

1/15/07

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*

January 17, 2007

To: Hamilton County Drainage Board

**RE: Vestal Kirkendall Drain – Mary Cox Arm 1 Reconstruction**

Attached is a petition and plans for the proposed reconstruction of the Vestal Kirkendall Drain. The reconstruction is being proposed by the Town of Westfield. The proposal is to reconstruct the 161<sup>st</sup> Bridge and enclose the Mary Cox Arm 1 on the south side of the road. Arm 1 was outlined in my report dated January 19, 2005, and approved by the Board on February 14, 2005; (Hamilton County Drainage Board Minutes Book 8; Page 178).

This line will consist of the following:

150' of 42" RCP pipe and 155' of 29" x 45" elliptical RCP pipe, two (2) manhole structures will also be installed. This will occur between Sta. 9+25 to Sta. 10+85 on the Mary Cox Arm 1 drain. This is reflected on plan sheet 6 prepared by United Consulting Inc., dated December 21, 2007, and have a project number of IN20050304.

Structure numbers 7001A and 7003A will be removed.


This proposal will not add additional footage to the length of the drains total length.

The cost of the relocation is to be paid for by the Town of Westfield and is within the boundaries of the public Right of Way of the Town of Westfield, who petitioned for the reconstruction. The project falls under the requirements as set out in IC 36-9-27-52.5, therefore, a hearing is not required for the petition.

The petitioner was not required to provide a performance bond since this is a Town of Westfield project. There is no new easement required for this drain as it is being reconstructed in existing easement and right of way.

I recommend approval by the Board at this time.

Sincerely,

A handwritten signature in black ink, appearing to read 'K. Ward', written over a horizontal line.

Kenton C. Ward, CFM  
Hamilton County Surveyor

KCW/mlg

**Gasb 34 Asset Price &  
Drain Length Log**

Drain-Improvement: Mary Cox Arm 1 Reconstruction

Drain Type:	Size:	Length	Length (DB Query)	Length Reconcile	If Applicable	
					Price:	Cost:
RCP	42	155	155	0	\$52.65 lf	\$8,160.75
HERCP	29" X 45"	155	155	0	\$76.95 lf	\$11,927.25

Sum:                      155\*                      0                      \$20,088.00

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

Comments:  
\*Parallel pipe

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

HAMILTON COUNTY DRAINAGE BOARD  
NOBLESVILLE, INDIANA

IN RE: Bridge Replacement-161st St. over Kirkendall Cr )  
Hamilton County, Indiana )

PETITION FOR RELOCATION AND RECONSTRUCTION

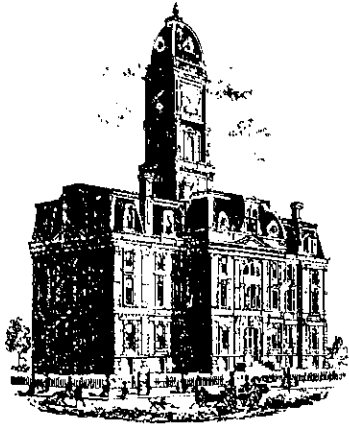
The Town of Westfield (hereinafter "Petitioner"),

hereby petitions the Hamilton County Drainage Board for authority to relocate and improve a section of the Vestal Kirkendall Drain, and in support of said petition advises the Board that:

1. Petitioner owns real estate through which a portion of the Vestal Kirkendall Drain runs.
2. Petitioner plans to develop its real estate with roads, buildings, utilities, storm drains, sanitary sewers and other structures.
3. Petitioner's proposed development of its real estate will require relocation and reconstruction of a portion of the Vestal Kirkendall Drain, as specifically shown on engineering plans and specifications filed with the Hamilton County Surveyor.
4. The work necessary for the proposed relocation and reconstruction will be undertaken at the sole expense of the Petitioner and such work will result in substantial improvement to the Vestal Kirkendall Drain, without cost to other property owners on the watershed of the Vestal Kirkendall Drain.
5. Proposed relocation and reconstruction will not adversely affect other land owners within the drainage shed.
6. Petitioner requests approval of the proposed relocation and reconstruction under IC 36-9-27-52.5.

WHEREFORE, Petitioner requests that an Order issued from the Hamilton County Drainage Board authorizing relocation and reconstruction of the Vestal Kirkendall Drain, in conformance with applicable law and plans and specifications on file with the Hamilton County Surveyor.

Neil B. VanTrees  
Signed  
Neil B. VanTrees  
Printed



*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*

**To: Hamilton County Drainage Board**

**August 10, 2010**

**Re: Vestal Kirkendall Drain – Mary Cox Arm 1 Relocation**


Attached are plans and other information for the Mary Cox Arm 1 Relocation. 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 there were no significant changes made to the drainage plans submitted with my report for this drain dated January 17, 2007. (See Drainage Board Minutes Book 11, Page 40) Therefore, the length of the drain remains at **0 feet**.

A non-enforcement was not required for this project because all the work was done within the existing right of way and drainage easements. This project was paid for by the Town of Westfield, therefore sureties were not required.

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

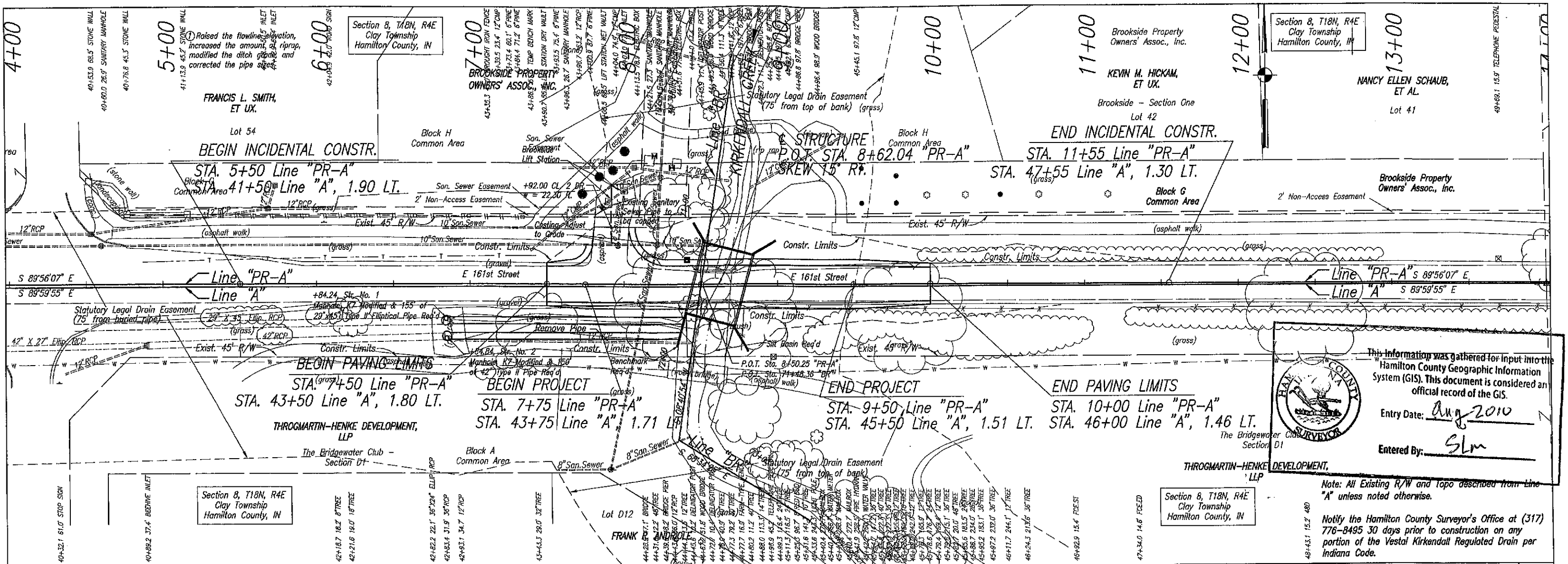
Sincerely,



---

Kenton C. Ward, CFM  
Hamilton County Surveyor

KCW/slm



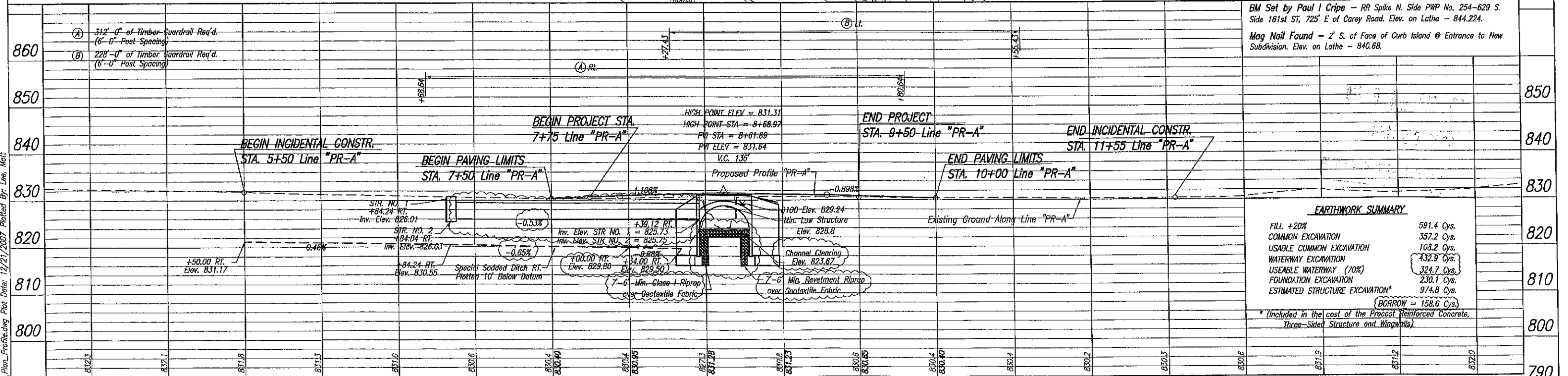
This information was gathered for input into the Hamilton County Geographic Information System (GIS). This document is considered an official record of the GIS.

Entry Date: Aug 2010

Entered By: SLM

Note: All Existing R/W and Topo described from Line "A" unless noted otherwise.

Notify the Hamilton County Surveyor's Office at (317) 776-8495 30 days prior to construction on any portion of the Vestal Kirkendall Regulated Drain per Indiana Code.



EARTHWORK SUMMARY	
FILL +20%	591.4 Cys.
COMMON EXCAVATION	357.2 Cys.
USABLE COMMON EXCAVATION	108.2 Cys.
WATERWAY EXCAVATION	432.9 Cys.
USEABLE WATERWAY (70%)	324.7 Cys.
FOUNDATION EXCAVATION	230.1 Cys.
ESTIMATED STRUCTURE EXCAVATION*	974.8 Cys.
* (Included in the cost of the Precast Reinforced Concrete, Three-Sided Structure and Wingwalls)	
BORROW = 158.6 Cys.	

① Changed pipe sizes and elevations.

## PAVEMENT QUANTITIES AND APPROACH TABLE

LOCATION	DESCRIPTION (APPROACH TYPE OR CLASS)	WIDTH ft.	LENGTH ft.	RAJH ft.	DISTANCE BEYOND R/W LINE ft.	HMA FOR APPROACHES				EXCAVATION		CLEAR ZONE AT DRIVE ft.	GRADE 1 % 2 %	COMPACTED AGGREGATE FOR BASE NO. 53 DEPTH (Inch) Tons	ASPHALT MATERIAL FOR ROADS						HMA BASE FOR SHOULDERS #/syd. Tons	SEAL COAT TYPE 2 sys.	SEAL COAT TYPE 5 sys.	ASPHALT MATERIAL FOR		COMPACTED AGGREGATE FOR SHOULDERS, G. NO. 73 DEPTH 6 Inch Tons		LINE PAINT, SOLID WHITE, 100 mm ft.	LINE PAINT, SOLID YELLOW, 100 mm ft.					
						WITHIN R/W LINE				CUT cys.	FILL cys.				HMA SURFACE, TYPE C Tons	HMA INTERMEDIATE, TYPE C Tons	HMA BASE, TYPE C Tons	PRIME COAT sys.	TACK COAT sys.	6 Inch				Tons										
						SUBGRADE TREATMENT TYPE IIIA sys.	HMA SURFACE TYPE C Tons	HMA INTERMEDIATE TYPE C Tons	HMA BASE TYPE C Tons																									
						#/syd. Tons	#/syd. Tons	#/syd. Tons	#/syd. Tons																									
7+92.00 LT.	Class II Drive	22.3	25.1	15 & 25		4.7	9.4	28.3					23.7																					
Mainline													329.1	36.2	72.4	217.2			203	658.6	1317.2				67.6	500	500							
TOTALS		22.3	25.1	15 & 25		4.7	9.4	28.3					352.8	36.2	72.4	217.2			203	744.3	1488.6				67.6	500	500							

### STRUCTURE DATA

STRUCTURE NUMBER	LOCATION			SIZE inches	PIPE TYPE	MANHOLE, INLET CATCH BASIN, OR SPECIALTY STRUCTURE	LENGTH ft.	FLOW LINE		SKEW COVER In	SERVICE LIFE	SITE DESIGNATION	pH	BACKFILL TYPE	STRUCTURE BACKFILL cys.	FLOWABLE MORTAR cys.	CLASS / RIFRAP Tons	CASTING TYPE	GRATED BOX END SECTION			REMARKS
	STATION	LEFT RIGHT CROSS	STATION					UP STREAM elev.	DOWN STREAM elev.										SLOPE	EA		
																					TYPE	
1	8+84.24	"PR-A"	X	45" X 29"	2	Manhole, K. Modified	155	826.01	825.73	N/A	7	2	29.5				7 Modified					Outlets at Station 8+39.12 "PR-A"
2	8+84.84	"PR-A"	X	42"	2	Manhole, K. Modified	150	826.03	825.75	N/A	7	2	34.5				7 Modified					Outlets at Station 8+39.12 "PR-A"
3	7+96.32	"PR-A"	X			Casting, Adjust to Grade																
4	8+21.52	"PR-A"	X			Casting, Adjust to Grade																
TOTALS																						

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

Entry Date: Aug. 2000

Entered By: SLM

### R/W MARKERS

LT/RT	STATION	OFFSET	EACH
TOTAL			

### MAILBOX APPROACHES

LOCATION	STATION	DESCRIPTION	WIDTH(ft)	ASSEMBLY REQUIRED		
				SINGLE	DOUBLE	RESET EX.
TOTALS						

### ENCAPSULATED LENS SHEET SIGN TABLE

LOCATION	SIGN CODE	THICKNESS in.	AREA sq.ft.	SIGN POST	LENGTH ft.
6+67.84 RT "PR-A"	OM-3R	0.08	3	1-A	7.83
8+26.43 LT "PR-A"	OM-3L	0.08	3	1-A	7.83
9+81.84 RT "PR-A"	OM-3L	0.08	3	1-A	7.83
10+56.43 LT "PR-A"	OM-3R	0.08	3	1-A	7.83
TOTALS			12		31.3

### GUARDRAIL SUMMARY TABLE

LOCATION		LEFT	RIGHT	TIMBER GUARDRAIL LENGTH							GUARDRAIL PEDESTALS				REMARKS
FROM STATION	TO STATION			VEHICLE RAIL @ 6'-0" SPA	STANDARD POST @ SPA	DOUBLE FACED @ 6'-3" SPA	LONG POST @ SPA	SHOP CURVED @ SPA	NESTED GUARDRAIL	GUARDRAIL TRANSITION TYPE TOB	GUARDRAIL END TREATMENT TYPE OS	GUARDRAIL END TREATMENT	CONCRETE, A *	REINFORCING STEEL *	
				ft.	ft.	ft.	ft.	ft.	ft.	EACH	TYPE	EACH	TYPE	EACH	
6+68.64 "PR-A"	9+80.64 "PR-A"	X		312									1.5	245.0	
8+27.43 "PR-A"	10+55.43 "PR-A"	X		228									1.5	244.9	
TOTALS				540									3.0	489.9	

\* INCLUDED IN THE COST OF THE TIMBER GUARDRAIL

### SODDING SUMMARY TABLE

LOCATION		LEFT	MEDIAN	RIGHT	SODDING					MULCHED SEEDING, R	SEEDING, NO MOW LAWN MARK		
FROM STATION	TO STATION				FOR PAVED SIDE DITCHES	FOR DITCHES	FOR MEDIAN	FOR SHOULDER BREAK	SODDING AT BRIDGE CONE				
7+50 "PR-A"	8+45 "PR-A"	X										120.3	
5+50 "PR-A"	8+35 "PR-A"			X								872.2	
8+85 "PR-A"	11+53 "PR-A"	X										311.8	
8+75 "PR-A"	10+00 "PR-A"			X								195.7	
TOTALS							122					872.2	627.8

07-2005.dwg | BSUMMARY.dwg Plot Date: 12/21/2007 Plotted By: Lee, Matt

① Changed pipe sizes and materials.

		STRUCTURE NUMBER																		
PIPE GROUP																				
SMOOTH PIPE SIZE																				
CORRUGATED PIPE SIZE																				
RCP/ RCHPE (S)	CLASS																			
	D0.01 RATING																			
NON-REINFORCED CONCRETE PIPE, CLASS 3 (S)																				
CORRUGATED PE PIPE, TYPE S (S) *																				
RIBBED PE PIPE (S) *																				
SMOOTH WALL PE PIPE (S)* / MAXIMUM DR																				
PROFILE WALL PVC PIPE (S)																				
SMOOTH WALL PVC PIPE (S) *																				
VITRIFIED CLAY PIPE, EXTRA STRENGTH (S)																				
CORRUGATED STEEL PIPE / PIPE-ARCH	FULLY BIT. COATED & LINED	CORR. PROFILE THICKNESS																		
	FULLY BIT. COATED & LINED	CORR. PROFILE THICKNESS																		
	FULLY BIT. COATED & LINED	CORR. PROFILE THICKNESS																		
	ALUM. COATED TYPE 2 (C)	CORR. PROFILE THICKNESS																		
	ALUM. COATED TYPE 2 W/ BPI (C)	CORR. PROFILE THICKNESS																		
	POLYMER PRECOATED GALVANIZED TYPE 1A (S)	CORR. PROFILE THICKNESS																		
	POLYMER PRECOATED GALVANIZED TYPE 1A (S)	CORR. PROFILE THICKNESS																		
	FIBER BONDED BITUMINOUS COATED (C)	CORR. PROFILE THICKNESS																		
	FIBER BONDED BITUMINOUS COATED W/ BPI (C)	CORR. PROFILE THICKNESS																		
	CORRUGATED ALUM. ALLOY PIPE (C)	CORR. PROFILE THICKNESS																		
	CORRUGATED ALUM. ALLOY PIPE W/ BPI (C)	CORR. PROFILE THICKNESS																		
	STR. PLATE ALUMINUM ALLOY PIPE (C)	CORR. PROFILE THICKNESS **																		
	STR. PLATE ALUMINUM ALLOY PIPE W/ CFP (C)	CORR. PROFILE THICKNESS **																		
	STR. PLATE STEEL PIPE W/ CFP (C)	CORR. PROFILE THICKNESS **																		

		STRUCTURE NUMBER																		
PIPE GROUP																				
SMOOTH PIPE SIZE																				
CORRUGATED PIPE SIZE																				
RCP/ RCHPE (S)	CLASS																			
	D0.3 RATING																			
NON-REINFORCED CONCRETE PIPE, CLASS 3 (S)																				
CORRUGATED PE PIPE, TYPE S (S) *																				
RIBBED PE PIPE (S) *																				
SMOOTH WALL PE PIPE (S)* / MAXIMUM DR																				
PROFILE WALL PVC PIPE (S)																				
SMOOTH WALL PVC PIPE (S) *																				
VITRIFIED CLAY PIPE, EXTRA STRENGTH (S)																				
CORRUGATED STEEL PIPE / PIPE-ARCH	FULLY BIT. PAVED & LINED (S)	CORR. PROFILE THICKNESS																		
	ZINC COATED (C)	CORR. PROFILE THICKNESS																		
	ZINC COATED W/ BPI (C)	CORR. PROFILE THICKNESS																		
	ALUM. COATED TYPE 2 (C)	CORR. PROFILE THICKNESS																		
	ALUM. COATED TYPE 2 W/ BPI (C)	CORR. PROFILE THICKNESS																		
	POLYMER PRECOATED GALVANIZED (C)	CORR. PROFILE THICKNESS																		
	POLYMER PRECOATED GALVANIZED W/ BPI (C)	CORR. PROFILE THICKNESS																		
	FIBER BONDED BITUMINOUS COATED (C)	CORR. PROFILE THICKNESS																		
	FIBER BONDED BITUMINOUS COATED W/ BPI (C)	CORR. PROFILE THICKNESS																		
	CORRUGATED ALUM. ALLOY PIPE (C)	CORR. PROFILE THICKNESS																		
	CORRUGATED ALUM. ALLOY PIPE W/ BPI (C)	CORR. PROFILE THICKNESS																		
	STR. PLATE ALUMINUM ALLOY PIPE (C)	CORR. PROFILE THICKNESS **																		
	STR. PLATE ALUMINUM ALLOY PIPE W/ CFP (C)	CORR. PROFILE THICKNESS **																		
	STR. PLATE STEEL PIPE W/ CFP (C)	CORR. PROFILE THICKNESS **																		

LEGEND

- RCP- REINFORCED CONCRETE PIPE
- RCHPE- REINFORCED CONCRETE HORIZONTAL ELLIPTICAL PIPE
- PE- POLYETHYLENE
- DR- DIMENSION RATIO
- PVC- POLYVINYL CHLORIDE
- BIT- BITUMINOUS
- CORR- CORRUGATION
- BPI- BITUMINOUS PAVED INVERT
- ALUM- ALUMINUM
- STR- STRUCTURAL
- CFP- CONCRETE FIELD PAVING
- CIR- CIRCULAR PIPE
- DEF- DEFORMED PIPE
- (S)- SMOOTH PIPE MATERIAL
- (C)- CORRUGATED PIPE MATERIAL
- OK- ACCEPTABLE FOR USE
- (LS)- LOCK SEAM PIPE REQUIRED
- \*- REFER TO STANDARD DRAWING 715-PHCL-18 OR 19 FOR NOMINAL DIAMETER APPROPRIATE FOR PAY ITEM DIAMETER
- \*\* - TABULATED THICKNESS REFERS TO TOP & SIDE PLATES. BOTTOM PLATES SHALL BE OF NEXT GREATER AVAILABLE THICKNESS.

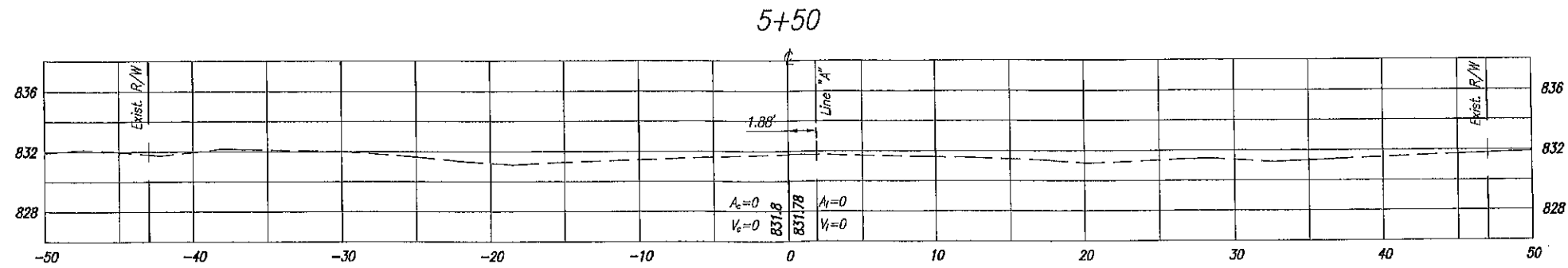
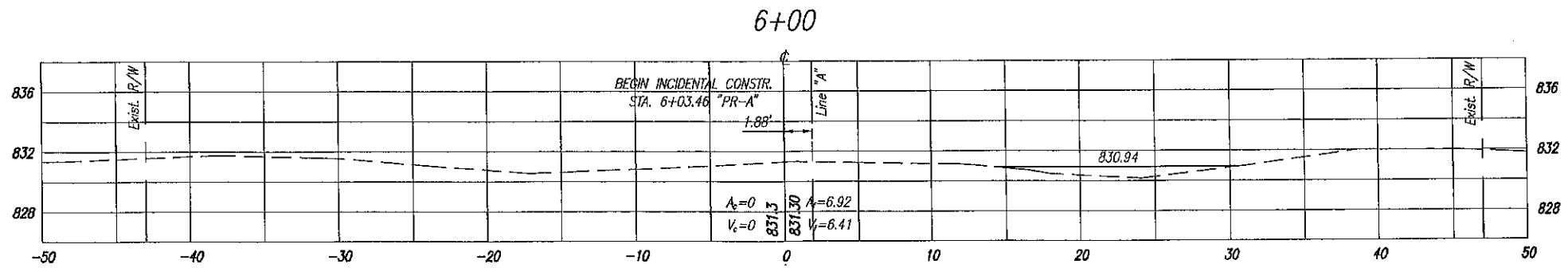
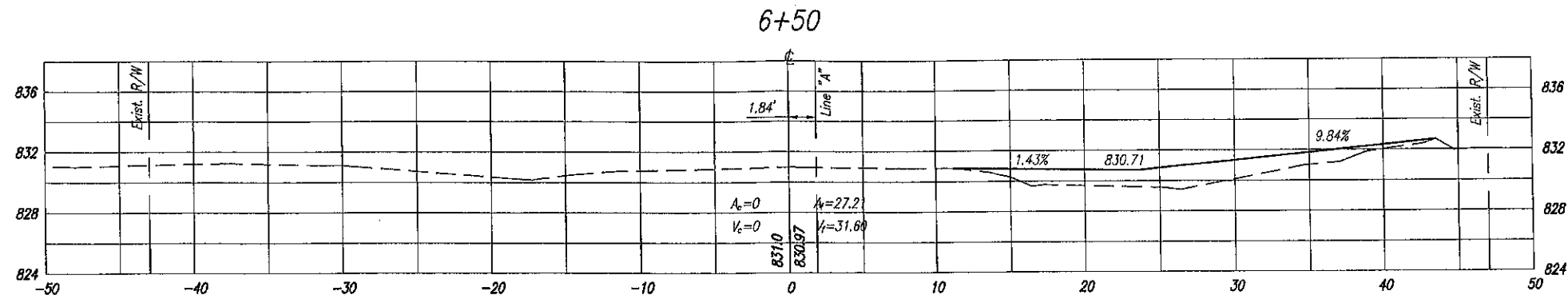
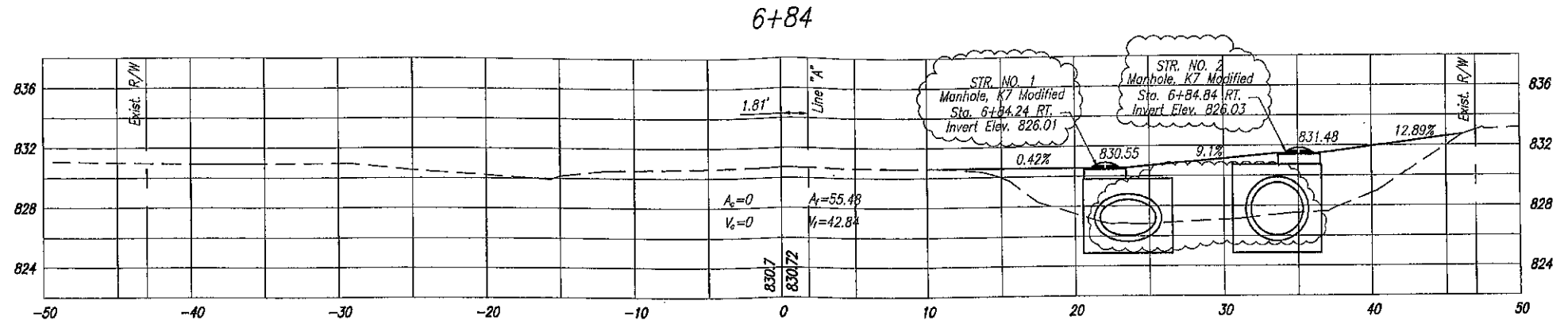
This information was gathered for input into the Hamilton County Geographic Information System (GIS). This document is considered an official record of the GIS.

Entry Date: Aug 2010

Entered By: SLM



① Modified pipe sizes and ditch slope.



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

Entry Date: Aug 2010

Entered By: SLM