Drain: PONDS WEST DRAIN **Drain #:** 254

Improvement/Arm: PONDS WEST-SECTION 1

Operator: JOH **Date:** 3-10-04

Drain Classification: Urban/Rural **Year Installed:** 1993

GIS Drain Input Checklist

- Pull Source Documents for Scanning — JH 3-10
- Digitize & Attribute Tile Drains — N/A
- Digitize & Attribute Storm Drains — JH 3-10
- Digitize & Attribute SSD — JH 3-11
- Digitize & Attribute Open Ditch — N/A
- Stamp Plans — JH 3-11
- Sum drain lengths & Validate — JH 3-11
- Enter Improvements into Posse — JH 3-11
- Enter Drain Age into Posse — JW 3-30
- Sum drain length for Watershed in Posse — JW 3-30
- Check Database entries for errors — JH 3-11

Gasb 34 Footages for Historical Cost
Drain Length Log

Drain-Improvement: PONDS WEST DRAIN - PONDS WEST - SECTION 1

Drain Type:	Size:	Length SURVEYOR'S REPORT	Length (DB Query)	Length Reconcile	If Applicable Price:	If Applicable Cost:
SSO	6"	8835'	8835'	Ø		
RCP	12"	78'	78'	Ø		
	15"	72'	72'	Ø		
	18"	346'	346'	Ø		
	21"	314'	314'	Ø		
	24"	1,431'	1,394'	-37'		
	27"	247'	247'	Ø		
	30"	300'	242'	-58		
	36"	Ø	160'	+160'		
CMP	8"	40'	20'	-20'		
	Sum:	11,663'	11,709'	+45'		

Final Report: _____

Comments:

SR AND AB DISAGREE ON 24", 30", 36", AND 8" CMP

SURVEYOR'S OFFICE

Hamilton County

Kenton C. Ward, Surveyor
776-8495
Suite 146
One Hamilton County Square
Noblesville, Indiana 46060-2230

May 13, 1993

TO: Hamilton County Drainage Board

RE: Ponds West Drain-Section 1

Attached is a petition, non-enforcement request, plans, calculations, quantity summary and assessment roll for the Ponds West Drain-Section 1. 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 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:

6"	SSD	8835 feet	27"	RCP	247 feet
12"	RCP	78 feet	18"	RCP	289 feet
15"	RCP	128 feet	30"	RCP	460 feet
21"	RCP	314 feet	8"	CMP	40 feet
24"	RCP	1431 feet			

The total length of the drain will be 11,822 feet.

The retention ponds (lakes) located in Common Area Ponds 3, 4, 5 and 6 and on Lots 35 and 36 are not to be considered part of the regulated drain. Only the inlet and outlet will be

maintained as part of the regulated drain. The maintenance of the ponds (lakes) will be the responsibility of the Homeowners Association. The Board will however, retain jurisdiction for ensuring the storage volume for which the lakes were designed will be retained. Thereby, allowing no fill or easement encroachments.

The portion of the Collins-Osborn or Williams Creek running through this section should be included under the maintenance of Ponds West until such time the open ditch is set up for maintenance separately.

The subsurface drains (SSD) to be part of the regulated drain are those located 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 considered part of the regulated drain. The portion of the SSD which will be regulated other than those under curbs are as follows:

REAR OF LOTS 4, 7-10, 20-24 AND 28-34

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 the drain/this section will be $ 1386.35.

Parcels assessed for this drain may be assessed for the

Collins-Osborn or Williams Creek 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 Ponds West, Section 1 as recorded in the Office of the Hamilton County Recorder.

I recommend the Board set a hearing for this proposed drain for July 1993.

Kenton C. Ward
Hamilton County Surveyor

KCW/no

NCB National City Bank

INTERNATIONAL DEPARTMENT
101 WEST WASHINGTON STREET
INDIANAPOLIS, INDIANA 46255

TELEPHONE (317) 267-7751

TELEX 244038

STANDBY LETTER OF CREDIT

Letter of Credit No: 44183

Date: April 13, 1993

BENEFICIARY

HAMILTON COUNTY COMMISSIONERS
AND CITY OF CARMEL
Hamilton County Courthouse
Noblesville, Indiana 46060

FOR ACCOUNT OF

DART DEVELOPMENT CORP. II
P.O. Box 1423
Carmel, Indiana 46032

We hereby establish our Irrevocable Letter of Credit in your favor, for the account indicated above, for the sum or sums not exceeding an aggregate amount of USD98,937.00 (Ninety-Eight Thousand Nine Hundred Thirty-Seven U.S.Dollars).

Funds are available by your draft(s) at sight drawn on National City Bank, Indiana Indianapolis, Indiana.

Drafts are to be accompanied by:

1. The original of this Letter of Credit No. 44183.

2. Beneficiary's certificate stating that "Dart Development Corp. II has failed to complete storm sewers, sub-service drains, monuments and markers in Project Ponds West, Section 1".

All drafts drawn under this Letter of Credit are to be endorsed hereon and shall bear the clause: "Drawn under National City Bank, Indiana Indianapolis, Indiana Letter of Credit No. (as indicated above)", and must be drawn and presented at this office on or before April 13, 1994.

We hereby agree with you that all drafts drawn under and in compliance with the terms of this Letter of Credit will be duly honored upon proper presentation.

Except as otherwise expressly stated herein, this credit is subject to the Uniform Customs and Practice for Documentary Credits (1983 Revision), International Chamber of Commerce, Publication No.400.

Very truly yours,

Daisy B. Elliott
(Authorized signature)

(Authorized signature)

HAMILTON COUNTY DRAINAGE BOARD
CERTIFICATE OF COMPLETION AND COMPLIANCE

Address of premises on which land alteration was accomplished: Southwest corner of 146th Street and Springmill Road, Carmel, Indiana

Project Name: Ponds West Section I

Relative to plans prepared by MSE Corporation on September 3, 1993.

I hereby certify that:

1. I am familiar with drainage requirements applicable to such land alteration (as set forth by the Hamilton County Drainage Board).

2. Land alteration accomplished pursuant to the referenced drainage permit was observed by personnel under my direction, and

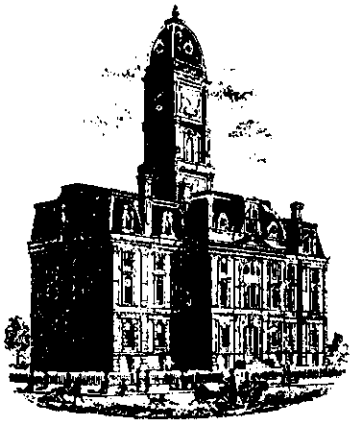
3. To the best of my knowledge, information and belief, such land alteration has been performed and completed in conformity with all such drainage requirements.

Certified this 7th day of January, 1994.

MSE CORPORATION

Bruce Hagen

Bruce E. Hagen
Professional Engineer #920299 - Indiana



SURVEYOR'S OFFICE

Hamilton County

Kenton C. Ward, Surveyor
776-8495
Suite 146
One Hamilton County Square
Noblesville, Indiana 46060-2230

August 29, 1995

TO: Hamilton County Drainage Board

RE: Ponds West Drain
Ponds West Sec. 1

Attached are as-builts, certificate of completion & compliance, and other information for Ponds West Sec. 1. 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 May 13, 1993. The changes are as follows: Structure 52 to 53 was lengthened and added an additional structure numbered 52A. This section of 24"RCP now totals 395'feet. Structure 86 to 87 was upgraded from 15"RCP to 18"RCP. Structure 51 to 52 consists of 18"RCP which has lengthened from 160'feet to 161'feet. Structure 29 to 30 consists of 63 feet of 24"RCP. This section was constructed during section 1 but was not on the original report. Structure 47 to 48 consisted of 128 feet of 30"RCP which was upgraded to a 36"RCP of the same length. Structure 48 to 49 was also upgraded to a 36"RCP of the same length.

The length of the drain due to the changes described above is now 11,891.

~~Attached also is a non-enforcement for the drain which I recommend that the Board approve at this time.~~ The non-enforcement was approved by the Board at its meeting on April 13, 1993.

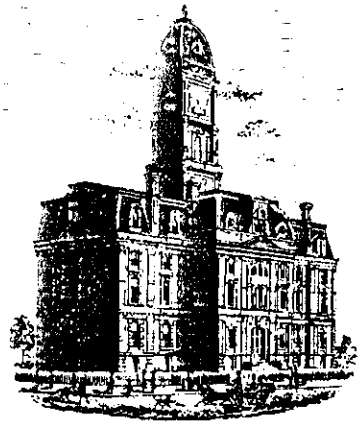
The bond or letter of credit from National City Bank, number 44183, dated April 13, 1993, in the amount of $98,937.00, has been recommended for release in a letter to the Commissioners dated December 23, 1993.

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

Sincerely,

Kenton C. Ward
Hamilton County Surveyor

KCW/nw



SURVEYOR'S OFFICE

Hamilton County

Kenton C. Ward, Surveyor
776-8495

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

To: Jeff Meyerose
MSE Corp.

Re: Ponds West Sec 1

Date: August 4, 1995

****

Dear Jeff,

Upon writing the final report for Ponds West Sec 1, a discrepancy was found on the mylar between the drawing and the profile for structures 47 to 48 and 48 to 49. The drawing above the profiles calls for 36" RCP's between these structures. The profile below calls for 30" RCP's. Subsequently, the structures were inspected and were determined to be 36" RCP's. In light of this error, a new mylar needs to be submitted for these structures. The new mylar should note the correct pipe size in the profile as determined by our inspection. Thank you for co-operation in this matter. If there are any questions or concerns please contact us immediately.

Sincerely,

Suzanne L. Mills

Suzanne L. Mills
Drainage Cartographer
776-8495

CONSTRUCTION PLANS FOR

PONDS WEST

Land Description

Land being part of the Northeast Quarter of Section 22, Township 18 North, Range 3 East, Hamilton County, Indiana, more particularly described as follows:

Beginning at the Southeast corner of said Northeast Quarter Section; thence South 89°20'11" West on and along the South line of said Quarter Section, a distance of 767.80 feet; thence North 00°04'20" East 475.00 feet; thence South 89°20'11" West parallel with the South line of said Quarter Section a distance of 733.70 feet; thence South 00°04'20" West 31.00 feet; thence South 89°20'11" West on and along the North line, and the prolongation thereof, of land described in a deed to Sarah B. Hein, recorded in Deed Book 329, Page 547, in the Office of the Recorder of Hamilton County, Indiana, a distance of 721.58 feet to the Northwest corner of said Hein's land; thence South 00°05'18" West, on Hein's West line, a distance of 444.00 feet to the South line of aforesaid Northeast Quarter Section; thence South 89°20'11" West on said South line a distance of 412.50 feet to the Southwest corner of said Quarter Section; thence North 00°05'18" East on and along the West line of said Quarter Section a distance of 2132.02 feet to a point 495 feet South of the Northwest corner of said Quarter Section; thence North 89°04'58" East parallel with the North line of said Quarter Section a distance of 412.50 feet; thence North 00°05'18" East 0.74 feet to an iron pipe found at the Southwest corner of land described in a deed to James M. Buck, as recorded in Deed Book 330, Page 304, in said Recorder's Office; thence North 79°49'38" East on and along the South line of said Buck's land a distance of 478.11 feet; thence South 00°55'02" East 57.80 feet; thence South 83°45'01" East 53.37 feet; thence South 41°01'24" East 43.56 feet; thence South 90°00'00" East 60.18 feet; thence South 11°18'35" East 310.67 feet; thence North 85°43'26" East 454.02 feet; thence North 00°48'29" West 795.00 feet to the North line of said Northeast Quarter Section; thence North 89°04'58" East on and along said North line, a distance of 1102.37 feet to the Northeast corner of said Quarter Section; thence South 00°02'16" East on and along the East line of said Quarter Section a distance of 2638.59 feet to the Point of Beginning, containing 123.288 acres, more or less, subject to rights-of-way, restrictions, easements, and legal drains.

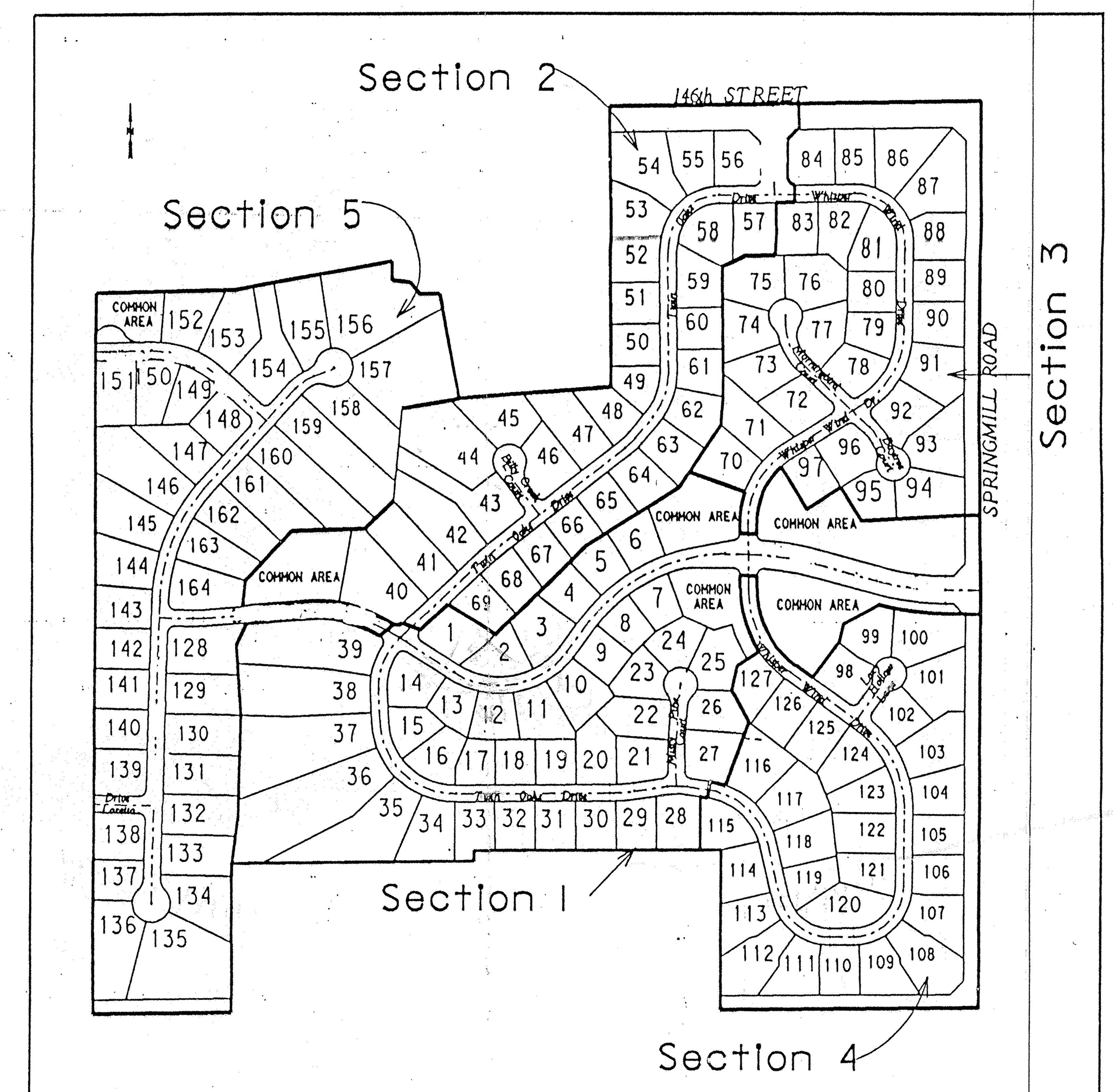
	SHEET NO.	DESCRIPTION
	1	TITLE SHEET
	2	SPECIFICATIONS
3-4	~~3-8B~~	SITE UTILITY PLANS & GRADING PLANS
	~~9-20~~	~~STREET PLAN & PROFILES~~
10-18	~~21-32~~	STORM PLAN & PROFILES
5-9	~~33-43~~	SANITARY PLAN & PROFILES
	~~44-46~~	~~CUL DE SAC & INTERSECTION DETAILS~~
	~~47-48~~	~~ENTRANCE DETAILS~~
	~~49-50~~	~~EROSION CONTROL PLANS~~
	~~51-52~~	~~DETAILS~~

SHEET NO.	REVISIONS
33-43	2/22/93 Revise San. Sewer Inverts
51	2/22/93 Revise San. Sewer Bedding Details
3-9,26-30,	3/12/93 See Sheets
47 48	3/12/93 See Sheets
1, 3-8, 27, 47, 49-52	3/28/93 See Sheets
1-52	4/9/93 Change Subd. name & Street Names
3-8, 8B, 10, 14, 15, 24, 25, 27, 28	4/20/93 See Sheets
41, 47	4/20/93 See Sheets
49	4/30/93 See Sheet
44 4, 13, 21, 33, 38	6/3/93 See Sheets
4, 8A, 21	7/30/93 See Sheets

NOTES:

CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL PERMIT ISSUING AGENCIES WITHIN THE TIME FRAME SPECIFIED BY THAT AGENCY PRIOR TO BEGINNING CONSTRUCTION.

ANY ALTERATIONS TO THESE PLANS NOT AUTHORIZED BY MSE ENGINEERING AND NOT IN ACCORDANCE WITH THE PLANS AND RECORDS ON FILE AT MSE ENGINEERING OFFICES SHALL RELIEVE MSE ENGINEERING OF RESPONSIBILITY FOR OVERALL ACCURACY OF PLANS.



PLANS PREPARED FOR

DART DEVELOPMENT CORP II
14122 SPRINGMILL ROAD
CARMEL, IN 46032
(317) 844-4451

PREPARED BY:

MSE Engineering
MSE Corporation
941 North Meridian
Indianapolis, IN 46204
317 634-1000
317 634-3576 FAX

August 10, 1993

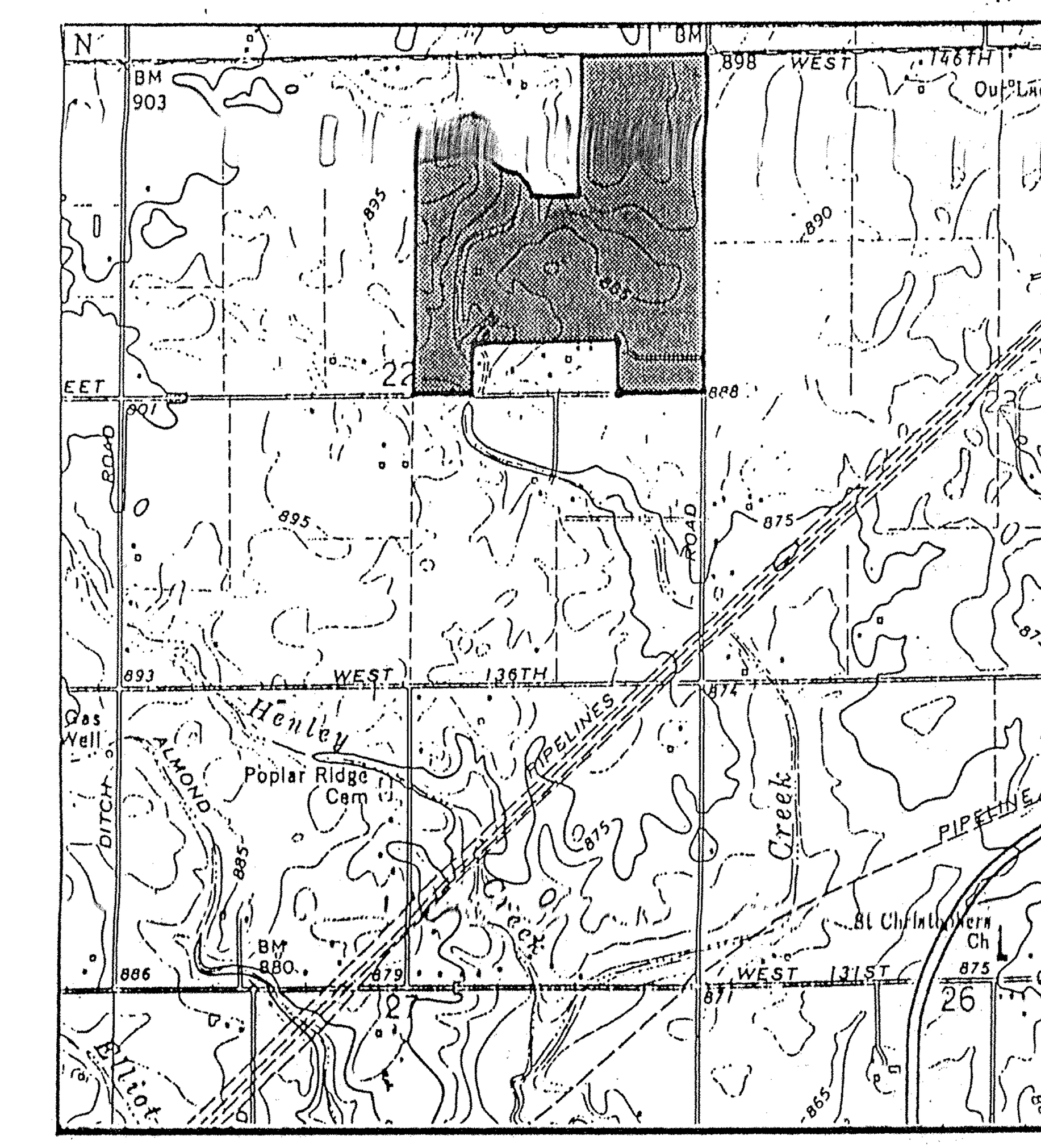
Asbuilt Listing Ponds West, Section 1

Owner: Dart Corporation

Engineer: MSE Corporation

Contractor: Harvey Construction

Lot 1	166' Southeast of manhole # 216, 65' of 6" pipe, 6' deep.
Lot 2	92' East of manhole # 240, 60' of 6" pipe, 6' deep.
Lot 3	184' Northeast of manhole # 239, 70' of 6" pipe, 6' deep.
Lot 4	197' Northeast of manhole # 239, 70' of 6" pipe, 6' deep.
Lot 5	46' Northeast of manhole # 238, 70' of 6" pipe, 6' deep.
Lot 6	58' Northeast of manhole # 238, 70' of 6" pipe, 6' deep.
Lot 7	69' Northeast of manhole # 238, 6' of 6" pipe, 6' deep.
Lot 8	289' Northeast of manhole # 239, 6' of 6" pipe, 6' deep.
Lot 9	171' Northeast of manhole # 239, 6' of 6" pipe, 6' deep.
Lot 10	63' Northeast of manhole # 239, 6' of 6" pipe, 6' deep.
Lot 11	172' East of manhole # 240, 6' of 6" pipe, 6' deep.
Lot 12	54' East of manhole # 240, 6' of 6" pipe, 6' deep.
Lot 13	301' Southeast of manhole # 216, 6' of 6" pipe, 6' deep.
Lot 14	157' Southeast of manhole # 216, 6' of 6" pipe, 6' deep.
Lot 15	83' Southeast of manhole # 205, 65' of 6" pipe, 6' deep.
Lot 16	90' Southeast of manhole # 205, 65' of 6" pipe, 6' deep.
Lot 17	217' East of manhole # 217, 70' of 6" pipe, 6' deep.
Lot 18	227' East of manhole # 217, 70' of 6" pipe, 6' deep.
Lot 19	55' East of manhole # 218, 80' of 6" pipe, 6' deep.
Lot 20	65' East of manhole # 218, 80' of 6" pipe, 6' deep.
Lot 21	148' North of manhole # 219, 80' of 6" pipe, 6' deep.
Lot 22	272' North of manhole # 219, 100' of 6" pipe, 6' deep.
Lot 23	282' North of manhole # 219, 100' of 6" pipe, 6' deep.
Lot 24	35' North of manhole # 220, 30' of 6" pipe, 6' deep.
Lot 25	364' North of manhole # 219, 25' of 6" pipe, 6' deep.
Lot 26	251' North of manhole # 219, 6' of 6" pipe, 6' deep.
Lot 27	107' North of manhole # 219, 6' of 6" pipe, 6' deep.
Lot 28	368' East of manhole # 218, 12' of 6" pipe, 6' deep.
Lot 29	251' East of manhole # 218, 6' of 6" pipe, 6' deep.
Lot 30	108' East of manhole # 218, 6' of 6" pipe, 6' deep.
Lot 31	395' East of manhole # 217, 6' of 6' pipe, 6' deep.
Lot 32	293' East of manhole # 217, 6' of 6" pipe, 6' deep.
Lot 33	170' East of manhole # 217, 6' of 6" pipe, 6' deep.
Lot 34	42' East of manhole # 217, 6' of 6" pipe, 6' deep.
Lot 35	162' Southeast of manhole # 205, 6' of 6" pipe, 6' deep.
Lot 36	67' Southeast of manhole # 205, 30' of 6" pipe, 6' deep.
Lot 37	68' North of manhole # 205, 6' of 6" pipe, 6' deep.
Lot 38	160' North of manhole # 205, 6' of 6" pipe, 6' deep.
Lot 39	278' North of manhole # 205, 6' of 6" pipe, 6' deep.
Lot 70	214' North of manhole # 237, 80' of 6" pipe, 6' deep.
Lot 71	226' North of manhole # 237, 80' of 6" pipe, 6' deep.



VICINITY MAP

Bruce Hagen

REGISTERED No. INDIANA PROFESSIONAL ENGINEER

9-3-93

Sanitary and Storm
AS-BUILTS
SECTION 1

This information was gathered for input into the Hamilton County Surveyor's Information System and is considered an official record of the GIS.
Entry Date: 3-10-04
Entered by: JDH

HAMILTON COUNTY INDIANA 1823

Sections 1-4 are to be approved and constructed at this time.
Section 5 to be approved and constructed at a later date.
4/1/93

STEPHEN E. BOURQUEIN REGISTERED No. S0441 STATE OF INDIANA LAND SURVEYOR

CERTIFIED THIS 14th DAY OF April 1993

STEPHEN BOURQUEIN
Registered Professional Land Surveyor No. S0441 - Indiana

FILED
AUG 03 1994
HAMILTON COUNTY DRAINAGE BOARD
SECRETARY

PROJECT DATA
ACRES : 123.288
LOTS : 164
LOTS/ACRE : 1.33

JOB No. 114-0522
SHEET 1 OF ~~52~~ 18

SITE WORK GENERAL NOTES AND SPECIFICATIONS

I. GENERAL CONDITIONS

A. The Contractor shall be responsible for obtaining or verifying that all permits and approvals are obtained from the respective city, county and state agencies prior to starting construction.

B. It shall be the Contractor's responsibility to determine the exact location of all existing utilities in the vicinity of the construction area prior to starting construction.

C. The Contractor shall be responsible for notification and coordination of all construction with the respective utility companies.

D. It shall be the responsibility of the Developer and Contractor to maintain quality control throughout the project; failure to do so may result in removal and replacement of defective work. It is recommended that the Developer have a qualified inspector on the job site at all times during construction.

E. It is essential that the work performed in conjunction with this project be installed according to these specifications. The Engineer will be required to certify that certain portions of this project were completed as per the construction plans. Therefore it is necessary to obtain approval and acceptance by the local, county, and state agencies that the construction was completed in compliance with these plans and specifications.

F. The designation A.S.T.M. shall refer to the American Society of Testing and Materials standards. The latest revision of listed A.S.T.M. standards shall prevail.

G. The designation I.N.D.O.T. shall refer to the Indiana Department of Transportation Standard Specifications dated 1988 and all subsequent revisions.

II. CLEARING AND GRUBBING

A. Clearing and grubbing shall consist of cutting, removal and satisfactory disposal of all trees, down timber, brush, projecting roots, stumps, rubbish, boulders, broken concrete, fencing (as designated), and other material on the project site and within the boundary as shown on the Construction Documents and/or as designated by "construction limits".

B. Special care shall be taken to insure that trees to be left remaining in the project area shall not receive limb, bark or root injuries. When such injuries occur, all rough edges of scarred areas shall be removed in accordance with accepted horticultural practice and the scars coated thoroughly with an asphaltum base tree paint.

C. All "unsuitable material" from clearing operations stated in Item II-A shall be removed to disposal area(s) off the project site; unless a Bury Pit is utilized. Bury Pits shall not be located below proposed building or pavement areas nor below proposed drainage structures or impoundment areas. Written permission of project owner must be obtained for bury pit construction on site.

D. Materials shall not be disposed of by burning unless approved by the local Fire Marshall.

III. TREE REMOVAL AND PROTECTION

A. Trees shall be removed from the project site only in areas occupied by roadway and surfaced areas in accordance with specifications of the City of Carmel.

B. Trees shall be removed from the project site as directed by the Developer and so designated.

C. Trees shall be removed from the project site where they interfere with the placement of storm or sanitary sewers.

D. The Contractor shall endeavor to save and protect trees of value and worth which do not impair construction of improvements as designated. In the event cut or fill exceeds 0.5 foot over the root area, the Developer shall be consulted with respect to protective measures to be taken, if any, to preserve such trees.

E. The Contractor shall be responsible for determining the method of protection of tops, trunks and roots of existing trees on the project site which are to remain. Existing trees exposed to potential damage shall be boxed, fenced or otherwise protected before any adjacent work is started. Earth, construction material, and equipment shall not be stockpiled or stored within the spread of branches. Branches which need to be removed or are broken shall be neatly trimmed and scars shall be covered with tree paint.

F. See note II-B.

IV. STRIPPING OF TOPSOIL

A. The Contractor shall verify that all topsoil has been removed in the areas to be occupied by road, walks and designated building areas. Topsoil shall be removed to a depth of 6 inches or deeper, if necessary, to assure the removal of vegetation matter where required.

B. Topsoil shall be kept separated from suitable fill materials and shall not be used as fill under pavement and/or building areas.

C. Topsoil shall be stored at a location where it does not interfere with construction operations. Excess topsoil shall be removed from the site. Topsoil storage areas shall be approved in writing by the Owner.

D. Topsoil shall be reasonably free from subsoil debris and stones.

V. GRADING

A. The Contractor shall perform all grading operations to bring subgrades, after final compaction, to the grades required for site improvement.

B. Subgrade shall be proofrolled with appropriate equipment and all spongy and otherwise unsuitable material shall be removed and replaced with suitable material.

C. Subgrade for streets shall be prepared in compliance with **Hamilton County.** Subgrade for streets shall be compacted to 100% of standard proctor in the upper 6" of depth. Depths of embankment below the upper 6" shall be compacted to 95% of standard proctor. See Pavement Construction Section XI.

D. All fill material shall be formed from soil free of deleterious material. Prior to placement of fill, a sample of the proposed fill material should be submitted to the soils engineer for his approval. The fill material should be placed in layers not to exceed eight (8") inches in loose thickness and should be spread and dried to a moisture content which will permit proper compaction.

E. All fill material in areas outside of building and pavement areas shall be compacted lightly and protected from erosion. Areas of building construction shall not have unsuitable material placed in that location, and fill shall be compacted in accordance with the Soils Engineer's report (minimum of 95% standard proctor).

VI. SANITARY SEWER CONSTRUCTION

1. Standard specifications of the Clay Waste District and Indiana Department of Highways shall apply for all work and materials. Pipe shall be installed in accordance with Section 715.

2. Sanitary sewer pipe shall be PVC in accordance with ASTM D-3034 (S.D.R. 35) and ASTM 2321. PVC pipe shall have grooved bell and gasket. The pipe shall be made of PVC plastic having a cell classification of 12454B.

3. PVC sewer fittings shall conform to the requirements of ASTM D-3034-89 specification. Fittings in sizes through 8" shall be molded in one piece with elastomeric joints and minimum socket depths as specified in sections 6.2 and 7.3.2. Fittings 10" and larger shall be molded or fabricated in accordance with section 7.11 with manufacturers standard pipe bells and gaskets. Wall thickness of fittings shall be SDR 26 as defined in section 7.4.1 of the specifications. Gaskets for elastomeric joints shall be molded with a minimum cross-sectional area of 0.20 square inches and conform to ASTM F-477 specification. Fittings shall be manufactured by Harco or equal.

4. All sanitary manholes shall be "precast concrete" manholes in accordance with ASTM C-478 and Section 720. O-Rings shall conform to C-443. Kent Seal or equivalent shall also be applied to all joints and between riser rings and castings. Manhole step spacing shall be no more than 16-inches.

5. Butyl rubber coating shall be applied around each manhole joint from 6-inches above to 6-inches below each joint. The appropriate primer shall be applied prior to applying the rubber coating. Inside joints to be filled with precast plug material.

6. The casting elevations are set by plan. However, the castings are to be adjusted in the field by the Engineer's representative, should a discrepancy occur between plan grade and existing grade. New manhole ring and cover shall be installed to establish grade. Maximum height of adjusting rings shall be 12-inches.

7. Backfill around all structures and all cuts under paved areas with granular material. Trenches opening within 5-feet of paved roadways shall be backfilled with granular material in accordance with Section 211. Backfill under sidewalks shall be granular, unless the walks are constructed a minimum of 6 months after backfill has been in-place.

8. The Contractor shall be responsible for verifying that all state highways, city and county permits have been obtained by the developer prior to start of construction.

9. The Contractor shall be required to furnish the developer's Engineer with a set of prints, marked in red pencil, showing actual sewer location and invert, to include lateral location, depth and length. Such "as-built" prints must be received by the Engineer before the final contract payment can be authorized. The sanitary sewer laterals and stubs termination shall be indicated on the surface with a metal fence post set immediately above said termination point.

10. All sanitary sewer lines upon completion will be required to pass an infiltration weir test and a low pressure air test, unless otherwise directed by the Engineer. Said test shall be conducted according to NCPI Standard Method, and shall be witnessed by an Engineer and a representative of the Clay Waste District.

11. Deflection tests shall be performed on all flexible pipe after the final backfill has been in-place at least 30 days. No pipe shall exceed a vertical deflection of 5 percent deflection test results. (The following are considered non-flexible pipes: concrete pipe, ductile iron pipe and cast iron pipe.) The deflection test shall be performed with a nine-point mandrel. Proving rings shall be available.

12. All mandrel testing shall be observed by a Professional Engineer for certification and a representative of the Clay Waste District.

13. The ends of laterals are to be plugged tight with a braced plastic disc or cap capable of withstanding a low pressure air test without leakage.

14. Bedding for flexible pipe shall be No. 8 crushed stone from 6-inches below the pipe to 12-inches above the pipe. Bedding for rigid pipe shall be No. 8 crushed stone from 6-inches below the pipe to the spring line of the pipe and from this point to 12-inches above shall be fill sand or equivalent. Manholes shall be placed on no less than 6-inches of No. 8 crushed stone bedding.

15. Water and sewer line crossings and separations shall be in accordance with Ten States' Standards.

16. Trench shall be opened sufficiently ahead of pipe laying to reveal obstructions, and shall be property protected and/or barricaded when left unattended.

17. No water shall be permitted to flow into the sanitary sewer system during construction. Contractor shall utilize a pump to keep the water level below the pipe. Pump discharge shall be directed to a storm outlet. Any pipe entering existing sewers shall be plugged, until such time as all tests on the sewers have been completed and the lines have passed all punch lists.

18. All sewer laterals installed by the mainline Contractor shall be bedded the same as the main line sewer.

19. Forty-eight (48) hours notice shall be given to the Clay Regional Waste District prior to the start of sewer construction. Also, 48-hours notice shall be given prior to any testing done on the sewer.

20. Manhole castings shall be stamped "SANITARY SEWER" (Neenah Casting R 1642 or equal) and be self-sealing type. Waterproof castings shall be Neenah R-1916-F1 and stamped "Sanitary Sewer".

21. The minimum slope for sewer acceptance by the Clay Township Regional Waste District are:

Size of Pipe	Minimum Constructed Slope
8-inch	0.40%
10-inch	0.28%
12-inch	0.22%
15-inch	0.15%
18-inch	0.12%

22. The Contractor shall provide measurements of the slope of the sewer for each manhole section as construction progresses. Such measurements shall be certified by a Registered Land Surveyor or Engineer and be available on-site for observation by the District's Inspector. No more than three manhole sections can be constructed in advance of such measurements.

23. In the event the Contractor does not meet the minimum slopes, the sewer section and any other affected sewer sections shall be reconstructed to meet such minimum slopes.

VII. EROSION PROTECTION DURING CONSTRUCTION

A. The Contractor shall provide adequate erosion protection measures during construction.

1. Rip-rap at locations designated on the plans.
2. Swales draining the site shall be mulch seeded or sodded and Contractor shall be responsible for establishing grass cover.
3. Construction operations conducted on private or city-owned property shall be neatly finish graded and mulch seeded.

VIII. STORM SEWER CONNECTION

A. Storm sewer structures shall comply with current specifications of the City, County and all agencies with respect to design and quality of construction.

B. All storm sewer construction inside public right-of-way, either existing or proposed, shall be in accordance with the Hamilton County specifications. Contractor shall notify the Hamilton County Surveyor forty-eight hours prior to commencement of storm sewer construction.

C. Where reinforced concrete pipe is shown on the construction plans, it shall be in accordance with A.S.T.M. C-76 Class III Wall "B", unless otherwise specified on the plans.

D. Where corrugated metal pipe is shown on the construction plans, it shall be 16 gauge unless otherwise specified and shall have the connecting bands and seals as specified by the manufacturer. C.M.P. may be either aluminum pipe or zinc coated steel sheets in accordance with A.S.T.M. A-444.

E. Manholes, catchbasins, and inlets may be precast concrete or poured in place concrete.

F. Precast concrete and steel for manholes and inlets shall be in accordance with A.S.T.M. C-478.

G. Castings shall be as shown on the Structure Data Table.

H. Granular backfill shall be required for all crossings under pavement areas, per the Hamilton County specifications.

IX. UTILITIES

A. Water Line

1. See Sanitary Sewers Notes for vertical and horizontal separations (Note VI-1-1 and 2).
2. All water lines shall be in accordance with the Standards and Specifications of the Indiana State Board of Health and the Hamilton Western Utilities. Sterilization of water mains shall be in accordance with the Indiana State Board of Health and the Hamilton Western Utilities for procedures and time of treatment.
3. Pressure tests for the water system shall be done in accordance with manufacturer's recommendations and the Hamilton Western Utilities specifications.
4. Granular backfill shall be required for all utility crossings under pavement areas. See Section VI-W.
5. Where private water lines are shown on the contract plans the pipe materials shall meet the Hamilton Western Utilities specifications.
6. Thrust blocks shall be installed in accordance with the details contained within the plans or the Hamilton Western Utilities standard specifications as applicable.
7. Felt material not to exceed 3/8 inch thick shall be placed between pipes and concrete thrust blocks.
8. All valves and appurtenances for domestic and fire protection water mains shall be approved by the Underwriters Laboratories and Factory Mutual for critical use.

B. Electric and Telephone

1. Conduit shall be required for all crossings under pavement areas.
2. Granular backfill shall be required for all crossings under pavement areas and three feet beyond the edge of the pavement.
3. Concrete pads for electric and telephone transformers shall be set at the approximate ground grade as shown on the Site Development Grading Plans.

X. GRANULAR BACKFILL

Shall be inaccordance with I.N.D.O.T. Standard Specifications.

XI. PAVEMENT CONSTRUCTION

A. All pavement construction shall be in accordance with the plans and specifications and conform to the minimum standards of Hamilton County.

B. Subgrade shall be prepared in compliance with Section 207.02 of the I.N.D.O.T. standard specifications. No traffic shall be permitted on the prepared subgrade prior to paving.

C. Backfilling of utility trenches with granular material under pavement areas is required and shall conform to Hamilton County specifications.

D. Contractor shall notify Hamilton County forty-eight hours prior to commencement of street construction within any existing or proposed right-of-way.

XII. CONCRETE CURB AND WALKS

A. See Detail Sheet for type and details. Curbs and walks within existing or proposed right-of-way shall be constructed in accordance with Hamilton County specifications.

B. Concrete shall be ready mixed Portland cement conforming to A.S.T.M. C-150. Aggregate shall conform to A.S.T.M. C-33. Compressive strength of concrete at 28 days shall be 4000 p.s.i. Where required, reinforcement shall be welded steel wire fabric conforming to A.S.T.M. A-185.

C. Application

1. Place concrete only on a moist, compacted subgrade or base free from loose material. Place no concrete on muddy or frozen subgrade.
2. Concrete shall be deposited so as to require as little rehandling as practical. When concrete is to be placed at an atmospheric temperature of 35+/-F. or less, Paragraph 702.10 of the I.N.D.O.T. Specifications, 1988 edition, shall apply.
3. Except as otherwise specified, cure all concrete by one of the methods described in Section 501.17 of the I.N.D.O.T. Specifications, 1988 edition.

XIII. FINISH GRADING AND SEEDING (Developer shall designate location if required.)

A. Topsoil or approved fill shall be spread over the rough grade to a depth sufficient to insure finish grades are met after rolling and settlement. The minimum thickness of the topsoil shall not be less than 4". New grades shall slope uniformly between levels established on the plans. Intersections of new grades with existing grades shall be uniform and smooth.

B. Fertilizer and agricultural limestone shall be spread uniformly over the area to be seeded and mixed into the top two inches of soil with a disk harrow, rotary tiller, or other approved equipment. Fertilizer shall be spread at the rate of 800 pounds per acre and agricultural limestone at the rate of one-half ton per acre, unless otherwise specified.

C. A seeding mixture in stripping, cut, or fill areas shall be applied at a rate of 90 pounds per acre with a mixture as follows: 18 lbs. Kentucky Bluegrass, 18 lbs. Park Kentucky Bluegrass, 18 lbs. Delta Kentucky Bluegrass, 10 lbs. Pennlawn Fescue and 26 lbs. Annual Ryegrass. Wood cellulose fibre, straw or mulch, as approved by the Engineer, shall be applied at a rate of 3/4 tons per acre.

XIV. LIME MODIFIED SOIL (Developer shall designate location if required.)

A. The use of Lime Modification shall be used to improve the upper 12" of subgrade that does not conform to Section 207 of the 1988 I.N.D.O.T. Specifications. The lime used shall be "Hydrated Lime, Code 'L'", as manufactured by Mississippi Lime, or equal. The following construction procedures shall be utilized.

1. The subgrade shall be placed to the proper grade.
2. Lime shall be dry placed on the subgrade at an application rate of 24 to 36 pounds per square yard as directed by the Engineer. The lime and soil shall then be mixed by tractor-drawn disc harrows, scarifiers, rotary mixers, or front end loaders equipped with bucket teeth. Several passes shall be made to a depth of 12" as directed by the Engineer.
3. Initial compaction shall be performed with a sheepsfoot roller. The soil and lime shall be compacted in 6" lifts until the proper grade is obtained. Grading will be accomplished by blading the excess to one lane and compacting the mixed lime and soil in the 6" lifts. The final passes shall be made with a steel wheel or pneumatic-tired roller as approved by the Engineer.
4. The density of the soil-lime mixture will be determined by the City of Carmel near the end of the finishing operations. Any portion of the soil-lime mixture not passing the density requirements shall be determined by the City of Carmel in accordance with AASHTO T-191.
5. When compaction of the lime-soil mixture is nearing completion, the surface shall be sloped to the required lines, grades, and cross section, and compaction continued using a steel wheeled roller until the minimum specified density is obtained.
6. The surface shall be maintained in a moist condition by means of a fine spray of water during all finishing operations. The treated material shall be maintained in a moist condition by sprinkling with water for a period of seven days. Traffic of all types shall be kept off the lime modified soil for seven days, or thereafter until in the opinion of the Engineer the lime-modified soil will support traffic without being damaged. When allowed on the subgrade, traffic shall exercise further care in driving over it so as not to tear up the subgrade.
7. Caution: Lime and lime mixtures are caustic in nature. The manufacturer of the lime shall be consulted to determine what special precautions are required to protect the skin, and particularly the eyes.

XVI. REMOVAL OF PAVEMENT, SIDEWALKS, CURBS, ETC.

A. Pavement removal shall consist of the removal and satisfactory disposal of bituminous pavement or the total of any combination of base, binder and surface course of any pavement on a rigid base (including the base).

B. Prior to performing the work of pavement removal at locations indicated on the plans, or where directed, cement concrete pavement to be removed shall be cut with a power driven concrete saw along designated lines. Sawing shall be such that any portion of the pavement to remain in place will not be damaged. Any portion that is damaged or removed outside the designated lines shall be replaced by the Contractor, at his expense.

XVII. SEALING CRACKS AND JOINTS IN BITUMINOUS PAVEMENT

A. Reflection cracks and joints, both longitudinal and transverse, as well as checked, cracked and alligatored areas shall be sealed using from 0.10 to 0.15 gallon per square yard of AE-90 or AE-150 bituminous material and covering with either No. 14-2 or No. 17 sand. The cracks, joints and alligatored areas shall be cleaned by blowing with compressed air or other suitable means prior to the placing of the bituminous sealing material. The bituminous material shall be allowed to penetrate the cracks and joints in the existing surface and any surplus shall be squeegeed back and forth over the area to refill them. Any excess material shall be squeegeed off the pavement. The sealed surface shall be covered with approximately 5 pounds of sand per square yard.

STRUCTURE DATA TABLE
SANITARY SEWER

Structure Number	Structure Type	Casting
200-201	Manhole Type "C"	R-1642
202	by others	----
203	by others	----
204	Manhole Type "C"	R-1916-F1
205-206	Manhole Type "C"	R-1642
207	by others	----
208-246	Manhole Type "C"	R-1642
247	by others	----
250	Manhole Type "C"	R-1642

STRUCTURE DATA TABLE
STORM SEWER

Structure Number	Structure Type	Casting
1	Inlet Type "A"	R-3501-N
2	Inlet Type "A" (modified)	R-3516
3	Manhole Type "B"	R-3501-N
4	End Section	----
5	Manhole Type "B"	R-3516
6	Manhole Type "B"	R-1772-A
7	Inlet Type "A"	R-4342
8	Inlet Type "A" (modified)	R-3516
9	Manhole Type "B"	R-3516
10	End Section	----
11	Inlet Type "B" (modified)	R-3516
12	Inlet Type "B" (modified)	R-3516
13	Special Structure	----
14	Manhole Type "B"	R-1772-A
14A	End Section	----
15	Inlet Type "A" (modified)	R-3516
16	End Section	----
17	End Section	----
18	End Section	----
19	Inlet Type "A"	R-4342
20	Inlet Type "A" (modified)	R-3516
21	Manhole Type "B"	R-3516
22	No Structure	
23	Manhole Type "B"	R-4342
24	Manhole Type "B"	R-4342
25	Manhole Type "B"	R-4342
26	End Section	----
27	Inlet Type "A" (modified)	R-3516
28	Inlet Type "B" (modified)	R-3516
29	Manhole Type "B"	R-4342
30	End Section	----
31	Inlet Type "A"	R-4342
32	End Section	----
33	End Section	----
34	Inlet Type "A"	R-3501-N
35	Inlet Type "A"	R-3501-N
36	Manhole Type "B"	R-3516
37	End Section	----
38	Manhole Type "B"	R-1772-A
39	Manhole Type "B"	R-1772-A
40	Manhole Type "B"	R-4342
41	No Structure	
42	Inlet Type "B" (modified)	R-3516
43	Inlet Type "B" (modified)	R-3516
44	Manhole Type "B"	R-4342
45	Manhole Type "B"	R-1772-A
46	Manhole Type "B"	R-3501-N
47	Manhole Type "B"	R-3501-N
48	Manhole Type "B"	R-1772-A
49	End Section	----
50	Inlet Type "A" (modified)	R-3516
51	Inlet Type "B" (modified)	R-3516
52	Manhole Type "B"	R-4342
53	End Section	----
54	Inlet Type "A" (modified)	R-3516
55	Manhole Type "B"	R-3501-N
56	Inlet Type "B" (modified)	R-3516
56A	End Section	----
57	Manhole Type "B"	R-4342
57A	Manhole Type "B"	R-4342
58	Inlet Type "B" (modified)	R-3516
59	Inlet Type "A" (modified)	R-3516
60	No Structure	
61	Inlet Type "A"	R-4342
62	Manhole Type "B"	R-1772-A
63	Inlet Type "A"	R-3501-A
64	Inlet Type "B" (modified)	R-3516
65	Manhole Type "B"	R-4342
66	Special Structure	R-4216-D
67	Manhole Type "B"	R-3501-N
68	Manhole Type "B"	R-3501-N
69	Manhole Type "B"	R-4342
70	Inlet Type "B" (modified)	R-3516
71	Inlet Type "B" (modified)	R-3516
72	End Section	----
73	End Section	----
74	Inlet Type "B" (modified)	R-3516
75	Inlet Type "B" (modified)	R-3516
76	End Section	----
77	End Section	----
78	Inlet Type "B" (modified)	R-3516
79	Inlet Type "B" (modified)	R-3516
80	End Section	----
81	End Section	----
82	Inlet Type "B"	R-3150
83	Inlet Type "B"	R-3150
84	End Section	----
85	End Section	----
86	Inlet Type "B"	R-3150
87	Inlet Type "A"	R-3150
88	End Section	----
89	Manhole Type "B"	R-4342
90	Special Structure	R-4216-D
91	End Section	----
92	Manhole Type "B"	R-3516
93	Manhole Type "B"	R-3516
94	Manhole Type "B"	R-3516
95	Inlet Type "A" (modified)	R-3516
96	Manhole Type "B"	R-1772-A
97	Manhole Type "B"	R-4342
98	Manhole Type "B"	R-4342
99	No Structure	
100	Manhole Type "B"	R-3516
101	Inlet Type "B" (modified)	R-3516
102	Inlet Type "B"	R-4342
103	Inlet Type "A"	R-4342
104	End Section	----
105	Inlet Type "A"	R-3501-N
106	End Section	----

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AUG 03 1994
HAMILTON COUNTY DRAINAGE BOARD
SECRETARY

Revisions and Dates:
2-25-93 Rev San Sewer Specs

Designed by:
Drawn by:
Checked by:
Approved by: SEB

STEPHEN E. BOURQUIN REGISTERED No. S0441 STATE OF INDIANA LAND SURVEYOR
Date February 8, 1993

Mid States Engineering, Inc.
501 Congressional Blvd., Suite 110
Carmel, IN 46032
317-843-5080

Title: SPECIFICATIONS

Scale: Job No.: 174-0522 Sheet No.: 17 Of: 18

Sanitary and Storm AS-BUILTS

Revisions and Dates
3-12-93 Revise Springmill R/W Grading,
3-28-93 Delete Str. 80, Add pipe run 81-112
3-28-93 Add 20 Lft 8" CMP to SSD outfalls
4-9-93 Changed Street Names
4-20-93 Relocate Str 111 & 112

Designed by: BEH
Drawn by: DSC
Checked by: BEH
Approved by: SEB
Date:

STEPHEN E. BOURDEAU — No. S0441 — STATE OF INDIANA — LAND SURVEYOR

MSE Engineering
MSE Corporation
501 Congressional Boulevard
Suite 110
Carmel, IN 46032
317 843-5080
317 843-5089 FAX

PONDS WEST

Title: SITE UTILITY PLAN & GRADING PLAN
SECTION 1

Scale: 1" = 50' Job No.: 114-0522 Sheet No.: 3 of 57

DGN: 522G8 PRF: 522G8 3 /8

LEGEND

EXISTING	PROPOSED
STORM SEWER	
SANITARY SEWER	
MANHOLE	
INLET	
END SECTION	
STORM STR. NO.	
SANITARY STR. NO.	

EXISTING	PROPOSED
FLOW ARROW	
CONTOUR	
890.6 SPOT ELEVATION	
MATCH EXISTING GRADE	

Sanitary and Storm AS-BUILTS

PONDS WEST

COMMON AREA (153833 SFT)

CHAS OSBORNE LEGAL DRAIN

Pointe Drive

Twin Oaks Drive

Ponds Pointe

Oak Drive

PROPOSED BRIDGE OVER WILLIAMS CREEK

FLOODWAY LIMIT

EXISTING TRAILER TO BE REMOVED

AREA TO BE EXCAVATED

EXISTING POND

EXISTING HOUSE TO BE REMOVED

COMMON AREA POND 6 (35649 SFT)
N.P. = 881.0
100 YEAR ELEV. = 884.64
BOTTOM = 873.00
IRREG. L.S.E.
IRREG. D.E.

POND 1
N.P. = 876.0
100 YEAR ELEV. = 881.09
IRREG. D.E.
EXISTING POND

LEGEND	EXISTING	PROPOSED
STORM SEWER		
SANITARY SEWER		
MANHOLE		
INLET		
END SECTION		
STORM STR. NO.		
SANITARY STR. NO.		
FLOW ARROW		
CONTOUR		
890.6 SPOT ELEVATION		
MATCH EXISTING GRADE		

Revisions and Dates	
3-12-93	Relocate Str 8 & 9, Rev Line A Sta 11+14
3-28-93	Add 20 Lft 8" CMP to SSD outfalls
4-09-93	Changed Street Names
4-20-93	Relocate Str 18A & 19
6-3-93	Rev. C/L grade Line "C" 60+00-69+00
8-2-93	ADD STORM STRUCTURE No. 52A

Designed by: BEH
Drawn by: DSC
Checked by: BEH
Approved by: SEB
Date:

STEPHEN E. BOURGEOIS No. S0441 STATE OF INDIANA LAND SURVEYOR

MSE Engineering
MSE Corporation
501 Congressional Boulevard
Suite 110
Carmel, IN 46032
317 843-5080
317 843-5089 FAX

Title: SITE UTILITY PLAN & GRADING PLAN
SECTION 1

Scale: 1" = 50' Job No.: 14-0522 Sheet No.: 4 of 52

DGN: 522G2.DGN PRF: 522G2.PRF

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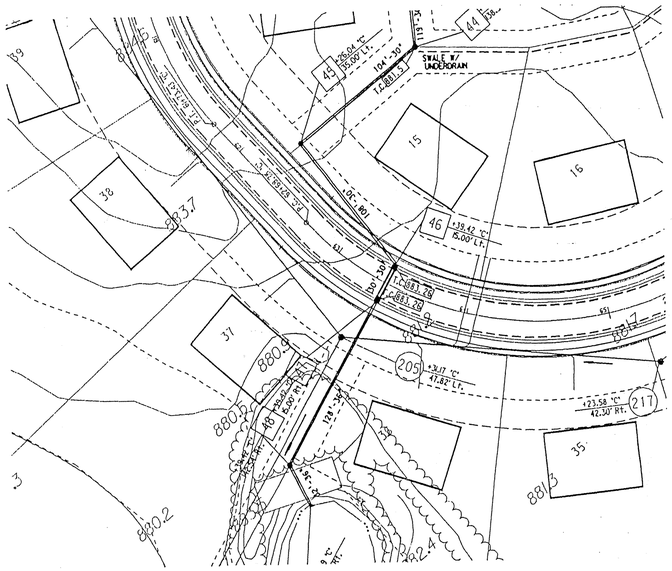
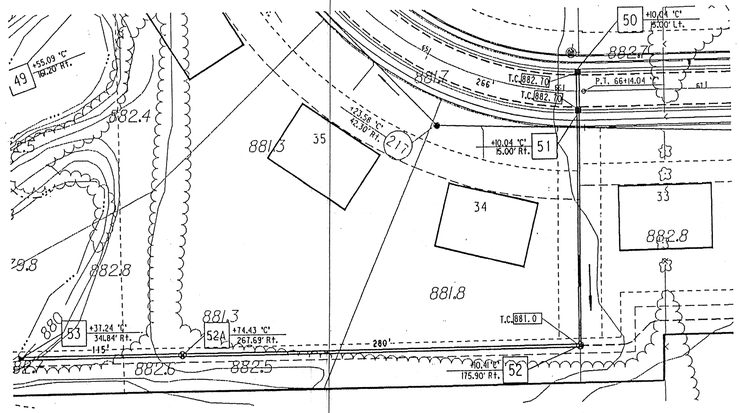
AUG 03 1994
HAMILTON COUNTY DRAINAGE BOARD
SECRETARY





NOTES:

LENGTHS OF PIPES INDICATED ARE FROM *CENTER TO CENTER OF STRUCTURES AND ARE NOT ACTUAL PIPE LENGTHS.*

CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL PERMIT ISSUING AGENCIES WITHIN THE TIME FRAME SPECIFIED BY THAT AGENCY PRIOR TO BEGINNING CONSTRUCTION.

GRANULAR BACKFILL REQUIRED

SGR

SCALE:
PLAN: 1" = 50'
PROFILE:
VERTICAL 1" = 5'
HORIZONTAL 1" = 50'

BENCH MARK DESCRIPTION

P.K. NAIL IN THE NORTHWEST FACE OF A POWERPOLE AT THE SOUTHWEST CORNER OF THE 146TH STREET AN SPRINGMILL ROAD INTERSECTION.

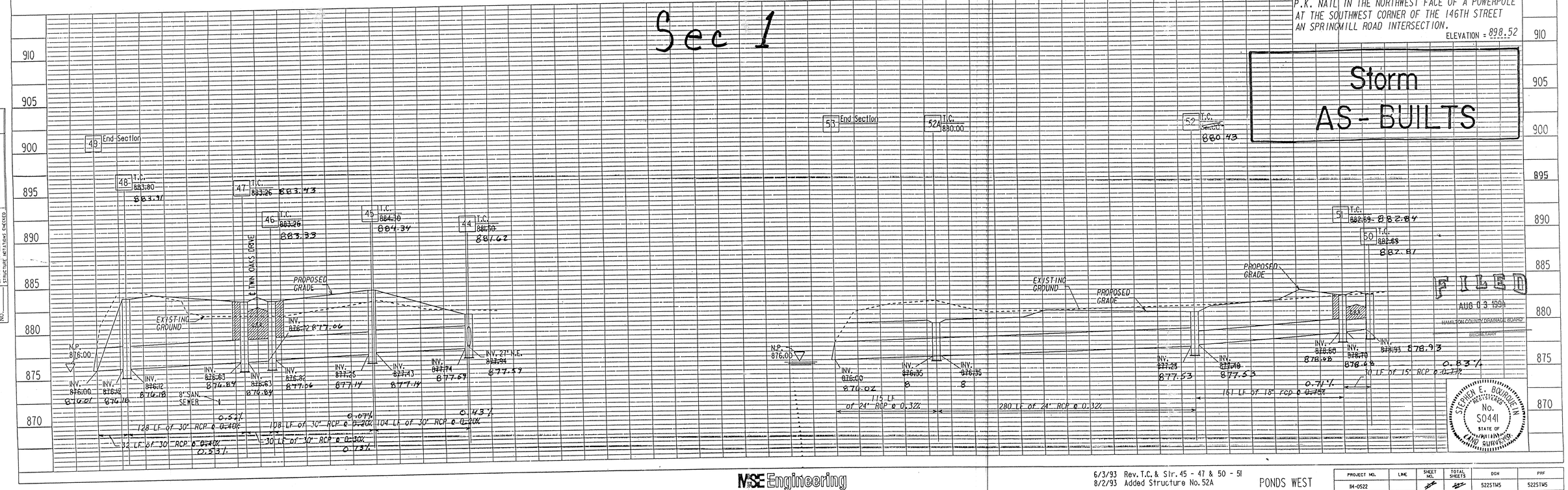
ELEVATION = 898.52

PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
NOTE BOOK PLANS CHECKED
NO. PLANS NOT CHECKED
DATE
BY

PROFILE
SURVEYED
PLOTTED
PLANS CHECKED
NOTE BOOK S.M.'s NOTED
NO. STRUCTURE ANTIONS CHECKED
DATE
BY

Sec 1

Storm AS-BUILTS



STEPHEN E. BOURQUIN
REGISTERED
No. S0441
STATE OF INDIANA
LAND SURVEYOR

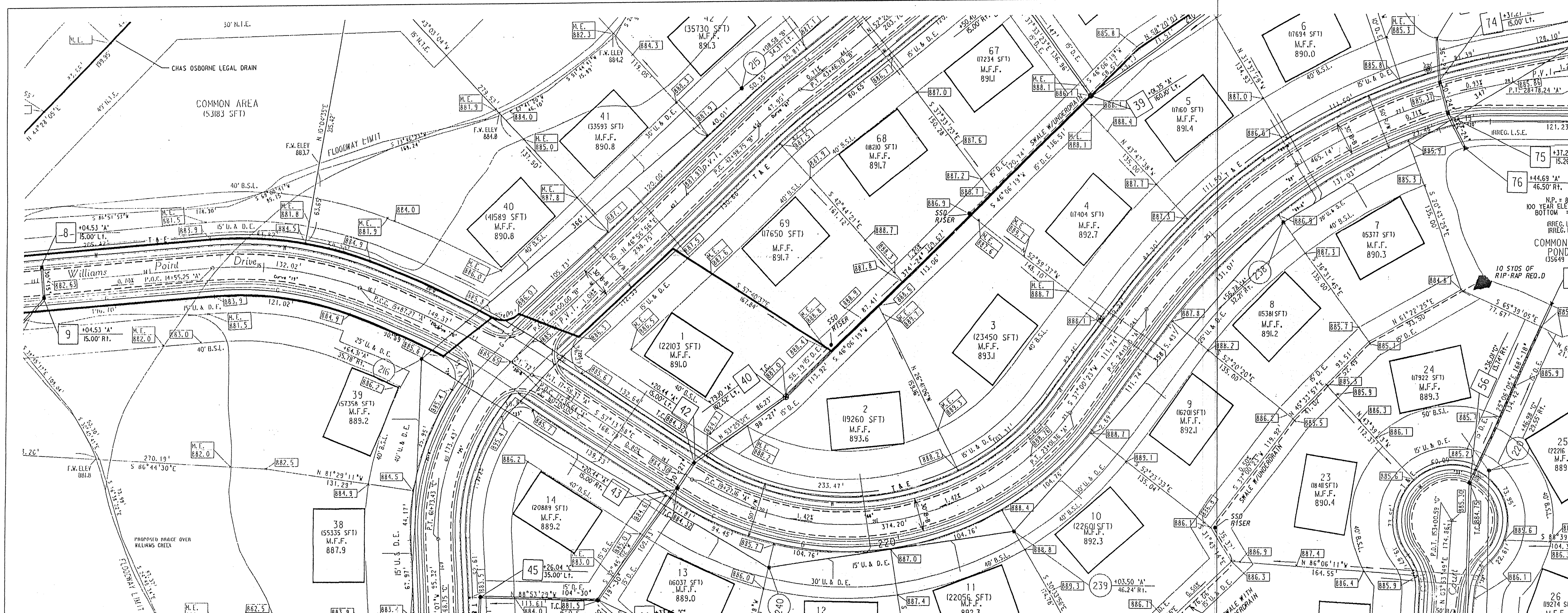
MSE Engineering

6/3/93 Rev. T.C. & Str. 45 - 47 & 50 - 51
8/2/93 Added Structure No. 52A

PONDS WEST

PROJECT NO.	LINE	SHEET NO.	TOTAL SHEETS	DGN	PRF
94-0522		10	18	522STM5	522STM5

STORM PLAN & PROFILE



NOTES:

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CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL PERMIT ISSUING AGENCIES WITHIN THE TIME FRAME SPECIFIED BY THAT AGENCY PRIOR TO BEGINNING CONSTRUCTION.

GRANULAR BACKFILL REQUIRED

GBR

SCALE:
PLAN: 1" = 50'
PROFILE:
VERTICAL 1" = 5'
HORIZONTAL 1" = 50'

BENCH MARK DESCRIPTION

P.K. NAIL IN THE NORTHWEST FACE OF A POWERPOLE AT THE SOUTHWEST CORNER OF THE 146TH STREET AN SPRINGMILL ROAD INTERSECTION.

ELEVATION = 898.52

This information was entered into the Hamilton County GIS. Entry Date 3-10-04 Entered by: JDH

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Storm AS-BUILTS

STEPHEN E. BOURQUEIN REGISTERED No. S0441 STATE OF INDIANA LAND SURVEYOR

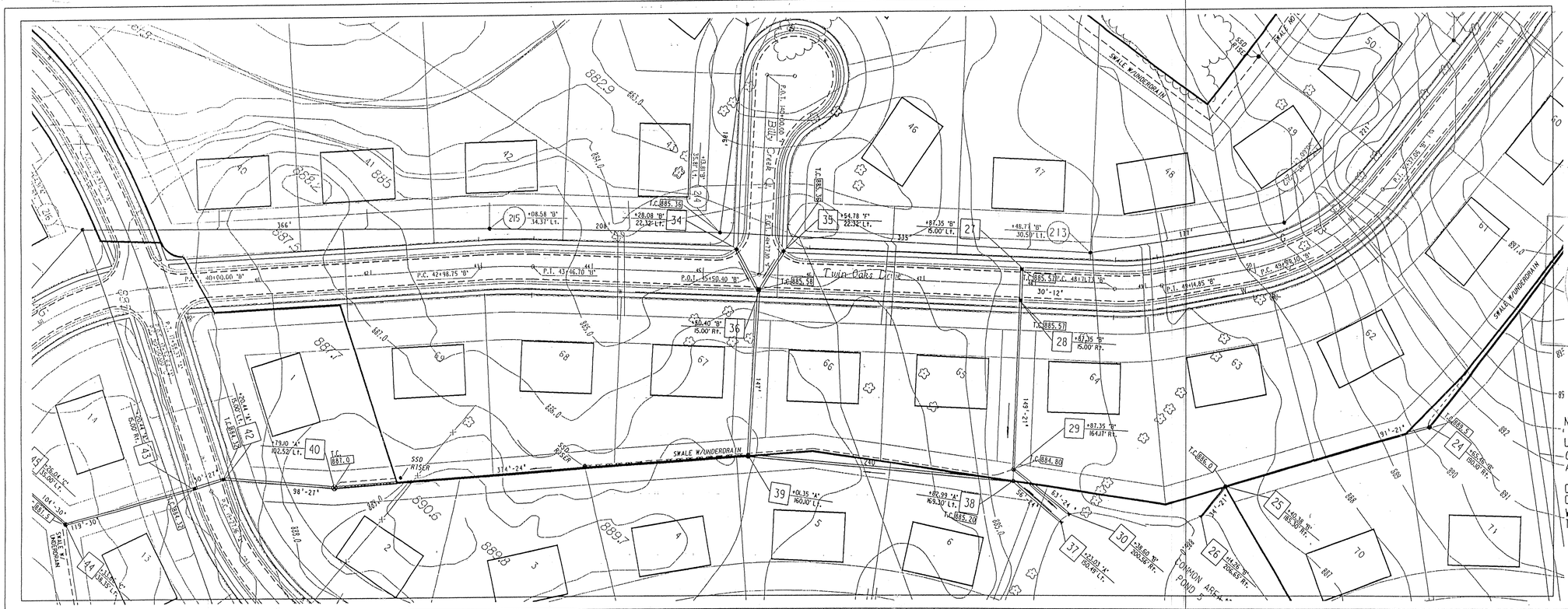
April 14, 1993

MSE Engineering

PONDS WEST

PROJECT NO.	LINE	SHEET NO.	TOTAL SHEETS	DGN	PRF
84-0522		11	18	522STM3	522STM3

STORM PLAN & PROFILE



PLAN — SURVEYED: — PLOTTED: — PLANS PREPARED: — NOTE BOOK: — NO.: — STREETS CHECKED: — DATE:

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

Entry Date: 3-10-04

Entered by: JDH

NOTES:

LENGTHS OF PIPES INDICATED ARE FROM CENTER TO CENTER OF STRUCTURES AND ARE NOT ACTUAL PIPE LENGTHS.

CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL PERMIT ISSUING AGENCIES WITHIN THE TIME FRAME SPECIFIED BY THAT AGENCY PRIOR TO BEGINNING CONSTRUCTION.

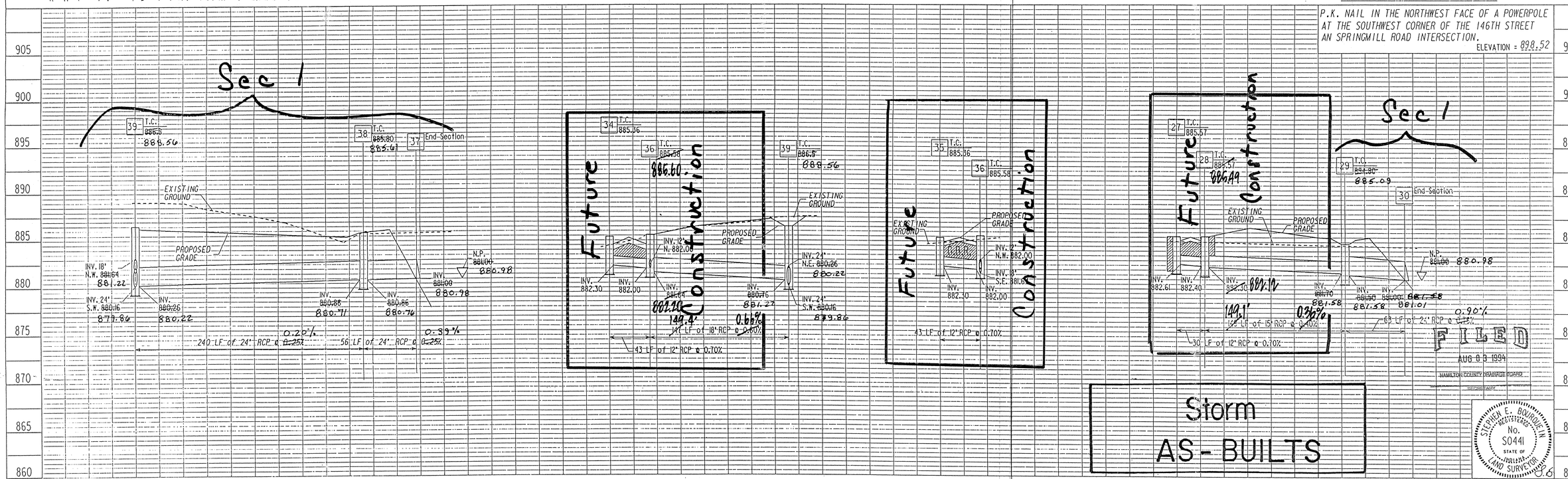
SCALE:
PLAN: 1" = 50'
PROFILE:
VERTICAL 1" = 5'
HORIZONTAL 1" = 50'

BENCH MARK DESCRIPTION

P.K. NAIL IN THE NORTHWEST FACE OF A POWERPOLE AT THE SOUTHWEST CORNER OF THE 146TH STREET AN SPRINGMILL ROAD INTERSECTION.

ELEVATION - 898.52

PROFILE — SURVEYED: — PLOTTED: — PLANS PREPARED: — NOTE BOOK: — NO.: — STREETS CHECKED: — DATE:



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AUG 0 9 1994
HAMILTON COUNTY DRAINAGE BOARD
SECRETARY

STEPHEN E. BOURQUIN
REGISTERED LAND SURVEYOR
No. S0441
STATE OF INDIANA

April 14, 1993

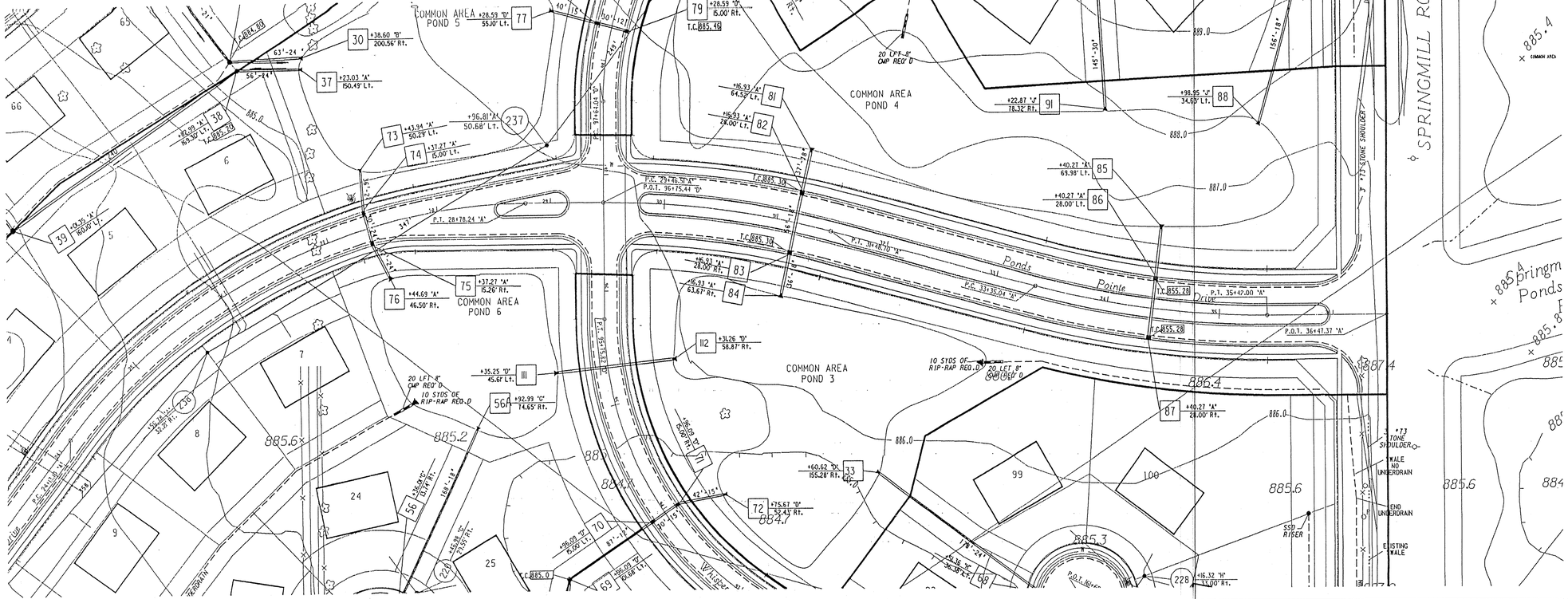
MSE Engineering

PONDS WEST

PROJECT NO.	LINE	SHEET NO.	TOTAL SHEETS	DGN	PRF
84-0522		12	18	522STM8	522STM8

STORM PLAN & PROFILES

Storm AS-BUILTS



NOTES:

LENGTHS OF PIPES INDICATED ARE FROM CENTER TO CENTER OF STRUCTURES AND ARE NOT ACTUAL PIPE LENGTHS.

CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL PERMIT ISSUING AGENCIES WITHIN THE TIME FRAME SPECIFIED BY THAT AGENCY PRIOR TO BEGINNING CONSTRUCTION.

GRANULAR BACKFILL REQUIRED — GBR

SCALE:
PLAN: 1" = 50'
PROFILE:
VERTICAL 1" = 5'
HORIZONTAL 1" = 50'

BENCH MARK DESCRIPTION

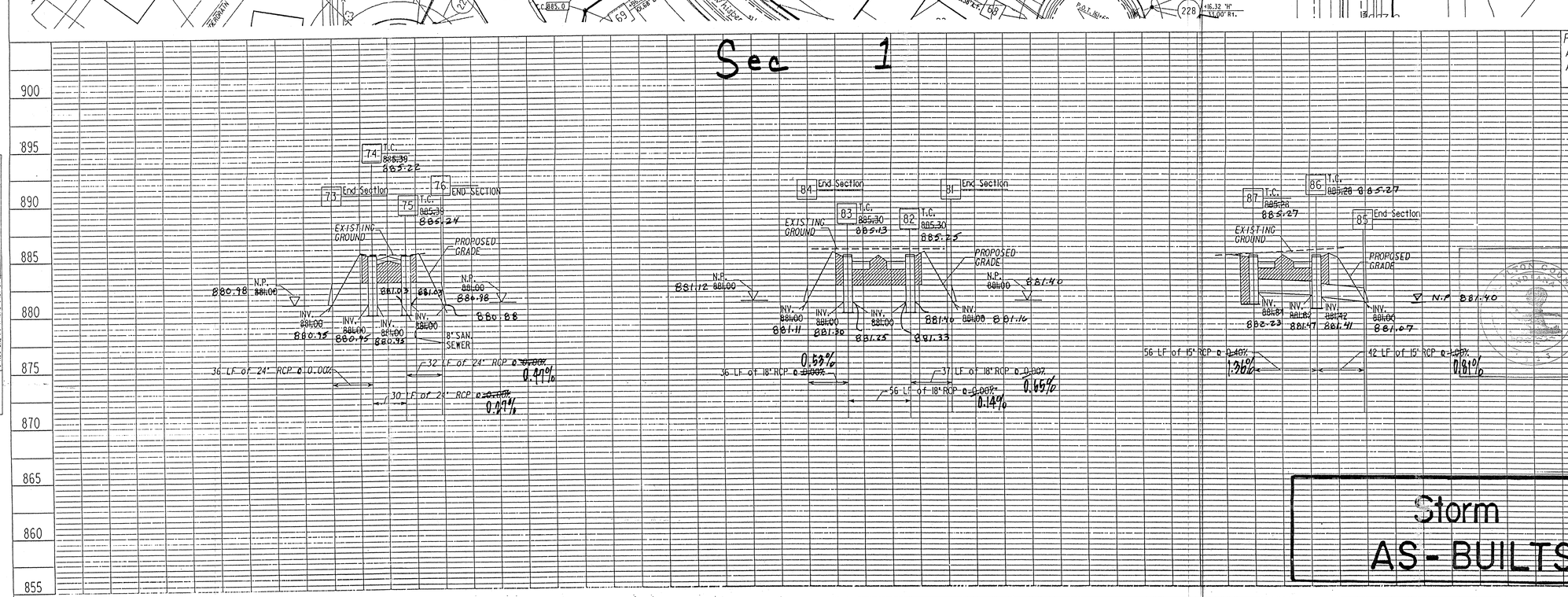
P.K. NAIL IN THE NORTHWEST FACE OF A POWERPOLE AT THE SOUTHWEST CORNER OF THE 146TH STREET AN SPRINGMILL ROAD INTERSECTION.

ELEVATION = 898.52

PLAN — SURVEYED, PLOTTED, ROADWAY CHECKED, RT.OF WAY CHECKED, NOTE BOOK, NO., DATE, BY

PROFILE — SURVEYED, PLOTTED, BASES CHECKED, ROADWAY CHECKED, STRUCTURES, NOTATIONS CHECKED, NOTE BOOK, NO., DATE, BY

Sec 1



Storm AS-BUILTS

FILED
AUG 03 1994
HAMILTON COUNTY DRAINAGE BOARD

STEPHEN E. BOURQUIN REGISTERED No. S0441 STATE OF INDIANA LAND SURVEYOR

This Plan is for construction

Entry Date: 3-10-04

Entered by: JOH

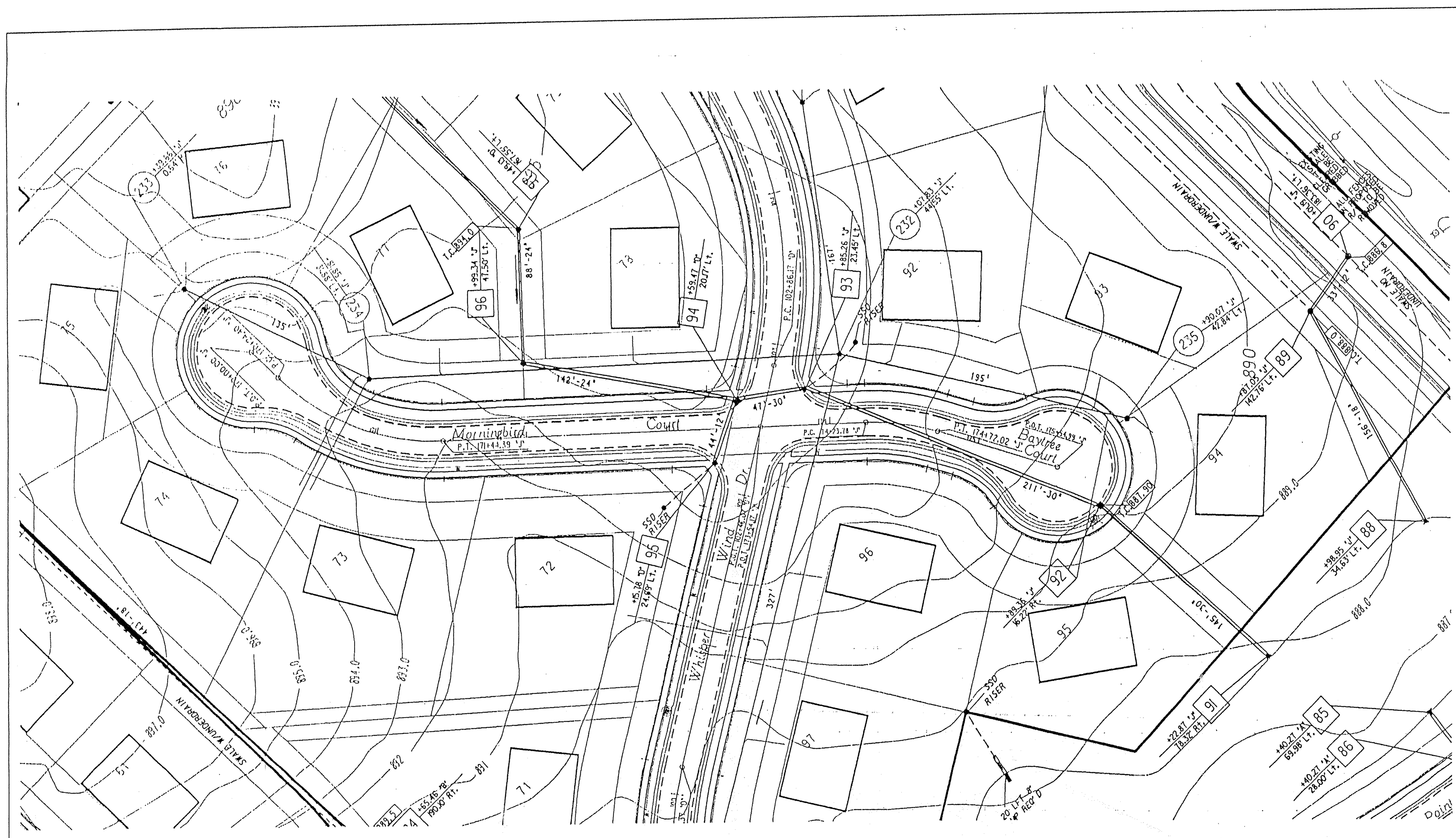
MSE Engineering

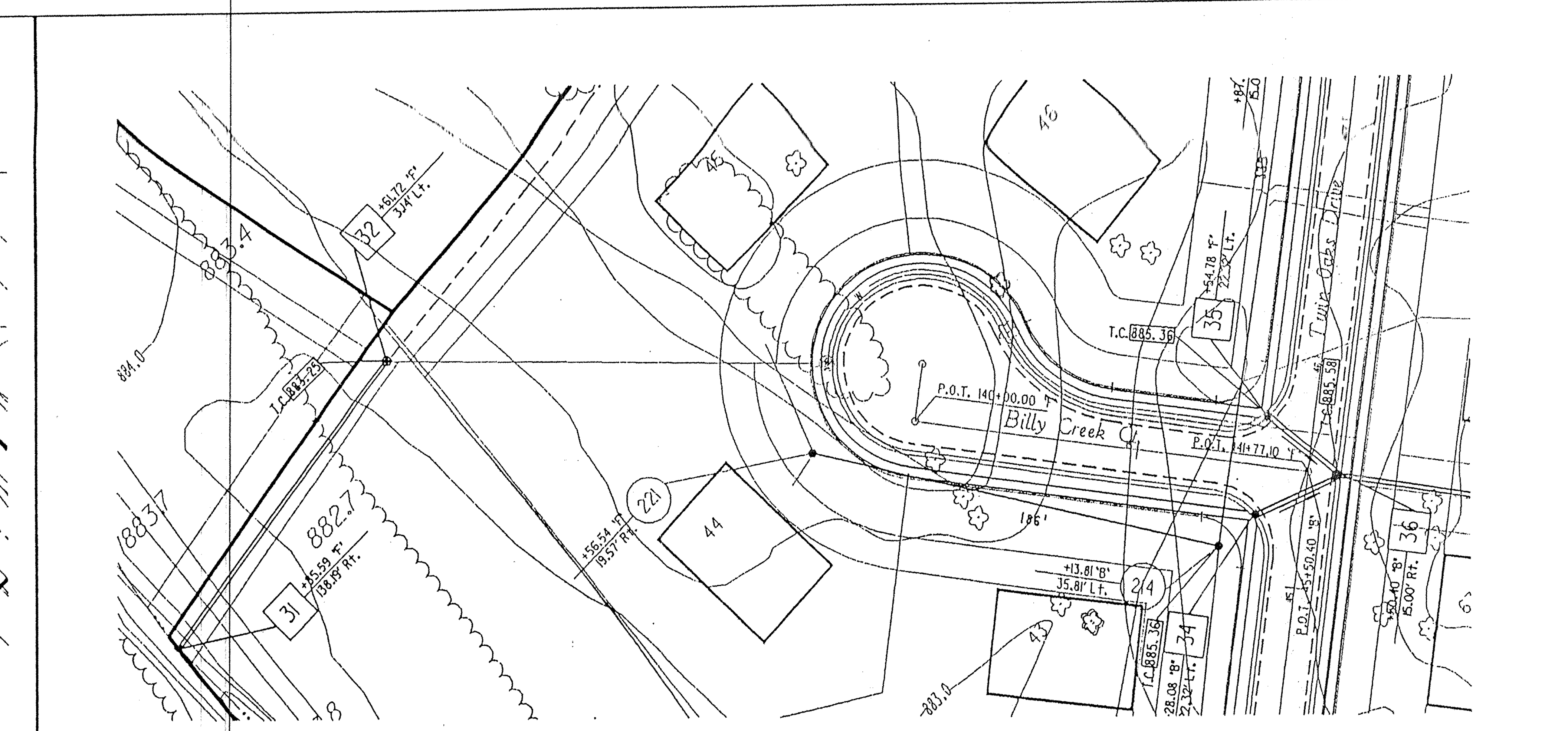
PONDS WEST

PROJECT NO.	LINE	SHEET NO.	TOTAL SHEETS	DGN	PRF
94-0522		13	18	5225TM3	5225TM3

4-20-93 Relocate Str 111 & 112

STORM PLAN AND PROFILE





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GRANULAR BACKFILL REQUIRED

GBR

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Storm
AS-BUILTS

FILED AUG 03 1994

STEPHEN E. BOURQUEIN REGISTERED No. S0441 STATE OF INDIANA LAND SURVEYOR

April 14, 1993

MSE Engineering

PONDS WEST

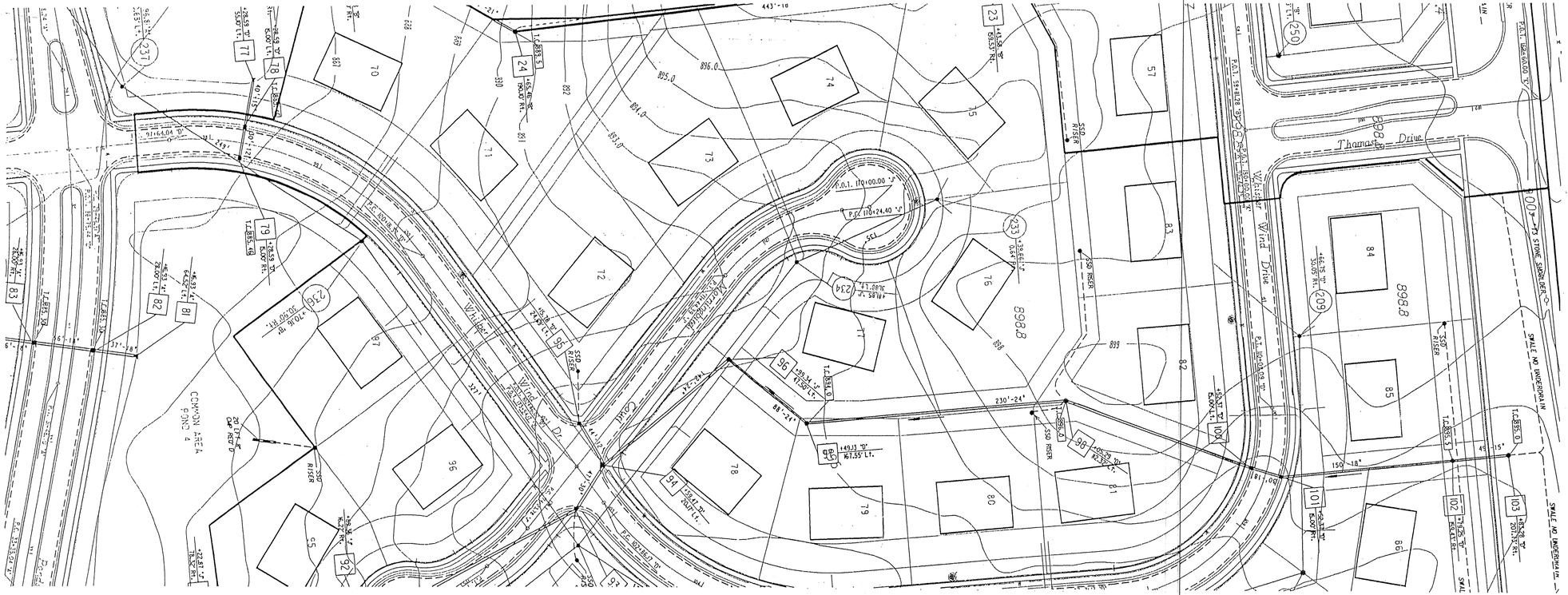
PROJECT NO.	LINE	SHEET NO.	TOTAL SHEETS	DGN	PRF
91-0522		14	52 18	522STR	522STR

3-12-93 Adjust T.C. Str 90

STORM PLAN & PROFILES

PLAN

	DATE
REVISED	
REVISED	
AS CONSTR CHECKED	
NOTE BOOK	
AS CONSTR CHECKED	
NO.	



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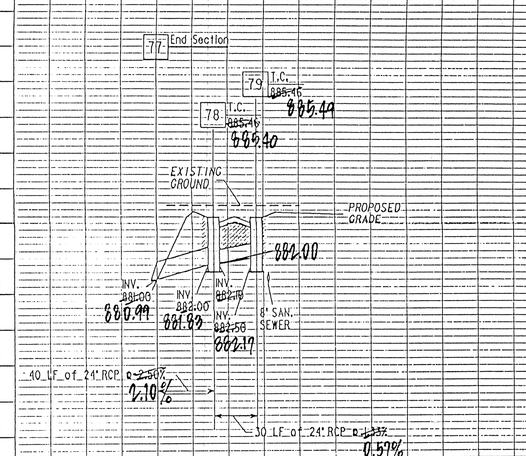
ELEVATION = 898.52

PROFILE

	DATE
REVISED	
PLOTTED	
AS CONSTR CHECKED	
NOTE BOOK	
AS CONSTR CHECKED	
NO.	



Storm AS-BUILTS

FILED
AUG 03 1994
HAMILTON COUNTY DRAINAGE BOARD
SECRETARY

STEPHEN C. BOURQUE IN REGISTERED No. S0441 STATE OF INDIANA LAND SURVEYOR

MSE Engineering

PONDS WEST

PROJECT NO.	LINE	SHEET NO.	TOTAL SHEETS	DGN	PRF
14-0522		15	18	5225TW2	5225TW2

3-12-93 Adjust T.C. Str 103
3-28-93 Rev Profile 77-79
3-28-93 Add Profile 111-112
4-20-93 Relocate Str 111-112, Delete Profile

STORM PLAN AND PROFILE

SURVEYOR'S OFFICE

Hamilton County

Kenton C. Ward, CFM
Surveyor of Hamilton County
Phone (317) 776-8495
Fax (317) 776-9628

Suite 188
One Hamilton County Square
Noblesville, Indiana 46060-2230

Map Correction-Field Verification

Drain Number: #254

Drain Name: Ponds West: Section 1 Arm

Date: 05-28-2009

Verified By: SLM & LMC

Drain Length: 11,709

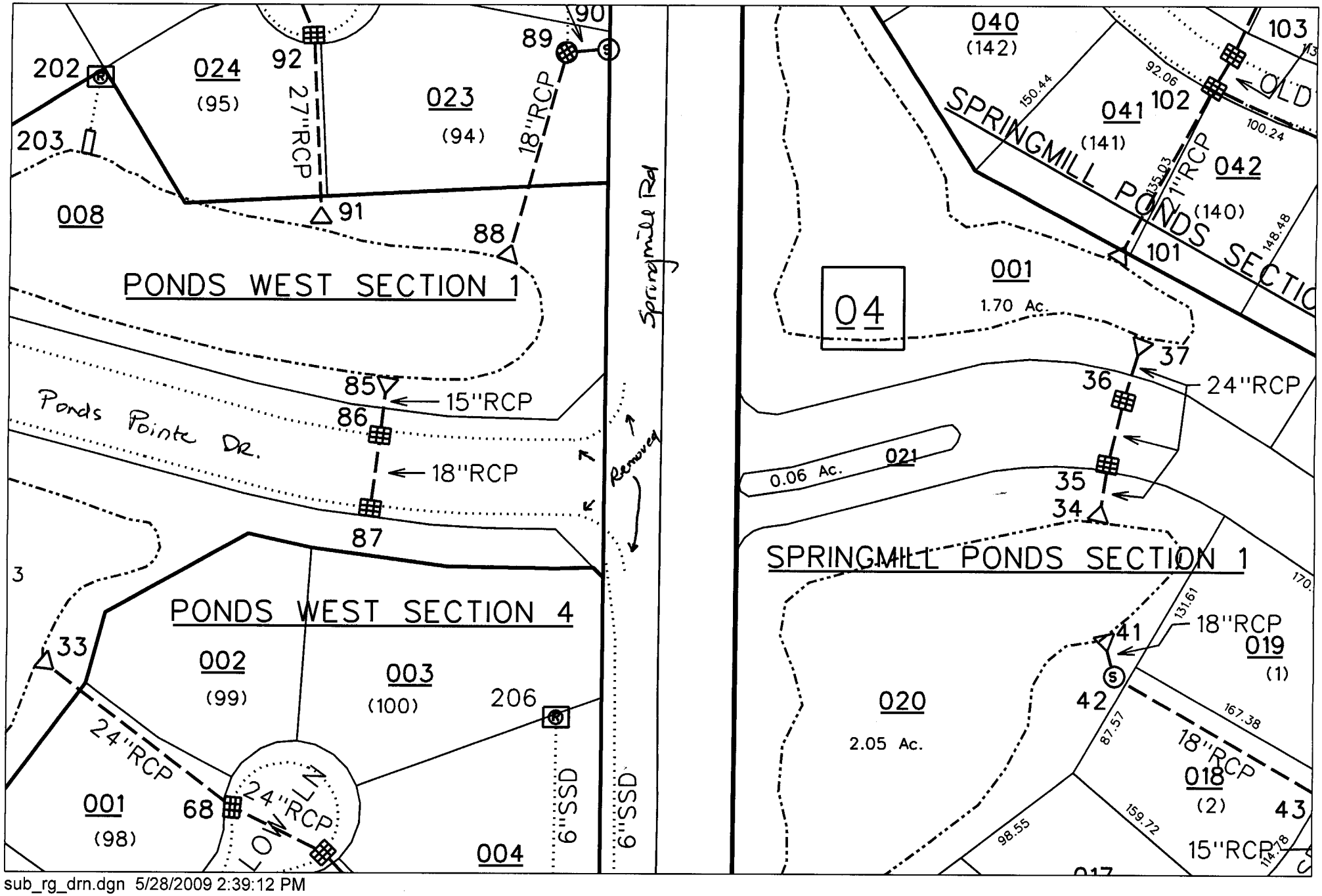
Change + / - : -121

New Length: 11,588

Notes & Sketch:

The road improvements made to Springmill Rd in 1997 removed 121 feet of 6" SSD at the entrance of Ponds Pointe Dr.

Suzanne L. Mills
GIS Specialist



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