

SURVEYOR'S OFFICE

Hamilton County

Kenton C. Ward, Surveyor

Phone (317) 776-8495

Fax (317) 776-9628

Suite 188

One Hamilton County Square

Noblesville, Indiana 46060-2230

To: Hamilton County Drainage Board

June 13, 2005

Re: 146th St Road Improvement Project

Attached are as-builts, plans, and other information for the 146th St. Road Improvement project. An inspection of the drainage facilities for this project has been made and the facilities were found to be complete and acceptable.

This report will serve as an initial and final report for this construction. This road project began just west of River Avenue and continued westward to a few hundred feet east of Oak Ridge Road. During this construction several regulated drains were affected. Those drains are as follows:

Cole & Associates Asbuilts: Project 98-0005

#117 Elizabeth Warner Drain: the widening removed 145' of 7" tile and 145' of 6" tile. A new breather was set on the south side of the road.

#205 Scarborough Farms Drain: there was 170' feet of 12" SSD removed along the right of way along with a 15" cmp outlet pipe.(Str. 100). The new outlet for the 12"ssd is now Str 42A on the road plans which resulted in an addition of 35' fo 12"ssd. The drain was then extended from Str 42A to the south side of 146th Street and empties into Kirkendall Creek. This extention consisted of 196 feet of 15" RCP.

RW Armstrong Plans: Project 98-0004

#293 Setter's Run Drain: Strs. 819-820 consists of 12" RCP and was shortened by 16 feet. Str 820 was removed and replaced with a solid manhole. Strs. 807-808 consists of 12" RCP and was shortened by 35 feet. Str. 808 was replaced with an inlet structure.

American Consulting Engineers' Plans: Project 97-0006

#207 Westfield Farms Drain -Westfield Farms Sec. 1: there was 680 feet of concrete swale removed along with 120' of 15" RCP between structures 1,2,3, and 4.

#207 Westfield Farms Drain –Shadow Lakes Sec. 2: the road project removed Str. 810 to 100. This removed 80' of 12" RCP.

#149 Hunter's Creek Village Drain –Hunters Creek Village Sec. 1: the road project removed 20 feet of 18" RCP and replaced Str. 106.

#32 Village Farms Drain – Village Farms Sec. 16: the road project removed Str. 400 to 401. This removed 85' of 12" RCP.

Floyd E. Burrows Asbuilts: Project 98-0008;

#32 Village Farms Drain – Murphy Ditch: the road project removed 1325 feet of open ditch and 190 feet of twin 33" RCP. The new 146th Street Improvement drain consists of the following: From Structure 72 to Str 71 to Str 124. This run of pipe consists of 328 feet of 29" x 45" ERCP and 1111 feet of RCP. This new portion is a total of 1439 feet of drain. Therefore, this road project removed a total of 76 feet from the drain's length.

#240 Springmill Ponds Drain – Section 3 Arm: the road project removed 430 feet of swale, 14 feet of 6"SSD, and 51 feet of 24" RCP. This occurred between Str 166 and 100 with both of those structures being removed. Also with the road project the existing twin 36" RCP under 146th St that outlets into the concrete swale in Village Farms Section 18 was shortened from 150 feet to 99 feet. The new 146th Street Improvement drain consists of the following:

Str 120–110:	24" RCP	36 feet
Str 110-124:	24" RCP	35 feet
Str 124-127:	27" x 42"ERCP	26 feet
Str 127-127A:	36"RCP-TWIN	195 feet
Str 127-127B:	36"RCP-TWIN	159 feet
Str 120–123:	12" RCP	10 feet
Str 110-92:	12" RCP	24 feet

This new portion is a total of 485 feet of drain. Therefore, this road project removed a total of 83 feet from the drain's length.

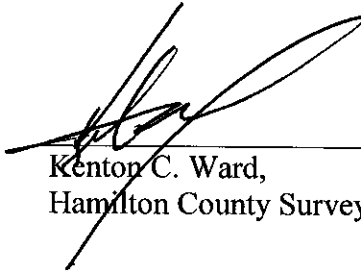
#254 Ponds West Drain – Section 2 Arm: the road project added 18 feet of 6" SSD, 55 feet of 18" RCP, and 161 feet of 15" RCP. This was between structures 20,21,22,23, and 23A, placed at the entrance of Thomas Dr.

#257 Village of Mount Carmel-Section 8 Arm: the road project added 68 feet of 12" RCP and two curb inlets identified as C1 and C2. This portion of drain was existed prior to this project but will be added to the regulated drain at this time.

#278 Merrimac Drain – Section 1 Arm: the road project removed structure 100 a concrete endsection and 18 feet of 15" HCSP.

I recommend the Board approve the drain's construction as complete and acceptable.

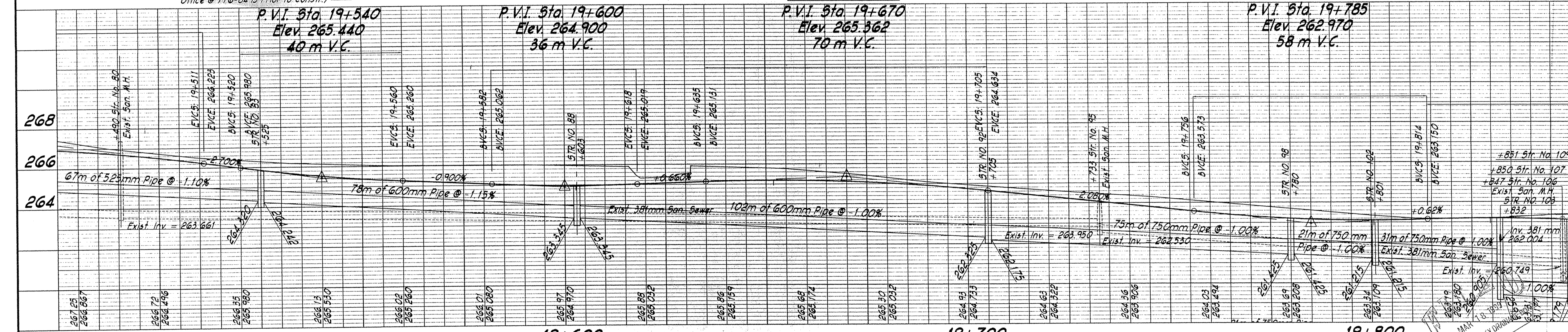
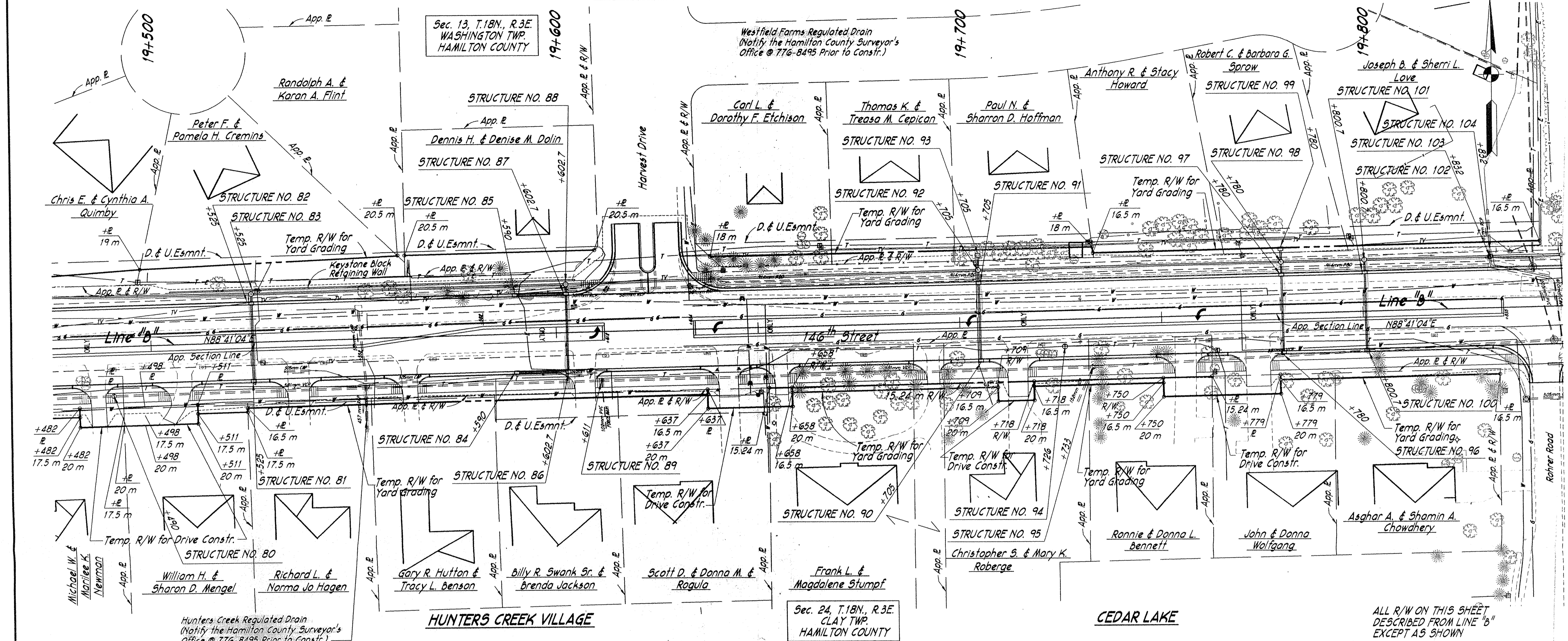
Sincerely,



Kenton C. Ward,
Hamilton County Surveyor

KCW/slm

WESTFIELD FARMS

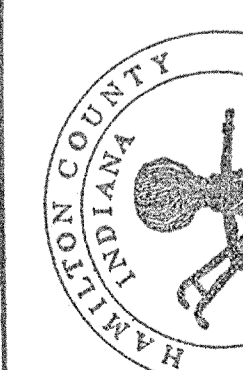


This information was gathered for input into the Hamilton County Geographical Information System. This document is considered an official record of the G.I.S. data.

Entry Date: 7-8-05

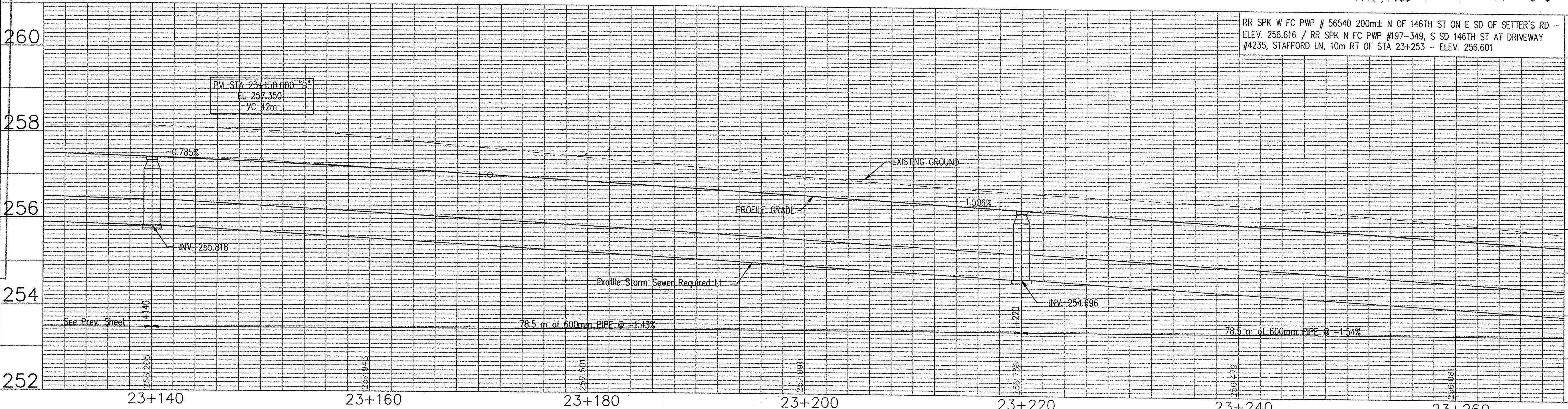
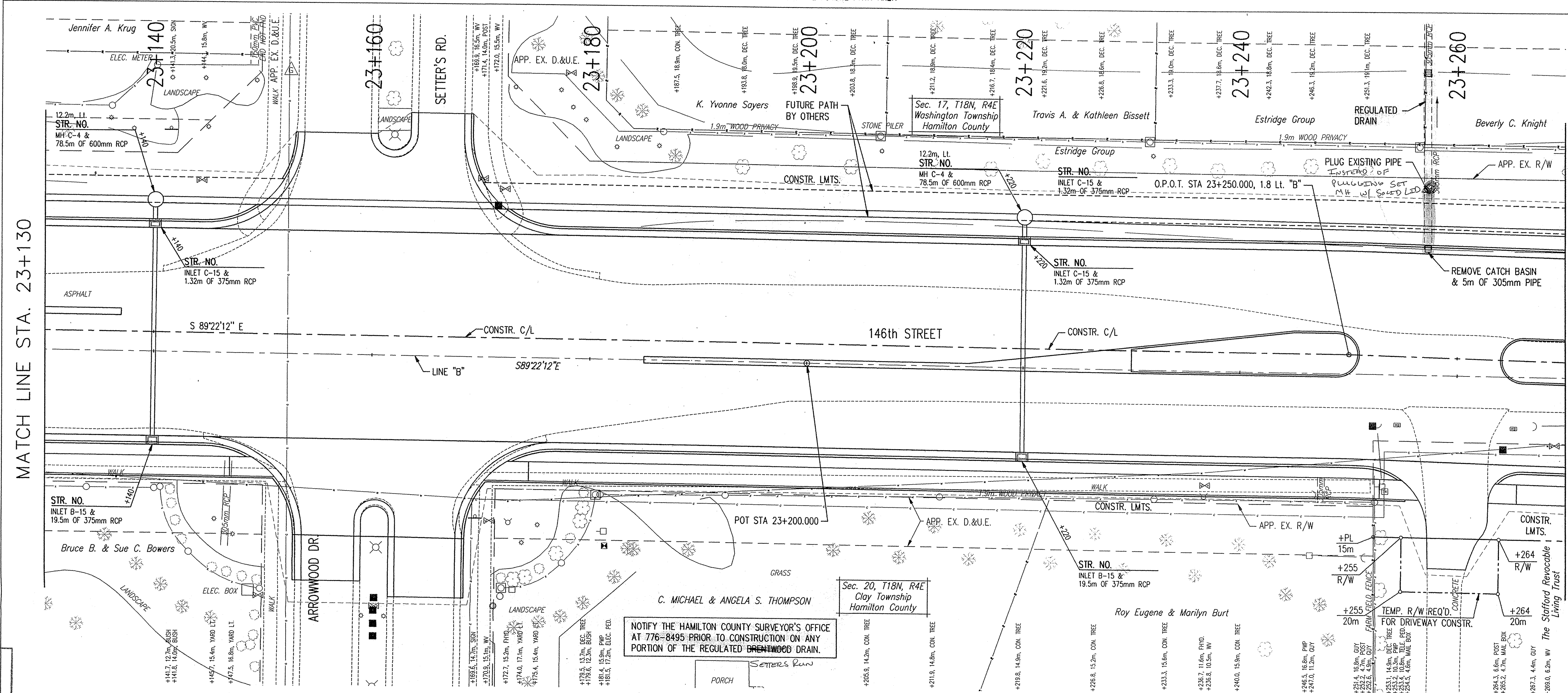
Entered by: SIK

* W. Asterisks available



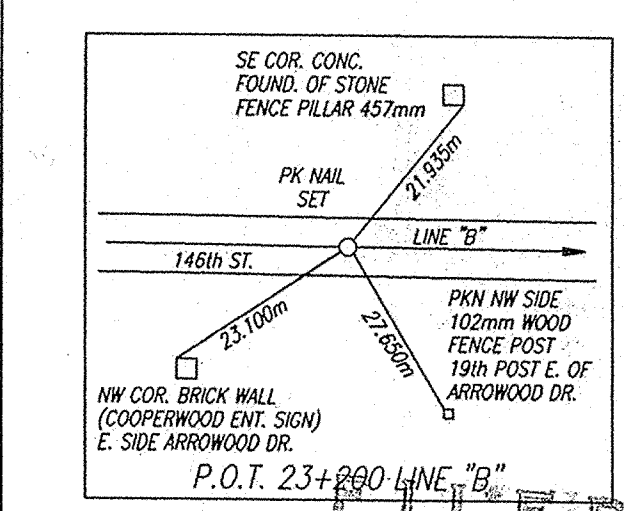
1. Westfield Farms 2. Hunter's Creek Village		RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	HAMILTON COUNTY HIGHWAY DEPARTMENT PLAN AND PROFILE	HORIZONTAL SCALE	BRIDGE FILE
		DESIGNED: W.E.H.	DRAWN: W.A.W.			VERTICAL SCALE	DESIGNATION
		CHECKED: P.A.U.J.	CHECKED: W.E.H.			SURVEY BOOK	SHEETS
					CONTRACT	10 of PROJECT	HCHD PR-97-0006

NO ABOVE GROUND UTILITIES WILL BE PERMITTED WITHIN THE FUTURE PATH AREA

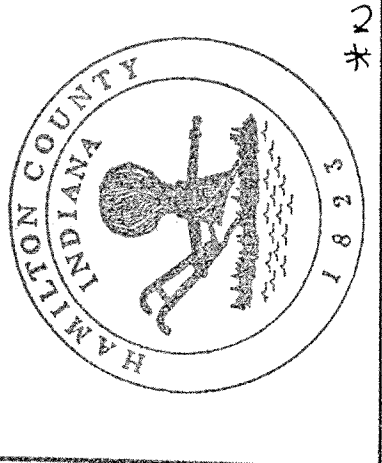


EXISTING LEGEND

⊙	STORM MANHOLE	⊙	ELECTRIC METER
⊙	STORM CURB INLET	⊙	TELE MANHOLE
⊙	STORM FLAT INLETS	⊙	TRAFFIC MANHOLE
⊙	SANITARY MANHOLE	⊙	TELEPHONE POLE
⊙	LIGHT POLE	⊙	TELEPHONE RISER
⊙	POWER POLE	⊙	CABLE T.V. RISER
⊙	POWER/LIGHT POLE	⊙	WATER VALVE
⊙	WATER METER	⊙	TELEPHONE BOOTH
⊙	FIRE HYDRANT	⊙	RETAINING WALL
⊙	GAS VALVE	⊙	SIGN
⊙	GAS METER	⊙	MAILBOX
⊙	GAS MARKER	⊙	HEDGE
⊙	R/W MARKER	⊙	BUSH
⊙	MONUMENT	⊙	DECIDUOUS TREE
⊙	IRON PIN	⊙	CONIFEROUS TREE
⊙	POST		
⊙	FENCES		
⊙	GUY WIRE		



This information was gathered for input into the Hamilton County Geographical Information System. The information is considered an official record of the GIS.
 Entry Date: 7-8-05
 Entered By: JLM
 * No Above Ground Utilities Allowed



REFERENCES : 146-PLAN; ROPF001; LEGEND;
 USER SETTING : USER 41 ALL
 FILE NAME : B-23030.dwg
 LASER DISK : XXX-X
 MRD INT : 11-DEC-98, 09:24:49 / JRC

PROPOSED LEGEND

(B) FULL DEPTH BITUMINOUS PAVEMENT	(J) SHOULDER	(15) SOODING	(22) CURB RAMP TYPE "N"
(C) CEMENT CONCRETE PAVEMENT FOR DRIVES	(7) MULTI-USE PATH (2.4m)	(16) CONCRETE CURB	(23) CURB RAMP TYPE "H"
(D) BITUMINOUS MIXTURE FOR APPROACHES	(8) MULTI-USE PATH (1.8m)	(17) CONCRETE CENTER CURB TYPE "C"	(24) CURB RAMP TYPE "G"
(E) BITUMINOUS PAVEMENT FOR DRIVES	(13) MODIFIED CONCRETE CURB	(20) CONCRETE CANTILEVER RETAINING WALL	(29) CURB RAMP TYPE "T"
(F) GRAVEL FOR DRIVES	(14) COMBINED CONC. CURB & GUTTER	(21) CURB RAMP TYPE "O"	

1. Setter's Run Drain

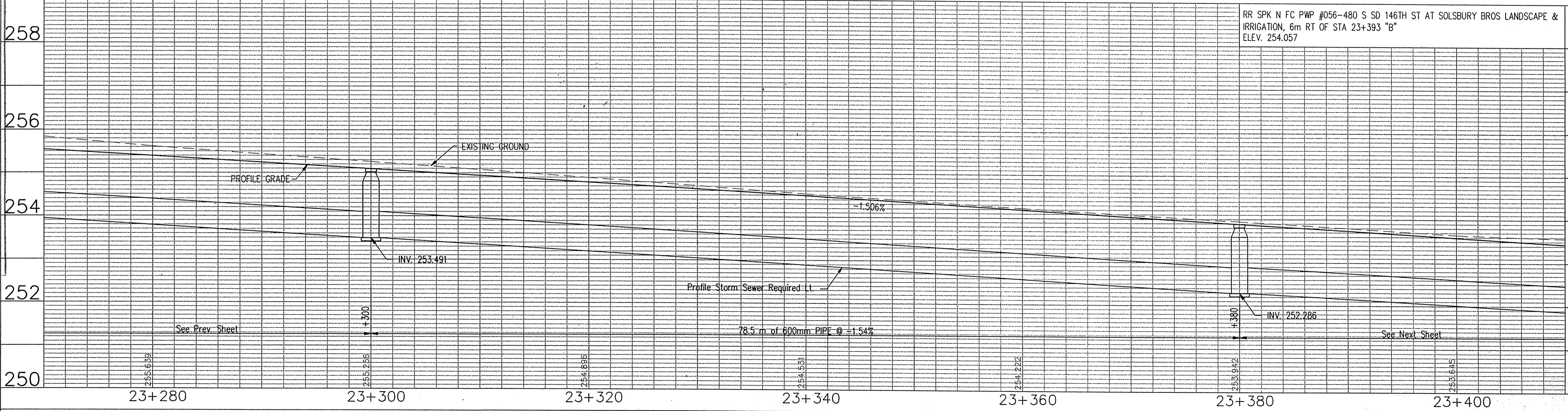
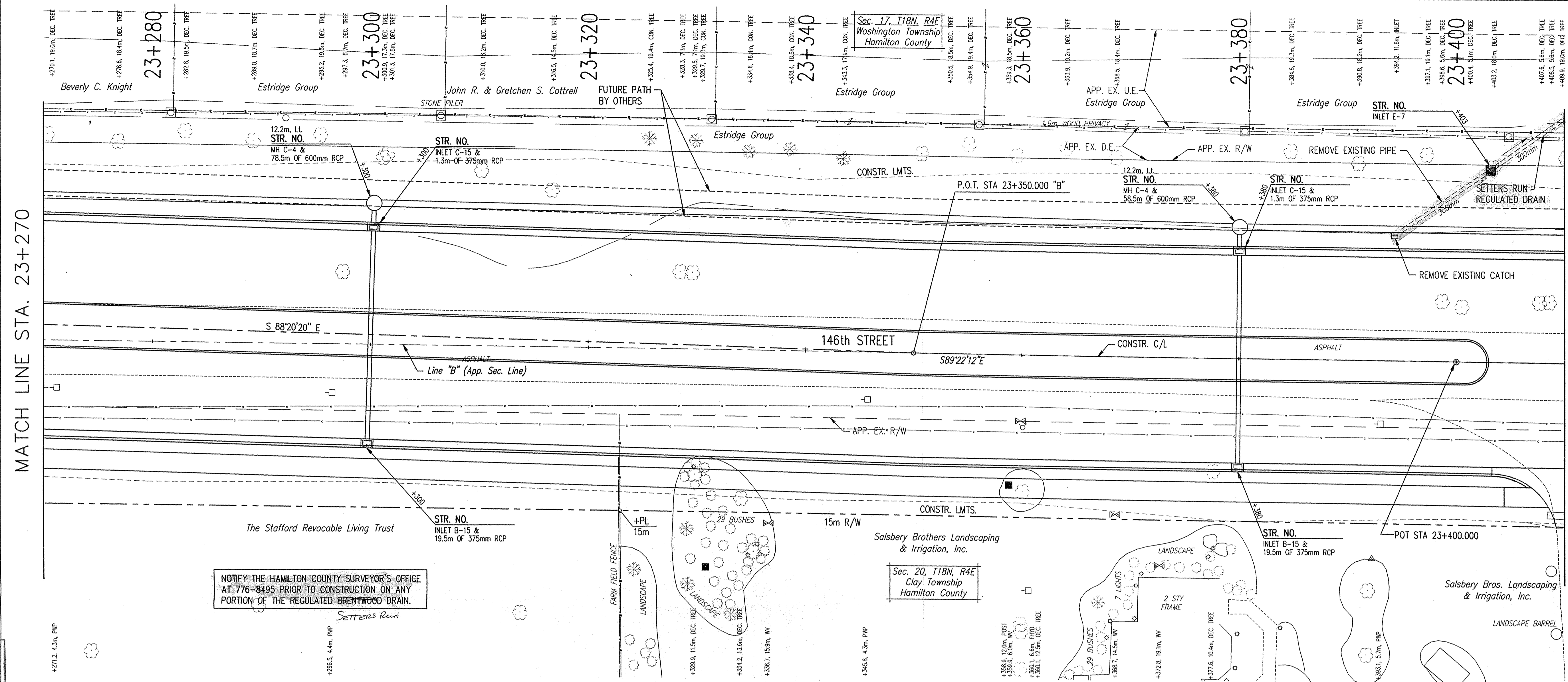
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CHECKED: RTS	CHECKED: IYS

**HAMILTON COUNTY
 HIGHWAY DEPARTMENT**

**146TH STREET
 PLAN & PROFILES**

HORIZONTAL SCALE 1:200	BRIDGE FILE
VERTICAL SCALE 1:50	DESIGNATION
SURVEY BOOK	SHEETS
CONTRACT	of PROJECT

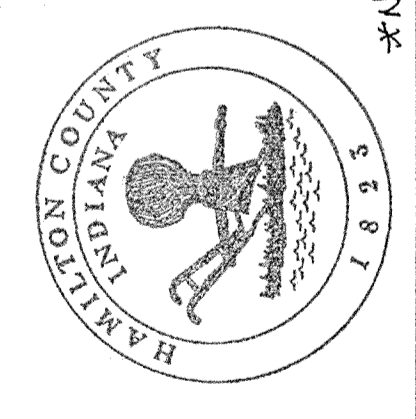
NO ABOVE GROUND UTILITIES WILL BE PERMITTED WITHIN THE FUTURE PATH AREA



EXISTING LEGEND

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⊙	STORM CURB INLET	⊙	TELE MANHOLE
⊙	STORM FLAT INLETS	⊙	TRAFFIC MANHOLE
⊙	SANITARY MANHOLE	⊙	TELEPHONE POLE
⊙	LIGHT POLE	⊙	TELEPHONE RISER
⊙	POWER POLE	⊙	CABLE T.V. RISER
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⊙	GAS MARKER	⊙	HEDGE
⊙	R/W MARKER	⊙	BUSH
⊙	MONUMENT	⊙	DECIDUOUS TREE
⊙	IRON PIN	⊙	CONIFEROUS TREE
⊙	POST		
⊙	FENCES		
⊙	GUY WIRE		

This information was gathered for input into the Hamilton County Geographical Information System. This document is considered an unrecorded record of the GIS.
 Entry Date: 1-08-05
 Entered by: SLM
 *No Above Ground Utilities



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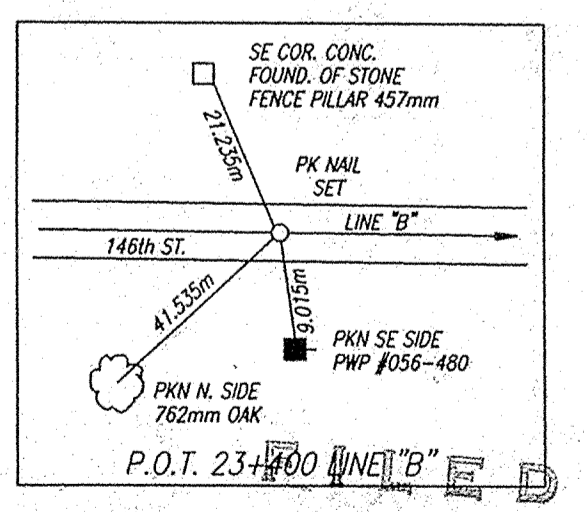
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Ⓡ	BITUMINOUS MIXTURE FOR APPROACHES	Ⓣ	MULTI-USE PATH (1.8m)	Ⓝ	CONCRETE CENTER CURB TYPE "C"	Ⓤ	CURB RAMP TYPE "G"
Ⓢ	BITUMINOUS PAVEMENT FOR DRIVES	Ⓞ	MODIFIED CONCRETE CURB	Ⓟ	CONCRETE CANTILEVER RETAINING WALL	Ⓡ	CURB RAMP TYPE "F"
Ⓣ	GRAVEL FOR DRIVES	Ⓠ	COMBINED CONC. CURB & GUTTER	Ⓡ	CURB RAMP TYPE "O"		

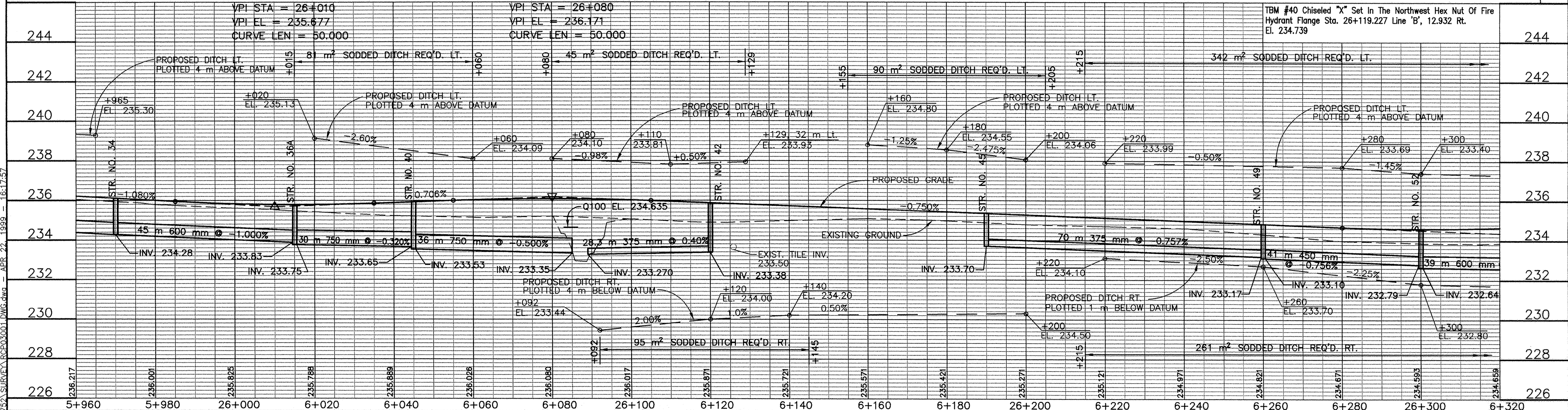
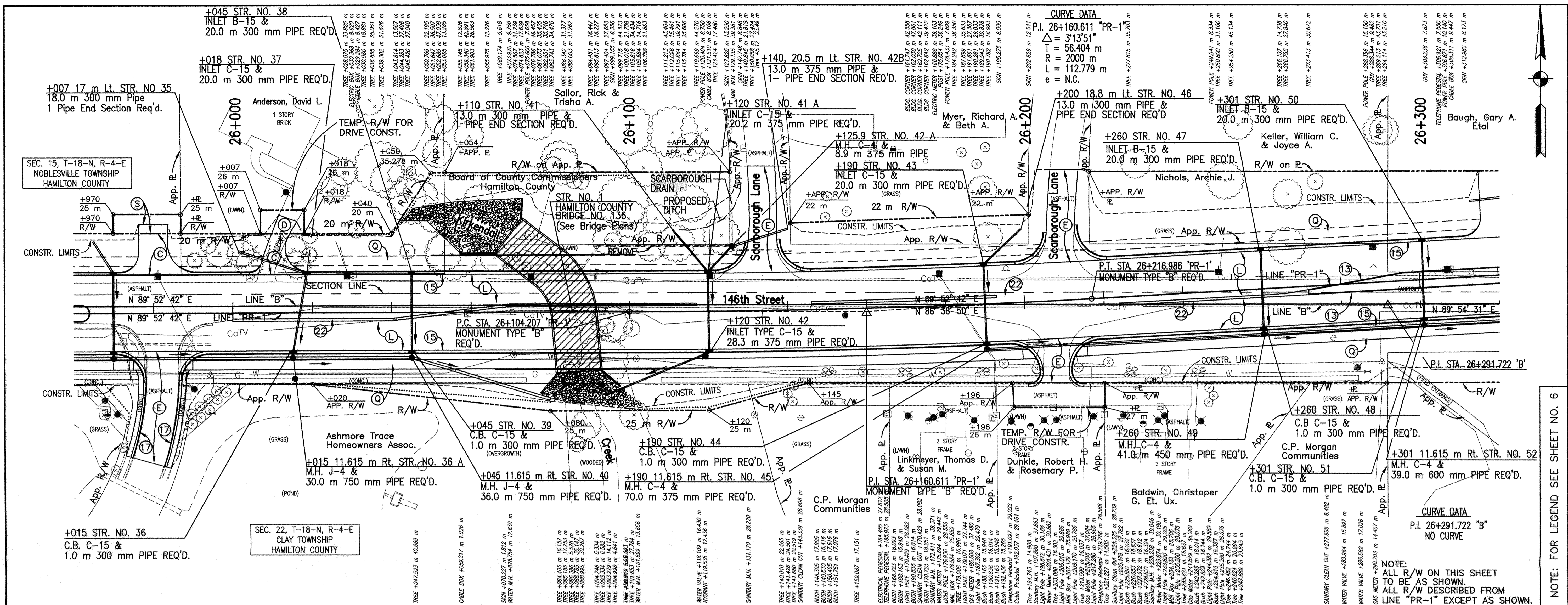
1. Seller's Run Drain

DESIGNED: IYS	DRAWN: MMY/KMW
CHECKED: RTS	CHECKED: IYS

HAMILTON COUNTY HIGHWAY DEPARTMENT
146TH STREET PLAN & PROFILES

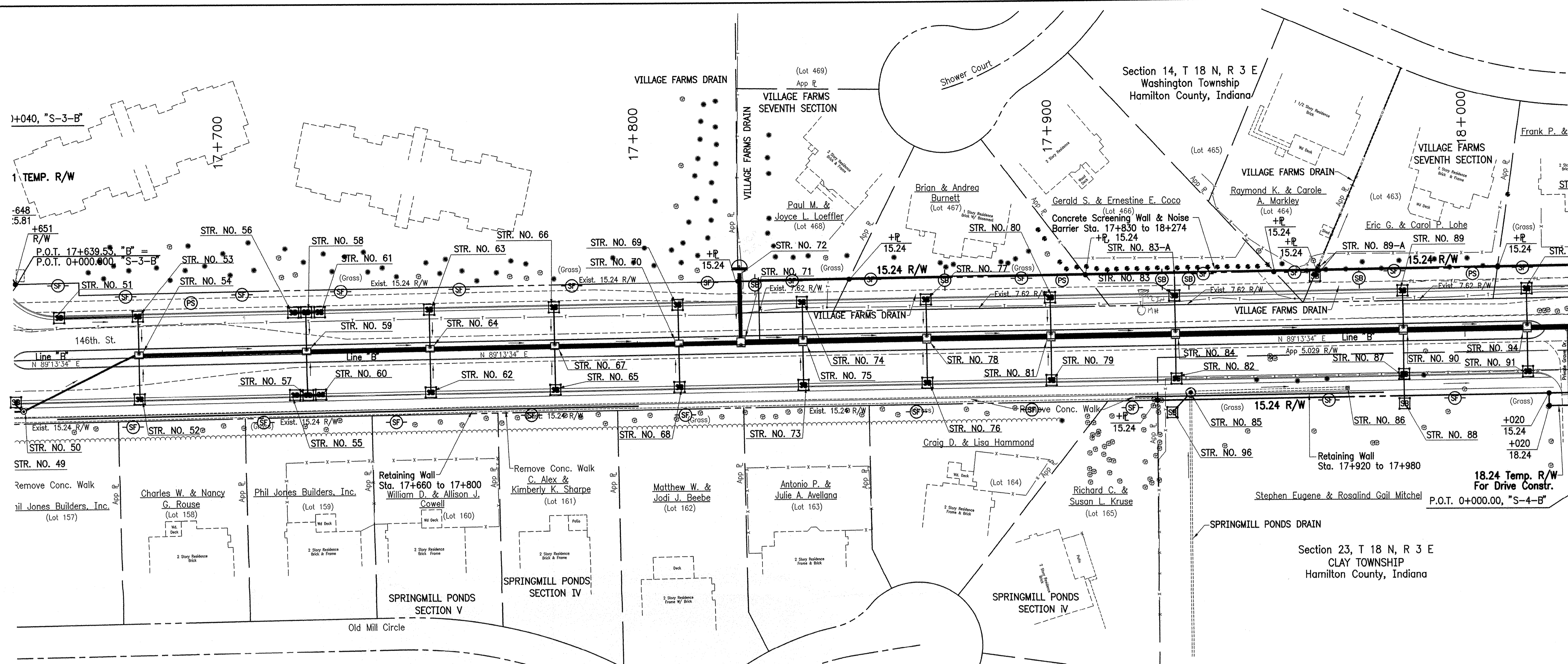
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1:200	
VERTICAL SCALE	DESIGNATION
1:50	
SURVEY BOOK	SHEETS
	of
CONTRACT	PROJECT



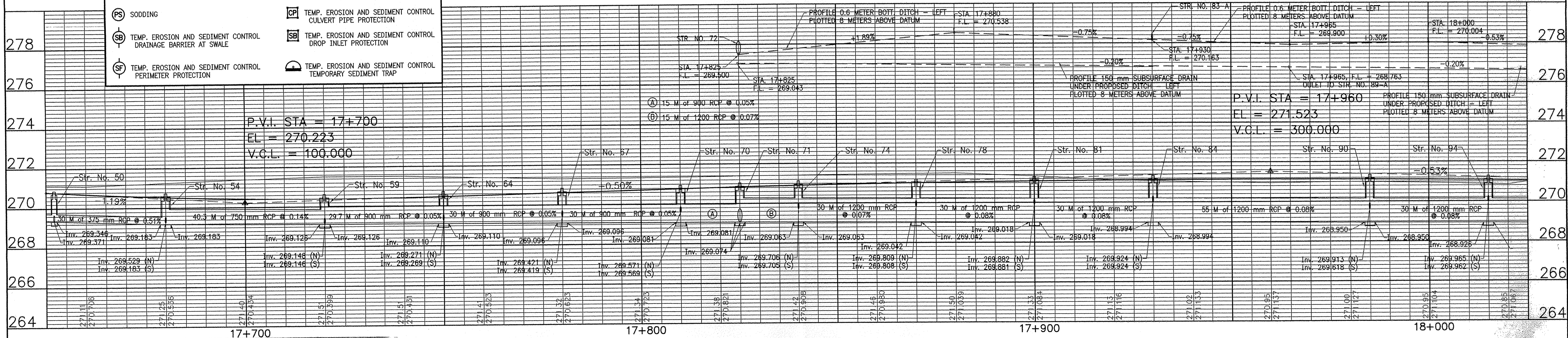


<p>RR SPIKE N. EDGE PAVEMENT</p> <p>PK NAIL S. SIDE UTILITY POLE#056-873</p> <p>PK NAIL S. SIDE PWP #195-448</p> <p>NOTE: BRASS PLUG FOUND 0.31' S. OF PK NAIL @ ROAD LEVEL. PK NAIL DOWN 5"</p> <p>MAG NAIL E. SIDE 15" WALNUT TREE STA. 26+441.716 (PK Nail Set)</p>	<p>HAMILTON COUNTY INDIANA</p> <p>This information was gathered for input into the Hamilton County Geographical Information System. This document is considered an official record of the GIS.</p> <p>Entry Date: 5-26-05</p> <p>Entered by: SLM</p>	<p>1. Scarborough Farms</p> <p>GABRIEL A. FRANCO REGISTERED PROFESSIONAL ENGINEER No. 20913 STATE OF INDIANA</p>	<p>RECOMMENDED FOR APPROVAL</p> <p><i>Gabriell Franco</i> 4/22/04 DATE</p> <p>DESIGNED: GAF DRAWN: JC</p> <p>CHECKED: HDH CHECKED: GAF</p>	<p>HAMILTON COUNTY HIGHWAY DEPARTMENT</p> <p>PLAN & PROFILE</p> <p>25+980 THRU 26+300</p>	<table border="1"> <tr> <td>HORIZONTAL SCALE</td> <td>BRIDGE FILE</td> </tr> <tr> <td>1:500</td> <td></td> </tr> <tr> <td>VERTICAL SCALE</td> <td>DESIGNATION</td> </tr> <tr> <td>1:100</td> <td></td> </tr> <tr> <td>SURVEY BOOK</td> <td>SHEETS</td> </tr> <tr> <td></td> <td>8 of 66</td> </tr> <tr> <td>CONTRACT</td> <td>PROJECT</td> </tr> <tr> <td></td> <td>PR-98-0005</td> </tr> </table>	HORIZONTAL SCALE	BRIDGE FILE	1:500		VERTICAL SCALE	DESIGNATION	1:100		SURVEY BOOK	SHEETS		8 of 66	CONTRACT	PROJECT		PR-98-0005
						HORIZONTAL SCALE	BRIDGE FILE														
1:500																					
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SURVEY BOOK	SHEETS																				
	8 of 66																				
CONTRACT	PROJECT																				
	PR-98-0005																				
<p>NOTE: FOR LEGEND SEE SHEET NO. 6</p>																					

Record Drawing
Bill Stanley 3.3.03
No Change



EROSION CONTROL LEGEND	
(FS) SODDING	(CP) TEMP. EROSION AND SEDIMENT CONTROL CULVERT PIPE PROTECTION
(SB) TEMP. EROSION AND SEDIMENT CONTROL DRAINAGE BARRIER AT SWALE	(SB) TEMP. EROSION AND SEDIMENT CONTROL DROP INLET PROTECTION
(SF) TEMP. EROSION AND SEDIMENT CONTROL PERIMETER PROTECTION	(ST) TEMP. EROSION AND SEDIMENT CONTROL TEMPORARY SEDIMENT TRAP



HAMILTON COUNTY INDIANA

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: 5-25-2005

Entered by: SLM

1. Village Farms Drain

REGISTERED PROFESSIONAL ENGINEER

ROBERT M. SLOAN

RECOMMENDED FOR APPROVAL: Robert M. Sloan 5/28/00

DESIGNED: RMG DRAWN: SLO

CHECKED: SLO CHECKED: RMG

INDIANA DEPARTMENT OF TRANSPORTATION

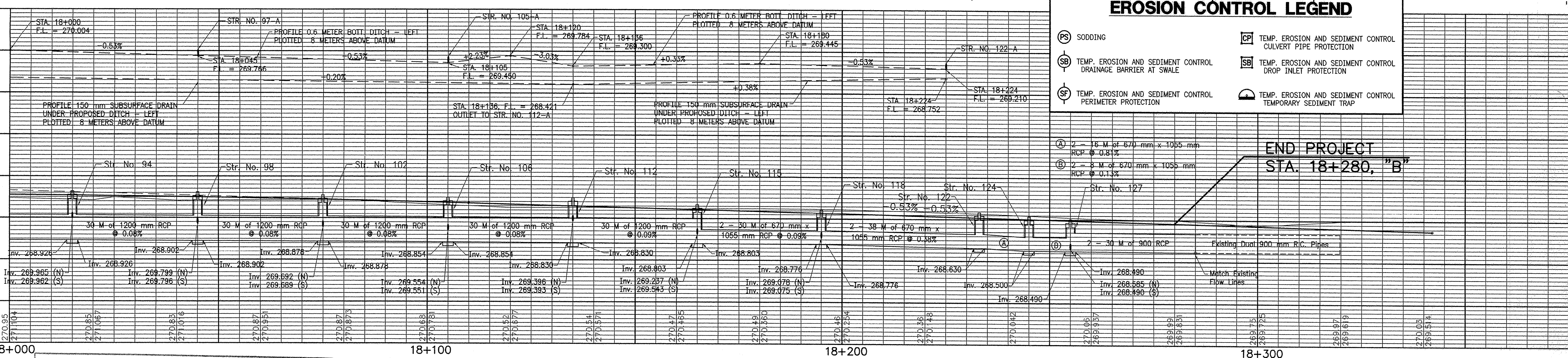
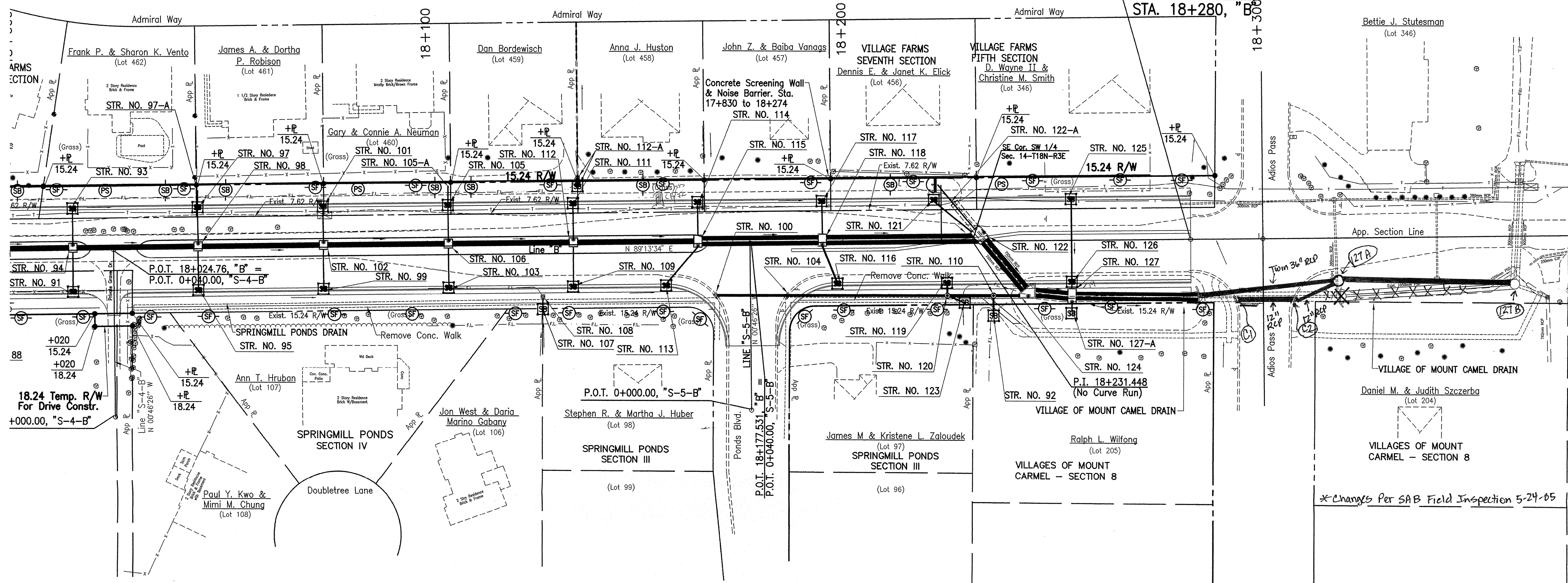
EROSION CONTROL DETAILS

STA. 17+650 to 18+025, LINE "B"

HORIZONTAL SCALE 1 : 500	BRIDGE FILE
VERTICAL SCALE 1 : 100	DESIGNATION
SURVEY BOOK	SHEETS 57 of 91
CONTRACT	PROJECT HCHD PR-98-0008

VILLAGE FARMS DRAIN

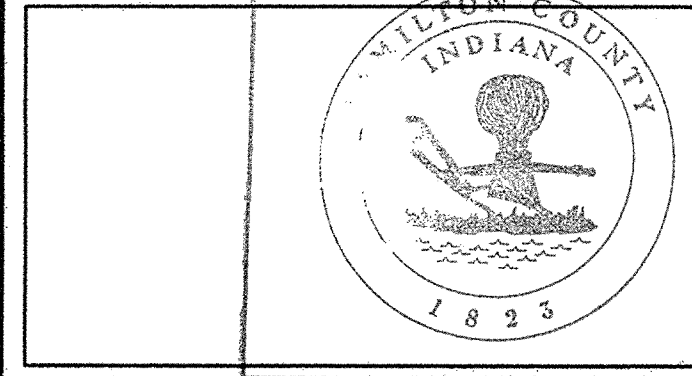
END PROJECT
STA. 18+280, "B"



EROSION CONTROL LEGEND

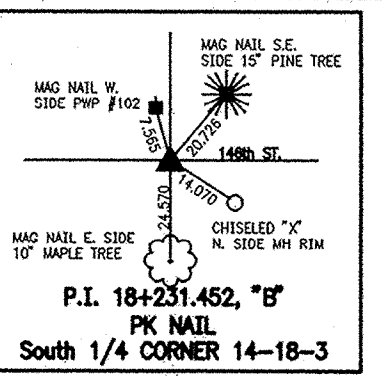
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- (SB) TEMP. EROSION AND SEDIMENT CONTROL DRAINAGE BARRIER AT SWALE
- (SF) TEMP. EROSION AND SEDIMENT CONTROL PERIMETER PROTECTION
- (CP) TEMP. EROSION AND SEDIMENT CONTROL CULVERT PIPE PROTECTION
- (SB) TEMP. EROSION AND SEDIMENT CONTROL DROP INLET PROTECTION
- (ST) TEMP. EROSION AND SEDIMENT CONTROL TEMPORARY SEDIMENT TRAP

END PROJECT
STA. 18+280, "B"



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Entry Date: 5-25-2005
Entered by: SLM

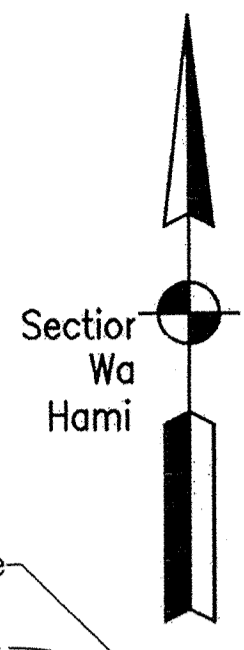
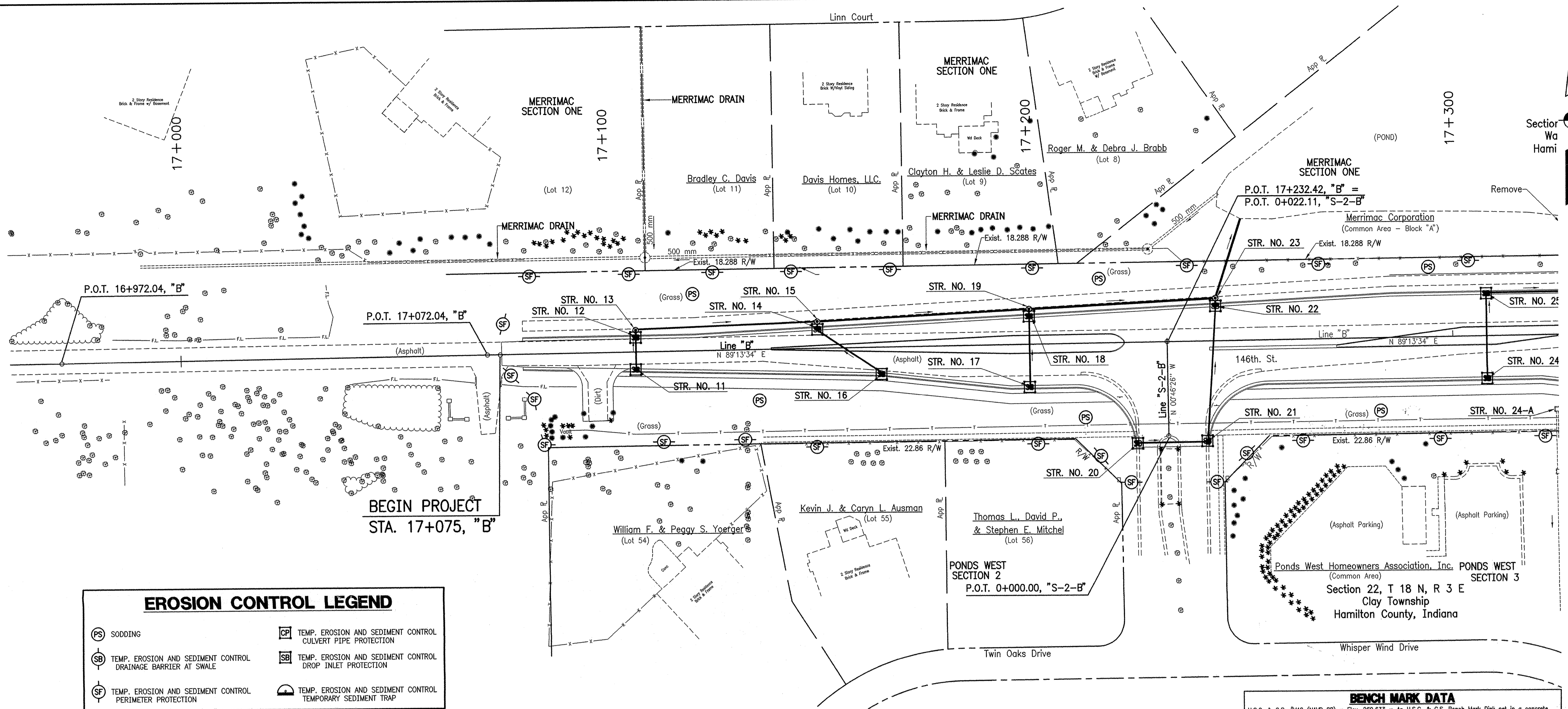
- Village Farms
- Springmill Ponds
- Village of Mt. Carmel



RECOMMENDED FOR APPROVAL: *Robert M. Gray* 1/28/00
DESIGN ENGINEER DATE
DESIGNED: RMG DRAWN: RMG
CHECKED: SLO CHECKED: SLO

INDIANA DEPARTMENT OF TRANSPORTATION
**EROSION CONTROL DETAILS
STA. 18+000 to 18+375, LINE "B"**

HORIZONTAL SCALE 1 : 500	BRIDGE FILE
VERTICAL SCALE 1 : 100	DESIGNATION
SURVEY BOOK	SHEETS
CONTRACT	58 of 91
	PROJECT
	HCHD PR-98-0008



EROSION CONTROL LEGEND

- SODDING
- TEMP. EROSION AND SEDIMENT CONTROL DRAINAGE BARRIER AT SWALE
- TEMP. EROSION AND SEDIMENT CONTROL PERIMETER PROTECTION
- TEMP. EROSION AND SEDIMENT CONTROL CULVERT PIPE PROTECTION
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- TEMP. EROSION AND SEDIMENT CONTROL TEMPORARY SEDIMENT TRAP

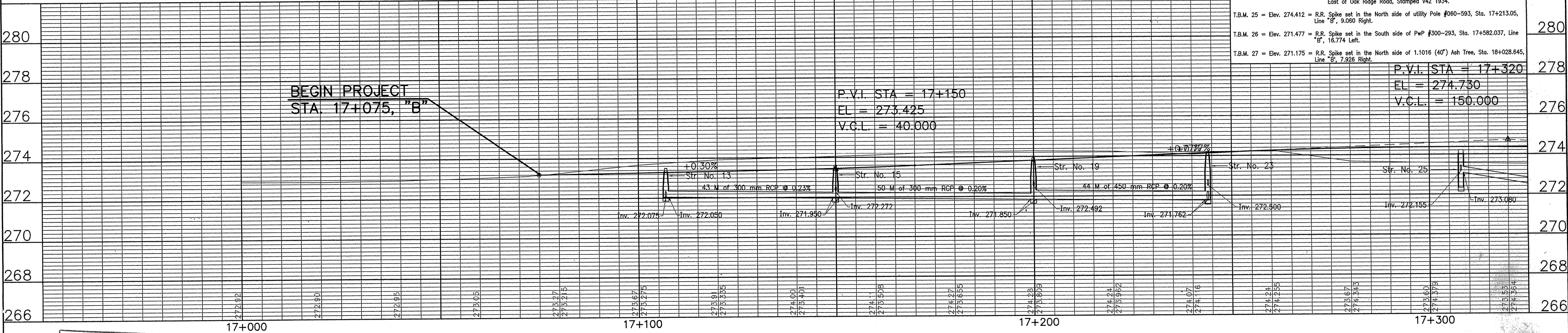
BENCH MARK DATA

U.S.C. & G.S. #V42 (WVD 88) = Elev. 289.633 = An U.S.C. & G.S. Bench Mark Disk set in a concrete post 6.401 (21') North of the C of 156th Street, 0.8 km (0.5 mile) East of Oak Ridge Road, Stamped V42 1934.

T.B.M. 25 = Elev. 274.412 = R.R. Spike set in the North side of utility Pole #060-593, Sta. 17+213.05, Line "B", 9.060 Right.

T.B.M. 26 = Elev. 271.477 = R.R. Spike set in the South side of PwP #300-293, Sta. 17+582.037, Line "B", 16.774 Left.

T.B.M. 27 = Elev. 271.175 = R.R. Spike set in the North side of 1.1016 (40') Ash Tree, Sta. 18+028.645, Line "B", 7.926 Right.



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: 6-9-05

Entered by: SIM

1. Ponds West Drain: Section 2 Arm



RECOMMENDED FOR APPROVAL: *Robert M. Gray* 1/28/00 DESIGN ENGINEER DATE

DESIGNED: RMG DRAWN: SLO

CHECKED: SLO CHECKED: RMG

INDIANA DEPARTMENT OF TRANSPORTATION

EROSION CONTROL DETAILS
STA. 16+950 to 17+325, LINE "B"

HORIZONTAL SCALE 1 : 500	BRIDGE FILE
VERTICAL SCALE 1 : 100	DESIGNATION
SURVEY BOOK	SHEETS 55 of 91
CONTRACT	PROJECT HCHD PR-98-0008