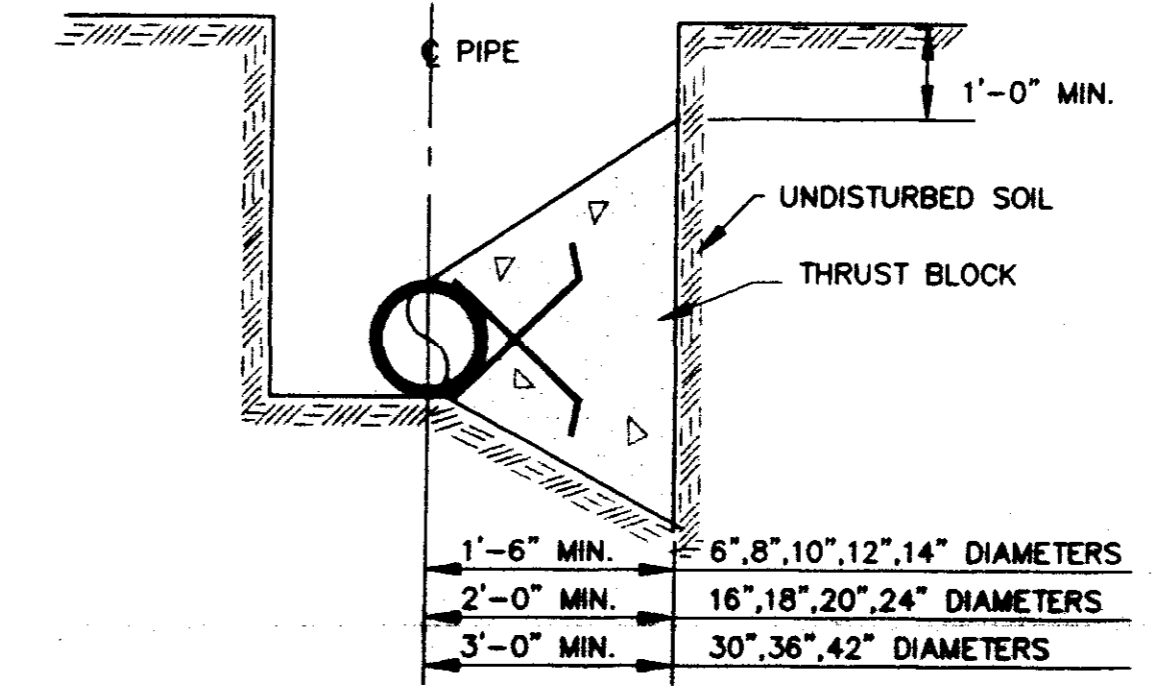
TYPICAL BORE SECTION

NOT TO SCALE

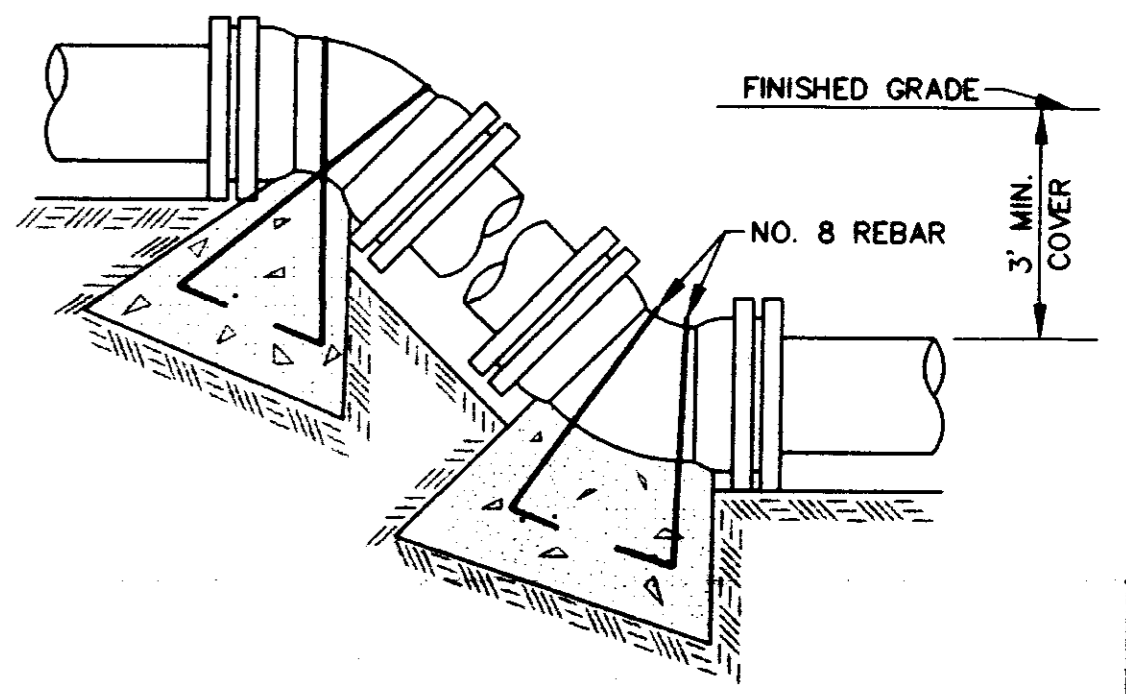


TYPICAL ROADWAY SECTION

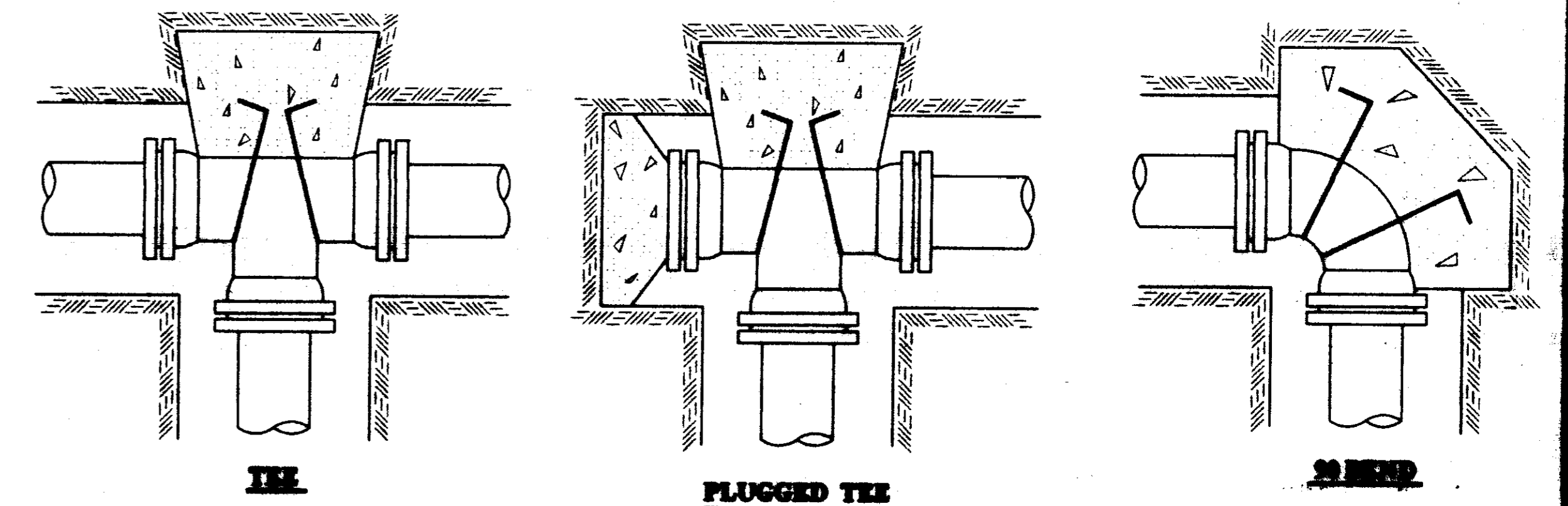
NOT TO SCALE



TYPICAL CROSS SECTION

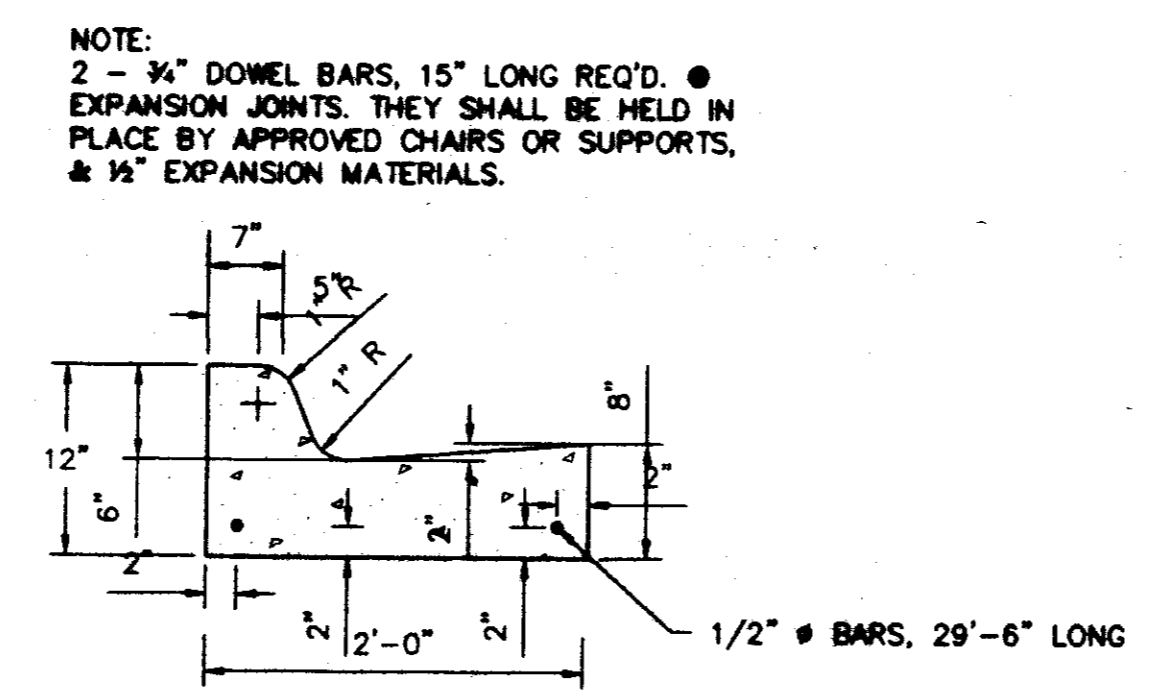


VERTICAL BENDS



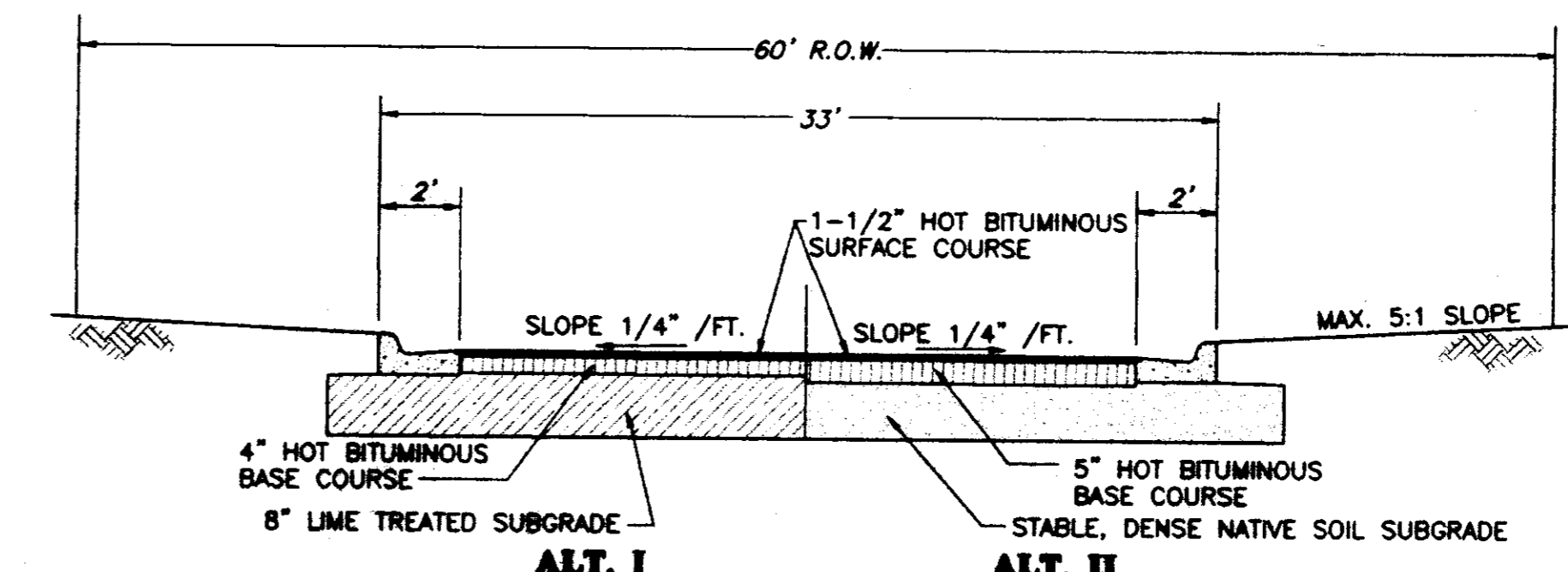
TYPICAL THRUST BLOCKING IN WATER MAINS AND SEWAGE FORCE MAINS

NOTE: ALL THRUST BLOCKS 2,500 PSI CONCRETE AGAINST UNDISTURBED EARTH



STANDARD CURB AND GUTTER

N.T.S.

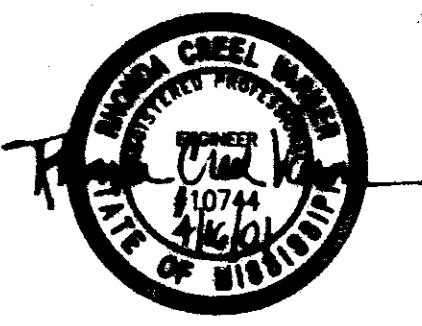


TYPICAL STREET SECTION

NOT TO SCALE

RECORD DRAWING

BY: *R. Vann* DATE: 4/16/01



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CRIS DEVELOPMENT, INC. G.P.

STANDARD MISCELLANEOUS DETAILS

**CITY OF RIDGELAND
MADISON COUNTY, MISSISSIPPI**

DESIGN R.C.V.	DATE: 01/23/99	STERLING Consultants	DRAWING NO. 10 of 10
SEWER R.D.D.	DATE: 01/23/99		
CHECK R.C.V.	DATE: 01/27/99		
SCALE:	AS SHOWN		

6:\cress\int-plaz\MPBP-005.dwg Mon Apr 16 13:50:18 2001 Ginny Bates - Sterling Consultants, Inc.