



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

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

December 30, 2005

TO: Hamilton County Drainage Board

RE: Stultz & Almond Drain, Heather Knoll Section 2

Attached is a petition filed by Platinum Properties, LLC along with a non-enforcement request, plans, calculations, quantity summary and assessment roll for the Heather Knoll Section 2 Arm, Stultz & Almond Drain to be located in Clay Township. I have reviewed the submittals and petition and have found each to be in proper form.

I have made a personal inspection of the land described in the petition. Upon doing so, I believe that the drain is practicable, will improve the public health, benefit a public highway, and be of public utility and that the costs, damages and expenses of the proposed drain will probably be less than the benefits accruing to the owners of land likely to be benefited. The drain will consist of the following:

6" SSD	6,392 ft.	21" RCP	473 ft.
12" RCP	938 ft.	24" RCP	396 ft.
15" RCP	1,196 ft.	27" RCP	363 ft.
18" RCP	516 ft.	30" RCP	375 ft.

The total length of the drain will be 10,649 feet.

With the development of this section of Heather Knoll, Arm 1 of the Stultz & Almond Drain will be vacated from Sta. 0+00 to Sta. 9+55 per the original 1884 legal description. This will remove 955 feet from the total length of the Stultz & Almond Drain.

The retention ponds (Lakes #4 & #3) located in Common Area # 7 are to be considered part of the regulated drain. Pond maintenance shall include the inlet and outlet, sediment removal and erosion control along the banks as part of the regulated drain. The maintenance of the ponds (lakes), such as mowing and aquatic vegetation control, will be the responsibility of the Homeowners Association. The Board will also retain jurisdiction for ensuring the storage volume for which the ponds were designed will be retained, thereby, allowing no fill or easement encroachments.

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 and right of way 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: The 6" SSD in the swale behind Lots 62 to 64.

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 platted lot, \$10.00 per acre for roadways and common areas, with a \$30.00 minimum. With this assessment the total annual assessment for this drain/this section will be \$1,788.90.

The petitioner has submitted surety for the proposed drain at this time. The sureties which are in the form of a Performance Bond are as follows:

Agent: Bond Safeguard Insurance Company

Date: June 30, 2005 Number: 5017923 For: Storm Sewers Amount: \$212,544.00

Agent: Bond Safeguard Insurance Company.

Date: June 30, 2005 Number: 5017922 For: Erosion Control Amount: \$6,495.00

Parcels assessed for this drain may be assessed for the Osborn & Collins or Williams Creek Drain 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.

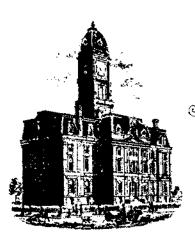
I recommend that upon approval of the above proposed drain that the Board also approve the attached non-enforcement request. The request is for the reduction of the regulated drain easement to those easement widths as shown on the secondary plat for Heather Knoll Section 2 as recorded in the office of the Hamilton County Recorder.

I recommend the Board set a hearing for this proposed drain for September 25, 2006.

Kenton C. Ward

Hamilton County Surveyor

KCW/pll





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

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

December 30, 2005



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RE: Stultz & Almond Drain, Heather Knoll Section 2

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I recommend the Board set a hearing for this proposed drain for September 25, 2006.

Kenton C. Ward

Hamilton County Surveyor

KCW/pll

STATE OF INDIANA)	(Revised 06/08/04)
COUNTY OF HAMILTON)	
TO: HAMILTON COUNT % Hamilton County S One Hamilton Cour Noblesville, IN. 460	urveyor ity Square, Suite 188	
In the matter of Hea	Drain Petition.	Subdivision, Section

Petitioner is the owner of all lots in the land affected by the proposed new regulated drain. The drainage will affect various lots in **Heather Knoll, Section 2**, a subdivision in Hamilton County, Indiana. The general route of such drainage shall be in existing easements and along public roads as shown in the plans on file in the Surveyor's Office.

Petitioner believes that the cost, damages and expenses of the proposed improvement will be less than the benefits which will result to the owners of the land likely to be benefited thereby. Petitioner believes the proposed improvements will:

- (a) improve public health
- (b) benefit a public street
- (c) be of public utility

Petitioner agrees to pay the cost of construction of the drainage system and requests periodic maintenance assessments by the Board thereafter.

The Petitioner also agrees to the following:

- 1. To provide the Drainage Board a Performance Bond or Non-Revocable Letter of Credit for the portion of the drainage system which will be made a regulated drain. The bond will be in the amount of 120% of the Engineer's estimate. The bond will be in effect until construction of 100% of the system is completed and so certified by the Engineer.
- The Petitioner shall retain an Engineer throughout the construction phase.
 At completion of the project the Petitioner's Engineer shall certify that the drainage system which is to be maintained as a regulated drain has been constructed as per construction plans.
- 3. The Petitioner agrees to request in writing to the County Surveyor any changes from the approved plan and must receive written authorization from the County Surveyor prior to implementation of the change. All changes shall be documented and given to the Surveyor to be placed in the Drain file.
- 4. The Petitioner shall instruct his Engineer to provide a reproducible print on a 24" x 36" Mylar of the final design of the Drainage System. This shall be submitted to the County Surveyor prior to the release of the Performance Bond.
- 5. The Petitioner shall comply with the Erosion Control Plan as specified on the construction plans. Failure to comply with the Erosion Control Plan shall be determined by the Board as being an obstruction to the drainage system. The County Surveyor shall immediately install or repair the needed measures at Petitioners cost as per IC 36-9-27-46.

The Petitioner further requests that the Drain be classified as an Urban Drain as per IC 36-9-27-69(d).

RECORDED OWNER(S) OF LAND INVOLVED

- Hen Branum	
Signed	Signed
Ken Brasseur	
Printed Name	Printed Name
November 30, 2004	
Date	Date
Signed	Signed .
Printed Name	Printed Name
Date	Date



CONSULTING ENGINEERS • LAND SURVEYORS

David J. Stoeppelwerth, P.E., P.L.S. President, C.E.O.

Curtis C. Huff, P.L.S. Vice-President, C.O.O.

R.M. Stoeppelwerth, P.E., P.L.S.

July 7, 2005

Hamilton County Surveyor's Office One Hamilton County Square Suite 188 Noblesville, Indiana 46060

Attention: Kent Ward

Re: Heather Knoll, Section 2

Dear Mr. Ward:

On behalf of the developer Platinum Properties, L.L.C., I wish to submit the following Engineer's Estimate for Heather Knoll, Section 2. The estimate is as follows:

Storm Sewer

\$177,120.00

Erosion Control

\$5,412.00

Monumentation

\$7,910.00

If you have any questions regarding these estimates, please contact Edward E. Fleming at (317) 577-3400, ext. 22.

Very truly yours,

STOEPPELWERTH & ASSOCIATES, INC.

David J. Stoeppelwerth Professional Engineer

No. 19358

19. STATE

NOTICE STATE

NOTIC

FINDINGS AND ORDER

CONCERNING THE MAINTENANCE OF THE

Stultz & Almond Drain, Heather Knoll Section 2 Arm

On this **25th** day of September 2006, the Hamilton County Drainage Board has held a hearing on the Maintenance Report and Schedule of Assessments of the Stultz & Almond Drain, Heather Knoll Section 2 Arm.

Evidence has been heard. Objections were presented and considered. The Board then adopted the original/amended Schedule of Assessments. The Board now finds that the annual maintenance assessment will be less than the benefits to the landowners and issues this order declaring that this Maintenance Fund be established.

HAMILTON COUNTY DRAINAGE	BOARD
President President	
Member	
Memmer	
Member	

Attest: Seprette Maskaue

FINDINGS AND ORDER

CONCERNING THE PARTIAL VACATION OF THE

Stultz & Almond Drain, Sta. 0+00 to Sta. 9+55

On this 25th day of September 2006, the Hamilton County Drainage Board has held a hearing on the Maintenance Report and Schedule of Assessments of the Stultz & Almond Drain, Sta. 0+00 to Sta. 9+55.

Evidence has been heard. Objections were presented and considered. The Board then adopted an order of action. The Board now finds that the costs of continued maintenance to the portion of the above drain exceed the benefits to the real estate benefited by the portion of the drain to be abandoned and issues this order vacating the above section of the **Stultz & Almond Drain**.

HAMILTON COUNTY DRAINAGE BOARD

President

Member

Attest: Spette Mastrug

BEFORE THE HAMILTON COUNTY DRAINAGE BOARD IN THE MATTER OF

Stultz & Almond Drain, Heather Knoll Section 2 Arm

NOTICE

To	Whom	It	May	Concern	and:	:	
							_
					-		

Notice is hereby given of the hearing of the Hamilton County Drainage Board on the Stultz & Almond Drain, Heather Knoll Section 2 Arm on September 25, 2006 at 9:05 A.M. in Commissioners Court, Hamilton County Judicial Center, One Hamilton County Square, Noblesville, Indiana, and which construction and maintenance reports of the Surveyor and the Schedule of Assessments made by the Drainage Board have been filed and are available for public inspection in the office of the Hamilton County Surveyor.

Hamilton County Drainage Board

Attest: Lynette Mosbaugh

ONE TIME ONLY

BEFORE THE HAMILTON COUNTY DRAINAGE BOARD IN THE MATTER OF THE

Stultz & Almond Drain, Heather Knoll Section 2 Arm

NOTICE

Notice is hereby given pursuant to Section 405 of the 1965 Indiana Drainage Code that this Board, prior to final adjournment on **September 25**, 2006 has issued an order adopting the Schedule of Assessments, filed the same and made public announcement thereof at the hearing and ordered publication. If judicial review of the findings and order of the Board is not requested pursuant to Article Eight of this code within twenty (20) days from the date of this publication, the order shall be conclusive.

Hamilton County Drainage Board

Attest: Lynette Mosbaugh

ONE TIME ONLY

CERTIFICATE OF COMPLETION AND COMPLIANCE

Re: Heather Knoll, Section Two				
I hereby certify that:				
1. I am a Registered Land Surveyor or 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				
4. The drainage facilities within the above referenced subdivision to the best of my knowledge, information and belief have been installed and completed in conformity with all plans and specifications.				
Signature:				
Business Address: Stoeppelwerth & Associates, Inc.				
9940 Allisonville Road, Fishers, Indiana 46038				
Telephone Number: (317) 849-5935				
SEAL INDIANA REGISTRATION NUMBER				
NO. STATE OF NOANA OR WITHING SURVE MINING				

To: Hamilton County Surveyor

Carmelingov

IMPROVEMENT-ARM: HEATHER KNOLL Sec 2

HEARING DATE: #455HUIT Z

DRAIN BOOK & PAGE: Sept 25, 2000

INSTALL! 2005

BL 9 Pg. 424-420

	FINAL REPO	ORT CHECKLIST	Heather Kndl TKwy
•	RELEASE BONDS	Od 23, 2006	2050
•	NON-ENFORCEMENT	#Z00600065690	1557
•	ENG CERT OF CC	J Done	292
•	ASBUILTS	Done	64/
•	FIGURE PIPE LENGTHS	J SIW	200/
•	ENTER INTO GIS	J &	204
•	WRITE FINAL REPORT	J 9-20-07	2712
•	ENTER INTO POSSE	1) Done	277V 267V
•	ENTER INTO GASB 34 SPREADSHEET	4 Done	27/28/
•	SCAN SURVEYOR'S REPORTS	-	2160
•	EMAIL WORD FILES TO LYNNETTE		3386/2 = 1694
•	COPIES OF REPORTS TO LYNNETTE	The state of the s	·

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Livingston LN	
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1772	
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112-64	. 20





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

September 26, 2007

Re: Stultz & Almond Drain: Heather Knoll Sec. 2

Attached are as-builts, certificate of completion & compliance, and other information for Heather Knoll Section 2. 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 December 30, 2005. The report was approved by the Board at the hearing held September 25, 2006. (See Drainage Board Minutes Book 9, Pages 424-426) The changes are as follows:

Structure:	Length:	Size	Material:	Up invert:	Dn_Invert	Grade:	Changes:
147-147A	128	12	RCP	910.48	909.95	0.41	-2
147A-146	161	15	RCP	909.95	909.5	0.28	2
146-145	198	15	RCP	909.5	909.12	0.19	
145-144	67	18	RCP	909.12	908.99	0.19	2
151-150	89	12	RCP	910.53	910.35	0.2	-2
150-147A	117	15	RCP	910.35	909.95	0.34	1
155-154	36	12	RCP	911.78	911.56	0.61	
156-153	151	12	RCP	911.67	910.92	0,5	1
153-152	62	18	RCP	910.92	910.61	0.5	
154-153	97	15	RCP	911.56	910.92	0.66	
167-164	65	21	RCP	911.65	911.37	0.43	2
164-163	191	21	RCP	911.37	910.93	0.23	1
163-162	30	21	RCP	910.93	910.87	0.2	
162-161A	139	21	RCP	910.87	910.45	0.3	-1
161A-161	50	21	RCP	910.45	910.2	0.5	
161-160	152	24	RCP	910.2	909.74	0.3	
160-159	36	24	RCP	909.74	909.49	0.69	
159-158	157	24	RCP	909.49	909.17	0.2	2
158-157	49	24	RCP	909.17	909	0.35	-4
166-165	37	15	RCP	912.11	911.75	0.97	
165-164	151	18	RCP	911.75	911.37	0.25	1
171-170	20	12	RCP	912.36	912.3	0,3	
170-169	190	15	RCP	912.3	911.65	0.34	

169-168	58	15	RCP	911.65	911.5	0.26	-1
185-184	215	27	RCP	913.3	912.8	0.23	1
184-183	146	27	RCP	912.8	912.39	0.28	-3
183-180	372	30	RCP	912.39	911.47	0.25	-3
177-176	75	12	RCP	912,82	912.6	0.29	
176-175	82	12	RCP	912.6	912.44	0.2	-2
175-174	32	18	RCP	912.44	912.2	0.75	
174-173	204	18	RCP	912.2	911.52	0.33	
179-178	30	15	RCP	912.83	912.69	0.47	
178-175	56	15	RCP	912.69	912.44	0.45	1
204-203	36	12	RCP	913.62	913.34	0.78	
203-202	201	15	RCP	913.34	911.55	0.89	-8
182-181	30	12	RCP	913.83	913.68	0.5	
181-203	111	15	RCP	913.68	913.34	0.31	-1
172-161A	175	12	RCP	910.81	910.45	0.21	
149-150	44	12	RCP	910.88	910.35	1.16	

6" SSD Streets:

Heather Knoll	
Pkwy	1694
Livingston Ln	192
Newington Ln	583
Paramount Cir	500.5
×2	

Total:

5939

RCP Pipe Totals:

	12	866
	15	1256
	18	516
	21	475
	24	394
	27	361
	30	372
T-4-1-		40.40

Total:

4240

The length of the drain due to the changes described above is now 10,317 feet.

The non-enforcement was approved by the Board at its meeting on September 25, 2006 and recorded under instrument #200600065690.

The following sureties were guaranteed by Bond Safeguard Insurance Company and released by the Board on its October 23, 2006 meeting.

Bond-LC No: 5017923 **Insured For:** Storm Sewers

Amount: \$212,544.00 **Issue Date:** June 30, 2005

Bond-LC No: 5017922

Insured For: Erosion Control

6" SSD Lots: lots 62-64

Total:

182

182

Amount: \$6,495

Issue Date: June 30, 2005

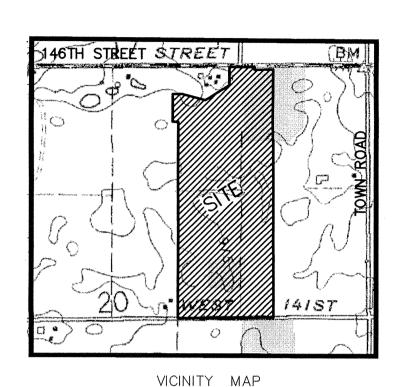
I recommend the Board approve the drain's construction as complete and acceptable.

Sincerely,

Kenton C. Ward, CFM

Hamilton County Surveyor

KCW/slm



NOT TO SCALE

INDEX DESCRIPTION C001 COVER SHEET C100 TOPOGRAPHICAL SURVEY C200&C201 SITE DEVELOPMENT PLAN STORMWATER POLLUTION & PREVENTION PLAN & SPECS C300&C301 STREET PLAN & PROFILES / ENTRANCE PLAN & INTERSECTION DETAILS /C400-C406 TRAFFIC CONTROL / TRAFFIC MAINTENANCE / TRAFFIC DETAILS C500-C502 SANITARY SEWER PLAN & PROFILES C600-C602 STORM SEWER PLAN & PROFILES C700&C701 WATER PLANS CONSTRUCTION DETAILS SANITARY C800-C803 STORM LANDSCAPE PLANS

	REVISIONS
SHT.	DESCRIPTION
ALL	REVISIONS PER TAC COMMENTS 2/21/05 JDH
ALL	REVISIONS PER DEVELOPER 4/22/05 BMK
ALL	REVISIONS PER CITY COMMENTS 6/6/05 BAH
ALL	REVISIONS PER SURVEYORS COMMENTS 6/08/05 JDH
0200,201,500 0501,502,600 501,602,700,701	AS BUILT 1/4/06 RKG
201,002,700,70	
	A

HEATHER KNOLL SECTION 2

Developed by: PLATINUM PROPERTIES L.L.C. 9551 DELEGATES ROW INDIANAPOLIS, INDIANA 46240

Phone: (317)-818-2900 Fax: (317)-818-2910

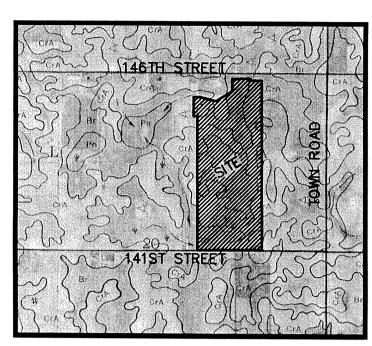
CONTACT: KEN BRASSEUR

RECORD DRAWING





SCALE: 1"=200'



SOILS MAP NOT TO SCALE

SOILS MAP

- MmA Miami silt loam, 0-2 % slopes- This nearly level, deep, well drained soil is on slight rises on uplands. Permeability is moderate in the subsoil and the substratum. Available water capacity is high. The main soil features that adversely affect engineering uses of this soil are moderate potential for frost action, moderate permeability, and moderate shrink—swell potential. This soil has severe limitations for local roads and streets. The base material needs to be strengthened with suitable material.
- Crosby silt loam, 0-3 percent slopes— this soil is light colored, silty in texture and on sloping uplands. It is deep and somewhat CrA

 poorly drained with slow permeability. It has high available water for plant growth and medium organic matter content. The soil has compact till starting at a depth between 20 -40 inches. The main soil features that affect urban development uses are seasonal high water table, moderate shrink—swell potential, high potential frost action and slow permeability.
- Br Brookston silty clay loam— this soil is dark colored, silty in texture and on depressional uplands. It is deep and very poorly drained with moderate permeability. It has high available water for plant growth and high organic matter content. It has compact till starting at a depth of 40 to 60 inches. The main soil features that affect the urban development uses are seasonal
- high water table, high potential frost action, moderate shrink—swell potential, moderate permeability and ponded surface water. MmB2 Miami silt loam, 2—6 percent slopes— this soil is light colored, silty in texture and on sloping uplands. It is deep and well drained with moderate permeability. It has moderate available water for plant growth and a medium organic matter content. It has compact till starting at a depth between 20— 40 inches. The main soil features that adversely affect urban development uses are
- moderate potential frost action, moderate shrink—swell potential, moderately slow permeability, low strength and erosion during MmC2 Miami clay loam, 6-12 % sloped severely eroded— this moderately sloping, deep well draining soil is on knobs and breaks along streams and drainage ways on uplands. Permeability is moderate in the subsoil and moderately slow in the substratum. This soil is suitable for urban development. The main soil features that adversely affect the engineering uses of this soil are moderate potential frost action, moderate shrink—swell potential, and moderately slow permeability. The hazard of erosion is high during
- FxC3 Fox loam, 8 to 18 % slopes, severely eroded—
 This moderate sloping, well—drained soil is on side slopes adjacent to drainageways on terraces and in domelike areas on uplands. It is moderately deep over sand and gravely sand. Permeability is moderate in the subsoil and rapid in the underlying material. Available water capacity is low. This soil has moderate limitations for urban to the subsoil of the soil are moderate from the subsoil and rapid in the underlying material. development (Slope). Features that adversely affect engineering uses of this soil are moderate frost action, moderate shrink—swell potential, moderate permeability in the subsoil and very rapid permeability in the under lying material. Topsoil should be stockpiled for use in exposed areas.
- This nearly level, deep, very poorly drained soil is in depressions, swales, and narrow drainageways on outwash plains. Runoff from higher adjacent soils is ponded on this soil. Permeability is slow. The water table is commonly at the surface or is at a depth of less than one foot in winter and early spring. Availbale water capacity is high. Surface runoff is ponded or is very slow. The main soil features that adversely affect engineering uses of this soil are a seasonal high water table, high potential frost action, moderate shrink—swell potential, and slow permeability. The base material for roads needs to be replaces or strengthened with suitable material.
- Oca Ockley silt loam, 0-2 % slopes— This nearly level, deep well drained soil is mainly on broad terraces. Permeability and available water capacity is moderate. This soil is suitable for urban development. Features that adversely affect engineering uses of this soil are moderate frost action, moderate shrink—swell potential, moderate permeability in the subsoil and very rapid permeability in
- Oc82 Ockley silt loam, 2-6 % slope, eroded— This gently sloping, deep well drained soil is mainly on broad terraces. Permeability and available water capacity is moderate. This soil is suitable for urban development. Features that adversely affect engineering uses of this soil are moderate frost action, moderate shrink—swell potential, moderate permeability in the subsoil and very rapid permeability in the under lying material. This soil has severe limitations for local roads because of low strength. The base material of roads needs to be strengthened with suitable material.

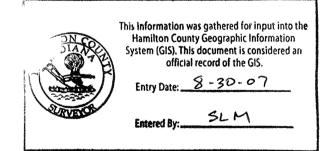
SECTION 2 DESIGN DATA

= 1.73 LOTS/ACRE

28.246 AC.

HEATHER KNOLL PARKWAY NEWINGTON LANE LIVINGSTON LANE STREET A STREET B

1,649.31 L.F. 623.78 L.F. 225.89 L.F. 307.63 L.F. 518.49 L.F.



PLANS PREPARED BY:

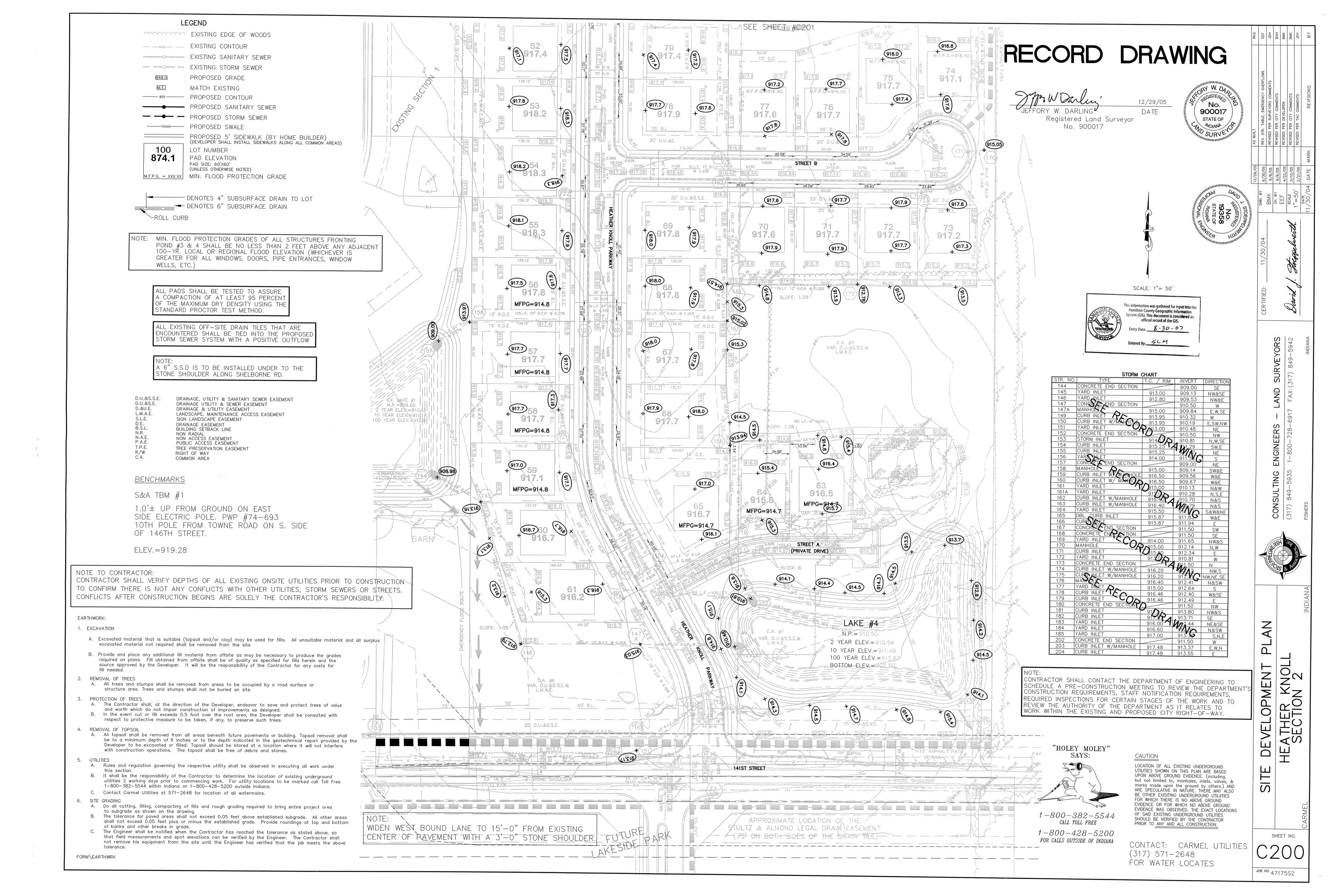
STOEPPELWERTH & ASSOCIATES, INC. CONSULTING ENGINEERS & LAND SURVEYORS 9940 ALLISONVILLE ROAD FISHERS, INDIANA 46038 PHONE: (317)-849-5935 FAX: (317)-849-5942 CONTACT PERSON: EDWARD E. FLEMING

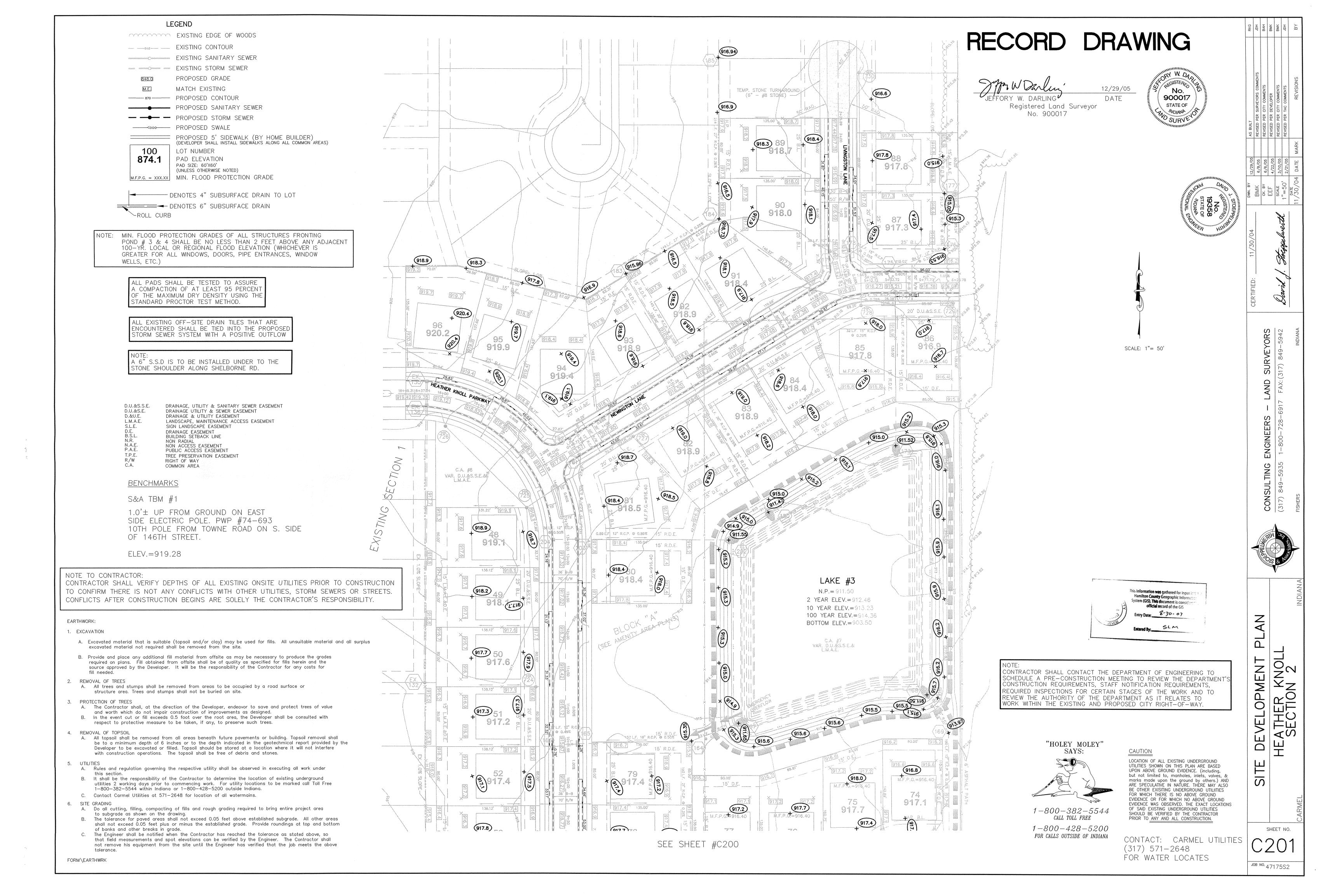
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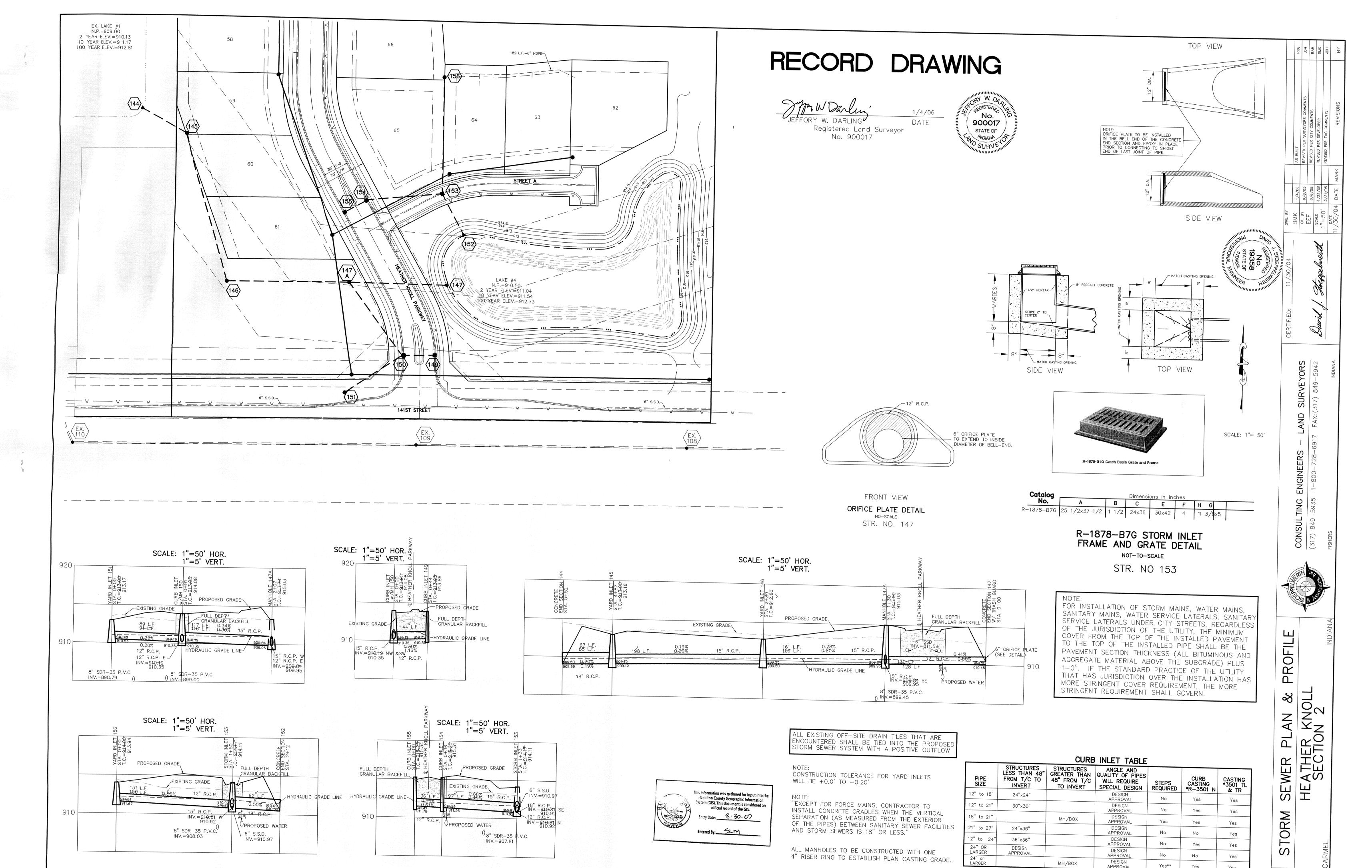
JAN 04 2006

DAVID J. STOEPPELWERTH PROFESSIONAL ENGINEER

NO. 19358







SHEET NO. STRUCTURES DEEPER THAN 48" FROM T/C TO INVERT WILL BE A M.H. OR A BOX WITH STEPS UNLESS SPECIAL DESIGN IS APPROVED SPECIAL NOTE: STRUCTURES WILL BE DESIGNED FOR MAXIMUM FLOW IN PIPES ^{ЈОВ NO.} 47175S2

* PIPES NO LARGER THAN 18" CAN BE USED IN THE 2' SIDE OF THIS BOX

SPECIAL NOTE:

SPECIAL NOTE:

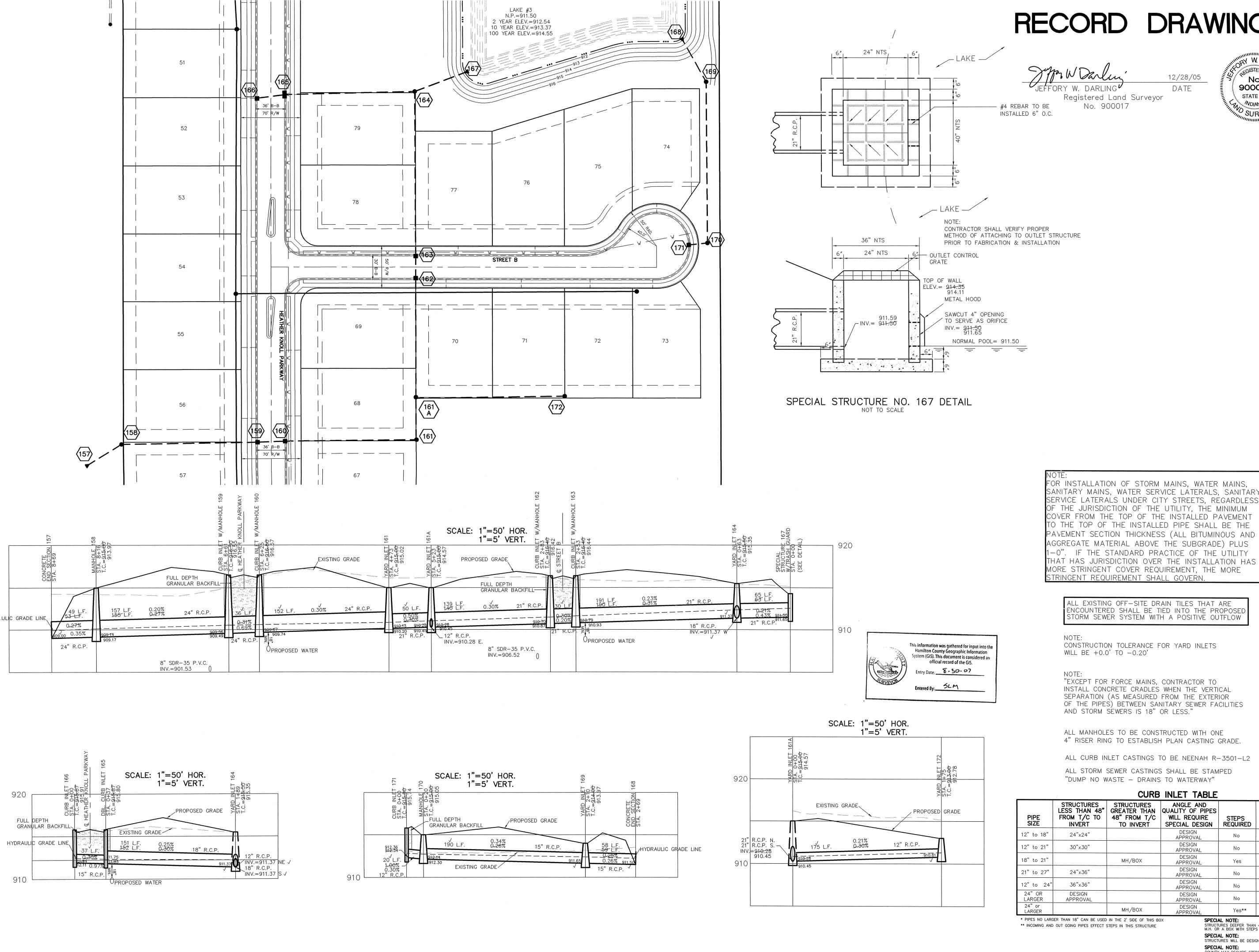
COUNTY MAY REQUIRE STEPS TO BE INSTALLED AFTER STRUCTURE IS SET, TO IMPROVE ACCESS.

** INCOMING AND OUT GOING PIPES EFFECT STEPS IN THIS STRUCTURE

ALL CURB INLET CASTINGS TO BE NEENAH R-3501-L2

ALL STORM SEWER CASTINGS SHALL BE STAMPED

"DUMP NO WASTE - DRAINS TO WATERWAY"



RECORD DRAWING

No. 900017

12/28/05 DATE Registered Land Surveyor

ALL EXISTING OFF-SITE DRAIN TILES THAT ARE

INSTALL CONCRETE CRADLES WHEN THE VERTICAL

ALL MANHOLES TO BE CONSTRUCTED WITH ONE

ALL CURB INLET CASTINGS TO BE NEENAH R-3501-L2

CURB INLET TABLE

APPROVAL

DESIGN

APPROVA

DESIGN APPROVAL

DESIGN

APPROVA

APPROVAL

DESIGN

APPROVAL DESIGN APPROVAL

ALL STORM SEWER CASTINGS SHALL BE STAMPED

"DUMP NO WASTE - DRAINS TO WATERWAY"

MH/BOX

MH/BOX

WILL BE +0.0' TO -0.20'

24"x24"

30"x30"

24"x36"

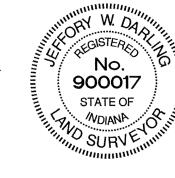
36"x36"

DESIGN APPROVAL

ENCOUNTERED SHALL BE TIED INTO THE PROPOSED

STORM SEWER SYSTEM WITH A POSITIVE OUTFLOW





SCALE: 1"= 50'

RKG EEF JOH

SURVEYORS (317) 849-5942

CONSULTING (317) 849-593

OFIL 2

 \Box

ATHER KNOLL SECTION 2 PLAN 出工

WER S ORM S

JOB NO. 47175S2

Yes** Yes SPECIAL NOTE:
STRUCTURES DEEPER THAN 48" FROM T/C TO INVERT WILL BE A
M.H. OR A BOX WITH STEPS UNLESS SPECIAL DESIGN IS APPROVED SPECIAL NOTE: STRUCTURES WILL BE DESIGNED FOR MAXIMUM FLOW IN PIPES

SPECIAL NOTE: COUNTY MAY REQUIRE STEPS TO BE INSTALLED AFTER STRUCTURE IS SET, TO IMPROVE ACCESS.

CURB CASTING
CASTING *3501 TL
*R-3501 N & TR

Yes

Yes

Yes

Yes

Yes

Yes

Yes

Yes

No

Yes

No

Yes

No

RECORD DRAWING

12/28/05 DATE Registered Land Surveyor No. 900017



FOR INSTALLATION OF STORM MAINS, WATER MAINS, SANITARY MAINS, WATER SERVICE LATERALS, SANITARY SERVICE LATERALS UNDER CITY STREETS, REGARDLESS OF THE JURISDICTION OF THE UTILITY, THE MINIMUM COVER FROM THE TOP OF THE INSTALLED PAVEMENT TO THE TOP OF THE INSTALLED PIPE SHALL BE THE PAVEMENT SECTION THICKNESS (ALL BITUMINOUS AND AGGREGATE MATERIAL ABOVE THE SUBGRADE) PLUS 1-0". IF THE STANDARD PRACTICE OF THE UTILITY THAT HAS JURISDICTION OVER THE INSTALLATION HAS

1"=5' VERT.

-PROPOSED GRADE

CONSTRUCTION TOLERANCE FOR YARD INLETS WILL BE +0.0' TO -0.20'

AND STORM SÉWERS IS 18" OR LESS."

"EXCEPT FOR FORCE MAINS, CONTRACTOR TO INSTALL CONCRETE CRADLES WHEN THE VERTICAL SEPARATION (AS MEASURED FROM THE EXTERIOR OF THE PIPES) BETWEEN SANITARY SEWER FACILITIES

ALL EXISTING OFF—SITE DRAIN TILES THAT ARE

ENCOUNTERED SHALL BE TIED INTO THE PROPOSED STORM SEWER SYSTEM WITH A POSITIVE OUTFLOW

ALL MANHOLES TO BE CONSTRUCTED WITH ONE 4" RISER RING TO ESTABLISH PLAN CASTING GRADE.

ALL CURB INLET CASTINGS TO BE NEENAH R-3501-L2

ALL STORM SEWER CASTINGS SHALL BE STAMPED "DUMP NO WASTE - DRAINS TO WATERWAY"

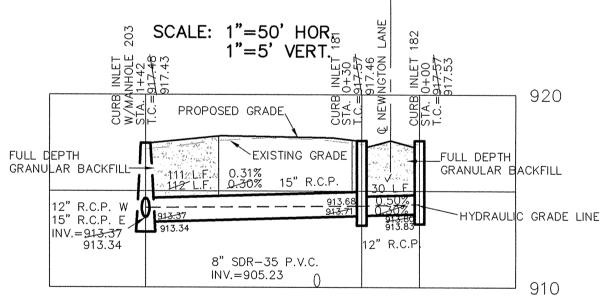
SCALE: 1"= 50'

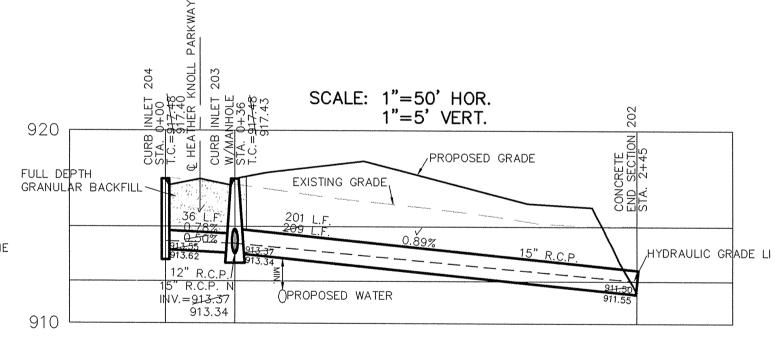
CURB INLET TABLE

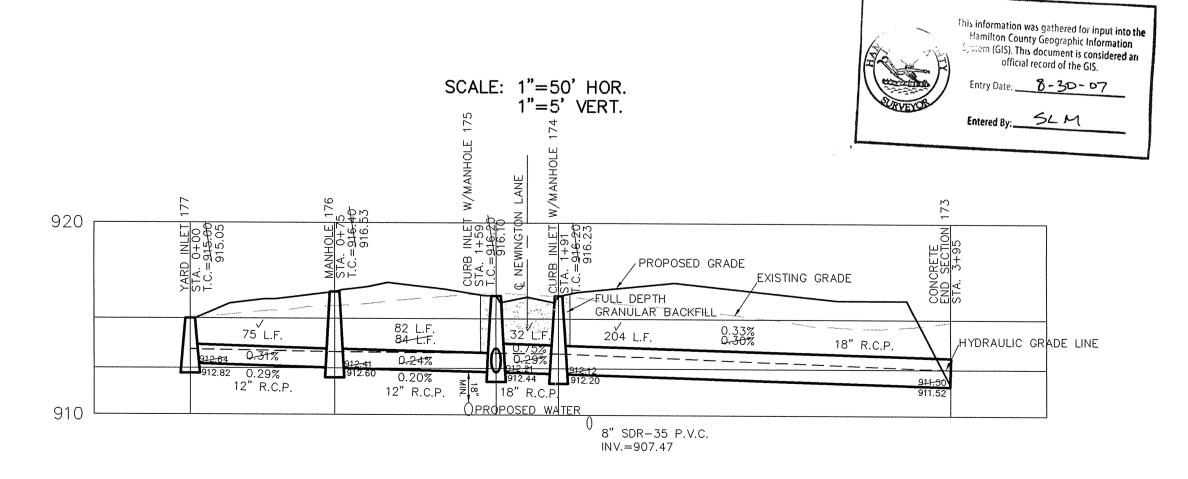
PIPE SIZE	STRUCTURES LESS THAN 48" FROM T/C TO INVERT	STRUCTURES GREATER THAN 48" FROM T/C TO INVERT	ANGLE AND QUALITY OF PIPES WILL REQUIRE SPECIAL DESIGN	STEPS REQUIRED	CURB CASTING *R-3501 N	CASTING *3501 TL & TR
12" to 18"	24"×24"		DESIGN APPROVAL	No	Yes	Yes
12" to 21"	30"×30"		DESIGN APPROVAL	No	Yes	Yes
18" to 21"		MH/BOX	DESIGN APPROVAL	Yes	Yes	Yes
21" to 27"	24"x36"		DESIGN APPROVAL	No	No	Yes
12" to 24"	36"x36"		DESIGN APPROVAL	No	Yes	Yes
24" OR LARGER	DESIGN APPROVAL		DESIGN APPROVAL	No	No	Yes
24" or LARGER		MH/BOX	DESIGN APPROVAL	Yes**	Yes	Yes

* PIPES NO LARGER THAN 18" CAN BE USED IN THE 2' SIDE OF THIS BOX ** INCOMING AND OUT GOING PIPES EFFECT STEPS IN THIS STRUCTURE

STRUCTURES DEEPER THAN 48" FROM T/C TO INVERT WILL BE A M.H. OR A BOX WITH STEPS UNLESS SPECIAL DESIGN IS APPROVED. SPECIAL NOTE: STRUCTURES WILL BE DESIGNED FOR MAXIMUM FLOW IN PIPES SPECIAL NOTE: COUNTY MAY REQUIRE STEPS TO BE INSTALLED AFTER STRUCTURE IS SET, TO IMPROVE ACCESS.







CONSULTING (317) 849-5935

SURVEYORS (317) 849-5942

PROFIL HEATHER KNOL SECTION 2 PLAN SEWER

JOB NO. 47175S2

TORM