

**Drain:** SPRINGMILL VILLAGES DRAIN      **Drain #:** 268  
**Improvement/Arm:** THE CROSSINGS - SECTION - 4  
**Operator:** JCH      **Date:** 5-18-04  
**Drain Classification:** Urban/Rural      **Year Installed:** 1996

### GIS Drain Input Checklist

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

Gasb 34 Footages for Historical Cost  
Drain Length Log

Drain-Improvement: SPRINGMOUTH VILLAGES DRAIN - THE CROSSINGS - SECTION 4

Drain Type:	Size:	Length <i>Surveyors Revised</i>	Length (DB Query)	Length Reconcile	Applicable	
					Price:	Cost:
SSD	6"	3314'	3314'	Ø	2.00	6,628.00
RCP	12"	35'	35'	Ø	7.25	253.75
	15"	146'	146'	Ø	9.50	1,387.00
	18"	211'	211'	Ø	10.50	2,215.50
	24"	228'	228'	Ø	18.00	4,104.00
	30"	214'	214'	Ø	24.60	5,264.40
	36"	143'	143'	Ø	32.25	4,611.75

Sum: 4,291'    4,291'    Ø    \$24,464.40

Final Report: \_\_\_\_\_

Comments:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



SURVEYOR'S OFFICE

# Hamilton County

Kenton C. Ward, Surveyor

Suite 146

776-8495

One Hamilton County Square

Noblesville, Indiana 46060-2270 January 8, 1996

TO: Hamilton County Drainage Board

RE: Springmill Village Drain-The Crossings Section 4

Attached is a petition, non-enforcement request, plans, calculations, quantity summary and assessment roll for the The Crossings sec 4, Springmill Village 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 benefited. The drain will consist of the following:

6" SSD	3314 feet	24" RCP	228 feet
12" RCP	40 feet	30" RCP	216 feet
15" RCP	151 feet	36" RCP	144 feet
18" RCP	210 feet		

The total length of the drain will be 4,303\_ feet.

The subsurface drains (SSD) to be part of the regulated drain are those located under the curbs. Only the main SSD lines which are located within the right of way are to be maintained as regulated drain. Laterals for individual lots will not be considered part of the regulated drain.

I have reviewed the plans and believe the drain will benefit each lot equally. Therefore, I recommend each lot be assessed

equally. I also believe that no damages will result to landowners by the construction of this drain. I recommend a maintenance assessment of \$30.00 per lot, \$5.00 per acre for roadways, with a \$ 30.00 minimum. With this assessment the total annual assessment for this drain/this section will be \$ 870<sup>00</sup>.

Parcels assessed for this drain may be assessed for the Overman-Harvey and/or Village Farms at sometime in the future.

I believe this proposed drain meets the requirements for Urban Drain Classification as set out in IC 36-9-27-67 to 69. Therefore, this drain shall be designated as an Urban Drain.

I recommend that upon approval of the above proposed drain that the Board also approve the attached non-enforcement request. This request is for the reduction of the regulated drain easement to those easement widths as shown on the secondary plat for The Crossings, Section 4 at Springmill Villages as recorded in the office of the Hamilton County Recorder.

I recommend the Board set a hearing for this proposed drain for 2/26/96 9:20am.

---

Kenton C. Ward  
Hamilton County Surveyor  
KCW/no

CERTIFICATE OF COMPLETION AND COMPLIANCE

TO: HAMILTON COUNTY SURVEYOR

RE: The Crossings at Springmill Villages Section 4

I hereby certify that:

- 1.) I am a Registered Engineer 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: \_\_\_\_\_

*David K. Sexton*

Date: \_\_\_\_\_

12.13.95

Type or Printed Name: David K. Sexton

Business Address: Schneider Engineering Corp. 3020 N. Post Road, Indianapolis, IN 46226

Telephone: 317-898-8282

INDIANA REGISTRATION NUMBER

9500028

SEAL





SURVEYOR'S OFFICE  
**Hamilton County**

Kenton C. Ward, Surveyor

Phone (317) 776-8495

Fax (317) 776-9628

Suite 146

One Hamilton County Square

Noblesville, Indiana 46060-2230

July 23, 1996

TO: Hamilton County Drainage Board

RE: Springmill Villages Drain-The Crossing Section 4

Attached are As-Builts, Certificate of Completion and Compliance, and other information for Springmill Villages Drain-The Crossing Section 4. An inspection of the drainage facilities for this section has been made and the facilities were found to be complete and acceptable.

During construction, changes were made to the drain which will alter the plans submitted with my report for this drain dated January 8, 1996. The changes are as followed:

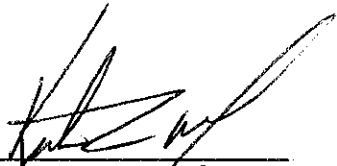
STR 236 to Ex Man Hole	15" RCP	lengthened	from 85' to 86 feet
STR 236 to 235	15" RCP	shortened	from 28' to 26 feet
STR 223 to Ex Man Hole	15" RCP	lengthened	from 138' to 140 feet
STR 223 to 222	30" RCP	shortened	from 28' to 26 feet
STR 222 to 221	30" RCP	shortened	from 50' to 48 feet
STR 231 to 230	15" RCP	shortened	from 38' to 34 feet
STR 232 to 230	12" RCP	shortened	from 40' to 35 feet
STR 230 to 229	18" RCP	lengthened	from 38' to 41 feet
STR 229 to 221	18" RCP	shortened	from 172' to 170 feet
STR 221 to 220	36" RCP	shortened	from 144' to 143 feet

The length of the drain due to the changes described above is now 4,291 feet.

The non-enforcement request was approved by the Board at its meeting on February 26, 1996.

A Bond of Letter of Credit from Brenwick Development was not required for this section.

I recommend the Board approve the drains construction as complete and acceptable.



Kenton C. Ward  
Hamilton County Surveyor  
KCW/no

SECTION 14-18N-3E

# THE CROSSINGS AT SPRINGMILL VILLAGES SECTION 4

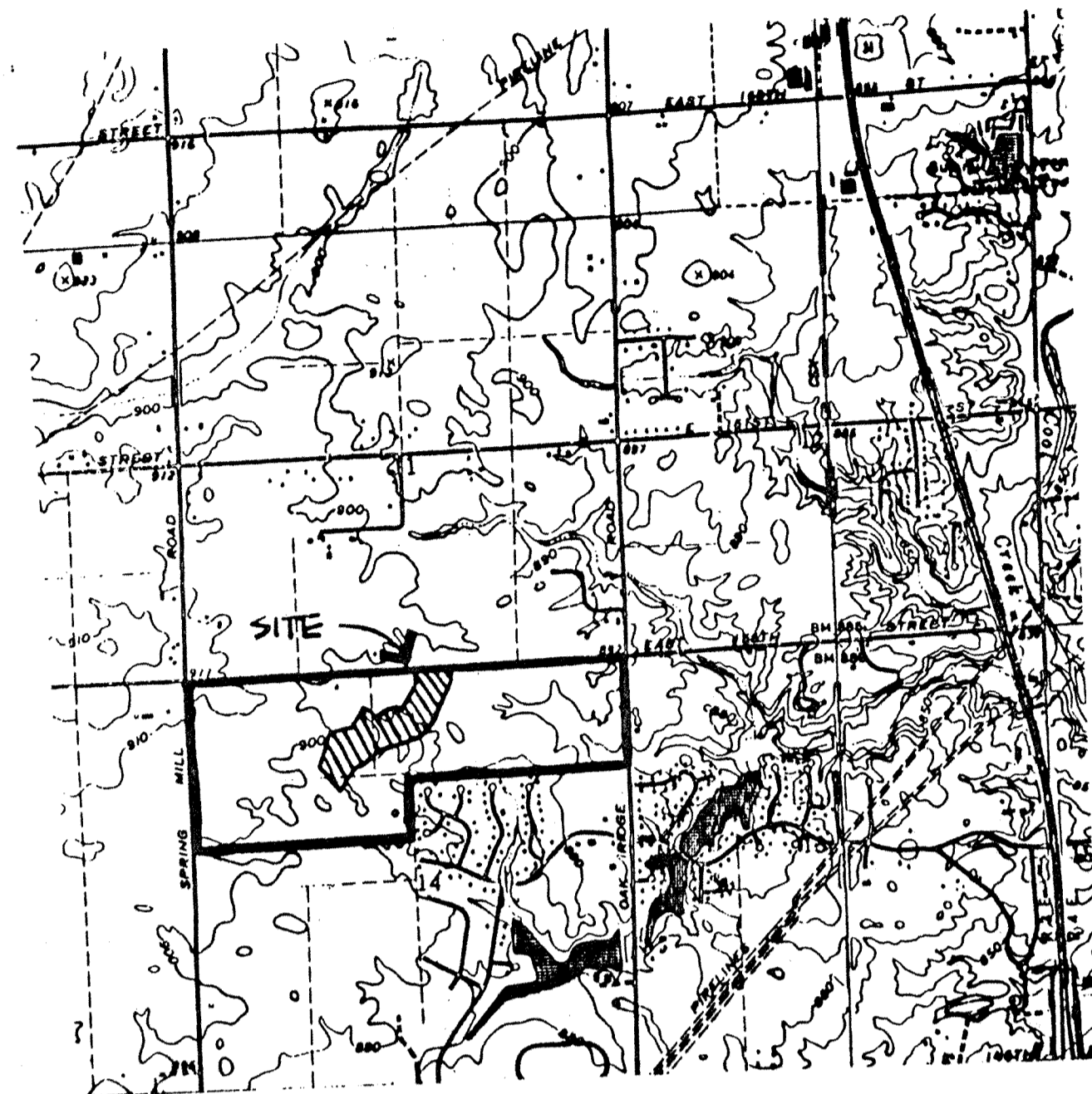
(CONSTRUCTION PLANS)

WASHINGTON TOWNSHIP  
HAMILTON COUNTY, INDIANA  
DEVELOPER:

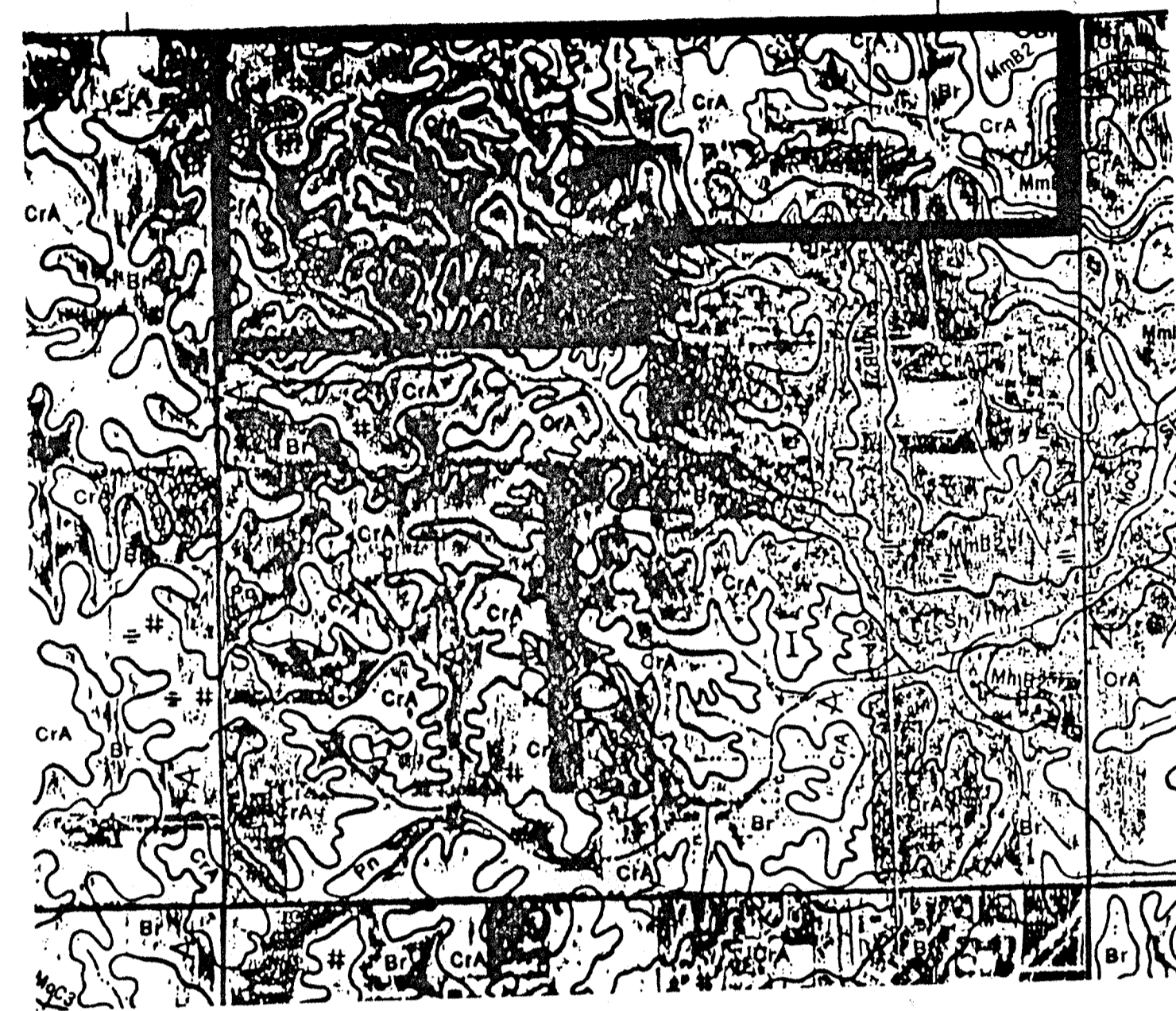
**BRENWICK DEVELOPMENT CO., INC.**  
12722 HAMILTON CROSSING BLVD.  
CARMEL, INDIANA 46032  
1317) 574-3400

Engineer:

**SCHNEIDER ENGINEERING CORP.**  
3020 NORTH POST ROAD  
INDIANAPOLIS, INDIANA 46226  
1317) 898-8282 FAX 1317) 899-8010

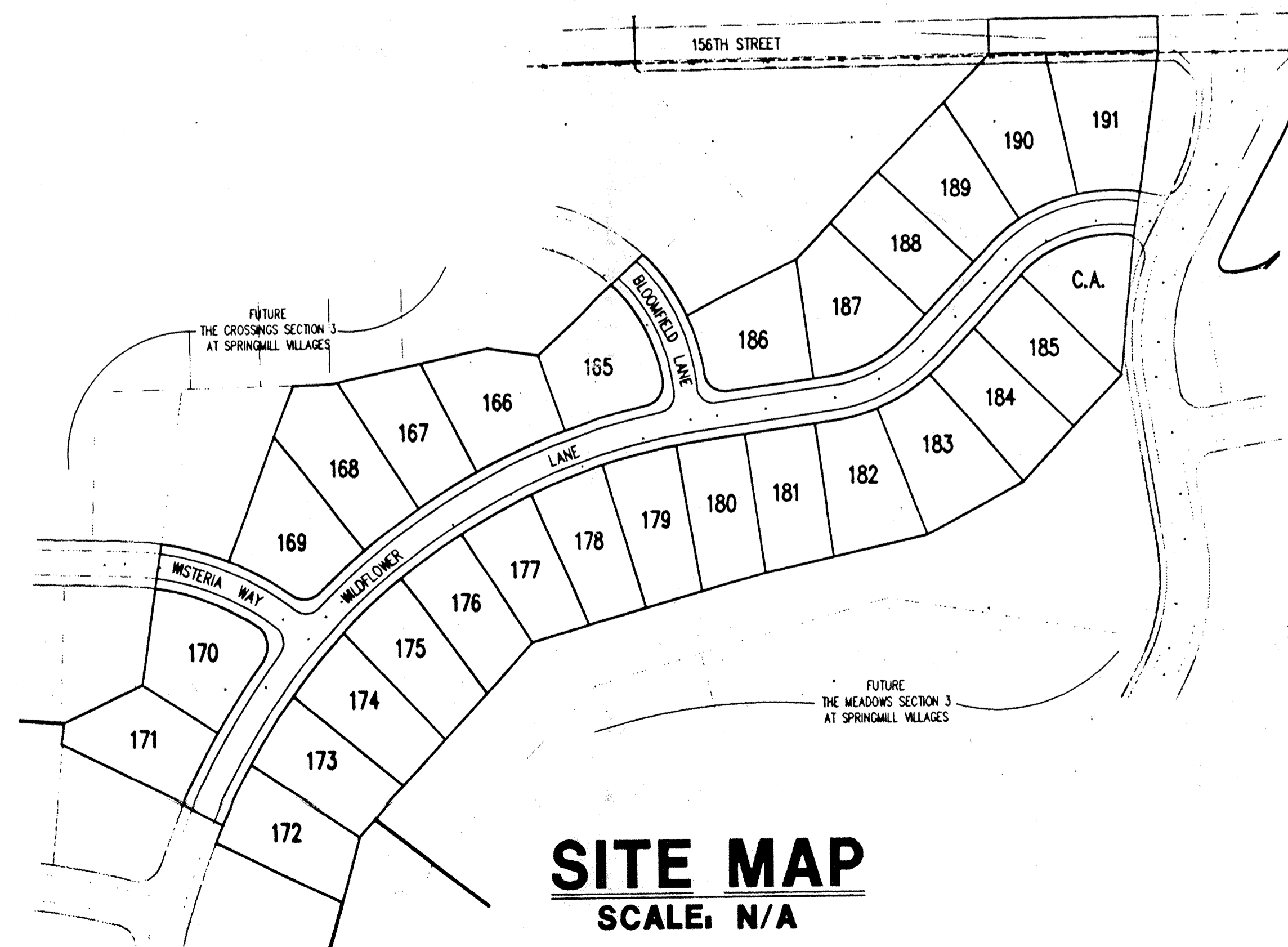


**AREA MAP**  
NOT TO SCALE



**SOILS MAP**  
NOT TO SCALE

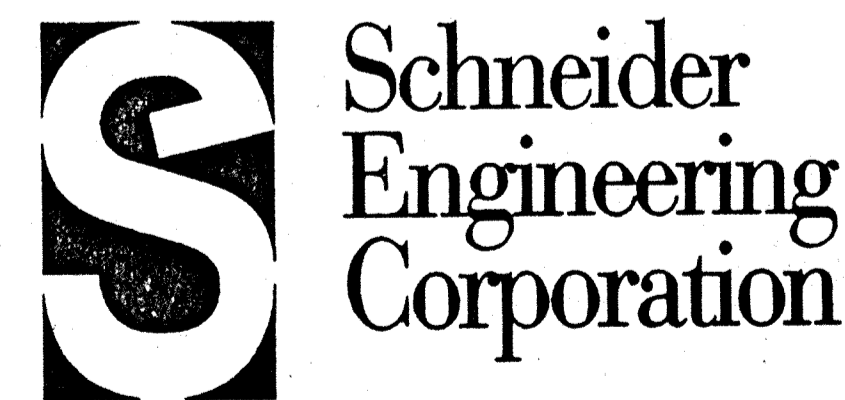
**SOILS LEGEND:**  
FxA Fox loam, 0-2% slopes  
FxB Fox loam, 2-8% slopes, eroded  
Hef Hennepe loam, 18 to 50% slopes  
MmA Miami silt loam, 0-2% slopes  
MmB2 Miami silt loam, 2-8% slopes, eroded  
MmD2 Miami silt loam, 12-18% slopes, eroded  
MmC2 Miami clay loam, 6-12% slopes, severely eroded  
MmD3 Miami clay loam, 12-18% slopes  
Pl Pits  
O&B2 Ockley silt loam, 2-8% slopes, eroded  
Sh Shoals silt loam  
St Seeth loam  
We Westland silty clay loam



**SITE MAP**  
SCALE: N/A

INDEX	
SHEET No.	DESCRIPTION
S-1	TITLE SHEET
S-2	DEVELOPMENT PLAN
S-3	EROSION CONTROL PLAN
S-4,5	STREET PLAN & PROFILES
S-6	INTERSECTION DETAIL
S-7	SANITARY SEWER PLAN & PROFILES
S-8	STORM SEWER PLAN & PROFILES
S-9	WATER DISTRIBUTION PLAN
S-10	WATER DIST. DETAILS & SPEC.
S-11	HAMILTON COUNTY DETAILS
S-12	GENERAL DETAILS
S-13	SPECIFICATIONS

**STORM  
ASBUILT**  
12-13-95



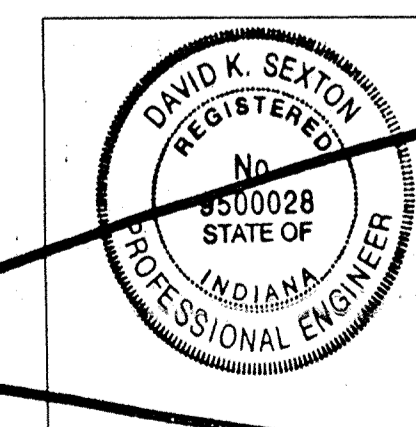
3020 North Post Road  
Indianapolis, Indiana  
46226-0068  
317-898-8282  
317-899-8010 Fax

Engineering  
Surveying  
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Geology

PRINTED  
JAN 5 1996  
SCHNEIDER ENGINEERING CORP.

FILED  
JAN 05 1996

A Partnered Entity with Bohlen, Meyer, Gibson & Associates, Incorporated, Hamilton County Surveyor



*David K. Sexton*  
CERTIFIED BY: DAVID K. SEXTON 4.5.95

DATE:

SHEET  
S-1  
OF  
13

PROJECT MANAGER: DKS

CHECKED BY: \_\_\_\_\_ DATE CHECKED: \_\_\_\_\_

(JOB No. 895.24)



**LEGEND**

- New Storm Sewer
- New Sanitary Sewer  
(Laterals are shown for reference only  
See Sanitary Plan & Profiles for Locations)
- Existing Contour
- Existing Elevation
- New Pavement Grade
- All Other Finish Grades
- Storm Structure Number
- Sanitary Structure Number
- Flow Arrow
- Pad Location  
DENOTES PAD ELEV.
- Subsurface Drain

**ELECTRIC**  
PSI ENERGY  
P.O. BOX 876  
CARMEL, IN. 46032  
MARK LA BARR 581-3041

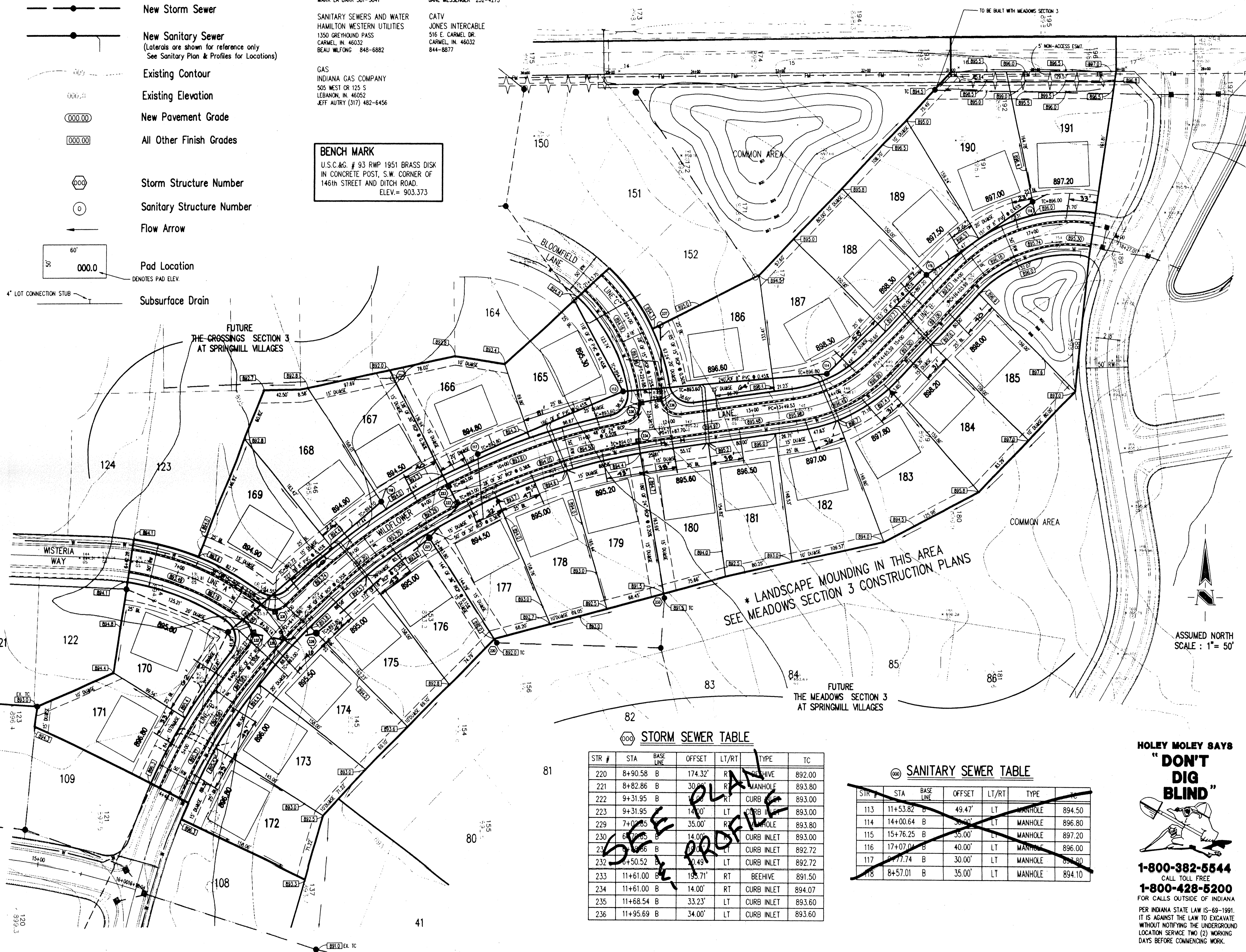
**SANITARY SEWERS AND WATER**  
HAMILTON WESTERN UTILITIES  
1350 GREYHOUND PASS  
CARMEL, IN. 46032  
BEAU WILFONG 848-6882

**GAS**  
INDIANA GAS COMPANY  
505 WEST CR 125 S  
LEBANON, IN. 46052  
JEFF AURY (317) 482-6456

**PHONE**  
AMERITECH  
5858 N. COLLEGE AVE.  
INDIANAPOLIS, IN. 46220  
JANE MESSENGER 252-4275

**CATV**  
JONES INTERCABLE  
516 E. CARMEL DR.  
CARMEL, IN. 46032  
844-8877

**BENCH MARK**  
U.S.C.&G. # 93 RWP 1951 BRASS DISK  
IN CONCRETE POST, S.W. CORNER OF  
146th STREET AND DITCH ROAD.  
ELEV. = 903.373



- GENERAL NOTES:**
- ALL GRADES AT BOUNDARY SHALL MEET EXISTING GRADES.
  - IT SHALL BE THE RESPONSIBILITY OF EACH SUBCONTRACTOR TO VERIFY ALL EXISTING UTILITIES AND CONDITIONS PERTAINING TO HIS PHASE OF WORK. IT SHALL ALSO BE THE SUBCONTRACTOR'S RESPONSIBILITY TO CONTACT THE OWNERS OF THE VARIOUS UTILITIES FOR PROPER STAKE LOCATION OF EACH UTILITY BEFORE WORK IS STARTED. THE SUBCONTRACTOR SHALL NOTIFY IN WRITING THE OWNER OR THE ENGINEER OF ANY CHANGES, OMISSIONS, OR ERRORS FOUND ON THESE PLANS OR IN FIELD BEFORE WORK IS STARTED OR RESUMED.
  - STANDARD SPECIFICATIONS SHALL APPLY FOR ALL SANITARY SEWERS.
  - ANY PART OF THE SANITARY OR STORM SEWER TRENCHES RUNNING UNDER PAVED AREAS TO BE BACKFILLED WITH GRANULAR MATERIAL.
  - THE SIZE AND LOCATION OF EXISTING UTILITIES SHOWN ARE PER INFORMATION PROVIDED BY THE RESPECTIVE UTILITY COMPANIES. ALL UTILITY COMPANIES SHOULD BE NOTIFIED PRIOR TO ANY EXCAVATION FOR FIELD LOCATION OF SERVICES.
  - SERVICE WALKS SHALL BE NON-REINFORCED CONCRETE 4" THICK AND 4' IN WIDTH. IF SIDEWALK IS TO BE PART OF THE HOME DRIVEWAY THAN 6" THICKNESS IS REQUIRED.
  - 4" CONCRETE SERVICE WALK ACROSS FRONTAGE OF EACH LOT TO BE CONSTRUCTED BY OTHERS.
  - TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION TO CONFORM TO APPLICABLE LOCAL AND STATE STANDARDS.
  - ALL CONSTRUCTION ACTIVITY ON THIS SITE TO BE PERFORMED IN COMPLIANCE WITH APPLICABLE O.S.H.A. STANDARDS FOR WORKER SAFETY.
  - CONTRACTOR SHALL MINIMIZE DAMAGE TO EXISTING TREES.

**SSD & STORM**

**ASBUILT**  
12.13.95

Revisions

CERTIFIED BY: *David K. Sexton* 12.13.95

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**STORM SEWER TABLE**

STR #	STA	BASE LINE	OFFSET	LT/RT	TYPE	TC
220	8+90.58	B	174.32'	R	BECHIVE	892.00
221	8+82.86	B	30.00'	R	MANHOLE	893.80
222	9+31.95	B	30.00'	LT	CURB INLET	893.00
223	9+31.95	B	14.00'	LT	CURB INLET	893.00
229	7+02.85	B	35.00'	R	MANHOLE	893.80
230	6+02.85	B	14.00'	R	CURB INLET	893.00
231	6+02.85	B	14.00'	LT	CURB INLET	892.72
232	8+50.52	B	40.49'	LT	CURB MANHOLE	892.72
233	11+61.00	B	195.71'	RT	BECHIVE	891.50
234	11+61.00	B	14.00'	RT	CURB INLET	894.07
235	11+68.54	B	33.23'	LT	CURB INLET	893.60
236	11+95.69	B	34.00'	LT	CURB INLET	893.60

**SANITARY SEWER TABLE**

STR #	STA	BASE LINE	OFFSET	LT/RT	TYPE	TC
113	11+53.82	B	49.47'	LT	MANHOLE	894.50
114	14+00.64	B	30.00'	LT	MANHOLE	896.80
115	15+76.25	B	35.00'	LT	MANHOLE	897.20
116	17+07.04	B	40.00'	LT	MANHOLE	896.00
117	9+77.74	B	30.00'	LT	MANHOLE	893.80
118	8+57.01	B	35.00'	LT	MANHOLE	894.10

**HOLEY MOLEY SAYS**  
**"DON'T DIG BLIND"**

**1-800-382-5544**  
CALL TOLL FREE  
**1-800-428-5200**  
FOR CALLS OUTSIDE OF INDIANA  
PER INDIANA STATE LAW IS-69-1991.  
IT IS AGAINST THE LAW TO EXCAVATE  
WITHOUT NOTIFYING THE UNDERGROUND  
LOCATION SERVICE TWO (2) WORKING  
DAYS BEFORE COMMENCING WORK.

**Schneider Engineering Corporation**

3020 North Post Road  
Indianapolis, Indiana 46228-0068  
317-898-8282  
317-899-8010 Fax

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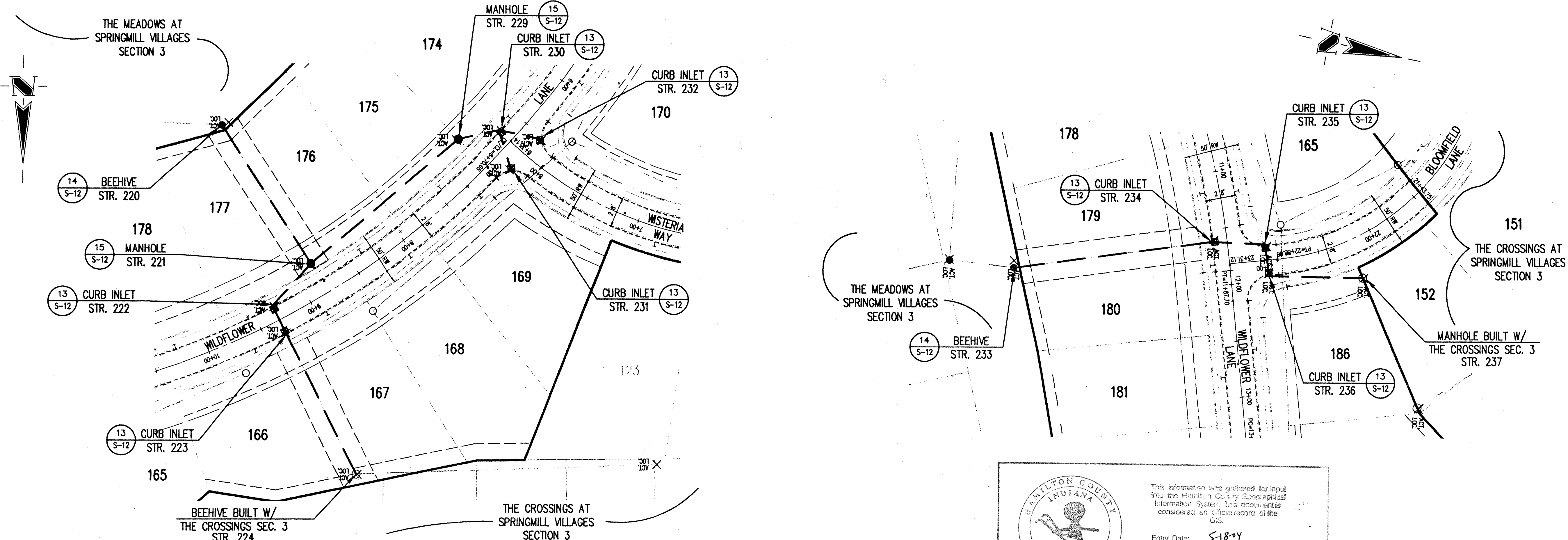
A Partnered Entity with Bohlen, Meyer, Gibson & Associates, Incorporated

**BRENWICK DEVELOPMENT CO. INC.**  
**THE CROSSINGS AT SPRINGMILL VILLAGES**  
SECTION 4

**SITE DEVELOPMENT PLAN**

Date	Project No.	Drawn	Apprv.
1/25/95	895.24	GSD	
Computer Files	Sheet No.		
895240v1	<b>S-2</b>		

Of 13



STORM SEWER PLAN

SCALE: 1"=50'

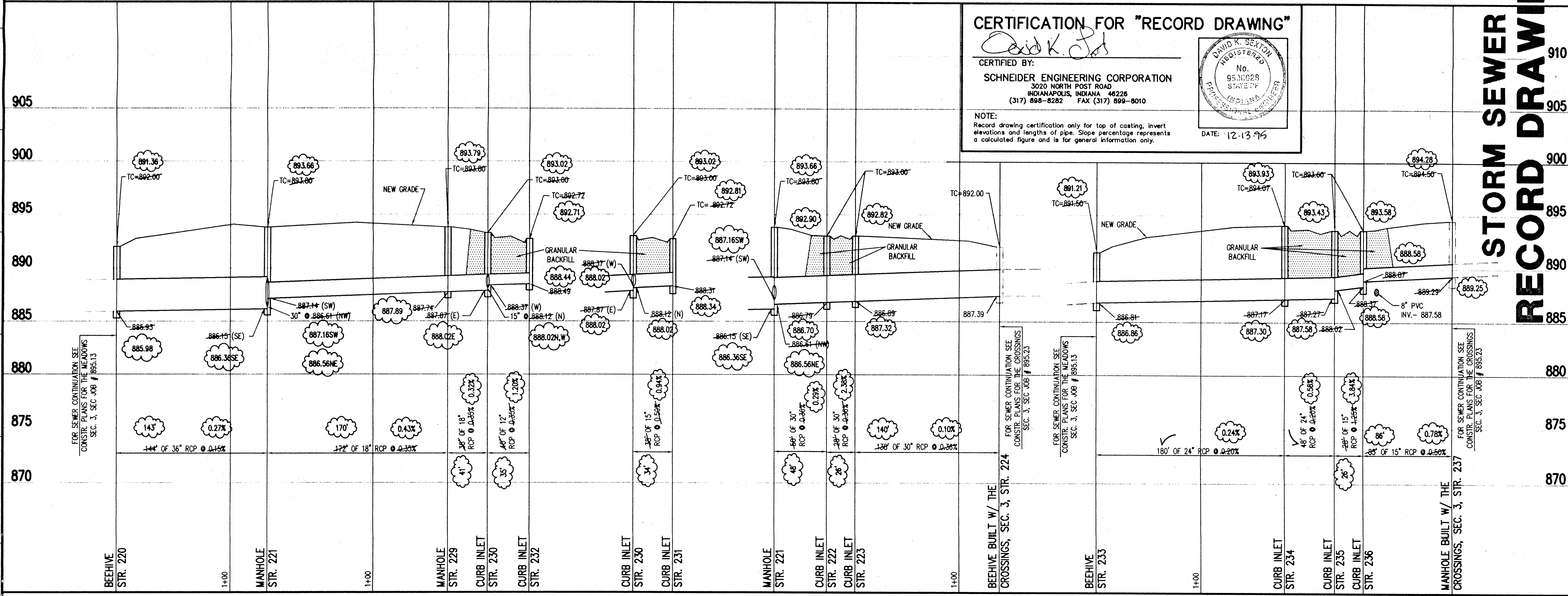
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- GENERAL NOTES:
1. ALL CUTS ARE TAKEN FROM THE EXISTING GRADE TO THE PIPE INVERT.
  2. ALL STATIONING IS TAKEN FROM THE NEAREST DOWNSTREAM STRUCTURE.
  3. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO FIELD VERIFY ALL UTILITY LOCATIONS BEFORE CONSTRUCTION BEGINS.
  4. TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION TO CONFORM TO APPLICABLE LOCAL AND STATE STANDARDS.
  5. ALL CONSTRUCTION ACTIVITY ON THIS SITE TO BE PERFORMED IN COMPLIANCE WITH APPLICABLE O.S.H.A. STANDARDS FOR WORKER SAFETY.
  6. CONTRACTOR SHALL MINIMIZE DAMAGE TO EXISTING TREES.

Revisions  
 12-13-95 STORM SEWER "RECORD DRAWING" B.E.T.

**CERTIFICATION FOR "RECORD DRAWING"**  
 CERTIFIED BY: *David K. J...*  
**SCHNEIDER ENGINEERING CORPORATION**  
 3020 NORTH POST ROAD  
 INDIANAPOLIS, INDIANA 46226  
 (317) 898-8282 FAX (317) 899-8010  
 DATE: 12-13-95

**STORM SEWER RECORD DRAWING**



STORM SEWER PROFILE

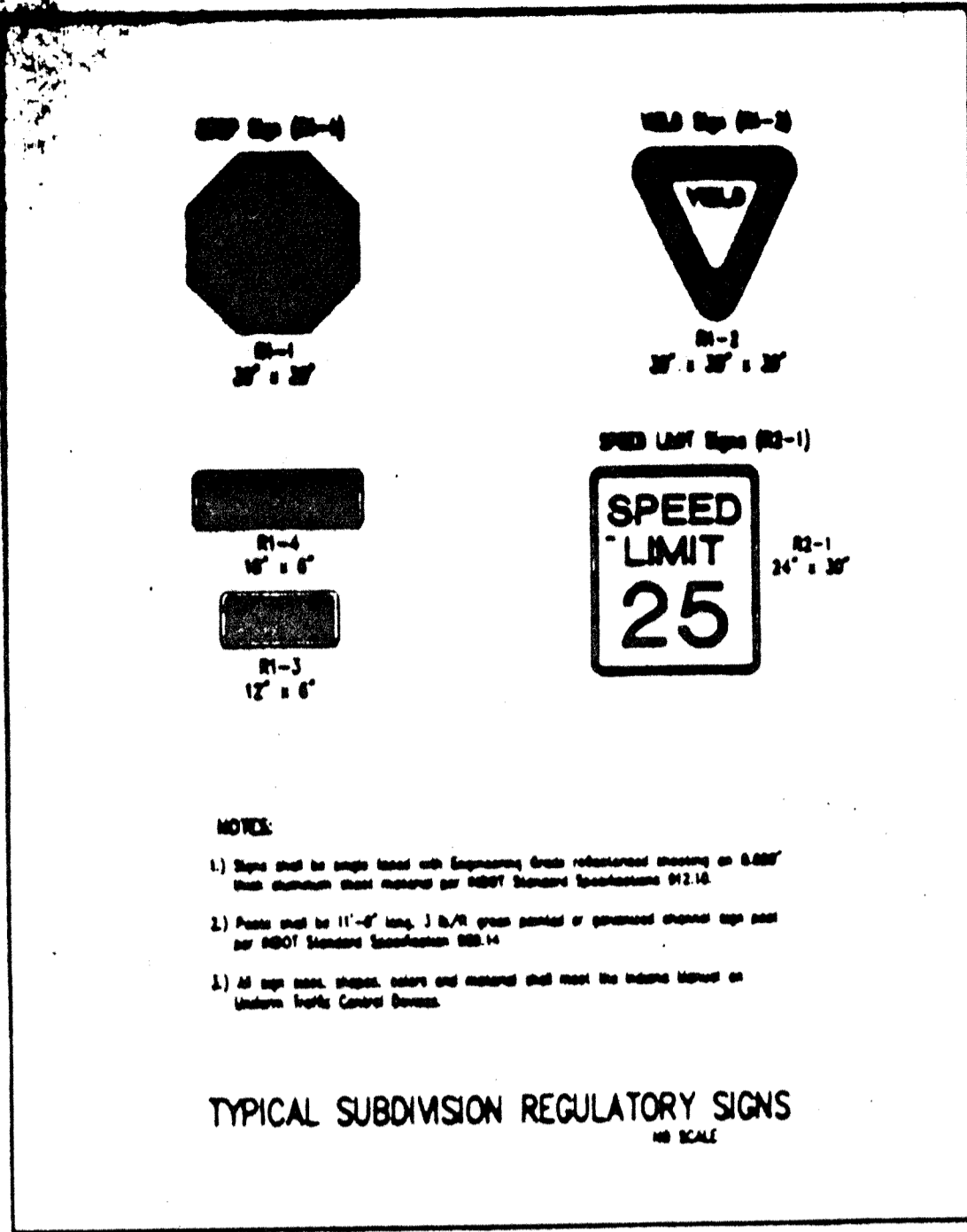
SCALE: HORIZ.: 1"=50'  
 VERT.: 1"=5'

CERTIFIED BY: \_\_\_\_\_  
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**BRENNICK DEVELOPMENT CO. INC.**  
**THE CROSSINGS SECTION 4**  
 AT SPRINGMILL VILLAGES

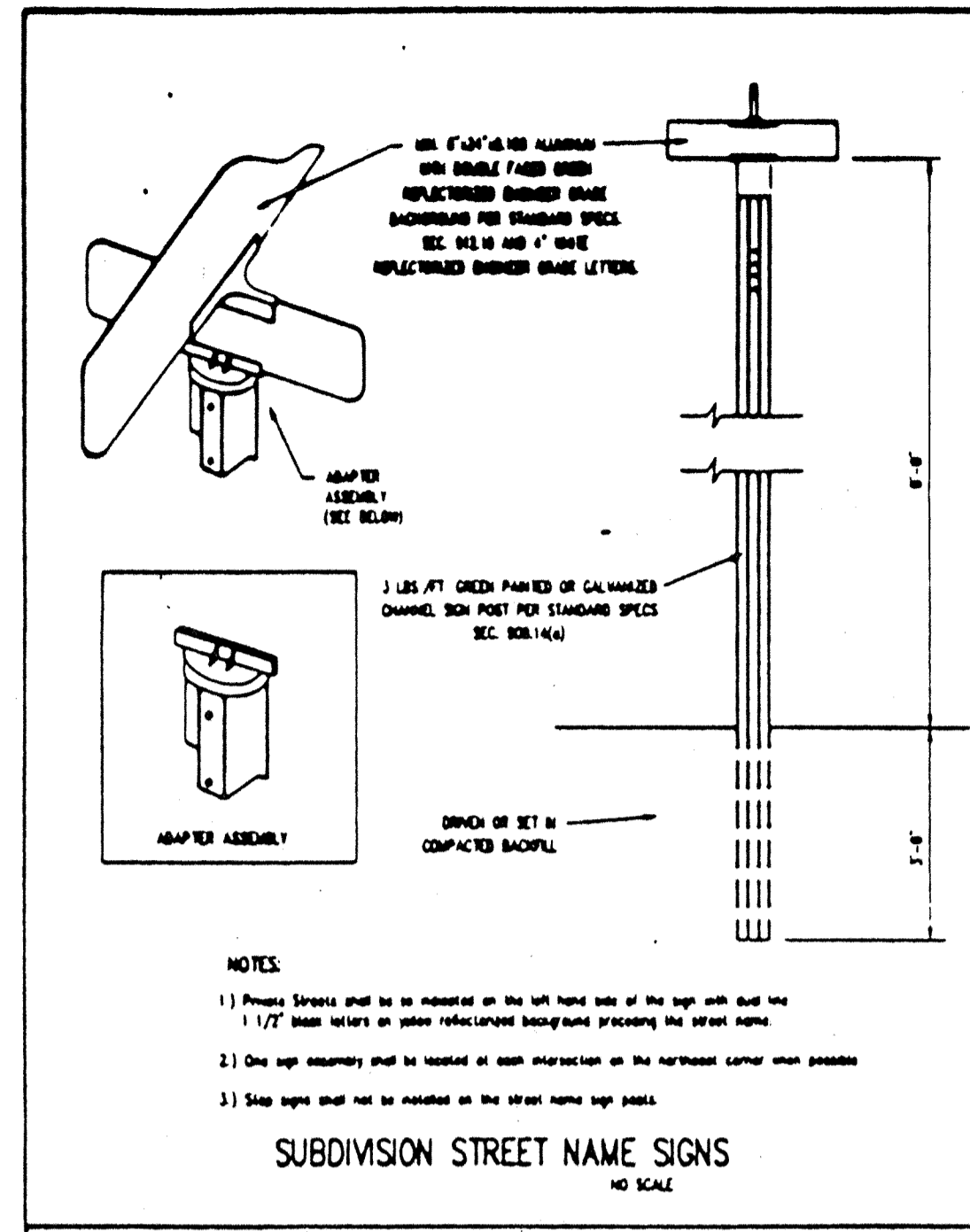
STORM SEWER PLAN & PROFILE

Date	Project No.	Drawn	Apprv.
1/25/95	89524	GSD	
Computer Files	Sheet No.		
89524ST1 895240V1	S-8		



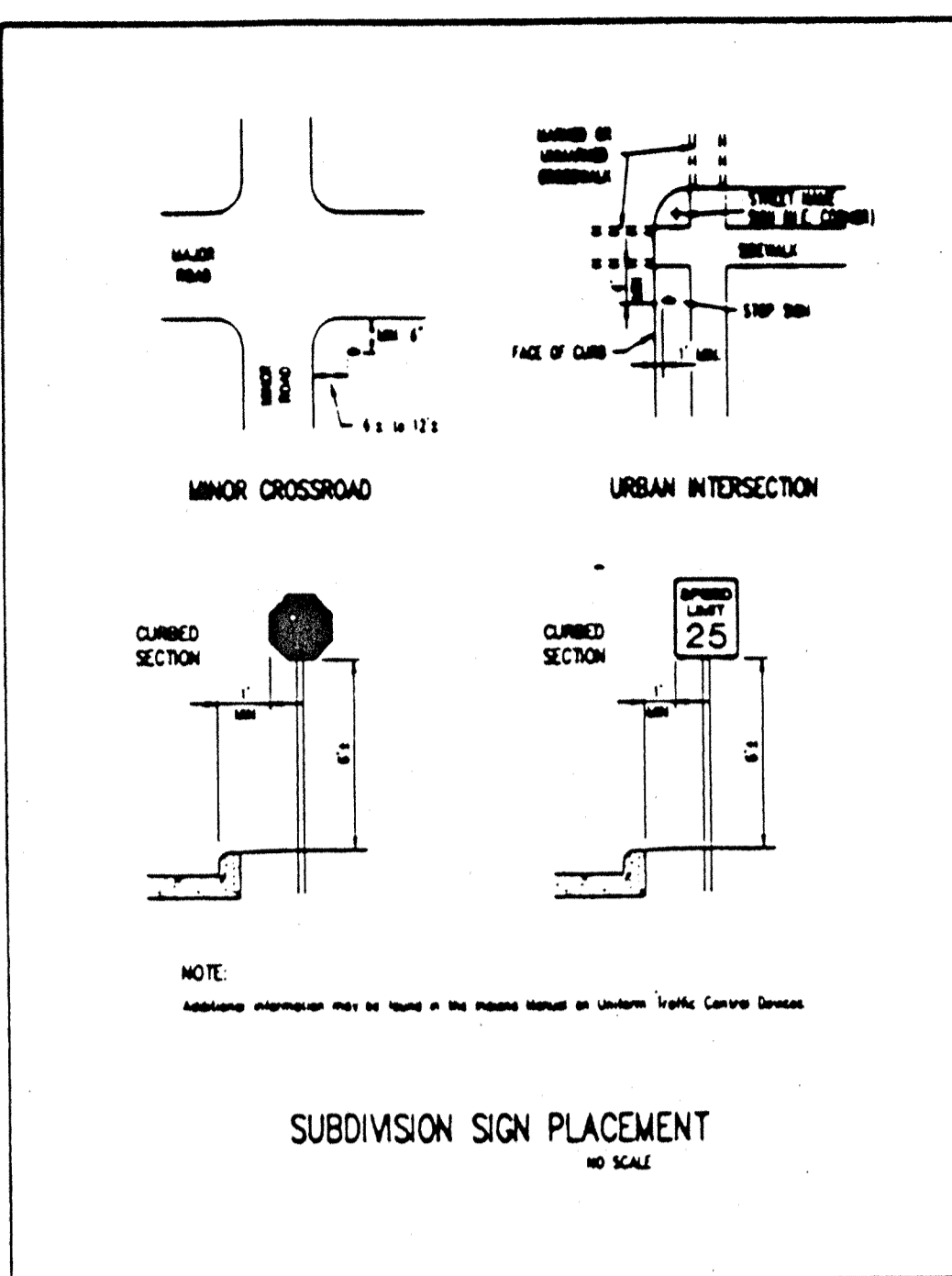
HAMILTON COUNTY HIGHWAY DEPARTMENT

RECOMMENDED	BY: <i>[Signature]</i>	DATE: 4-1-93	REVISED	
APPROVED	BY: <i>[Signature]</i>	DATE: 4-1-93	STANDARD PLAN	S-1



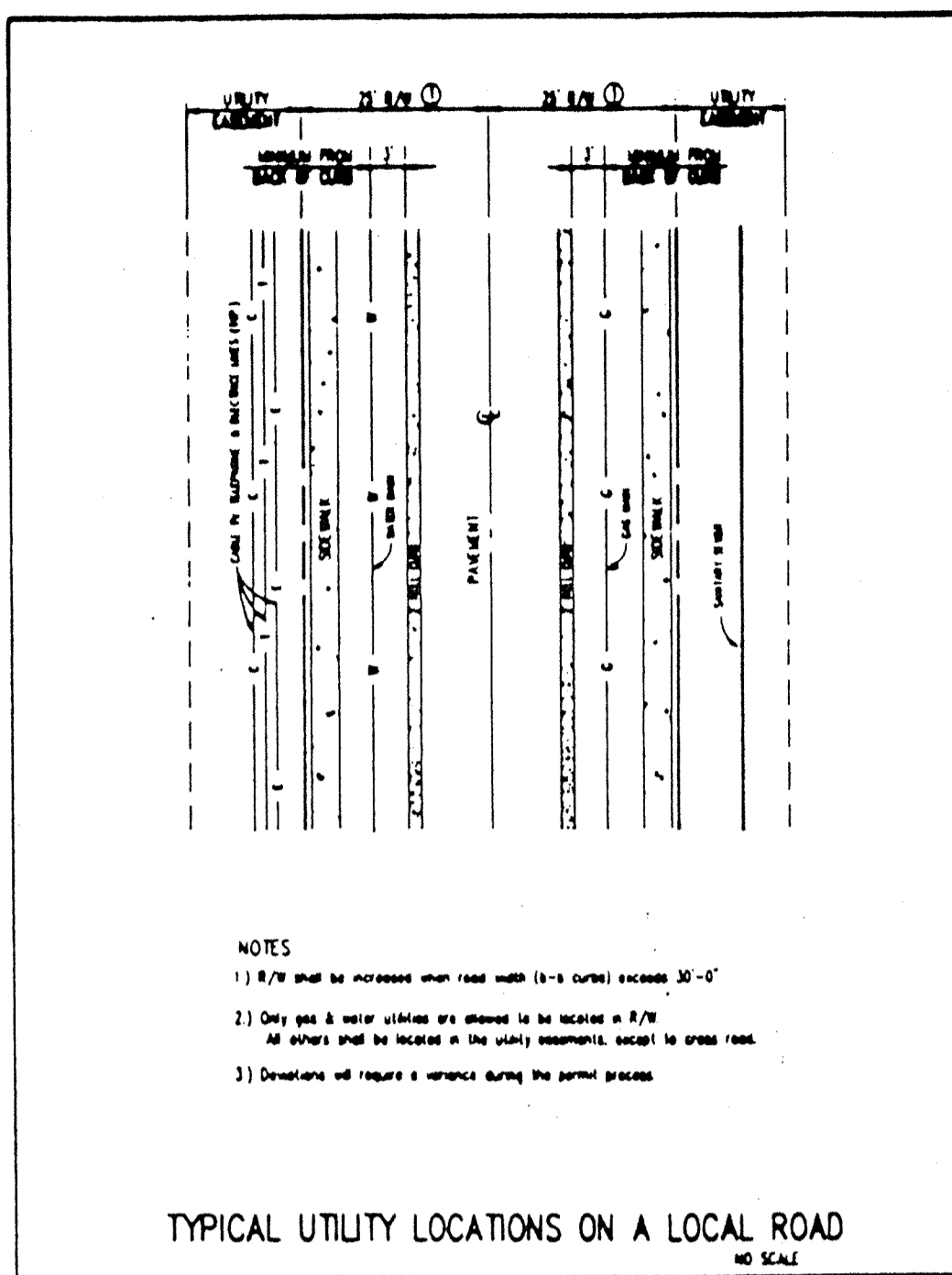
HAMILTON COUNTY HIGHWAY DEPARTMENT

RECOMMENDED	BY: <i>[Signature]</i>	DATE: 4-1-93	REVISED	
APPROVED	BY: <i>[Signature]</i>	DATE: 4-1-93	STANDARD PLAN	S-2



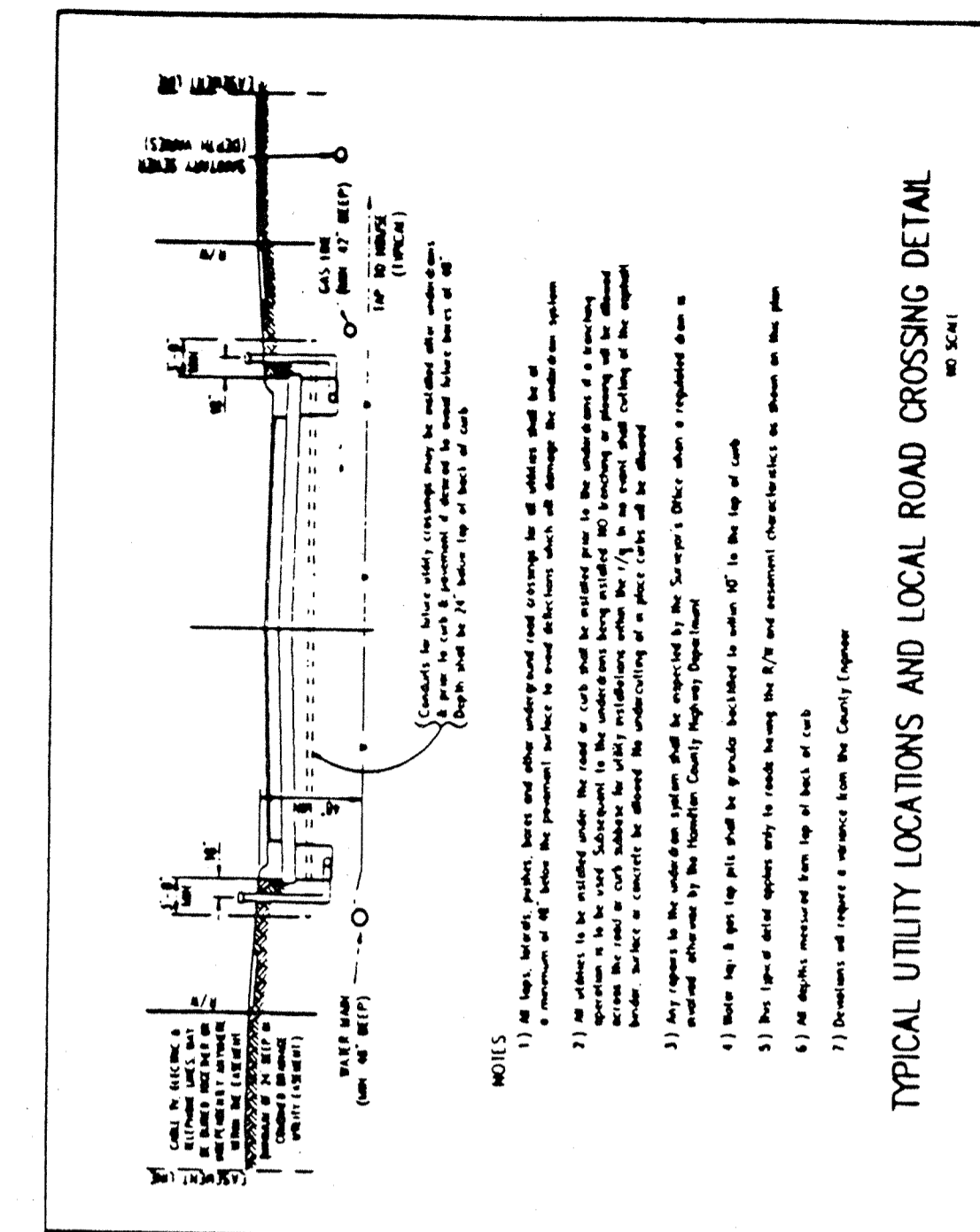
HAMILTON COUNTY HIGHWAY DEPARTMENT

RECOMMENDED	BY: <i>[Signature]</i>	DATE: 4-1-93	REVISED	
APPROVED	BY: <i>[Signature]</i>	DATE: 4-1-93	STANDARD PLAN	S-3



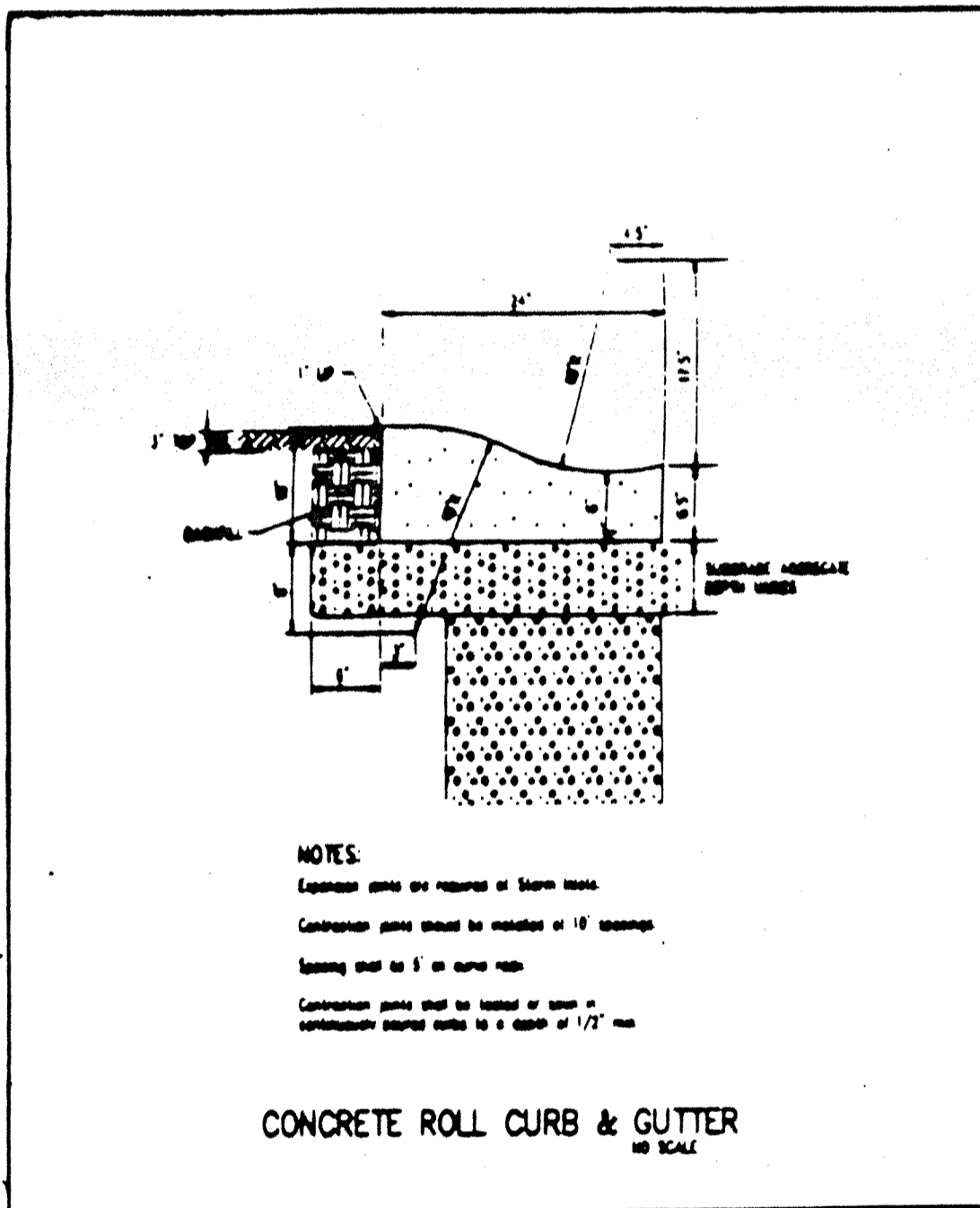
HAMILTON COUNTY HIGHWAY DEPARTMENT

RECOMMENDED	BY: <i>[Signature]</i>	DATE: 4-1-93	REVISED	
APPROVED	BY: <i>[Signature]</i>	DATE: 4-1-93	STANDARD PLAN	U-2



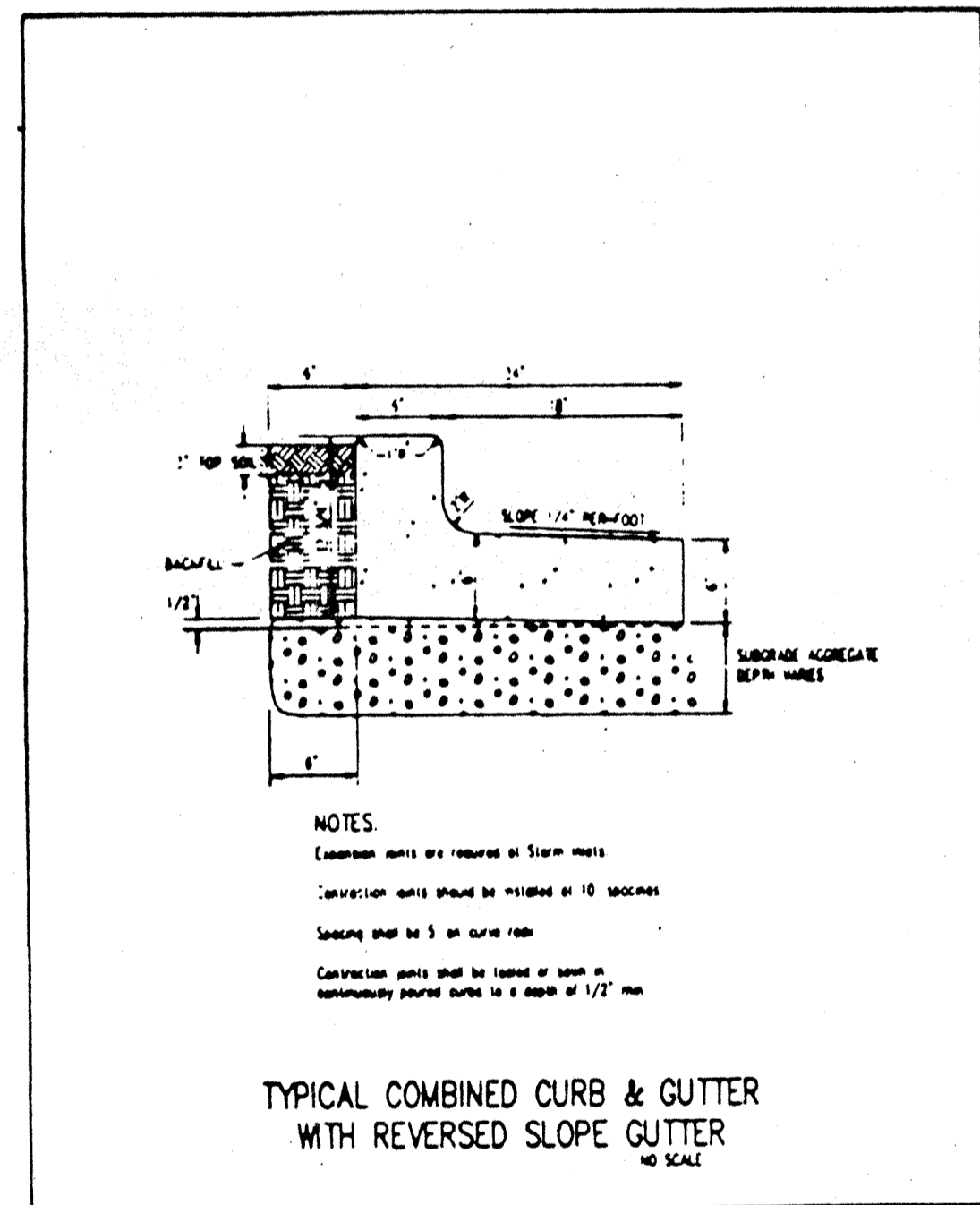
HAMILTON COUNTY HIGHWAY DEPARTMENT

RECOMMENDED	BY: <i>[Signature]</i>	DATE: 4-1-93	REVISED	
APPROVED	BY: <i>[Signature]</i>	DATE: 4-1-93	STANDARD PLAN	U-4



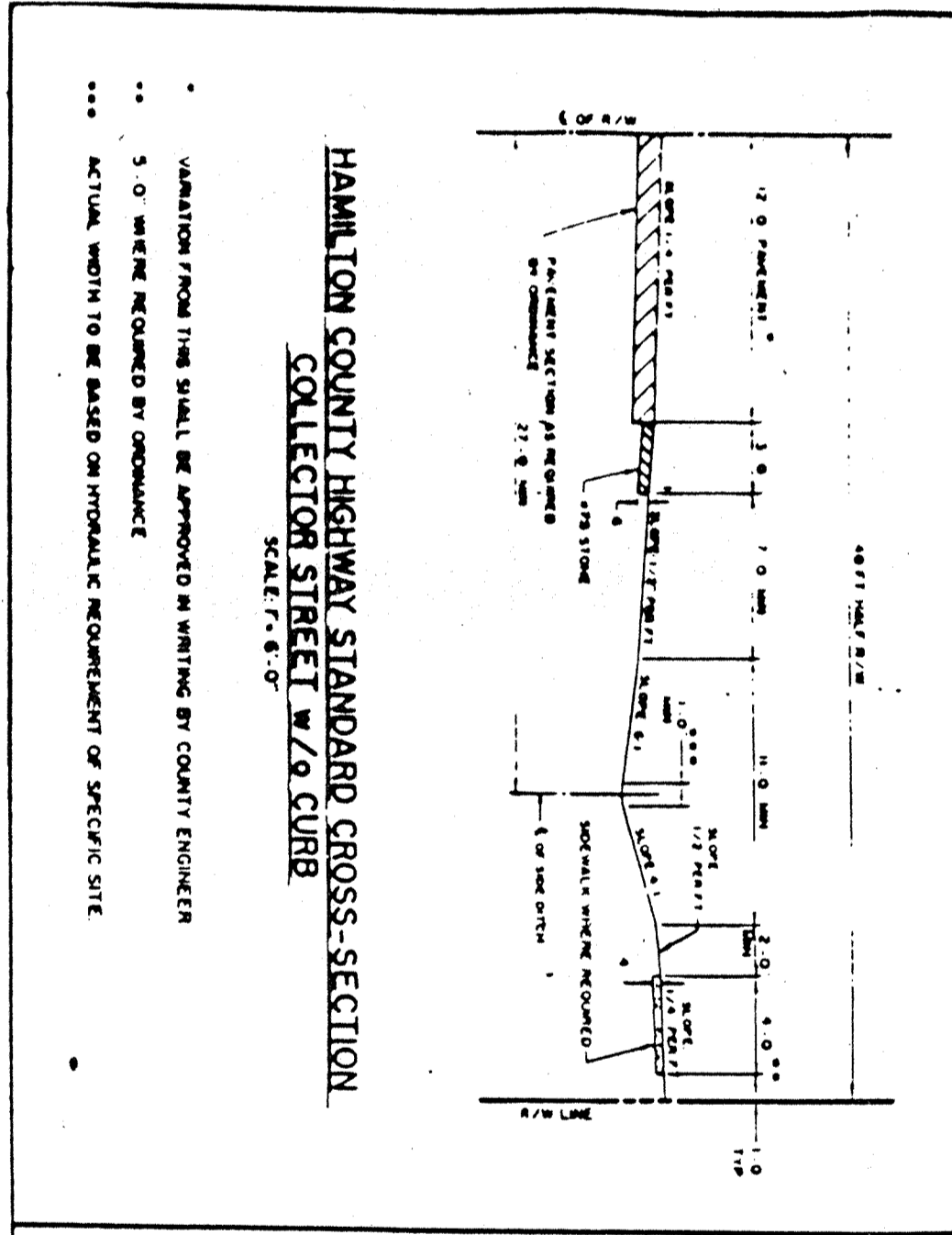
HAMILTON COUNTY HIGHWAY DEPARTMENT

RECOMMENDED	BY: <i>[Signature]</i>	DATE: 4-1-93	REVISED	
APPROVED	BY: <i>[Signature]</i>	DATE: 4-1-93	STANDARD PLAN	C-1



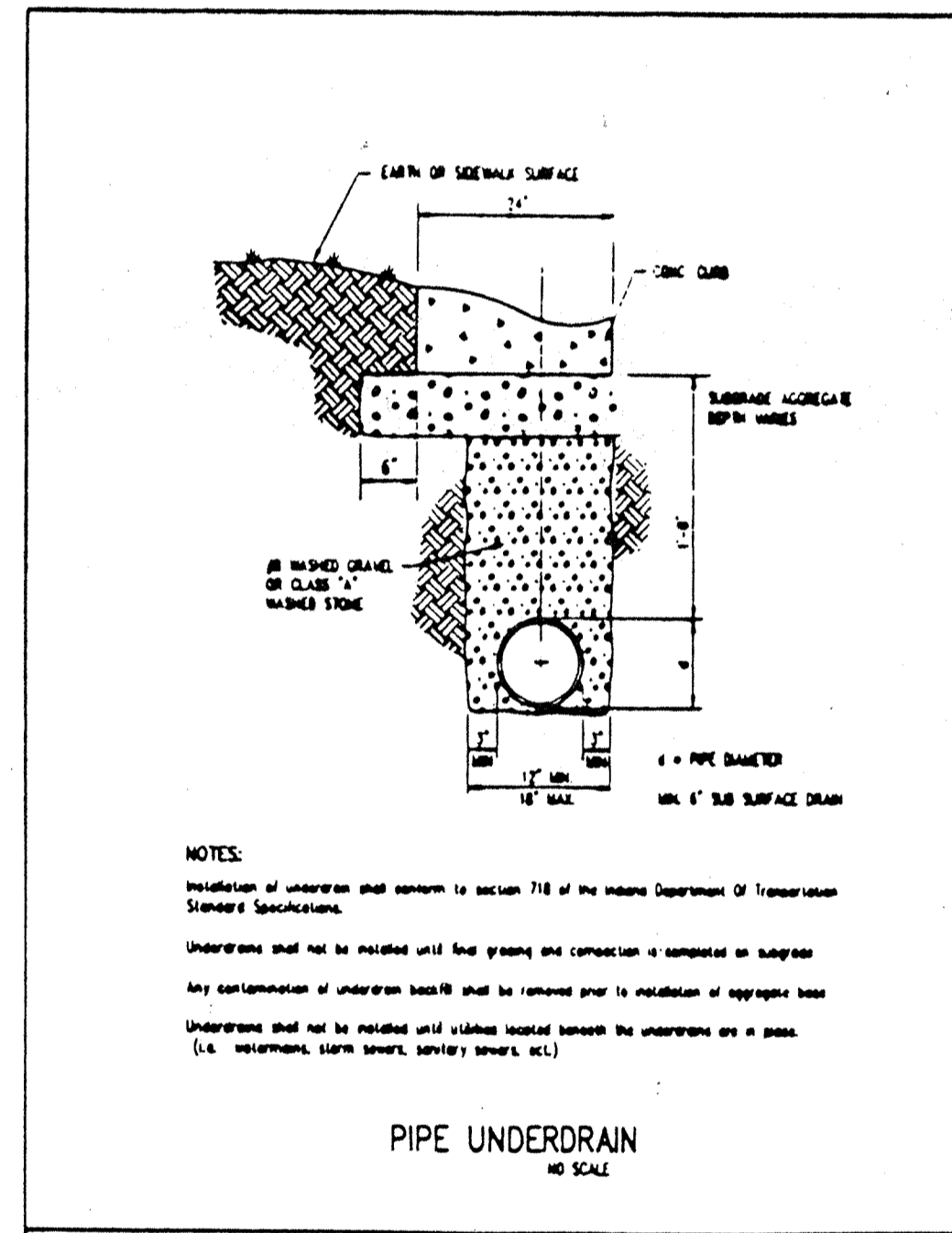
HAMILTON COUNTY HIGHWAY DEPARTMENT

RECOMMENDED	BY: <i>[Signature]</i>	DATE: 4-1-93	REVISED	
APPROVED	BY: <i>[Signature]</i>	DATE: 4-1-93	STANDARD PLAN	C-5



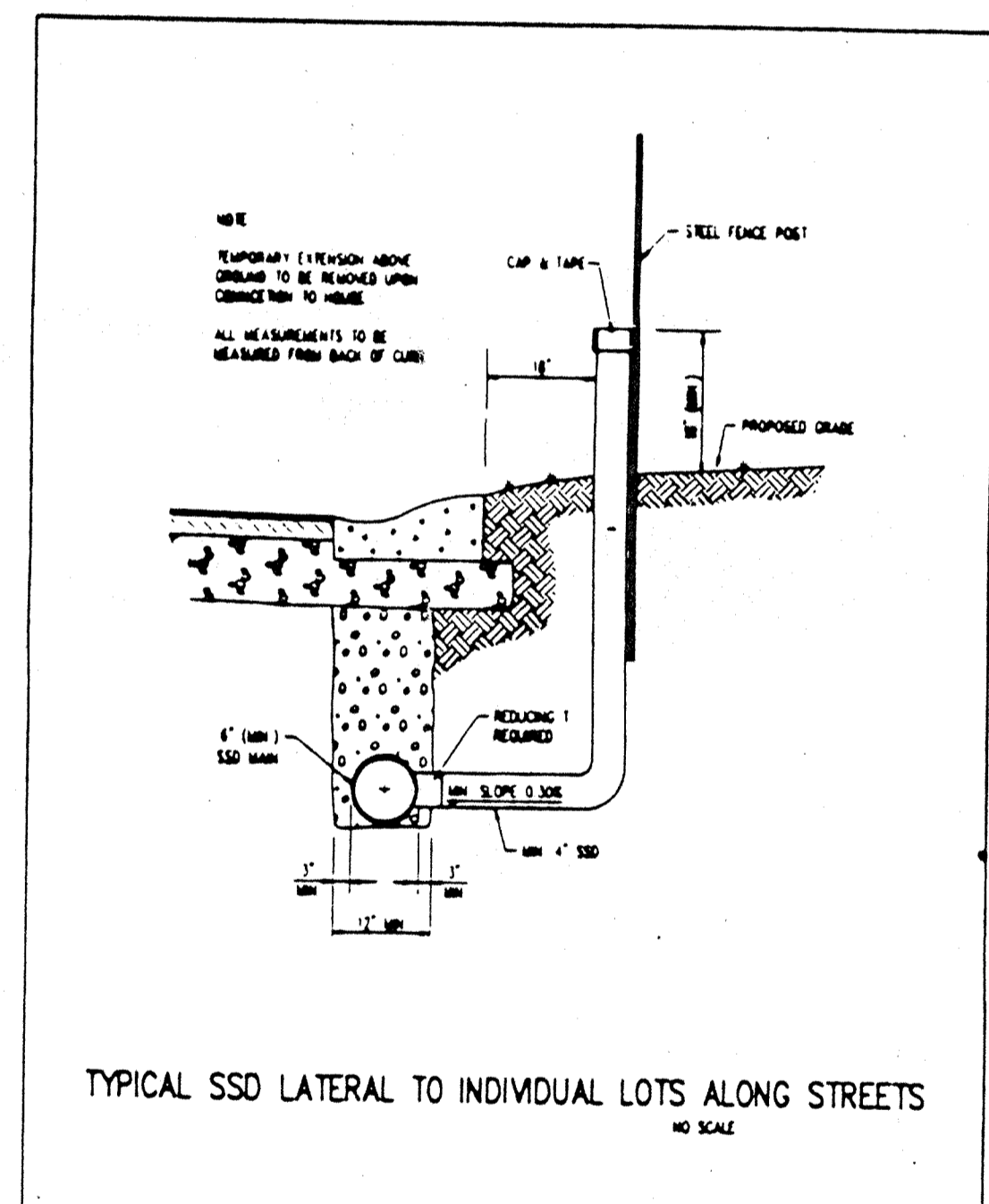
HAMILTON COUNTY HIGHWAY DEPARTMENT

RECOMMENDED	HAMILTON COUNTY ENGINEER	DATE: 2-23-92	REVISED	
APPROVED	HAMILTON COUNTY COMMISSIONER	DATE: 4-21-92	STANDARD PLAN	CS-1



HAMILTON COUNTY HIGHWAY DEPARTMENT

RECOMMENDED	BY: <i>[Signature]</i>	DATE: 4-1-93	REVISED	
APPROVED	BY: <i>[Signature]</i>	DATE: 4-1-93	STANDARD PLAN	P-1



HAMILTON COUNTY SURVEYORS OFFICE

APPROVED	BY: <i>[Signature]</i>	DATE: 4-5-93	REVISED	
			STANDARD PLAN	

Revisions

DAVID K. BEATON  
REGISTERED  
No. 8500028  
STATE OF INDIANA  
PROFESSIONAL ENGINEER

CERTIFIED BY: *[Signature]* DATE: 4-5-93

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**Schneider Engineering Corporation**

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Indianapolis, Indiana 46226-0068  
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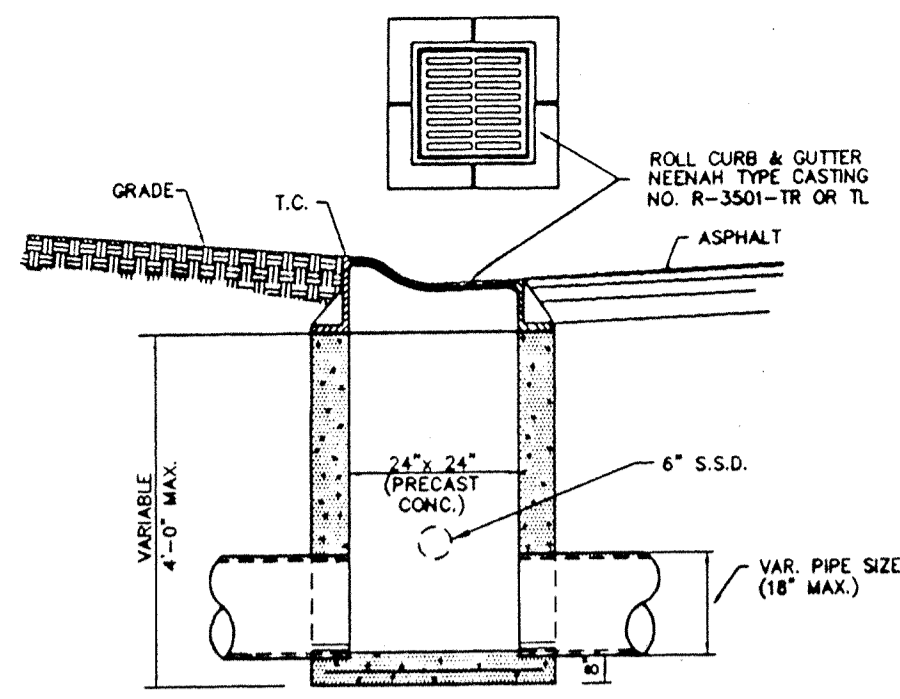
A Partnered Entity with Bohlen, Meyer, Gibson & Associates, Incorporated

BRENNICK DEVELOPMENT CO. INC.  
THE CROSSINGS SECTION 4  
AT SPRINGMILL VILLAGES

HAMILTON COUNTY DETAILS

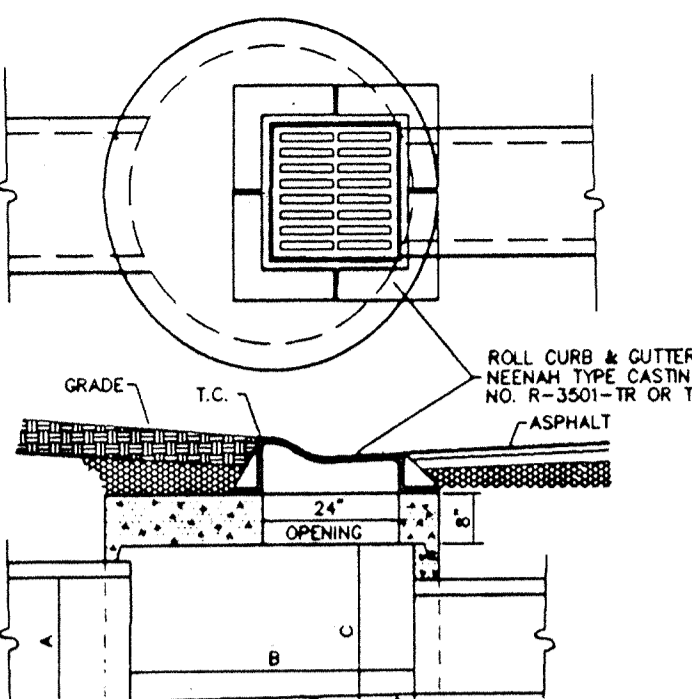
Date	Project No.	Drawn	Apprv.
1/25/95	89523	GSD	
Computer Files	Sheet No.		
89523M01	S-11		
Of 13			

**STORM ASBUILT**  
12.13.95



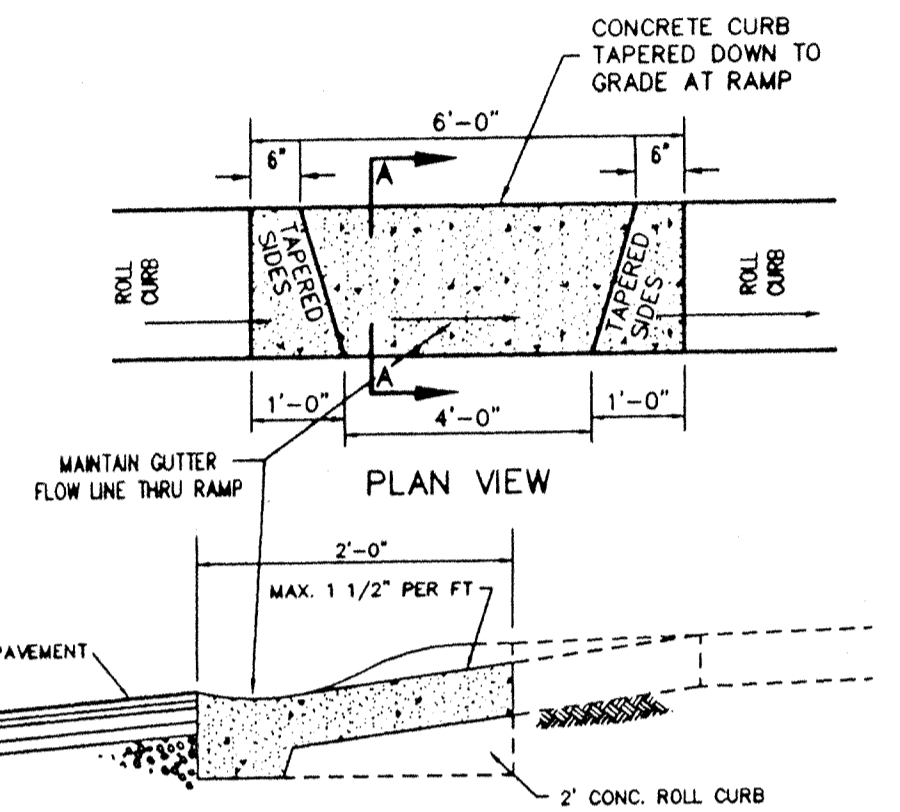
**ROLL CURB INLET** 16 S-12

NOTE:  
ALL STRUCTURES 3' OF GREATER SHALL BE ACCESSIBLE WITH STEPS  
THE FIRST STEP SHALL BE PLACED 18" BELOW THE TOP OF CASTING, FOLLOWED BY 16" THEREAFTER.



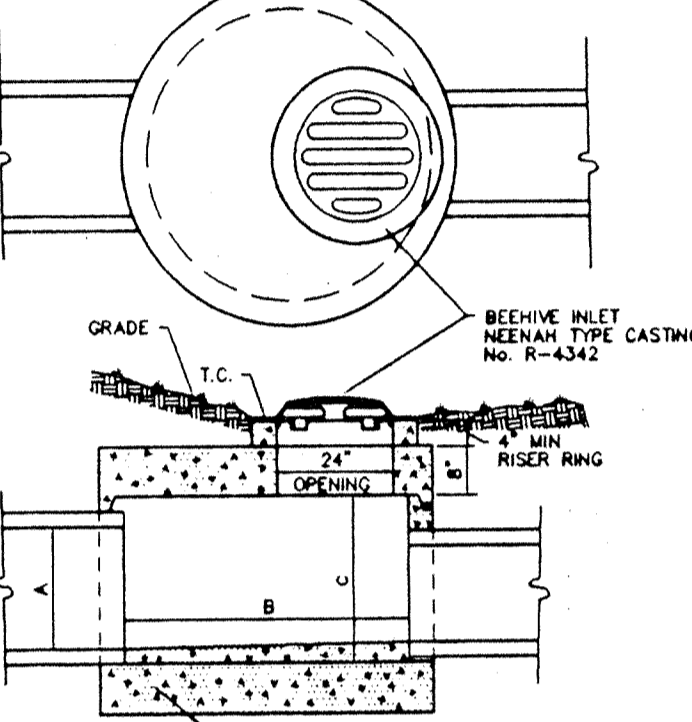
**ROLL CURB INLET** 13 S-12

DIMENSIONS (INCHES)		
(MAX)	(D)	(MIN)
12	36	18
15	36	21
18	48	24
21	48	27
24	48	30
27	60	33
30	60	36
33	60	39
36	60	42
39	60	45
42	60	48



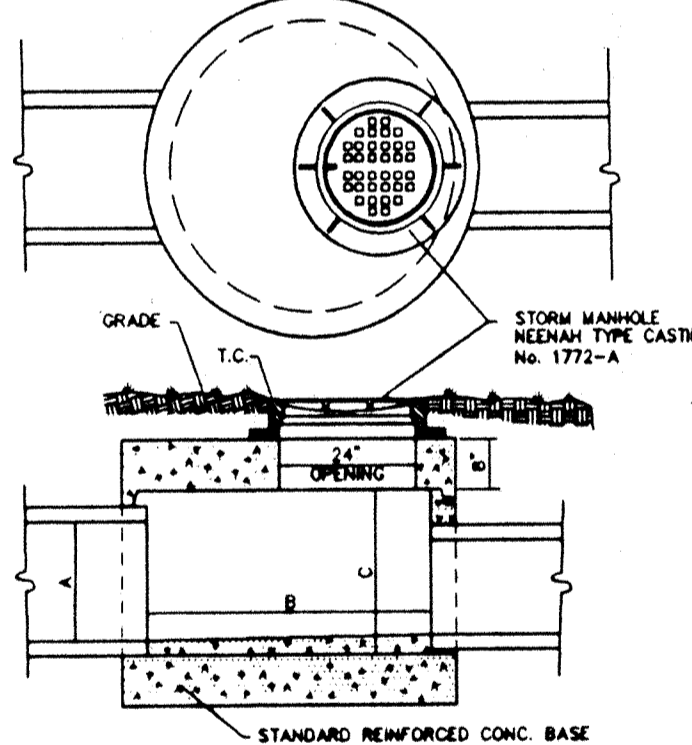
**WHEELCHAIR RAMP DETAIL** 19 S-12

NOTE:  
ALL STRUCTURES 3' OF GREATER SHALL BE ACCESSIBLE WITH STEPS  
THE FIRST STEP SHALL BE PLACED 18" BELOW THE TOP OF CASTING, FOLLOWED BY 16" THEREAFTER.



**BEEHIVE INLET DETAIL** 14 S-12

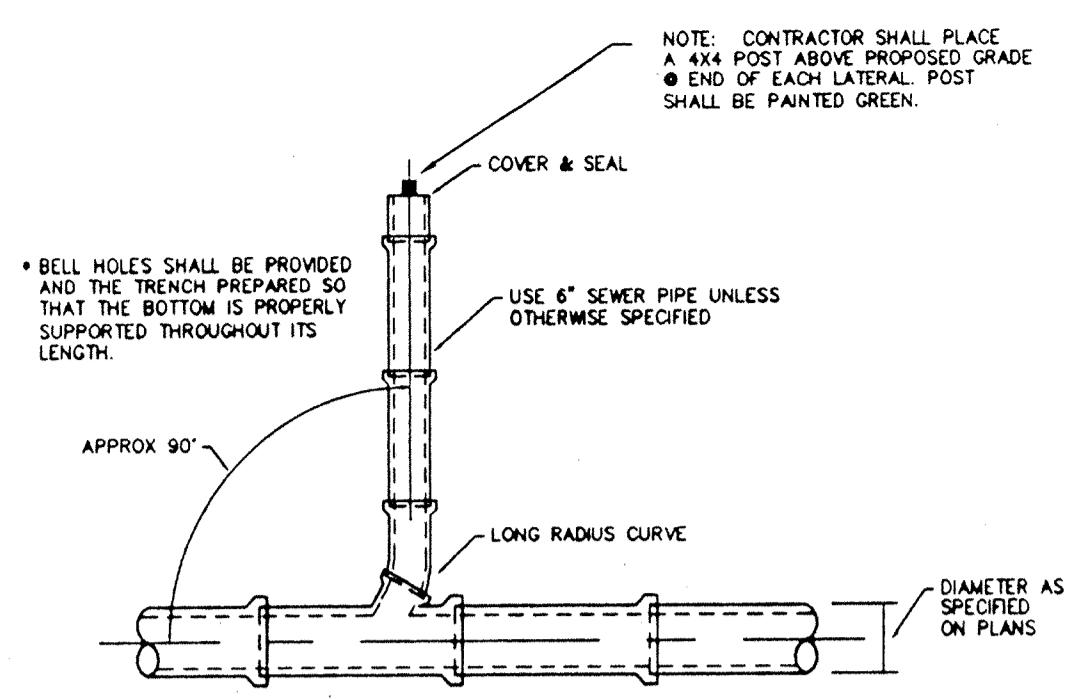
DIMENSIONS (INCHES)		
(MAX)	(D)	(MIN)
12	36	18
15	36	21
18	48	24
21	48	27
24	48	30
27	60	33
30	60	36
33	60	39
36	60	42
39	60	45
42	60	48



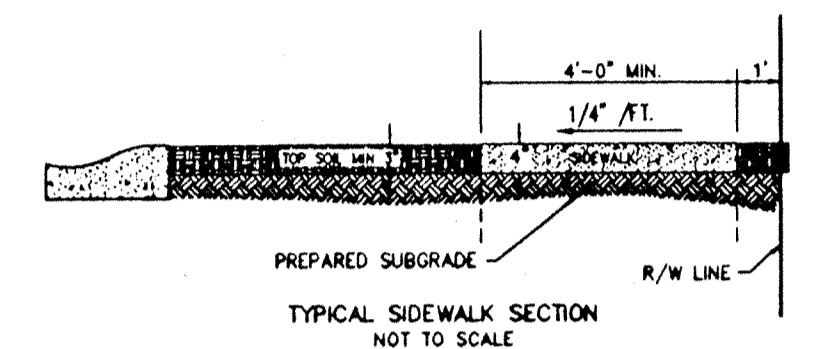
**STORM MANHOLE DETAIL** 15 S-12

NOTE:  
ALL STRUCTURES 3' OF GREATER SHALL BE ACCESSIBLE WITH STEPS  
THE FIRST STEP SHALL BE PLACED 18" BELOW THE TOP OF CASTING, FOLLOWED BY 16" THEREAFTER.

DIMENSIONS (INCHES)		
(MAX)	(D)	(MIN)
12	36	18
15	36	21
18	48	24
21	48	27
24	48	30
27	60	33
30	60	36
33	60	39
36	60	42
39	60	45
42	60	48

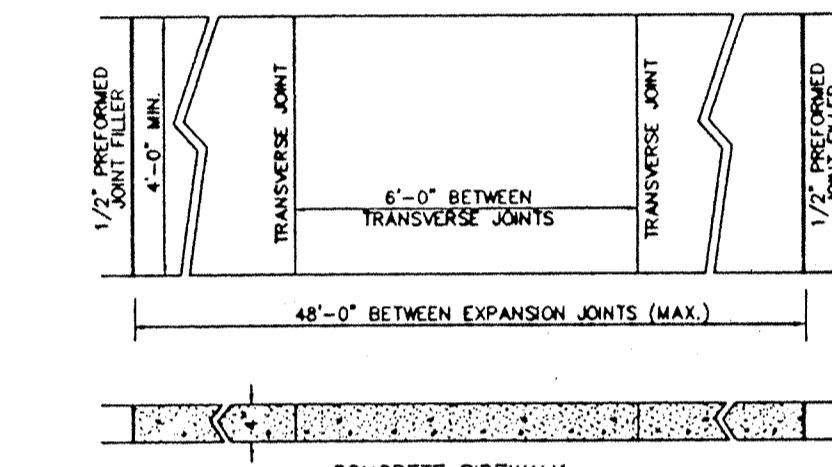


**WYE & LATERAL CAPPING DETAIL** 9 S-12

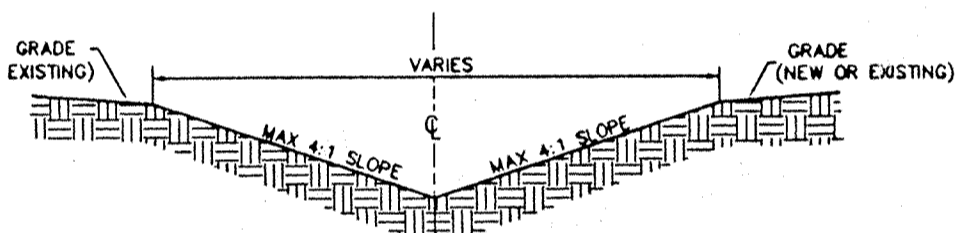


**SIDEWALK DETAIL** 10 S-12

THE SPACE BEHIND THE CURB SHALL BE FILLED WITH SUITABLE MATERIAL TO THE REQUIRED ELEVATION AND COMPACTED IN LAYERS NOT TO EXCEED 6" IN DEPTH. SUBGRADE UNDER ALL CURB, SIDEWALK, AND DRIVES SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 207.02 OF THE STANDARD SPECIFICATIONS.

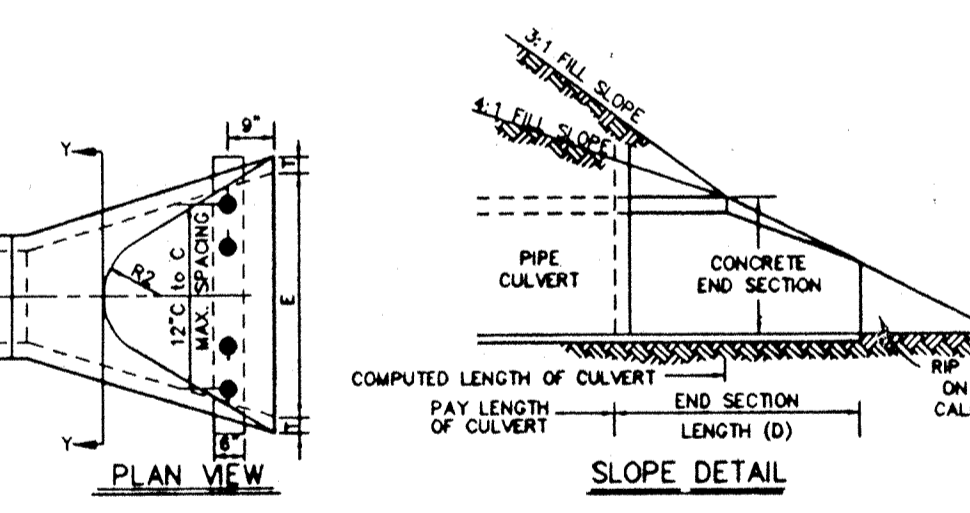


**TYPICAL SWALE SECTION** 11 S-12

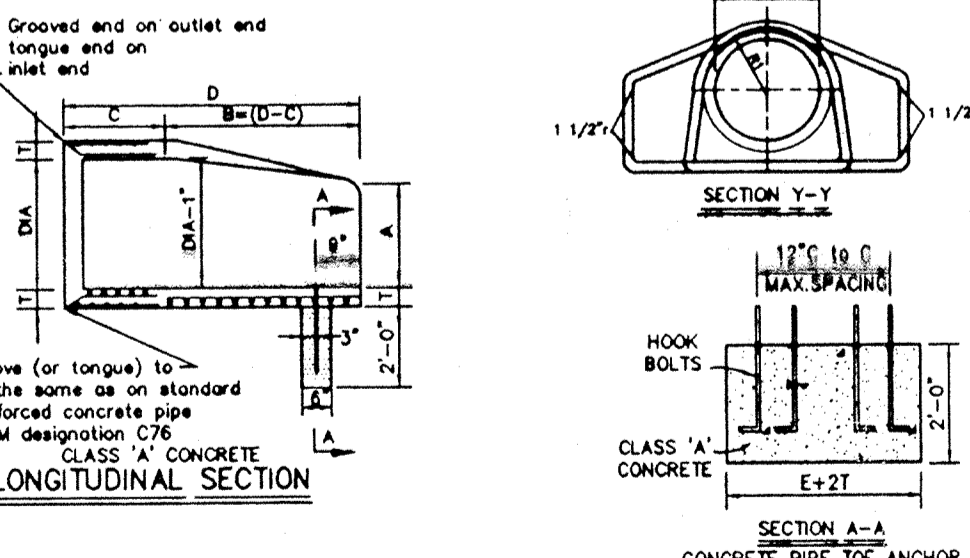


**CONCRETE CRADLE** 6 S-12

To be used when clear distance between pipes is 18" or less, or where noted on the drawings.

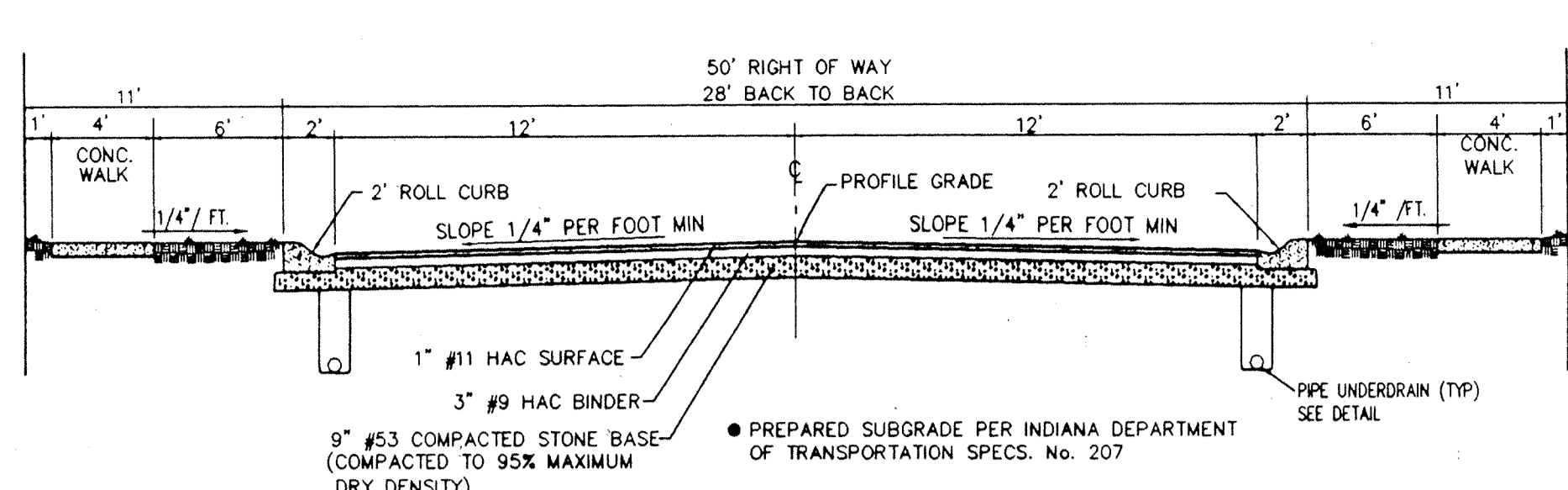


**TYPICAL UTILITY CROSSING** 7 S-12

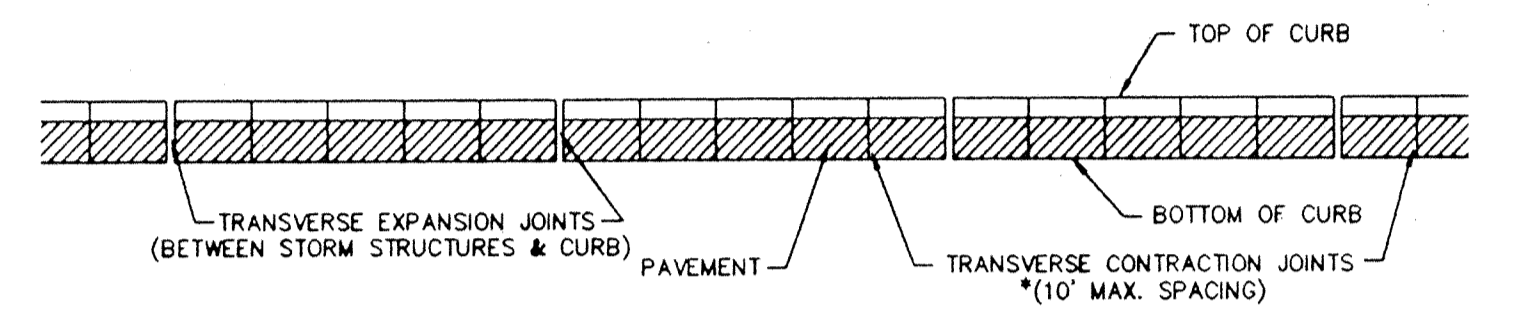


DIMENSIONS OF CONCRETE END SECTIONS FOR ROUND PIPE									
DIA	T	A*	C*	D*	E*	K	R <sub>1</sub>	R <sub>2</sub>	APPROX. WEIGHT
12"	2"	5"	4'-3"	6'-2"	2'-0"	1.3	10 1/8"	9"	800
15"	2 1/4"	7"	4'-0"	6'-3"	2'-6"	1.5	12 1/2"	11"	1,100
18"	2 1/2"	11"	4'-1"	6'-2"	3'-0"	1.8	15 1/2"	12"	1,300
21"	2 3/4"	11"	3'-6"	6'-3"	3'-6"	2.1	16 3/8"	13"	1,500
24"	3"	1'-0"	2'-8"	6'-3"	4'-0"	2.3	16 3/16"	14"	1,800
27"	3 1/4"	1'-1"	2'-5"	6'-3"	4'-6"	2.6	18 1/2"	14 1/2"	2,100
30"	3 1/2"	1'-2"	1'-10"	6'-3"	5'-0"	2.9	18 3/16"	15"	2,400
33"	3 3/4"	1'-3"	3'-6"	8'-3"	5'-6"	3.1	18 1/2"	17 1/2"	4,100
36"	4"	1'-5"	3'-1"	8'-3"	6'-0"	3.4	23 3/4"	20"	4,200

**PRECAST CONCRETE END SECTION** 12 S-12

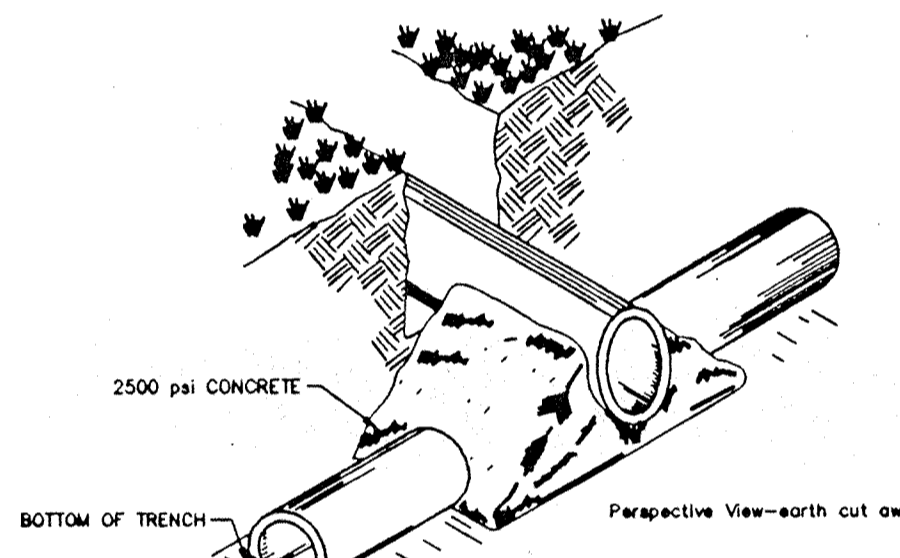


**TYPICAL STREET SECTION** 1 S-12

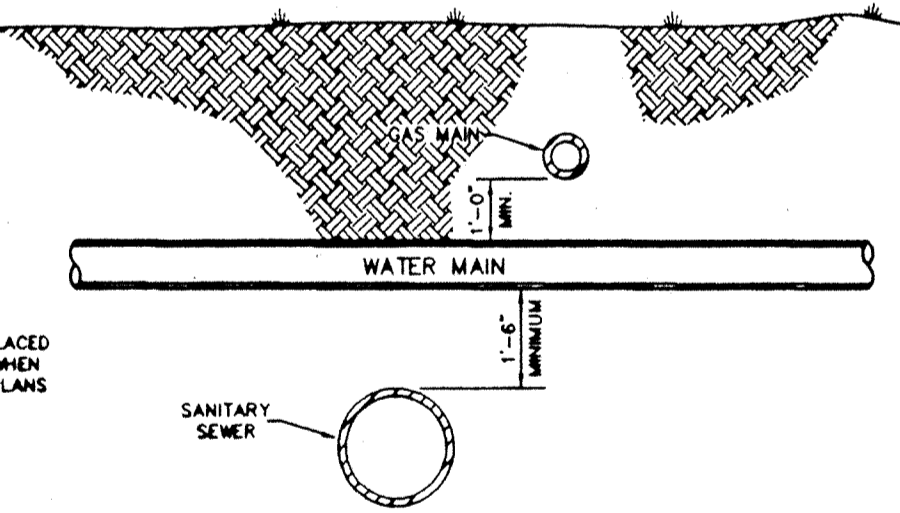


**CURB JOINT DETAIL** 3 S-12

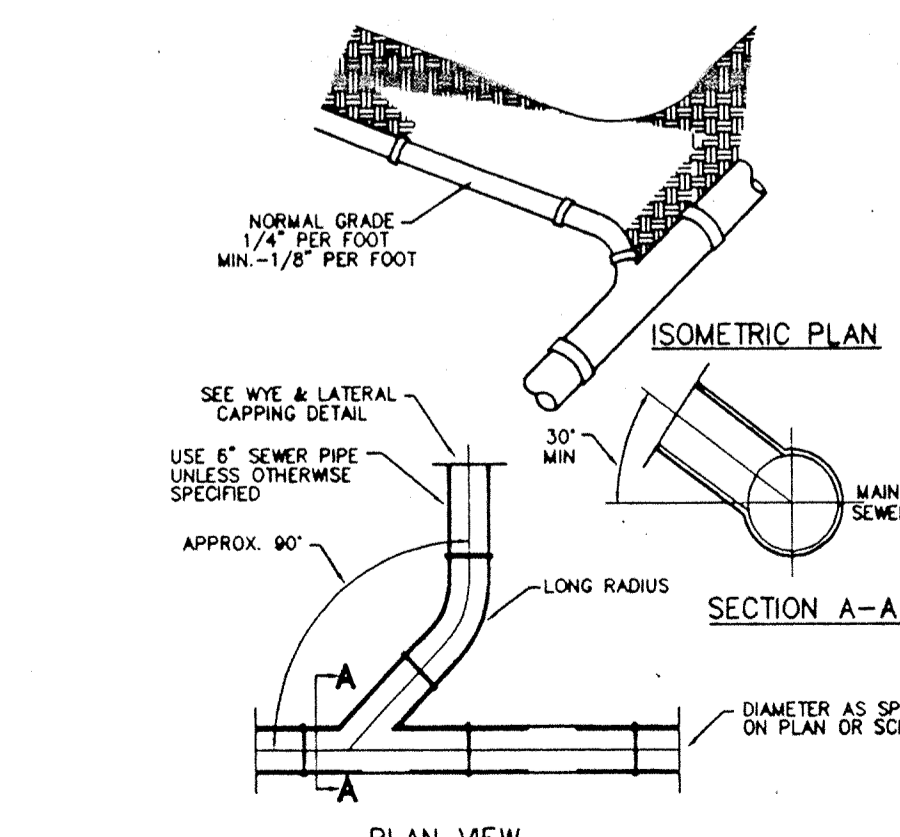
\* TRANSVERSE CONTRACTION JOINTS MAX. 5' SPACING WITHIN RADIUS OF INTERSECTIONS AND ENTRANCES.



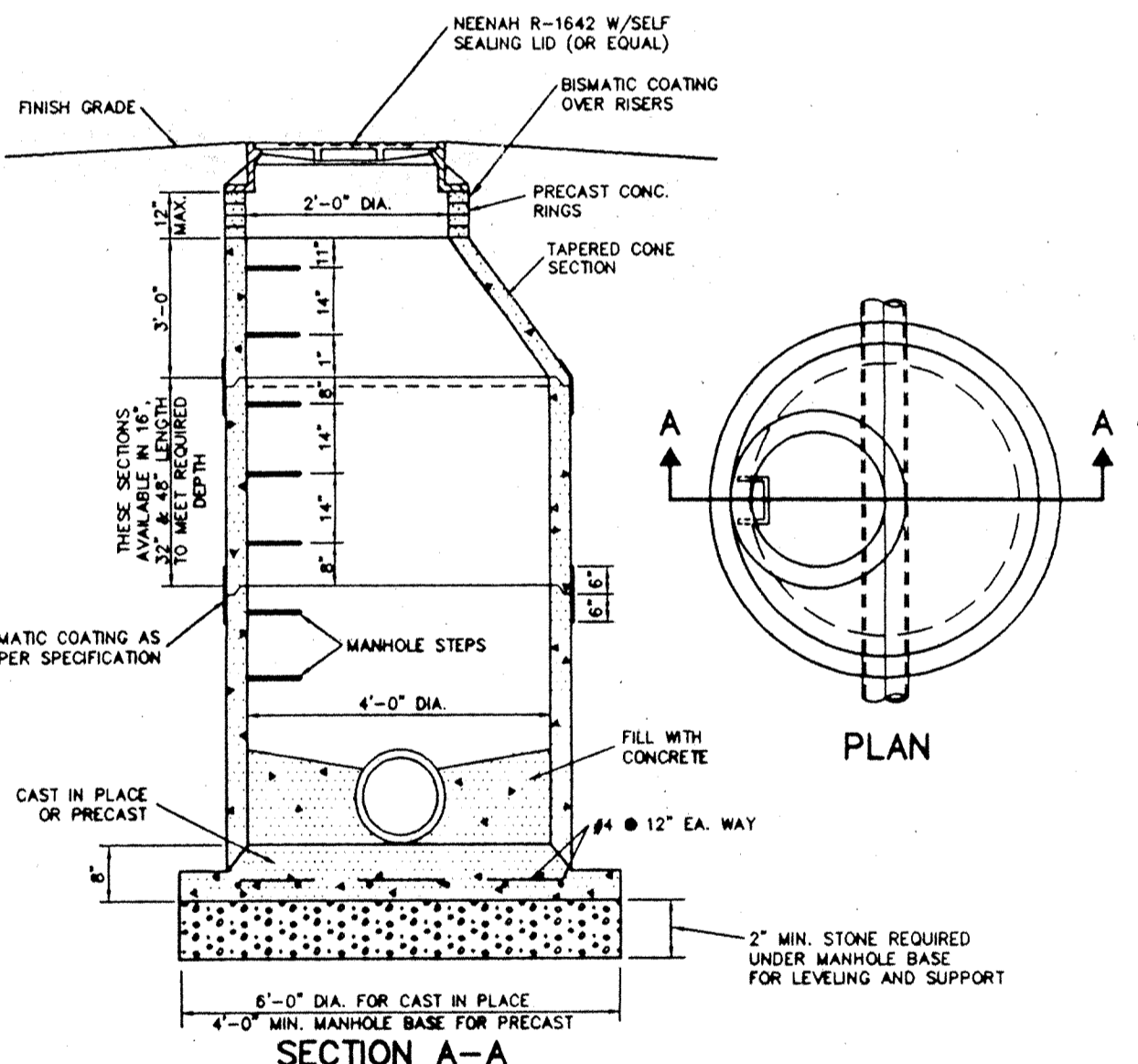
**CONCRETE CRADLE** 6 S-12



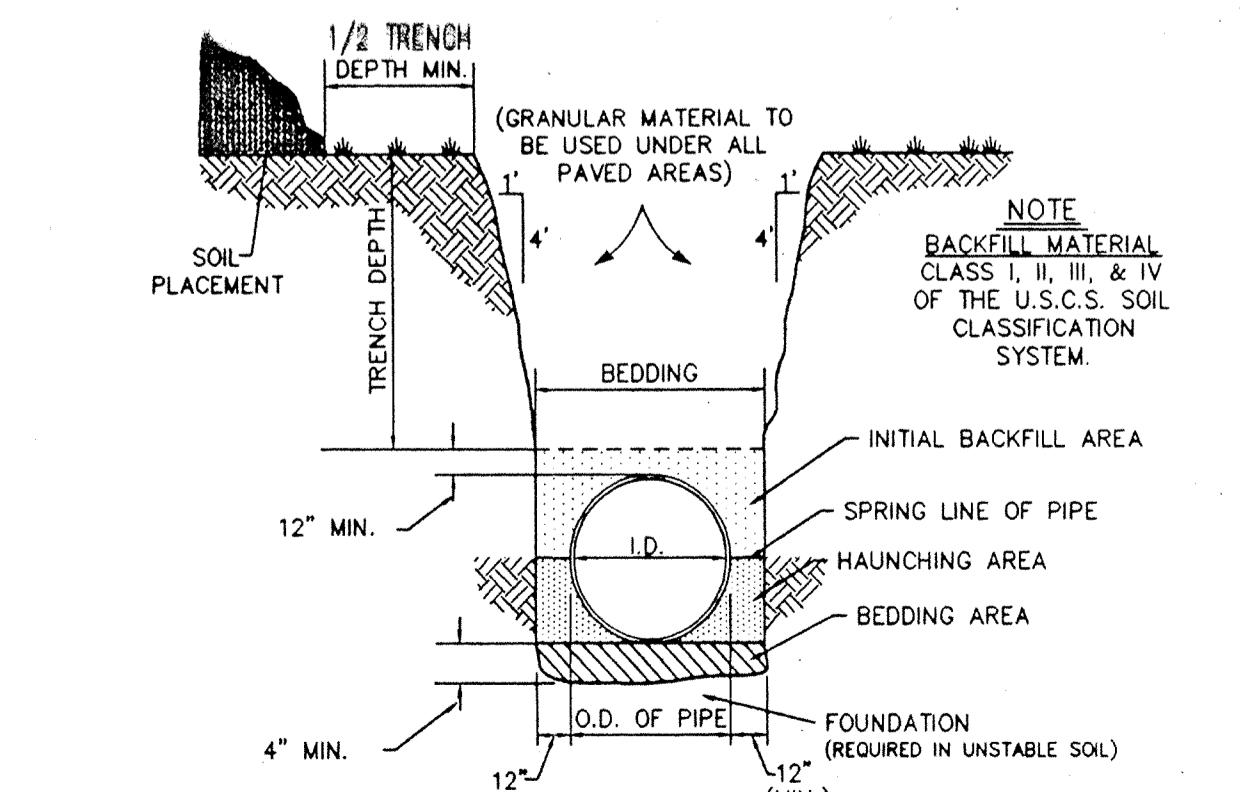
**TYPICAL UTILITY CROSSING** 7 S-12



**CONNECTION TO MAIN SEWER** 8 S-12



**SANITARY MANHOLE DETAIL** 4 S-12



**TRENCH & PIPE EMBEDMENT DETAIL** 5 S-12

Revisions  
3-23-95 REV. PER TAC COMMENT  
**STORM ASBUILT**  
12-13-95

DAVID K. SEATON  
REGISTERED  
No. 9500028  
STATE OF INDIANA  
PROFESSIONAL ENGINEER  
CERTIFIED BY: *David K. Seaton* 4-5-95  
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A Partnered Entity with Bohlen, Meyer, Gibson & Associates, Incorporated

BRENNICK DEVELOPMENT CO. INC.  
THE CROSSINGS SECTION 4  
AT SPRINGMILL VILLAGES

GENERAL DETAILS

Date 1/25/95	Project No. 895.24	Drawn GSD	Approv.
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Computer Files 866240ET	Sheet No. <b>S-12</b>
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