Drain: CROOKED CREEK DRAIN **Drain #:** 250
Improvement/Arm: ASHBROOKE - SECTION 2
Operator: JDH **Date:** 11-25-03
Drain Classification: **Urban**/Rural **Year Installed:** 1992

GIS Drain Input Checklist

- Pull Source Documents for Scanning — GAA 11-25
- Digitize & Attribute Tile Drains — N/A
- Digitize & Attribute Storm Drains — GAA 11-25
- Digitize & Attribute SSD — GAA 11-25
- Digitize & Attribute Open Ditch — N/A
- Stamp Plans — GAA 11-25
- Sum drain lengths & Validate — GAA 11-25
- Enter Improvements into Posse — GAA 11-25
- Enter Drain Age into Posse — [illegible]
- Sum drain length for Watershed in Posse — [illegible]
- Check Database entries for errors — GAA 11-25

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Gasb 34 Footages for Historical Cost
Drain Length Log

Drain-Improvement: CROOKED CREEK DRAIN - ASHBROOK - SECTION 2

Drain Type:	Size:	Length (SURVEYOR'S REPORT)	Length (DB Query)	Length Reconcile	Price:	Cost:
SSD	6"	4,872'	4,872'	Ø	$ 2.00	$ 9,744.00
RCP	12"	321'	308'	-13'	7.25	2,233.00
	15"	345'	345'	Ø	9.50	3,277.50
	18"	419'	419'	Ø	10.50	4,399.50
	24"	388'	388'	Ø	18.00	6,984.00
	54"	958'	880'	-78'	85.45	75,196.00
Sum:		7,303'	7,212'	-91'		$ 101,834.00

Final Report: _____

Comments:

SURVEY REPORT LENGTHS DO NOT MATCH LENGTH ON PROFILE SHEETS FOR 12" + 54" PIPE.
NOTE: PLANS WERE USED, NOT AS BUILTS OR RECORD DRAWINGS.

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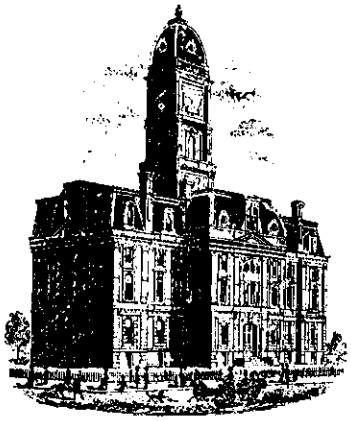

SURVEYOR'S OFFICE

Hamilton County

Kenton C. Ward, Surveyor
776-8495

Suite 146
One Hamilton County Square
Noblesville, Indiana 46060-2230

October 22, 1992

TO: Hamilton County Drainage Board

RE: Crooked Creek Ashbrook, Section 2 Arm

Attached is a petition, Non-enforcement request, plans, calculations, quanity for the Crooked Creek Ashbrook Section 2, Arm.

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 accuruing to the owners of land likely to be benefitted. The drain will consits of the following:

6" SSD	4872 feet	24" RCP	388 feet
12" RCP	321 feet	54" RCP	958 feet
15" RCP	345 feet		
18" RCP	419 feet		

The total length of the drain will be 7303 feet.

The retention pond (existing lake #1) which borders lots 71 to 76 is not to be considered part of the requlated drain. Only the inlet and outlet will be maintained as part of the regulated drain. The maintenance of the lake will be the responsibility of the Homeowners Association. The Board will however, retain jurisidiction for ensuring the storage volume for which the lake was designed will be retained. Thereby, allowing no fill or easement encroachments.

I have reviewed the plans and believe the drain will benefit each lot equally. Therefore, I recommed each lot be assessed equally. I recommed 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 the drain/this section will be $1211.96.

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The subsurface drains (SSD) to be part of the regulated drain are those locacted under the curbs and those main lines between lots or in rear yards. Only the main SSD lines which are located within the easement are to be maintained as regulated drain. Laterals for individual lots will not be condidered part of the regulated drain. The portion of the SSD which will be regulated other than those under curbs are those installed with Section 1. The existing culvert pipe under Shelborne Road is not to be considered as part of the regulated drain.

I recommend a hearing be set for December 1992. If approved at hearing I recommend the Board approve the attached non-enforcement request for Ashbrook, Section 2. I also recommend the Board classify this drain as an Urban Drain.

Kenton C. Ward,
Hamilton County Surveyor

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CERTIFICATE OF COMPLETION AND COMPLIANCE

TO: HAMILTON COUNTY SURVEYOR

RE: ASHBROOKE SECTION Two

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: _____ Date: 10-16-92

Type or Printed Name: Richard A. Henderson

Business Address: Schneider Engineering Corp.

3020 North Post Road; Indianapolis, IN 46226

Telephone: (317) 898-8282

RICHARD A. HENDERSON REGISTERED No. 900081 STATE OF INDIANA PROFESSIONAL ENGINEER

INDIANA REGISTRATION NUMBER

900081

SEAL

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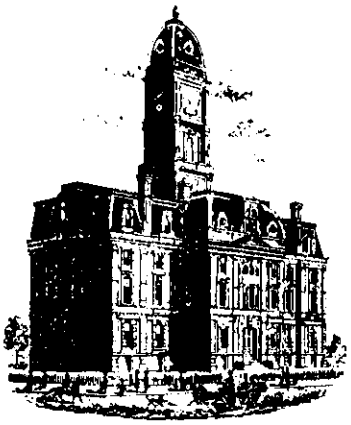

SURVEYOR'S OFFICE

Hamilton County

Kenton C. Ward, Surveyor
Phone (317) 776-8495
Fax (317) 776-9628

Suite 146
One Hamilton County Square
Noblesville, Indiana 46060-2230

To: Hamilton County Drainage Board

October 28, 1997

Re: **Crooked Creek Drain - Ashbrooke Sec. 2**

Attached are the plans, certificate of completion and compliance, and other information for Ashbrooke Sec. 2. An inspection of the drainage facilities for this section has been made and the facilities were found to be complete and acceptable. Although asbuilts were not obtained the facilities were constructed according to plan.

During construction of the drain there were not any significant changes made to the drain. Subsequently, there were not any significant changes made to the plans submitted with my report dated October 22, 1992. Therefore, the length of the drain remains at **7,303 feet**.

The non-enforcement was approved by the Board at its meeting on December 21, 1992 and recorded under instrument # 9300001.

The bond or letter of credit from Brenwick Development Co. was not required.

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

Sincerely,

Kenton C. Ward,
Hamilton County Surveyor

KCW/slm

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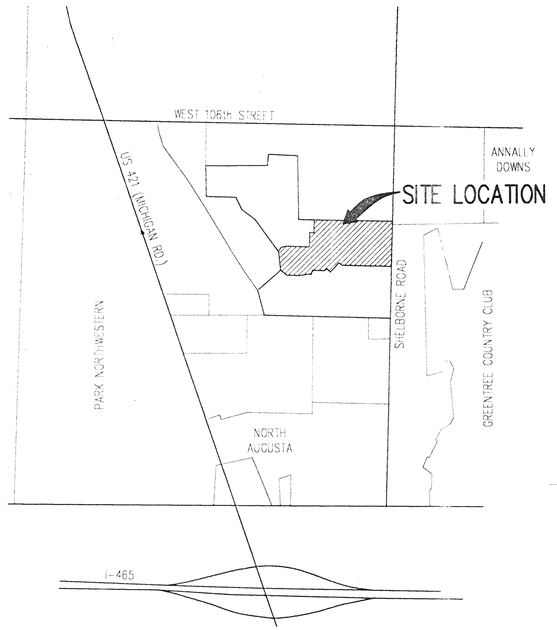
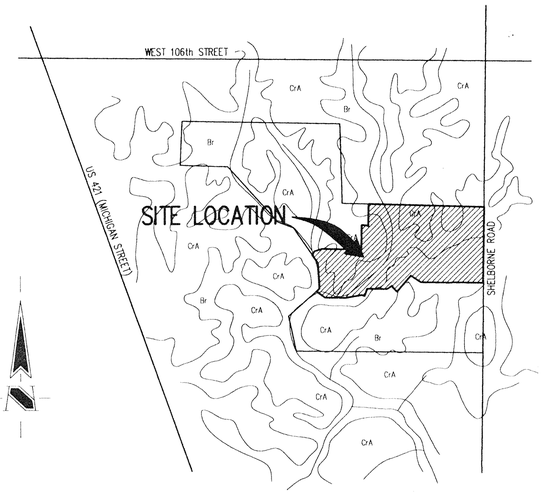
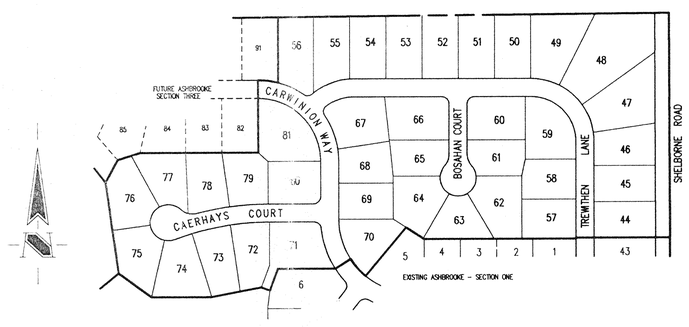


AREA MAP
NOT TO SCALE



SOILS MAP
NOT TO SCALE

SOILS LEGEND
CrA – Crosby Silt Loam
Br – Brookston-Silty Clay Loam



SITE MAP
SCALE: 1"=200'

SECTION 7 – 17N – 3E

ASHBROOKE SECTION 2

(CONSTRUCTION PLANS)

CLAY TOWNSHIP
HAMILTON COUNTY, INDIANA

Developer:

BRENWICK DEVELOPMENT CO., INC.
9502 ANGOLA COURT
INDIANAPOLIS, INDIANA 46268
(317) 841-9102

Engineer:

SCHNEIDER ENGINEERING CORP.
3020 NORTH POST ROAD
INDIANAPOLIS, INDIANA 46226
(317) 898-8282

INDEX

SHEET No.	DESCRIPTION
S-1	TITLE SHEET
S-2	DEVELOPMENT PLAN
S-3	EROSION CONTROL PLAN
S-4-S-7	STREET PLAN
S-8-S-10	SANITARY SEWER PLAN
S-11-S-12	STORM SEWER PLAN
S-13-S-14	GENERAL DETAILS
S-15	SPECIFICATIONS

HAMILTON COUNTY INDIANA 1823

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Entry Date: 11-25-03

Entered by: JDH

Schneider Engineering Corporation
CIVIL ENGINEERS — LAND SURVEYORS

3020 NORTH POST ROAD
INDIANAPOLIS, INDIANA 46226-6518
(317) 898-8282

DATE:

CERTIFIED BY: RICHARD A. HENDERSON

FILED
AUG 21 1991
OFFICE OF HAMILTON COUNTY SURVEYOR

PROJECT ENGINEER: DKS

CHECKED BY: _____ DATE CHECKED: _____

(JOB No. 813.20)

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LEGEND

- Existing Storm Sewer
- New Storm Sewer
- Existing Sanitary Sewer
- New Sanitary Sewer
- Existing Contour
- 000.0 Existing Elevation
- 000.00 New Pavement Elevation
- 000.00 All Other Finish Elevations
- (000.00) Corrected Elevations
- Storm Structure Number
- Sanitary Structure Number
- Flow Arrow
- 000.0 Denotes Elevation and Approximate Pad Size
- SSD Subsurface Drain w/4" Lateral Connection
- 207 SSD Invert Elevation
- 885.5 Minimum Flood Protection Elevation
- 000.00 Suggested Finished Floor Elevation (No Pad)
- Water Main } Shown for reference only. Final design
- Fire Hydrant } and installation by Indianapolis Water Co.
- Swale (℄)
- M.E. Match Existing Elevation
- Swale Elevation (Flow Line)

Benchmarks

NOTE:

The elevation datum used for this project was formulated to coincide with topographic mapping created from aerial photography. This mapping was prepared by a consultant using an incorrect elevation value for USC&GS Benchmark T-78. Since this mapping USC&GS Benchmark T-78 has been destroyed. Previous surveys have established that a discrepancy existed between USC&GS Benchmarks T-79 and S-76. The combination of these situations results in establishing an elevation datum based on an elevation value 1.12 feet greater than the published value for USC&GS Benchmark S-76. The following benchmarks are established on site with values adjusted for use with this project only.

TBM 101
Top of railroad spike in centerline of Shelbourne Road approximately 1,335 feet south of the centerline of 106th Street.
Elevation = 890.98

TBM 102
Top of bent spike in centerline of Shelbourne Road approximately 2600 feet south of the centerline of 106th Street.
Elevation = 885.42

TBM 103
P.K. nail in west side of power pole 1 foot up on the east side of Shelbourne Road approximately 2600 feet south of the centerline of 106th Street.
Elevation = 886.54

TBM 104
A cut square at the southeast corner of the concrete deck of a lift station on the south side of the subject site approximately 1600 feet west of the centerline of Shelbourne Road.
Elevation = 884.12

TOPOGRAPHY BY
LOBO AERIAL SURVEYS
COLUMBUS, IN
DATED 12-23-88

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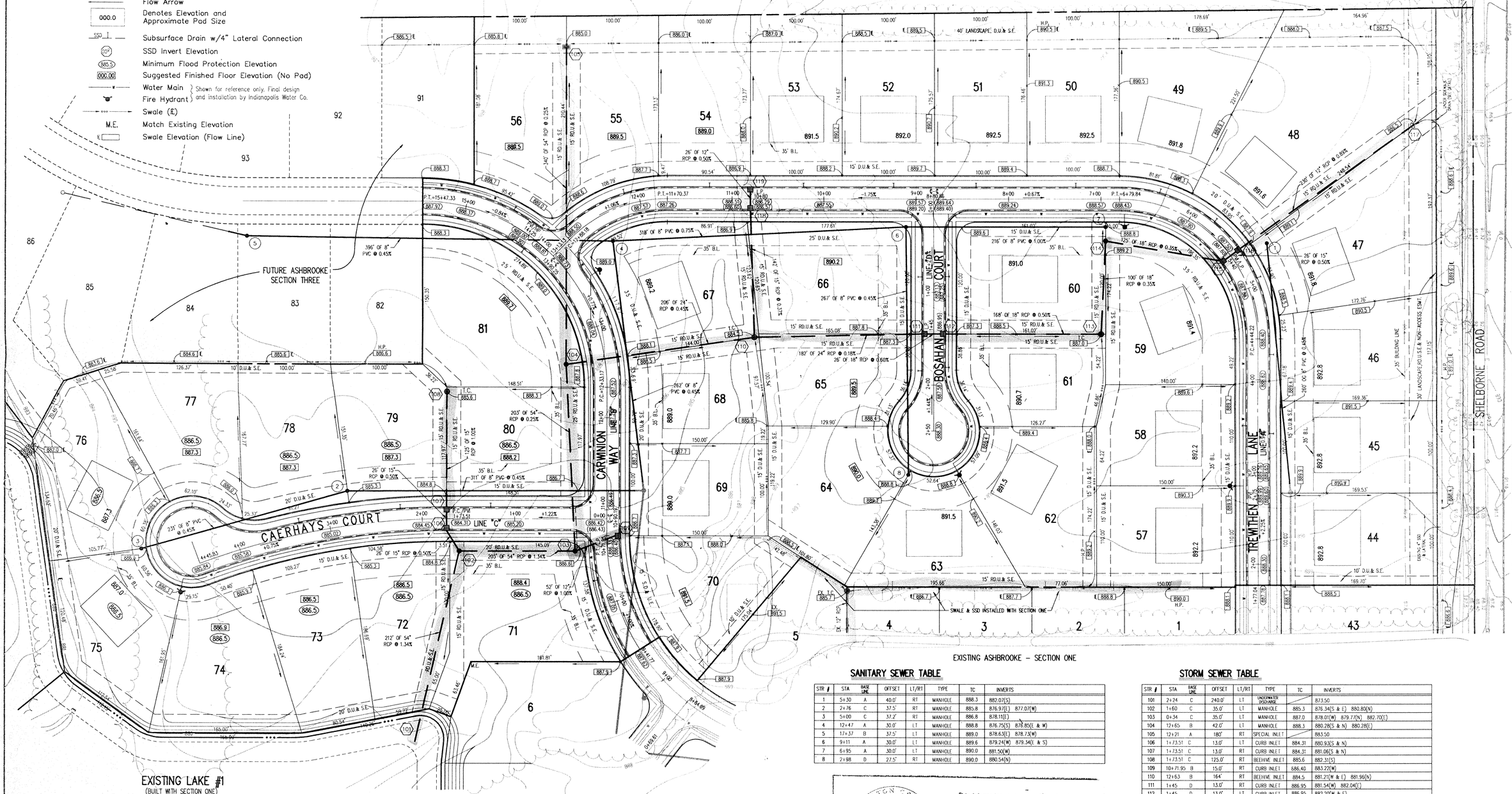
ASSUMED NORTH
SCALE: 1"=50'



SANITARY SEWER TABLE

STR #	STA	BASE LINE	OFFSET	LT/RT	TYPE	TC	INVERTS
1	5+30	A	40.0'	RT	MANHOLE	888.3	882.07(S)
2	2+76	C	37.5'	RT	MANHOLE	885.8	876.97(E) 877.07(W)
3	5+00	C	37.2'	RT	MANHOLE	886.8	878.11(E)
4	12+47	A	30.0'	LT	MANHOLE	888.8	876.75(S) 876.85(E & W)
5	17+37	B	37.5'	LT	MANHOLE	889.0	878.63(E) 878.73(W)
6	9+11	A	30.0'	LT	MANHOLE	889.6	879.24(W) 879.34(E & S)
7	6+95	A	30.0'	LT	MANHOLE	890.0	881.50(W)
8	2+98	D	27.5'	RT	MANHOLE	890.0	880.54(N)

STORM SEWER TABLE

STR #	STA	BASE LINE	OFFSET	LT/RT	TYPE	TC	INVERTS
101	2+24	C	240.0'	LT	UNCONTAMINATED DISCHARGE		873.50
102	1+60	C	35.0'	LT	MANHOLE	885.3	876.34(S & E) 880.80(N)
103	0+34	C	35.0'	LT	MANHOLE	887.0	878.01(W) 879.71(N) 882.70(E)
104	12+65	B	42.0'	LT	MANHOLE	888.3	880.28(S & N) 880.28(E)
105	12+21	A	180'	RT	SPECIAL INLET		883.50
106	1+73.51	C	13.0'	LT	CURB INLET	884.31	880.93(S & N)
107	1+73.51	C	13.0'	RT	CURB INLET	884.31	881.06(S & N)
108	1+73.51	C	125.0'	RT	BEEHIVE INLET	885.6	882.31(S)
109	10+71.95	B	15.0'	RT	CURB INLET	886.40	883.22(W)
110	12+63	B	164'	RT	BEEHIVE INLET	884.5	881.21(W & E) 881.96(N)
111	1+45	D	13.0'	RT	CURB INLET	886.95	881.54(W) 882.04(E)
112	1+45	D	13.0'	LT	CURB INLET	886.95	882.20(W & E)
113	7+00	A	145.0'	LT	BEEHIVE INLET	887.0	883.04(W & N)
114	6+95	A	45.0'	LT	MANHOLE	889.1	883.39(S & E)
115	5+40	A	13.0'	LT	CURB INLET	887.60	883.83(W) 884.08(NE)
116	5+40	A	13.0'	RT	CURB INLET	887.60	884.21(SW) 884.46(NE)
117	5+37	A	24.5'	RT	END SECTION		886.50(SW)
118	10+80	A	13.0'	LT	CURB INLET	886.57	882.48(S) 882.73(W)
119	10+80	A	13.0'	RT	CURB INLET	886.57	882.86(S)

HAMILTON COUNTY INDIANA 1823

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Entry Date: 11-25-03

Entered by: JDH

FILED
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REVISIONS

BY	DATE	CHECK

DRAWN BY JDS DATE 8-19-91 CHECK NO. CHECK

CERTIFIED

SCHNEIDER ENGINEERING CORPORATION
3020 NORTH POST ROAD
INDIANAPOLIS, INDIANA 46226-6518
(317) 898-8282
P.O. BOX 26048
civil engineers
land surveyors

PROJECT ASHBROOKE - SECTION TWO JOB NO. 813.2
PREPARED FOR BRENWICK DEVELOPMENT CO., INC. SCALE: 1"=50'
TITLE DEVELOPMENT PLAN

SHEET S-2 OF 15

FILE NAME: 813.2DEV1

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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.

Benchmarks

NOTE:
The elevation datum used for this project was formulated to coincide with topographic mapping created from aerial photography. This mapping was projected a considerable using an incorrect elevation value for USC&GS Benchmark T-78. Since this mapping USC&GS Benchmark T-78 has been destroyed. Previous surveys have established that a discrepancy existed between USC&GS benchmarks T-78 and S-78. The combination of these situations results in establishing an elevation datum based on an elevation value 1.12 feet greater than the published value for USC&GS Benchmark S-78. The following benchmarks are established on site with values adjusted for use with this project only.

TBM 101
Top of railroad spike in centerline of Shelbourne Road approximately 1335 feet south of the centerline of 106th Street.
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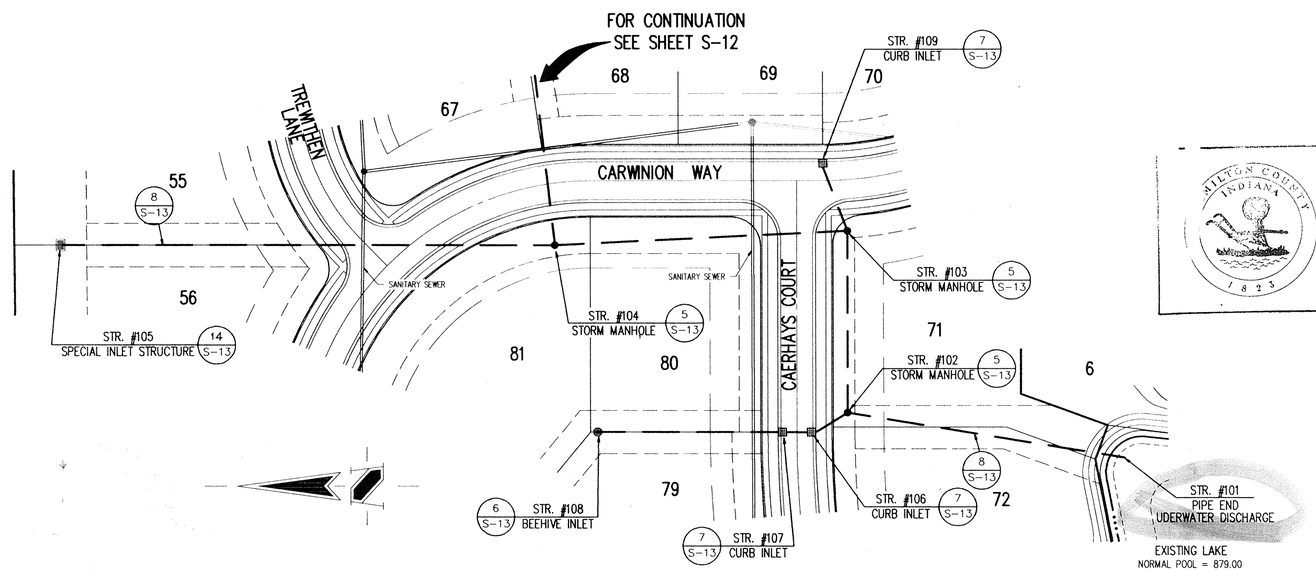
Elevation = 885.42

TBM 103
P.K. nail in west side of power pole 1 foot up on the east side of Shelbourne Road approximately 2600 feet south of the centerline of 106th Street.
Elevation = 886.54

TBM 104
A cut square at the southeast corner of the concrete deck of a lift station on the south side of the subject site approximately 1600 feet west of the centerline of Shelbourne Road.
Elevation = 884.12



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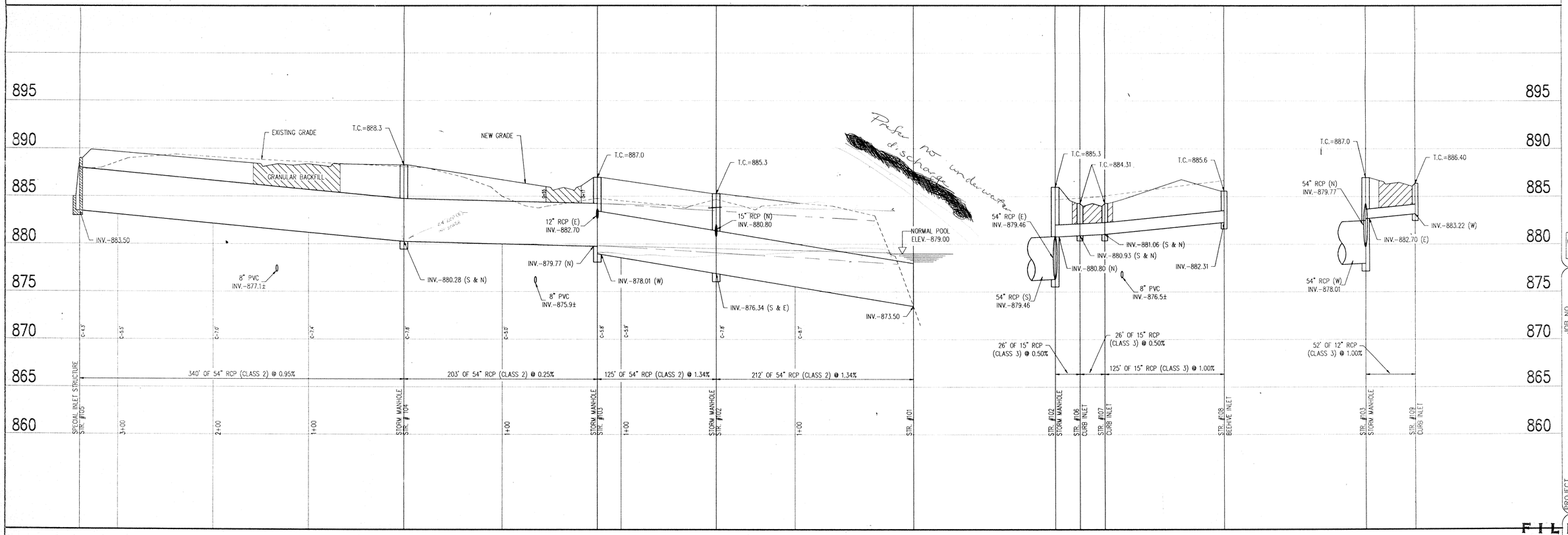
Entered by: JDH

TOPOGRAPHY BY
LOBO AERIAL SURVEYS
COLUMBUS, IN
DATED 12-23-88

STORM SEWER PLAN

SCALE: 1"=50'



STORM SEWER PROFILE

SCALE: HORZ.: 1"=50' / VERT.: 1"=5'

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AUG 2 1 1991
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SHEET S-11 OF 15

REVISIONS

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JCS	8-19-91				

SCHNEIDER ENGINEERING CORPORATION
civil engineers
land surveyors
3020 NORTH POST ROAD
INDIANAPOLIS, INDIANA 46226-6518
(317) 898-8282
P.O. BOX 26068

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PROJECT: ASHBROOKE – SECTION TWO JOB NO. 813.2
PREPARED FOR: BRENWICK DEVELOPMENT CO., INC.
TITLE: STORM SEWER PLAN
SCALE: NOTED

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Benchmarks

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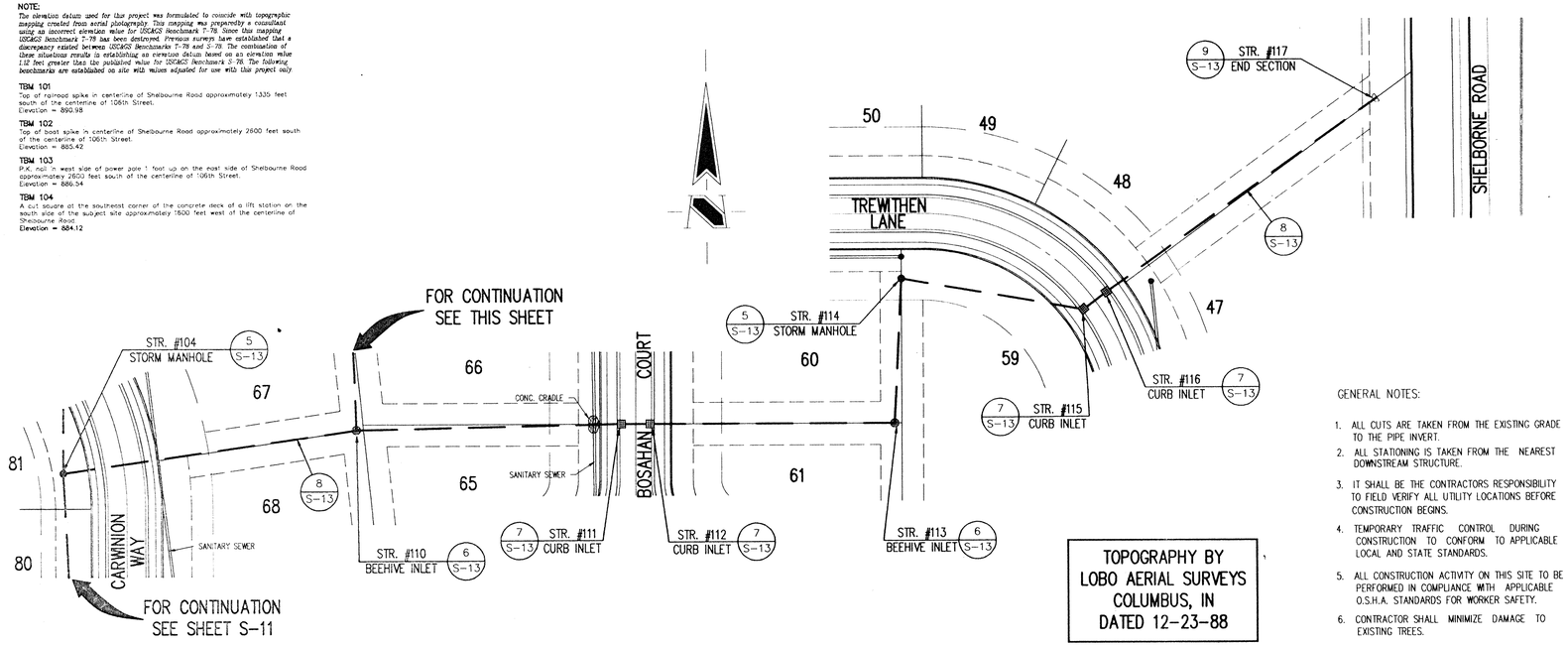

TOPOGRAPHY BY
LOBO AERIAL SURVEYS
COLUMBUS, IN
DATED 12-23-88

GENERAL NOTES:

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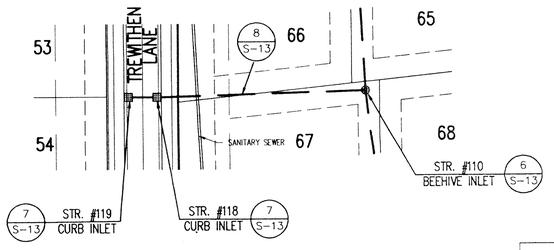

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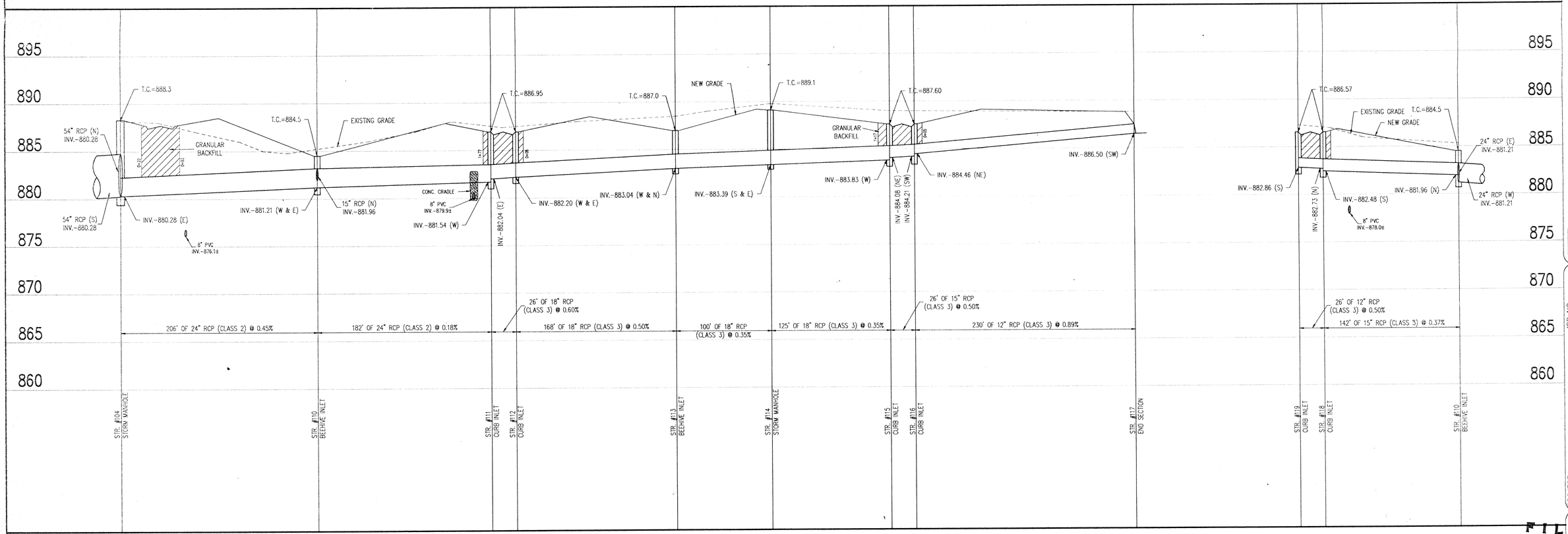
Entry Date: 11-25-03

Entered by: JDW

SCALE: 1"=50'

STORM SEWER PLAN



STORM SEWER PROFILE

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

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OFFICE OF HAMILTON COUNTY SURVEYOR

SHEET 8-12 OF 15

REVISIONS

DRAWN BY	DATE	CHECK NO.	BY	DATE	CHECK
JGS	8-19-91				

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3020 NORTH POST ROAD
INDIANAPOLIS, INDIANA 46226-6518
(317) 898-8282
P.O. BOX 26668
civil engineers
land surveyors

PROJECT ASHBROOKE - SECTION TWO JOB NO. 813.2
PREPARED FOR BRENWICK DEVELOPMENT CO., INC.
TITLE STORM SEWER PLAN
SCALE: NOTED

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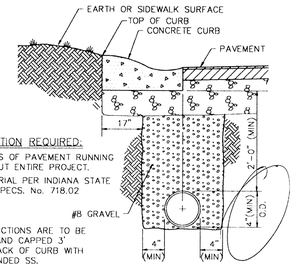
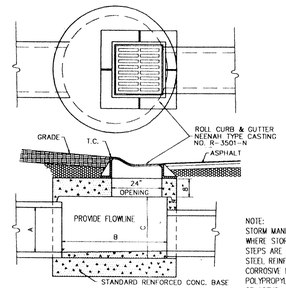


INSTALLATION REQUIRED:

- BOTH SIDES OF PAVEMENT RUNNING THROUGHOUT ENTIRE PROJECT.
- PIPE MATERIAL PER INDIANA STATE HIGHWAY SPECS. No. 718.02
- LOT CONNECTIONS ARE TO BE STUBBED AND CAPPED 3' BEYOND BACK OF CURB WITH CURB BRANDED SS.

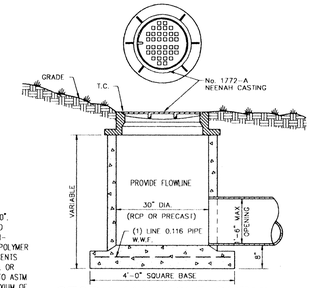
PIPE UNDERDRAIN (11 / S-13)



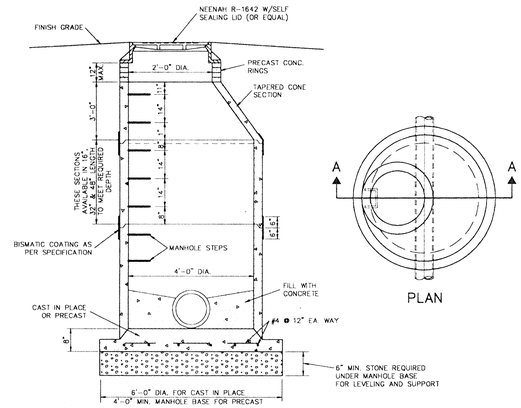
DIMENSIONS (INCHES) A (MAX)	B (O.D.)	C (MIN)	STRUCTURE NUMBER
21	48	28	#12,#14,#15,#16,#19
24	48	31	#11
27	60	34	
30	60	38	
33	60	41	
36	60	44	
42	60	50	

NOTE:
STORM MANHOLES SHALL INCLUDE STEPS WHERE STORM SEWER DEPTH EXCEEDS 4'-0". STEPS ARE TO BE POLYPROPYLENE COATED STEEL REINFORCING OR AN APPROVED NON-CORROSIVE FIBERGLASS MATERIAL. THE COPOLYMER POLYPROPYLENE SHALL MEET THE REQUIREMENTS OF ASTMD-4101 WITH DEFORMED 3/8" DIA. OR LARGER REINFORCING STEEL CONFORMING TO ASTM A-615, GRADE 60. STEPS SHALL BE A MAXIUM OF 24" FROM THE TOP, 24" FROM THE BOTTOM AND 16" SPACING BETWEEN.

SPECIAL ROLL CURB INLET (7 / S-13)

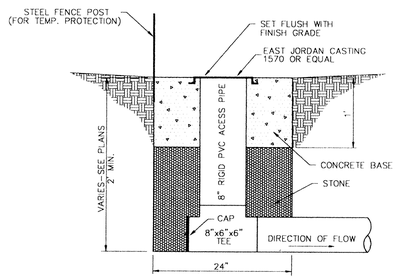


STORM MANHOLE DETAIL (4 / S-13)

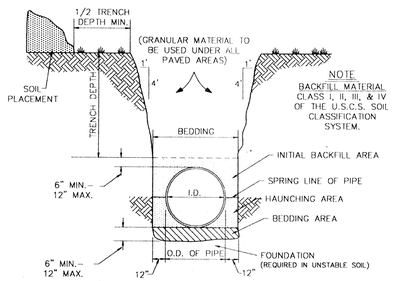


SECTION A-A

SANITARY MANHOLE DETAIL (1 / S-13)

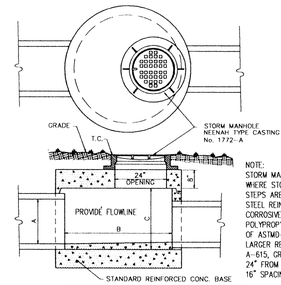


SUBSURFACE DRAIN RISER DETAIL (12 / S-13)



NOTE
BACKFILL MATERIAL CLASS I, II, III, & IV OF THE U.S.C.S. SOIL CLASSIFICATION SYSTEM.

TRENCH & PIPE EMBEDMENT DETAIL (8 / S-13)



NOTE:
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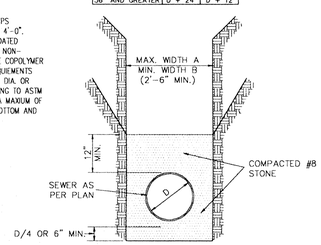
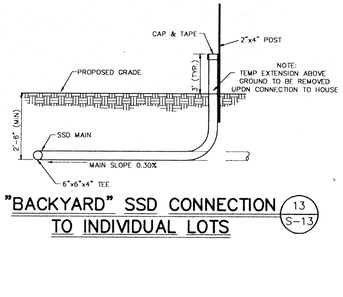
DIMENSIONS (INCHES) A (MAX)	B (O.D.)	C (MIN)	STRUCTURE NUMBER
21	48	28	#114
24	48	31	
27	60	34	
30	60	38	
33	60	41	
36	60	44	
42	60	50	
54			#102,#103,#104

SPECIAL STORM MANHOLE DETAIL (5 / S-13)

PIPE SIZE	A	B
UP TO 33"	D + 16"	D + 12"
36" AND GREATER	D + 24"	D + 12"



SANITARY SEWER TRENCH DETAIL (2 / S-13)

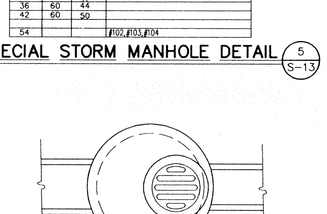


DIMENSIONS OF GALVANIZED STEEL END SECTIONS FOR ROUND PIPE									
TYPE OF PIPE	PIPE DIA. IN INCHES	GAGE	DIMENSION A ±1"	B (MAX)	H ±1"	L ±1 1/2"	W ±2"	APPROX. SLOPE
R.C.P.	12	.063	7	8	6	26	30	2 1/2
R.C.P.	15	.063	8	10	6	31	36	2 1/2
R.C.P.	18	.063	9	12	6	36	42	2 1/2
R.C.P.	21	.063	10	13	6	41	48	2 1/2
R.C.P.	24	.079	12	16	8	51	60	2 1/2
R.C.P.	30	.079	14	19	9	60	72	2 1/2
R.C.P.	36	.099	16	22	11	69	84	2 1/2
R.C.P.	42	.099	18	27	12	78	90	2 1/4
R.C.P.	48	.099	18	30	12	84	102	2
R.C.P.	54	.099	18	33	12	87	114	1 3/4

NOTE: FOR CORRUGATED METAL PIPE USE NEXT SMALLER DIAMETER END SECTION.

METAL END SECTION DETAIL (9 / S-13)

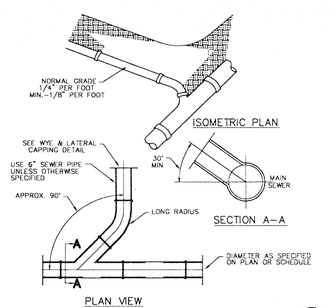
WITH CHILD/ANIMAL GUARD STR. #120, 121



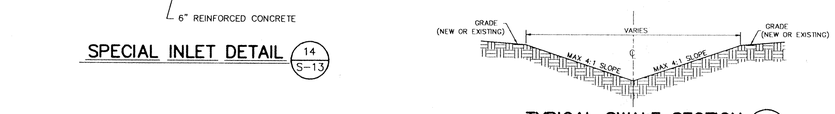
NOTE:
STORM MANHOLES SHALL INCLUDE STEPS WHERE STORM SEWER DEPTH EXCEEDS 4'-0". STEPS ARE TO BE POLYPROPYLENE COATED STEEL REINFORCING OR AN APPROVED NON-CORROSIVE FIBERGLASS MATERIAL. THE COPOLYMER POLYPROPYLENE SHALL MEET THE REQUIREMENTS OF ASTMD-4101 WITH DEFORMED 3/8" DIA. OR LARGER REINFORCING STEEL CONFORMING TO ASTM A-615, GRADE 60. STEPS SHALL BE A MAXIUM OF 24" FROM THE TOP, 24" FROM THE BOTTOM AND 16" SPACING BETWEEN.

DIMENSIONS (INCHES) A (MAX)	B (O.D.)	C (MIN)	STRUCTURE NUMBER
12	36	18	
15	36	21	
18	48	25	#113
21	48	28	
24	48	31	#110
27	60	34	
30	60	38	
33	60	41	
36	60	44	
42	60	50	

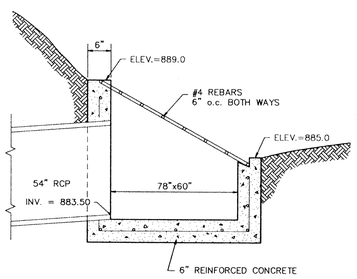
BEEHIVE INLET DETAIL (6 / S-13)



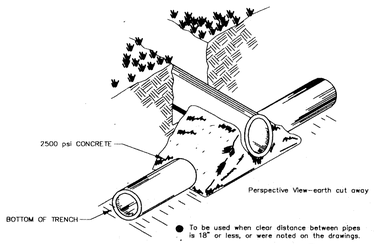
CONNECTION TO MAIN SEWER (3 / S-13)



TYPICAL SWALE SECTION (10 / S-13)

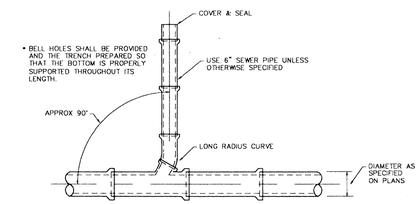


SPECIAL INLET DETAIL (14 / S-13)



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

CONCRETE CRADLE (16 / S-13)



- BELL HOLES SHALL BE PROVIDED AND THE TRENCH PREPARED SO THAT THE BOTTOM IS PROPERLY SUPPORTED THROUGHOUT ITS LENGTH.
- SEAL MUST BE ABLE TO PASS AIR PRESSURE TESTS REQUIRED FOR SEWER MAIN

WYE & LATERAL CAPPING DETAIL (15 / S-13)

"BACKYARD" SSD CONNECTION TO INDIVIDUAL LOTS (13 / S-13)

REVISIONS

DRAWN BY	DATE	CHECK NO.	BY	DATE	CHECK
JCS	8-19-91				

CERTIFIED

SCHNEIDER ENGINEERING CORPORATION
3020 NORTH POST ROAD
INDIANAPOLIS, INDIANA 46226-6518
(317) 898-8282
P.O. BOX 26068
civil engineers
land surveyors

PROJECT ASHBROOKE – SECTION TWO JOB NO. 813.20
PREPARED FOR BRENWICK DEVELOPMENT CO., INC.
TITLE GENERAL DETAILS
SCALE: NONE

FILED
AUG 21 1991
OFFICE OF HAMILTON COUNTY SURVEYOR

SHEET S-13 OF 15

FILE NAME: 81320ETI

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