

Drain: MASHHEAD DRAIN **Drain #:** 203
Improvement/Arm: MASHHEAD-SECTION 16
Operator: JOH **Date:** 2-3-04
Drain Classification: Urban/Rural **Year Installed:** 1986

GIS Drain Input Checklist:

- Pull Source Documents for Scanning JA 2-3
- Digitize & Attribute Tile Drains N/A
- Digitize & Attribute Storm Drains JA 2-3
- Digitize & Attribute SSD JA 2-3
- Digitize & Attribute Open Ditch JA 2-3
- Stamp Plans JA 2-3
- Sum drain lengths & Validate JA 2-3
- Enter Improvements into Posse JA 2-3
- Enter Drain Age into Posse JA 3-2
- Sum drain length for Watershed in Posse JA 3-2
- Check Database entries for errors JA 2-3



SURVEYOR'S OFFICE

Hamilton County

Kenton C. Ward, Surveyor

776-9626

Noblesville, Ind. 46060

FILED

HAMILTON COUNTY DRAINAGE BOARD

Harold W. O'Connell
SECRETARY

TO: Hamilton County Drainage Board

RE: Masthead Drain, Section 16

Attached is a petition, non-enforcement request, plans and assessment roll for the Masthead Drain, Section 16 Drain.

I have reviewed the submittals and petition and have found each to be in proper form.

I have made a personal inspection of the land described in the petition. Upon doing so, I believe that the drain is practicable; will improve the public health; benefit a public highway and be of public utility; and that the costs damages and expenses of the proposed drain will probably be less than the benefits accruing to the owners of land likely to be benefitted. The drain will consist of the following:

Open Ditch	690ft	15" RCP	502ft
6" SSD	1240ft	18" RCP	160ft
12" RCP	313ft		

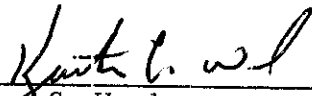
The total length of the drain will be 2905 feet. The open ditch section shall be from Structure 504 to the reservoir and structure 507 to the reservoir.

I have reviewed the plans and believe the drain will benefit each lot equally. Therefore, I recommend each lot be assessed equally. I recommend a maintenance assessment of \$20.00 per lot, \$2.00 per acres for roadways, with a \$6.00 minimum. With this assessment the total annual assessment for the drain/this section will be \$486.00. I recommend this drain be classified as an Urban Drain. Block Z will not be assessed, because title is divided between lots

and will be considered part of the assessment for those lots.

I recommend a hearing be set for December 8, 1986.

KCW/no



Kenton C. Ward
Hamilton County Surveyor

TO: HAMILTON COUNTY DRAINAGE BOARD
% Hamilton County Surveyor, Courthouse, Noblesville, IN 46060

In the matter of Masthead Subdivision,
Section 16 Drain Petition.

Petitioner is the owner of all lots in the land affected by the proposed new regulated drain. The drainage will affect various lots in Masthead Section 16, a subdivision in Hamilton County, Indiana. The general route of such drainage shall be in existing easements and along public roads as shown in the plans on file in the Surveyor's Office.

Petitioner believes that the cost, damages and expenses of the proposed improvement will be less than the benefits which will result to the owners of the land likely to be benefited thereby. Petitioner believes the proposed improvements will:

- (a) improve public health
- (b) benefit a public street
- (c) be of public utility

Petitioner agrees to pay the cost of construction of the drainage system and requests periodic maintenance assessments by the Board thereafter.

The Petitioner also agrees to the following:

1. To provide the Drainage Board a Performance Bond for the portion of the drainage system which will be made a regulated drain. The bond will be in the amount of 100% of the Engineers estimate. The bond will be in effect until construction of 100% of the system is completed and so certified by the Engineer.
2. The Petitioner shall retain an Engineer throughout the construction phase. At completion of the project the Petitioner's Engineer shall certify that the drainage system which is to be maintained as a regulated drain has been constructed as per construction plans.

3. The Petitioner agrees to request in writing to the County Surveyor any changes from the approved plan and must receive written authorization from the County Surveyor prior to implementation of the change. All changes shall be documented and given to the Surveyor to be placed in the Drain File.
4. The Petitioner shall instruct his Engineer to provide a reproducible print on a 24" x 36" mylar of the final design of the Drainage System. This shall be submitted to the County Surveyor prior to the release of the Performance Bond.
5. The Petitioner shall comply with the Erosion Control Plan as as specified on the construction plans. Failure to comply with the Erosion Control Plan shall be determined by the Board as being an obstruction to the drainage system. The County Surveyor shall immediately install or repair the needed measures at Petitioners cost as per IC 36-9-27-46.

The Petitioner further requests that the Drain be classified as an Urban Drain.

X Eugene A. Heiwig
Signed

Eugene A. Heiwig
Printed Name

Signed

Printed Name

RECORDED OWNER(S) OF LAND INVOLVED

DATE 10-1-86

BEFORE THE HAMILTON COUNTY

DRAINAGE BOARD IN THE

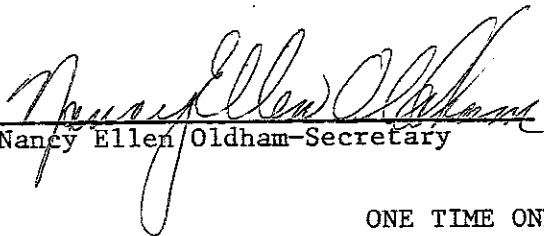
MATTER OF THE Masthead, Section 16 DRAIN

NOTICE

TO WHOM IT MAY CONCERN AND

Notice is hereby given of the Hearing of the Hamilton County Drainage Board on the Masthead, Section 16 Drain, on December 8, , at 9:20 A.M. in the Commissioner's Court, 3rd floor, in the Hamilton County Courthouse Noblesville, Indiana and which the Maintenance Report of the Surveyor and the Schedule of Assessments made by the Drainage Board have been filed and are available for public inspection in the office of the Hamilton County Surveyor.

ATTEST:


Nancy Ellen Oldham-Secretary

HAMILTON COUNTY DRAINAGE BOARD

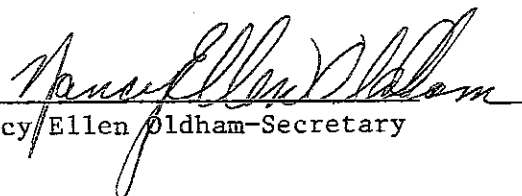
ONE TIME ONLY

BEFORE THE HAMILTON
COUNTY DRAINAGE BOARD
IN THE MATTER OF THE
Masthead, Section 16 DRAIN

NOTICE

Notice is hereby given pursuant to Section 405 of the 1965 Indiana Drainage Code that this Board, prior to final adjournment has issued an order adopting the Schedule of Assessments, filed the same and made public announcement thereof at the hearing and ordered publication. If judicial review of the findings and order of the Board is not requested pursuant to Article Eight of this Code within twenty (20) days from the date of this publication, the order shall become conclusive.

HAMILTON COUNTY DRAINAGE BOARD

ATTEST: 
Nancy Ellen Oldham-Secretary

One Time Only

*need final map
by 10/1/86*

M. L. 16



October 7, 1986

FBI
FOIA
AUDIT

Irrevocable Letter of Credit No. 2781695685-01115
Expiration Date: October 7, 1989

Hamilton County Commissioners,
Hamilton County, Indiana

OCT 20 1986

Gentlemen:

For the account of The Shorewood Corporation, we hereby authorize you to draw on us at sight to the extent of ****U.S. \$7,220.00****.

Each of your drafts must:

1. Be marked "Drawn under PSFS Letter of Credit No. 2781695685-01115 dated October 7, 1986."
2. Be presented, together with this original Letter of Credit at our offices at 1234 Market Street, 9th Floor, Philadelphia, Pennsylvania, 19107, no later than 3:00 p.m. Philadelphia time on October 7, 1989.
3. Be accompanied by the following:
 - Certification by Hamilton County Commissioners, Hamilton County, Indiana of non-compliance with the specifications required for Storm Sewers in Section 16 of the Masthead by the Shorewood Corporation. Such certification may not antedate this Letter of Credit and;
 - Certification by Hamilton County Commissioners, Hamilton County, Indiana that funds drawn under this Letter of Credit will be used to bring the Storm Sewers into compliance in accordance with the specifications referenced.
4. Not exceed, in the cumulative aggregate, \$7,220.00.

To: Kent Ward

CERTIFICATE OF COMPLETION AND COMPLIANCE

TO: HAMILTON COUNTY SURVEYOR
RE: Masthead Subdivision, Section 16

I hereby certify that:

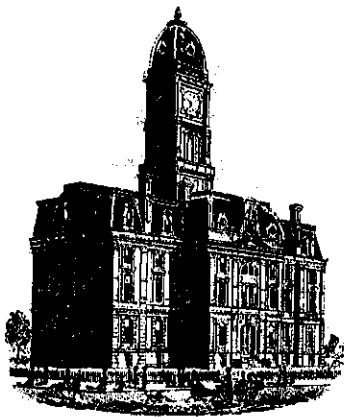
- 1.) I am a Registered Land Surveyor in the State of Indiana,
- 2.) I am familiar with the plans and specifications for the above referenced subdivision,
- 3.) I have personally observed and supervised the completion of the Drainage Facilities for the above referenced subdivision, and
- 4.) To the best of my knowledge, information and belief, the Drainage Facilities within the subdivision has been installed and completed in conformity with all plans and specifications.

Signature: Joseph A. Sharp Date: 9-30-86
 Type or Printed Name: Joseph A. Sharp
 Business Address: 7172 Graham Road
Indianapolis, IN 46250
 Telephone: 317/842-6777

INDIANA REGISTRATION NUMBER
S0076

SEAL





SURVEYOR'S OFFICE

Hamilton County

Kenton C. Ward, Surveyor

773-6000 Ext. 19
776-9626

Noblesville, Ind. 46060 August 7, 1987

TO: Hamilton County Drainage Board

RE: Masthead Drain Section 16

Attached is an as built of the development plan for Masthead Drain, Section 16. On June 29th I made a final inspection of the drainage facilities and found them to be complete and acceptable. No changes were made during the construction of the drainage facilities. Therefore, the length remains at 2905 feet.

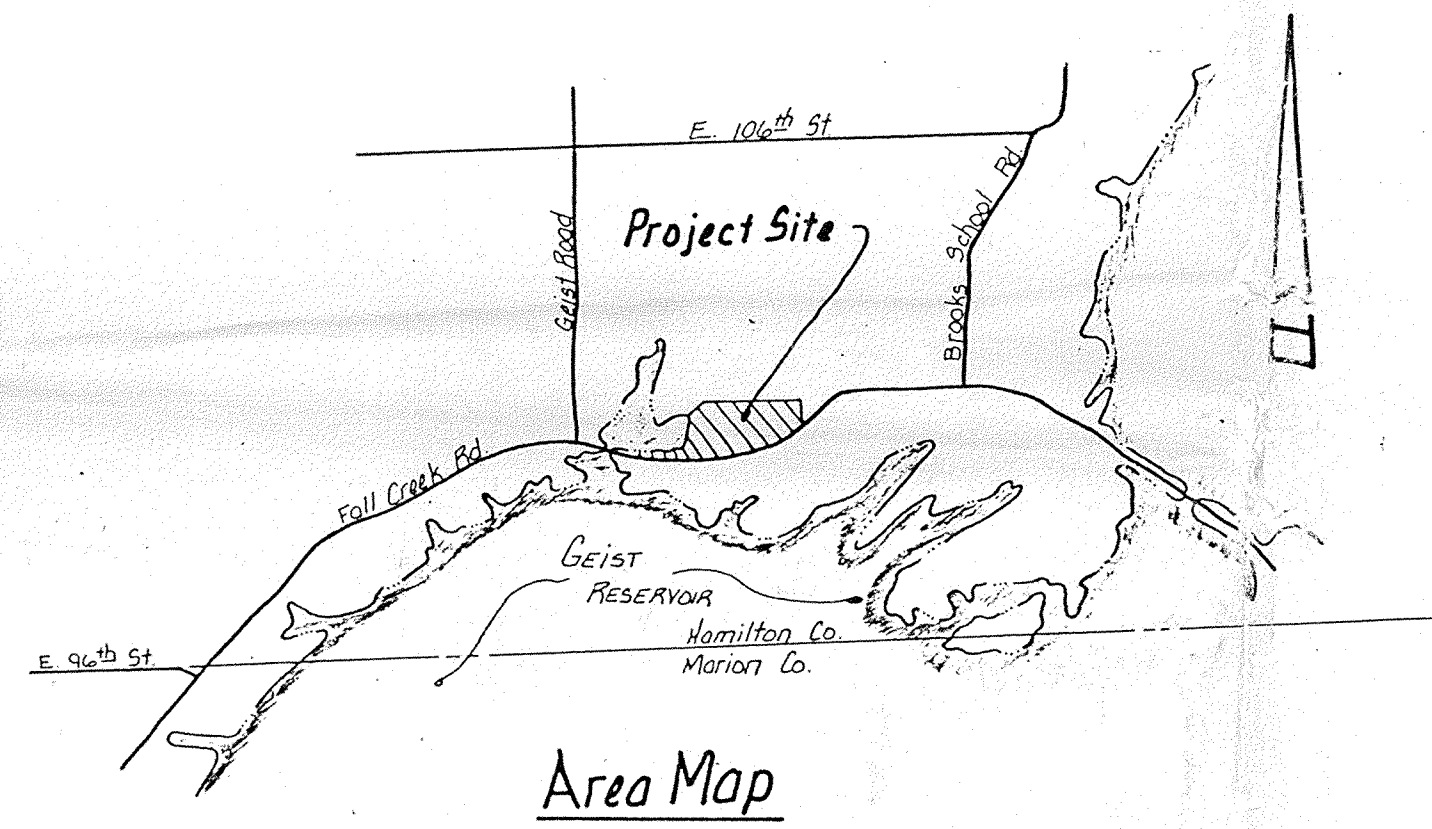
I recommend the Board approve the drain as constructed. I further recommend the Board approve the attached non-enforcement of easements.

Kenton C. Ward
Kenton C. Ward
Hamilton County Surveyor

KCW/no

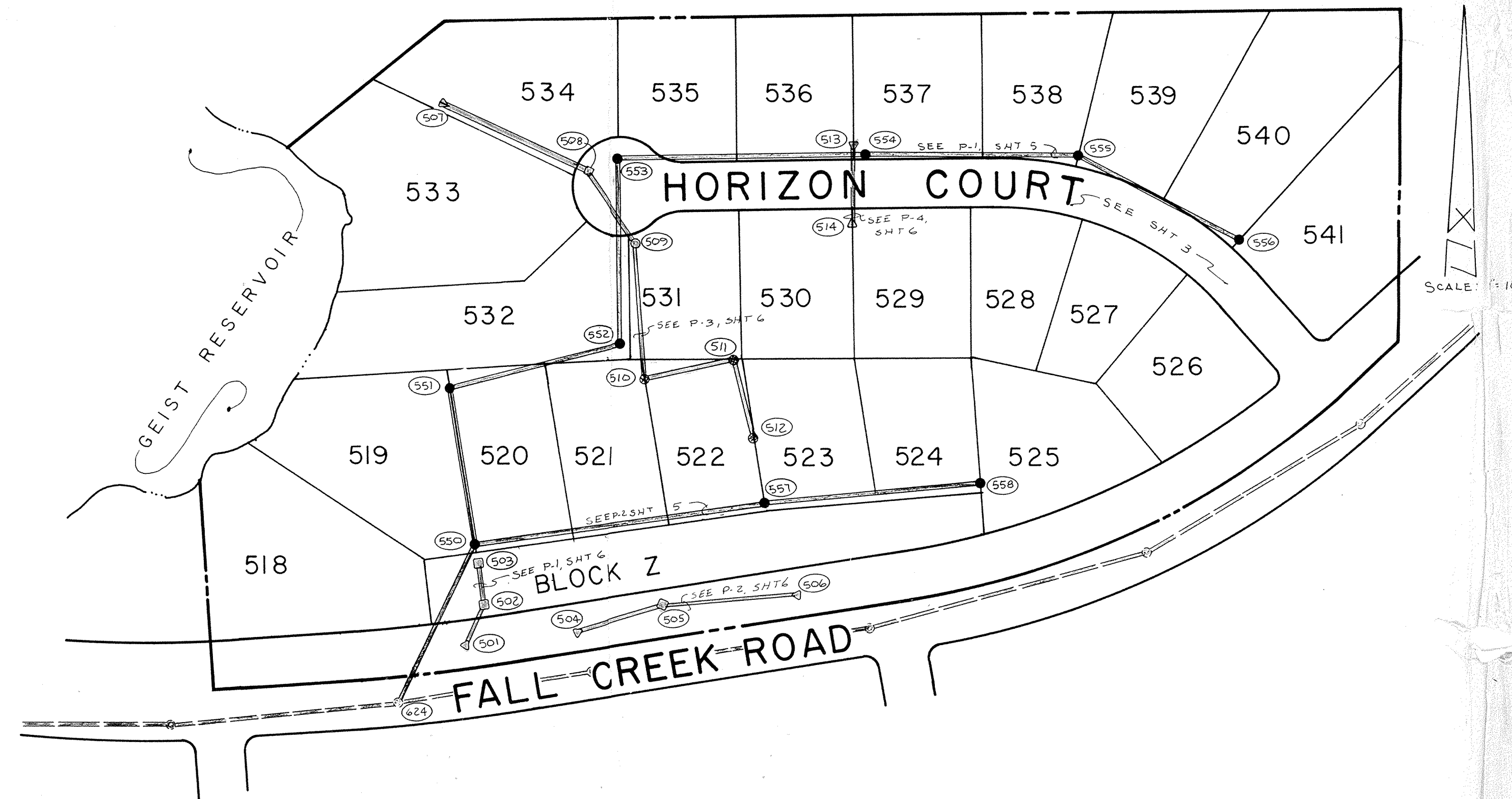
FILED
AUG 10 1987
HAMILTON COUNTY DRAINAGE BOARD
Nancy Ellen Alderson

CONSTRUCTION PLANS FOR MASTHEAD SECTION 16



Area Map

was
15-09-00-00-005.102 = 5.256 Ac ±
of 15-10-00-00-026.005



INDEX	
SHT.	DESCRIPTION
2	SITE DEVELOPMENT PLAN
3	STREETS - PLAN & PROFILE
4	STREET DETAILS
5	SANITARY SEWER - PLAN & PROFILE
6	STORM SEWER - PLAN & PROFILE
7	STANDARD DETAILS
8	STANDARD DETAILS & SPECIFICATIONS

BENCHMARKS

NO.	DESCRIPTION

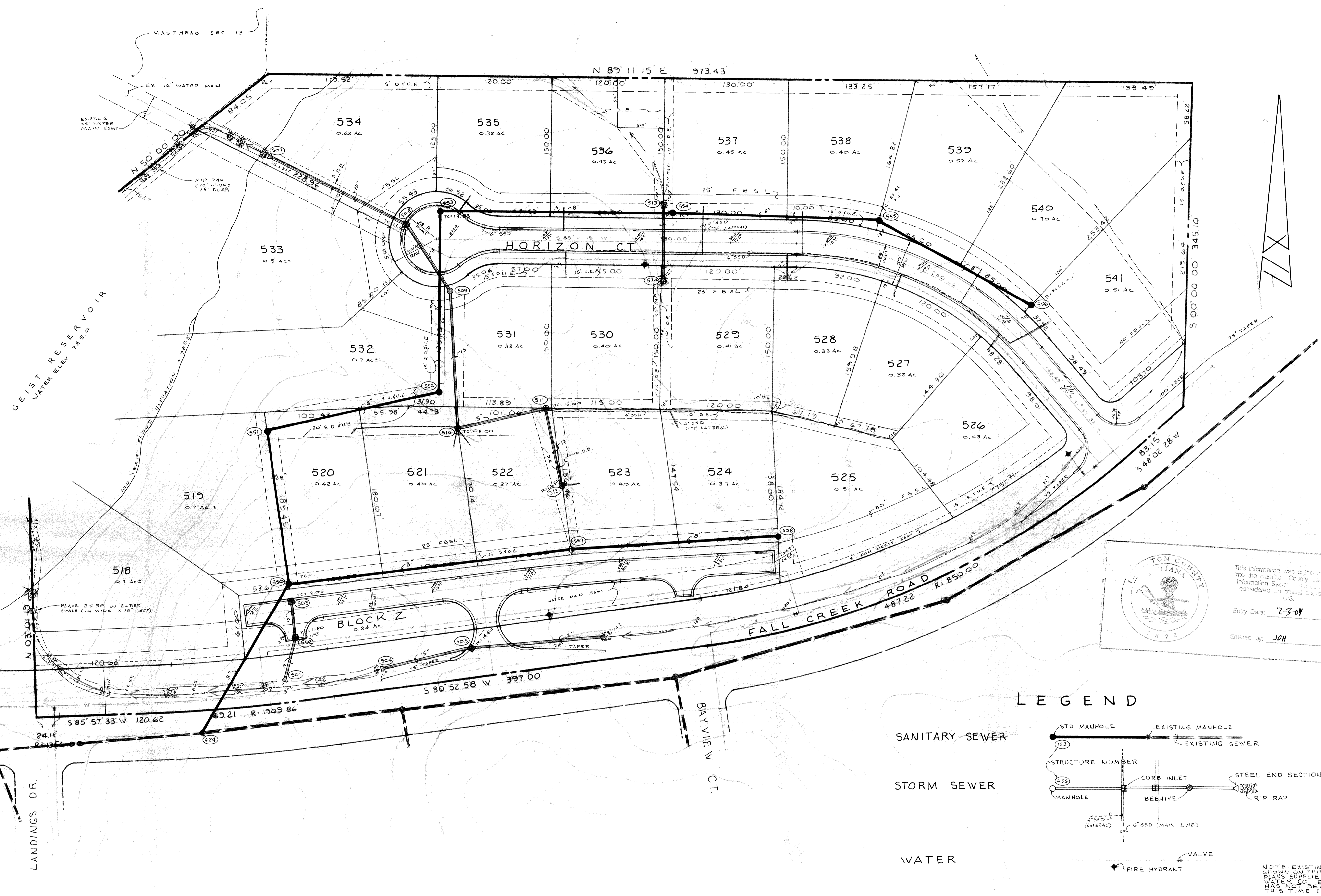
REVISIONS

NO.	DESCRIPTION

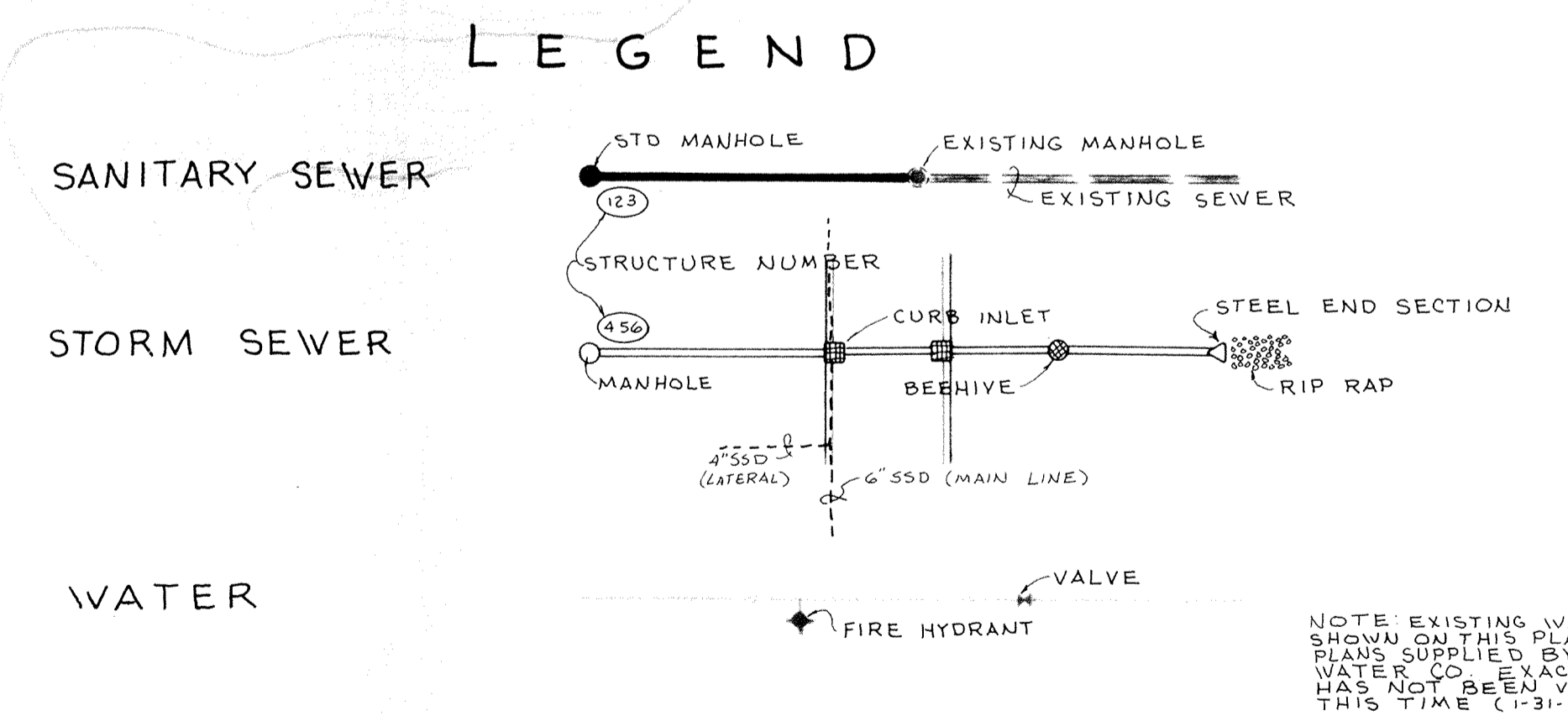
This information was obtained for input into the Hamilton County Geographic Information System. The information is considered an official record of the GIS.

Entry Date: 2-3-04

Entered by: JOH



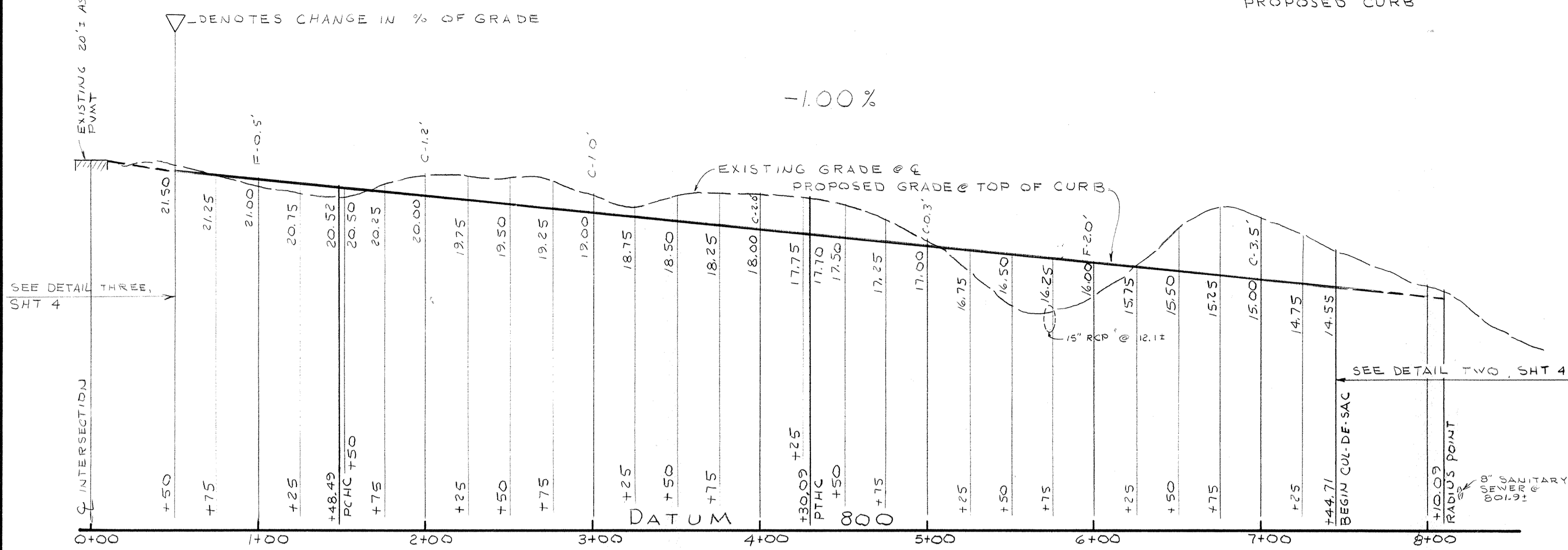
TON COUNTY
 This information was prepared based on information supplied by the Hamilton County Information System. The accuracy of this information is not guaranteed and is considered an advisory record of the GIS.
 Entry Date: 2-2-04
 Entered by: J011



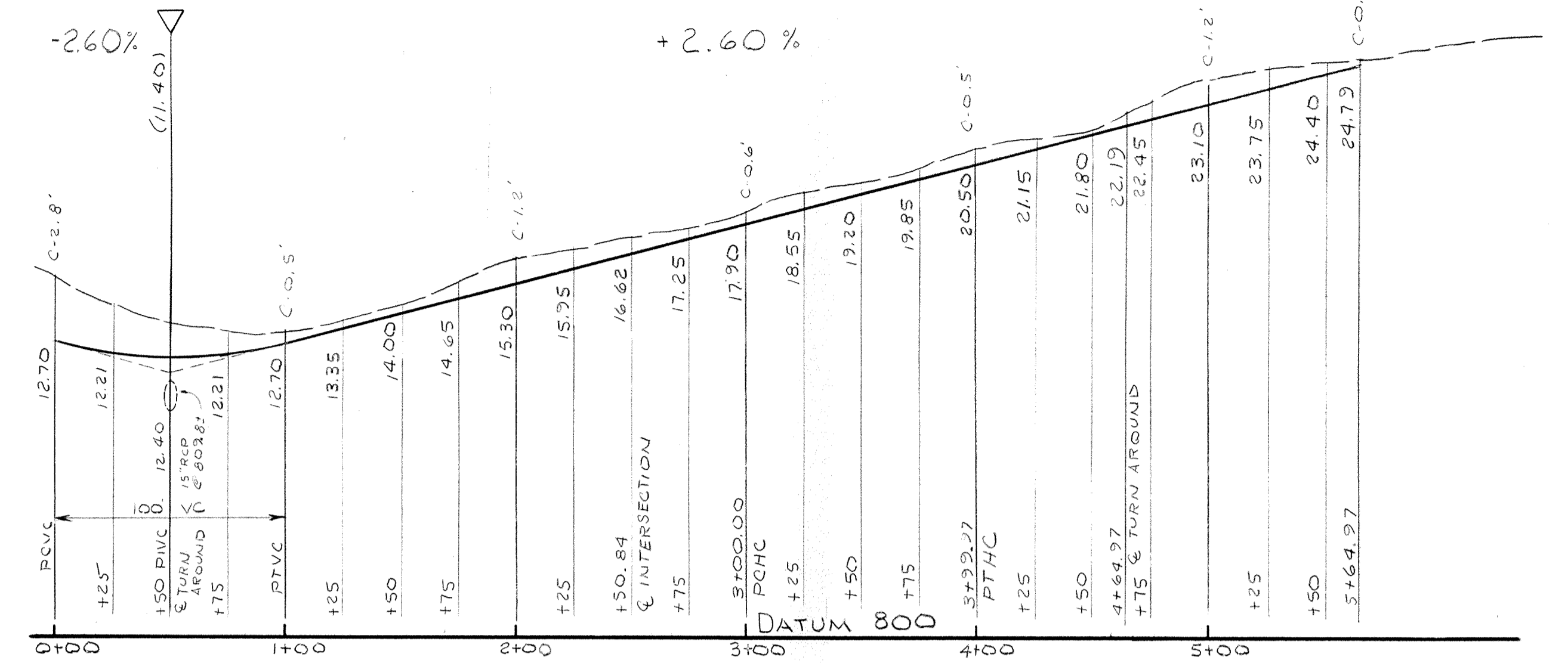
BEARINGS, DIMENSIONS & EASEMENTS ARE SHOWN FOR REFERENCE ONLY & DO NOT NECESSARILY DEPICT ACTUAL RECORDED INFORMATION. SEE RECORDED PLAT FOR EXACT INFORMATION.

CERTIFIED BY	REVISIONS	PAUL I. CRIFE, INC. 7172 GRAHAM ROAD INDIANAPOLIS, INDIANA 46250 317-842-6777	TECH. CHK.	DRAWN BY	SCALE	DATE	CLIENT	DWG. TYPE	FILE NUMBER	SHEET
			DFTNG. CHK.	JG	1" = 50'	1-31-86	MASTHEAD-SECTION 16		2	
DATE			DRAWING TITLE					JOB NUMBER		OF 8
			SITE DEVELOPMENT PLAN					79100-10016		

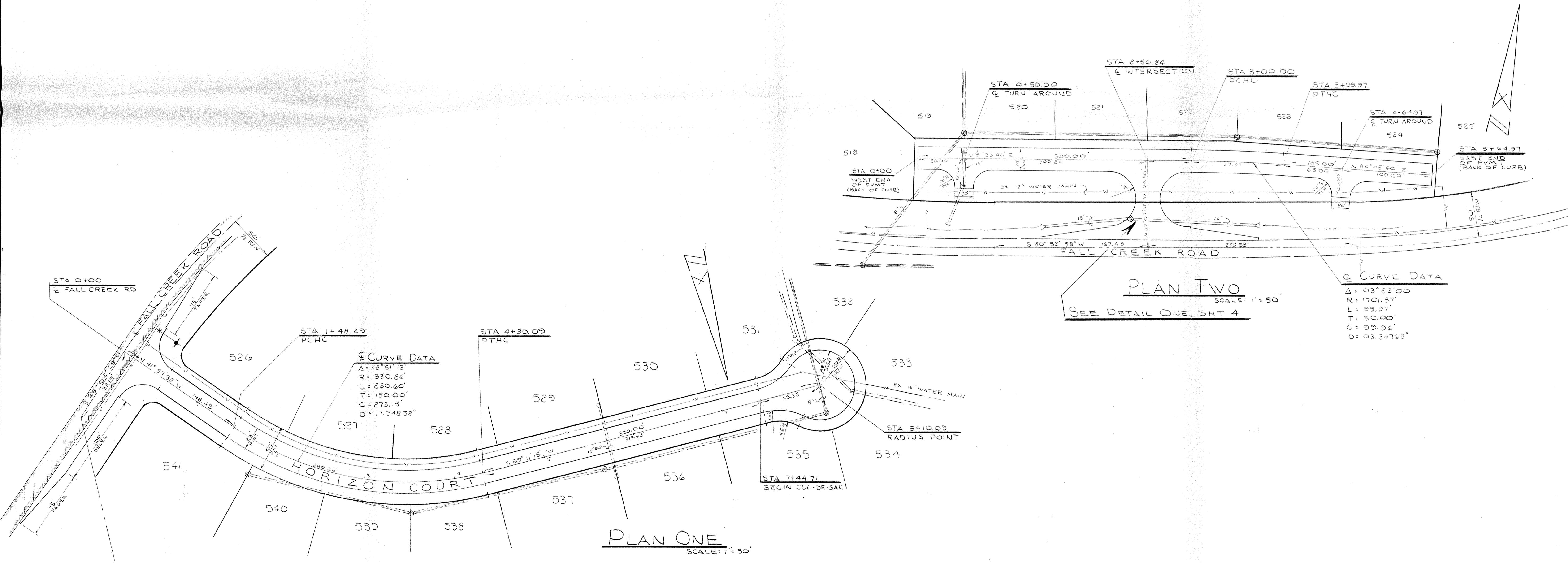
NOTE: CUTS & FILLS SHOWN ARE APPROXIMATE FROM EXISTING GRADE @ C TO TOP OF PROPOSED CURB



PROFILE ONE
SCALE: HORIZ: 1"=50'
VERT: 1"=5'



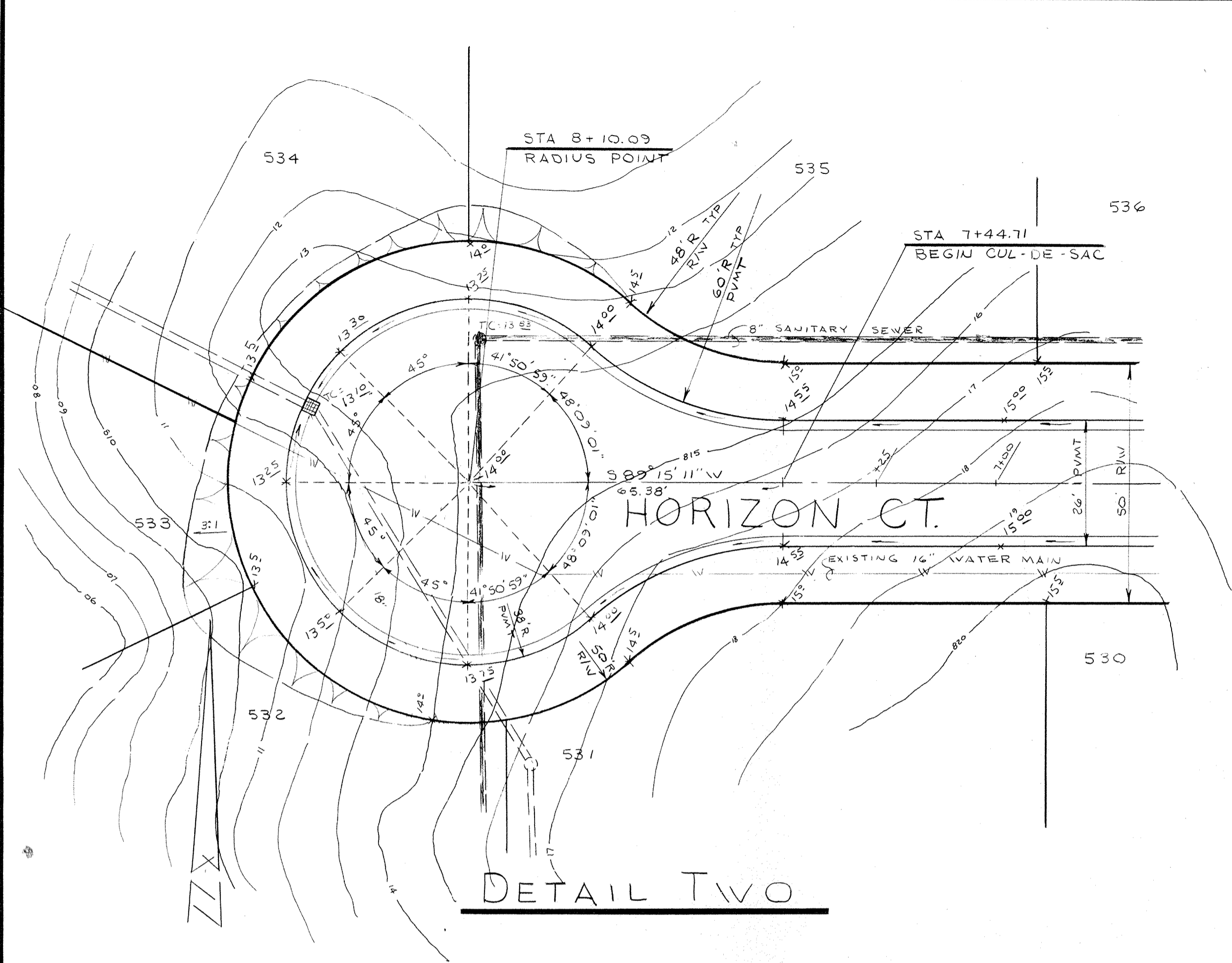
PROFILE TWO
SCALE: HORIZ: 1"=50'
VERT: 1"=5'



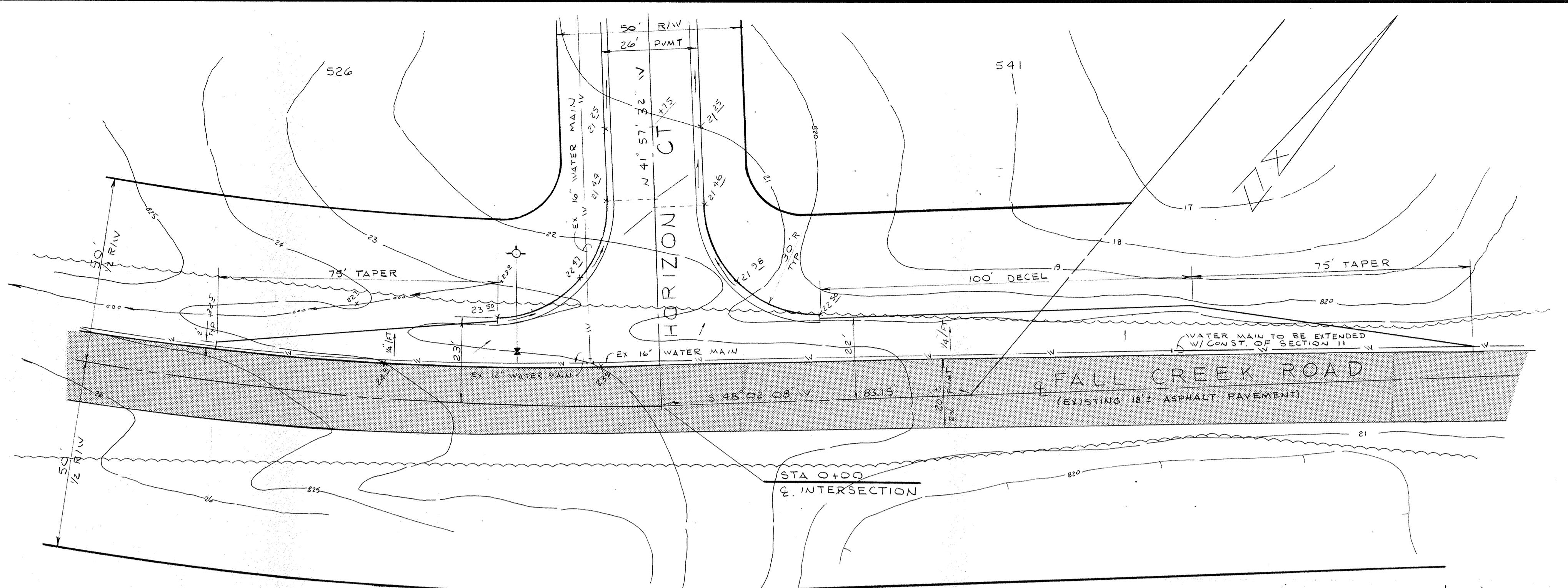
Curve Data
 $\Delta = 48^{\circ}51'13''$
 $R = 330.26'$
 $L = 280.60'$
 $T = 150.00'$
 $C = 273.15'$
 $D = 17.34856^{\circ}$

Curve Data
 $\Delta = 03^{\circ}22'00''$
 $R = 1701.37'$
 $L = 99.97'$
 $T = 50.00'$
 $C = 99.96'$
 $D = 03.36763^{\circ}$

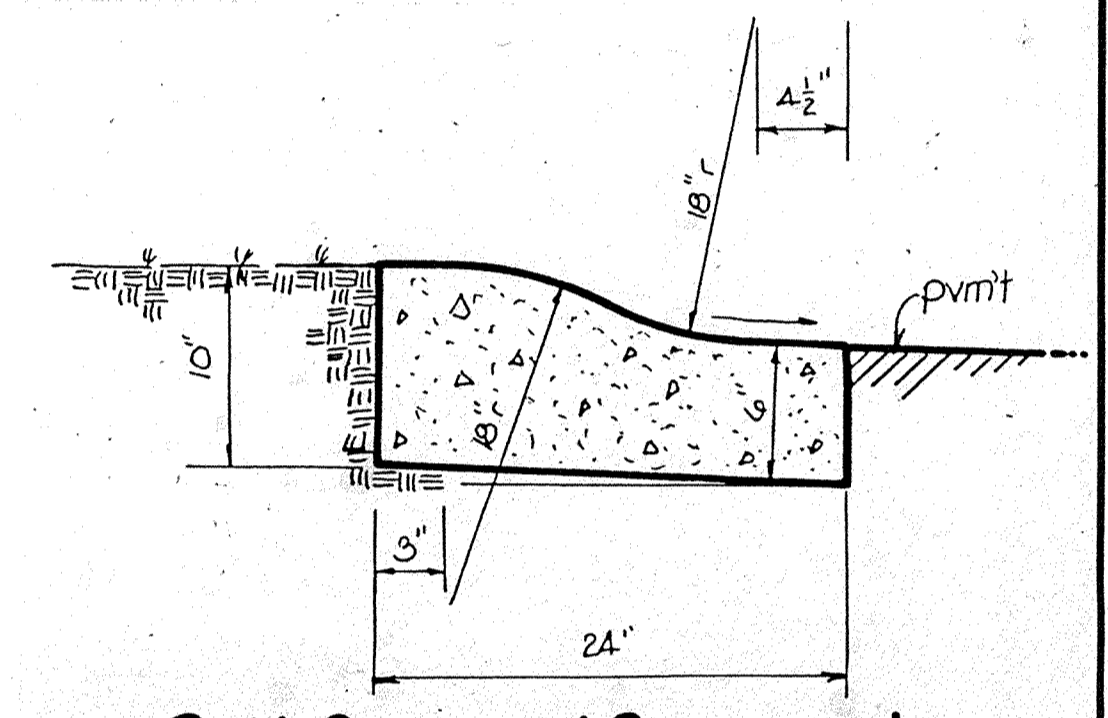
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DATE			STREETS- PLAN, PROFILE & DETAILS				JOB NUMBER	79100-10016		OF 8



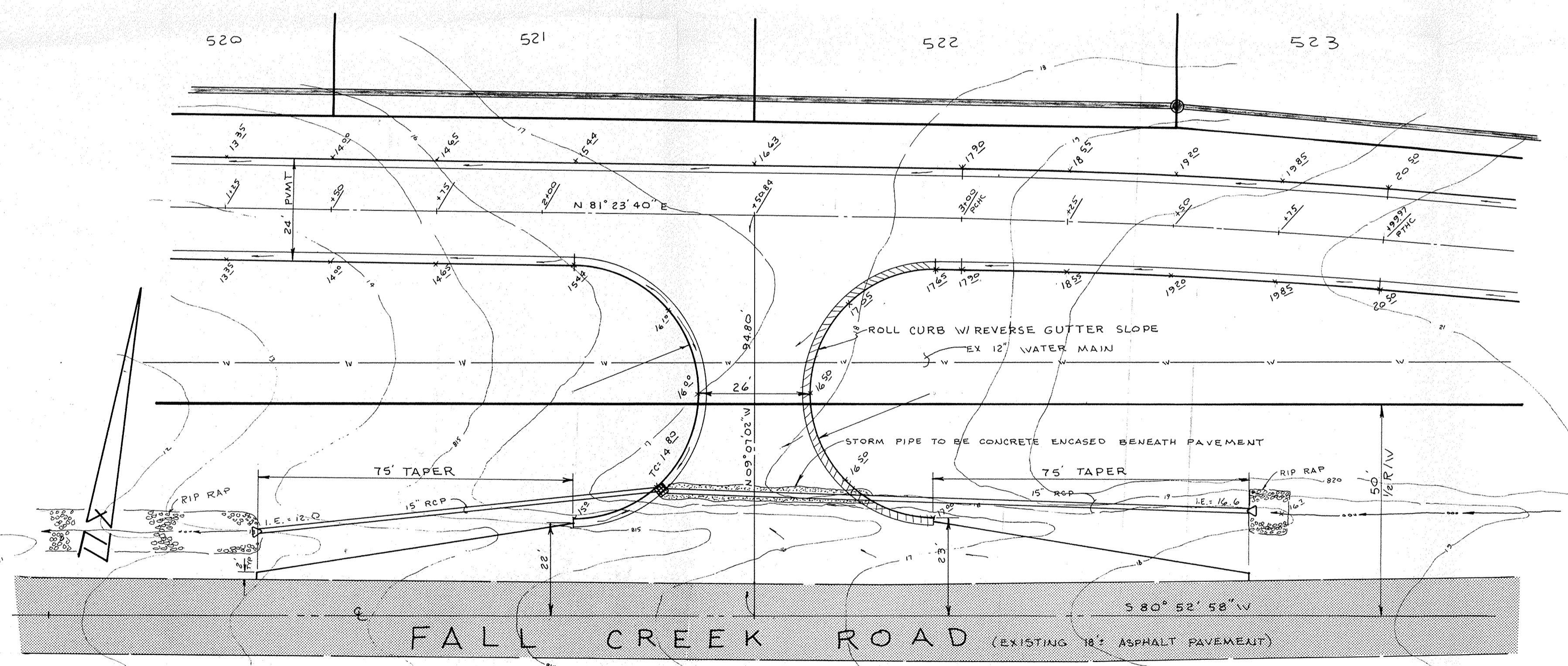
DETAIL TWO




DETAIL THREE



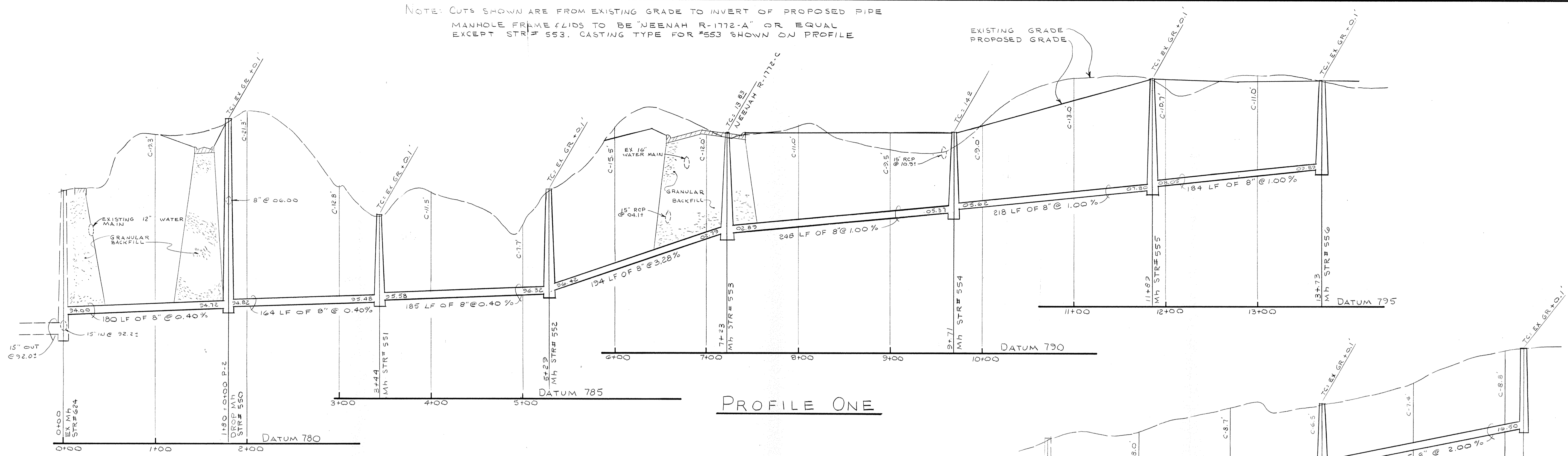
Roll Curb w/ Reversed Gutter Slope no scale



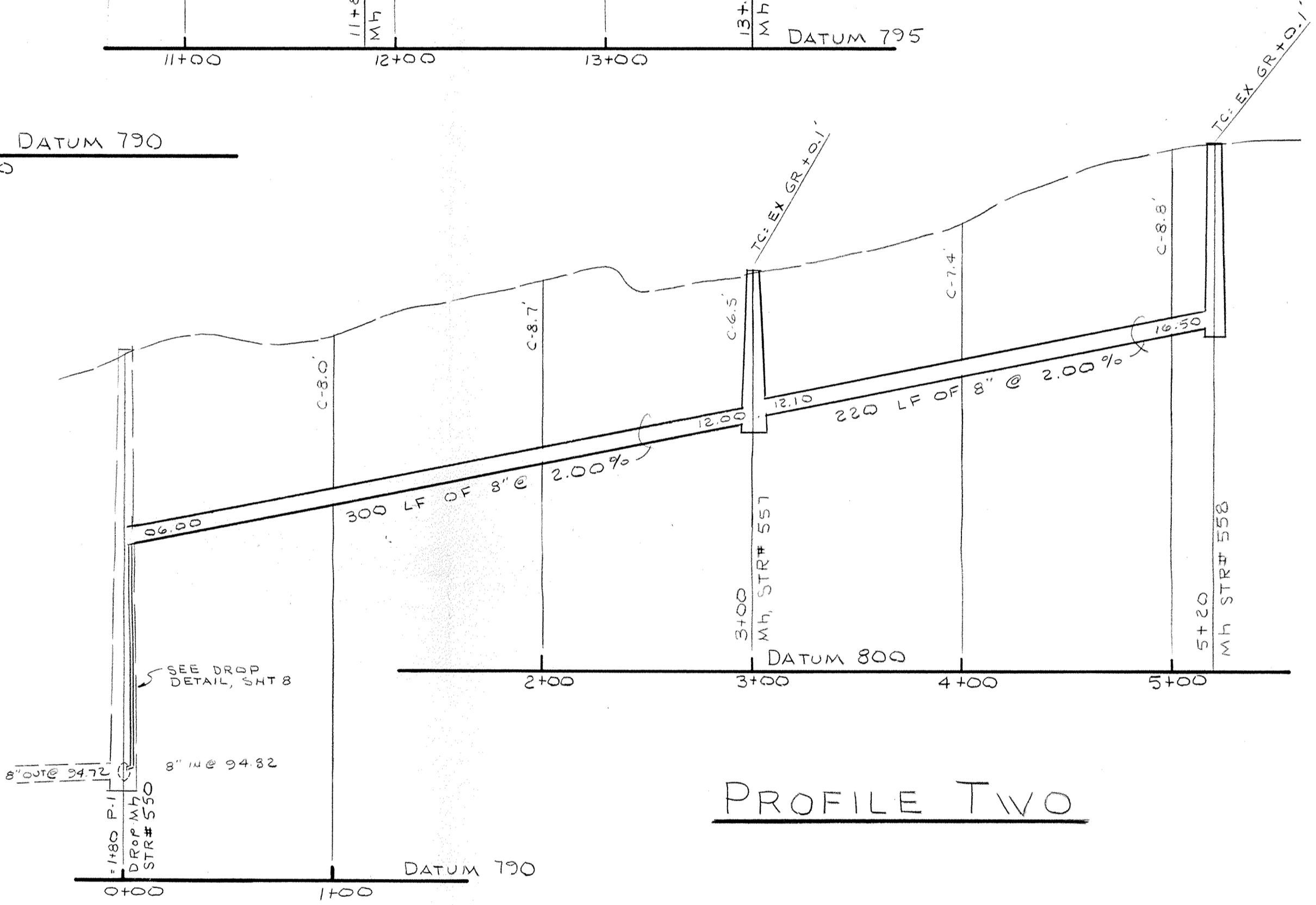
DETAIL ONE

CERTIFIED BY	REVISIONS	 PAUL I. CRIFE, INC. 7172 GRAHAM ROAD INDIANAPOLIS, INDIANA 46250 (317) 842-6777	TECH. CHK.	DRAWN BY	SCALE	DATE	CLIENT	DWG. TYPE	FILE NUMBER	SHEET
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DATE			STREET DETAILS				JOB NUMBER		79100-10016	OF 8

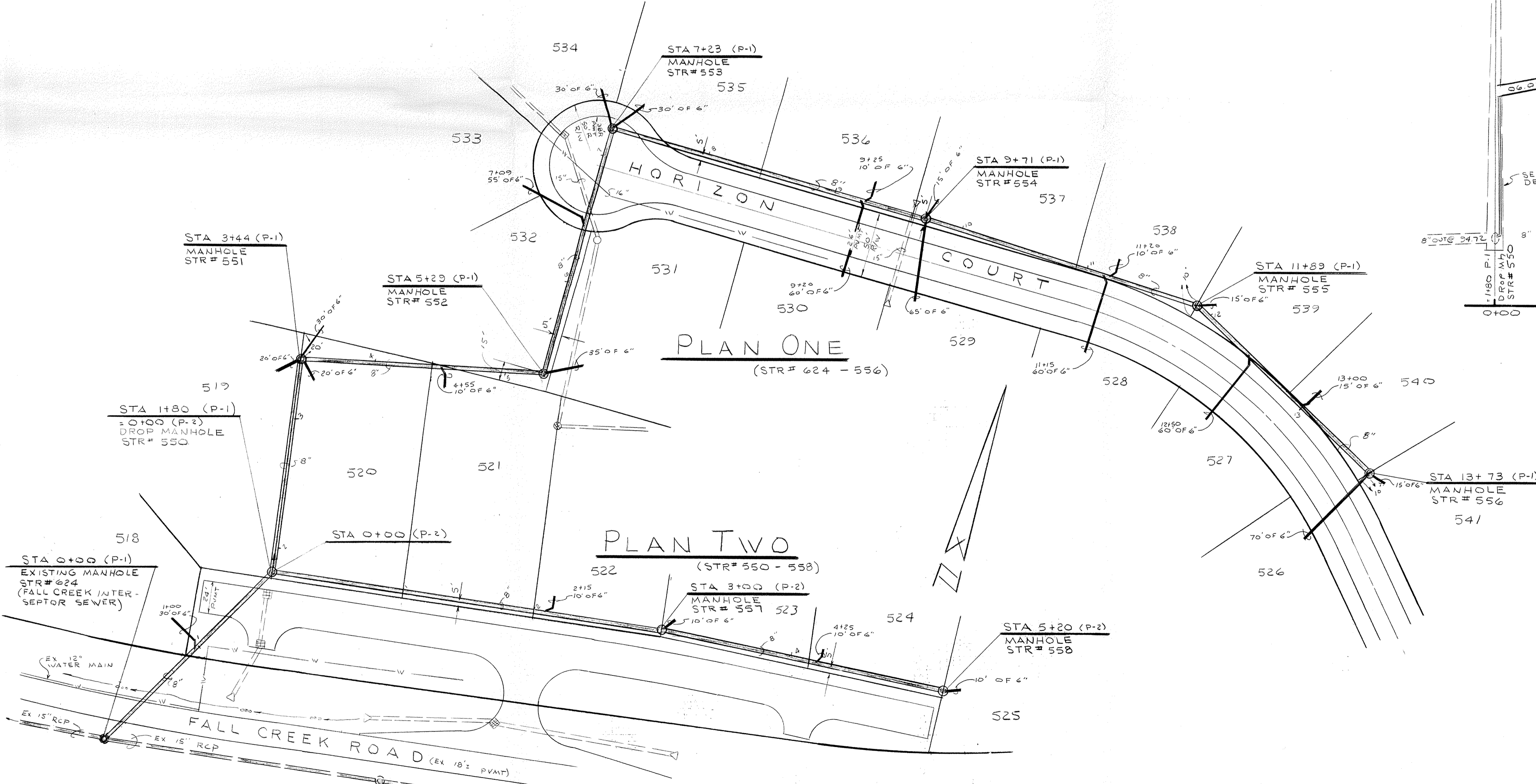
NOTE: CUTS SHOWN ARE FROM EXISTING GRADE TO INVERT OF PROPOSED PIPE
 MANHOLE FRAME FLIDS TO BE "JENNAH R-1772-A" OR EQUAL
 EXCEPT STR# 553. CASTING TYPE FOR #553 SHOWN ON PROFILE



PROFILE ONE




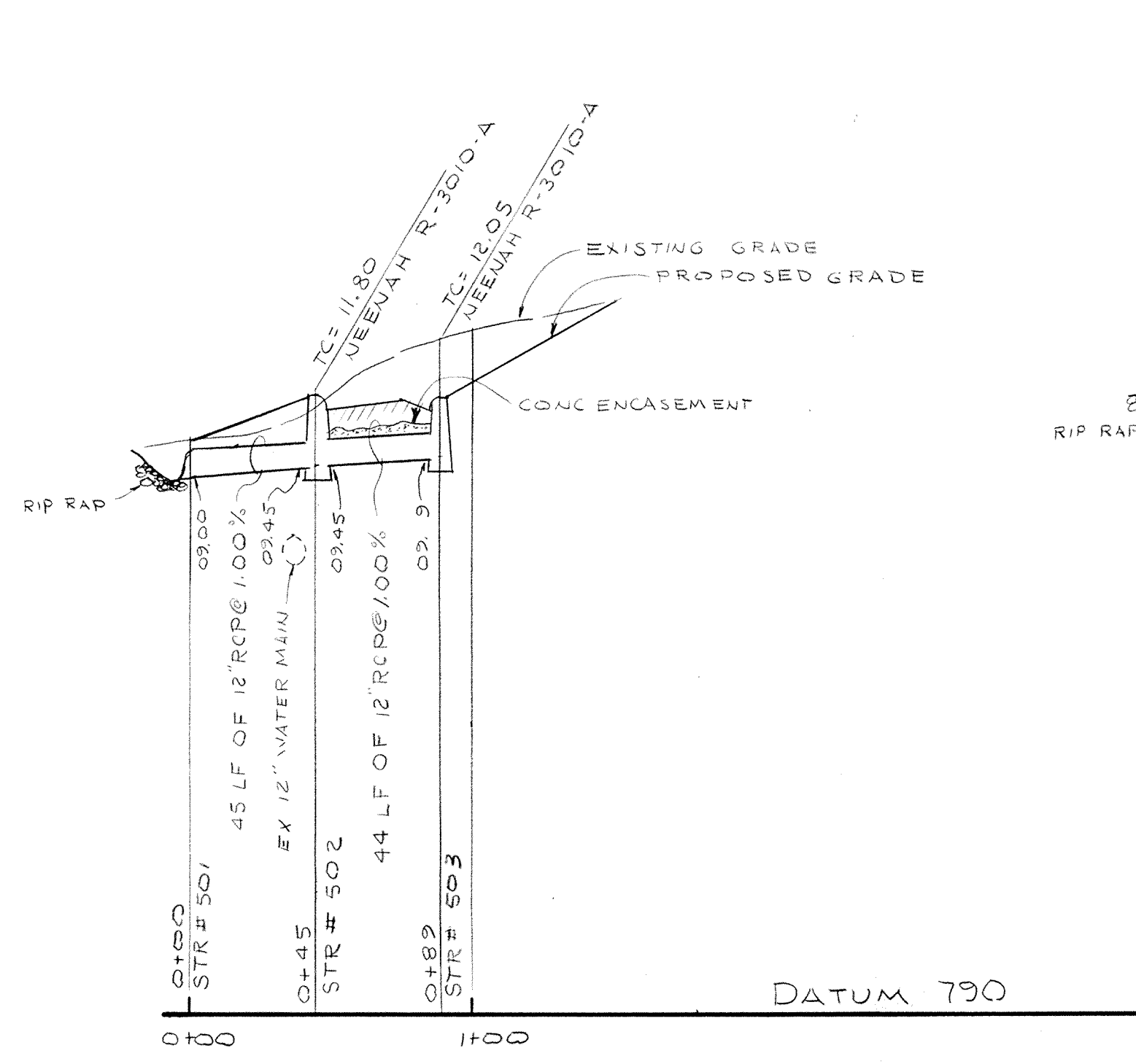
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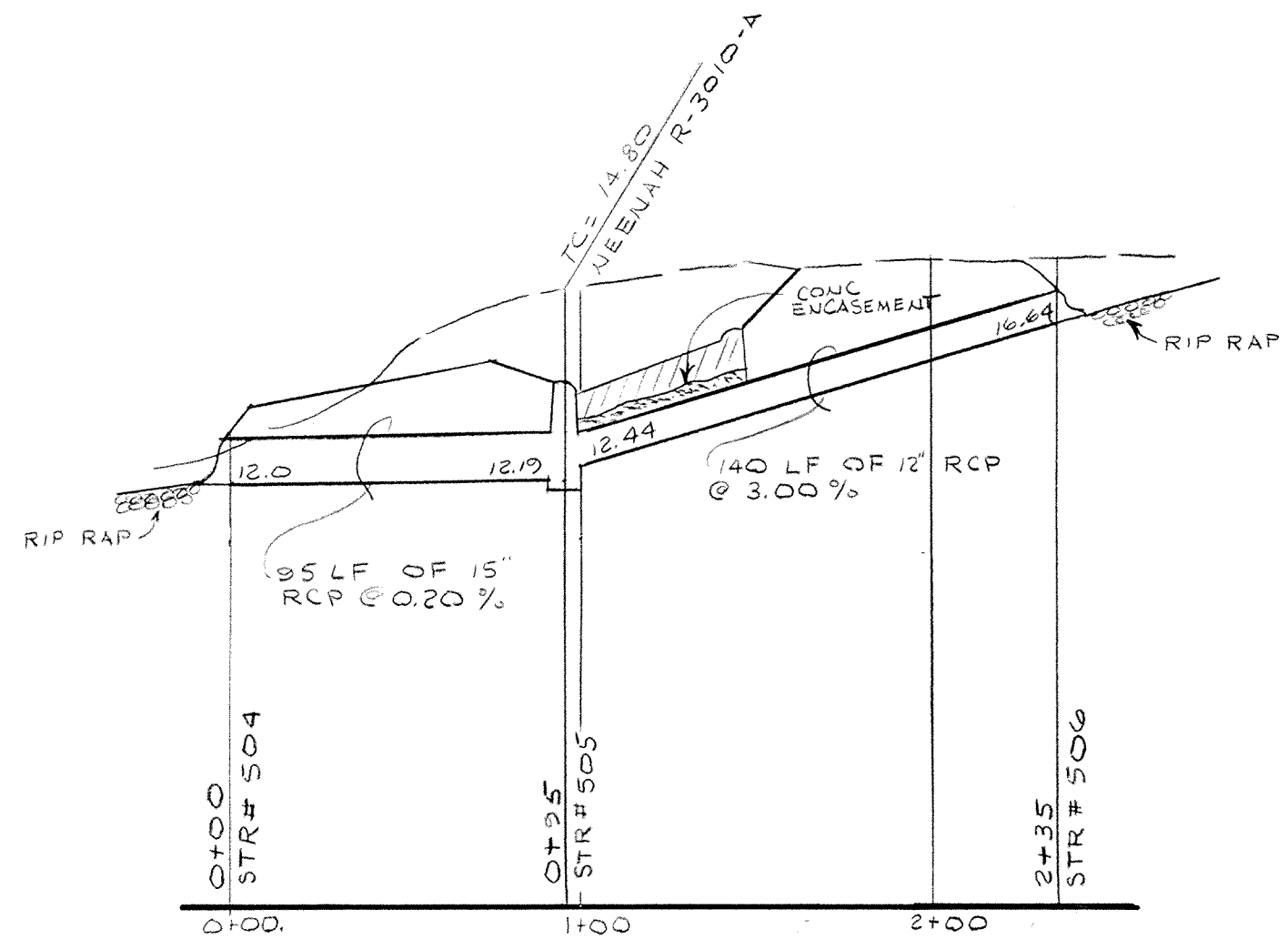
PLAN ONE

PLAN TWO

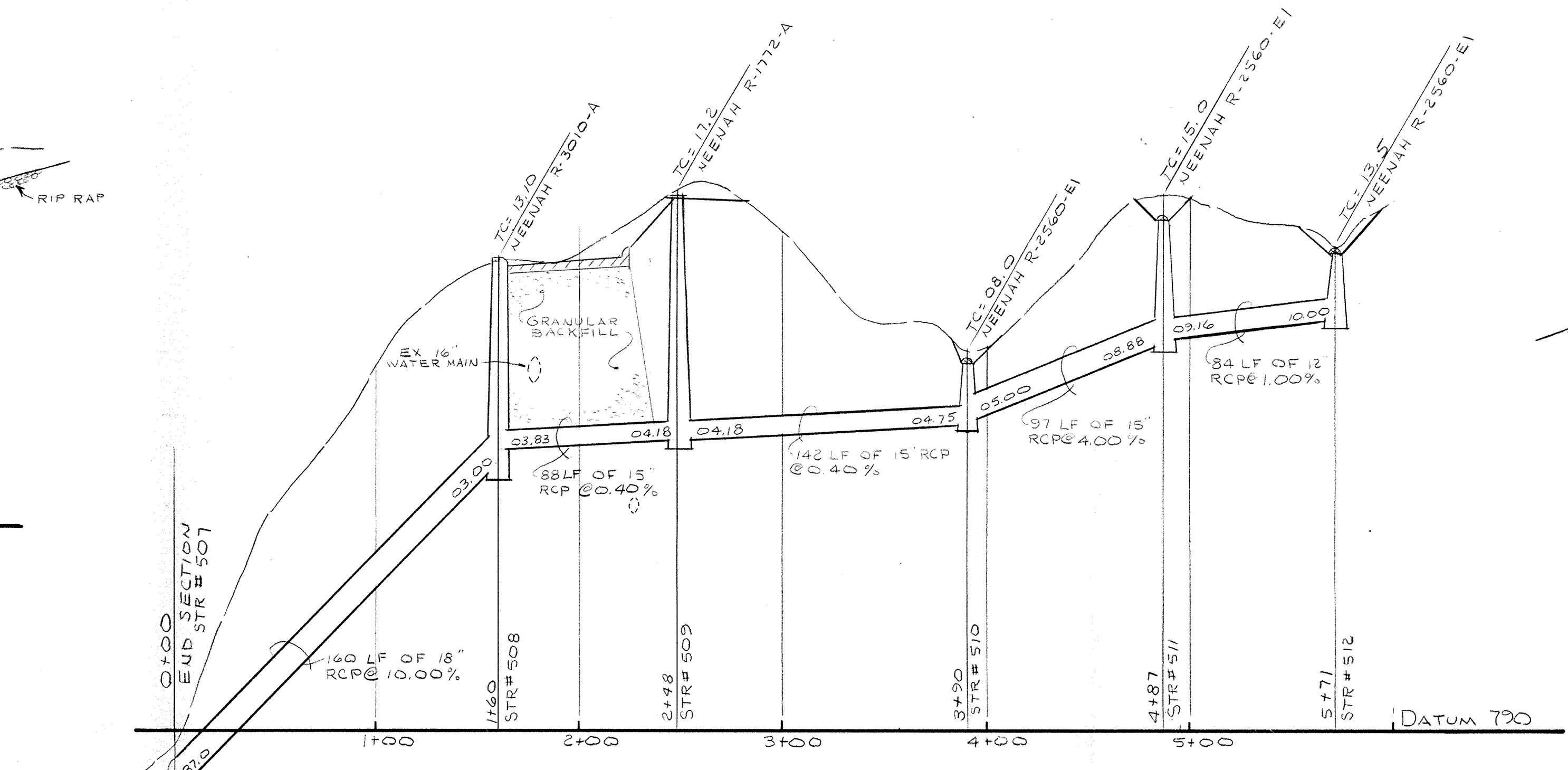
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	DATE		DFTNG. CHK.	4G	HORIZ: 1"=50' VERT: 1"=5'	1-31-86	MASTHEAD-SECTION 16			5
DRAWING TITLE								JOB NUMBER		OF 8
SANITARY SEWER-PLAN & PROFILE								79100-110016		



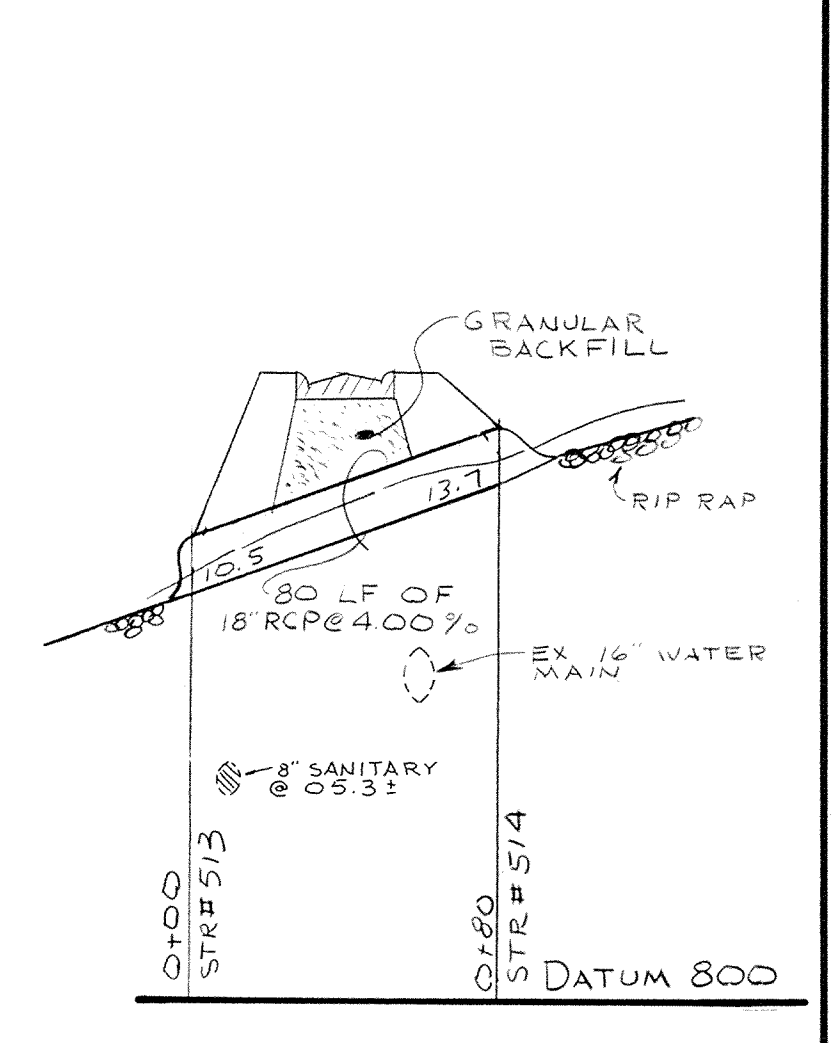
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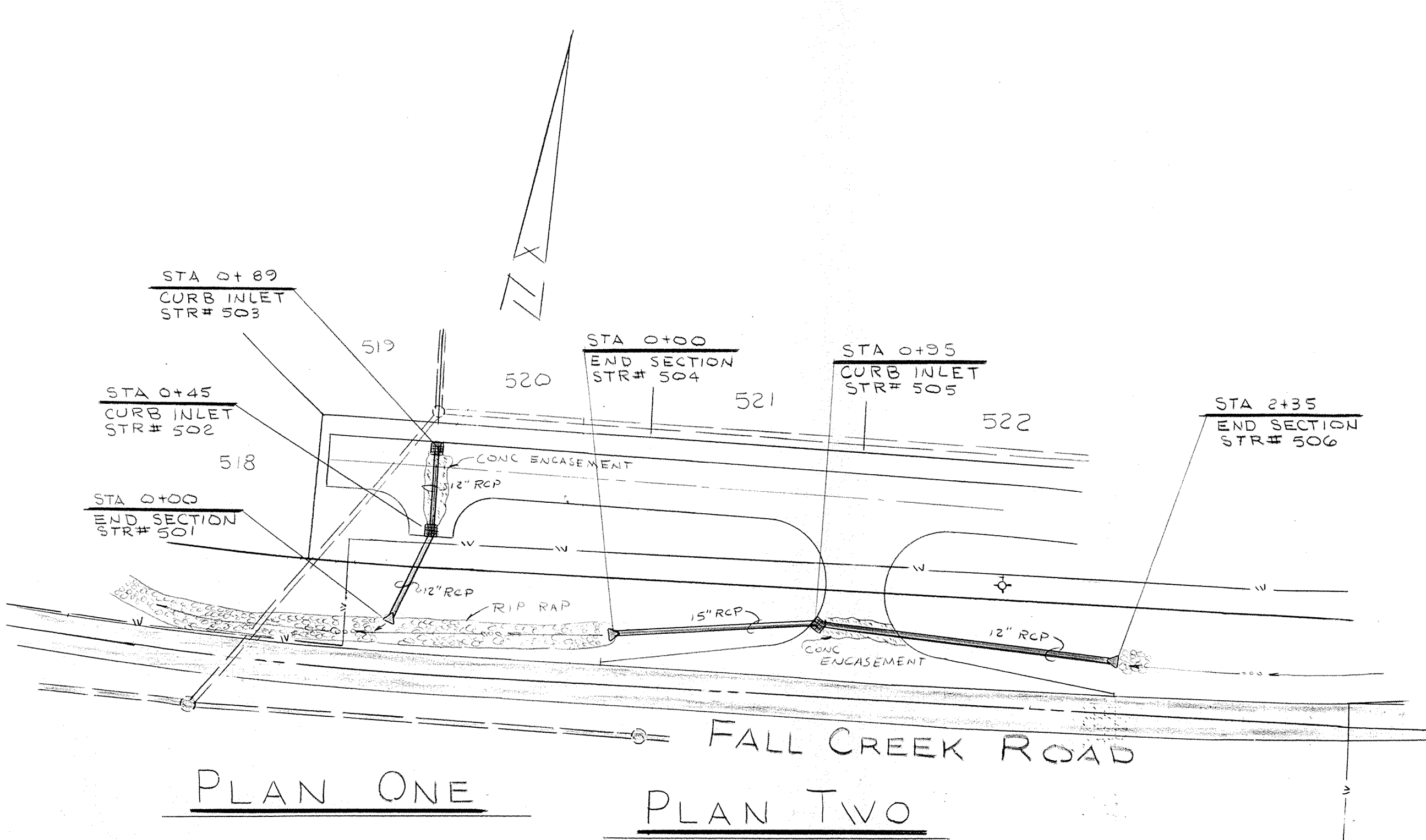
PROFILE TWO



PROFILE THREE

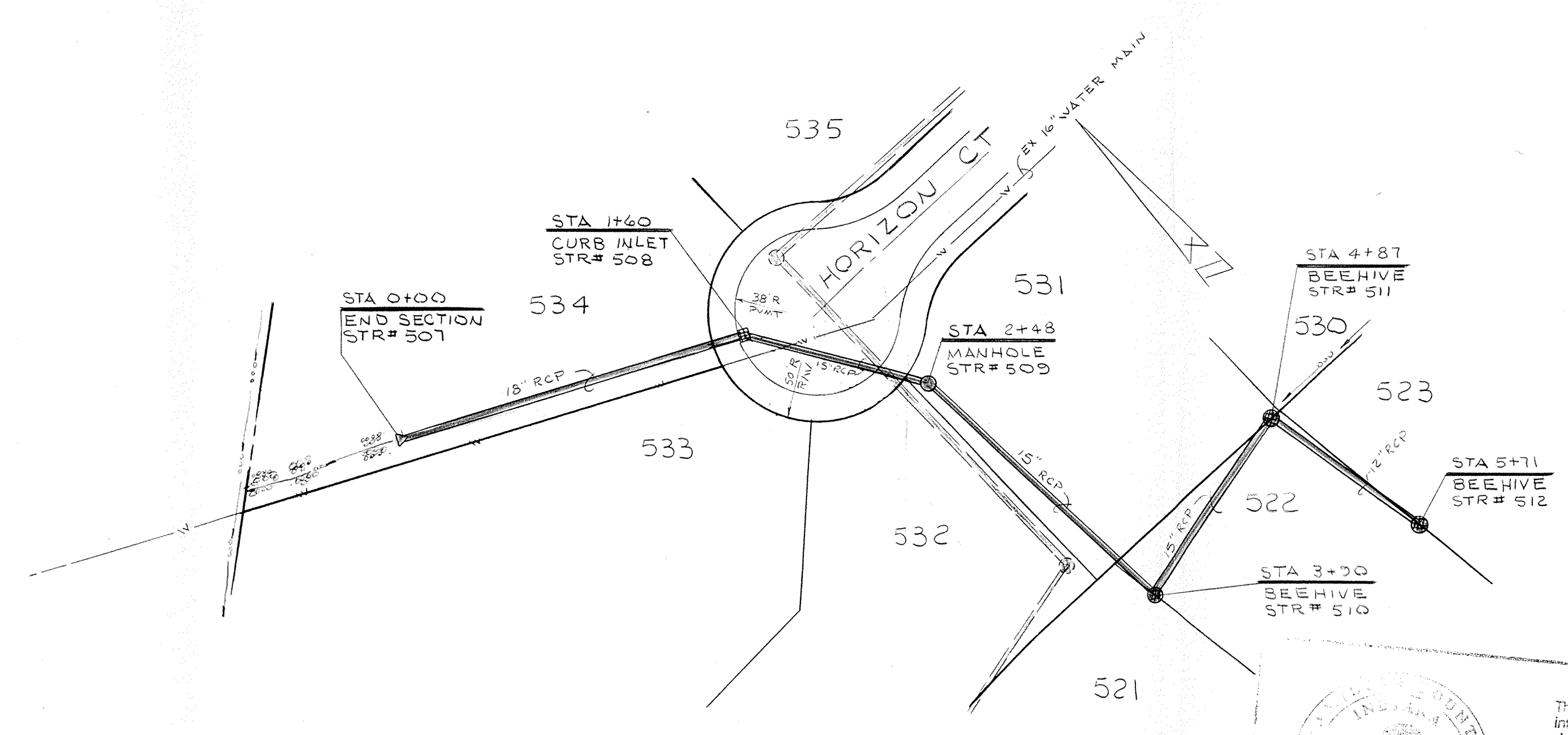


PROFILE FOUR

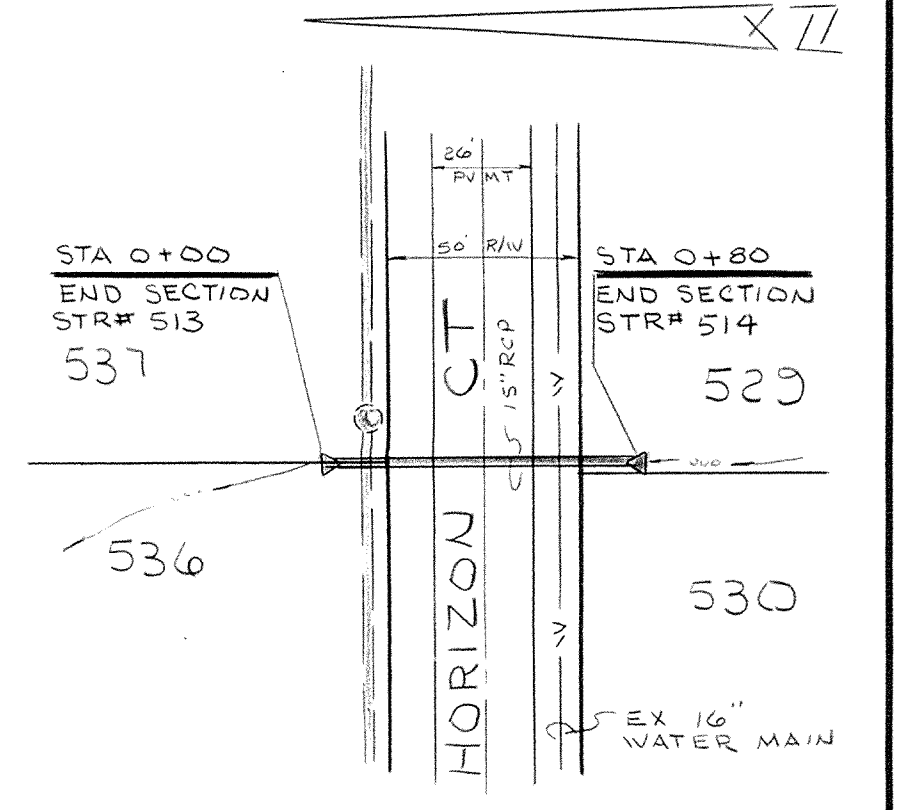


PLAN ONE

PLAN TWO




PLAN THREE



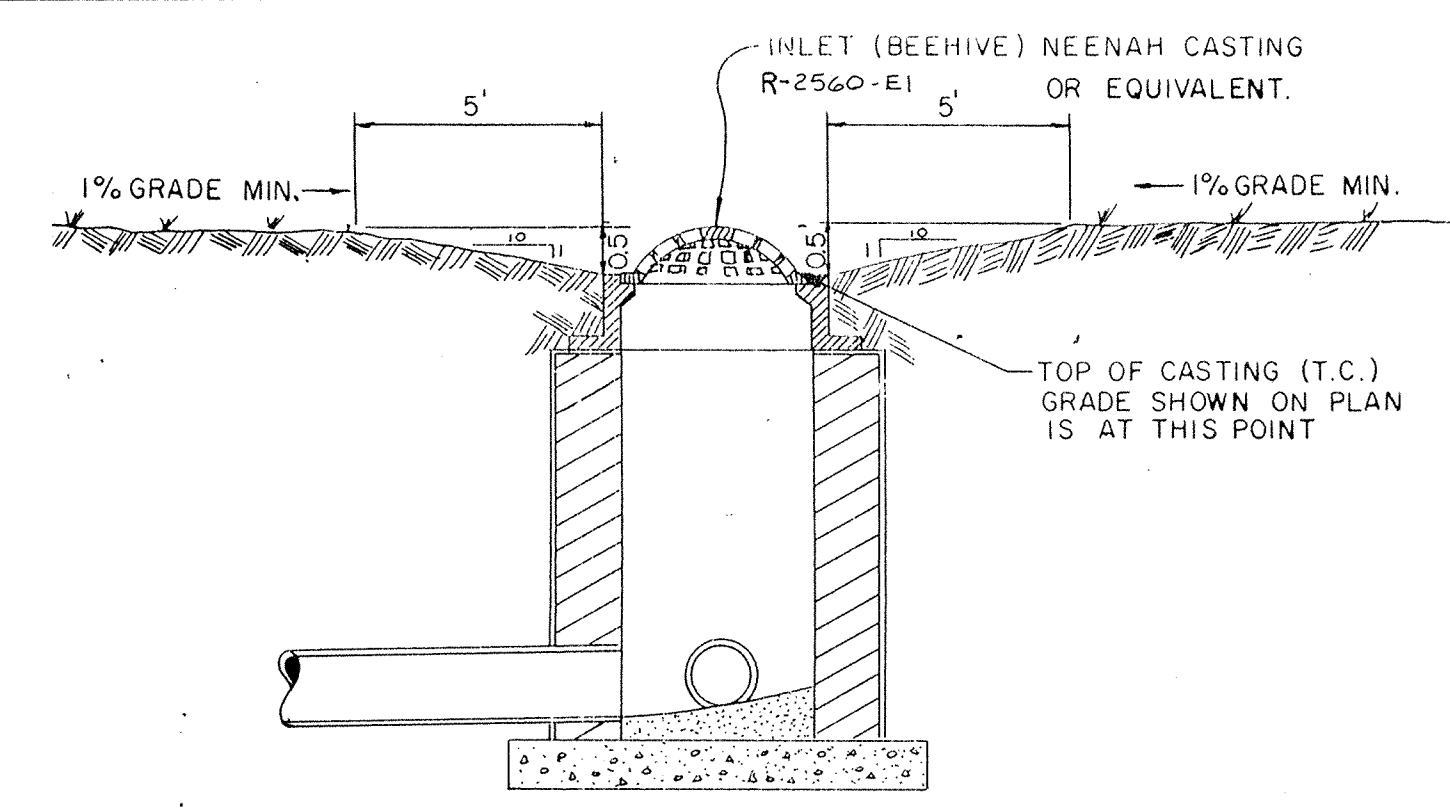
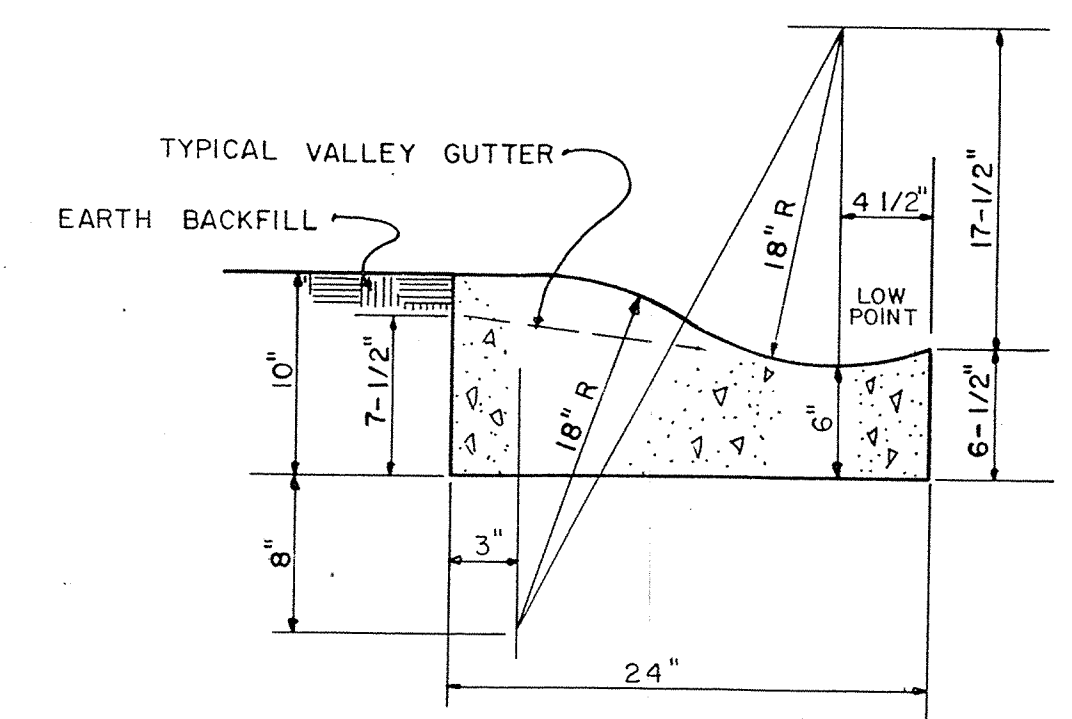
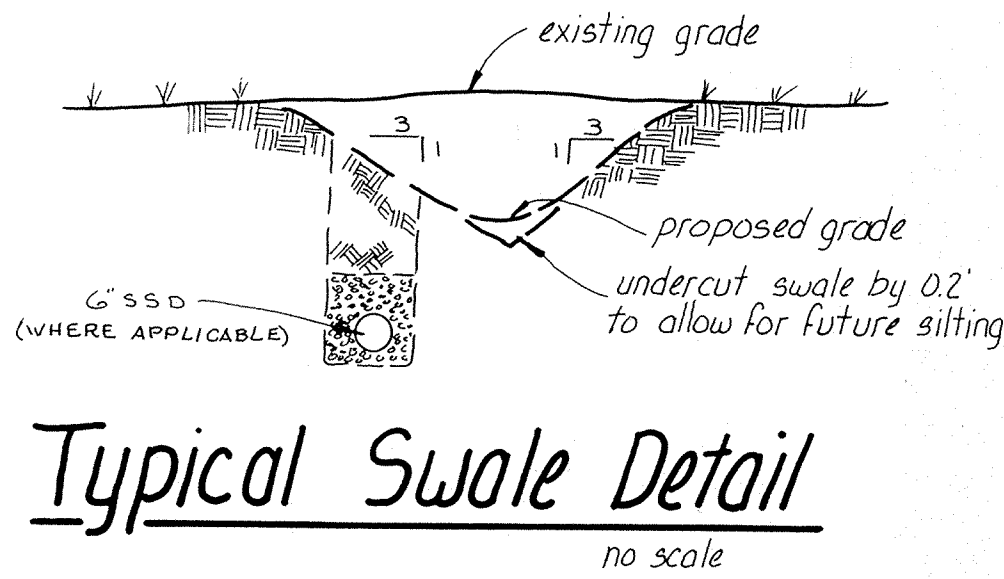
PLAN FOUR

This information was gathered for input into the Hamilton County Geographical Information System. This document is considered an official record of the GIS.
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 Entered by: JDH

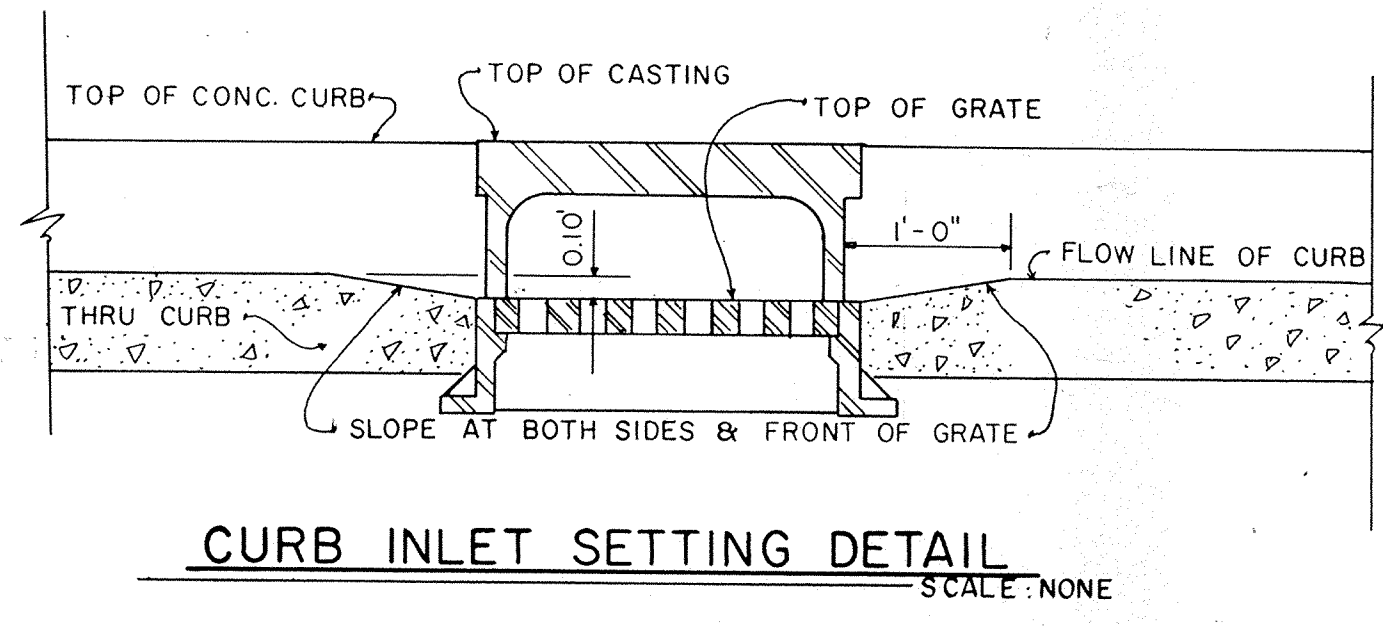
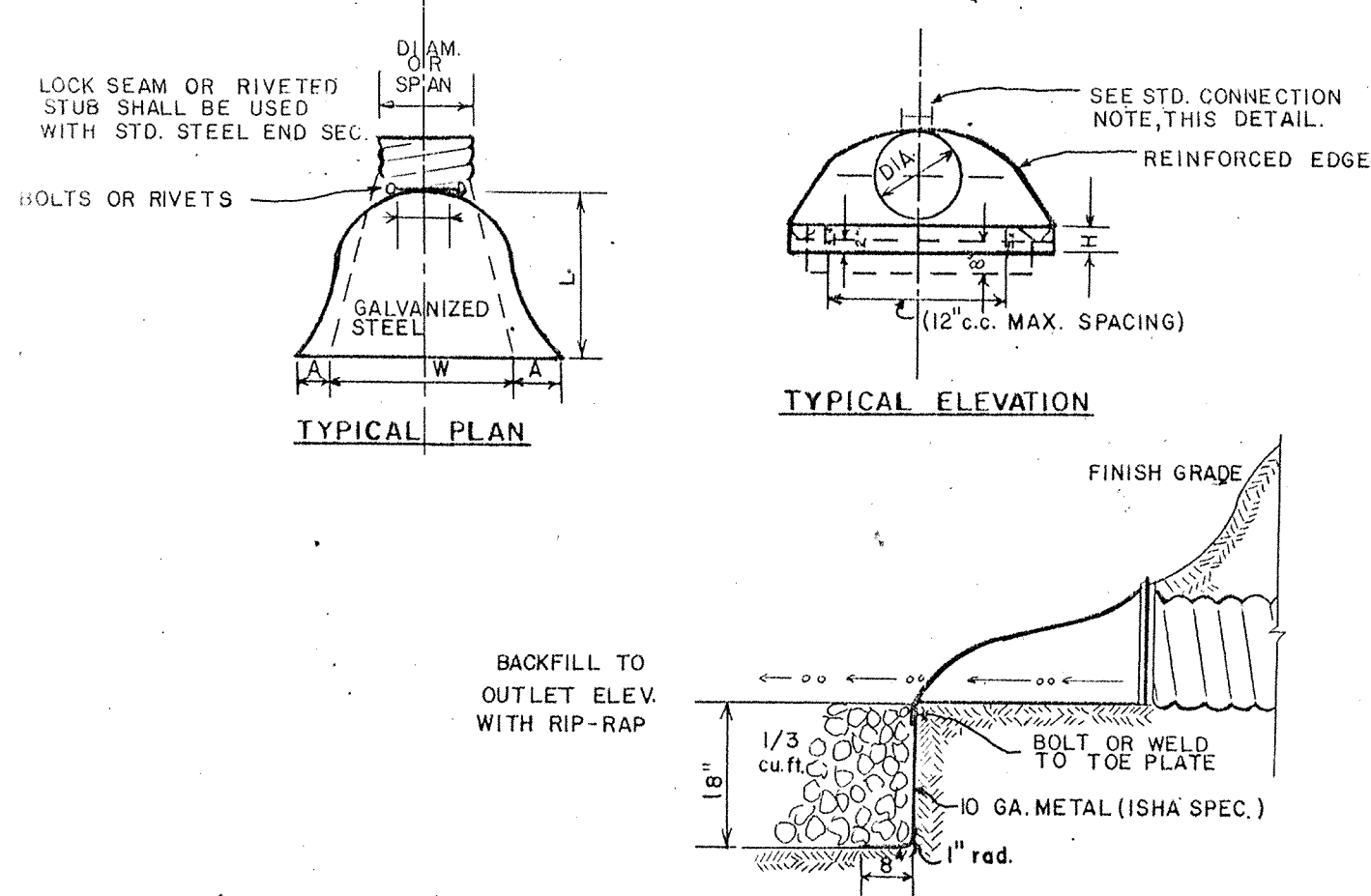
CERTIFIED BY	REVISIONS	 PAUL I. CRIFE, INC. 7172 GRAHAM ROAD INDIANAPOLIS, INDIANA 46250 (317) 842-6777	TECH. CHK.	DRAWN BY	SCALE	DATE	CLIENT	DWG. TYPE	FILE NUMBER	SHEET
			DFTNG. CHK.	DRAWING TITLE	HORIZ: 1"=50'	1-31-86	MASTHEAD - SECTION 16			6
DATE								JOB NUMBER		OF 8
								79100-10016		

DIMENSIONS OF GALVANIZED STEEL END SECTIONS FOR ROUND PIPE

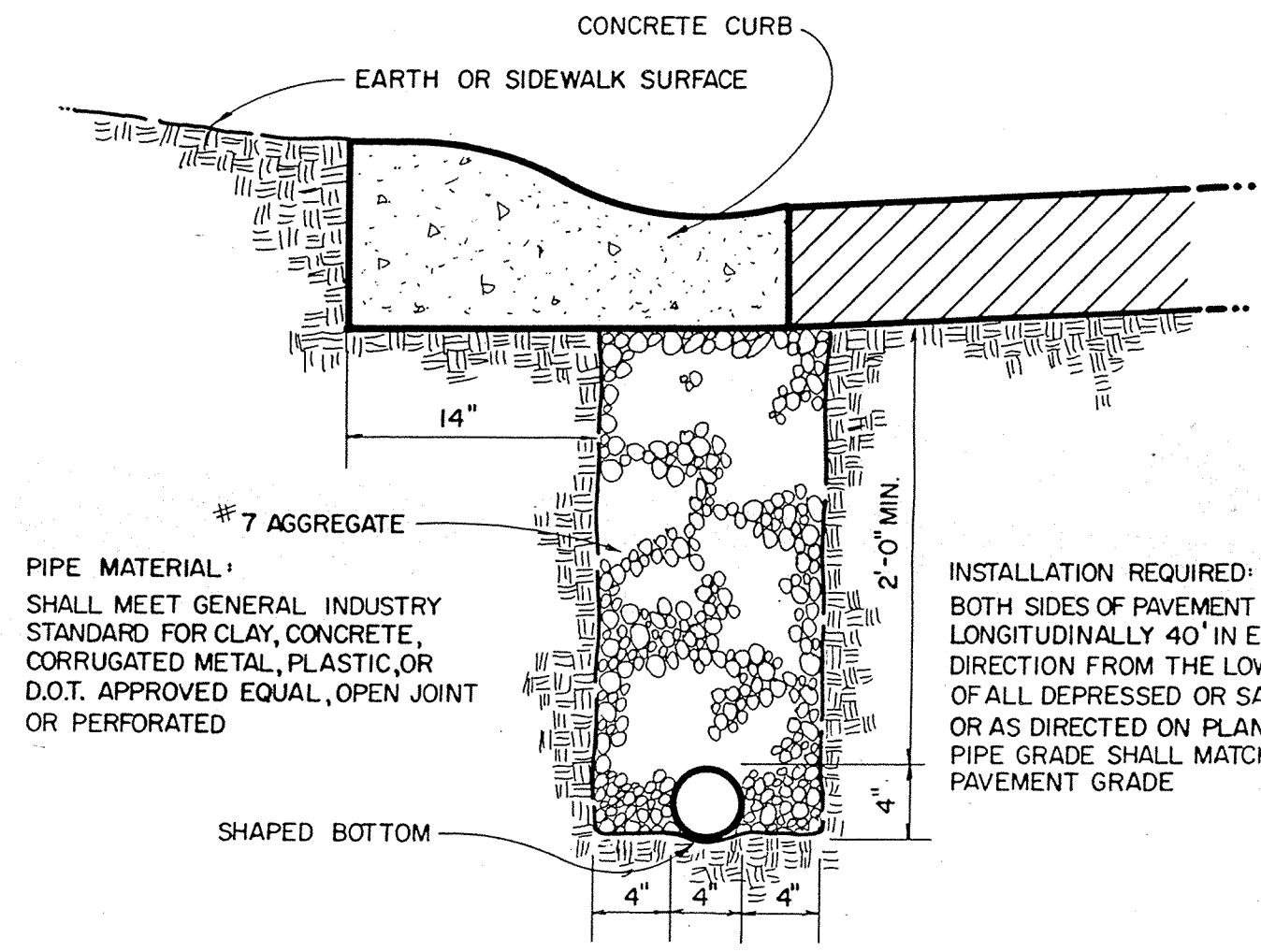
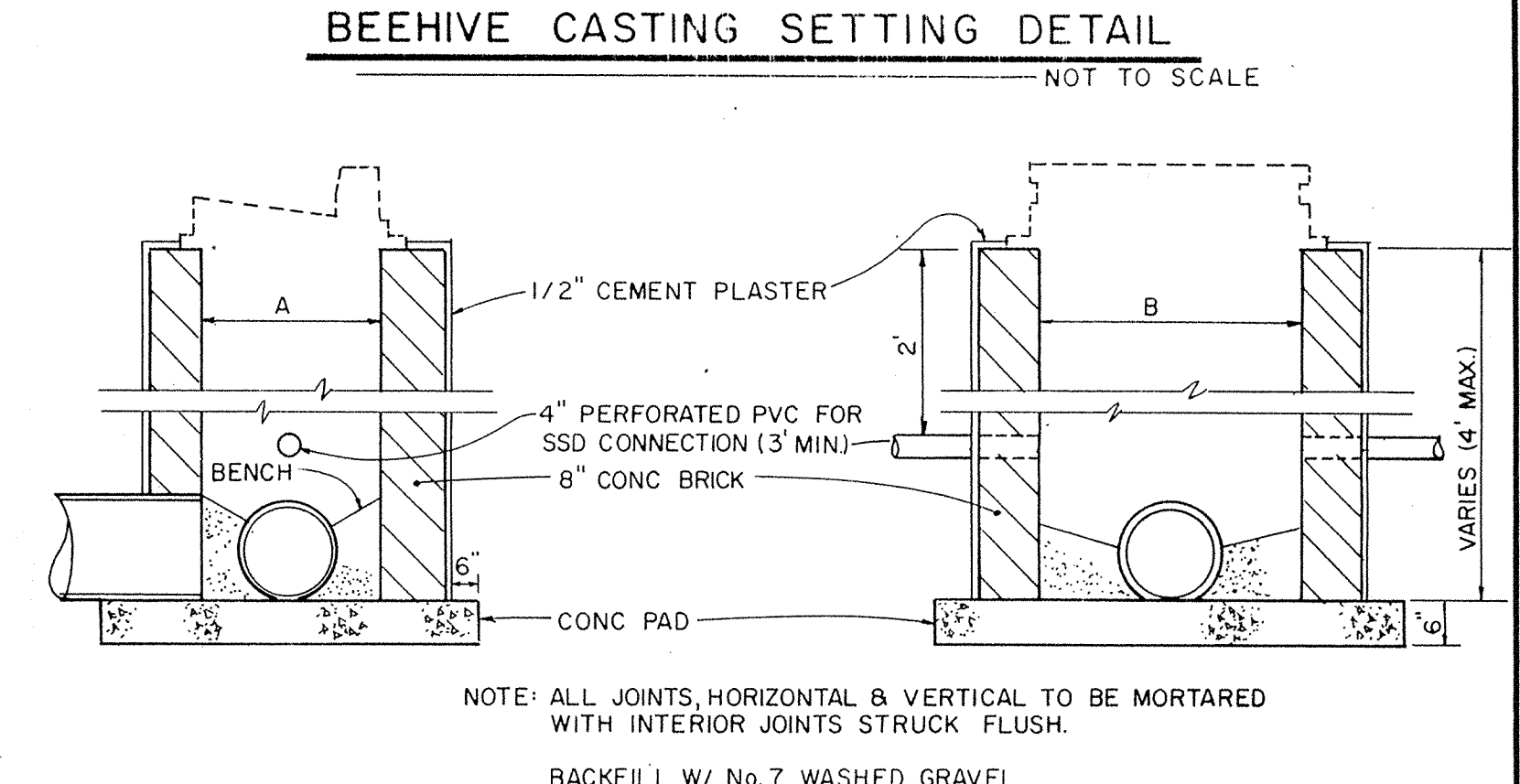
PIPE DIA IN INCHES	GAGE	DIMENSIONS IN INCHES			PIPE DIA IN INCHES	DIMENSIONS IN INCHES		APPROX SLOPE	BODY	STD. PIPE SIZE & CONN. USAGE GALVANIZED STEEL PIPE	
		A ± 1	B (max)	H ± 1		L 1/2	W 2			TYPE CONN.	ROUND
12	16	6	6	6	12	21	24	2 1/2	1 pc.	# 1	12" THRU 24"
15	16	7	8	6	15	26	30	2 1/2	1 pc.	# 2	30" THRU 36"
18	16	8	10	6	18	31	36	2 1/2	1 pc.	# 3	42" THRU 84"
21	16	9	12	6	21	36	42	2 1/2	1 pc.		
24	16	10	13	6	24	41	48	2 1/2	1 pc.		
30	14	12	16	8	30	51	60	2 1/2	1 pc.		
36	14	14	19	9	36	60	72	2 1/2	2 pc.		
42	12	16	22	11	42	69	84	2 1/2	2 pc.		
48	12	18	27	12	48	78	90	2 1/4	2 pc.		
54	12	18	30	12	54	84	102	2	2 pc.		
60	12	18	33	12	60	87	114	1 3/4	3 pc.		
66	12	18	36	12	66	87	120	1 1/2	3 pc.		
72	12	18	39	12	72	87	126	1 1/3	3 pc.		
78	12	18	42	12	78	87	132	1 1/4	3 pc.		
84	12	18	45	12	84	87	138	1 1/6	3 pc.		



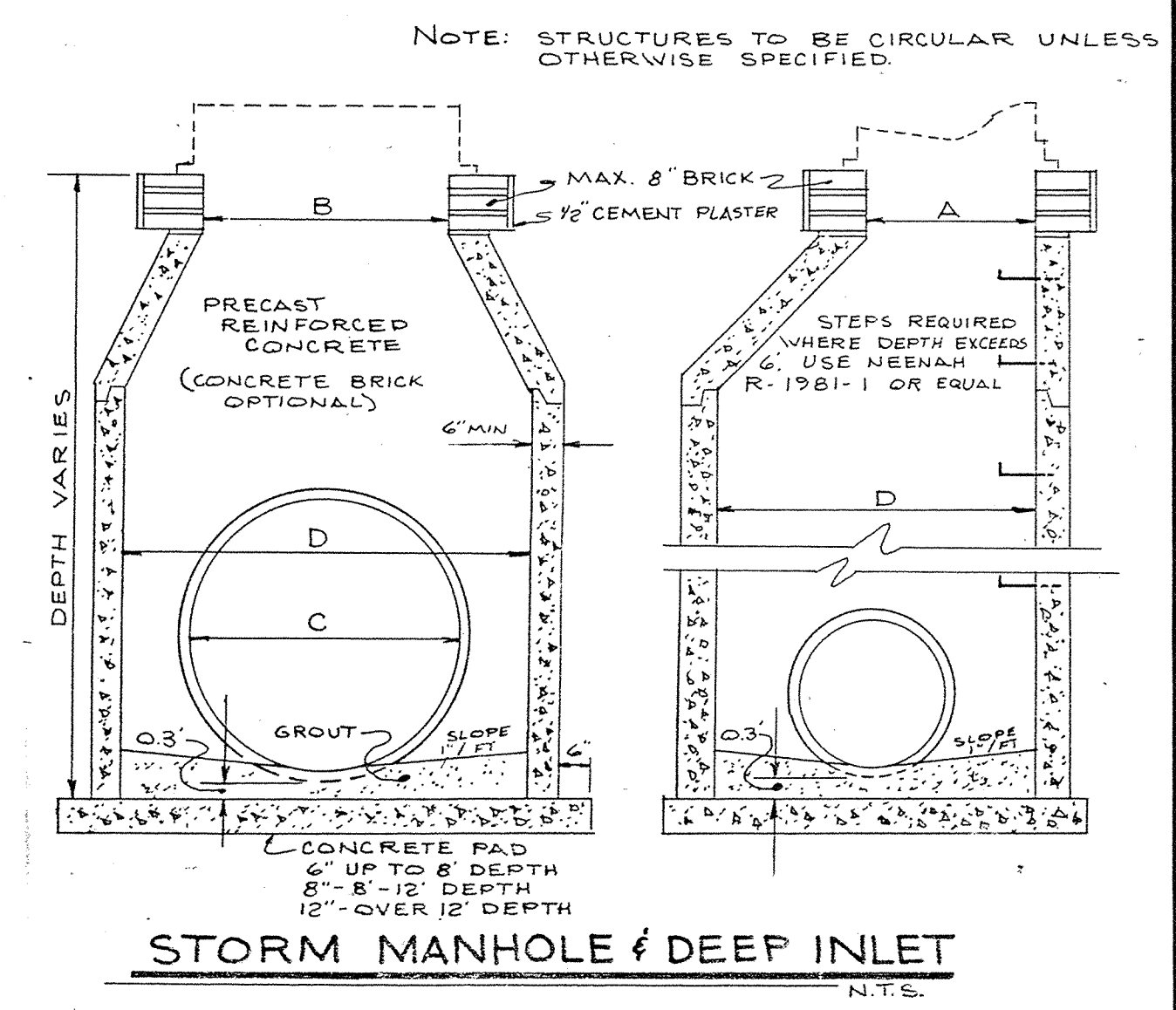
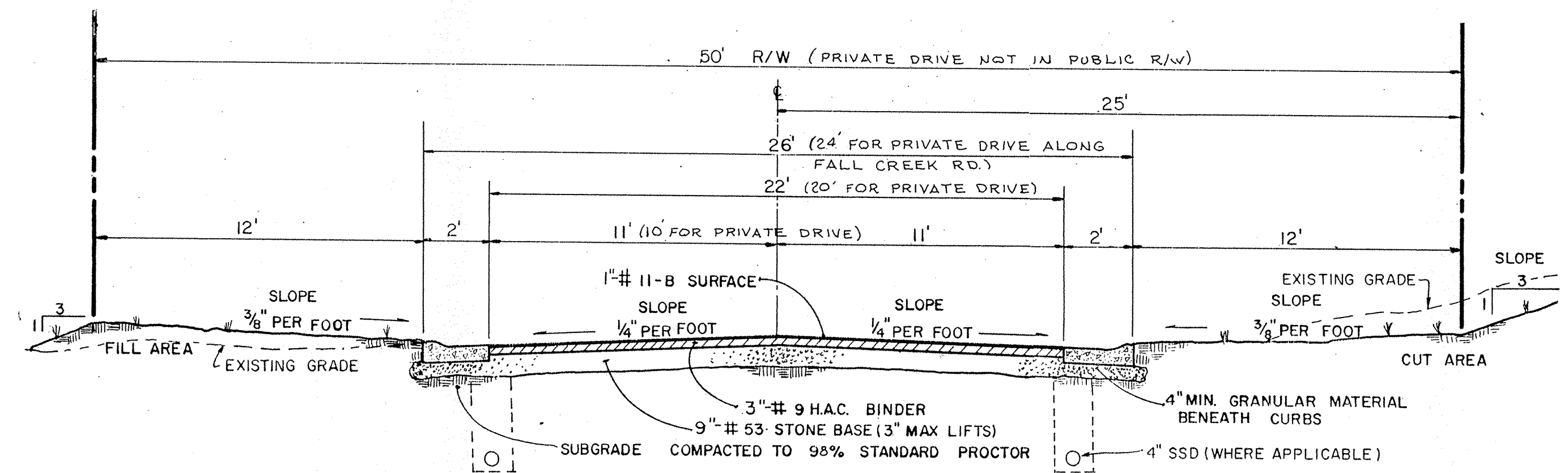
STANDARD CONNECTIONS: TYPE #1 SHALL BE CONNECTOR LUG WITH THREADED ROD. TYPE #2 SHALL BE THREADED ROD WITH ROD HOLDERS. TYPE #3 SHALL BE RIVETED OR BOLTED CONNECTION.
NOTE: STANDARD DIMENSIONS FOR GALVANIZED STEEL END SECTIONS FOR PIPE-ARCH MAY BE FOUND ON MISC. STANDARDS SHEET E₂, DATED JULY, 1972, OF THE INDIANA STATE HIGHWAY STANDARD SPECIFICATIONS.



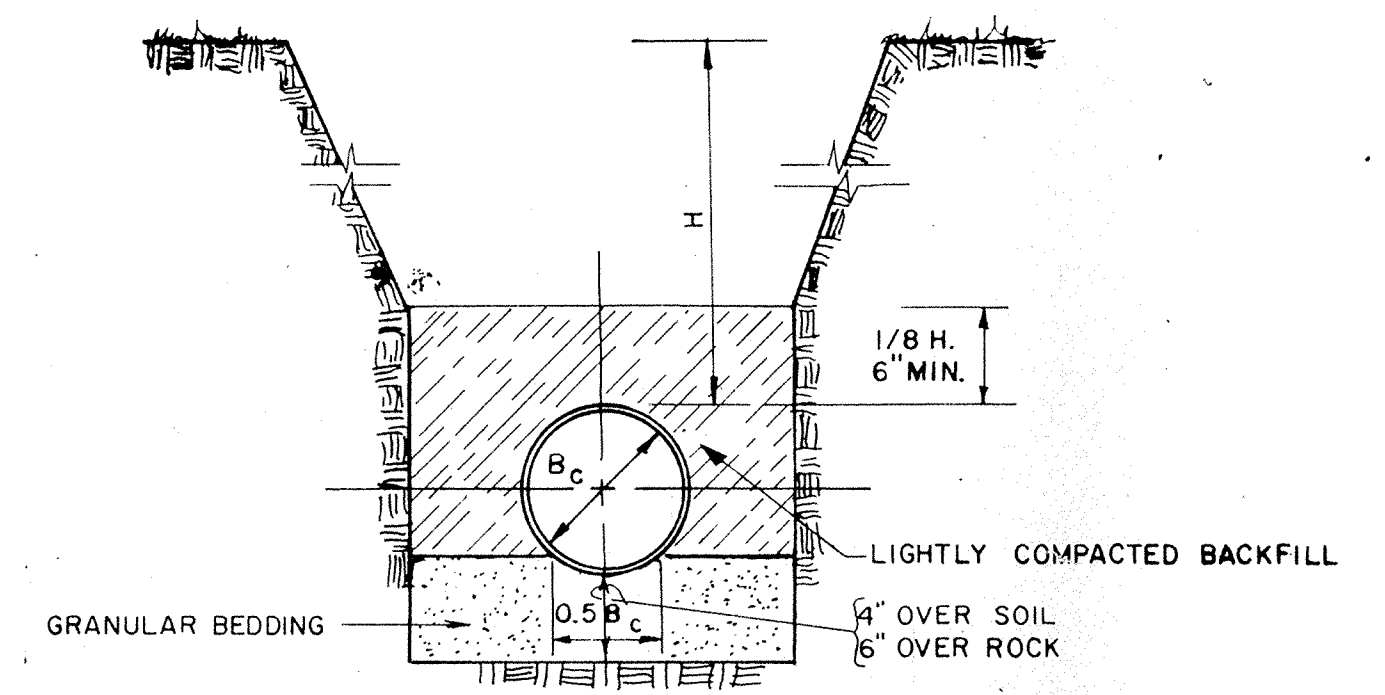
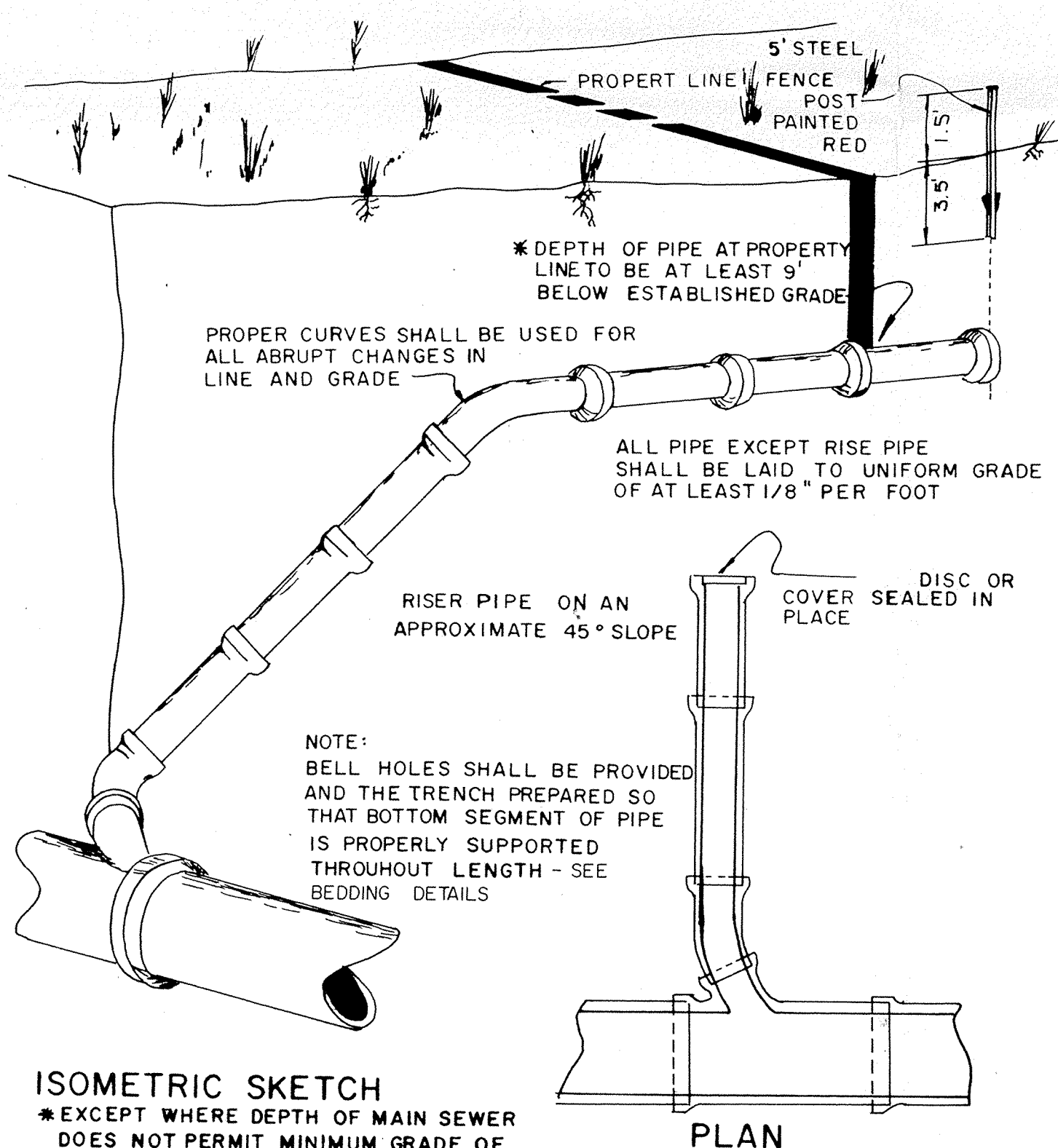
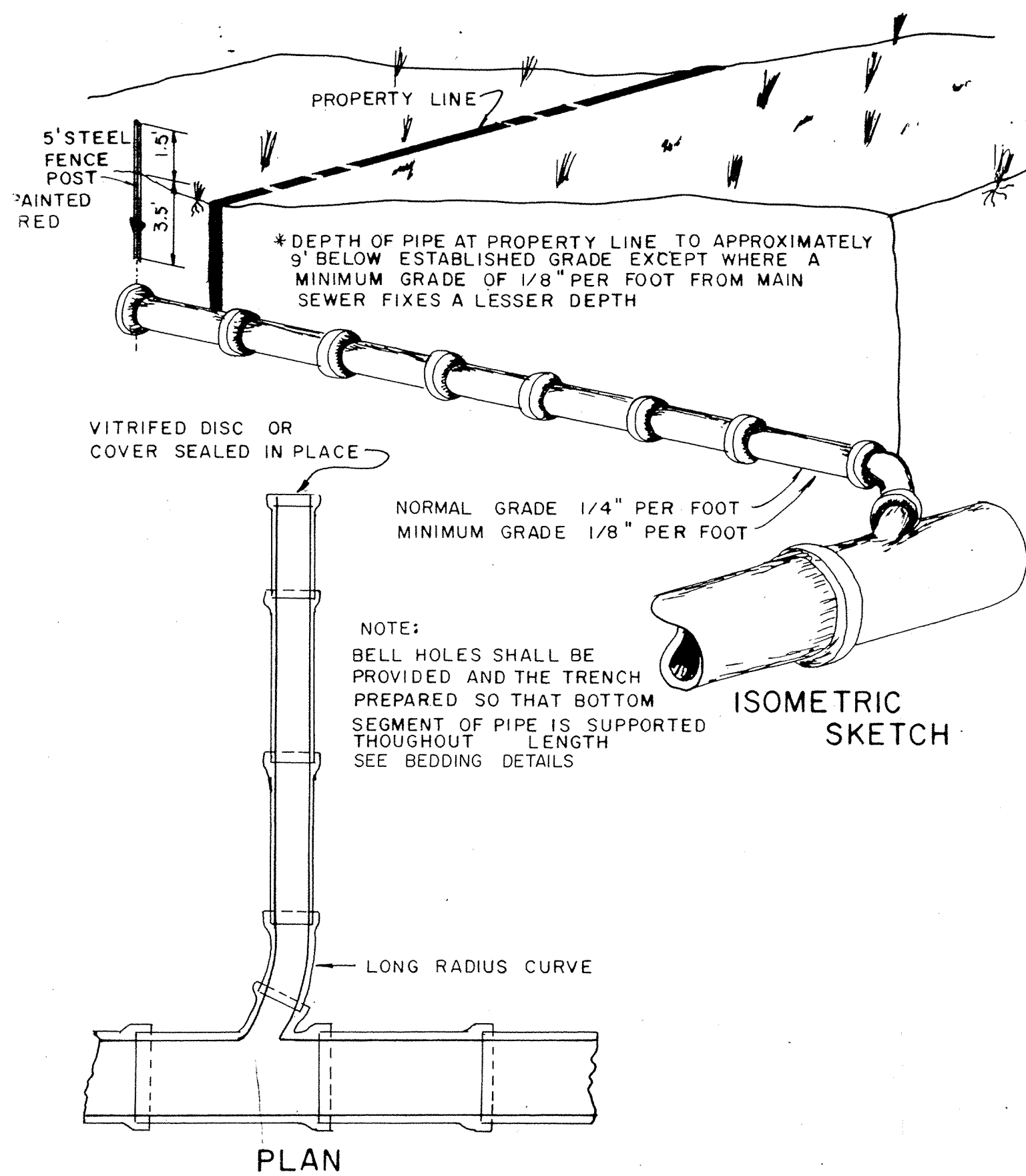
TYPICAL CURB DETAIL WITH VALLEY GUTTER
(STD. PLAN # 12-01-TYPE 1) SCALE: NONE



CASTING	A	B	C	D
R-1772-A	25"	DIAMETER	21"	4'-0"
R-2560-E1	27"	DIAMETER	24"	4'-0"
R-3010-A	24"	25"	27"	4'-0"
R-3501	25"	27"	36"	5'-0"
			42"	5'-4"
			46"	6'-0"
			54"	6'-6"

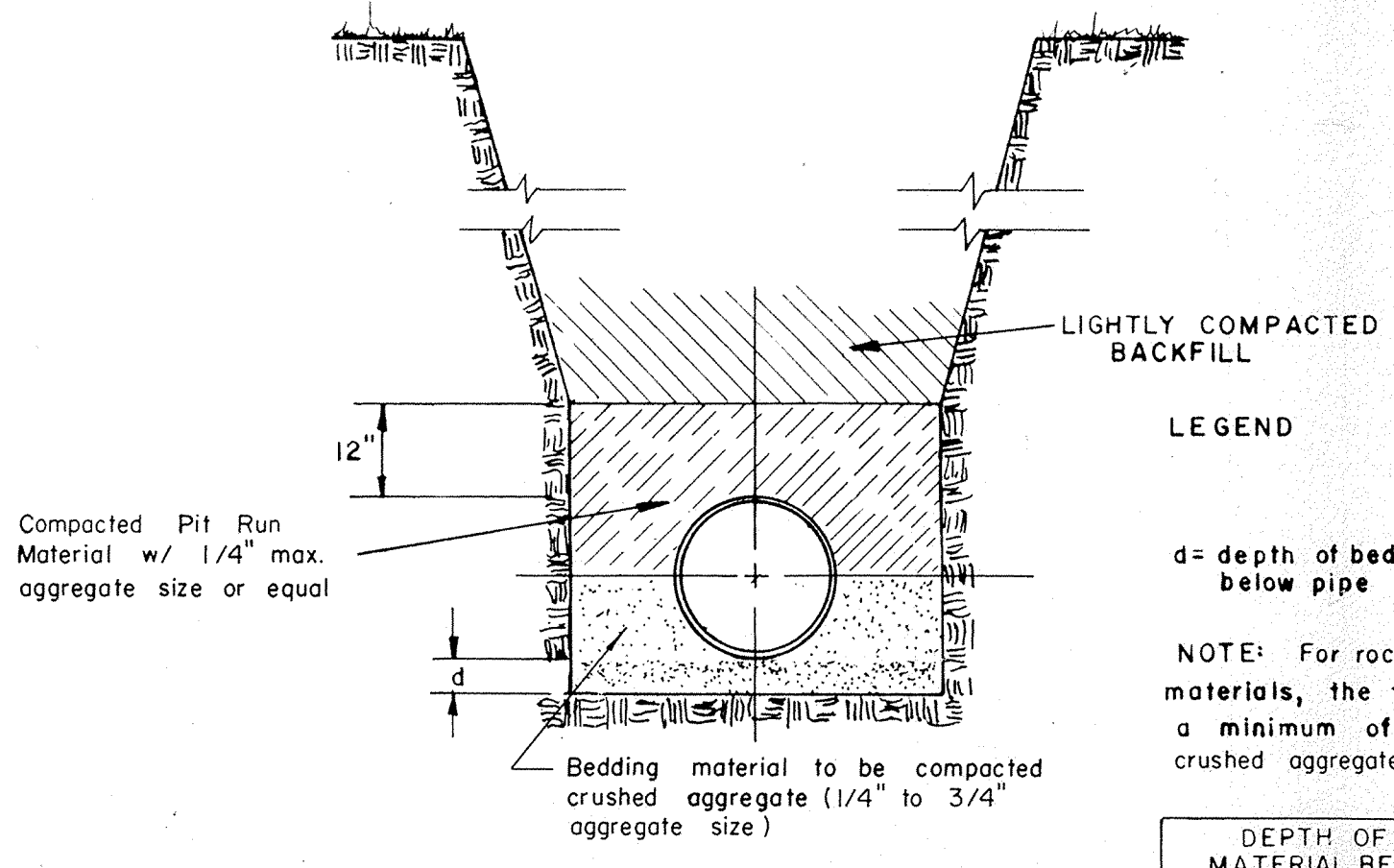


NOTE: ALL METHODS AND MATERIALS OF STREET CONSTRUCTION SHALL BE IN ACCORDANCE WITH ISHA SPECS. (1978) SEC. 403, 902.01, 903.01 AND 903.02 WITHOUT WRITTEN CHANGE FROM ENGINEER



STANDARD PIPE BEDDING (FOR RIGID PIPE)

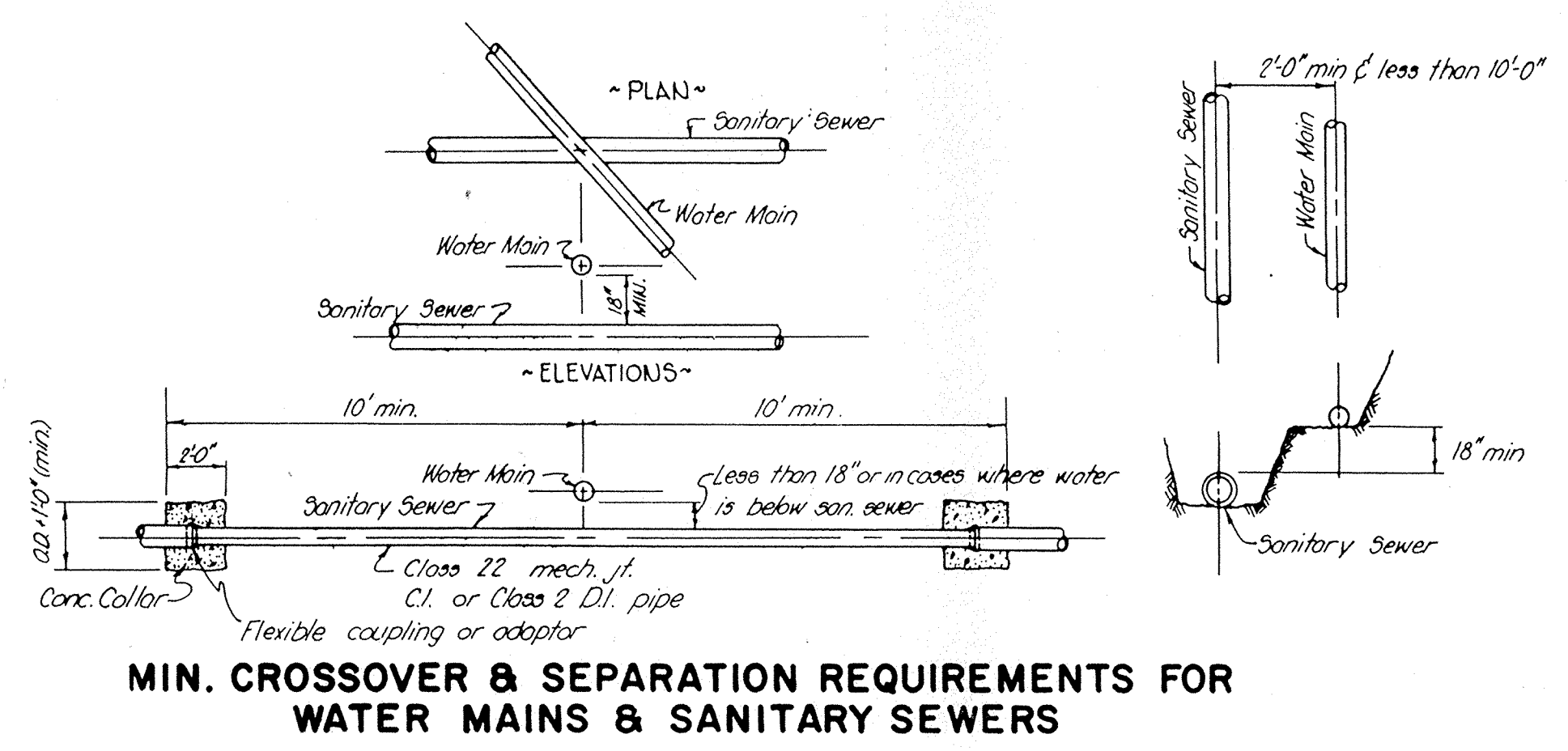
$L_1 = 1.5$ NO SCALE



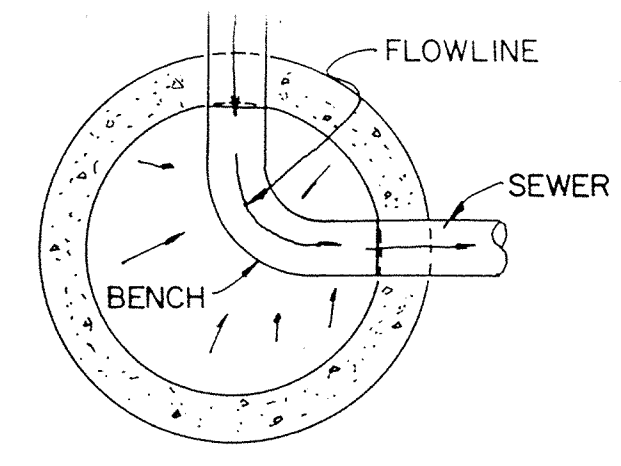
SANITARY CLASS "B" BEDDING (FOR FLEXIBLE PIPE)

$L_1 = 1.9$ NO SCALE

DEPTH OF BEDDING MATERIAL BELOW PIPE	
Inside diameter	d (min)
27" and smaller	3"
30" to 60"	4"
66" & larger	6"

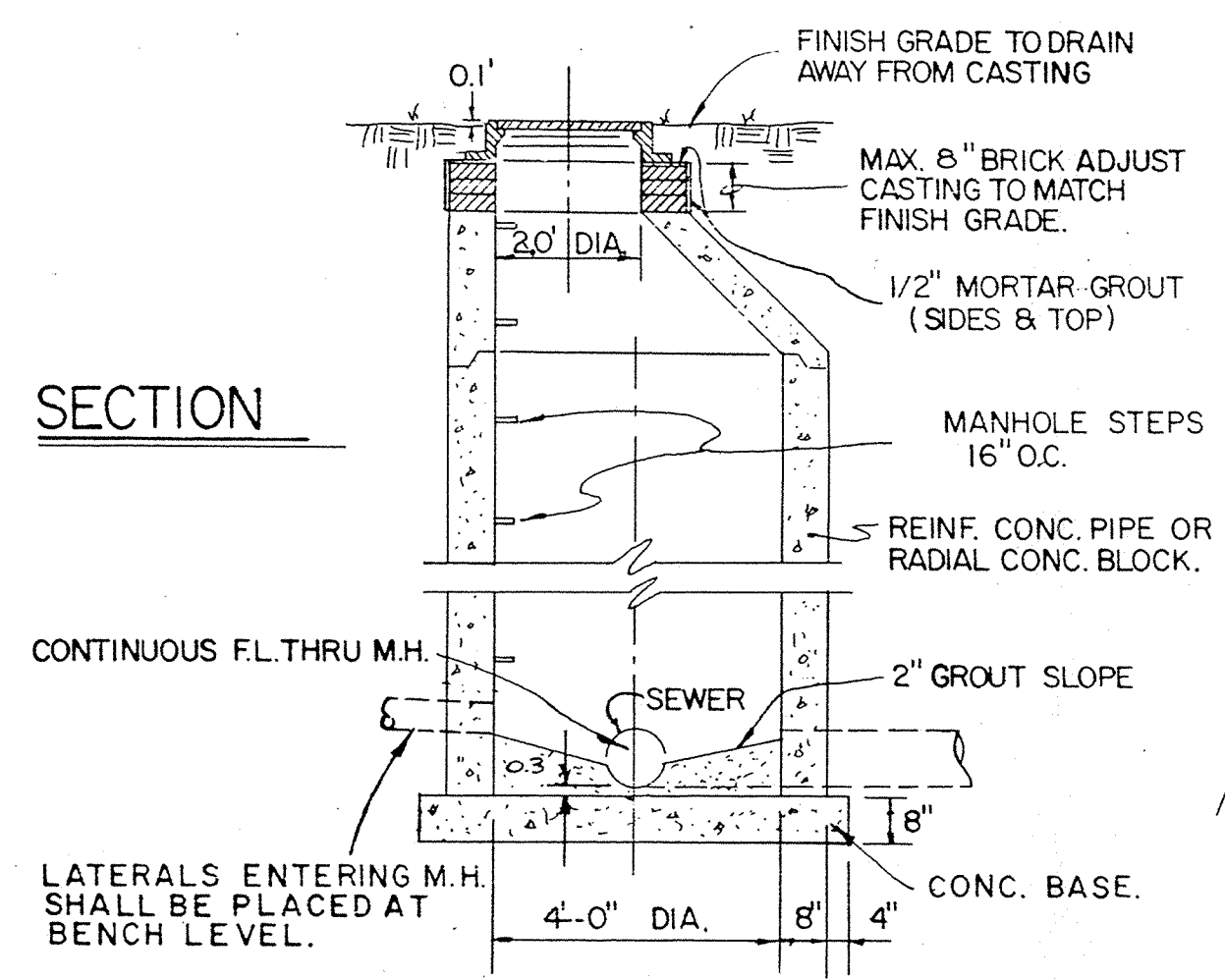


PLAN



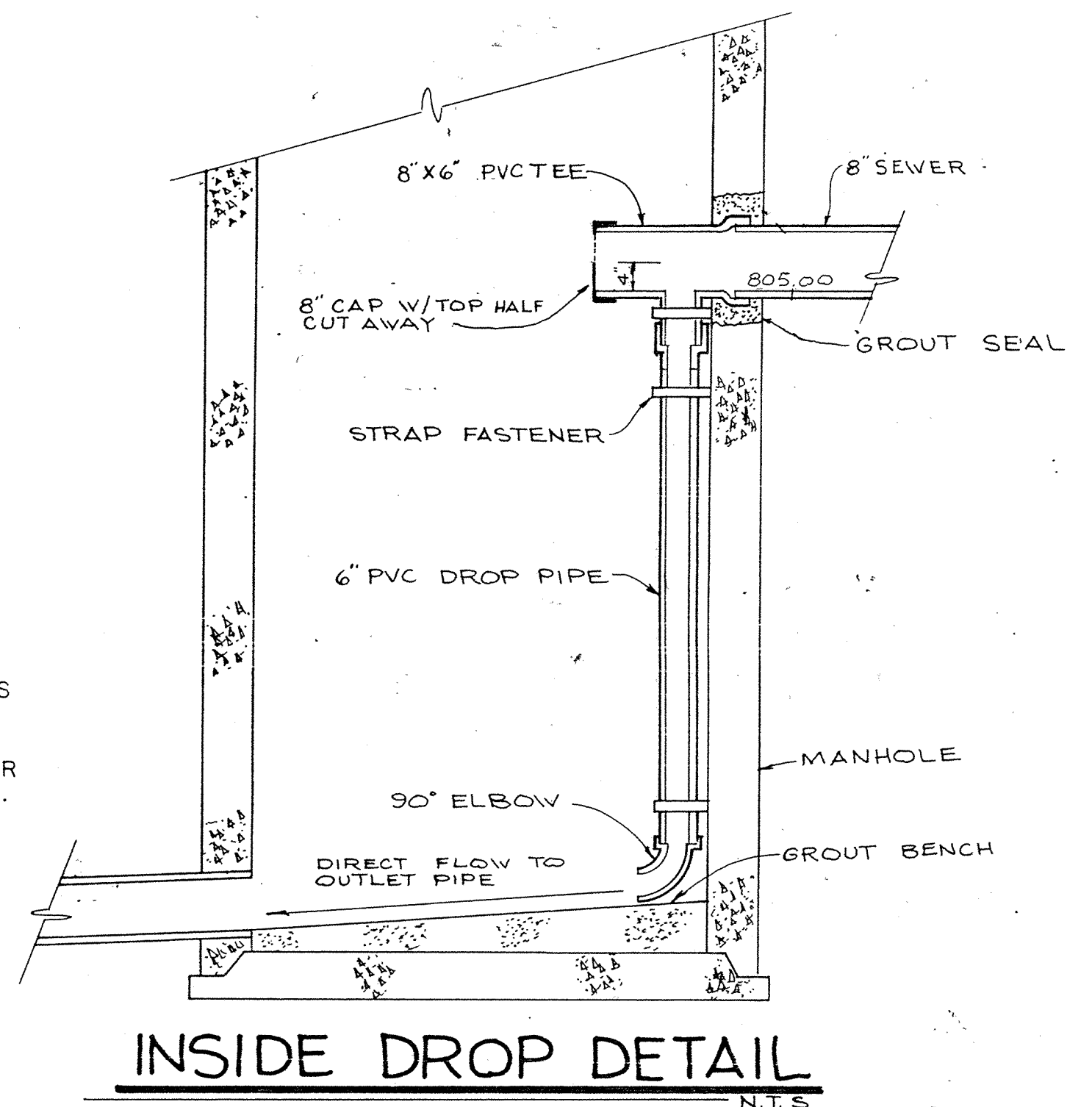
NOTE: SEE SANITARY SEWER PROFILES FOR CASTING DESIGNATION.

SECTION



STANDARD MANHOLE FOR SANITARY SEWERS AS ILLUSTRATED

NOT TO SCALE



Sanitary Sewer Specifications

- Standard Specifications of the Indiana State Board of Health and the City of Noblesville shall apply for all work and materials.
- All sanitary sewer in this project may be any of the following, unless specifically designated:
 - Vitrified Clay (VCP) meeting requirements set forth in ASTM C-200
 - Polyvinyl Chloride (PVC) meeting requirements set forth in ASTM D-3034
 - Cast Iron (C.I.) meeting requirements set forth in ASTM A-74
 - ABS Composite meeting requirements set forth in ASTM D-2680 and ASTM D-751
- All joints and fitting shall conform to the same standards as the pipe.
- Installation of flexible pipe shall conform to ASTM D-2321-74.
- Backfill around all structures and all cuts under paved area with granular material.
- The Contractor shall be responsible for obtaining all State, City and County permits.
- Alignment and grade changes in plan may be deviated from in field with engineer's approval. Final plans furnished with maintenance bond and completed affidavit shall reflect "as built" conditions.

Seeding Specifications

- Swale Seeding: Seed and fertilizer within construction limits immediately after construction with 5#/acre "Red Top" Grass, 20#/acre Rye Grass, 20#/acre Blue Grass, 25#/acre "Tall Fescue" Grass and 600#/acre 12/12/12 fertilizer.
- Cut and Fill Seeding Along Streets: 25#/acre "Tall Fescue" Grass, 20#/acre "Rye Grass", 15#/acre "Blue Grass" and 600#/acre 12/12/12 fertilizer.

STORM SEWER SPECIFICATIONS

- Standard specifications of the City of Noblesville shall apply for all work and materials.
- All storm sewer pipe shall be reinforced concrete pipe conforming to ASTM Design C-76 Class III, or galvanized helical corrugated steel pipe conforming to AASHTO M 36, unless under street, then fully bituminous coated helical corrugated steel pipe conforming to AASHTO M 190 unless specified otherwise on plan. If either of the corrugated steel pipe types are used for pipes called out on the plans as being larger than 18", the corrugated steel pipe will need to be one size larger than the size called out on the plan.
- Backfill around all structures and cuts under paved areas with granular material.
- The Contractor shall be responsible for obtaining all State Highway, City and County permits.
- See standard detail sheet for construction dimensions of storm structures.
- Storm sewer discharge areas and inverts are tentative and are subject to field modifications by the Engineer or his representative. The Contractor will be reimbursed for any additional labor and materials necessary to complete any modifications according to the unit prices submitted by the Contractor on the contract documents.
- The Contractor shall provide at least 2' of cover over all storm sewers.
- Rip rap shall be a minimum 1/3 cubic foot in size and a minimum 18" in depth. Dimensions for rip rap on this plan are for estimating purposes only. Actual best placement of rip rap shall be determined by field conditions.
- All drainage pipe and ditch outfalls to receiving streams shall be constructed in accordance with drawings, subject however, to any modifications required by the City of Noblesville at the time installation is completed and to any adjustments needed for field conditions not adequately anticipated by the design drawings.