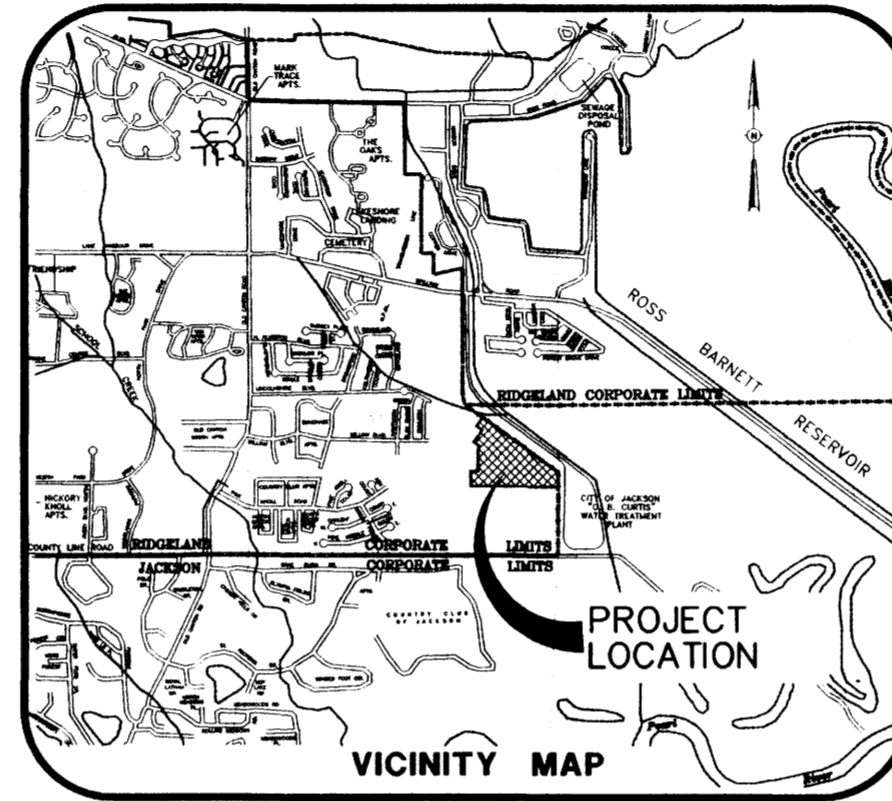


# RECORD DRAWINGS

## FOR

# BLACKTHORNE II

## HAWTHORN GREEN - PART 4B



### DRAWING INDEX

- 1 - COVER SHEET
- 2 - GEOMETRIC LAYOUT
- 3 - DRAINAGE LAYOUT
- 4 - SEWER AND WATER LAYOUT
- 4A - AS-BUILT SEWER AND WATER SERVICE LAYOUT
- 5 - EROSION, SEDIMENT AND STORMWATER CONTROL PLAN
- 6 - PLAN AND PROFILE - LINCOLNSHIRE BOULEVARD (STA. 1+00 TO 16+26.83)  
PLAN AND PROFILE - SPRINGFIELD COURT (STA. 1+00 TO 7+26.51)
- 7 - PLAN AND PROFILE - TRINITY LANE (STA. 1+00 TO STA. 4+27.47)  
PLAN AND PROFILE - OLD SQUARE COURT (STA. 1+00 TO STA. 4+20.42)
- 8 - PLAN AND PROFILE - DRAINLINE "A" (STA. 1+00 TO STA. 8+56.62)  
PLAN AND PROFILE - DRAINLINE "B" (STA. 1+00 TO STA. 2+95.54)
- 9 - 13 CITY OF RIDGELAND STANDARD DETAILS

Michael E. Lang  
 11/2/05

DRAWING NO. PROJECTS\2003\03001\HGW-PART4\HG4B-CVR.DWG

**H D LANG AND ASSOCIATES, INC.**  
 POST OFFICE BOX 16085 JACKSON, MISSISSIPPI 39236  
 601-362-4886

DEVELOPER  
**SOUTH MADISON COUNTY  
 DEVELOPMENT COMPANY, INC.**  
 POST OFFICE BOX 100  
 MADISON, MISSISSIPPI 39130

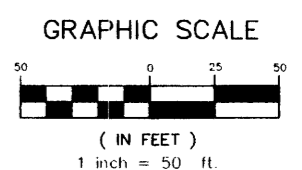
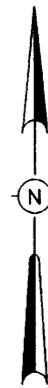
LOCATION  
 SITUATED IN THE  
 NE 1/4 OF THE SE 1/4 OF  
 SECTION 33, TOWNSHIP 7 NORTH - RANGE 2 EAST  
 CITY OF RIDGELAND  
 MADISON COUNTY, MISSISSIPPI

DATE	REVISION	BY	DRAWN BY: C.L.S.
11-23-04	RECORD DRAWINGS	D.L.M.	DATE: 10-22-03
			SCALE:
			BOOK: PAGE:
			PROJECT NO.: 03-001

SHEET

1

PWP-00234



**CENTERLINE CURVE DATA**

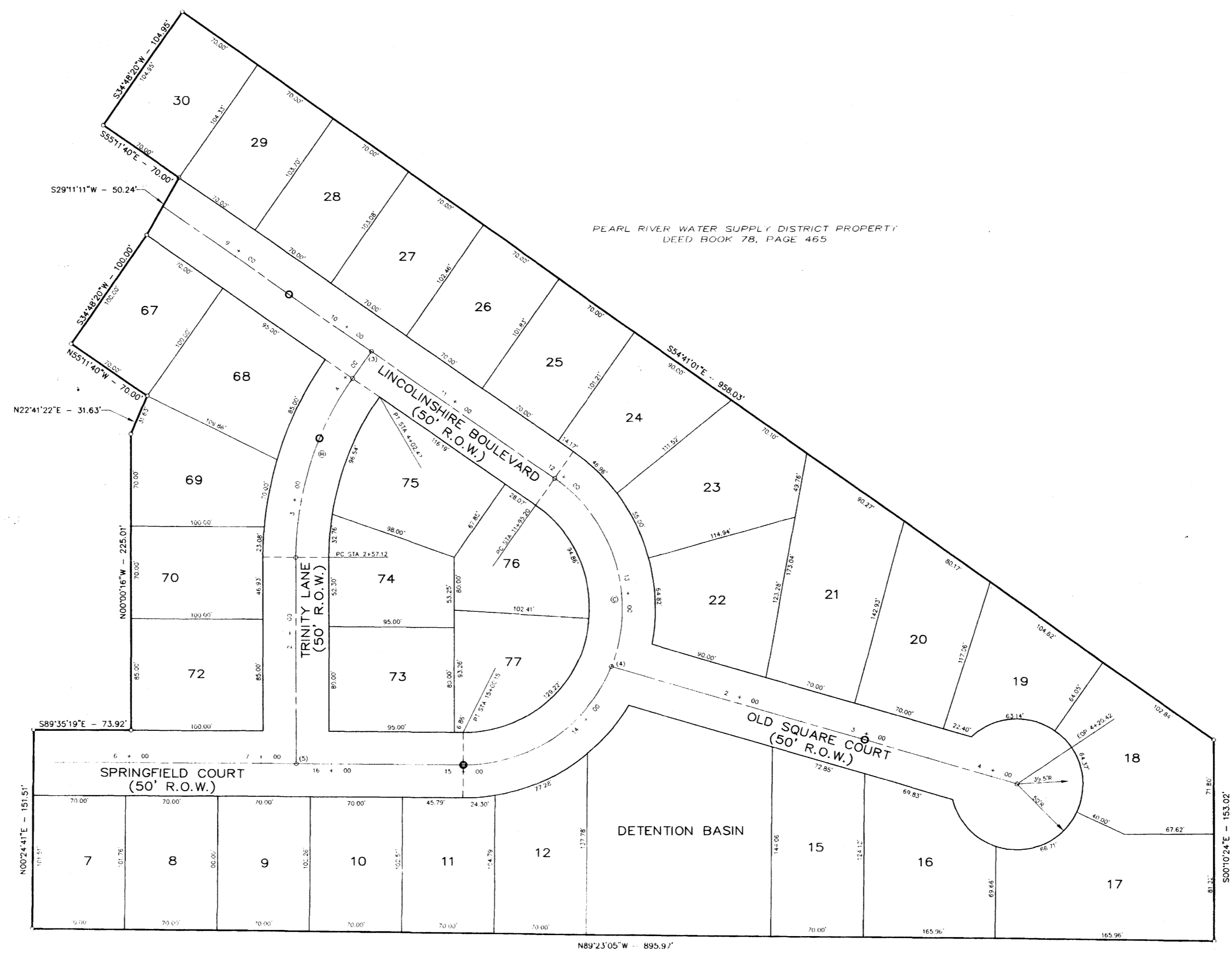
⊙ Δ = 145.26 21'	⊙ Δ = 34.48 20'
⊙ Δ = 47.746 20'	⊙ Δ = 23.947 78'
R = 120.00'	R = 239.25'
T = 387.73'	T = 75.00'
L = 304.96'	L = 145.36'

**CENTERLINE INTERSECTIONS**

- (3) STA 10+25.95 LINCOLNSHIRE BOULEVARD = STA 4+27.47 TRINITY LANE
- (4) STA 13+55.82 LINCOLNSHIRE BOULEVARD = STA 1+00 OLD SQUARE COURT
- (5) STA 16+26.83 LINCOLNSHIRE BOULEVARD = STA 7+26.51 SPRINGFIELD COURT = STA 1+00 TRINITY LANE

**SUBGRADE DENSITY LOCATIONS**

- STATION 9+50 LINCOLNSHIRE BOULEVARD
- STATION 3+00 OLD SQUARE COURT
- STATION 15+00 SPRINGFIELD COURT
- STATION 3+50 TRINITY LANE



PEARL RIVER WATER SUPPLY DISTRICT PROPERTY  
DEED BOOK 78, PAGE 465

CITY OF JACKSON PROPERTY  
DEED BOOK 357, PAGE 762

**NOTES:**  
1. DIMENSIONS ALONG CURVES ARE CHORD DISTANCES.  
2. AREA = 8.515 ACRES (MORE OR LESS)

**H D LANG AND ASSOCIATES, INC.**  
POST OFFICE BOX 16085 JACKSON, MISSISSIPPI 39236  
601-362-4886

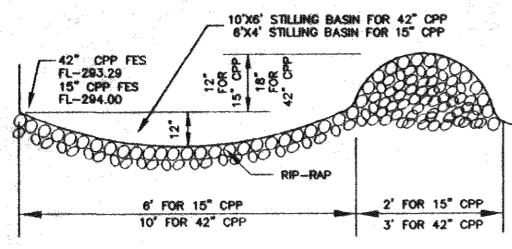
PROJECT  
**HAWTHORN GREEN, PART 4B**

DESCRIPTION  
**GEOMETRIC LAYOUT**

DATE	REVISION	BY	DRAWN BY: CLS
5-7-04	REVISIONS PER CITY OF RIDGELAND	D.L.M.	DATE: 10-16-03
11-23-04	RECORD DRAWINGS	D.L.M.	SCALE: 1"=50'
			BOOK: PAGE:
			PROJECT NO.: 03-001

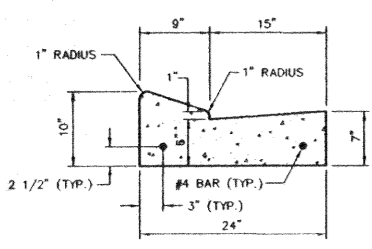
SHEET  
**2**





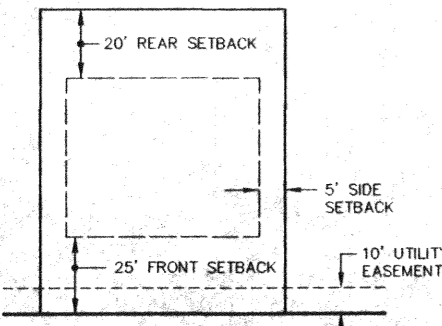
STILLING BASIN

NOTE:  
1. 100-200# RIP RAP REQUIRED.



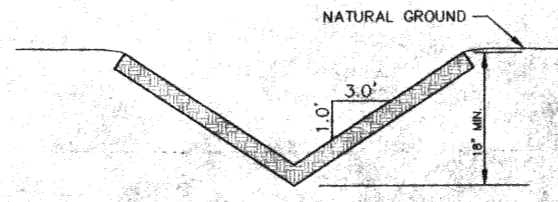
CURB & GUTTER DETAIL

NOTES:  
1. 1/2" EXPANSION JOINT REQUIRED AT 30' INTERVALS, WITH (2) 3/4" DOWEL BARS, 15' LONG REQUIRED AT ALL EXPANSION JOINTS. THEY SHALL BE HELD IN PLACE BY APPROVED CHAIRS OR SUPPORTS, AND 1/2" EXPANSION MATERIALS.  
2. 1/4" CONTRACTION JOINT REQUIRED AT 10' INTERVALS.  
3. ALL CURB & GUTTER AND DRIVEWAYS TO BE CONSTRUCTED OF 1:2:4 MIX CONCRETE.

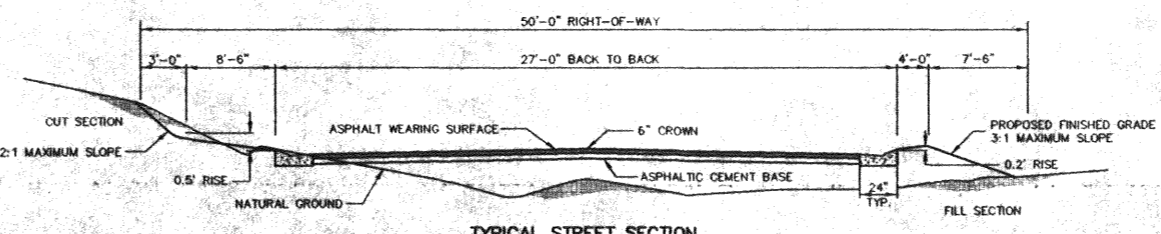


TYPICAL LOT DETAIL

NOTE: 10' MINIMUM DISTANCE BETWEEN BUILDINGS.

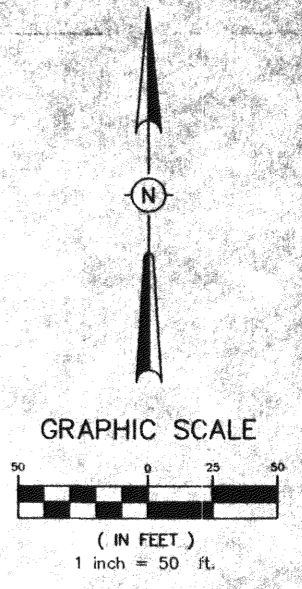
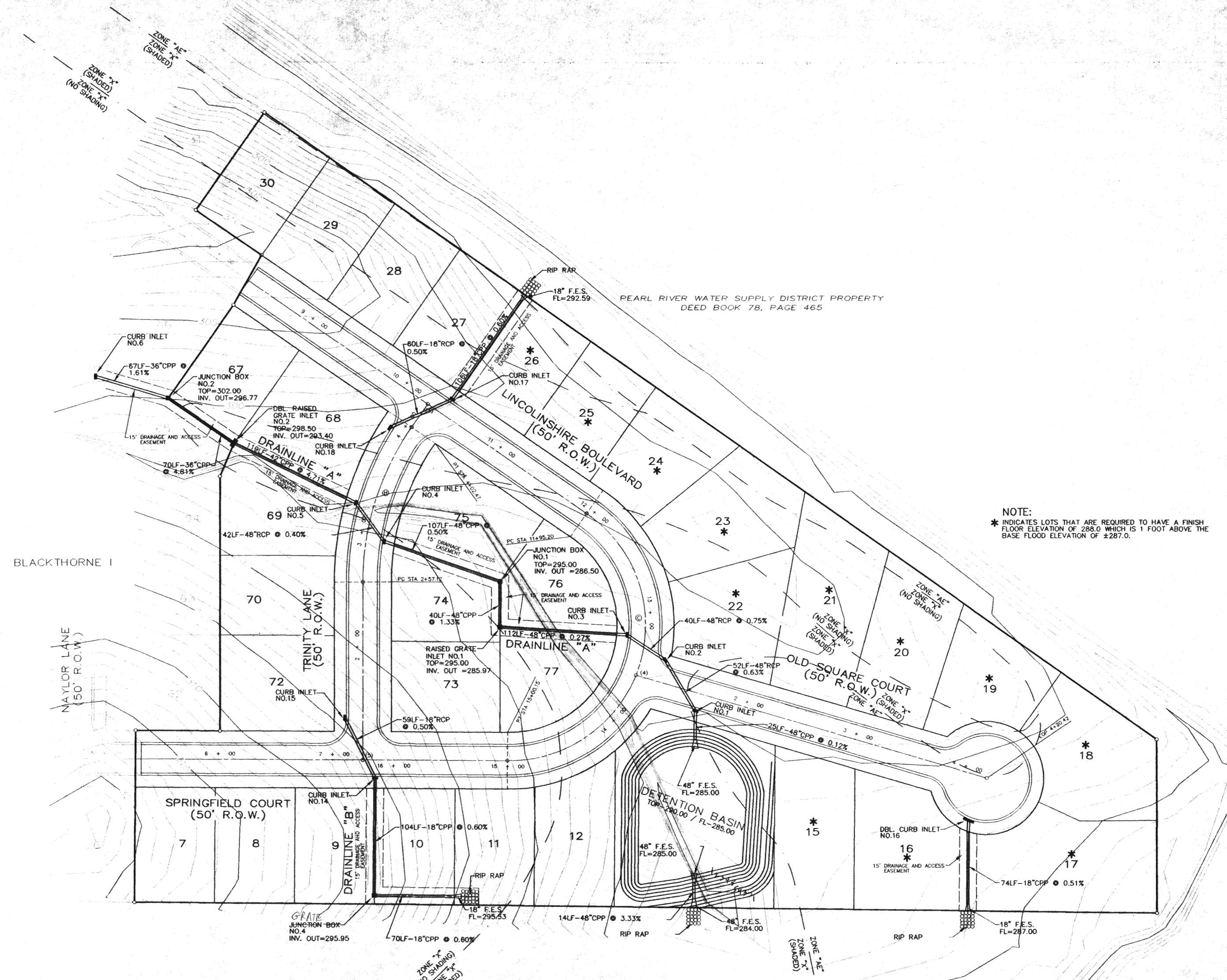


TYPICAL DRAINAGE SWALE SECTION



TYPICAL STREET SECTION

1 1/2" WEARING SURFACE WITH 5" ASPHALTIC CEMENT BASE & 8" SOIL TREATMENT (LIME) LIME TREATED SUB-GRADE MUST EXTEND ONE FOOT BEYOND BACK OF CURB.



CENTERLINE CURVE DATA  
 Δ = 145°30'21"    Δ = 34°48'36"  
 D = 47.74839'    D = 23.94778'  
 R = 120.00'    R = 238.22'  
 L = 304.96'    L = 145.96'

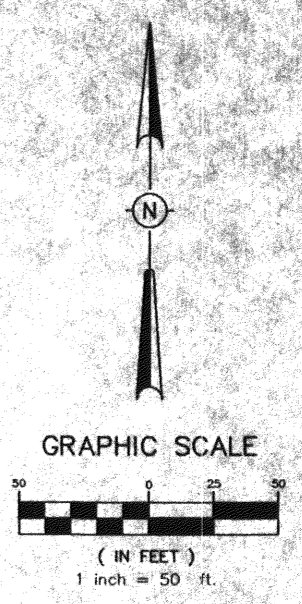
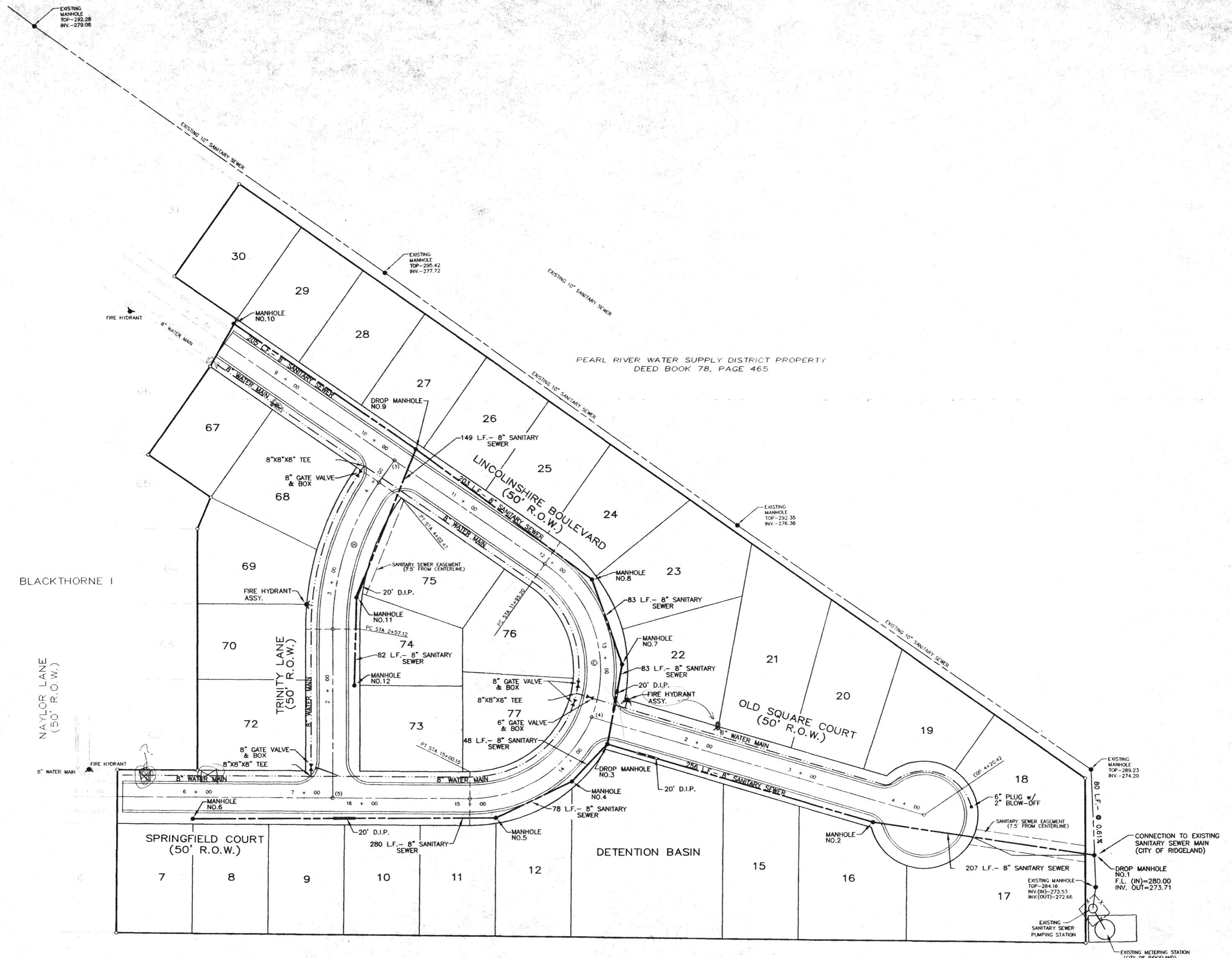
CENTERLINE INTERSECTIONS  
 (1) STA 10+25.95 LINCOLNSHIRE BOULEVARD = STA 44+27.47 TRINITY LANE  
 (4) STA 13+55.82 LINCOLNSHIRE BOULEVARD = STA 1+00 OLD SQUARE COURT  
 (5) STA 16+26.83 LINCOLNSHIRE BOULEVARD = STA 7+26.51 SPRINGFIELD COURT = STA 1+00 TRINITY LANE

NOTE:  
\* INDICATES LOTS THAT ARE REQUIRED TO HAVE A FINISH FLOOR ELEVATION OF 288.0 WHICH IS 1 FOOT ABOVE THE BASE FLOOD ELEVATION OF ±287.0.

DRAWING NO. PROJECTS\0001\03001\HOW-PART4 PARTB\H4B-DB.DWG

<b>H D LANG AND ASSOCIATES, INC.</b> POST OFFICE BOX 16086 JACKSON, MISSISSIPPI 39236 601-362-4886	PROJECT	DESCRIPTION	DATE	REVISION	BY	DRAWN BY: CLS	SHEET
	HAWTHORN GREEN, PART 4B	DRAINAGE LAYOUT	5-7-04	REVISIONS PER CITY OF RIDGELAND	D.L.M.	DATE: 10-23-03	
			06-04-04	REVISED PER RIDGELAND	CLS	SCALE: 1"=50'	
			11-23-04	RECORD DRAWINGS	D.L.M.	BOOK: PAGE:	3
						PROJECT NO.: 03-001	



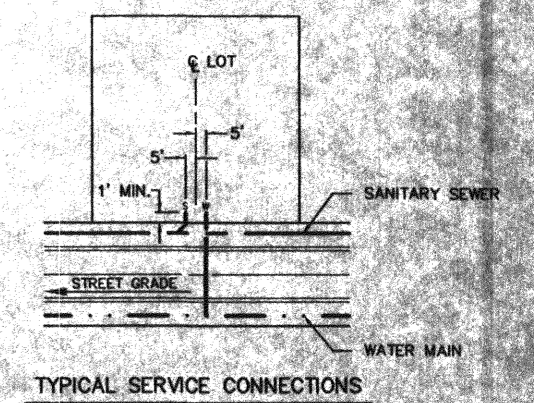


**CENTERLINE CURVE DATA**

① Δ = 145°36'21"	② Δ = 34°48'36"
D = 47.74639'	D = 23.94778'
P = 120.00'	P = 23.94778'
T = 30.73'	T = 25.00'
L = 304.96'	L = 145.36'

**CENTERLINE INTERSECTIONS**

(3) STA. 10+25.95 LINCOLNSHIRE BOULEVARD = STA. 44+27.47 TRINITY LANE
(4) STA. 13+55.82 LINCOLNSHIRE BOULEVARD = STA. 1+00 OLD SQUARE COURT
(5) STA. 15+26.83 LINCOLNSHIRE BOULEVARD = STA. 7+25.91 SPRINGFIELD COURT
STA. 14+00 TRINITY LANE



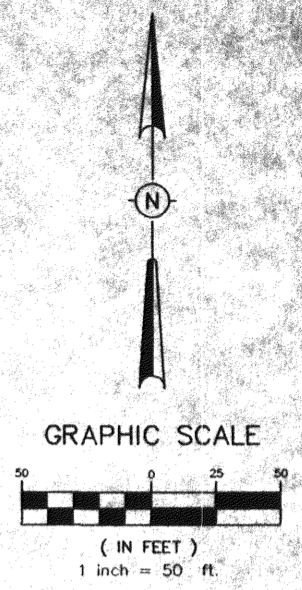
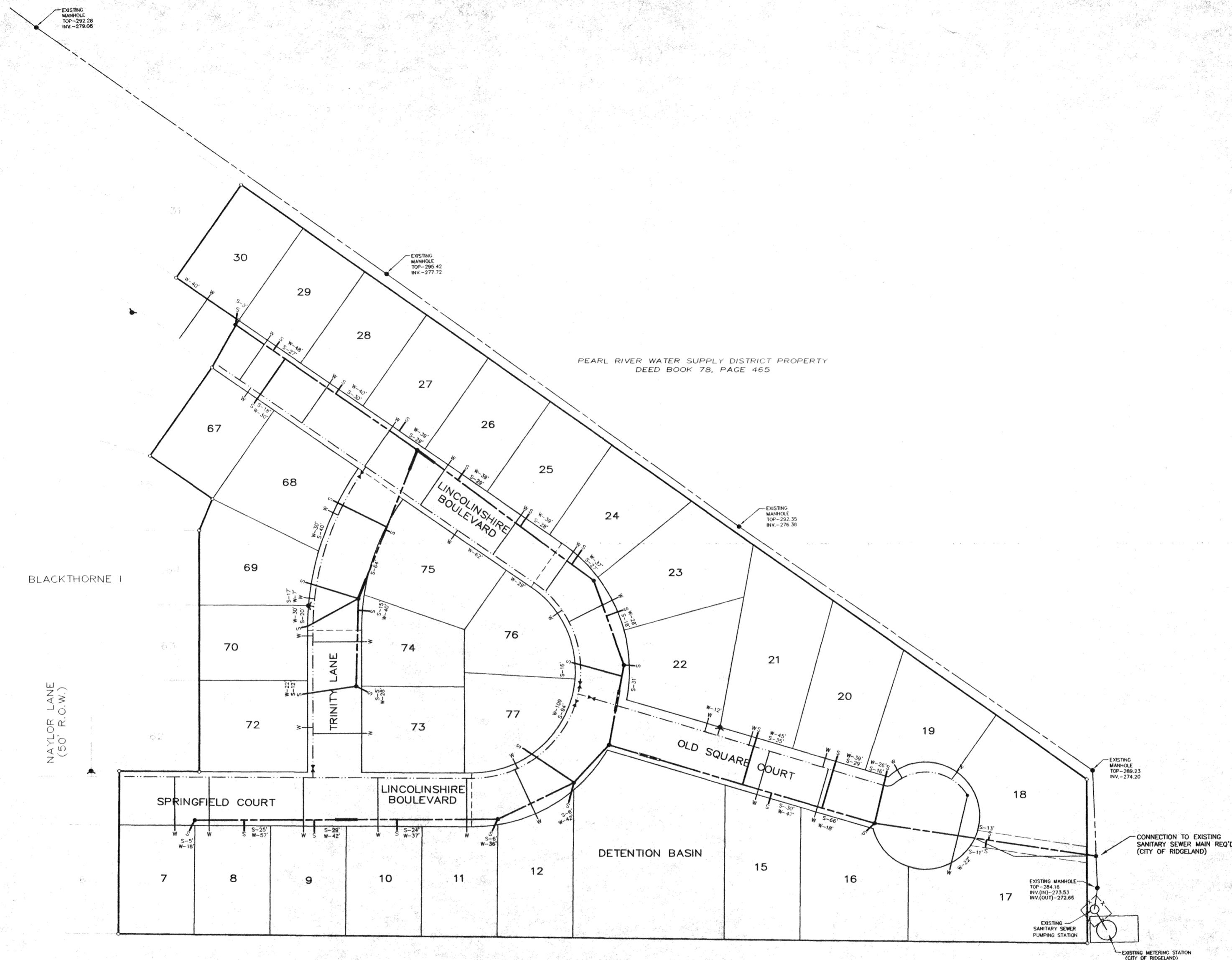
**NOTE:**  
THE CONTRACTOR SHALL PROVIDE A 3/4" WATER SERVICE AND A 6" SANITARY SEWER SERVICE TO EACH LOT AS DIRECTED BY THE ENGINEER.

- NOTES:**
1. FIRE HYDRANT ASSEMBLY INCLUDES 6" GATE VALVE & BOX AND 8"X8"X6" TEE.
  2. FIRE HYDRANT ASSEMBLY WILL REQUIRE THE USE OF THE "MEGA" LUG SYSTEM.
  3. ALL JOINTS OF DUCTILE IRON PIPE ON SANITARY SEWER SHALL BE CENTERED ON ITS CROSSING WITH WATER MAINS AND STORM SEWER PIPES.
  4. ALL WATER LINES SHALL BE LAID A MINIMUM OF 10 FEET HORIZONTALLY FROM ALL SEWER LINES AND A MINIMUM OF 18 INCHES (CLEAR SPACING) ABOVE SEWER LINES. WATER LINES ALWAYS CROSS OVER SEWER LINES.
  5. ALL SEWER LINES SHALL BE SDR-26 PVC SEWER PIPE, UNLESS DUCTILE IRON PIPE IS INDICATED. ALL WATER LINES SHALL BE C-900 PVC APPROVED WATER PIPE.

DRAWING NO. PROJECTS\2003\03001\HOW-PART4\PART-B\WC4B-SW.DWG

<b>H D LANG AND ASSOCIATES, INC.</b> POST OFFICE BOX 16085 JACKSON, MISSISSIPPI 39236 601-362-4886	PROJECT	DESCRIPTION	DATE	REVISION	BY	DRAWN BY: CLS	SHEET
	HAWTHORN GREEN, PART 4B	SEWER & WATER LAYOUT	5-7-04	REVISIONS PER CITY OF RIDGELAND	D.L.M.	DATE: 10-23-03	4
			11-23-04	RECORD DRAWINGS	D.L.M.	SCALE: 1"=50'	
						BOOK: PAGE:	
						PROJECT NO.: 03-001	





- NOTES:
1. FIRE HYDRANT ASSEMBLY INCLUDES 6" GATE VALVE & BOX AND 8"x8"x6" TEE.
  2. FIRE HYDRANT ASSEMBLY WILL REQUIRE THE USE OF THE "MEGA" LUG SYSTEM.
  3. ALL JOINTS OF DUCTILE IRON PIPE ON SANITARY SEWER SHALL BE CENTERED ON IT'S CROSSING WITH WATER MAINS AND STORM SEWER PIPES.
  4. ALL WATER LINES SHALL BE LAID A MINIMUM OF 10 FEET HORIZONTALLY FROM ALL SEWER LINES AND A MINIMUM OF 18 INCHES (CLEAR SPACING) ABOVE SEWER LINES. WATER LINES ALWAYS CROSS OVER SEWER LINES.
  5. ALL SEWER LINES SHALL BE SDR-26 PVC SEWER PIPE, UNLESS DUCTILE IRON PIPE IS INDICATED. ALL WATER LINES SHALL BE C-900 PVC APPROVED WATER PIPE.
  6. AS-BUILT SEWER AND WATER SERVICE LOCATIONS PROVIDED BY UTILITY CONSTRUCTORS.

DRAWING NO. PROJECTS\2003\03001\HOW-PART4.PART-B\HC4B-SWS.DWG

<b>H D LANG AND ASSOCIATES, INC.</b> POST OFFICE BOX 16085 JACKSON, MISSISSIPPI 39236 601-362-4886	PROJECT	DESCRIPTION	DATE	REVISION	BY	DRAWN BY: CLS	SHEET
	HAWTHORN GREEN, PART 4B	AS-BUILT SEWER & WATER SERVICE LAYOUT	5-7-04	REVISIONS PER CITY OF RIDGELAND	D.L.M.	DATE: 10-17-03	4A
			12-01-04	RECORD DRAWINGS	D.L.M.	SCALE: 1"=50'	
						BOOK: PAGE: PROJECT NO.: 03-001	



**SYMBOLS FOR EROSION AND SEDIMENT CONTROL PRACTICES**

**TEMPORARY PRACTICES**

- → → CHECK DAM
- ▢ CONSTRUCTION ENTRANCE / EXIT
- D → DIVERSION
- △ DUST CONTROL
- SEDIMENT BASIN
- SILT FENCE
- ▣ STORM DRAIN INLET PROTECTION (SILT FENCE, STRAW BALE)
- STRAW BALE BARRIER

**PERMANENT PRACTICES**

- BZ BUFFER ZONE
- DETENTION BASIN
- D → DIVERSION
- I GRADE STAB. STRUCTURE
- GW GRASSED WATERWAY
- ▢ LAND GRADING
- ▢ LEVEL GRADING
- LW LINED WATERWAY OR OUTLET
- ▢ PARKING LOT STORAGE
- ▢ PAVED FLUME
- ▢ ROCK OUTLET PROTECTION
- R STORMWATER RETENTION BASIN

**VEGETATIVE PRACTICES**

- M MULCHING
- PS PERMANENT SEEDING
- S SODDING
- TS TEMPORARY SEEDING
- PILE TOPSOILING
- TP TREE PRESERVATION AND PROTECTION
- GC TREES, SHRUBS, VINES AND GROUND COVER
- DS VEGETATIVE DUNE STABILIZATION

**COMPOSITE PRACTICES**

- ▢ VEGETATIVE STREAMBANK STAB.
- ▢ STRUCTURAL STREAMBANK STAB.
- RR RIPRAP

**PLANNED EROSION, SEDIMENT AND STORMWATER CONTROL PRACTICES**

- 1. STORM DRAIN INLET PROTECTION**  
TEMPORARY HAY BALE AND SILT FENCE COMBINATIONS WILL BE INSTALLED AT ALL CURB INLET AND GRATE INLET LOCATIONS.
- 2. LAND GRADING**  
EXCESS EXCAVATION FROM THE STREET RIGHTS OF WAY WILL BE PLACED ON THE LOTS OF LOWEST ELEVATION. ALL FILL MATERIALS WILL BE COMPACTED AND SLOPES WILL NOT EXCEED 3:1. ALL AREAS WILL RECEIVE SEEDING FOR STABILIZATION OF THE FILL MATERIAL UNTIL PERMANENT VEGETATION IS ESTABLISHED AFTER THE CONSTRUCTION OF THE INDIVIDUAL HOUSES.
- 3. ROCK OUTLET PROTECTION**  
A RIPRAP APRON WILL BE LOCATED AT THE OUTLET OF ALL CULVERTS TO PREVENT SCOUR.
- 4. PERMANENT SEEDING**  
ALL DISTURBED AREAS WILL BE PERMANENTLY SEEDED AND MULCHED ONCE FINAL GRADE IS ESTABLISHED. THE LAND GRADING AREAS PREVIOUSLY MENTIONED WILL RECEIVE TEMPORARY SEEDING AS STATED.

**TEMPORARY SEEDING**

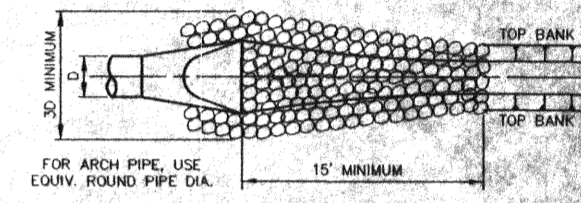
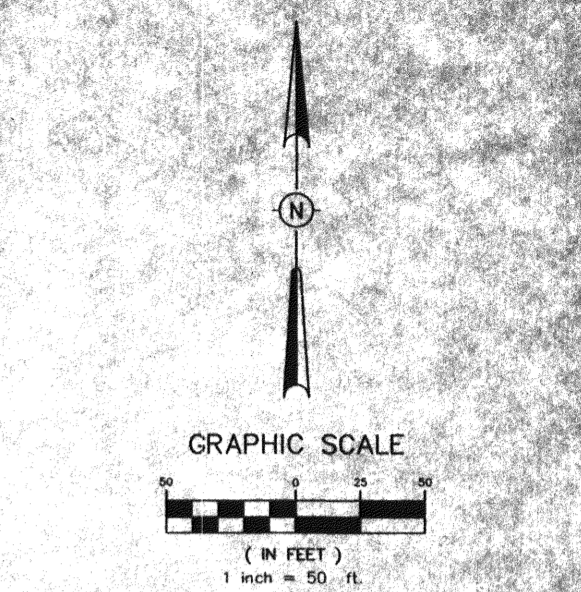
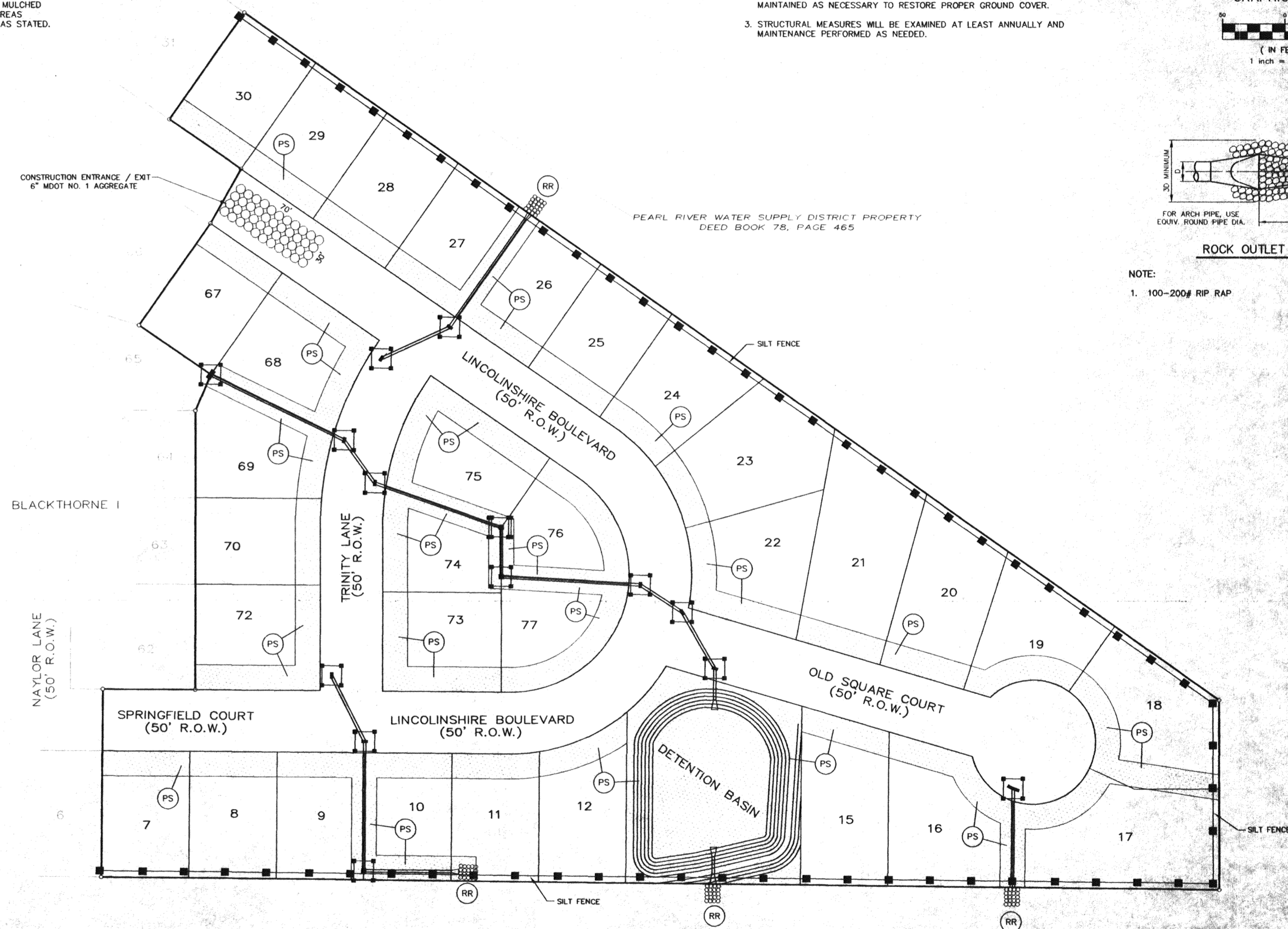
ALL FILL AREAS OUTSIDE OF PAVED AREAS SHALL RECEIVE TEMPORARY SEEDING OF ANNUAL RYEGRASS AT 40 LBS./AC. WITH 13/13/13 FERTILIZER AT 600 LBS./AC.  
ALL SLOPES SHALL RECEIVE TEMPORARY SEEDING AND FERTILIZER AND STRAW MULCH WITH ASPHALT TACK AT 1.5 TONS MULCH/AC. AND 100 GAL EMULSIFIED ASPHALT, GRADE SS-1 AT 100 GAL./TON MULCH.

**PERMANENT SEEDING**

PERMANENT SEEDING OF BERMUDA GRASS AT 15 LBS./AC. WITH 13/13/13 FERTILIZER AT 600 LBS./AC.

**MAINTENANCE PLAN**

- SHORT TERM**
1. ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL BUT IN NO CASE LESS THAN EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED.
  2. SEDIMENT WILL BE REMOVED FROM THE INLET PROTECTION DEVICES WHEN IT REACHES A MAXIMUM OF 6 INCHES DEEP. THE DEVICE WILL BE REPLACED AS NECESSARY TO MAINTAIN A BARRIER.
  3. ALL SEEDED AREAS WILL BE FERTILIZED AND RESEDED AS NECESSARY TO MAINTAIN A DENSE VEGETATIVE COVER.
- LONG TERM**
1. ALL VEGETATED AREAS WILL BE MAINTAINED IN ADEQUATE CONDITION TO PROVIDE PROPER GROUND COVER.
  2. AREAS WHERE VEGETATION IS LOST WILL BE FERTILIZED, SEEDED AND MAINTAINED AS NECESSARY TO RESTORE PROPER GROUND COVER.
  3. STRUCTURAL MEASURES WILL BE EXAMINED AT LEAST ANNUALLY AND MAINTENANCE PERFORMED AS NEEDED.



**ROCK OUTLET PROTECTION**

NOTE:  
1. 100-200# RIP RAP

DRAWING NO. PROJECTS\2003\03001\116-PART 4B-PART 4B-11648-EC.DWG

**H D LANG AND ASSOCIATES, INC.**  
POST OFFICE BOX 16085 JACKSON, MISSISSIPPI 39236  
601-362-4886

PROJECT: **HAWTHORN GREEN - PART 4B**

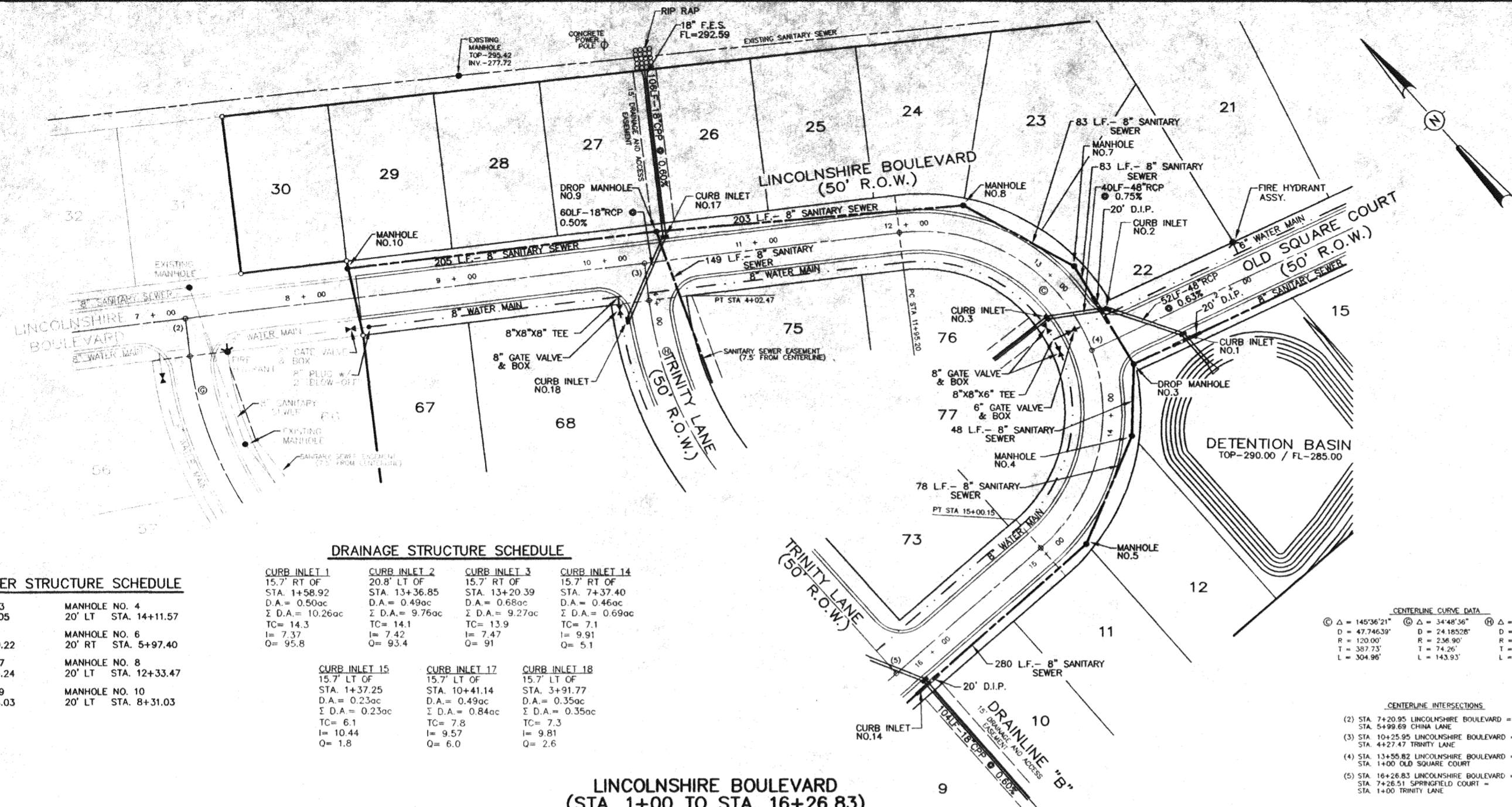
DESCRIPTION: **EROSION, SEDIMENT AND STORMWATER CONTROL PLAN**

DATE	REVISION	BY
5-7-04	REVISIONS PER CITY OF RIDGELAND	D.L.M.
6-7-04	REVISIONS PER CITY OF RIDGELAND	B.A.
11-23-04	RECORD DRAWINGS	D.L.M.

DRAWN BY: CLS  
DATE: 10-21-03  
SCALE: 1"=50'  
BOOK: PAGE:  
PROJECT NO.: 03-001

SHEET: **5**





**SANITARY SEWER STRUCTURE SCHEDULE**

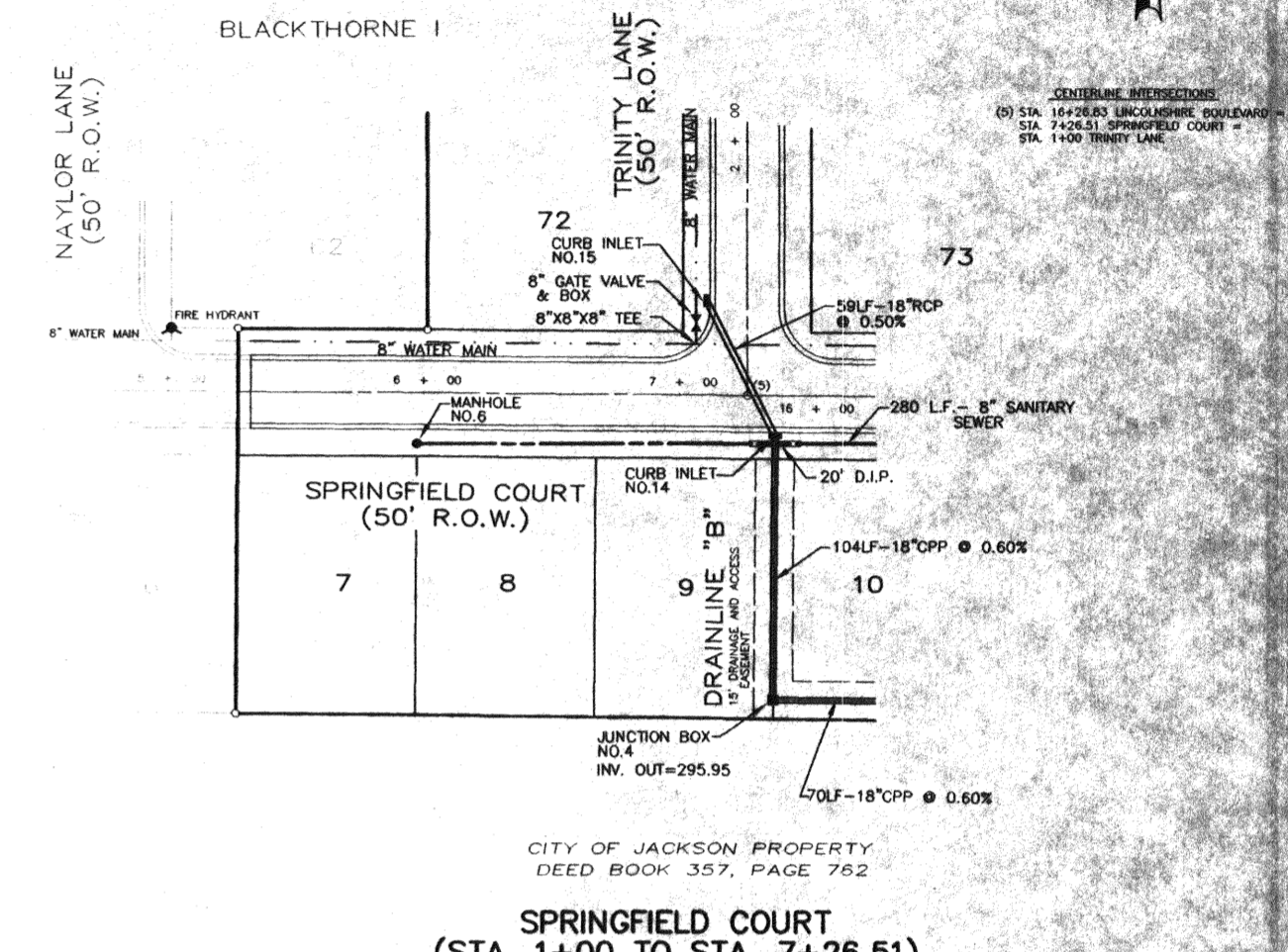
MANHOLE NO. 6  
20' RT STA. 5+97.40

MANHOLE NO. 5  
20' LT STA. 14+79.32

**DRAINAGE STRUCTURE SCHEDULE**

CURB INLET 14  
15.7' RT OF  
STA. 7+37.40  
D.A. = 0.46ac  
Σ D.A. = 0.69ac  
TC = 7.1  
I = 9.91  
Q = 5.1

CURB INLET 15  
15.7' LT OF  
STA. 1+37.25  
D.A. = 0.23ac  
Σ D.A. = 0.23ac  
TC = 6.1  
I = 10.44  
Q = 1.8



CITY OF JACKSON PROPERTY  
DEED BOOK 357, PAGE 762

**SPRINGFIELD COURT  
(STA. 1+00 TO STA. 7+26.51)**

**SANITARY SEWER STRUCTURE SCHEDULE**

DROP MANHOLE NO. 3  
20' RT STA. 1+21.05

MANHOLE NO. 4  
20' LT STA. 14+11.57

MANHOLE NO. 5  
20' LT STA. 14+79.22

DROP MANHOLE NO. 7  
20' LT STA. 13+06.24

DROP MANHOLE NO. 9  
20' LT STA. 10+36.03

MANHOLE NO. 6  
20' RT STA. 5+97.40

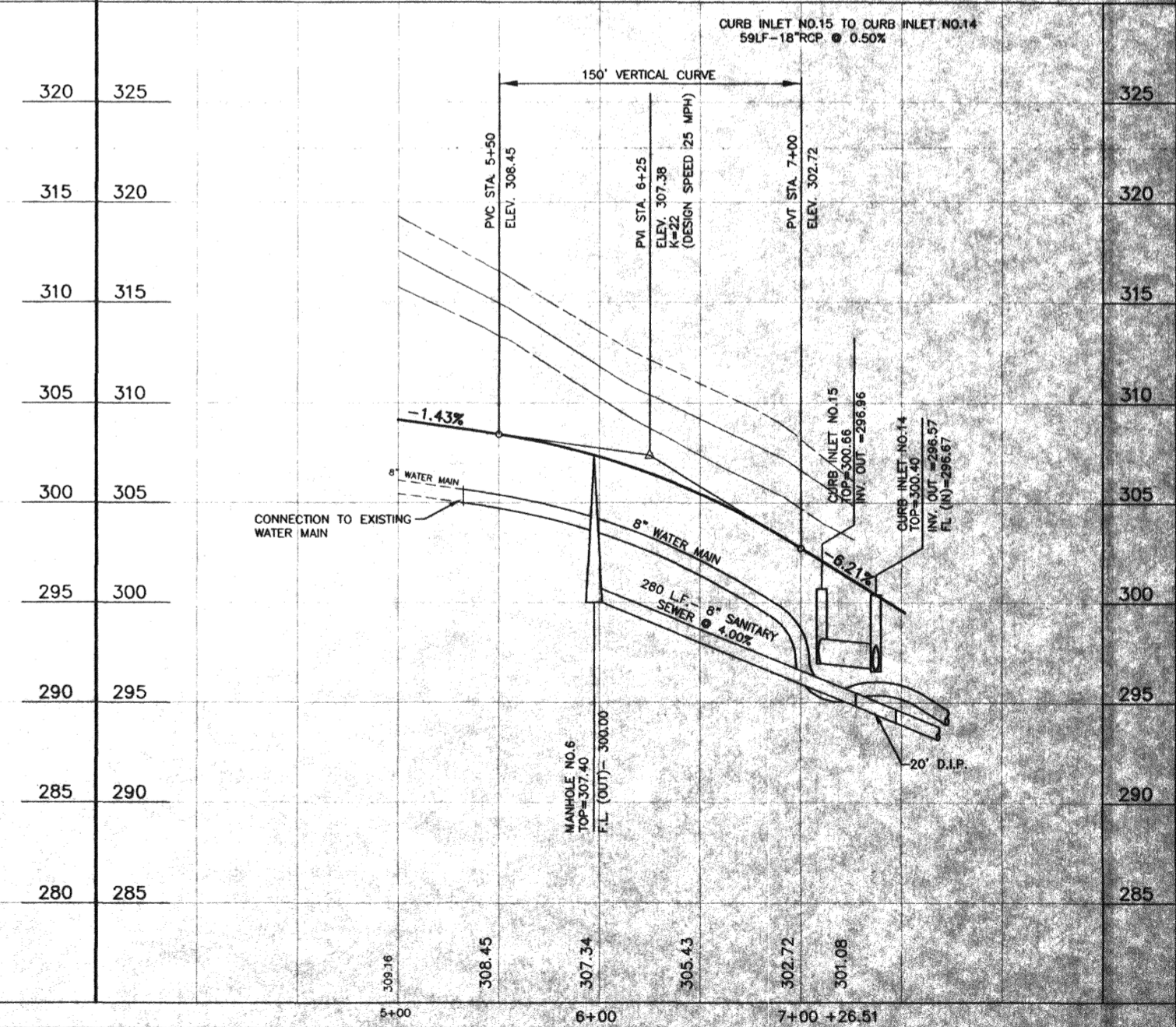
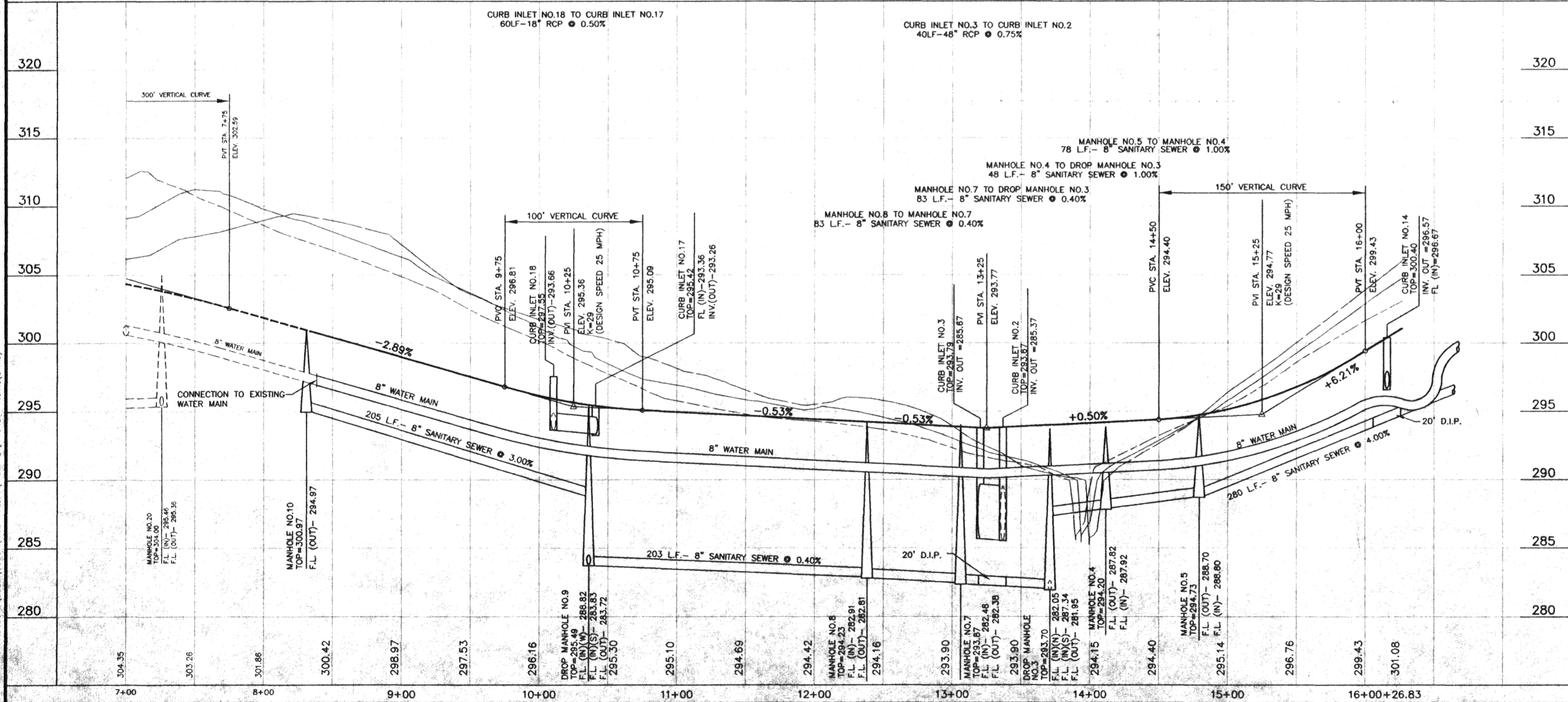
MANHOLE NO. 8  
20' LT STA. 12+33.47

MANHOLE NO. 10  
20' LT STA. 8+31.03

**DRAINAGE STRUCTURE SCHEDULE**

CURB INLET 1 15.7' RT OF STA. 1+58.92 D.A. = 0.50ac Σ D.A. = 10.26ac TC = 14.3 I = 7.37 Q = 95.8	CURB INLET 2 20.8' LT OF STA. 13+36.85 D.A. = 0.49ac Σ D.A. = 9.76ac TC = 14.1 I = 7.42 Q = 93.4	CURB INLET 3 15.7' RT OF STA. 13+20.39 D.A. = 0.68ac Σ D.A. = 0.46ac TC = 13.9 I = 7.47 Q = 91	CURB INLET 14 15.7' RT OF STA. 7+37.40 D.A. = 0.46ac Σ D.A. = 0.69ac TC = 7.1 I = 9.91 Q = 5.1
CURB INLET 15 15.7' LT OF STA. 1+37.25 D.A. = 0.23ac Σ D.A. = 0.23ac TC = 6.1 I = 10.44 Q = 1.8	CURB INLET 17 15.7' LT OF STA. 10+41.14 D.A. = 0.49ac Σ D.A. = 0.84ac TC = 7.8 I = 9.57 Q = 6.0	CURB INLET 18 15.7' LT OF STA. 3+91.77 D.A. = 0.35ac Σ D.A. = 0.35ac TC = 7.3 I = 9.81 Q = 2.6	

**LINCOLNSHIRE BOULEVARD  
(STA. 1+00 TO STA. 16+26.83)**



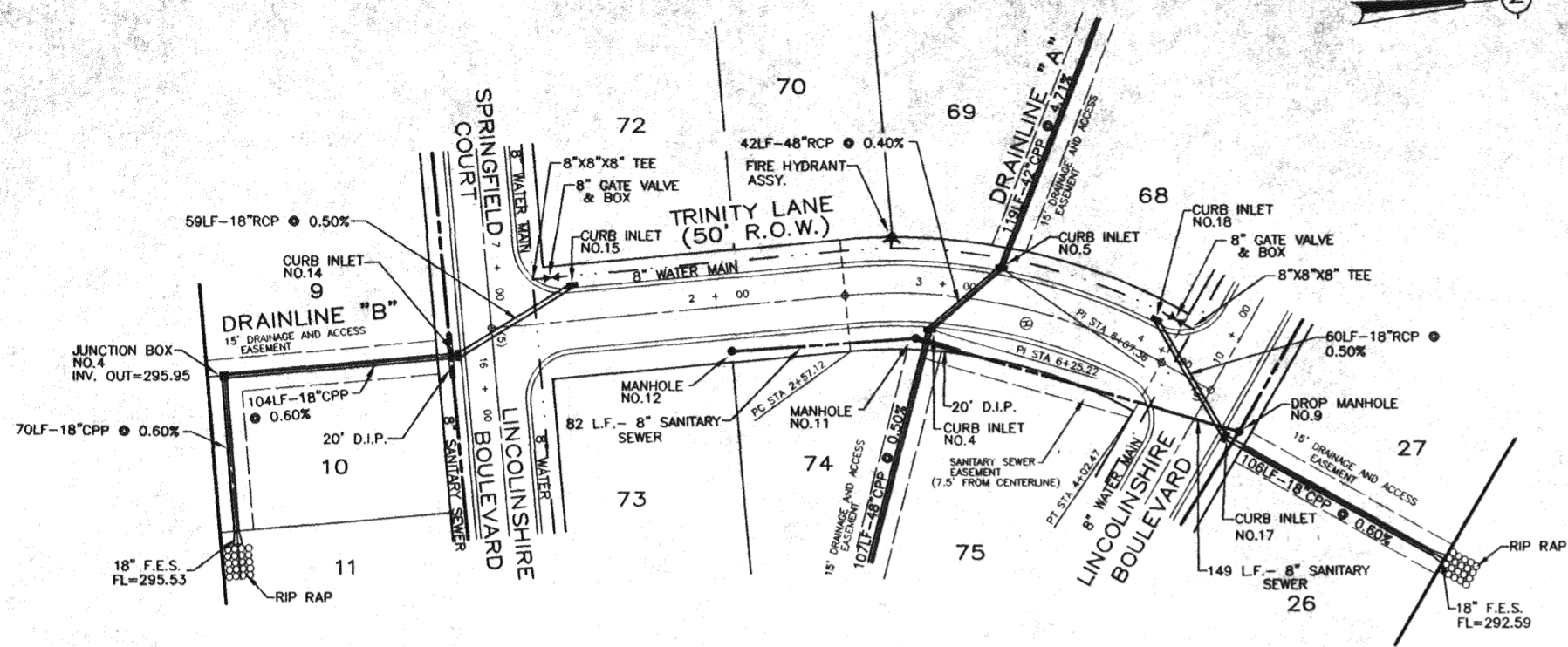
**H D LANG AND ASSOCIATES, INC.**  
POST OFFICE BOX 16085  
JACKSON, MISSISSIPPI 39236  
601-362-4886

PROJECT  
**HAWTHORN GREEN - PART 4B**

DESCRIPTION  
**PLAN AND PROFILE  
LINCOLNSHIRE BOULEVARD  
(STA. 1+00 TO STA. 16+26.83)  
SPRINGFIELD COURT  
(STA. 5+00 TO STA. 7+26.51)**

DATE 5-7-04	REVISION REVISIONS PER CITY OF RIDGELAND	BY D.L.M.	DRAWN BY: CLS	SHEET 6
11-23-04	RECORD DRAWINGS	D.L.M.	DATE: 10-23-03	
			HORIZ.: 1"=50' / VERT.: 1"=5'	
			BOOK: PAGE:	
			PROJECT NO.: 03-001	





**DRAINAGE STRUCTURE SCHEDULE**

CURB INLET 4 15.7 RT OF STA. 2+95.59 D.A. = 0.40oc I D.A. = 8.34oc TC = 12.6 I = 7.43 Q = 68.1	CURB INLET 5 15.7 LT OF STA. 3+23.63 D.A. = 0.48oc I D.A. = 7.94oc TC = 12.45 I = 7.87 Q = 86	CURB INLET 15 15.7 LT OF STA. 1+37.25 D.A. = 0.23oc I D.A. = 0.23oc TC = 6.1 I = 10.44 Q = 1.8
---	--	---

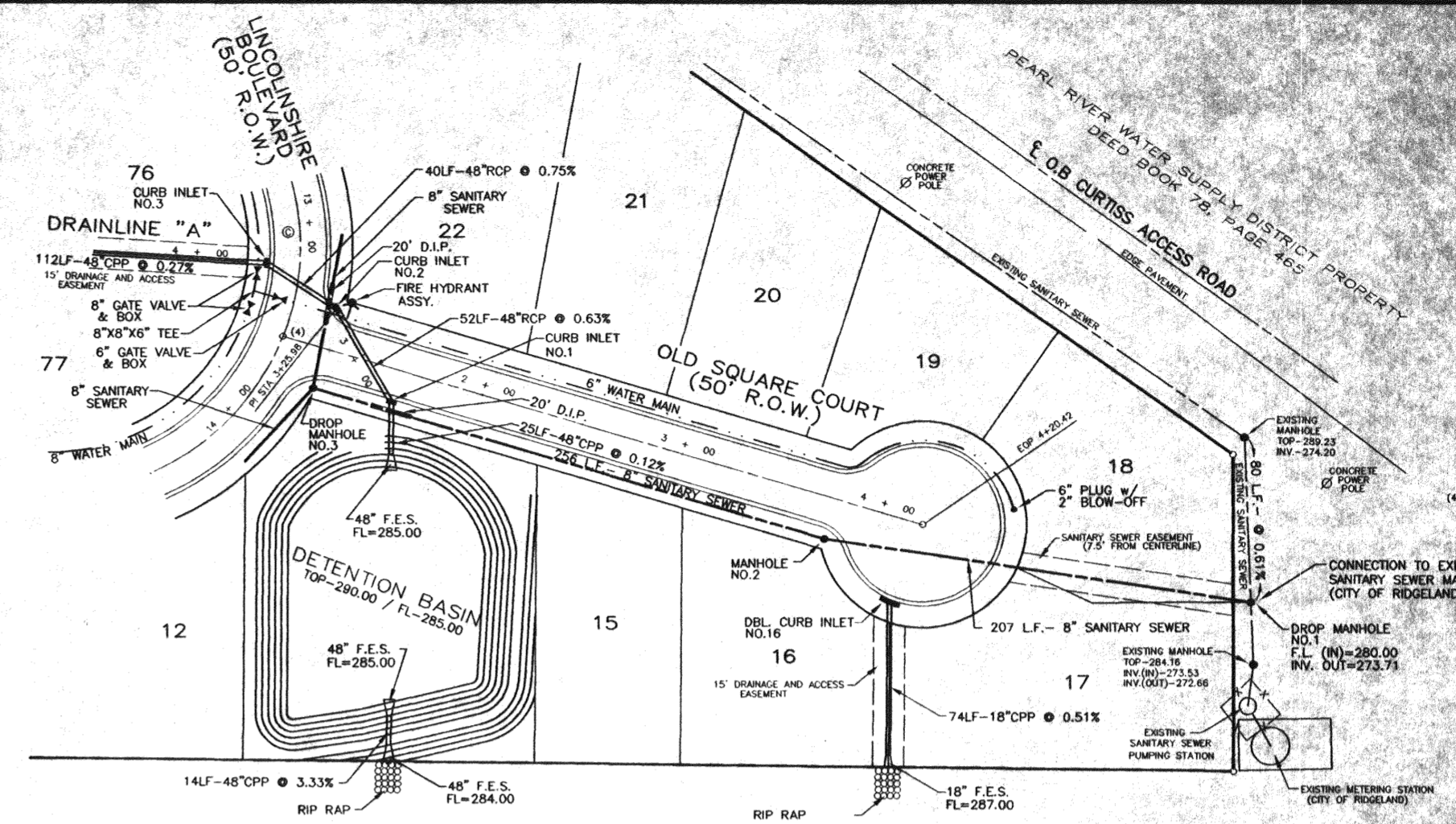
**SANITARY SEWER STRUCTURE SCHEDULE**

DROP MANHOLE NO. 9 20' LT STA. 10+36.03	MANHOLE NO. 11 20' RT STA. 2+39.26
MANHOLE NO. 12 20' RT STA. 2+04.67	

**DRAINAGE STRUCTURE SCHEDULE**

CURB INLET 17 15.7 LT OF STA. 10+41.14 D.A. = 0.49oc I D.A. = 0.84oc TC = 7.8 I = 9.57 Q = 6.0	CURB INLET 18 15.7 LT OF STA. 3+91.77 D.A. = 0.35oc I D.A. = 0.35oc TC = 7.3 I = 9.81 Q = 2.6
---	--

**PLAN AND PROFILE  
TRINITY LANE (STA. 1+00 TO STA. 4+27.47)**



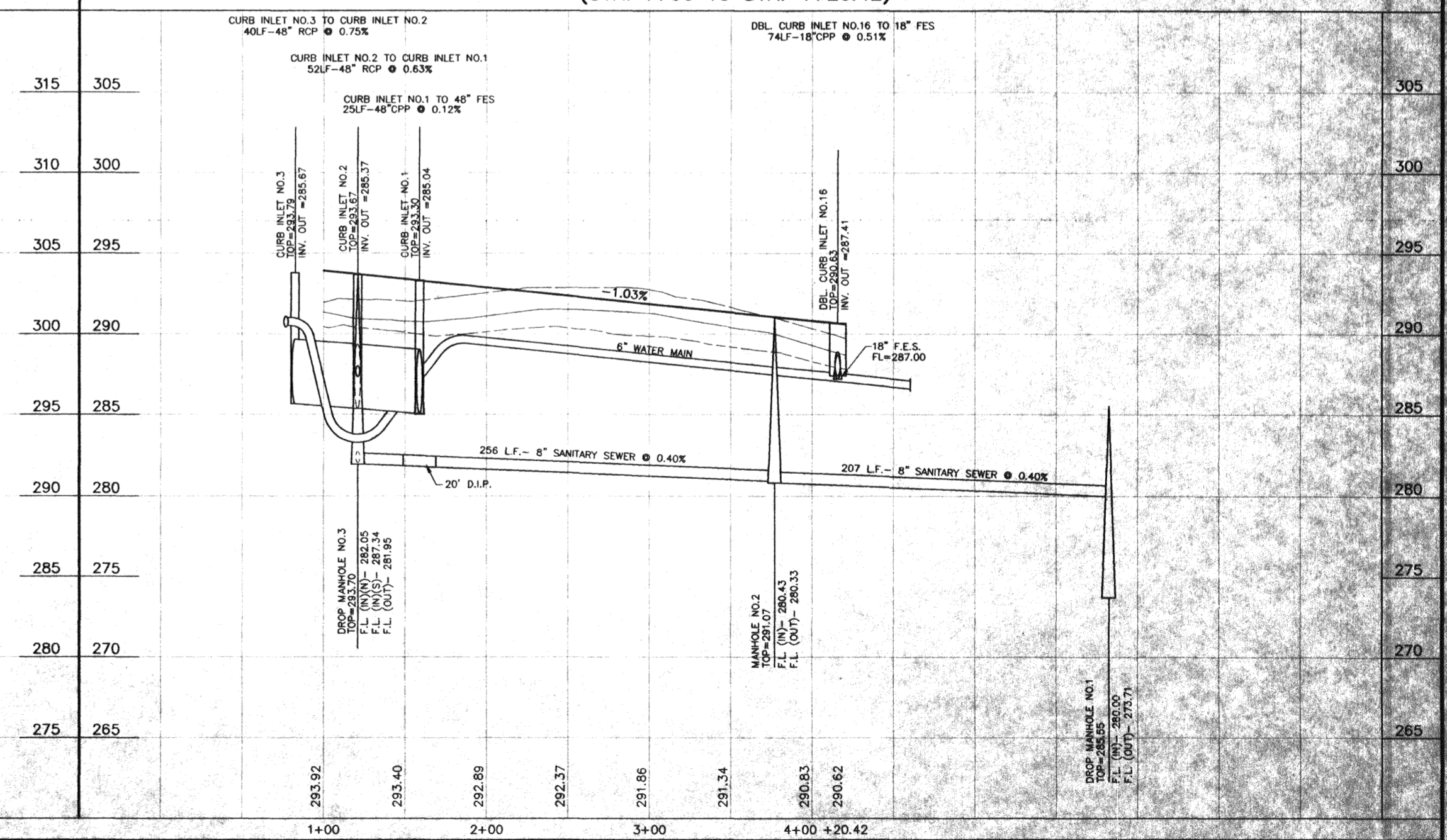
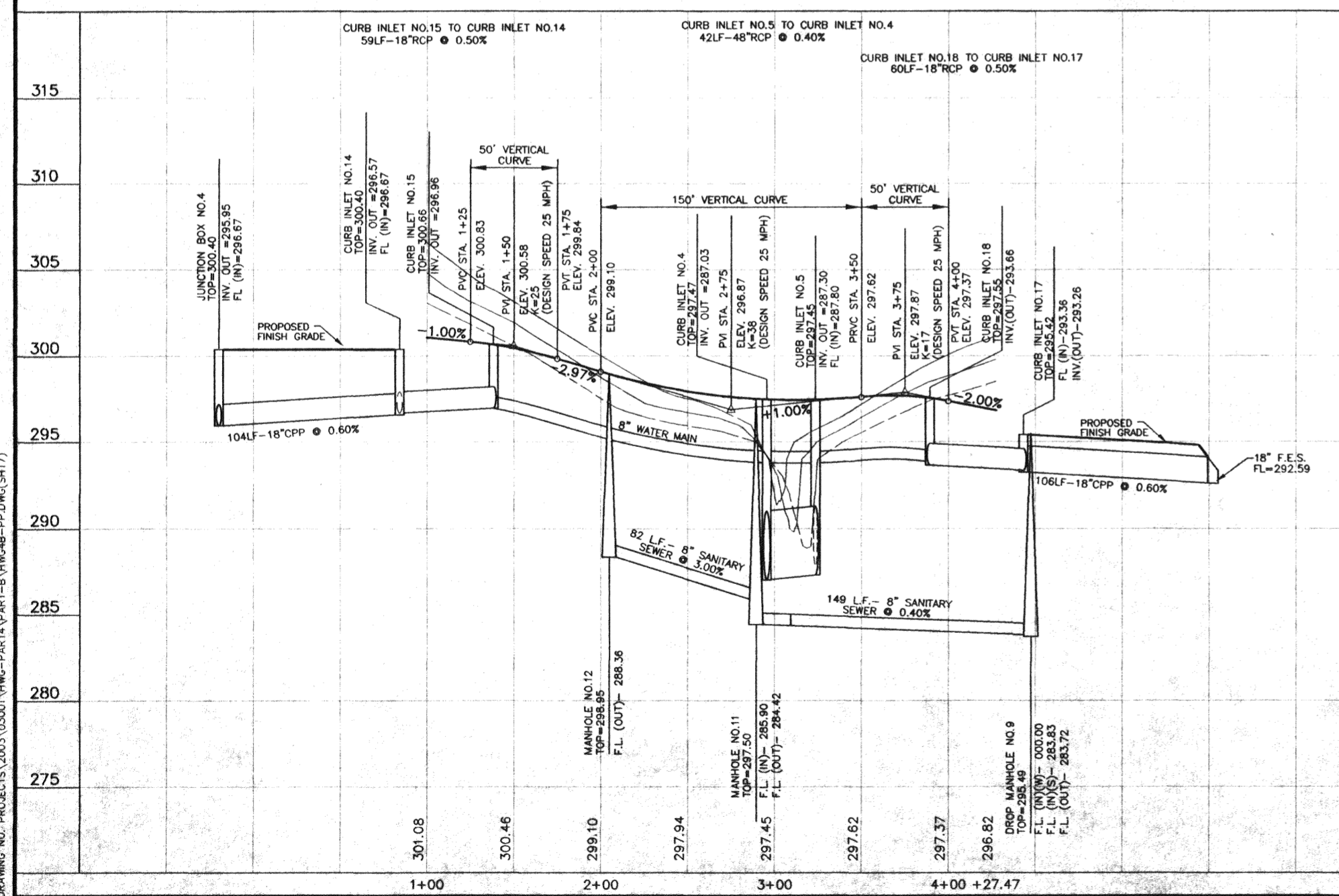
**SANITARY SEWER STRUCTURE SCHEDULE**

DROP MANHOLE NO. 1 8.8' LT STA. 5+82.34	MANHOLE NO. 2 20' RT STA. 3+77.12
DROP MANHOLE NO. 3 20' RT STA. 1+21.05	

**DRAINAGE STRUCTURE SCHEDULE**

CURB INLET 1 15.7 RT OF STA. 1+58.92 D.A. = 0.50oc I D.A. = 10.26oc TC = 14.3 I = 7.37 Q = 95.8	CURB INLET 2 20.8 LT OF STA. 13+36.85 D.A. = 0.49oc I D.A. = 9.76oc TC = 14.1 I = 7.47 Q = 93.4	CURB INLET 3 15.7 RT OF STA. 13+20.39 D.A. = 0.68oc I D.A. = 9.27oc TC = 13.9 I = 7.47 Q = 91	DBL CURB INLET 16 40.5 RT OF STA. 4+15.83 D.A. = 1.24oc I D.A. = 1.24oc TC = 11.3 I = 8.22 Q = 7.6
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**OLD SQUARE COURT  
(STA. 1+00 TO STA. 4+20.42)**



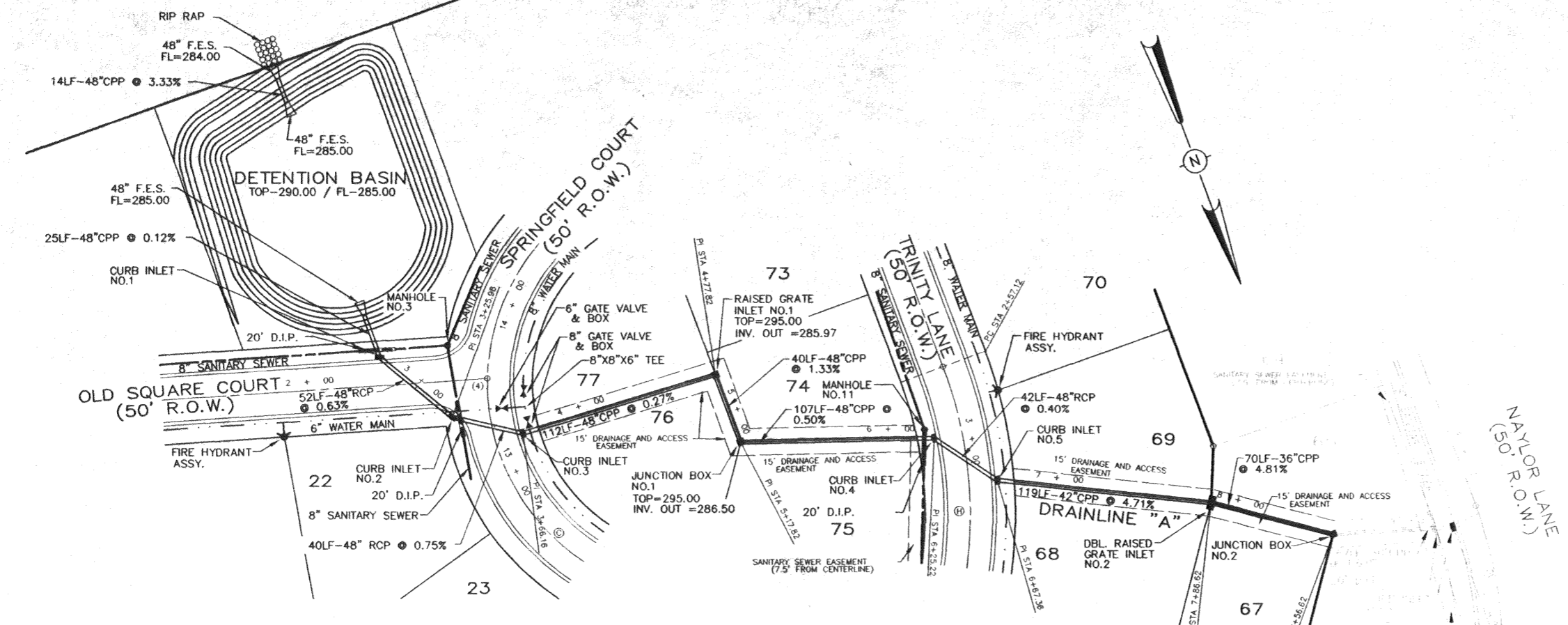
**H D LANG AND ASSOCIATES, INC.**  
POST OFFICE BOX 16085  
JACKSON, MISSISSIPPI 39236  
601-362-4886

PROJECT  
**HAWTHORN GREEN - PART 4B**

DESCRIPTION  
**PLAN AND PROFILE  
TRINITY LANE (STA. 1+00 TO STA. 4+27.47)  
OLD SQUARE COURT  
(STA. 1+00 TO STA. 4+20.42)**

DATE	REVISION	BY	DRAWN BY: CLS	SHEET
5-7-04	REVISIONS PER CITY OF RIDGELAND	D.L.M.	DATE: 10-23-03	7
11-23-04	RECORD DRAWINGS	D.L.M.	HORIZ.: 1"=50' / VERT.: 1"=5'	
			BOOK: PAGE: PROJECT NO.: 03-001	

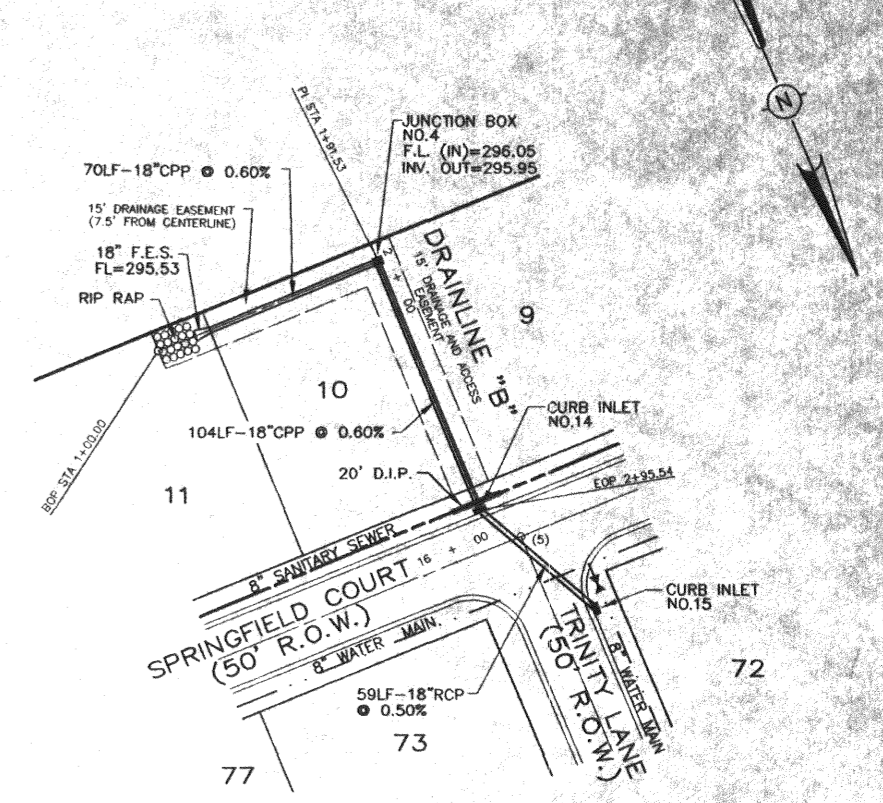




**DRAINAGE STRUCTURE SCHEDULE**

CURB INLET 1	CURB INLET 2	CURB INLET 3	CURB INLET 4	CURB INLET 5	RAISED GRATE INLET NO. 1
15.7 RT OF	20.8 LT OF	15.7 RT OF	15.7 RT OF	15.7 LT OF	127.7 LT OF
STA. 1+58.92	STA. 13+36.85	STA. 13+20.39	STA. 2+95.59	STA. 3+23.63	STA. 13+00.00
D.A. = 0.50%	D.A. = 0.49%	D.A. = 0.68%	D.A. = 0.40%	D.A. = 0.48%	D.A. = 0.25%
± D.A. = 10.26%	± D.A. = 9.76%	± D.A. = 9.27%	± D.A. = 8.34%	± D.A. = 7.94%	± D.A. = 8.99%
TC = 14.3	TC = 14.1	TC = 13.9	TC = 12.6	TC = 12.45	TC = 13.5
I = 7.37	I = 7.42	I = 7.47	I = 7.43	I = 7.87	I = 7.58
O = 95.8	O = 93.4	O = 91	O = 88.1	O = 86	O = 87.9

**DRAINLINE "A"**  
(STA. 1+00 TO STA. 14+24.04)



**DRAINAGE STRUCTURE SCHEDULE**

CURB INLET 14	CURB INLET 15
15.7 RT OF	15.7 LT OF
STA. 7+37.40	STA. 1+37.25
D.A. = 0.46%	D.A. = 0.23%
± D.A. = 0.69%	± D.A. = 0.23%
TC = 7.1	TC = 6.1
I = 9.91	I = 10.44
O = 5.1	O = 1.8

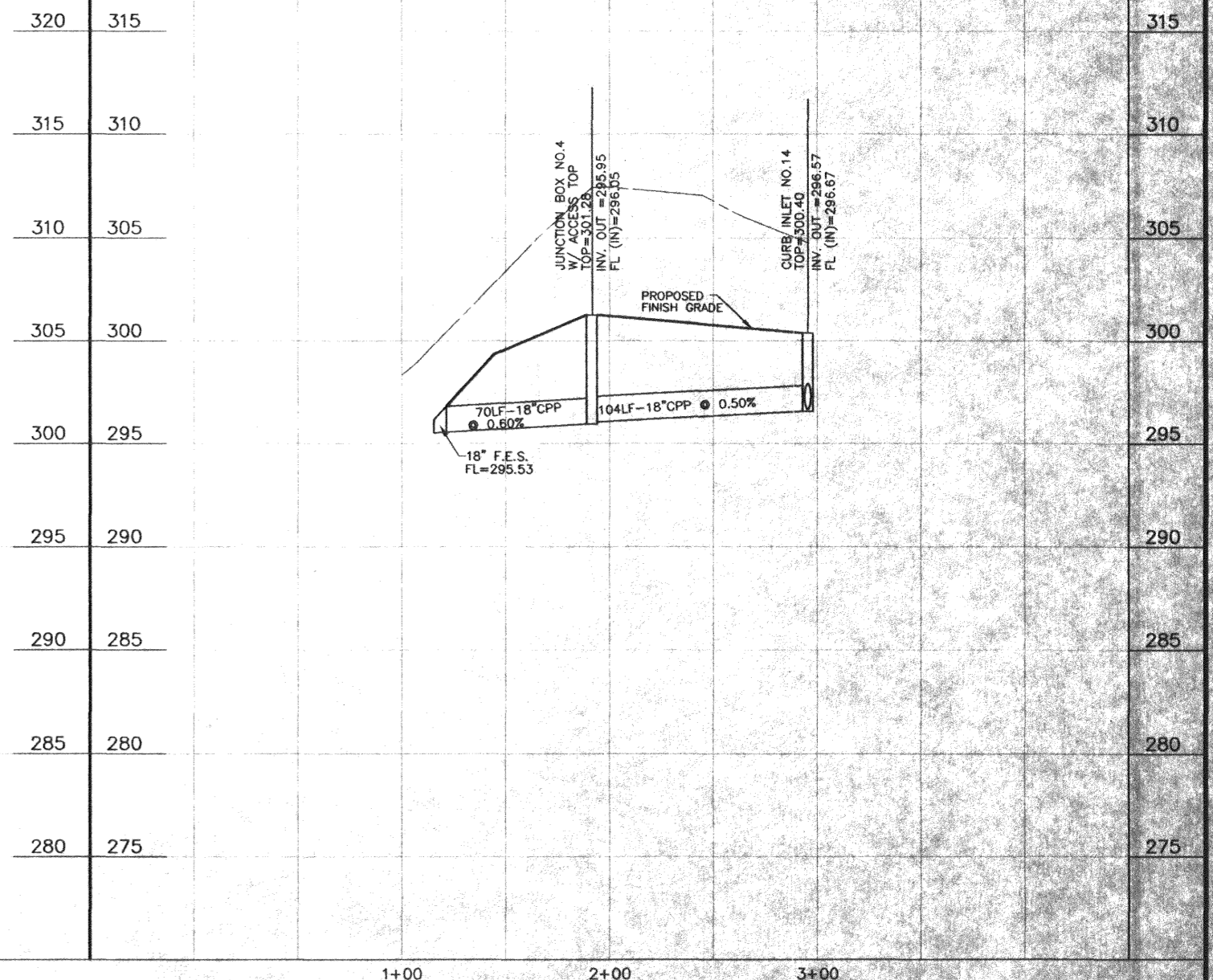
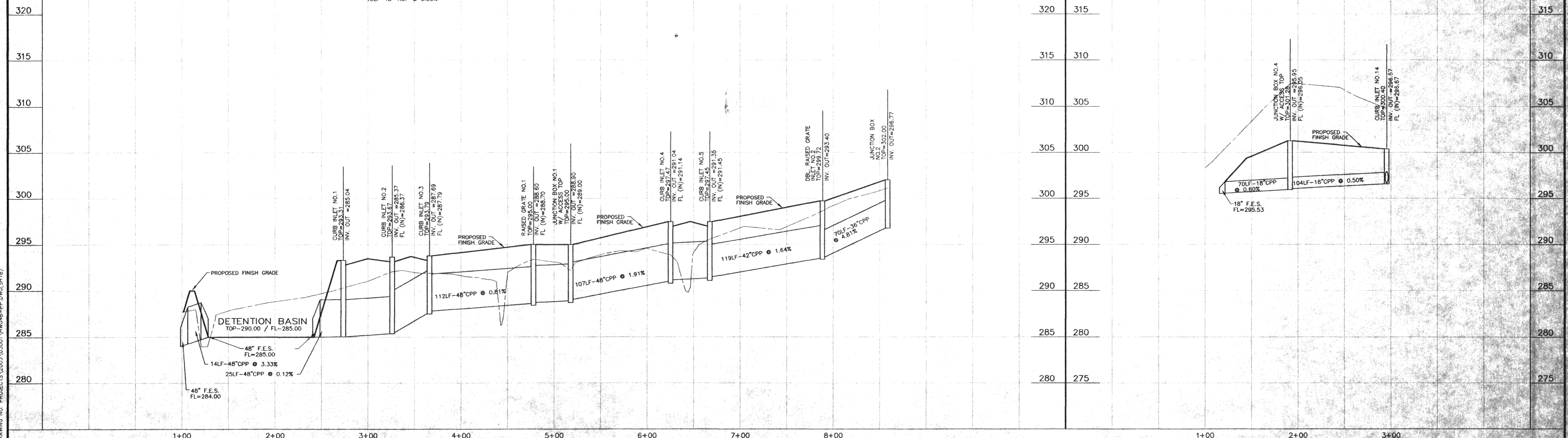
**DRAINLINE "B"**  
(STA. 1+00 TO STA. 2+95.54)

CURB INLET NO.2 TO CURB INLET NO.1  
52LF-48" RCP @ 0.63%

JUNCTION BOX NO.1 TO RAISED GRATE INLET NO.1  
40LF-48" CPP @ 0.50%

CURB INLET NO.5 TO CURB INLET NO.4  
42LF-48" RCP @ 0.50%

CURB INLET NO.3 TO CURB INLET NO.2  
40LF-48" RCP @ 3.30%



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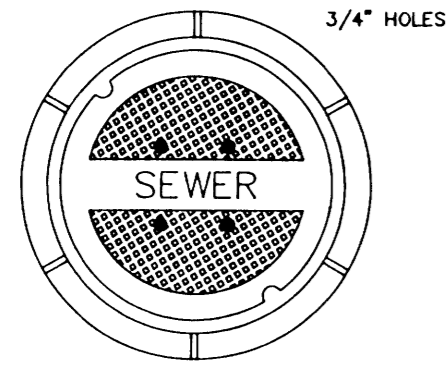
PROJECT  
**HAWTHORN GREEN - PART 4B**

DESCRIPTION  
**PLAN AND PROFILE  
DRAINLINE "A" (STA. 1+00 TO STA. 8+56.62)  
DRAINLINE "B" (STA. 1+00 TO STA. 2+95.54)**

DATE	REVISION	BY	DRAWN BY: OLS
5-7-04	REVISIONS PER CITY OF RIDGELAND	D.L.M.	DATE: 10-23-03
11-23-04	RECORD DRAWINGS	D.L.M.	HORIZ.: 1"=50' / VERT.: 1"=5'
			BOOK: PAGE:
			PROJECT NO.: 03-001

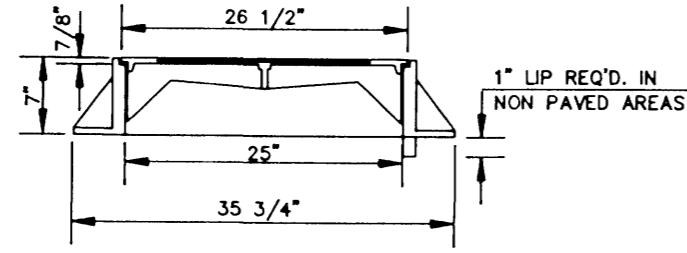
SHEET  
**8**





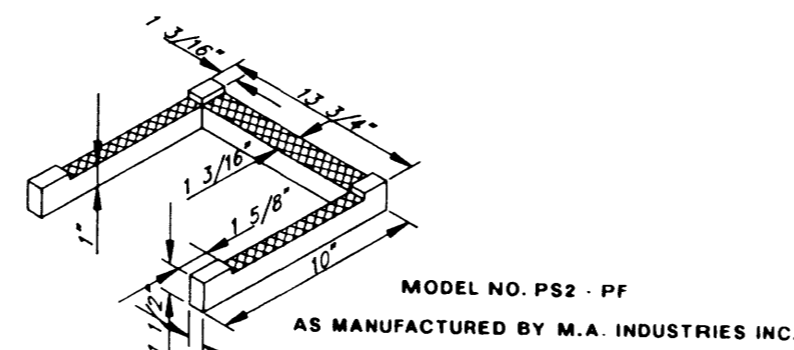
TOP PLAN OF COVER

3/4" HOLES



SECTION

FRAME & COVER WEIGHT 420 LBS.

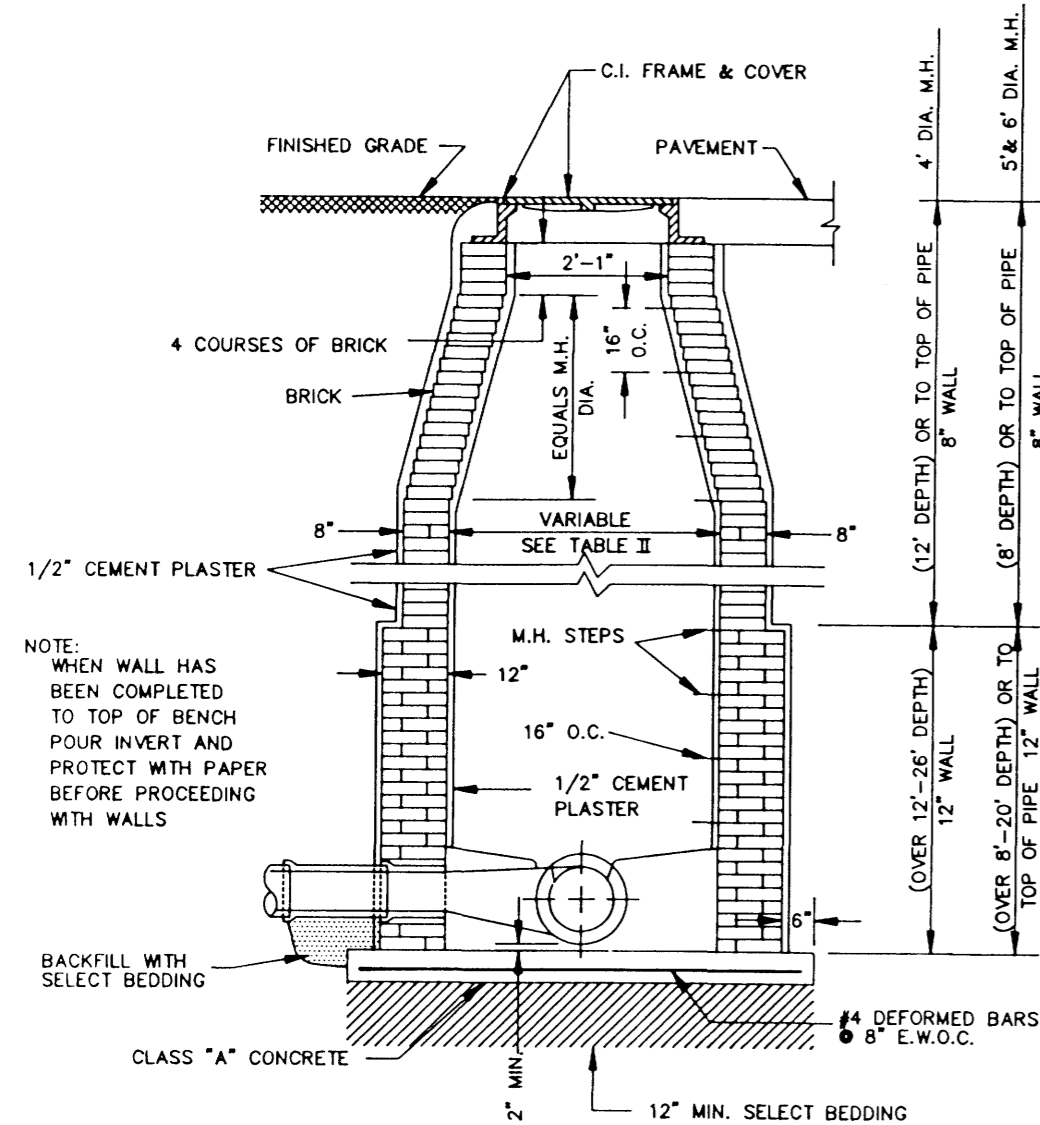


DETAIL 'B'

MODEL NO. PS2 - PF  
AS MANUFACTURED BY M.A. INDUSTRIES INC.

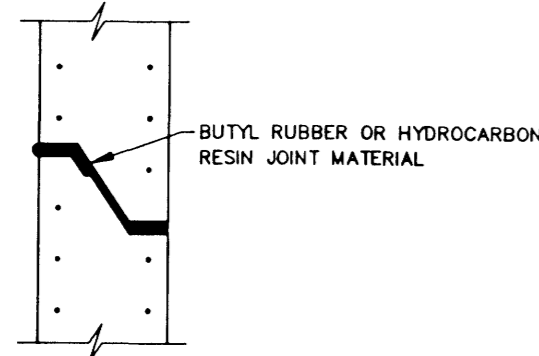
**STANDARD MANHOLE FRAME AND COVER**

N.T.S.



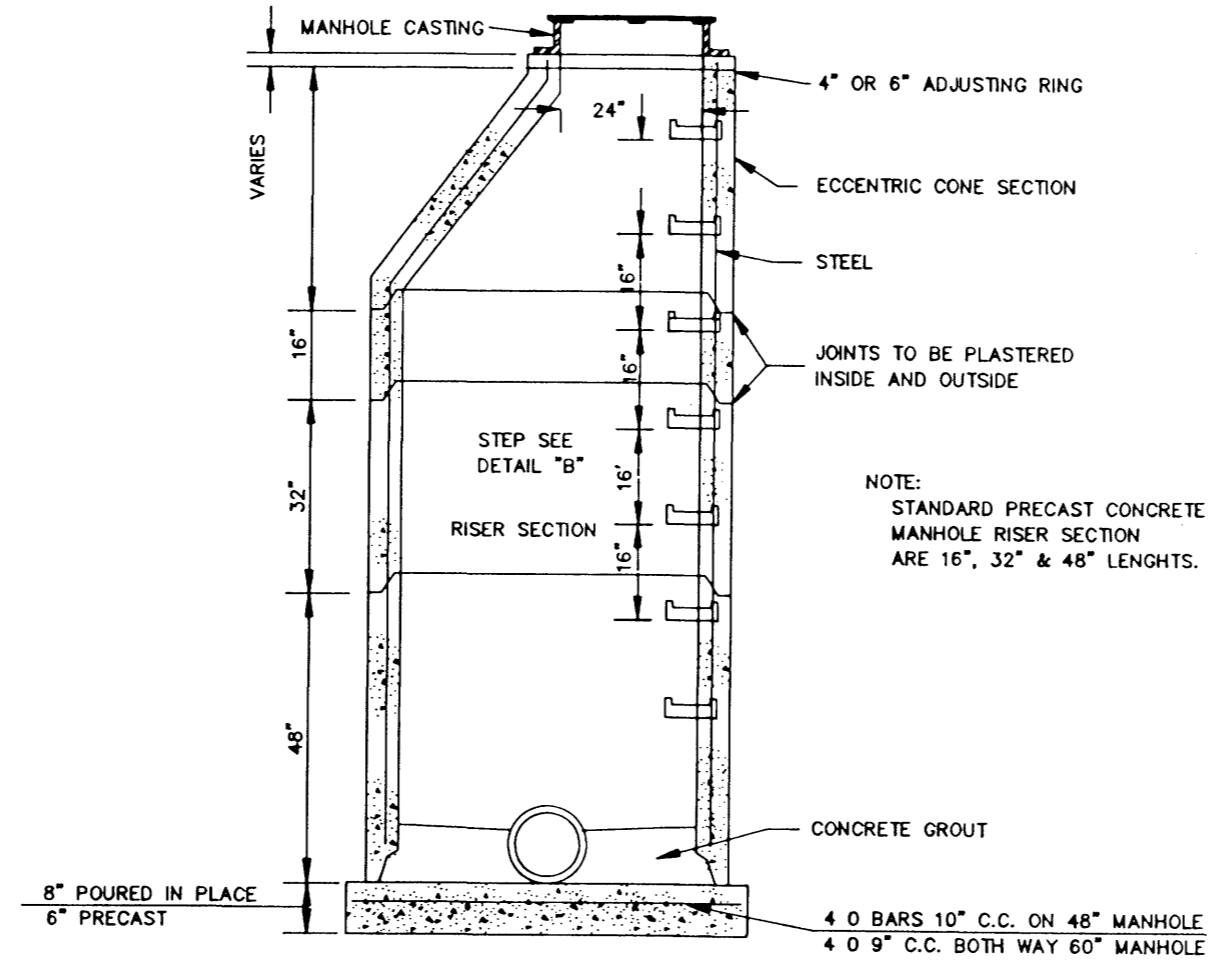
**STANDARD BRICK MANHOLE**

N.T.S.



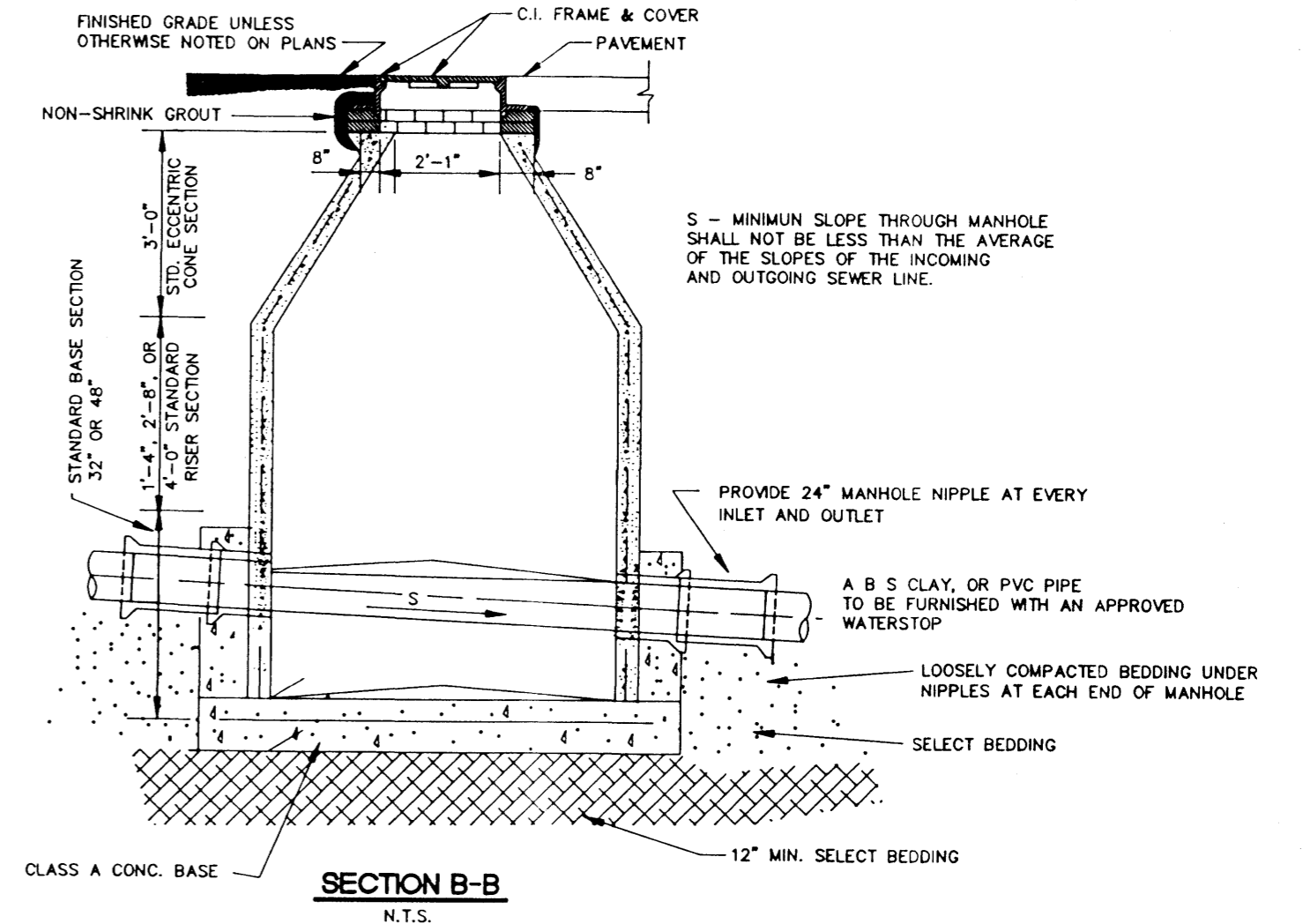
TYPICAL PRECAST CONCRETE MANHOLE JOINT DETAIL

N.T.S.



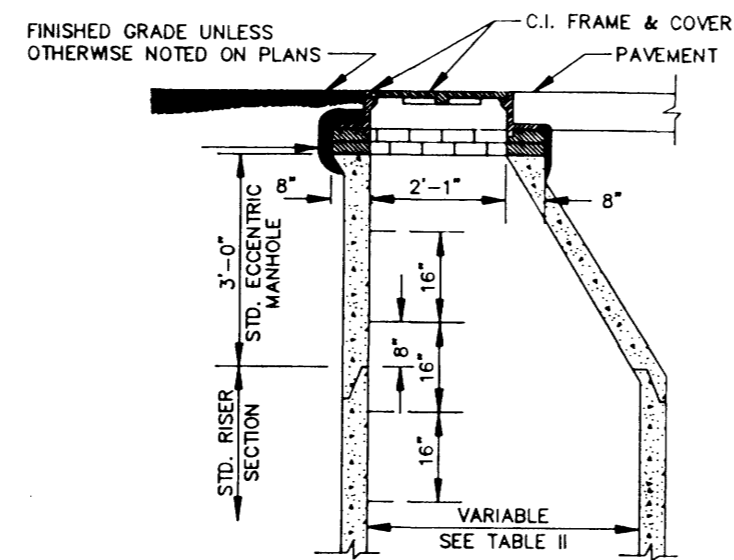
**SECTION OF PRECAST CONCRETE MANHOLE**

N.T.S.



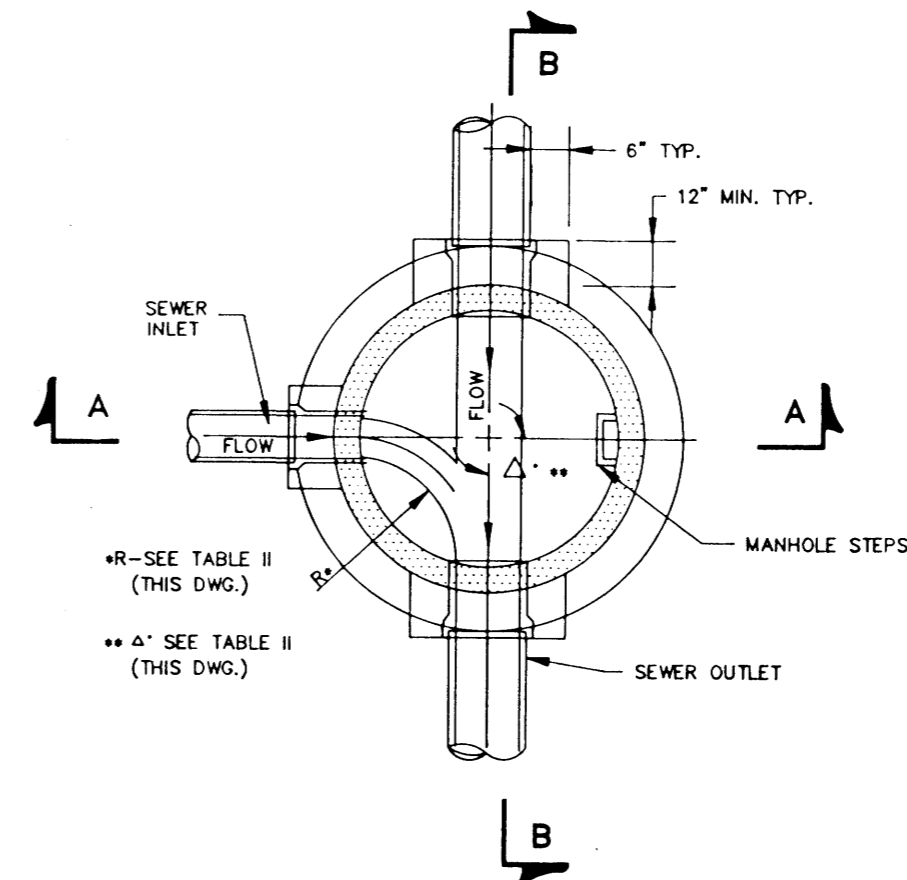
SECTION B-B

N.T.S.



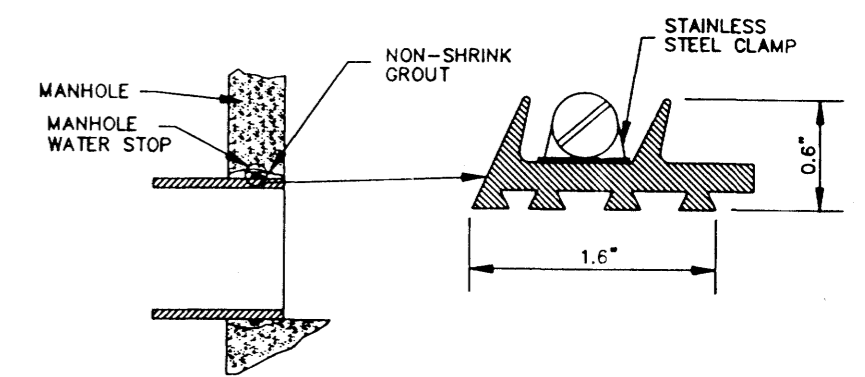
**STANDARD ECCENTRIC CONE FOR ALL DIAMETER MANHOLES**

N.T.S.



SECTIONAL PLAN STANDARD MANHOLE

N.T.S.



**TYPICAL MANHOLE WATER STOP FOR ABS, CLAY OR PVC PIPE**

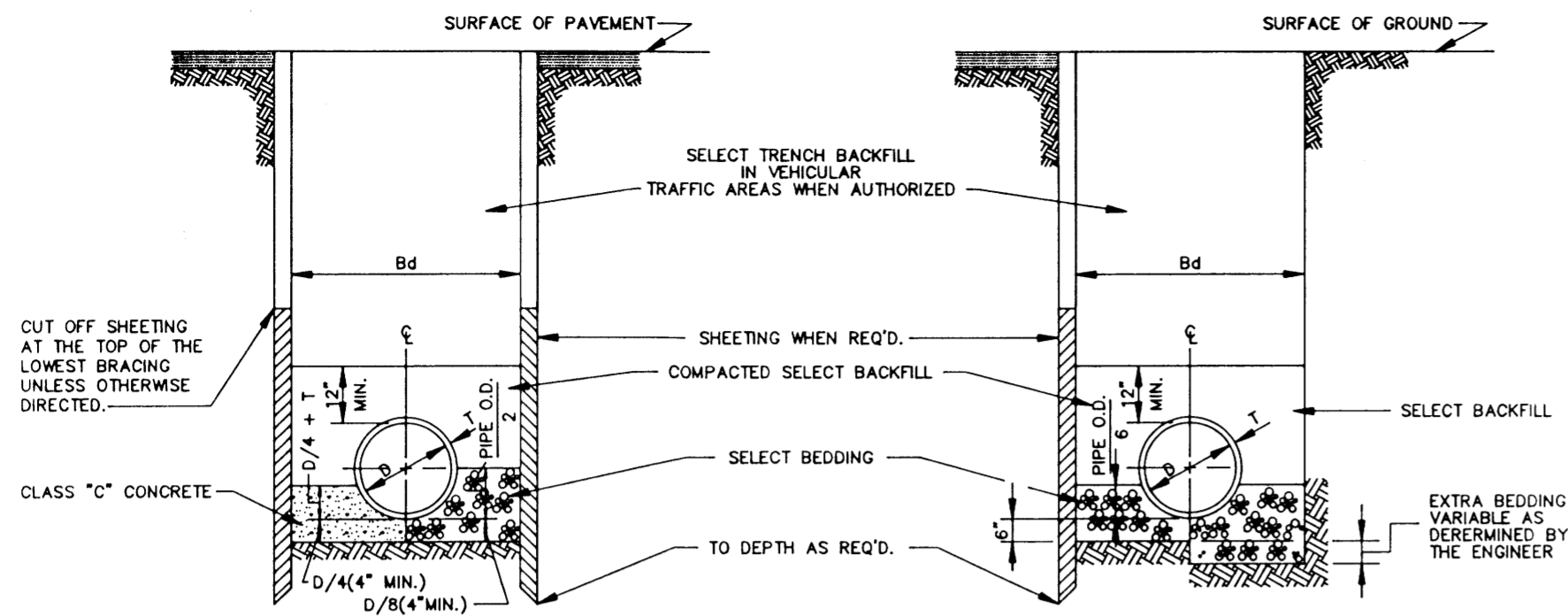
EXISTING AND "STRADDLE" MANHOLES  
N.T.S.

CITY OF RIDGELAND, MS.

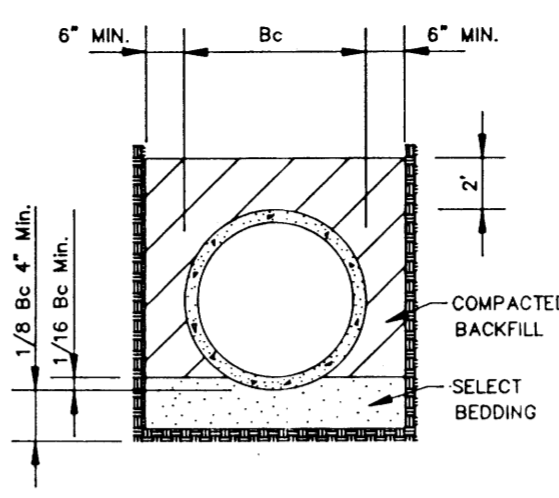
**STANDARD DETAILS**

DSGN:		THE CITY OF RIDGELAND	DRAWING NO.
DRWN:			OF
CHKD:			
SCALE:			





TYPICAL TRENCH DETAILS (FORCE MAIN)



**CLASS "A" BEDDING**  
 MATERIAL SHALL BE CLASS "C" CONCRETE CRADLES. THE PIPE SHALL BE LAID ON CONCRETE SADDLES CONSTRUCTED TO PROVIDE VERTICAL AND LATERAL SUPPORT FOR THE PIPE WHILE THE CRADLE IS BEING PLACED. PIPE SUPPORTS OF WOOD BLOCKS, LOOSE BRICK, ETC., WILL NOT BE PERMITTED. THE CRADLE SHALL BE POURED AFTER THE JOINTS HAVE BEEN MADE, CARE BEING TAKEN TO PREVENT MOVEMENT OF THE PIPE. WHENEVER THE CONTRACTOR PLACES CONCRETE OUTSIDE THE DIMENSIONS SHOWN ON THE DRAWINGS, THE COST OF SUCH CONCRETE WILL BE AT THE CONTRACTOR'S EXPENSE.

**CLASS "B" BEDDING**  
 MATERIAL SHALL BE SELECT BEDDING AS SPECIFIED. MATERIAL SHALL BE CAREFULLY PLACED AND THOROUGHLY COMPACTED BY TAMPING.

**CLASS "C" BEDDING (STANDARD BEDDING)**  
 MATERIAL SHALL BE THE SAME AS FOR CLASS "B" BEDDING AND SHALL BE PLACED AS SHOWN BY STANDARD DETAILS FOR THE TYPE OF PIPE USED.

CLASS "A" BEDDING CLASS "B" BEDDING CLASS "B" BEDDING EXTRA BEDDING (FOR INADEQUATE SOIL BEARING CAPACITY)

BEDDING FOR VITRIFIED CLAY, CONCRETE & ABS PIPE

TYPICAL TRENCH DETAILS  
 N.T.S.

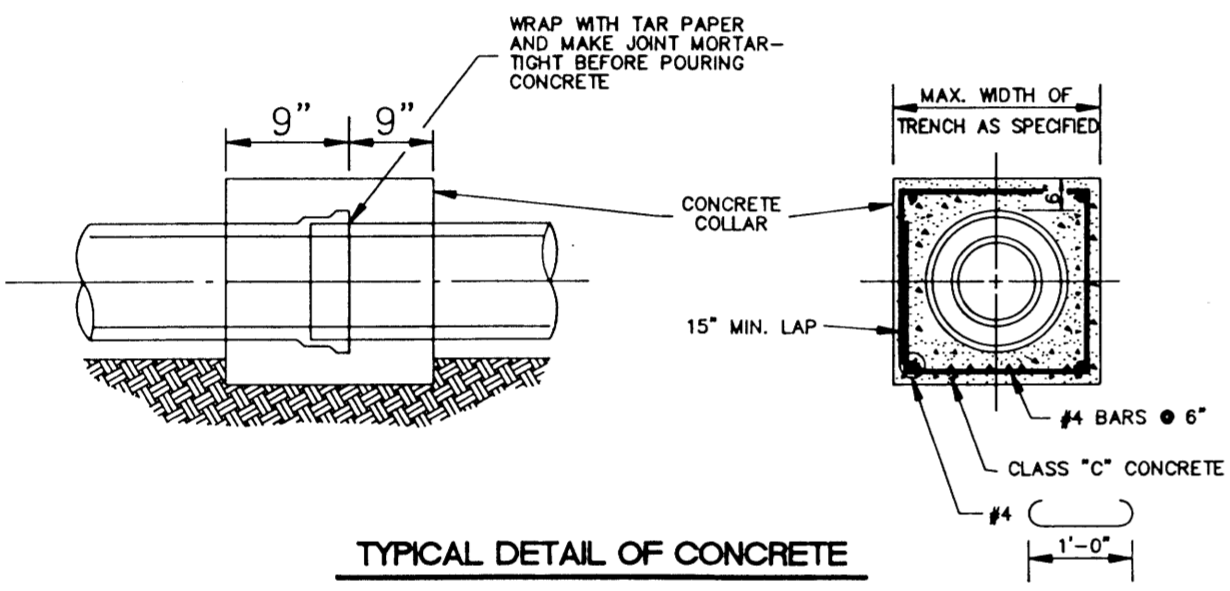
**TABLE "A"**  
 PIPE SIZE

CARRIER PIPE (INCHES)	CASING PIPE	
	DIA. (INCHES)	STEEL PIPE WALL THICK
8	16	1/4"
10	20	5/16"
12	24	3/8"
14 & 16	30	1/2"
18	36	1/2"
24	36	1/2"
30	54	1/2"
36	54	1/2"
42	66	SEE TABLE "B"
48	72	-
54	78	-
60	84	-
66	96	-
72	108	-
84	120	-
96	144	-

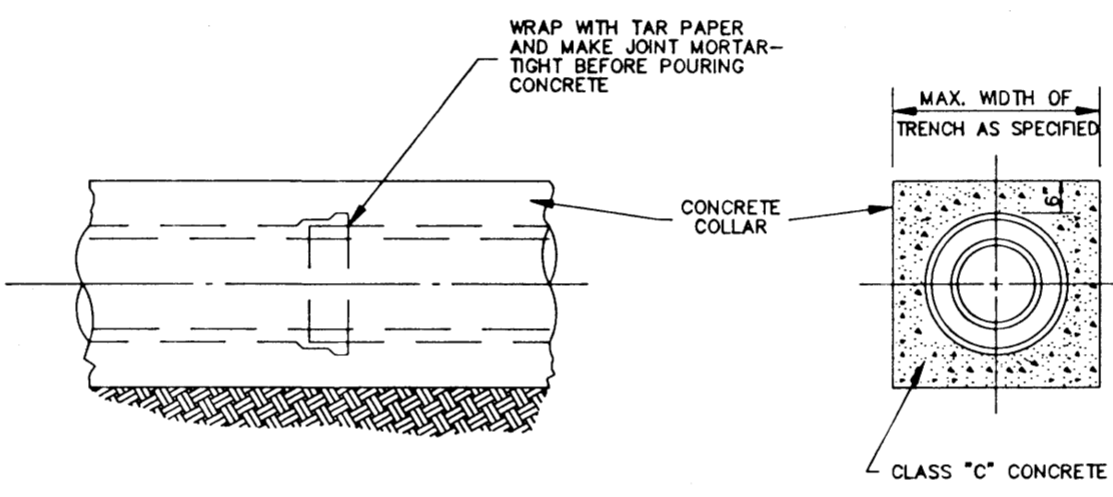
**TABLE "B"**  
 GAGES OF LINER PLATE FOR CONTINUOUS LOAD-CARRYING STRUCTURES

NOMINAL DIA. (INCHES)	HEIGHT OF COVER (FEET)									
	2-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50
48	12	12	12	12	12	12	12	10	8	7
54	12	12	12	12	12	12	12	10	8	7
60	12	12	12	12	12	12	12	10	8	7
66	12	12	12	12	12	12	12	10	8	7
72	12	12	12	12	12	12	10	8	7	5
78	12	12	12	12	10	8	7	5	5	5
84	12	12	12	10	10	8	7	5	5	5
96	12	10	10	10	8	5	5	5	5	5
108	10	10	10	10	8	7	5	5	5	5
120	10	10	10	8	7	5	5	5	5	3
144	8	8	8	8	5	5	3	1	1	1

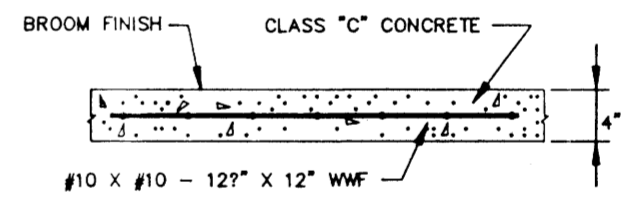
CASING PIPE  
 SIZE AND THICKNESS OF PIPE FOR RAILROAD & HIGHWAY CROSSING



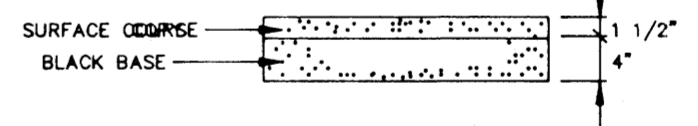
TYPICAL DETAIL OF CONCRETE COLLAR  
 N.T.S.



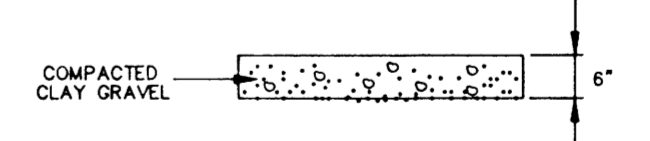
TYPICAL DETAIL OF CONCRETE ENCASMENT  
 N.T.S.



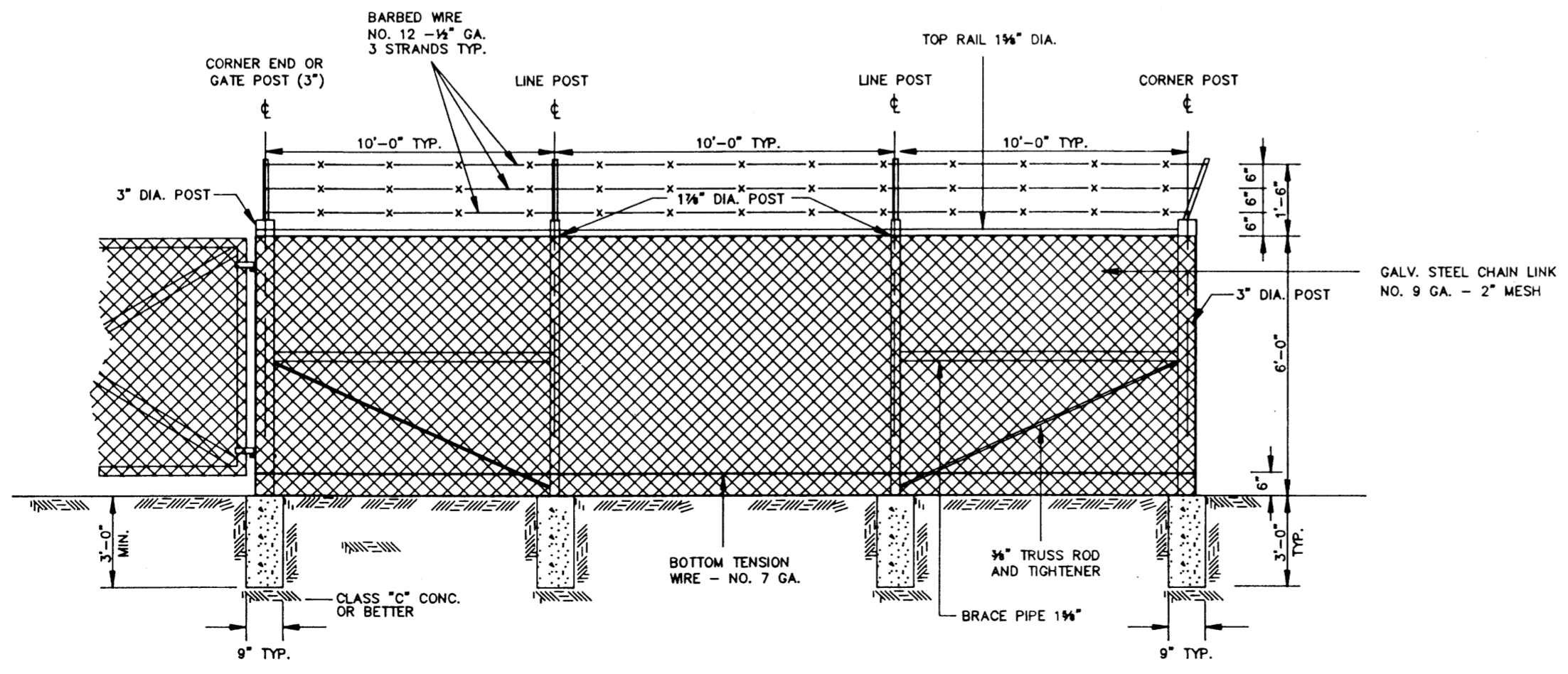
TYPICAL CONC. DRIVEWAY AND SIDEWALK REPAIR



TYPICAL ASPHALT DRIVEWAY REPAIR



TYPICAL GRAVEL DRIVEWAY REPAIR

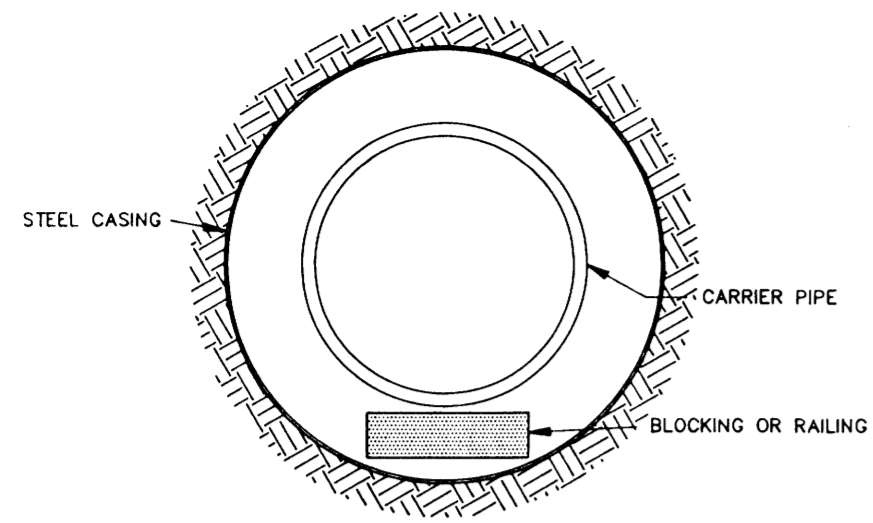


CHAIN LINK FENCE DETAIL  
 N.T.S.

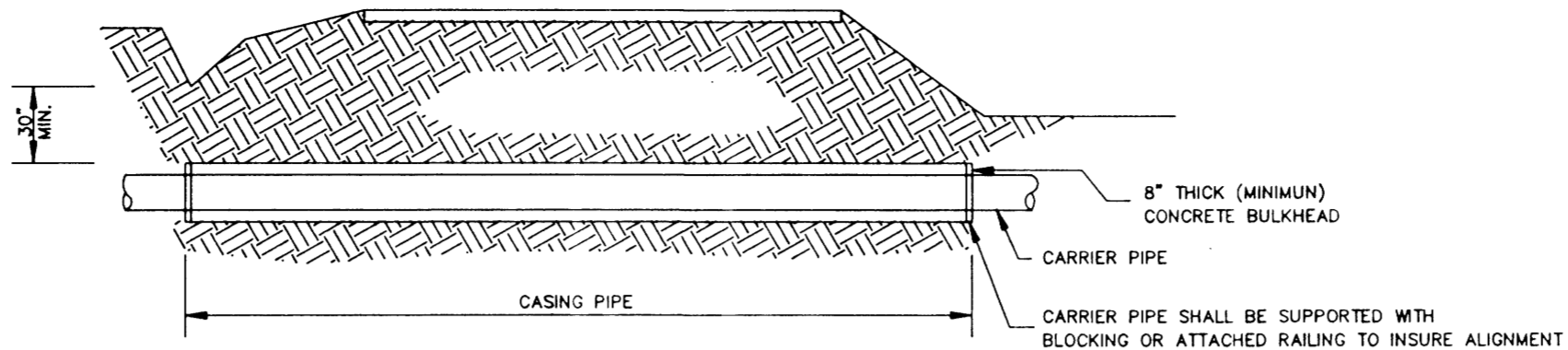
CITY OF RIDGELAND, MS.  
**STANDARD DETAILS**

DSGN:	THE CITY OF RIDGELAND	DRAWING NO.
DRWN:		
CHKD:		
SCALE:		





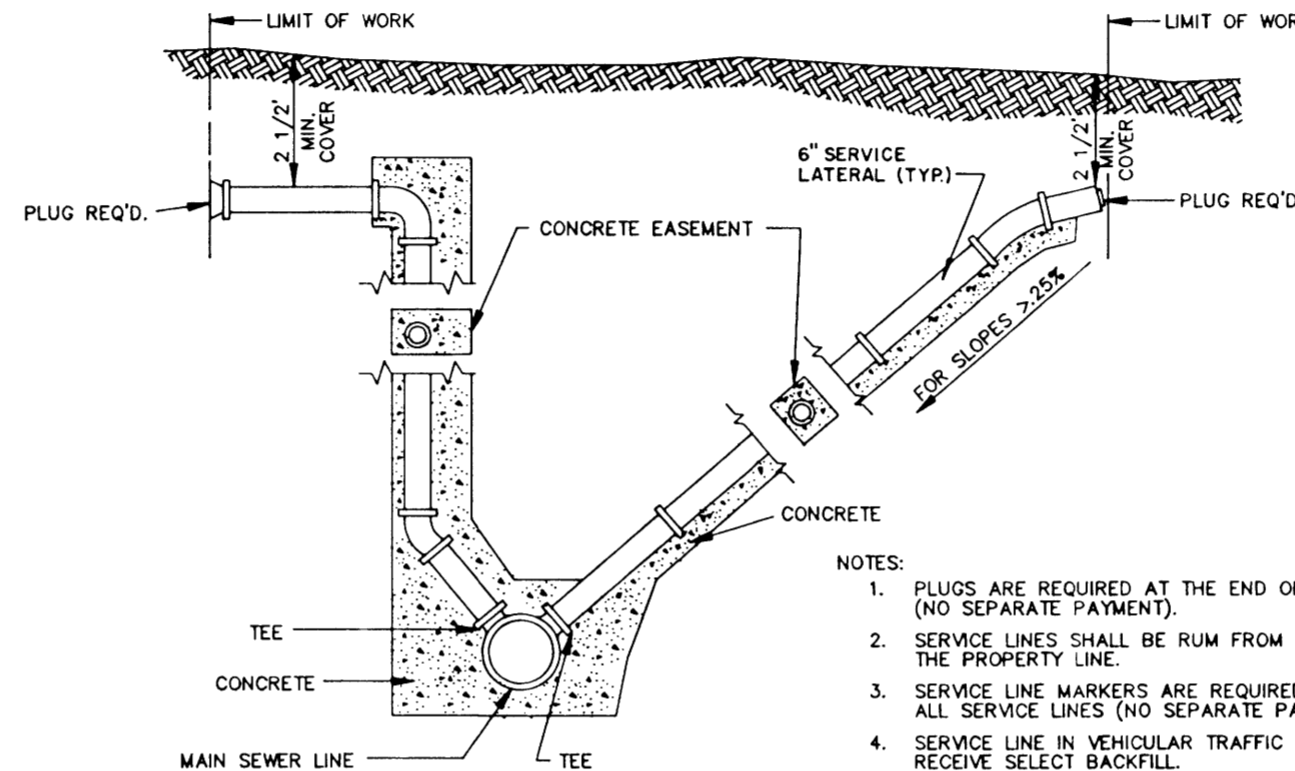
**BORE SECTION**  
N.T.S.



**TYPICAL BORE SECTION**  
N.T.S.

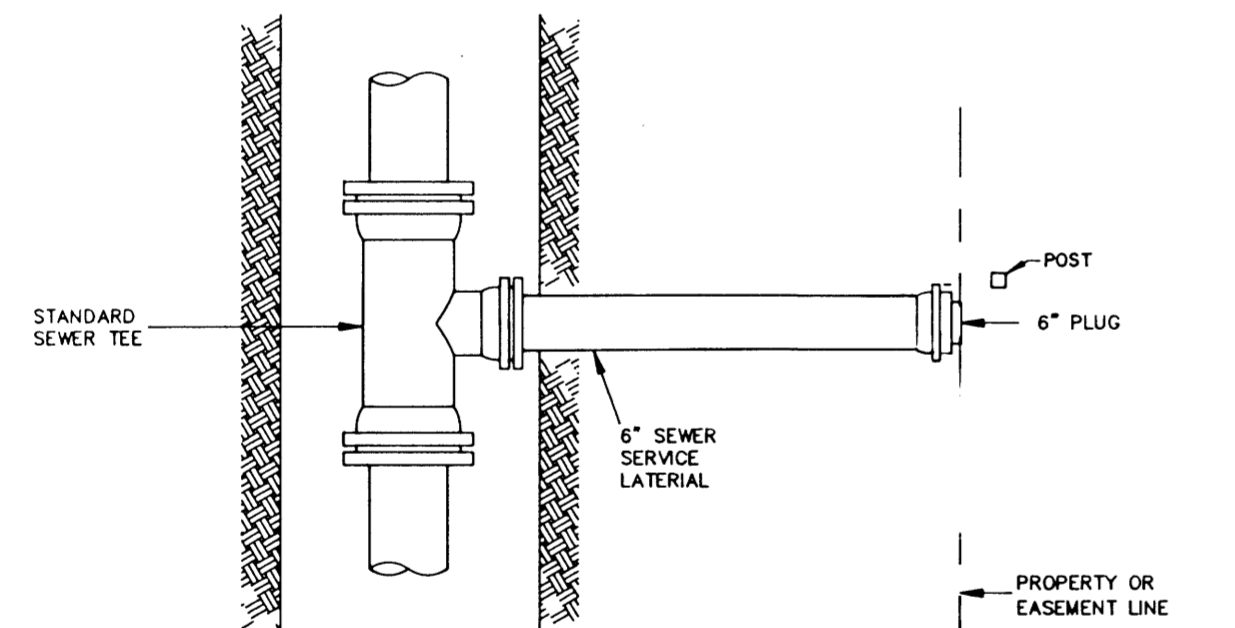
TABLE II GOVERNING DIMENSIONS FOR MANHOLES			
PIPE SIZE	Δ ANGLE	BASE DIAMETER **	"R" *
8" THRU 12"	0° TO 90°	4'	1'- 6"
15"	0° TO 60°	4'	1'- 10"
15"	60° TO 90°	4'	1'- 10"
18"	0° TO 60°	4'	2'- 3"
18"	60° TO 90°	4'	1'- 10"
21"	0° TO 60°	4'	2'- 7"
21"	60° TO 90°	5'	2'- 4"
24"	0° TO 45°	4'	3'- 0"
24"	45°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

\* SEE SECTIONAL PLAN, STANDARD MANHOLE  
\*\* PRECAST MANHOLE

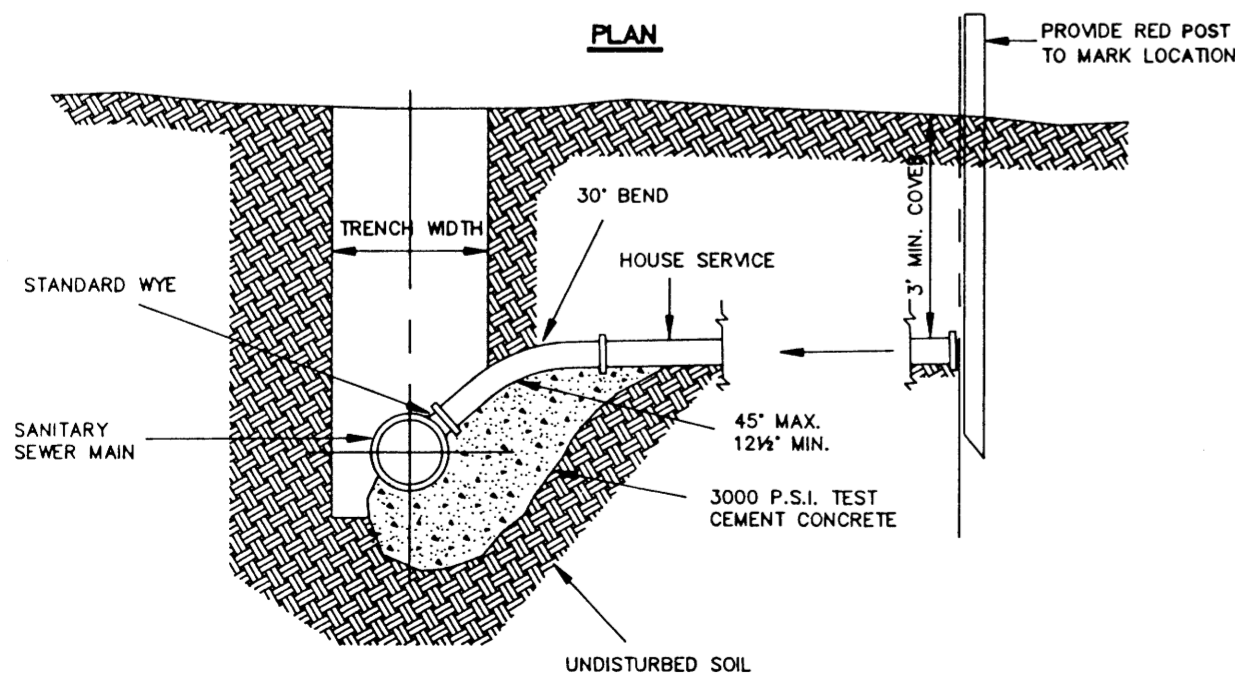


- NOTES:
1. PLUGS ARE REQUIRED AT THE END OF ALL SERVICE LINES (NO SEPARATE PAYMENT).
  2. SERVICE LINES SHALL BE RUM FROM THE SEWER LINES TO THE PROPERTY LINE.
  3. SERVICE LINE MARKERS ARE REQUIRED AT THE END OF ALL SERVICE LINES (NO SEPARATE PAYMENT).
  4. SERVICE LINE IN VEHICULAR TRAFFIC AREA SHALL RECEIVE SELECT BACKFILL.
  5. WHEN MINIMUM COVER CAN NOT BE OBTAINED DUCTILE IRON PIPE SHALL BE USED.

**SERVICE CONNECTION FOR DEEP SEWER**  
N.T.S.

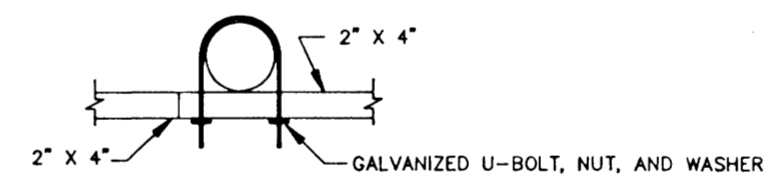


**PLAN**

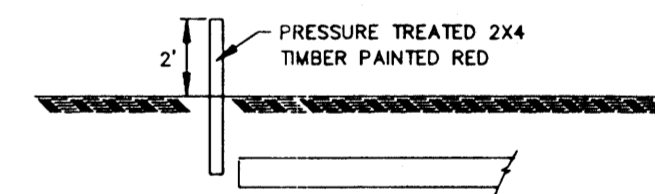


**ELEVATION**

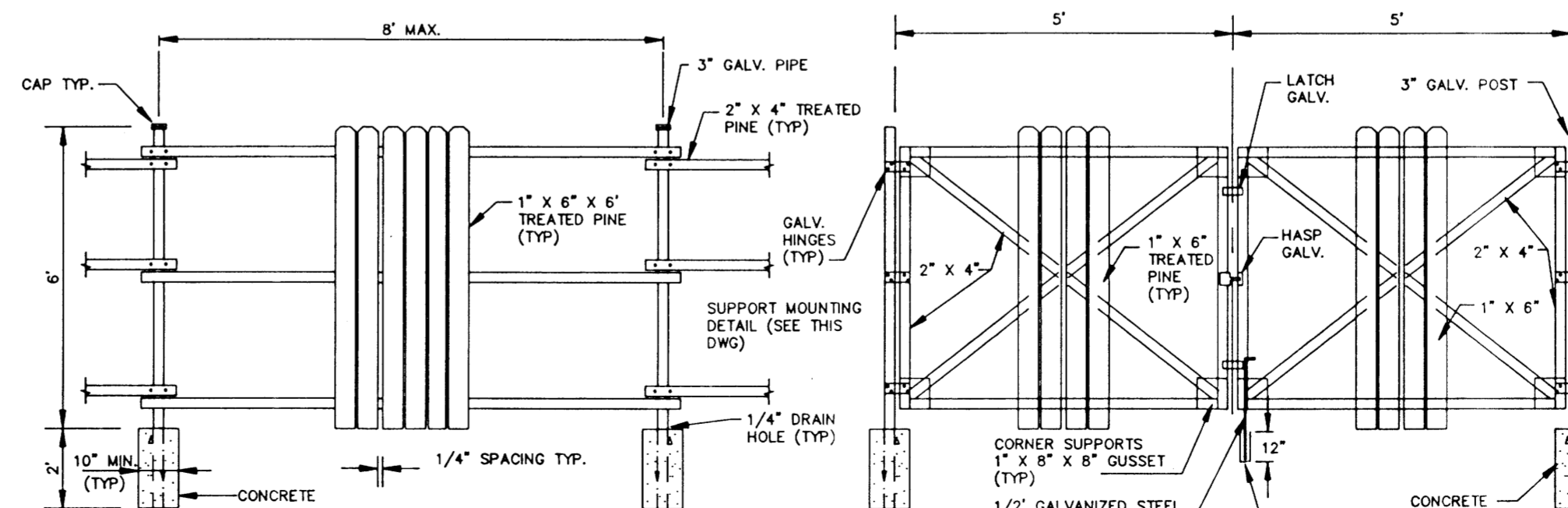
**SEWER SERVICE CONNECTION**  
N.T.S.



**SUPPORT MOUNTING DETAIL**  
N.T.S.



**SERVICE LINE MARKER**  
(NO SEPARATE PAYMENT)  
N.T.S.



**FENCE DETAIL**  
N.T.S.

**GATE DETAIL**  
N.T.S.

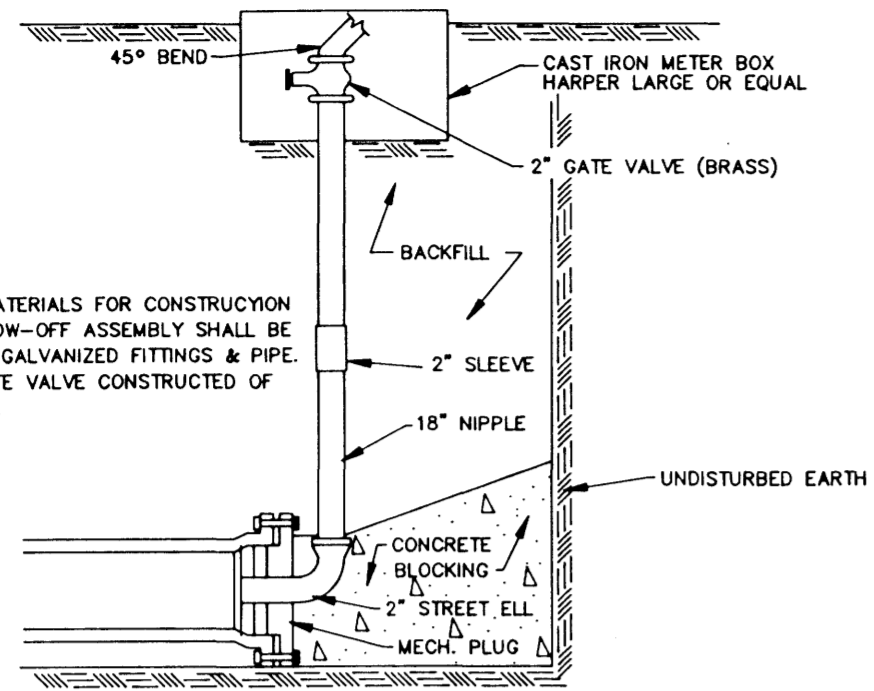
CITY OF RIDGELAND, MS.

**STANDARD DETAILS**

WEST WATER LINES

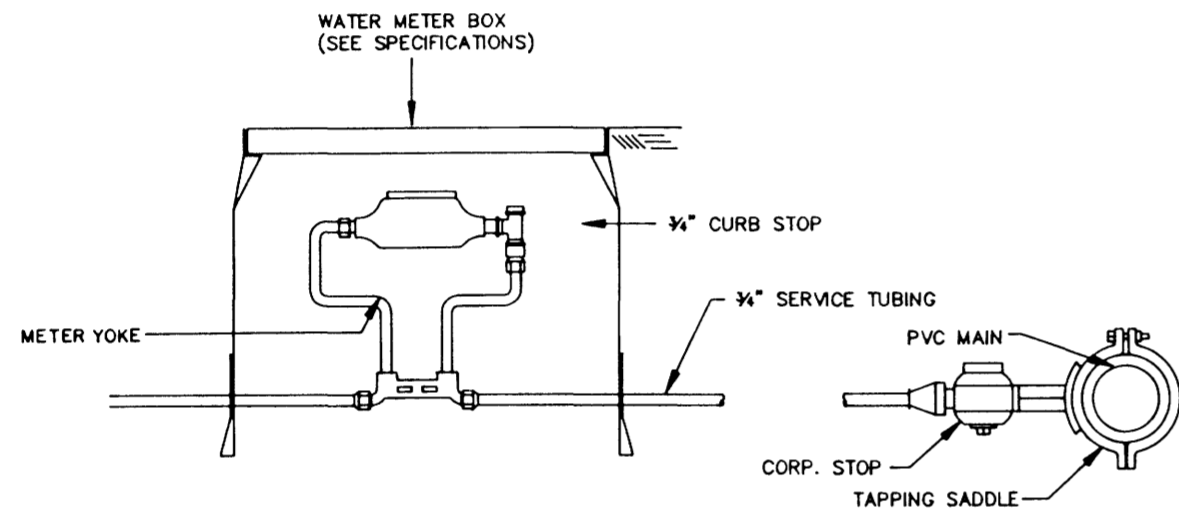
DBGN:	SV	THE CITY OF RIDGELAND	DRAWING NO.
DRWN:	BFM		5 of 5
CHKD:	SV		
SCALE:	N.T.S.		



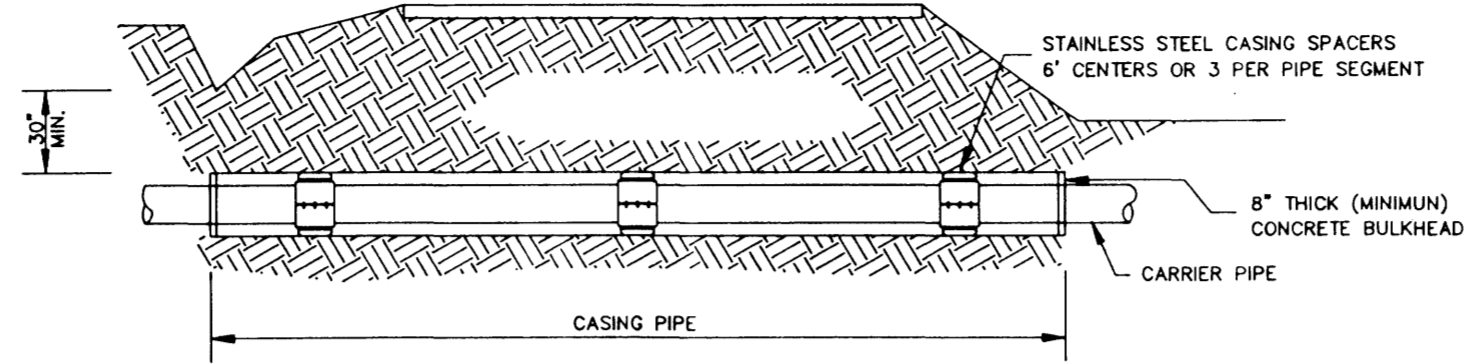


NOTE:  
ALL MATERIALS FOR CONSTRUCTION OF BLOW-OFF ASSEMBLY SHALL BE OF 2" GALVANIZED FITTINGS & PIPE. 2" GATE VALVE CONSTRUCTED OF BRASS.

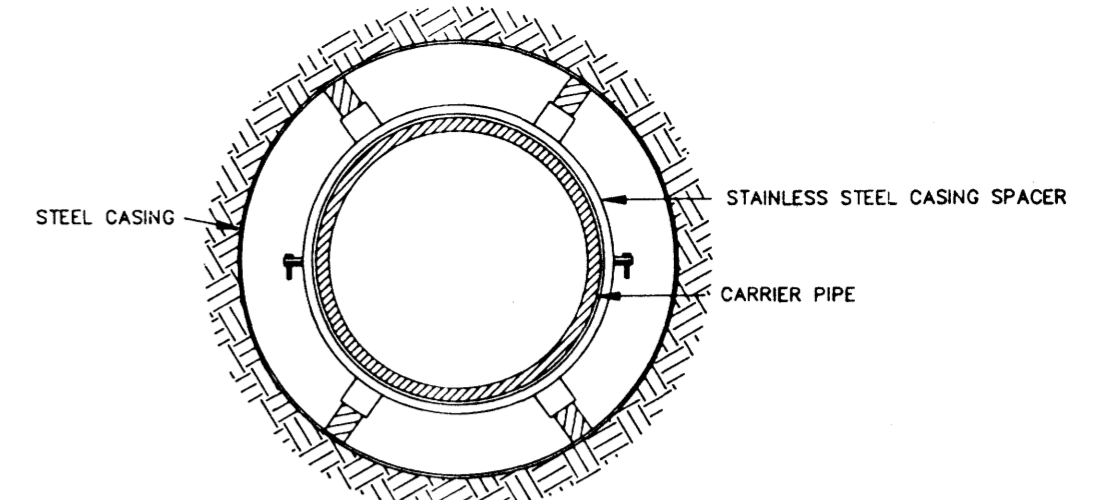
**TYPICAL BLOW-OFF ASSEMBLY**  
N.T.S.



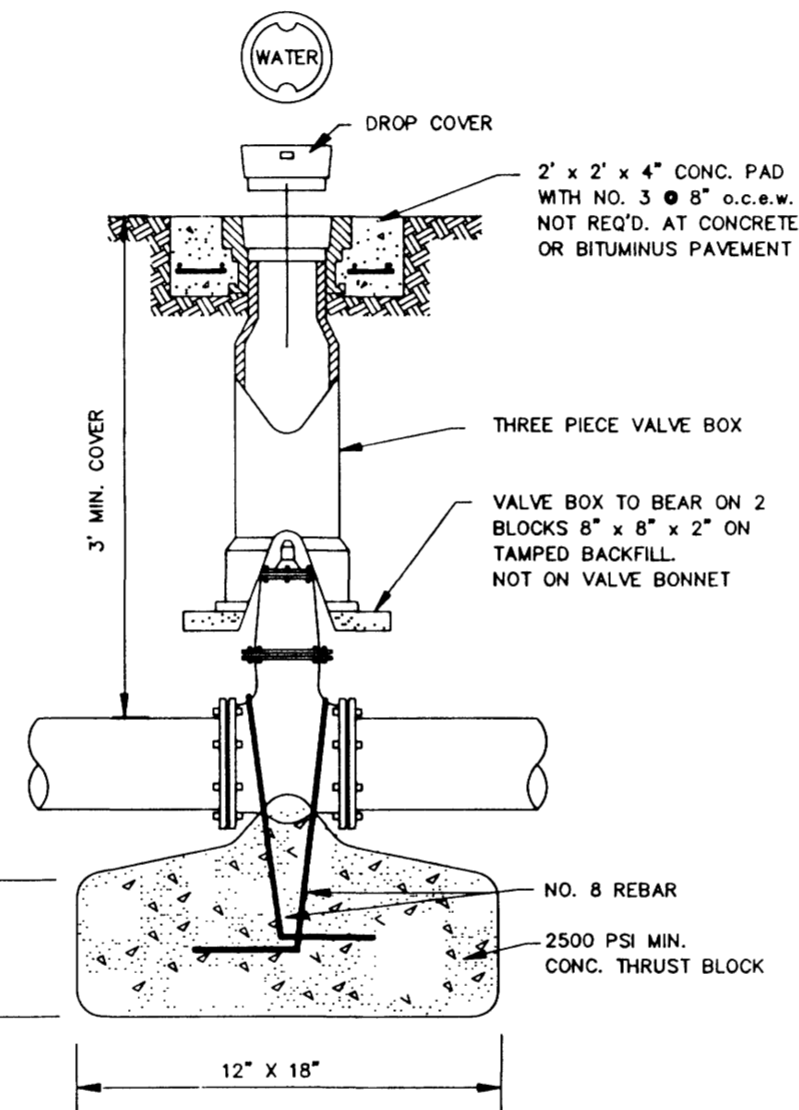
**TYPICAL 3/4" WATER SERVICE**  
N.T.S.



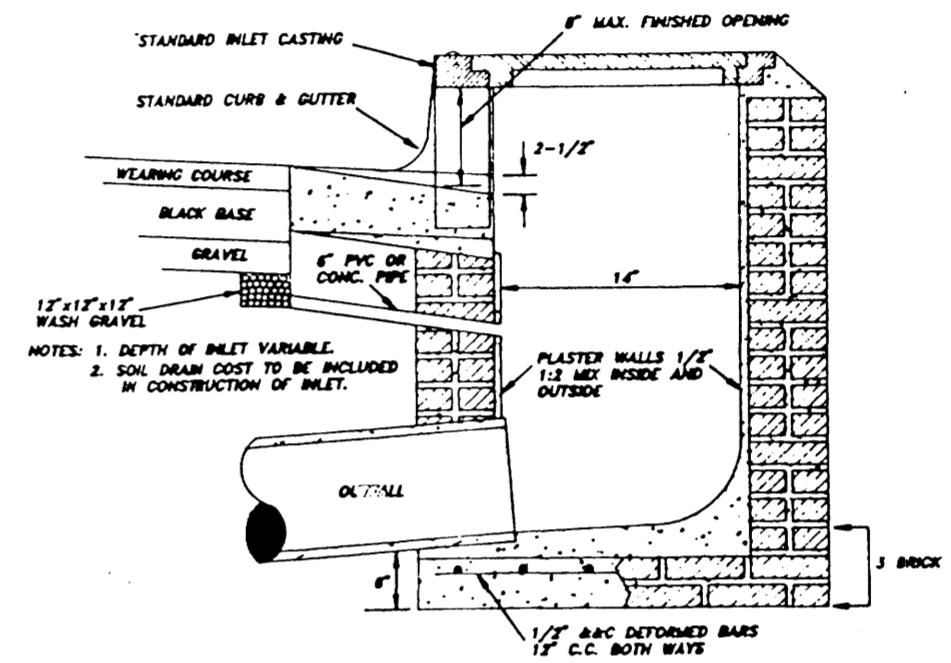
**TYPICAL BORE SECTION**  
N.T.S.



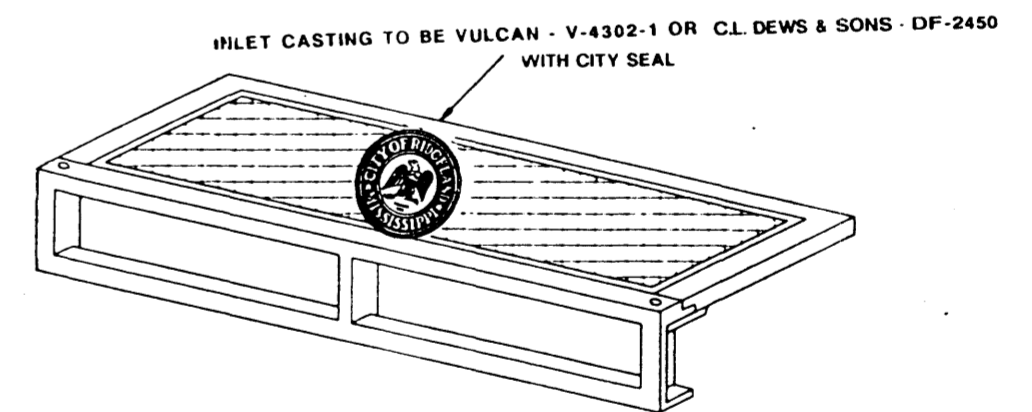
**BORE SECTION**  
N.T.S.



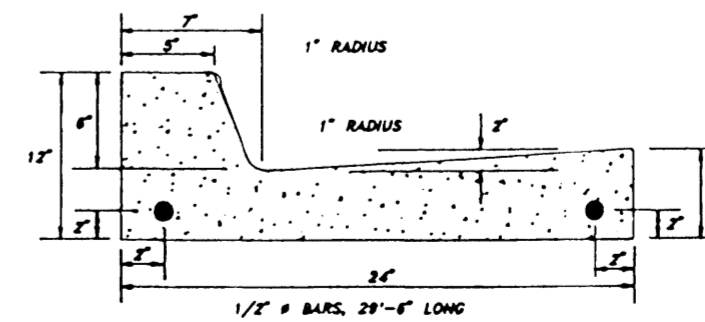
**GATE VALVE DETAIL**  
N.T.S.



**SECTION OF STANDARD CURB INLET**



**STANDARD CURB INLET CASTING**



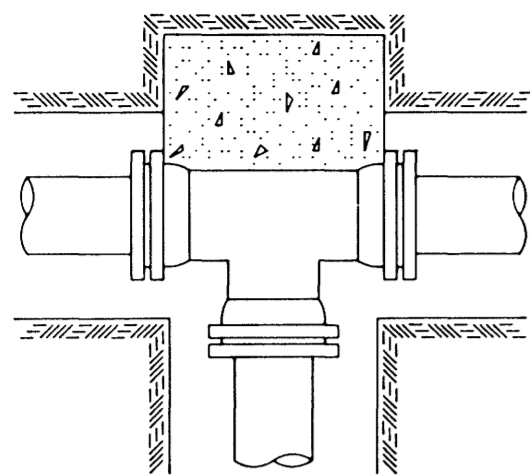
NOTES: 1. ALL CURBS, GUTTERS & DRIVEWAYS TO BE CONSTRUCTED OF 3000 LB. CONCRETE.  
2. 2 - 3/4" DOWEL BARS, 15" LONG REQ'D. AT EXPANSION JOINTS. THEY SHALL BE HELD IN PLACE BY APPROVED CHAIRS OR SUPPORTS AND 1/2" EXPANSION MATERIALS.

**STANDARD CURB & GUTTER**

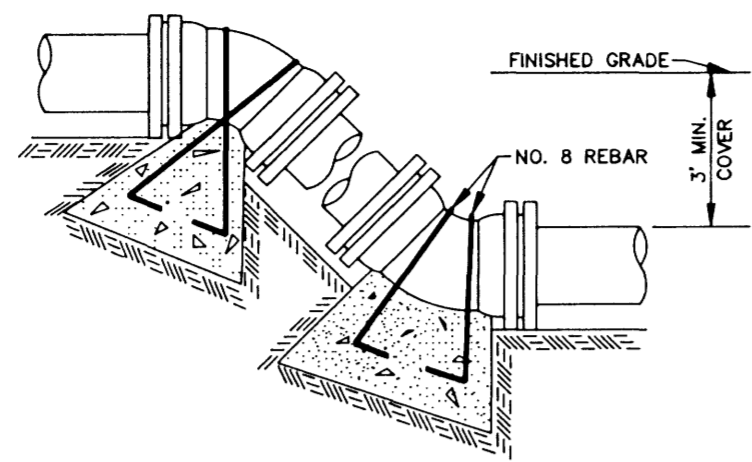
**CITY OF RIDGELAND, MS.**  
**STANDARD DETAILS**

DEGN:	SV	THE CITY OF RIDGELAND	DRAWING NO.
DRWN:	BPM		5 of 6
CHKD:	SV		
SCALE:	N.T.S.		

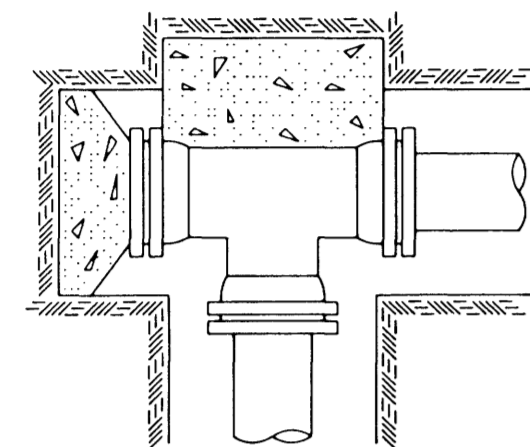




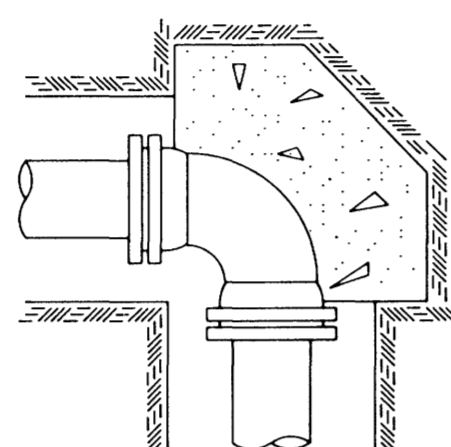
TEE



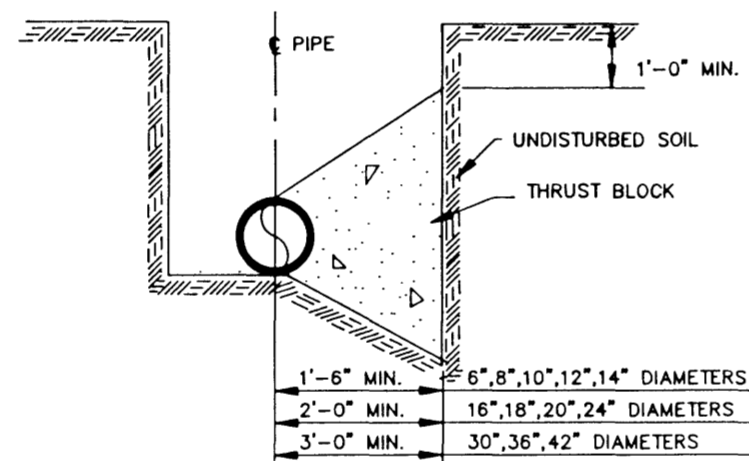
VERTICAL BENDS



PLUGGED TEE



90° BEND



TYPICAL CROSS SECTION

TYPICAL THRUST BLOCKING IN WATER MAINS AND SEWAGE FORCE MAINS

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

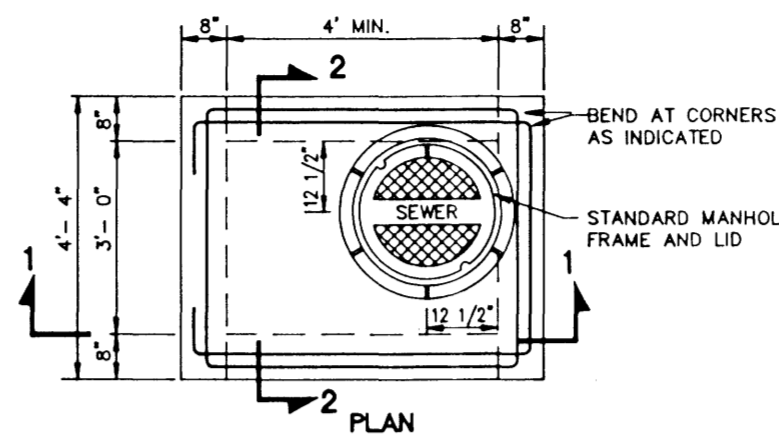
BEARING AREA IN SQ. FT.

BEARING AREA IN SQ. FT.					VERTICAL BENDS						
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)

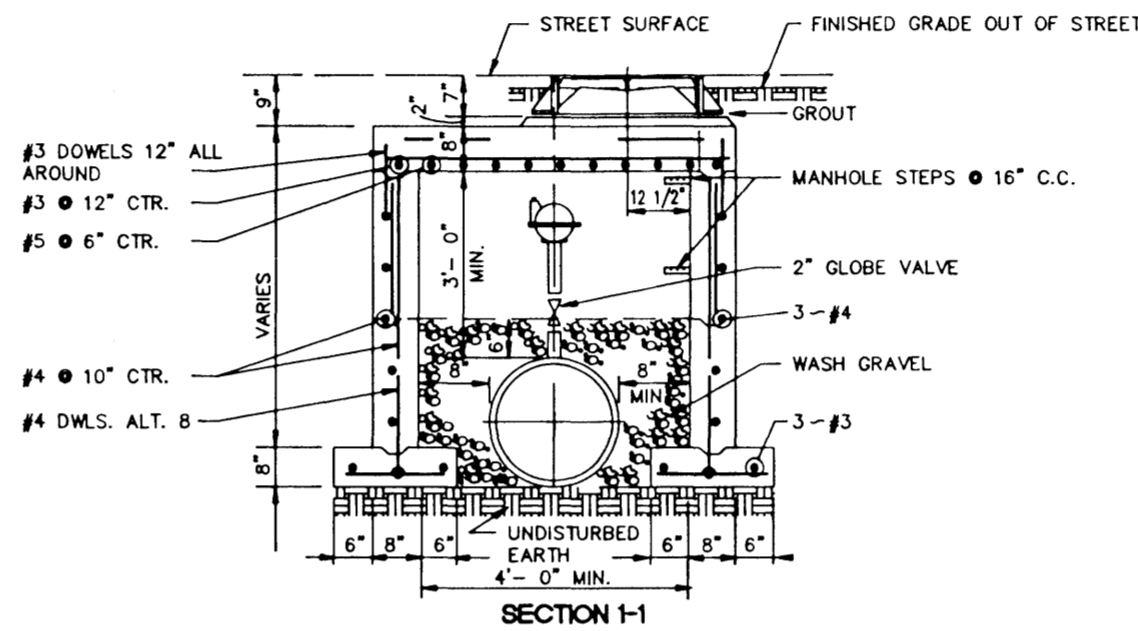
VOLUME OF BLOCKS INCLUDING SOIL LOAD CU. FT. (CU. YDS.)

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.

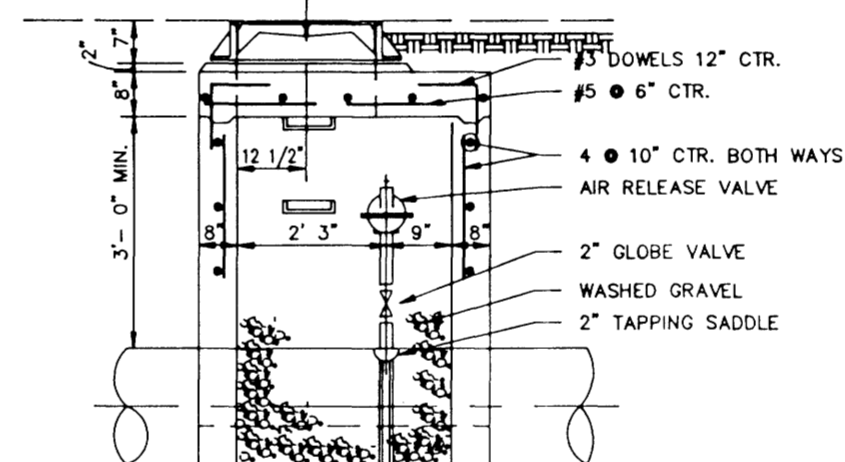
NOTE: ABOVE VALUES REPRESENT THE VOLUME OF BLOCKS INCLUDING SOIL LOAD IN CU.FT. (CU.YDS.) THE VALUES WERE CALCULATED USING A P=100 PSI AND A S.F.=1.5. FOR DIFFERENT P, MULTIPLY VALUES BY P/100.



PLAN



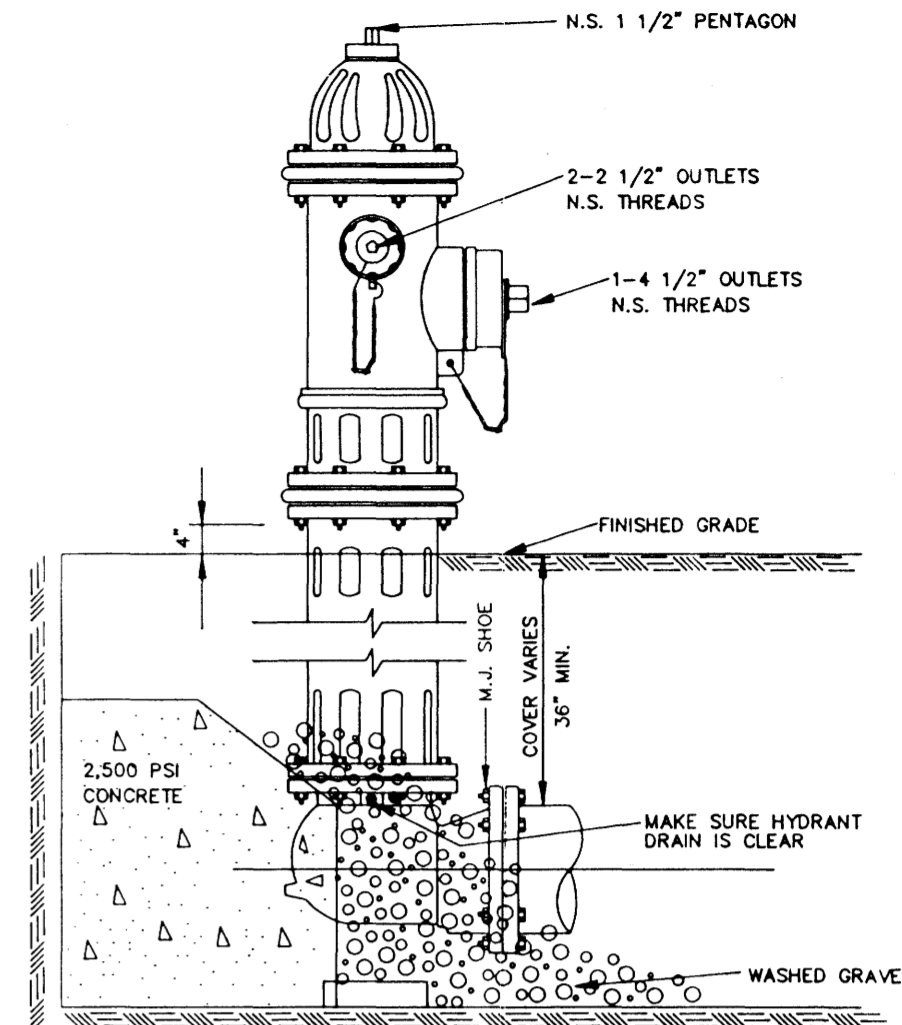
SECTION 1-1



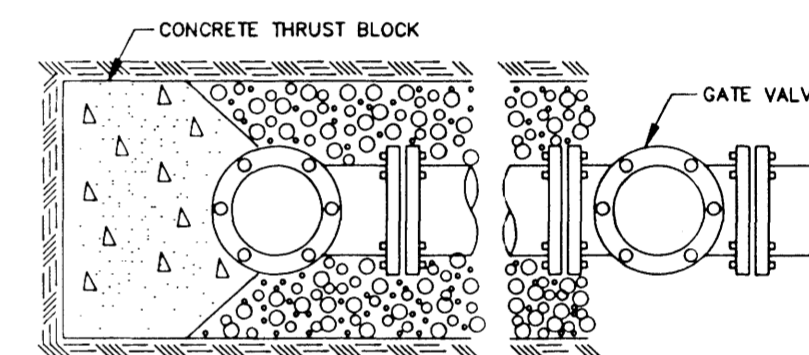
SECTION 2-2

TYPICAL AIR OR AIR VACUUM RELEASE VALVE INSTALLATION WITH MANHOLE

NOT TO SCALE



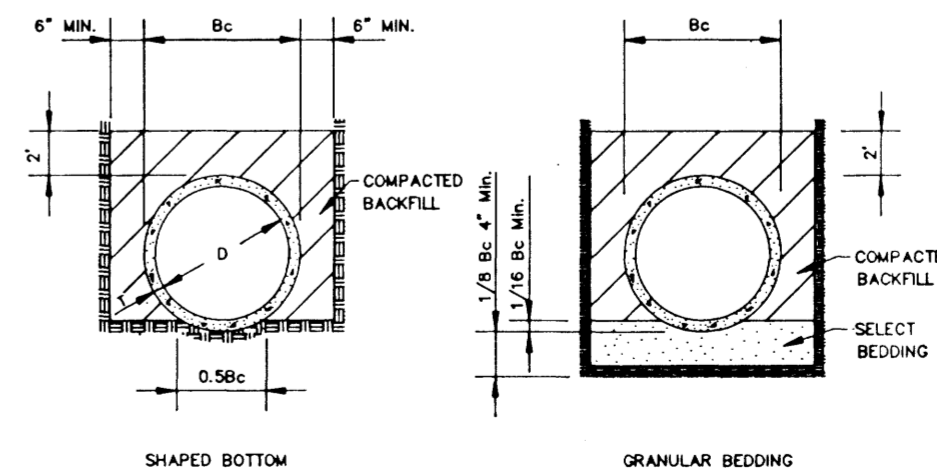
ELEVATION



PLAN

TYPICAL FIRE HYDRANT INSTALLATION

NOTE: GATE VALVES WILL BE REQUIRED ON ALL FIRE HYDRANT LEGS. N.T.S. ANCHOR COUPLINGS REQ'D.



SHAPED BOTTOM

GRANULAR BEDDING

CLASS C

TYPICAL TRENCH DETAILS

N.T.S.

CITY OF RIDGELAND, MS.

STANDARD DETAILS

DSGN: SV  
DRWN: BRM  
CHKD: SV  
SCALE: N.T.S.



DRAWING NO.  
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