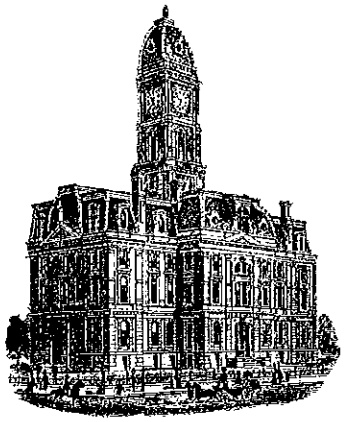


SURVEYOR'S OFFICE

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

November 12, 2015

To: Hamilton County Drainage Board

Re: William P. Bennett Drain Reconstruction

Attached is a petition, drainage map, drainage shed map and schedule of assessments for the reconstruction of the William P. Bennett Drain. The William P. Bennett Drain is listed as number three (3) on the 2015 Drain Classification List under reconstruction.

HISTORY

This drain was requested for classification by Steve Pitts on April 5, 1972 and by Alice Butler on June 14, 1974.

Petitions for reconstruction have been filed twice for this drain. These were filed with the Board on November 10, 2003 and the latest on March 10, 2004. The last petition having 18.8% of the landowners within the drainage shed signing.

The Drainage Area of William P. Bennett covers portions of Sections 13 and Section 24 of Adams Township, Range 3 East, Township 20 North and portions of Sections 8, 17, 18, 19, 20 of Jackson Township, Range 4 East, Township 20 North. The total watershed for the drain is 1,953.88 acres.

The William P. Bennett Drain consists of the William P. Bennett Drain, the Asa Wiles Drain and the S. Moriarty Drain.

The oldest portion of the system is the Asa Wiles Drain. This tile was viewed and ordered constructed on November 23, 1894. (Commissioners Record Book 9, Pgs. 303-306). This drain was installed as a replacement for the then existing Perry Bennett Drain. The Asa Wiles consists of a main tile that runs in a southwesterly direction from the south side of 266th Street to its outlet into the William P. Bennett Drain at Sta. 0 of the Bennett west of US 31. The Asa Wiles also has one arm running along the west side of Dunbar Rd. The Asa Wiles consists of 4,710 feet of 10" and 12" tile for the main drain and 825 feet of 10" tile for Arm 1. The Drain totals 5,535 feet of tile drain.

The next drain constructed was the S. Moriarty Drain. This drain was viewed and the report given by the viewers of the ditch to the Commissioners on March 3, 1910. (Commissioners Record Book 21, pgs. 104-106). This tile begins just south of the NW corner of the SE Quarter of Section 17 and runs in a northwesterly direction crossing Salem Road and outletting into the existing William P. Bennett open

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

ditch. The S. Moriarty consisted of one main tile consisting of 2,150 feet of 12" tile. The S. Moriarty Drain was reconstructed by Becks Hybrids in 2014. The tile now consists of main tile 2,135 feet of 18-inch tile.

The William P. Bennett Ditch was viewed on August 5, 1924 and then ordered constructed by the Commissioners on September 2, 1924 (Commissioners Record 28, Page 148-151). The William P. Bennett is an open ditch that runs in a northeasterly direction from the west side of US 31 to its confluence with Little Cicero Creek for a length of 14,437 feet. The Bennett drain also includes 542 feet of 20" tile west of US 31 (between the end of the Asa Wiles tile and the beginning of the open ditch portion of the W.P. Bennett Drain). The Bennett was cleaned out in 1947 and an arm, consisting of open ditch 1,070 feet in length, that runs along the southeast corner of the US 31 & 266th Street intersection was constructed in 1958. A segment of this arm was enclosed with 152-feet of 42" RCP in 1999. The Bennett drain consists of 694 feet of tile and 15,507 feet of open ditch.

The total drain length is 15,507 feet of open ditch and 8,364 feet of tile for a total of 23,871 feet.

The drain was placed on maintenance on May 27th, 2008. At that time it was recommended for the drain to be placed on maintenance but remain on the reconstruction list until plans could be finalized and a reconstruction hearing held. At that time, the drainage shed for the drain was reported to be 1,959.37 acres with a total annual maintenance assessment of $7,514.66.

The following drain complaints and work orders are on file at the Hamilton County Surveyor's Office:

Landowner (at time of complaint)	Date	Complaint
Michael D and Lisa McCool	1/5/2005	Erosion
Michael D and Lisa McCool	4/20/2005	Erosion
Christine Durbin	2/26/2014	Flooding and Erosion
Dorothy M Grinstead	1/4/2011	Sink Hole
Dorothy M Grinstead	11/22/2011	Sink Hole
Markus E and Ruth A Patterson	11/14/2011	2 Sink Holes and Erosion
Dennis & Milton L Baltimore Jr. and Wayne F & Donna M Hunter	2/28/2012	Clear Open Drain
Dennis & Milton L Baltimore Jr. and Duvall, Bond & Harris LLC	7/25/2012	Clear easement for Highway project
Gene A and Beverly S Grinstead; trustees	6/10/2014	Sink Holes

All the work orders have been completed to date.

EXISTING CONDITIONS

The report to the drainage board in 2008 indicated that the open ditch was heavily overgrown and was in need of clearing. The condition of the drain was susceptible to jams caused by debris which could result in backwater and localized flooding. The condition of the drain has increased the potential for large woody debris to collect on road crossings, threatening the bridge structure and and/or redirecting flow and causing erosion.

The open ditch portion of the drain was inspected visually in December 2014. The inspection identified that the open ditch portion of the drain is heavily overgrown with vegetation and has a high amount of

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

accumulated sediment in the channel. This sediment compromises both the hydraulic capacity of the road crossings and the ability to effectively drain the root zone of the adjacent agricultural lands. An adequately drained root zone relieves stress on plants and also provides aeration to the root system, which potentially increases production/yield of the acreage.

In some areas the drain is close to existing roadway. The drain has been listed in the Surveyors Drain Classification List since 2007 as having portions of the drain within or immediately adjacent to the right of way. In the Drain Classification List these areas where the open ditch parallels the roadway are recommended to be moved away from the right-of-way so as to increase safety. This should be done during reconstruction of the drain. The following four (4) areas were recommended for reconstruction per the Drain Classification List:

1. Approximately 200 feet east of US 31 on south side of 266th Street
2. Approximately 2,700 feet east of US 31 on south side of 266th Street
3. Approximately 2,200 feet south of 276th Street along north side of Salem Road.
4. Approximately 730 feet west of Salem Road along south side of 276th Street

The crossing at Anthony Road and the westernmost crossing of 266th Street overtop during the NCRS Type A rain event as well as all rain events above this event. The existing channel is inadequate for the NCRS Type A rain event downstream of Anthony Road, at certain points along 266th Street and in the vicinity of US-31.

Although not specifically noted in the NPDES Phase II General Permit Application, Storm Water Quality Management Plan Part C: Program Implementation Report, the drain is within the drainage shed for the Little Cicero Creek which is identified on Page 4 of the report as an MS4 receiving stream. The drain is mentioned in the NPDES Phase II General Permit Application Storm Water Quality Management Plan Part B: Baseline Characterization Report. The Drain is listed on the following pages of this report:

1. Page 6 as #05120201080090 Watershed within the MS4 Area.
2. Page 14 as being in IDEM 305(b) Report as being fully supportive for aquatic life and full body contact.
3. Page 16 as not being substantially impacted by MS4 storm water discharges.
4. Page 18 as being a sub-watershed for Little Cicero Creek and is a priority watershed. Little Cicero Creek listed due to impaired biotic communities.

This drain is not listed on the 2004 303(d) List of Impaired Waters for Indiana. However, it is within the Little Cicero Creek Drainage Shed which is listed due to impaired biotic communities.

However, the drain is listed in the 2006 303(d) list for E. coli.

In 2006, the Board contracted with J.F. New to perform a Watershed Management Plan (WMP) for Little Cicero Creek. This plan was funded by a 319 Grant through IDEM and EPA. The Bennett Drain is mentioned in the report on pages 4, 47 and 93 as being impaired by E. coli. It is also listed on page 75 of the report as having elevated total suspended solids (TSS) concentrations. These were found during one or more of the base flow sampling events completed for the study.

The sampling done on the Bennett Drain for the study is discussed on pages 65 and 66 of the WMP. The sampling showed that the dissolved oxygen (DO), temperature and pH were at normal levels. However, the stream had a Qualitative Habitat Evaluation Index (QHEI) of 44 which suggests that the stream is non-supportive of aquatic life. Areas of concern other than TSS and E coli was the fecal coli form levels, nutrient concentrations, BOD and COD levels.

On Page 119 it is recommended that the drains not currently on maintenance be placed on a maintenance program. It was also recommended that filter strips be installed along the drain in order to reduce nutrient loading and sediment.

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

RECONSTRUCTION PROJECT

The project was designed by Banning Engineering. A final reconstruction report from Banning Engineering dated August 2015 is attached.

This project is located within the WP Bennett Watershed and comprises the reconstruction of the open portion of the drain. The enclosed portions of the drain are not included in this project. The project begins in the southwest quarter of Section 8, Township 20 North and Range 4 East, where the drain discharges to Little Cicero Creek. The project continues upstream generally west/southwest to the northeast quarter of Section 24, Township 20 North and Range 3 East, to the west side of U.S. 31 to the point where the enclosed portion of the drain discharges to the open channel portion of the drain. The majority of the project is within Jackson Township. A small portion (860 LFT) of the project is within Adams Township. The total length of the project is 14,125-feet.

A new channel was recommended for the entire length of the project. The recommended bottom width of the new channel varies between 4-feet and 6-feet. The first 4,000-LF of the ditch from Little Cicero Creek is recommended to have a 6-foot bottom width. The next 3,200-LF upstream of this segment is recommended to have a 5-foot bottom width. The final 6,925-LF of the channel within the project area is recommended to have a 4-foot bottom width. The side slopes of the new channel in all segments is 2-foot horizontal for each 1-foot vertical. The bottom widths were designed to keep the estimated 5-year flow rates within the ditch banks. The slope of the channel within the project limits varies. The slope is 0.16% from the Little Cicero Creek to Anthony Road (a distance of 6450-LF), 0.2% from Anthony Road to US-31 (a distance of 6,825-LF) and 0.10% from US-31 to the end of the project (a distance of 850-LF). The slopes were set to match the existing inverts of the crossing at U.S. 31 and to eliminate backwater during low flow conditions on tile outlets observed and surveyed along open ditch.

The channel is designed to carry/contain the NRCS Type A Drainage Curve flowrate for Indiana and the 5-year storm frequency within the banks at all locations. The following flow rate information was determined for the watershed.

Q [Type A] = 280 ft^3 per second
Q5 = 390 ft^3 per second
Q10 = 523 ft^3 per Second
Q50 = 895 ft^3 per Second

The project includes the widening and lowering of the open ditch, the installation of two sediment basin, the installation of two farm crossings, the extension of 19 farm outlets, the installation of one surface water pipe, and the installation of rip-rap armoring at several bends. Six of the existing eight pipe crossings are being reconstructed. The existing crossings of 276th Street and US-31 will remain in-place. All six of the reconstructed crossings are being lowered to match the proposed flow line. Five of the six reconstructed crossings are being increased in size.

The project will include tree removal and clearing of debris. Clearing of trees will take place to facilitate an operational side for equipment access for the project and for future maintenance. The operational side is generally on the west side of the drain from Little Cicero Creek to 276th Street. Looking upstream the operation side is proposed to be on the following side per the segments listed below:

Right side (West side) Little Cicero Creek to 276th Street
Left Side (East Side) 276th Street to Salem Road
Right Side (North Side) Salem Road Relocation
Left Side (East and South Side) Salem Road to Anthony Road

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

Right Side (West and North Side) Anthony Road to 266th Street
Left Side (South Side) Eastern 266th Street Crossing to Middle 266th Street Crossing
Right Side (North Side) Middle 266th Street Crossing to Western 266th Street Crossing
Left Side (South Side) Western 266th Street Crossing to US-31
Right Side (West Side) US-31 to End Project.

A 75-foot Conservation Clearing is proposed on the Operational Side from Station 0+00 to Station 31+00 and from Station 45+00 to Station 141+25. 50-foot Conservation Clearing is proposed on the Operational Side from Station 34+75 to Station 45+00. 75-foot Conservation Clearing is proposed on each side of the channel between Stations 31+00 and 34+75.

A proposed 20-foot filter strip is proposed along each of the above segments on the Operational Side.

With the exception of the approximately 325-LF relocation at Salem Road, the drain is being reconstructed in place. The approximately 325-LF segment of the ditch on the north side of Salem Road is being relocated such that the top of bank is at least 15-feet from the edge of the roadway shoulder. This is location 3 from page 3.

As currently designed, the reconstruction of this drain will not require acquisition of new easement. All work will occur within the existing 75 foot easement from the top of bank per IC 36-9-27-33.

The channel will be dredged an average of 2.32 feet in depth.

PERMITS

Per a letter dated July 2, 2015 from the IDNR, an IDNR Construction in the Floodway permit is not required as the William P. Bennett Regulated Open Channel is less than 10 miles in length.

Per a letter dated July 2, 2015 from the IDNR, an IDNR Ditch Reconstruction permit is not required as the work is not within one half (1/2) mile or a freshwater lake 10-acres or more in size.

Per a letter dated October 1, 2015 from the IDNR, there are no endangered, threatened or rare (ETR) species, high quality natural communities or natural areas within ½-mile of the project area.

A Rule 5 permit is not required as the project is exempt based on the work being maintenance activity.

Per a letter dated November 5, 2015 from the U.S. Army Corps of Engineers, the project is not subject to regulation under Section 404 of the Clean Water Act and is authorized under the Regional General Permit issued December 15, 2014.

An IDEM Individual Section 401 Water Quality Certification is required for this project due to the proposed relocation of the channel at Salem Road. This certification has not been received as of the date of this report.

A permit for work in the right of way of the INDOT has been submitted. This permit has not been received as of the date of this report.

QUANTITIES & COST ESTIMATE

Banning was hired by approval of a Professional Services Agreement in the amount of $30,000 on November 14, 2014 per Hamilton County Drainage Board Book 16 Page 1. The final reconstruction report dated August 2015 is attached.

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

The construction cost estimate for the project is outlined in detail as follows:

Regulated Drain Work				
Item Description	Quantity	Unit	Unit Cost	Total Cost
Clearing	1	LS	$ 65,000.00	$ 65,000.00
Excavate 4' channel bottom	6925	LFT	$ 6.30	$ 43,627.50
Excavate 5' channel bottom	3200	LFT	$ 8.00	$ 25,600.00
Excavate 6' channel bottom	3555	LFT	$ 9.50	$ 33,772.50
Riprap	172	Tons	$ 75.00	$ 12,900.00
Seeding Channel Banks	10.8	Acres	$ 2,500.00	$ 27,000.00
Seeding Filter Strip	7	Acres	$ 1,750.00	$ 12,250.00
Surface Water Pipe	8	EA	$ 1,150.00	$ 9,200.00
6"x20' CMP with Animal Guard	5	EA	$ 500.00	$ 2,500.00
8"x20' CMP with Animal Guard	3	EA	$ 525.00	$ 1,575.00
10"x20' CMP with Animal Guard	1	EA	$ 575.00	$ 575.00
12"x20' CMP with Animal Guard	6	EA	$ 625.00	$ 3,750.00
15"x20' CMP with Animal Guard	1	EA	$ 700.00	$ 700.00
18" RCP Extension	1	LS	$ 1,500.00	$ 1,500.00
Ford Crossing	2	EA	$ 3,000.00	$ 6,000.00
8.5' Diam. X 24' CMP w/backfill	1	EA	$ 12,000.00	$ 12,000.00
8.5' Diam. X 26' CMP w/backfill	1	EA	$ 13,000.00	$ 13,000.00
Remove (2) Driveway CMP's	2	EA	$ 1,500.00	$ 3,000.00
Driveway Crossing Stone	2	EA	$ 1,000.00	$ 2,000.00
Remove and Replace Fences as needed	1	LS	$ 12,500.00	$ 12,500.00
			Subtotal	$ 288,450.00
			15% Contingency	$ 43,267.50
			Subtotal	$ 331,717.50
Banning Engineering			Engineering Services	$ 30,000.00
Banning Engineering			Construction Staking	$ 9,900.00
Total to be assessed to entire drainage shed.			Total	$ 371,617.50

Highway Work				
Item Description	Quantity	Unit	Unit Cost	Total Cost
117"x79" CMP Arch Pipe x 40 LFT w/backfill	1	EA	$ 20,000.00	$ 20,000.00
117"x79" CMP Arch Pipe x 50 LFT w/backfill	3	EA	$ 25,000.00	$ 75,000.00
Sawcut and Remove Old Culverts	4	EA	$ 4,000.00	$ 16,000.00
6' Channel under 276th Street	135	LFT	$ 35.00	$ 4,725.00
Re-Aligned 6' Channel	310	LFT	$ 35.00	$ 10,850.00
3' Stone Shoulder (#53's 6" thick)	172	LFT	$ 7.50	$ 1,290.00
Pavement Repair	4	EA	$ 7,500.00	$ 30,000.00
			Subtotal	$ 157,865.00
			15% Contingency	$ 23,679.75
Total lump sum to County Highway			Total	$ 181,544.75

The total cost of this project is estimated to be $553,162.25.

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

The cost of the new pipe and culvert work at 276th Street will be paid by the County Highway Department per IC 36-9-27-71. The lump sum cost to be charged to the County Highway will be $181,544.75. The remaining $371,617.50 will be spread out to the entire drainage shed. The drainage shed for this reconstruction project is 1953.98 acres. I have reviewed the benefitted drainage shed and upon considering each parcel individually, I believe each parcel within the drainage shed will have equal benefits as provided by the drain. Therefore, I recommend each tract be assessed on the same basis equally. I also believe that no damages will result to landowners by reconstruction of this drain. I recommend a reconstruction assessment of $189.74 per acre with the minimum assessment set at $189.20.

At the meeting of the Board on October 26, 2015, the hearing for this proposed reconstruction project was set for December 14, 2015.

Kenton C. Ward, CFM
Hamilton County Surveyor

KCW/pll

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

To: Hamilton County Drainage Board

Re: In the matter of the William P. Bennett Drain Petition

Comes now the undersigned individuals, who petition the Hamilton County Drainage Board, per IC 36-9-27, for the reconstruction of the above referenced regulated drain. The undersigned believe the following:

1. They are owners of ten percent (10%) in acreage or more of land area alleged by the petition to be affected by the drain.

2. That as property owners within the drainage shed, they are qualified petitioners.

3. That they now desire the regulated drain be reconstructed in JACKSON Township.

4. The names and address of each owner affected by the proposed public drainage are attached hereto, made a part hereof, and marked Exhibit "A", which area of land involved in the proposed drainage area is located in section 19, township 20 north, range 4 east, Hamilton County, Indiana.

5. That the proposed reconstruction consist of _____

_____

_____.

6. That in the opinion of the Petitioner, the costs, damages, and expenses of the proposed improvement will be less than the benefits which will result to the owners of the land to be benefited thereby.

7. That in the opinion of Petitioner, the proposed improvement will improve the public health; benefit a public highway; and be of public utility.

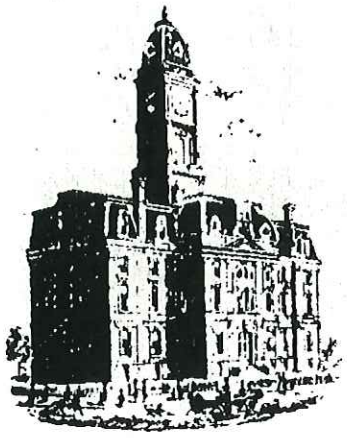
8. That Petitioners shall pay the cost of notice and all legal costs including engineering expenses if the petition is dismissed.

9. Petitioner shall post a bond, if required, to pay the cost of notice and all legal costs in the case the improvement is not established.

Signature	Printed Name	Printed Address
L R Hunt	LOUIS R HUNT	15740 OAK RD CARMEL IN 46033
Janet A Hunt	JANET A HUNT	15740 OAK Rd CARMEL IN 46033
Richard D Egler	Richard D Egler	65E 226th ST ATLANTA 46031
Tom Beck	BECK Family LP	6767 EAST 276th ST ATLANTA, IN 46031
James Riggs	James Riggs	20707 Hinkle Rd Noblesville, IN 46060

HAMILTON COUNTY DRAINAGE BOARD FILED MAR 10 2004 SECRETARY

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060



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

December 16, 2003

To: Louis R. Hunt
15740 Oak Road
Carmel, IN 46033

Re: William P. Bennett Drain Petition

Dear Mr. Hunt,

The petition to reconstruct the William P. Bennett regulated drain is being returned to you due to the lack of sufficient number of signatures required to petition for reconstruction. I have highlighted the section of the petition that states that at least 10% of the land area must be represented by signatures of the respective property owners. The William P. Bennett regulated drain watershed consists of 1790 acres and therefore a minimum of 179 acres must be represented on the petition by signatures of property owners within the watershed.

Please note that only one signature per parcel is required. Multiple signatures for the same parcel will only represent the total acreage of the parcel and not carry any more weight than a single signature for the parcel.

I would recommend that you contact some of the surrounding property owners that have larger parcels of land to see if they would also sign the petition. Property owners such as Richard Egler, Gene Grinstead and Sonny Beck have acreage within the watershed and could be enough to represent the required 10% if they too sign the petition.

Please feel free to contact me at 776-8495 if you have any questions concerning this matter.

Sincerely,

Andrew D. Conover

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

William Bennett Reconstruction Petition

Name	Parcel Number	Acres in Shed
Louis & Janet Hunt	302190000005000	76
Richard Egler	302170000002000	121.55
Beck Family LP	302180000008000	60.22
Beck Family LP	302180000009003	35
James Riggs	302180000009002	44
Total Acres on Petition		**336.77**
Total Acres in Shed		**1790**
Percent Represented on Petition		**18.81%**

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

STATE OF INDIANA)
) ss:
COUNTY OF HAMILTON)

BEFORE THE HAMILTON COUNTY DRAINAGE BOARD
NOBLESVILLE, INDIANA

IN THE MATTER OF THE
RECONSTRUCTION OF THE
William P. Bennett Drain Reconstruction

FINDINGS AND ORDER FOR RECONSTRUCTION

The matter of the proposed Reconstruction of the ***William P. Bennett Drain Reconstruction*** came before the Hamilton County Drainage Board for hearing ***on February 8, 2016,*** on the Reconstruction Report consisting of the report and the Schedule of Damages and Assessments. The Board also received and considered the written objection of an owner of certain lands affected by the proposed Reconstruction, said owner being:

Evidence was heard on the Reconstruction Report and on the aforementioned objections.

The Board, having considered the evidence and objections, and, upon motion duly made, seconded and unanimously carried, did find and determine that the costs, damages and expenses of the proposed Reconstruction will be less than the benefits accruing to the owners of all land benefited by the Reconstruction.

The Board having considered the evidence and objections, upon motion duly made, seconded and unanimously carried, did adopt the Schedule of Assessments as proposed, subject to amendment after inspection of the subject drain as it relates to the lands of any owners which may have been erroneously included or omitted from the Schedule of Assessments.

The Board further finds that it has jurisdiction of these proceedings and that all required notices have been duly given or published as required by law.

Wherefore, it is ORDERED, that the proposed Reconstruction of the ***William P. Bennett Drain Reconstruction*** be and is hereby declared established.

Thereafter, the Board made inspection for the purpose of determining whether or not the lands of any owners had been erroneously included or excluded from the Schedule of Assessments. The Board finds on the basis of the reports and findings at this hearing as follows:

HAMILTON COUNTY DRAINAGE BOARD

PRESIDENT

Member

Alternate Member

ATTEST: Executive Secretary

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

W.P. Bennett #353
Reconstruction hearing: 12/14/15

$189.74/Ac with a $189.20 minimum for entire shed.
Co. Hwy - Lump Sum = $181,544.75
Assessment roll grand total is $553,162.43.

Beck, Hunt & Riggs * **Petitioner**

$331,717.50 Construction Cost
$30,000.00 Engineering
$9,900.00 Construction Staking
$371,617.50 Total asmt to shed

$181,544.75 County Hwy Lump Sum

$553,162.25 Grand total

Parcel		Owner	Desc	Rate	Ben	Asmt	% of Total
03-02-20-00-00-002.000		Arcadia Christian Church w/LE to Joyce C Cline & LE to	S20 T20 R4 41.63Ac	Residential/Ag	32.63	$6,191.22	1.12%
01-01-13-00-00-014.000		Armfield, Steve L	S13 T20 R3 20.00Ac	Residential/Ag	20.00	$3,794.80	0.69%
03-02-18-00-00-012.000		Armfield, Steve L	S18 T20 R4 80.70Ac	Residential/Ag	44.70	$8,481.38	1.53%
03-02-18-00-00-004.000		Baitz, Phyllis A & Phyllis Anne Baitz	S18 T20 R4 104.00Ac	Residential/Ag	43.37	$8,229.02	1.49%
03-02-19-00-00-002.001		Baker, Nancy J	S19 T20 R4 2.00Ac	Residential/Ag	2.00	$379.48	0.07%
03-02-19-00-00-002.002		Bales, Dale R & Jannis E	S19 T20 R4 3.00Ac	Residential/Ag	3.00	$569.22	0.10%
03-02-08-00-00-024.000		Baltimore, Dennis M	S8 T20 R4 21.83Ac	Residential/Ag	16.33	$3,098.46	0.56%
01-01-24-00-00-019.000		Barrus, Wilbur A & Cheryl A	S24 T20 R3 1.99Ac	Residential/Ag	1.99	$377.58	0.07%
01-01-24-00-00-019.002		Barrus, Wilbur A & Cheryl A	S24 T20 R3 2.68Ac	Residential/Ag	2.68	$508.50	0.09%
03-02-17-00-00-021.000	*	**Beck Family Limited Partnership**	S17 T20 R4 20.00Ac	Residential/Ag	6.00	$1,138.44	0.21%
03-02-17-00-00-023.000	*	**Beck Family Limited Partnership**	S17 T20 R4 56.75Ac	Residential/Ag	56.75	$10,767.76	1.95%
03-02-17-00-00-020.000	*	**Beck Family Limited Partnership**	S17 T20 R4 1.03Ac	Residential/Ag	0.55	$189.20	0.03%
03-02-17-00-00-022.000	*	**Beck Family Limited Partnership**	S17 T20 R4 30.60Ac	Residential/Ag	22.88	$4,341.26	0.78%
03-02-18-00-00-008.000	*	**Beck Family Limited Ptn**	S18 T20 R4 60.22Ac	Residential/Ag	60.22	$11,426.14	2.07%
03-02-18-00-00-009.003	*	**Beck Family Limited Ptn**	S18 T20 R4 35.00Ac	Residential/Ag	35.00	$6,640.90	1.20%
03-02-19-00-00-001.002	*	**Beck Foundation Inc**	S19 T20 R4 77.41Ac	Residential/Ag	77.41	$14,687.78	2.66%
03-02-18-00-00-006.000	*	**Becks Superior Hybrids Inc**	S18 T20 R4 17.72Ac	Residential/Ag	11.00	$2,087.14	0.38%
03-02-19-00-00-001.000	*	**Becks Superior Hybrids Inc**	S19 T20 R4 1.67Ac	Residential/Ag	1.67	$316.88	0.06%
03-02-19-00-00-006.000	*	**Becks Superior Hybrids Inc**	S19 T20 R4 19.50Ac	Residential/Ag	0.30	$189.20	0.03%
03-02-19-00-00-006.001	*	**Becks Superior Hybrids Inc**	S19 T20 R4 60.24Ac	Residential/Ag	4.24	$804.50	0.15%
03-02-19-00-00-006.002	*	**Becks Superior Hybrids Inc**	S19 T20 R4 3.15Ac	Residential/Ag	0.50	$189.20	0.03%
03-02-19-00-00-011.000	*	**Becks Superior Hybrids Inc**	S19 T20 R4 65.63Ac	Residential/Ag	9.01	$1,709.56	0.31%
03-02-20-00-00-006.000	*	**Becks Superior Hybrids Inc**	S20 T20 R4 35.10Ac	Residential/Ag	1.00	$189.74	0.03%
01-01-13-00-00-016.000		Bragg, Maria Stahl TR Betty Jo Stahl TR & Maria Stahl Bragg	S13 T20 R3 80.00Ac	Residential/Ag	46.00	$8,728.04	1.58%
01-01-13-00-00-017.000		Bragg, Maria Stahl TR Betty Jo Stahl TR & Maria Stahl Bragg	S13 T20 R3 40.00Ac	Residential/Ag	21.00	$3,984.54	0.72%
01-01-24-00-00-001.000		Bragg, Maria Stahl Trustee of Helen H Stahl Trust Agre	S24 T20 R3 40.00Ac	Residential/Ag	31.00	$5,881.94	1.06%
01-01-24-00-00-002.000		Bragg, Maria Stahl Trustee of Helen H Stahl Trust Agre	S24 T20 R3 52.62Ac	Residential/Ag	52.62	$9,984.12	1.80%
03-02-18-00-00-009.000		Brittain, Lee L & Alison M	S18 T20 R4 10.00Ac	Residential/Ag	10.00	$1,897.40	0.34%
03-02-18-00-00-011.101		Brown, Jeffrey D & Cynthia K	S18 T20 R4 2.00Ac	Residential/Ag	2.00	$379.48	0.07%
03-02-19-00-00-005.001		Chaszar, Frank & Mary Lou	S19 T20 R4 2.00Ac	Residential/Ag	2.00	$379.48	0.07%
03-02-19-00-00-003.000		Clark, William Ray & Laura A Revocable Living Trust	S19 T20 R4 71.53Ac	Residential/Ag	56.53	$10,726.00	1.94%
03-02-18-00-00-011.001		Crowley Norma S	S18 T20 R4 18.00Ac	Residential/Ag	18.00	$3,415.32	0.62%

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

Parcel		Owner	Desc	Rate	Ben	Asmt	% of Total
03-02-08-00-00-023.000		Duvall Bond & Harris LLC	S8 T20 R4 38.99Ac	Residential/Ag	7.00	$1,328.18	0.24%
03-02-17-00-00-003.000		Duvall Bond & Harris LLC	S17 T20 R4 85.06Ac	Residential/Ag	84.04	$15,945.76	2.88%
03-02-18-00-00-005.000		Duvall Bond & Harris LLC	S18 T20 R4 60.83Ac	Residential/Ag	30.00	$5,692.20	1.03%
03-02-17-00-00-002.101		Egler, Joshua	S17 T20 R4 3.00Ac	Residential/Ag	3.00	$569.22	0.10%
01-01-24-00-00-016.001		Frey, Eric M & Julia E	S24 T20 R3 3.00Ac	Residential/Ag	2.00	$379.48	0.07%
01-01-24-00-00-006.000		Grinstead, Beverly S Trustee of Beverly S Grinstead Rev Trust	S24 T20 R3 18.00Ac	Residential/Ag	18.00	$3,415.32	0.62%
01-01-24-00-00-007.000		Grinstead, Beverly S Trustee of Beverly S Grinstead Rev Trust	S24 T20 R3 20.00Ac	Residential/Ag	20.00	$3,794.80	0.69%
01-01-24-00-00-008.000		Grinstead, Beverly S Trustee of Beverly S Grinstead Rev Trust	S24 T20 R3 40.00Ac	Residential/Ag	40.00	$7,589.60	1.37%
99-99-99-99-99-999.001		Hamilton County Highway Department	Anthony, Arthur Baker, Dunbar, Salem, 266, 276	Road	84.60	$16,052.00	2.90%
99-99-99-99-99-999.001		Hamilton County Highway Department	276th Highway Work	Lump Sum	n/a	$181,544.75	32.82%
03-02-19-00-00-012.000		Hammond Farm Inc	S19 T20 R4 85.00Ac	Residential/Ag	30.00	$5,692.20	1.03%
03-02-19-00-00-002.000		Hampton, Glenn	S19 T20 R4 2.00Ac	Residential/Ag	2.00	$379.48	0.07%
03-02-20-00-00-004.000		Hanni, Bradley & Lisa	S20 T20 R4 6.43Ac	Residential/Ag	6.43	$1,220.04	0.22%
03-02-18-00-00-009.004		Havenwood Homeowners Association Inc	S18 T20 R4 3.44Ac	Residential/Ag	2.30	$436.40	0.08%
03-02-18-00-00-008.001		Hinderliter, Richard & Diana	S18 T20 R4 14.78Ac	Residential/Ag	14.78	$2,804.36	0.51%
03-02-20-00-00-003.000		Hoch, Jan L	S20 T20 R4 0.94Ac	Residential/Ag	0.94	$189.20	0.03%
03-02-19-00-00-005.000	*	**Hunt Real Estate Limited Liability Company**	S19 T20 R4 76.00Ac	Residential/Ag	76.00	$14,420.24	2.61%
01-01-24-00-00-019.001	*	**Hunt Real Estate LLC**	S24 T20 R3 94.61Ac	Residential/Ag	81.57	$15,477.10	2.80%
03-02-08-00-00-025.000		Hunter, Wayne Francis & Donna Marie	S8 T20 R4 36.71Ac	Residential/Ag	0.10	$189.20	0.03%
03-02-17-00-00-001.000		Hurley Cemetery	S17 T20 R4	Residential/Ag	0.21	$189.20	0.03%
99-99-99-99-99-999.002		Indiana Department Of Transportation	US 31 S18&19 T20 R4 and S13&24 T20 R3	Road	88.11	$16,718.00	3.02%
01-01-24-00-00-002.001		James, Christie Trustee of Helen H Stahl Trust	S24 T20 R3 8.96Ac	Residential/Ag	8.96	$1,700.08	0.31%
01-01-24-00-00-002.002		James, Christie Trustee of Helen H Stahl Trust	S24 T20 R3 8.42Ac	Residential/Ag	8.42	$1,597.62	0.29%
01-01-24-00-00-004.000		James, Christie Trustee of Helen H Stahl Trust	S24 T20 R3 75.00Ac	Residential/Ag	75.00	$14,230.50	2.57%
03-02-18-00-00-007.000		Kinder, James Don & Mary E Trustee	S18 T20 R4 14.00Ac	Residential/Ag	14.00	$2,656.36	0.48%
01-01-24-00-00-021.000		Kouns, Paul E	S24 T20 R3 88.56Ac	Residential/Ag	88.06	$16,708.50	3.02%
03-02-17-00-00-015.000		Lawson, June L	S17 T20 R4 43.04Ac	Residential/Ag	0.75	$189.20	0.03%
03-02-17-00-00-007.000		Leininger, William & Joyce A	S17 T20 R4 16.87Ac	Residential/Ag	1.50	$284.62	0.05%
03-02-18-00-00-008.101		Lennis, Brett A & Dawn	S18 T20 R4 5.00Ac	Residential/Ag	5.00	$948.70	0.17%
01-01-24-00-00-003.000		Matthews, Daniel H & Jan V	S24 T20 R3 1.44Ac	Residential/Ag	1.44	$273.24	0.05%
03-02-20-00-00-024.000		Morgan, Jeffery R	S20 T20 R4 14.93Ac	Residential/Ag	0.94	$189.20	0.03%
03-02-20-00-00-005.000		P & N Farms Inc	S20 T20 R4 36.00Ac	Residential/Ag	31.75	$6,024.26	1.09%
03-02-20-00-00-008.000		P & N Farms Inc	S20 T20 R4 23.66Ac	Residential/Ag	2.00	$379.48	0.07%
03-02-19-00-00-001.001		Patterson, Markus E & Ruth A	S19 T20 R4 1.14Ac	Commercial	1.14	$216.30	0.04%
01-01-13-00-00-006.000		R & C Farm Inc	S13 T20 R3 34.30Ac	Residential/Ag	17.30	$3,282.50	0.59%
01-01-13-00-00-007.000		R & C Farm Inc	S13 T20 R3 1.10Ac	Residential/Ag	0.90	$189.20	0.03%
01-01-13-00-00-012.000		R & C Farm Inc	S13 T20 R3 40.00Ac	Residential/Ag	40.00	$7,589.60	1.37%
01-01-13-00-00-013.000		R & C Farm Inc	S13 T20 R3 20.00Ac	Residential/Ag	20.00	$3,794.80	0.69%
03-02-17-00-00-006.102		Reed, Robert L & Sherrie A	S17 T20 R4 2.09Ac	Residential/Ag	2.09	$396.56	0.07%

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

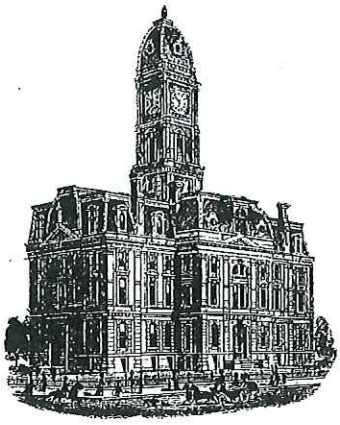
Parcel		Owner	Desc	Rate	Ben	Asmt	% of Total
03-02-18-00-00-009.002	*	**Riggs, James**	S18 T20 R4 51.20Ac	Residential/Ag	44.00	$8,348.56	1.51%
01-01-13-00-00-015.000		Rockwell, Raymond H & Linda Kay	S13 T20 R3 40.00Ac	Residential/Ag	30.00	$5,692.20	1.03%
03-02-20-00-00-001.000		Smith, David Ray & Kyle M	S20 T20 R4 1.00Ac	Residential/Ag	1.00	$189.74	0.03%
01-01-24-00-00-004.001		Steketee, Peter J & Terry Lynn Bowman Jt/Rs	S24 T20 R3 5.00Ac	Residential/Ag	5.00	$948.70	0.17%
03-02-19-00-00-004.000		Stepp, Steven P & Julie A	S19 T20 R4 2.38Ac	Residential/Ag	2.38	$451.58	0.08%
03-02-18-00-00-011.003		Stern, Duane M & Nancy J Waltz Stern	S18 T20 R4 1.90Ac	Residential/Ag	1.90	$360.52	0.07%
03-02-18-00-00-009.001		Stringer, Matthew L & Ruth A	S18 T20 R4 2.00Ac	Residential/Ag	2.00	$379.48	0.07%
03-02-17-00-00-006.202		Thompson, Christopher A	S17 T20 R4 10.00Ac	Residential/Ag	3.50	$664.10	0.12%
03-02-18-00-00-011.000		VanMeter, Mark Todd	S18 T20 R4 16.90Ac	Residential/Ag	16.02	$3,039.64	0.55%
03-02-18-00-00-011.002		VanMeter, Mark Todd	S18 T20 R4 1.20Ac	Residential/Ag	1.20	$227.70	0.04%
03-02-17-00-00-002.000		W Lee Egler Farms Inc	S17 T20 R4 121.55Ac	Residential/Ag	121.55	$23,062.90	4.17%
03-02-17-00-00-006.101		Wallace, Stephen T	S17 T20 R4 6.96Ac	Residential/Ag	6.96	$1,320.60	0.24%
03-02-17-00-00-006.001		Wallace, Stephen Timothy	S17 T20 R4 13.93Ac	Residential/Ag	13.93	$2,643.08	0.48%
03-02-17-00-00-006.002		Wallace, Stephen Timothy	S17 T20 R4 69.08Ac	Residential/Ag	52.00	$9,866.48	1.78%
01-01-24-00-00-010.000		Whitmore, Dickie Lee	S24 T20 R3 1.71Ac	Residential/Ag	1.20	$227.70	0.04%
01-01-24-00-00-005.000		Wiggington, Daniel	S24 T20 R3 2.00Ac	Residential/Ag	2.00	$379.48	0.07%
01-01-24-00-00-016.000		Wilson, William D & Judith K	S24 T20 R3 27.00Ac	Residential/Ag	9.00	$1,707.66	0.31%
01-01-24-00-00-024.000		Wilson, Wm D & Judy K	S24 T20 R3 66.00Ac	Residential/Ag	13.00	$2,466.62	0.45%
01-01-24-00-00-020.001		Wright, Thomas E & Carolyn J Family Trust	S24 T20 R3 2.32Ac	Residential/Ag	0.10	$189.20	0.03%
01-01-24-00-00-020.000		Wright, Thomas E & Carolyn J Family Trust of 1993	S24 T20 R3 37.68Ac	Residential/Ag	18.93	$3,591.78	0.65%
01-01-24-00-00-017.000		Wyant, Greg A & Sheila C	S24 T20 R3 7.00Ac	Residential/Ag	5.50	$1,043.58	0.19%
Parcels: 91 + Lump Sum					1953.88	$553,162.43	100.00%

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

WILLIAM P. BENNETT DRAIN RECONSTRUCTION

Property Owner	Parcel Number	Acres Benefited	Proposed Recons. Assmnt	% of Recons. Cost
Baitz, Phyllis A	03-02-18-00-00-004.000	43.37	$8,229.02	1.49
Brown, Jeffrey D. & Cynthia K.	03-02-18-00-00-011.101	2	$379.48	0.07
Rockwell, Raymond H. & Linda Kay	01-01-13-00-00-015.000	30	$5,692.20	1.03
Total		**75.37**	**$14,300.70**	**2.59**

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060



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

December 11, 2015

Ms. Phyllis Baitz
2809 East 276th Street
Atlanta, IN 46031

RE: William P. Bennett Regulated Drain Assessment Objection and Questions

Dear Ms. Baitz:

Thank you for your letter regarding the W.P. Bennett Legal Drain Reconstruction Project. Your objection to the assessment is noted. In reading your letter, I identify four questions for which an answer is being sought. I will answer the questions presented in the letter in the order they are asked in the letter.

1. Per the minutes of the Board meeting on October 13, 2014, the reconstruction of the drain was petitioned in 2004 and that Beck's Hybrids asked that quotes be obtained for professional services.
2. The final assessment is based on the final total project costs. In the event that the project costs less then estimated, the assessment will be re-calculated. In the event that the project costs more than estimated, there will be another public hearing to increase the assessment.
3. The crossings need to be lowered since the ditch is being lowered. Lowering the channel without lowering the culverts would result in standing water within the channel and increased rate of sedimentation.
4. The ditch is being lowered at the upstream end (where the enclosed portion of the drain discharges to the open ditch) 0.7-feet (slightly more than 8-inches). Lowering the ditch at this location provides relief to the enclosed drainage system in that the pipe is more able to drain free. Lowering the ditch also allows for a future lowering of the enclosed portion of the drain if that is ever desired. The drain is then proposed at a minimal slope (and at a slope consistent with other regulated drain reconstruction projects in the County) to the receiving stream. The design of the channel is not that much different than if the centerline grade of the channel was graded at a minimum slope from the elevation of the outlet of the enclosed portion of the drain.

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

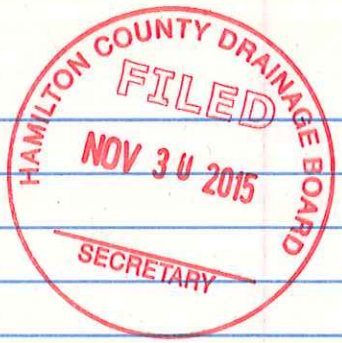
Please let me know if you have any questions.

Sincerely,

Gary R. Duncan, Jr., PE
Project Engineer

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

Parcel # 03-02-18-00-00-004.000



November 24, 2015

Hamilton County Drainage Board
Suite 188
One Hamilton County Square
Noblesville, In 46060-2230

Re: Proposed William P Bennett Reconstruction

Dear Board Members:

I am writing a letter in response to the notice I received from you on the William P. Bennett Drain.

The amounts for the proposed project and assessments seem very excessive to me.

In reading through the Surveyor's Report I question why an outside Company was hired to prepare these plans at a cost of $30,000 for engineering and $9,900 for construction staking rather than using the surveyor's own staff. It seems to me that the costs would be lower if we used our own people rather than hiring a special outside provider.

If the actual costs of this project are lower than originally estimated, will our assessments be reduced to reflect that?

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

The report shows several Crossings and the lowering of those Crossings, do they need to be lowered that much? That too would seem to add more cost to the project.

I understand that the sediment in the drain needs to be removed to be of benefit to my neighbors and the drainage but are the plans doing way more than what is necessary?

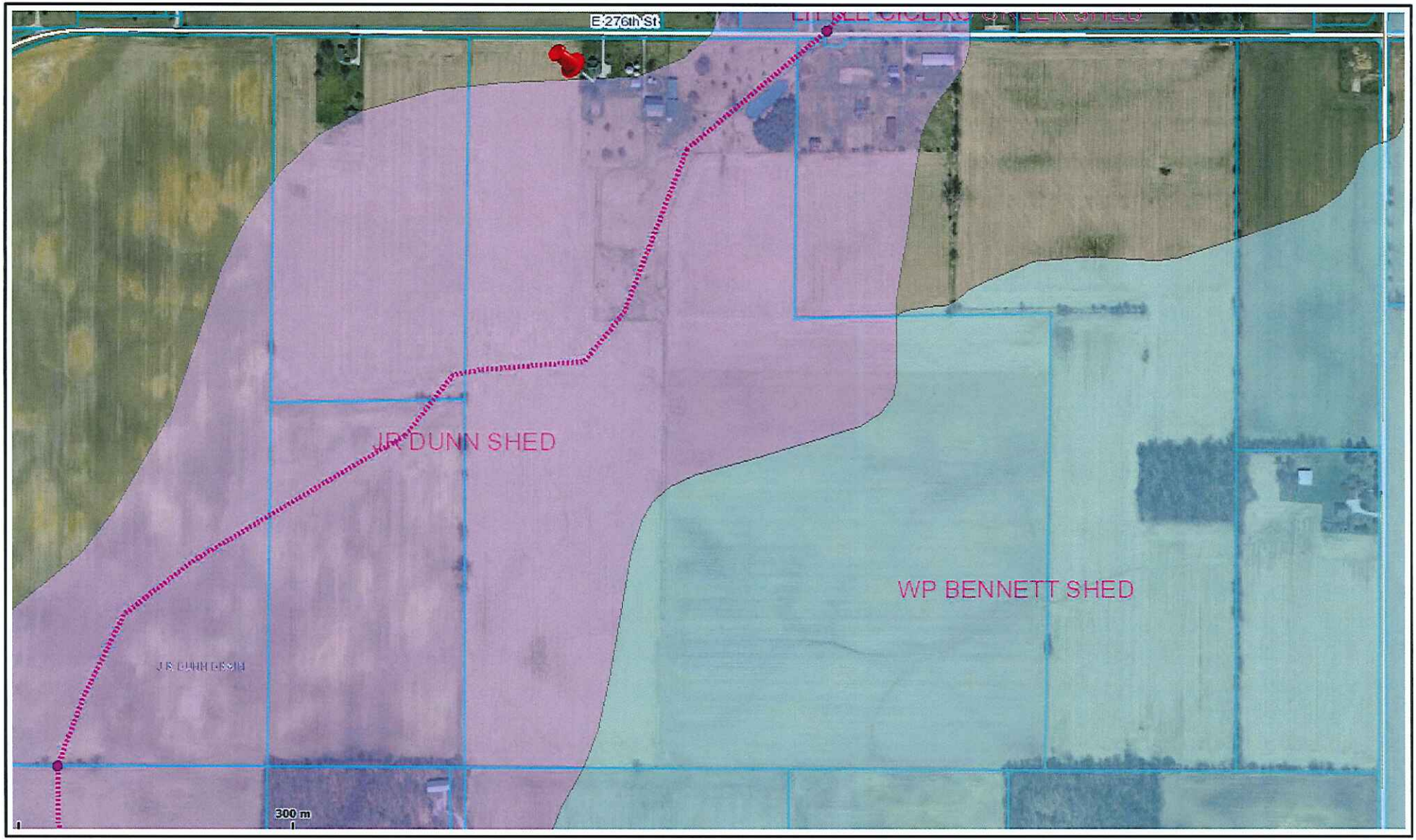
In closing I appreciate your time in reading my letter and I would ask that you please consider lowering the assessments to the property owners and to do what is necessary but not go way beyond that to our detriment in working on the drain.

Cordially,

Phyllis A. Baitz

(property Owner)

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060



Hamilton County

William P. Bennett Drain

Printed: Nov 30, 2015

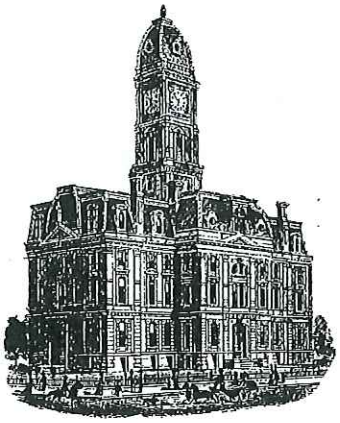
N
W E
S

0 900
Feet

The information on this web site is provided and hosted by Hamilton County, Indiana. Continued use of this web site is conditional upon your explicit acceptance of the terms and conditions set forth in this disclaimer document. The data provided herein may be inaccurate and/or out of date. Any person or entity who relies on this data for any purpose whatsoever does so solely at their own risk. Neither Hamilton County Indiana nor its employees or officers warrant the accuracy, reliability, or timeliness of any of the data provided herein. This data is provided "as is" without warranty of any kind. Hamilton County may elect to discontinue this service without notice at any point in the future.

County of Hamilton Indiana
www.hamiltoncounty.in.gov

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060



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

December 11, 2015

Mr. Jeff Brown
2270 East 266th Street
Arcadia, IN 46030

RE: William P. Bennett Regulated Drain Assessment Objection and Questions

Dear Mr. Brown:

Thank you for your letter regarding the W.P. Bennett Legal Drain Reconstruction Project. Your objection to the assessment is noted. I will answer the questions presented in the letter in order.

1. The Board invited three quotes for engineering services. The firms invited were VS Engineering, Banning Engineering and Miller Surveying. The Board received two quotes. One quote was from Banning Engineering in the amount of $39,500 with an optional geotechnical investigation of $5,000. The other quote was from VS Engineering in the amount of $119,500 with an option geotechnical investigation of $10,000. At the time the contract was awarded, construction staking was removed from the scope of work and the construction staking was to be done by staff from the Surveyor's office.
2. The Board invited three quotes for engineering services.
3. Yes, Banning Engineers quote was the lowest.
4. The final assessment is based on the final total project costs. In the event that the project costs less then estimated, the assessment will be re-calculated. In the event that the project costs more than estimated, there will be another public hearing to increase the assessment.
5. There is not a separate bidding process for the construction materials. The scope of work for the project includes all items necessary for a complete project including the purchase and delivery of construction materials.
6. Per Indiana Code 36-9-27-71 the necessary improvements for the drainage conveyances underneath the roadways must be funded from the owner of those roadways.
7. The Board will hire an outside contractor to complete the project. The Board does not have personnel or equipment to complete a drain reconstruction project.
8. The Board reviews the opinions and assessments of the Surveyor and the staff of the Surveyor's office.

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

General questions. Taxpayers do pay for road repairs; there is just not a separate assessment for each road repair project. Roadways are in place for use by the general public and it would be difficult to assess repairs to specific property owners as more than just certain property owners use a given roadway. Regulated drains provide drainage to specific watersheds and it is more equitable to assess only the properties within the watershed for the repairs due to the fact that those property owners are the sole beneficiaries of the improvements.

Over the course of time, surface drains fill with sediment and full reconstruction projects are needed. The assessments for regular and routine maintenance are generally not adequate for such a project.

Please let me know if you have any questions.

Sincerely,

Gary R. Duncan, Jr., PE
Project Engineer

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

Parcel No. 03-02-18-00-00011.101

Hamilton County Drainage Board
One Hamilton County Square
Suite 188
Noblesville, IN 46060-2230

Jeff Brown
2270 E. 266th Street
Arcadia, IN 46030

Subject: William P. Bennett Drain Assessment Objection and Questions

To whom it may concern,

As a recipient of the proposed assessment letter, I wish to object to this assessment for the following reasons based on the Section 36-9-27-52 paragraph d, item (1):

"The costs, damages, and expenses of the proposed reconstruction will exceed the benefits that will result to the owners of all land benefited."

First I have some questions:

1. Was a bid process conducted for the engineering and staking process?
2. If not, why not?
3. If yes, was Banning's quote the lowest bid?
4. If the project costs come in lower or higher, based on prices of construction materials and possibly no need for the contingency fees, will the assessments be reduced?
5. Are construction materials obtained via a bid process to keep costs as low as possible?
6. Why are the costs for the drain construction charged to the landowners but the costs for the county highway repairs are not being assessed to us?
7. Who is actually performing the drain repair portion of this work? If the work is performed by county employees, landowners should not be assessed for work performed by our employees.
8. Who reviews the County Surveyor's opinions and determines that his assessments are correct and fair?

My objection to the assessments, and I realize that mine is tiny compared to many of the others on the landowner list, is that I believe that these type projects should come from the general fund and not be assessed project by project. The landowners are not being assessed for the county road repairs required by this project yet those repairs would not be necessary if this project was not being undertaken. Why do we pay for the drain repairs but not road repairs? If the drain is not repaired and the resulting overflow would cause for a road to be closed, that would affect the general population, not just the landowners.

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

The affected landowners do not directly pay for county highway projects that are done in other areas of the county. I may never drive on some miscellaneous county road that was resurfaced or have a bridge repaired, yet my county property and income taxes pay for those projects. Why is a drainage project any different than a highway project?

I believe these type projects should be paid for by the tax revenues of Hamilton County. Had proper maintenance been done over the past 24 years that I have lived in my current home, this larger project most likely would not have to occur.

I know that the P29, P30, P31, and P32 sections of the Upper 266th Street portion of this project have never operated correctly. While I am not technical enough to know the reasons, the water levels as shown in P32 and P31 are always very high, even in dry conditions. This leads to moss buildup and most likely, mosquito infestations. This appears to be caused by inadequate engineering and improper installation of the drain crossing under 266th Street in the first place. This crossing does not seem deep enough to allow water to always flow through, causing the backup of water mentioned above. At a minimum, I do not think the landowners should be responsible for improper work performed in the past on this section of the project.

I appreciate the opportunity to raise this objection. I intend to be in attendance to hear these concerns addressed. As taxpayers, we need to believe our taxes are being spent in a proper and ethical manner. We are not here to merely contribute money to projects that are now required due to improper maintenance or improper engineering. We want to know our tax dollars are being cared for by requiring low bid work and not assessed for estimates which could be inaccurate. Would we be charged a lower assessment once the project is completed and costs less? If it costs more, as we assessed more?

Thank you,

Jeff Brown

Jeff Brown
2270 E. 266th Street
Arcadia, IN 46030

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

Hamilton County

William P. Bennett Drain

Printed: Dec 07, 2015

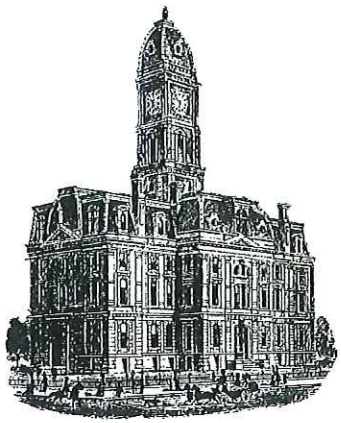
N
W E
S

0 400
Feet

The information on this web site is provided and hosted by Hamilton County, Indiana. Continued use of this web site is conditional upon your explicit acceptance of the terms and conditions set forth in this disclaimer document. The data provided herein may be inaccurate and/or out of date. Any person or entity who relies on this data for any purpose whatsoever does so solely at their own risk. Neither Hamilton County Indiana nor its employees or officers warrant the accuracy, reliability, or timeliness of any of the data provided herein. This data is provided "as is" without warranty of any kind. Hamilton County may elect to discontinue this service without notice at any point in the future.

County of Hamilton Indiana
www.hamiltoncounty.in.gov

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060



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

December 11, 2015

Raymond H. Rockwell
28999 U.S. 31
Atlanta, IN 46031

Re: W. P. Bennett Drain

I received your objection dated December 9, 2015 regarding the proposed W. P. Bennett Drain Reconstruction.

Please be aware that the drainage assessments are based on surface flow, not by the location of private subsurface tile locations. I have enclosed a drainage shed map showing the drainage break between the A. L. Haughey Drain and the W. P. Bennett Drain for your property. The assessment for your 40 acre tract is split 10 acres to the Haughey Drain and 30 acres to the Bennett Drain.

I hope this helps explain your proposed reconstruction assessment.

Sincerely,

Kenton C. Ward, CFM
Hamilton County Surveyor

KCW/llm

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

I object to the assessment of the Willian P. Bennett drain on my property 01-01-13-00-15.00 that does not benefit my property. My tile does not go that direction.

Raymond H Rockwell

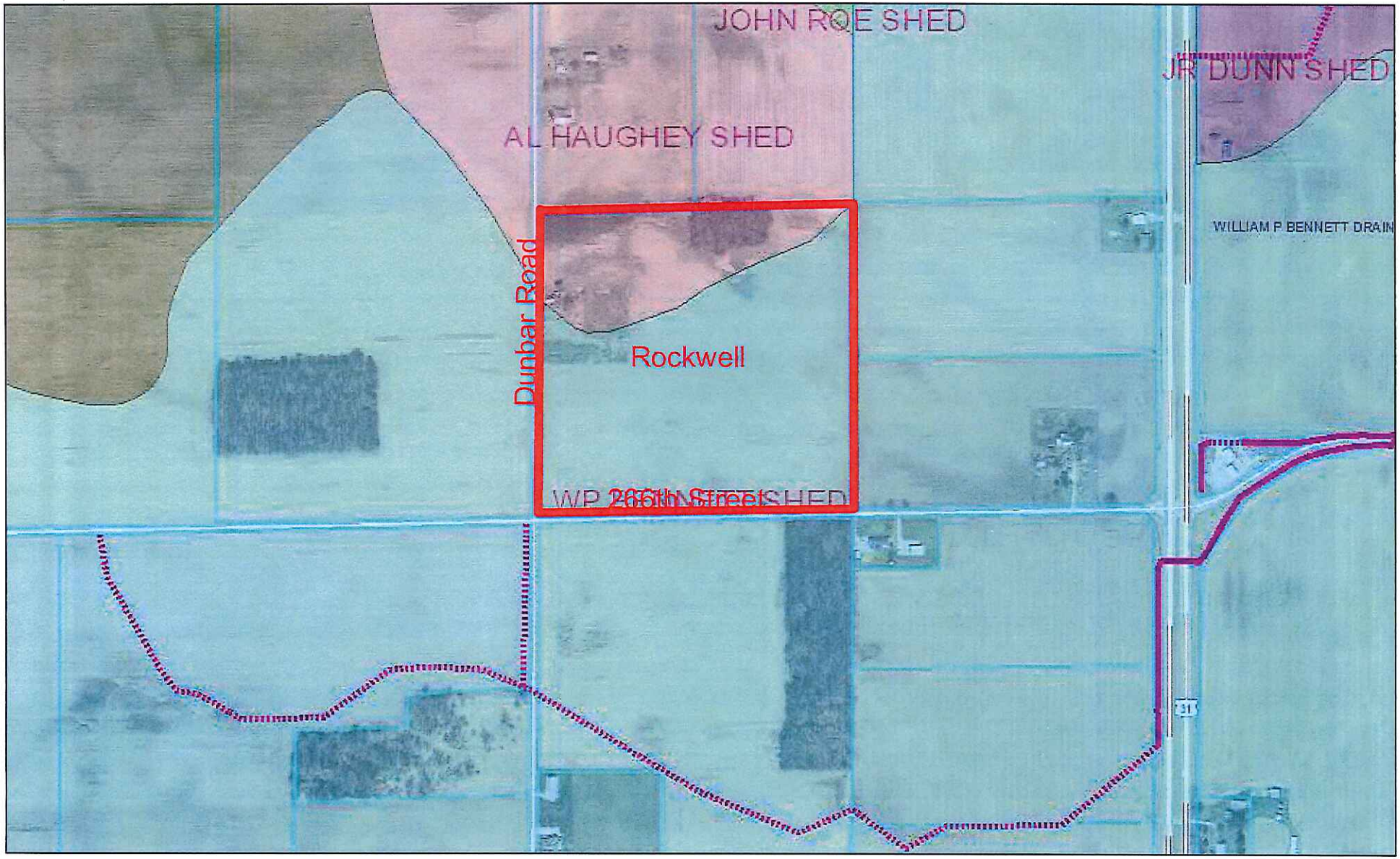
FILED
DEC 09 2015
OFFICE OF HAMILTON COUNTY SURVEYOR

William P. Bennett Drain

01-01-13-00-00-015-000

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

Rockwell Property



December 11, 2015

- <all other values>
- MUNICIPAL MANHOLE
- Regulated Drains Text

N

1:6,960

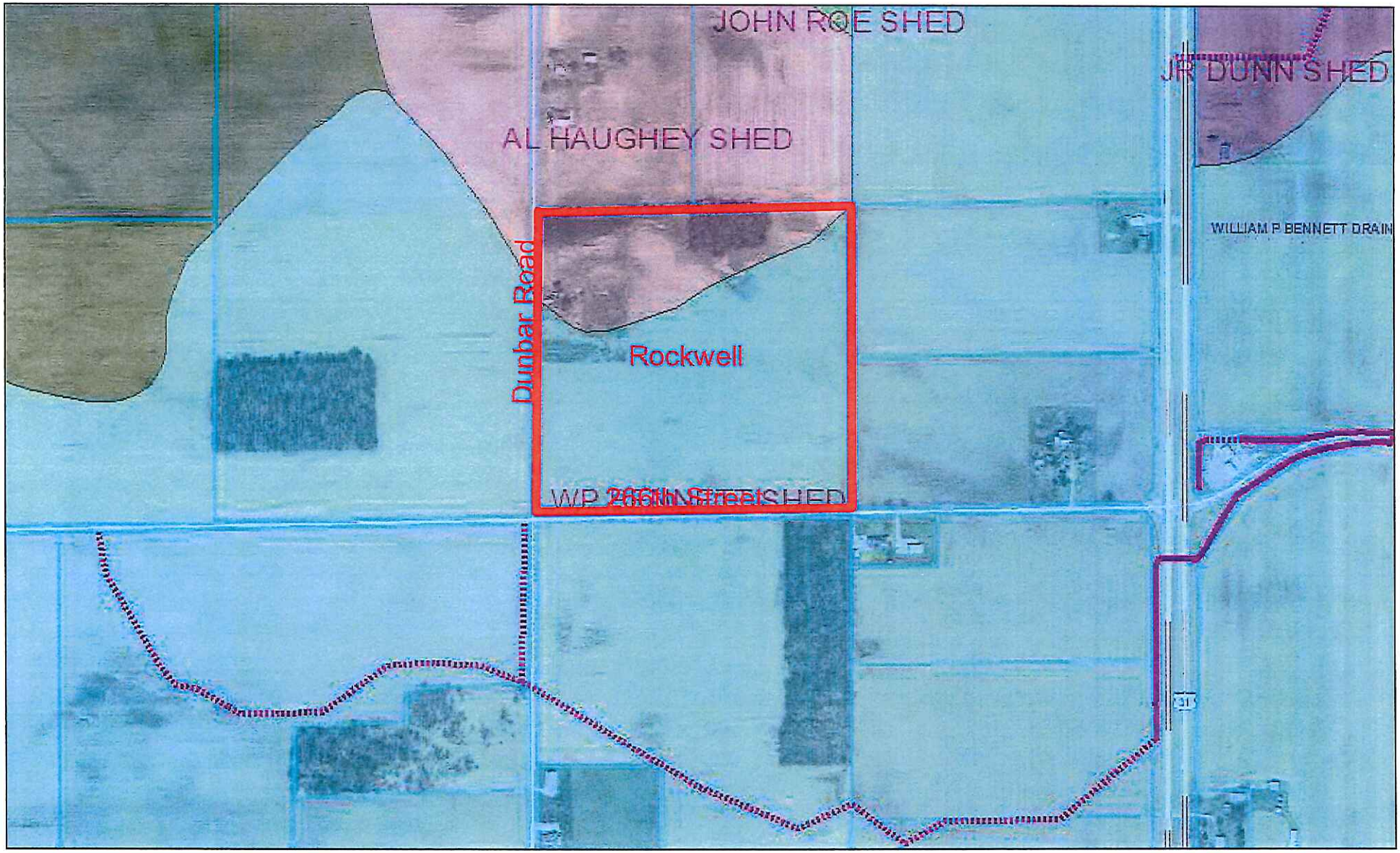
0 0.05 0.1 0.2 mi

0 0.075 0.15 0.3 km

Basemap information here

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

Rockwell Property



December 11, 2015

- <all other values>
- MUNICIPAL MANHOLE
- Regulated Drains Text
- CLOSED DRAIN

N

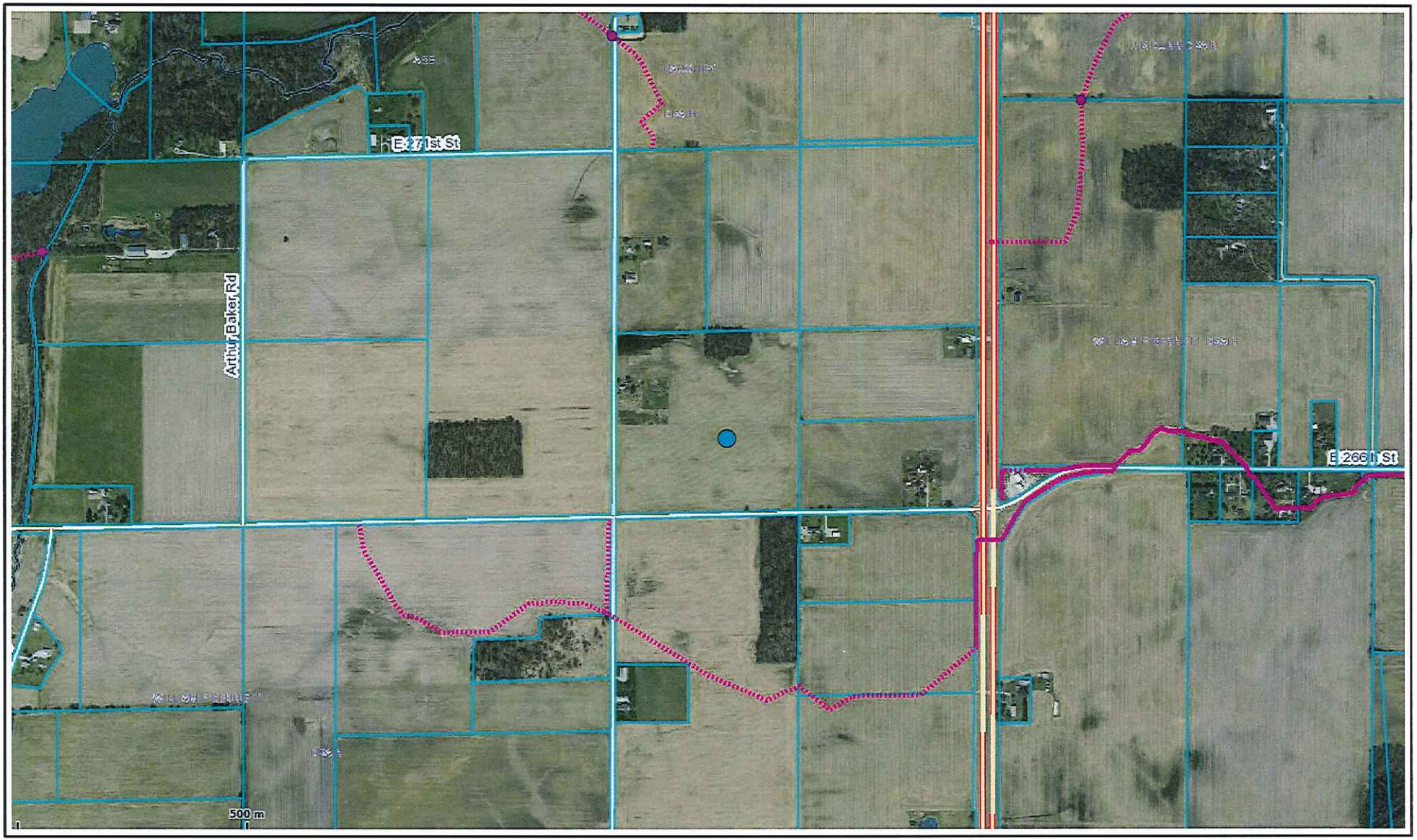
1:6,960

0 0.05 0.1 0.2 mi

0 0.075 0.15 0.3 km

Basemap information here

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060



Hamilton County

William P. Bennett Drain

Printed: Dec 09, 2015

N
W E
S

0 1,000
Feet

The information on this web site is provided and hosted by Hamilton County, Indiana. Continued use of this web site is conditional upon your explicit acceptance of the terms and conditions set forth in this disclaimer document. The data provided herein may be inaccurate and/or out of date. Any person or entity who relies on this data for any purpose whatsoever does so solely at their own risk. Neither Hamilton County Indiana nor its employees or officers warrant the accuracy, reliability, or timeliness of any of the data provided herein. This data is provided "as is" without warranty of any kind. Hamilton County may elect to discontinue this service without notice at any point in the future.

County of Hamilton Indiana
www.hamiltoncounty.in.gov

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

OFFICE OF

HAMILTON COUNTY DRAINAGE BOARD

November 13, 2015

Notice of Hearing on Reconstruction & Schedule of Assessments and Damages on the **William P. Bennett Drain.**

Rockwell, Raymond H & Linda Kay
28999 U S 31
Atlanta, IN 46031

Under the Indiana Drainage Code, all land which drains directly, or indirectly, may be assessed for either maintenance cost or reconstruction cost within the drain. In making the calculation for each parcel, the Drainage Board must calculate the percentage of the cost attributable to each parcel of land benefitted. The Drainage Board has received a reconstruction report and schedule of assessments which affects your land. The purpose of the reconstruction project is to perform work which will substantially improve the drainage for the entire watershed served by the drain.

You are hereby notified that the reconstruction report of the County 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 County Surveyor. The chart below contains your proposed assessment and your percentage of the total reconstruction assessment.

The reconstruction report of the Surveyor and schedule of damages and benefits as determined by the Drainage Board for the proposed improvement known as the **William P. Bennett Drain** have been filed and are available for inspection in the office of the County Surveyor. The schedule of assessments shows the following lands in your name are affected as follows. <u>This assessment is not a charge for services associated with regulating the quality of storm water within your city or town.</u>

Description of Land	Acres Benefited	Damages	Reconst. Assmt.	% of Total	Maint. Assmt.
01-01-13-00-00-015.000					
S13 T20 R3 40.00Ac	30.00	Zero	$5,692.20	1.03%	*
Residential/Ag					
*No change in current maintenance assessment rates.					

The hearing on the Surveyor's reconstruction report and on the schedules of damages and assessments are set for hearing at **12:00 P.M. on December 14, 2015,** in the Commissioner's Court. The law provides that objections must be written and filed not less than 5 days before the date of the hearing. Objections may be for causes as specified by law and which are available at the Surveyor's Office. Written evidence in support of objections may be filed. The failure to file objections constitutes a waiver of your right to thereafter object, either before the Board or in court on such causes, to any final action of the Board. On or before the day of the hearing before the Board, the Surveyor shall and any owner of affected lands may cause written evidence to be filed in support of or in rebuttal to any filed objections.

HAMILTON COUNTY DRAINAGE BOARD
One Hamilton County Square, Ste. 188
Noblesville, IN 46060-2230

For a copy of the Surveyor's Report to the Drainage Board and a copy of the map, if applicable, please go to www.hamiltoncounty.in.gov/drainageboardnotices.

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

BEFORE THE HAMILTON COUNTY DRAINAGE BOARD
IN THE MATTER OF

William P. Bennett Drain Reconstruction

NOTICE

To Whom It May Concern and: _____
_____
_____

Notice is hereby given of the hearing of the Hamilton County Drainage Board concerning the reconstruction of the **William P. Bennett Drain Reconstruction** on **December 14, 2015** at **12:00 P.M.** in Commissioners Court, Hamilton County Judicial Center, One Hamilton County Square, Noblesville, Indiana. Construction and maintenance reports of the Surveyor and the Schedule of Assessments proposed 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

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

STATE OF INDIANA)
) SS BEFORE THE HAMILTON
)
COUNTY OF HAMILTON) DRAINAGE BOARD

IN THE MATTER OF **William P. Bennett Drain Reconstruction**

NOTICE

Notice is hereby given that the Hamilton County Drainage Board at its regular meeting **February 8, 2016** adopted the reconstruction report of the Surveyor and the Amended Schedule of damages and assessments including annual assessment for periodic maintenance, finding that the costs, damages and expense of the proposed improvement would be less than the benefits which will result to the owner of lands benefited thereby.

The Board issued an order declaring the proposed improvement established. Such findings and order were marked filed and are available for inspection in the Office of the Hamilton County Surveyor.

If judicial review of the findings and order of the Board is not requested pursuant to Article VIII of the 1965 Indiana Drainage Code as amended within twenty (20) days from the date of publication of this notice, the findings and order shall become conclusive.

HAMILTON COUNTY DRAINAGE BOARD

BY: Christine Altman
PRESIDENT

ATTEST: Lynette Mosbaugh
SECRETARY

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

APPENDIX C - Photo Log

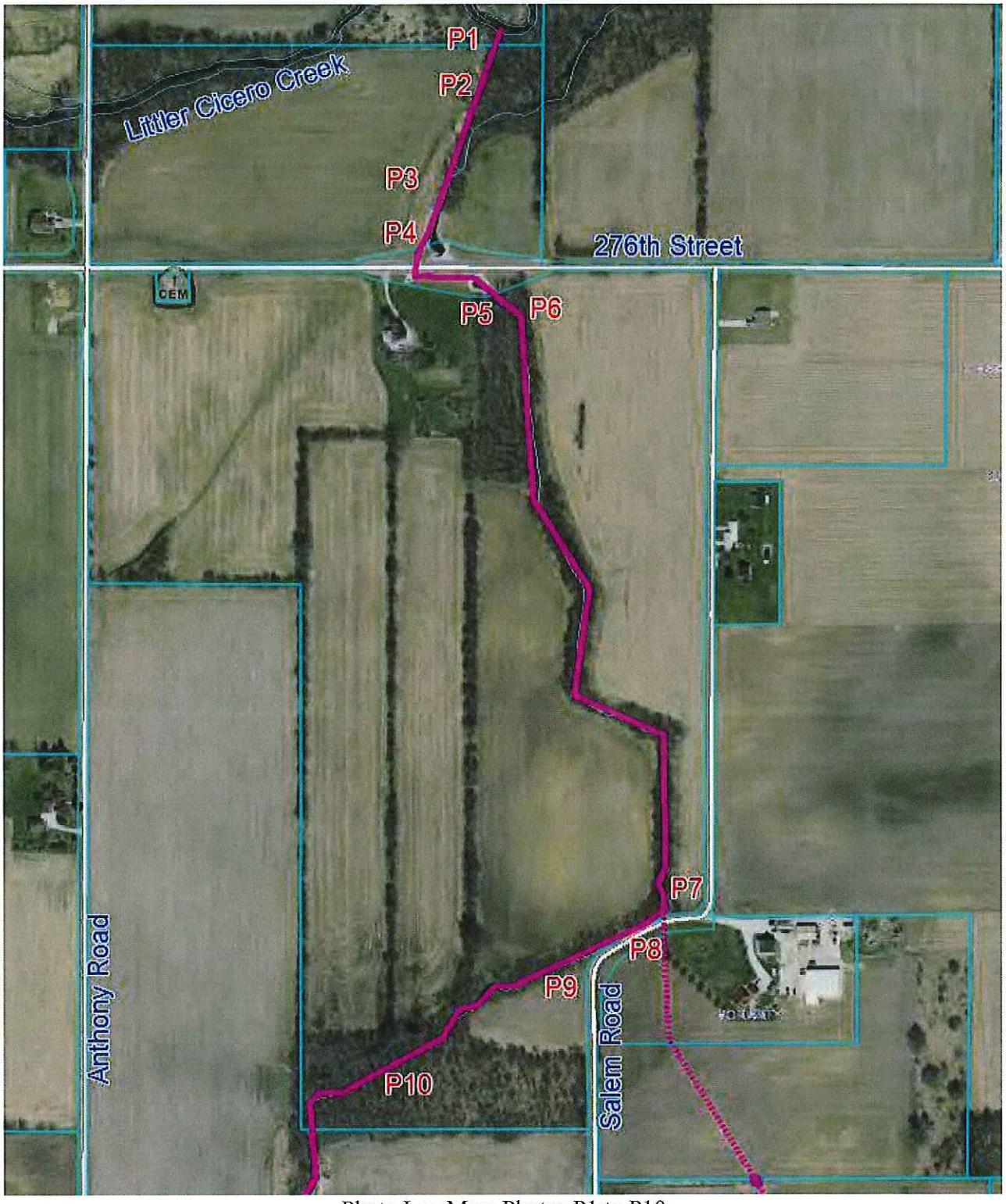


Photo Log Map: Photos P1 to P10

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

P1: Outlet to Little Cicero Creek

P2: Channel Downstream of 276th Street (Looking upstream)

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

P3: Overbank Erosion at Station 6+00 (Left Side)

P4: Bridge Under 276th Street

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

P5: Upstream Face of 276th Street Bridge

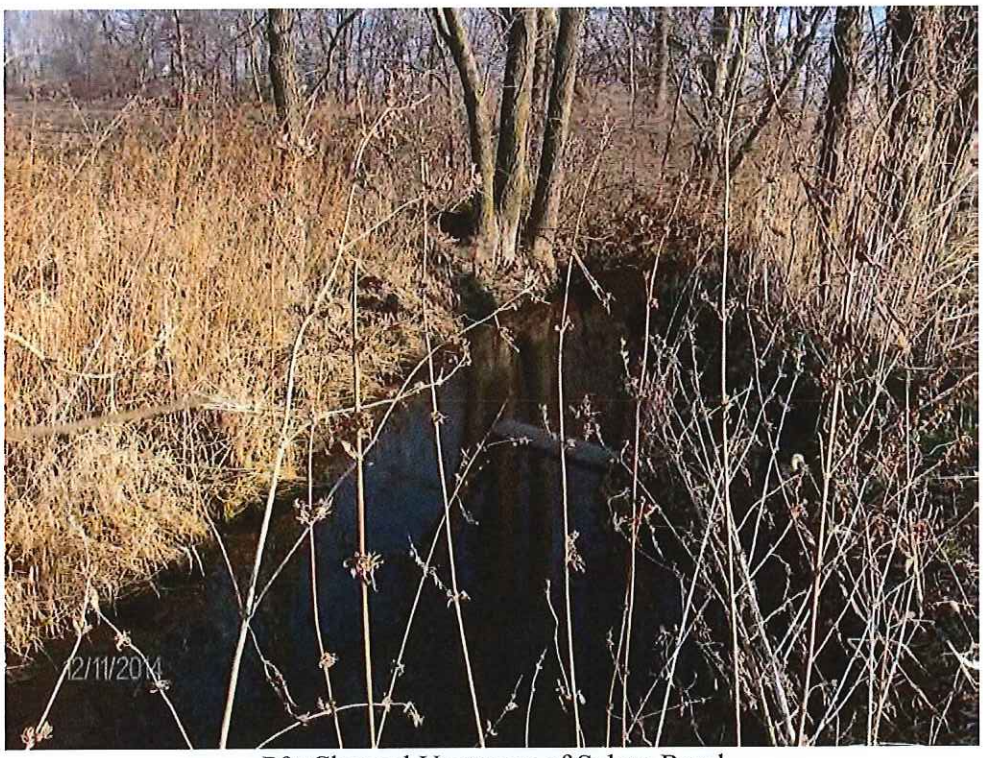
P6: Channel Upstream of 276th Street

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

P7: Outlet of Beck's Relocation Arm Regulated Drain

P8: Ditch Adjacent to Salem Road

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060



P9: Channel Upstream of Salem Road

P10: Existing Ford Crossing on Duvall Bond & Harris LLC Property

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

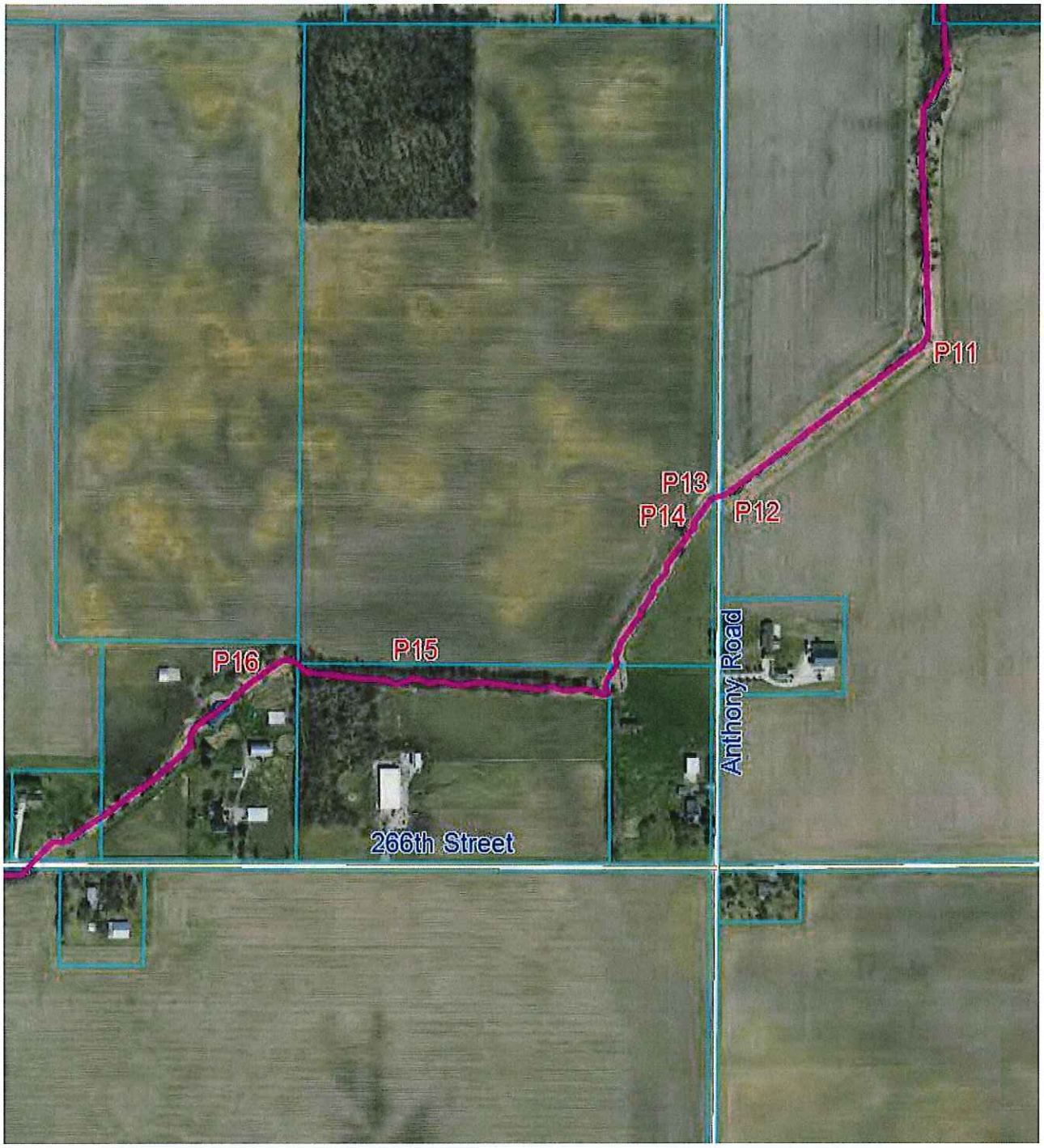


Photo Log Map: Photos P11 to P16

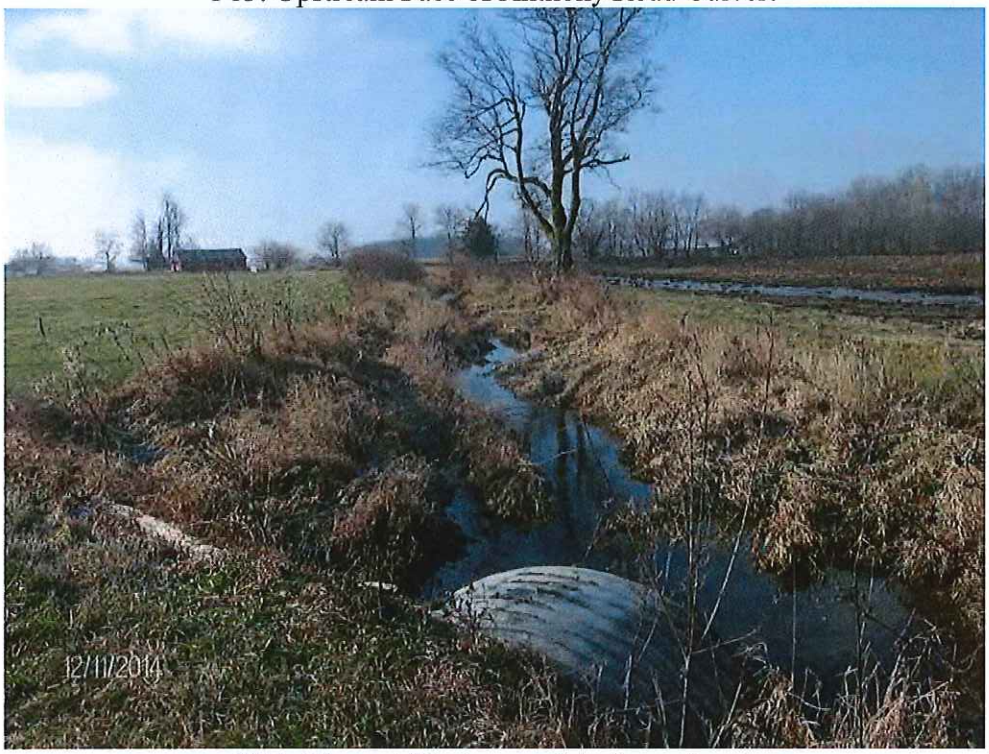
This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

P11: Looking Upstream Towards Anthony Road

P12: Downstream Face of Anthony Road Culvert

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

P13: Upstream Face of Anthony Road Culvert



P14: Channel Upstream of Anthony Road

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

P15: Channel on Beck's / Hinderliter Propterty (Station 77+00)

P16: Channel on Durbin Property (Station 83+00)

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

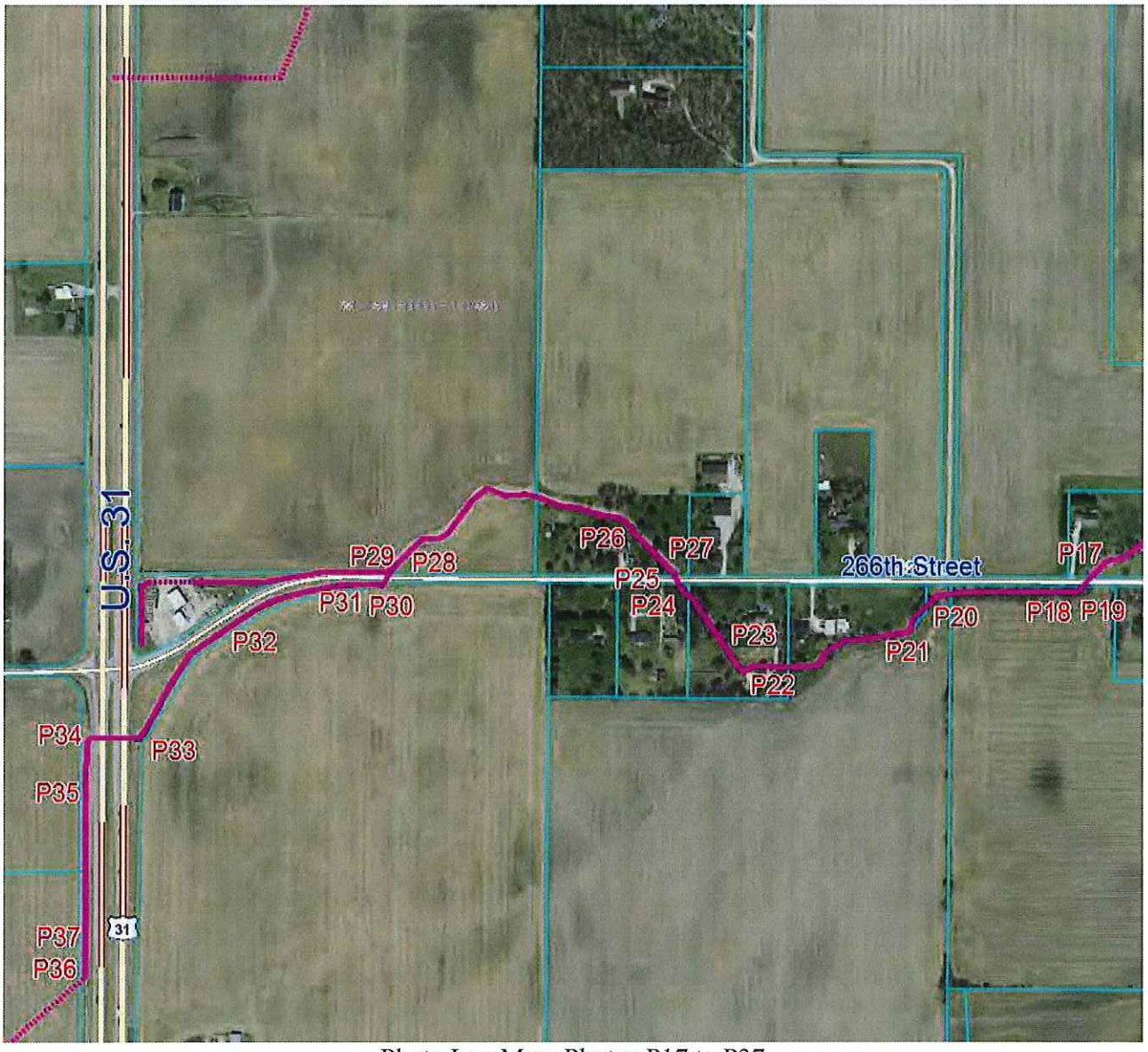


Photo Log Map: Photos P17 to P37

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

P17: Downstream Face of Downstream 266th Street Crossing

P18: Channel Upstream of 266th Street Crossing (Station 94+00)

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

P19: Submerged Outlet just Upstream of 266th Street (Station 93+31)

P20: Private Crossing on Clark Property (Station 98+00)

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

P21: Channel on Stepp Property (Station 100+00)

P22: Private Crossing on Bales Property (Station 104+50)

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

P23: Channel Upstream of Private Bales Crossing

P24: Downstream Face of Middle 266th Street Crossing

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

P25: Looking Downstream from 266th Street Middle Crossing

P26: Looking Upstream from Middle 266th Street Crossing

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

P27: Upstream Face of Middle 266th Steet Crossing

P28: Downstream Face of Upper 266th Street Crossing

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

P29: Looking Downstream from Upper 266th Street Crossing

P30: Looking Upstream from Upper 266th Street Crossing

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

P31: Upstream Face of 266th Street Upper Crossing

P32: Channel Upstream of 266th Street

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

P33: Downstream Face of U.S. 31 Crossing

P34: Upstream Face of U.S. 31 Crossing

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

P35: Channel within U.S. 31 ROW

P36: WP Bennett Tile Outlet (Submerged)

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

P37: Looking Downstream from Tile Outlet (Beginning of Open Drain)

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

Prepared for:

Hamilton County Drainage Board
1 Hamilton Square, Suite 188
Noblesville, IN 46060

President – Steven C. Dillinger
Vice President – Christine Altman
Member – Mark Heirbrandt
Surveyor – Kenton C. Ward

Prepared by:

BANNING ENGINEERING
853 Columbia Road, Suite 101
Plainfield, IN 46168
317-707-3700

August 2015

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

Project Location

This project is located within the WP Bennett Watershed which covers a 2.8 square mile area in Northern Hamilton County. The project begins in the southwest quarter of Section 8, Township 20N and Range 4E, where it enters Little Cicero Creek. The project continues generally west southwest to the northeast quarter of Section 24, Township 20N and Range 3E, where the tile enters into the open ditch along the west side of U.S. 31. The majority of the drain is located within Jackson Township, though a small portion (860 LFT) of the open drain is within Adams Township. The WP Bennett tile drain begins at the upper end of the open drain. The tile drain is not part of this study.

Existing Conditions

The WP Bennett drain has been petitioned for reconstruction. Field observations viewed in December of 2014 present a drain in need of dipping and tree clearing. In some areas the drain is also too close to public roadways and is recommended to be relocated so the top of bank is at least 15 LFT from edge of the road shoulder. Several areas were observed to have significant sediment compromising both the hydraulic capacity of road crossings and the ability to drain the root zone of the adjacent agricultural lands effectively. An adequately drained root zone relieves stress on plants and also provides aeration to the root system which also increases productivity potential.

An existing conditions hydraulic capacity analysis on the reach has been performed using Hydrologic Engineering Center River Analysis System software (HEC-RAS). Indiana Natural Resource Conservation Service (NRCS) open drain runoff curves were initially used to evaluate the project reach. The results shown in Figure 1.1 indicate that the majority of the ditch does not have adequate agricultural capacity as estimated using Indiana Drainage Runoff Curve 'A' (good protection from overflow, not maximum flood runoff) published by Indiana NRCS.

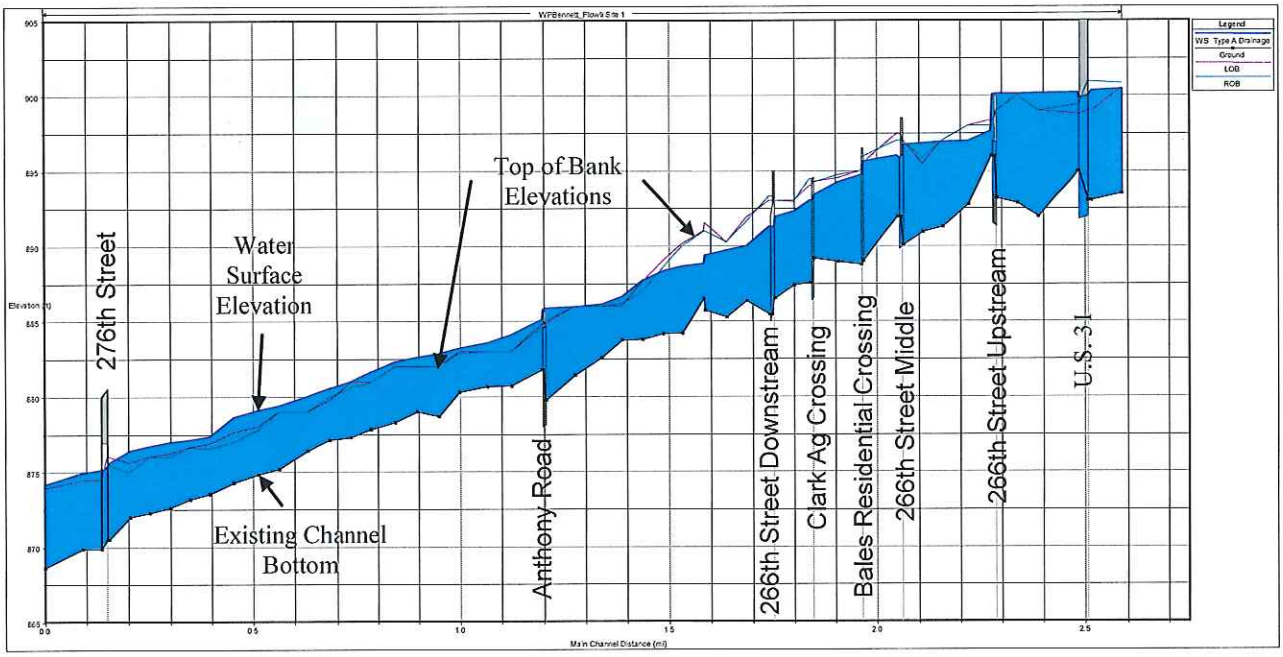


Figure 1.1 Agricultural Type 'A' Drainage Curve Analysis of Existing Conditions

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

Additionally, to evaluate flooding frequency potential of the channel and roadway overtopping potential crossing sizes, a NOAA Atlas 14 critical duration analysis was completed for the area. Four frequencies were evaluated; 5-Year, 10-Year, 25-Year and 50-Year. The 50% risk of exceedence "All" rainfall distribution was used for the hydrologic analysis. Flow rates at five locations were determined within the project area for the storm return frequencies noted above. The locations are shown in Figure 1.2. Tabulated results for the existing conditions analysis are shown below.

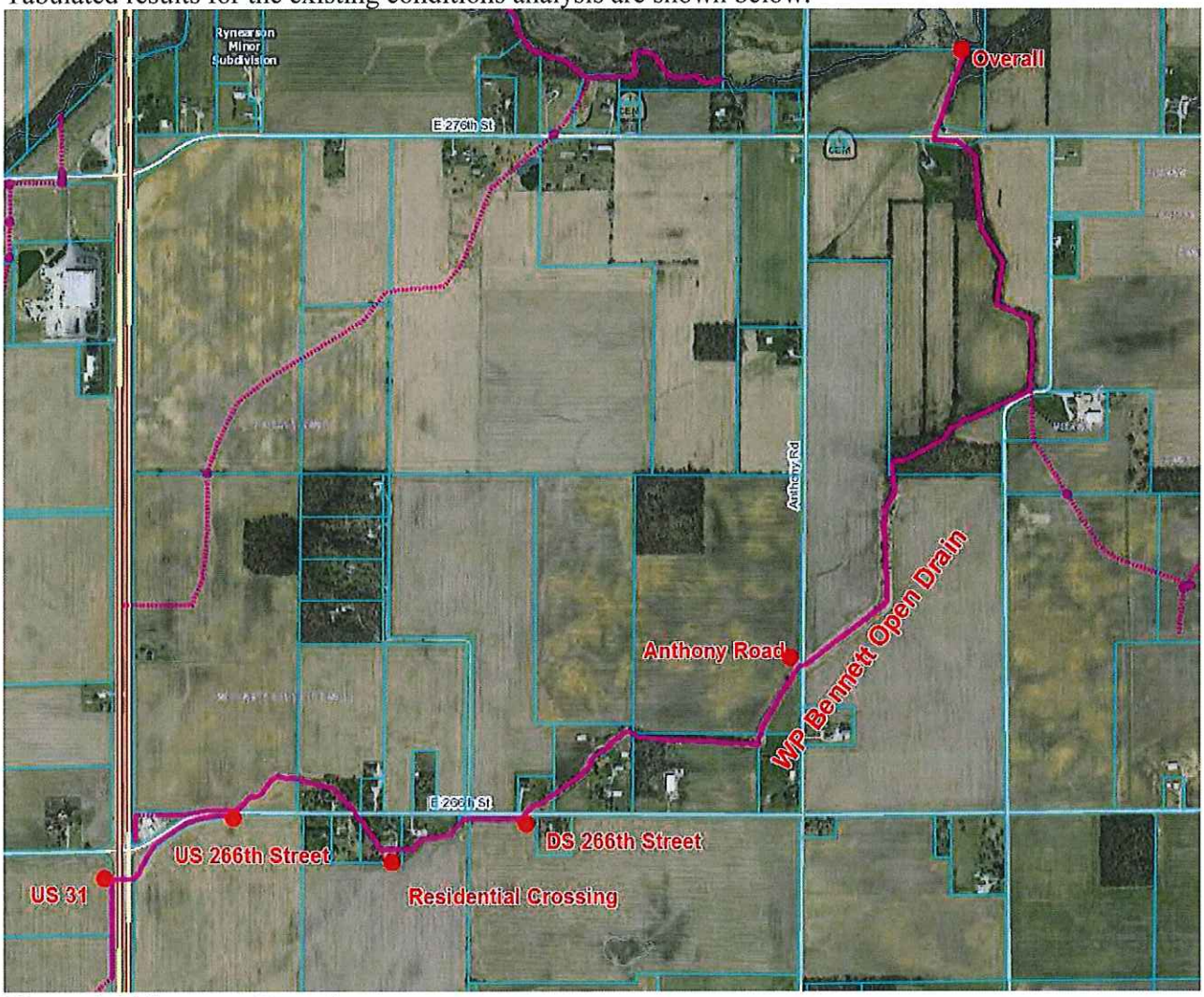


Figure 1.2 Flow rate Locations

	Flowrates (cfs)				
Location	**Type A Drainage**	**5-Year**	**10-Year**	**25-Year**	**50-Year**
Overall (1807 Ac.)	280	390	523	716	895
Anthony Road (1110 Ac.)	209	255	342	469	586
DS 266th Street (939 Ac.)	189	223	300	410	514
Residential Crossing (872 Ac.)	181	211	283	388	486
US 266th Street (785 Ac.)	170	195	262	359	450
U.S. 31 (680 Ac.)	156	172	231	317	397

Table 1.1 Flowrates for WP Bennett Drain

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

Recommended Reconstruction

A new channel is recommended throughout the project area. The recommended bottom width of the new channel varies between 4-feet and 6-feet. The first 4,000-LF of the ditch from the Little Cicero Creek is recommended to have a 6-foot bottom width. The next 3,200-LF upstream of this segment is recommended to have a 5-foot bottom width. The final 6,925-LF of the channel within the project area is recommended to have a 4-foot bottom width. The side slopes of the new channel in all segments is recommended to be 2-foot horizontal for each 1-foot vertical. The recommended slope of the channel within the project limits varies. The recommended slope is 0.16% from the Little Cicero Creek to Anthony Road (a distance of 6,415-LF), 0.2% from Anthony Road to US-31 (a distance of 6,775-LF) and 0.10% from US-31 to the end of the project (a distance of 925-LF). The bottom widths were designed to keep the estimated 5-year flow rates within the ditch banks. Slopes along the reach were set to both match existing inverts of the crossing at the U.S. 31 and eliminate backwater during low flow conditions on tile outlets observed and surveyed along the reach.

The designed channel will pass the NRCS Type 'A' Drainage Curve flowrate for Indiana and the 5- year storm. Storm events exceeding the 5-year event will overflow the channel starting downstream of Anthony Road. Road crossings for the reach vary in design frequency capacity prior to overtopping the roadway. Channel slope and roadway cover limits potential capacity at several of the roadway crossing locations.

The Anthony Road Crossing will pass the lowest frequency at the 10-year flowrate. Both residential crossings and the upstream two 266th Street crossings will pass the 25-year flowrate. The downstream 266th Street crossing, 276th Street crossing and the U.S. 31 crossing will pass the 50-year flowrates. The design proposes to use the existing 276th Street and U.S. 31 crossings. As development occurs within the watershed, the current Hamilton County Stormwater Management Technical Standards Manual release rate restrictions will continue to lessen the potential frequency of road overtopping. Below is a list of the proposed new drain crossings.

Anthony Road: 117" x 79" CMP Pipe Arch, 40 LFT
Downstream 266th Street: 117" x 79" CMP Pipe Arch, 50 LFT
Clark Agricultural: 8.5' Diameter CMP, 24 LFT
Bales Residential: 8.5' Diameter CMP, 26 LFT
Middle 266th Street: 117" x 79" CMP Pipe Arch, 50 LFT
Upstream 266th Street: 117" x 79" CMP Pipe Arch, 50 LFT

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

References

"Maps, Aerial Photos, & GIS." *Government of Hamilton County Indiana*. Hamilton County Gov., n.d. Web. 20 May 2015. <http://www.hamiltoncounty.in.gov/category/subcategory.php?categoryid=65>.

"NOAA Atlas 14 Point Precipitation Frequency Estimates." *Hydrometeorological Design Studies Center*. NOAA, n.d. Web. 22 May 2015. <http://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=in>.

"Web Soil Survey." *Natural Resources Conservation Service*. United States Department of Agriculture, February 2012. Web. 22 May 2015. <http://websoilsurvey.nrcs.usda.gov/app/>.

List of Appendices

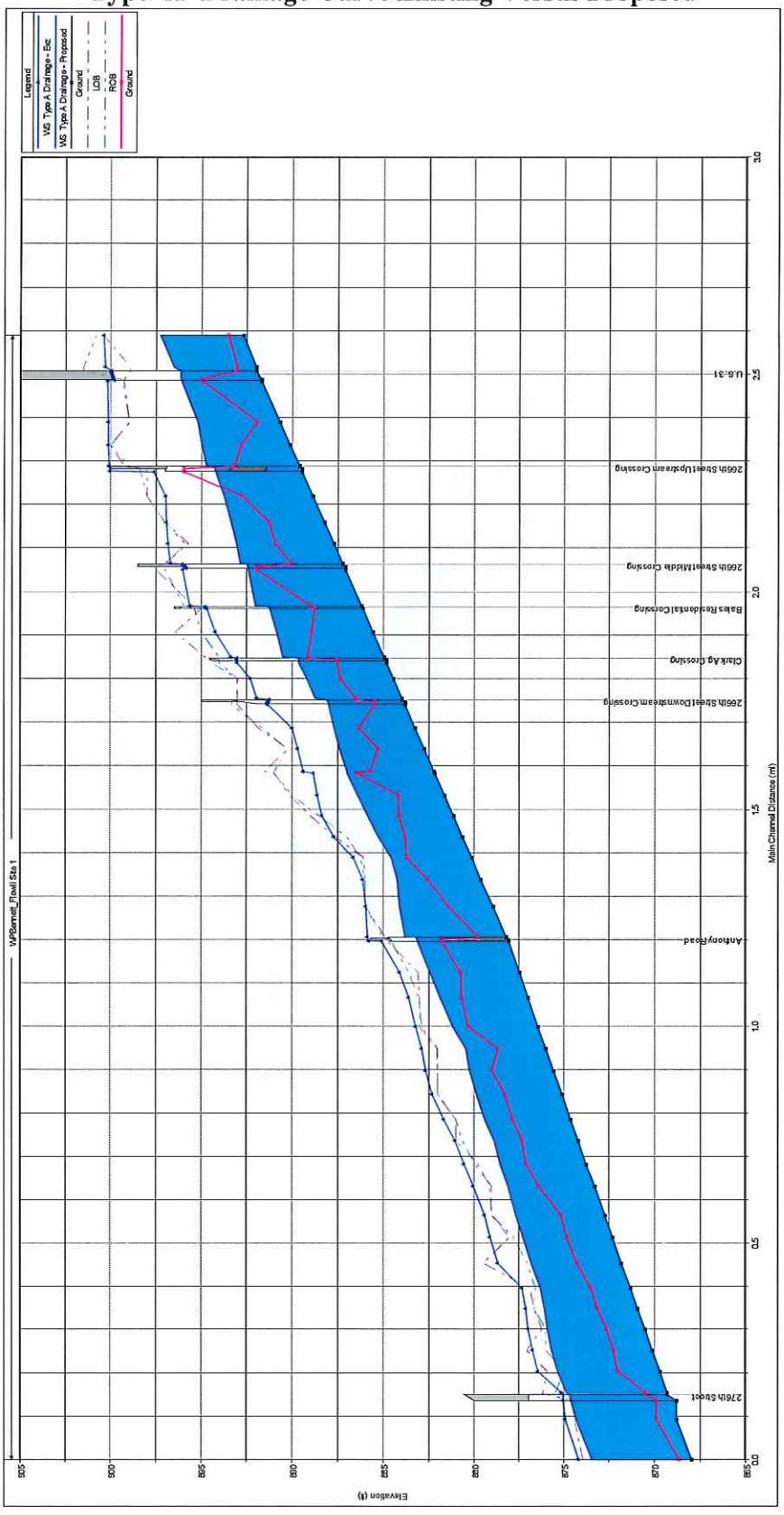
Appendix A - Calculations
Appendix B - Cost Opinion
Appendix C - Photo Log

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

APPENDIX A - Calculations

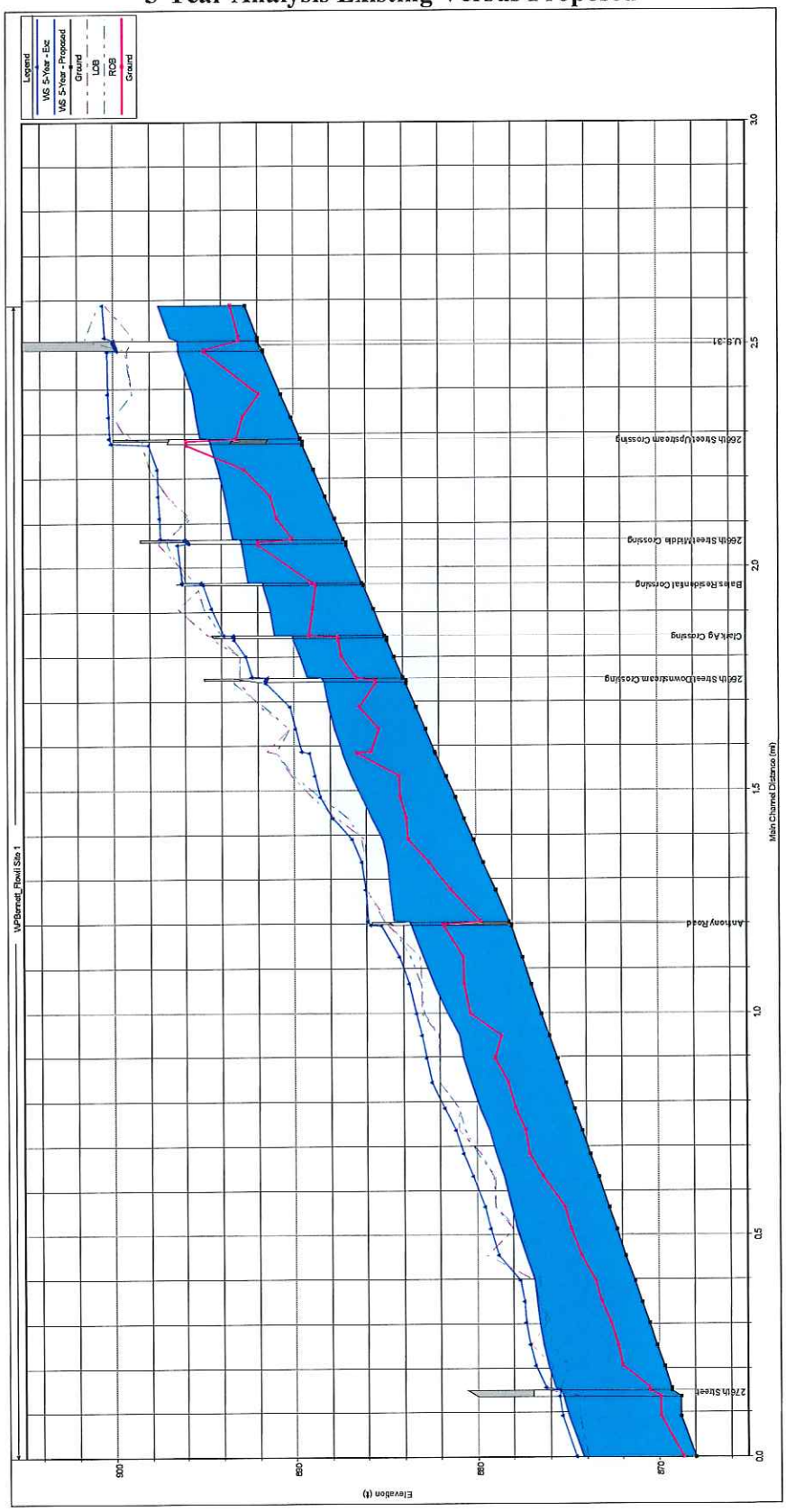
This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

Type 'A' Drainage Curve Existing Versus Proposed



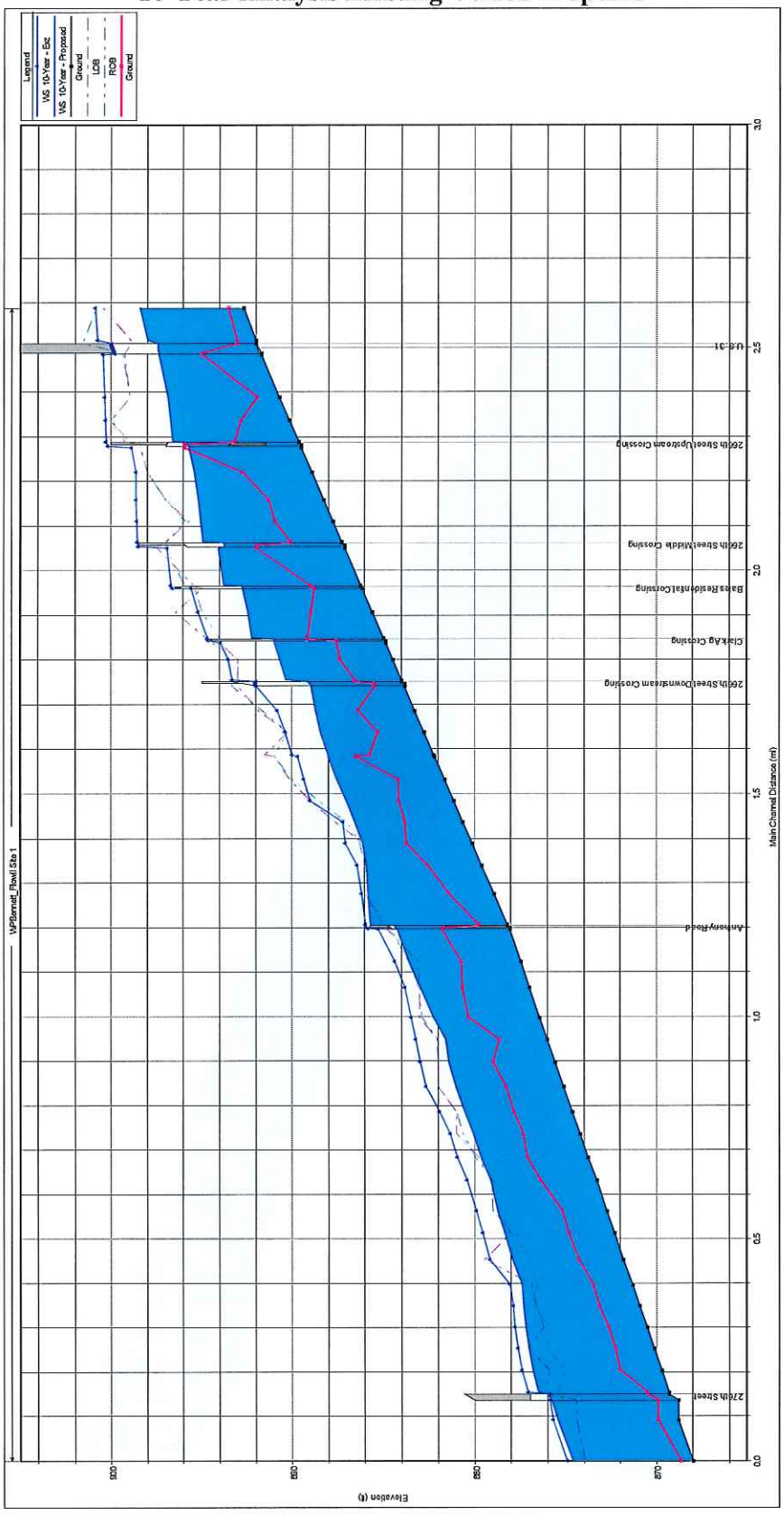
This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

5-Year Analysis Existing Versus Proposed



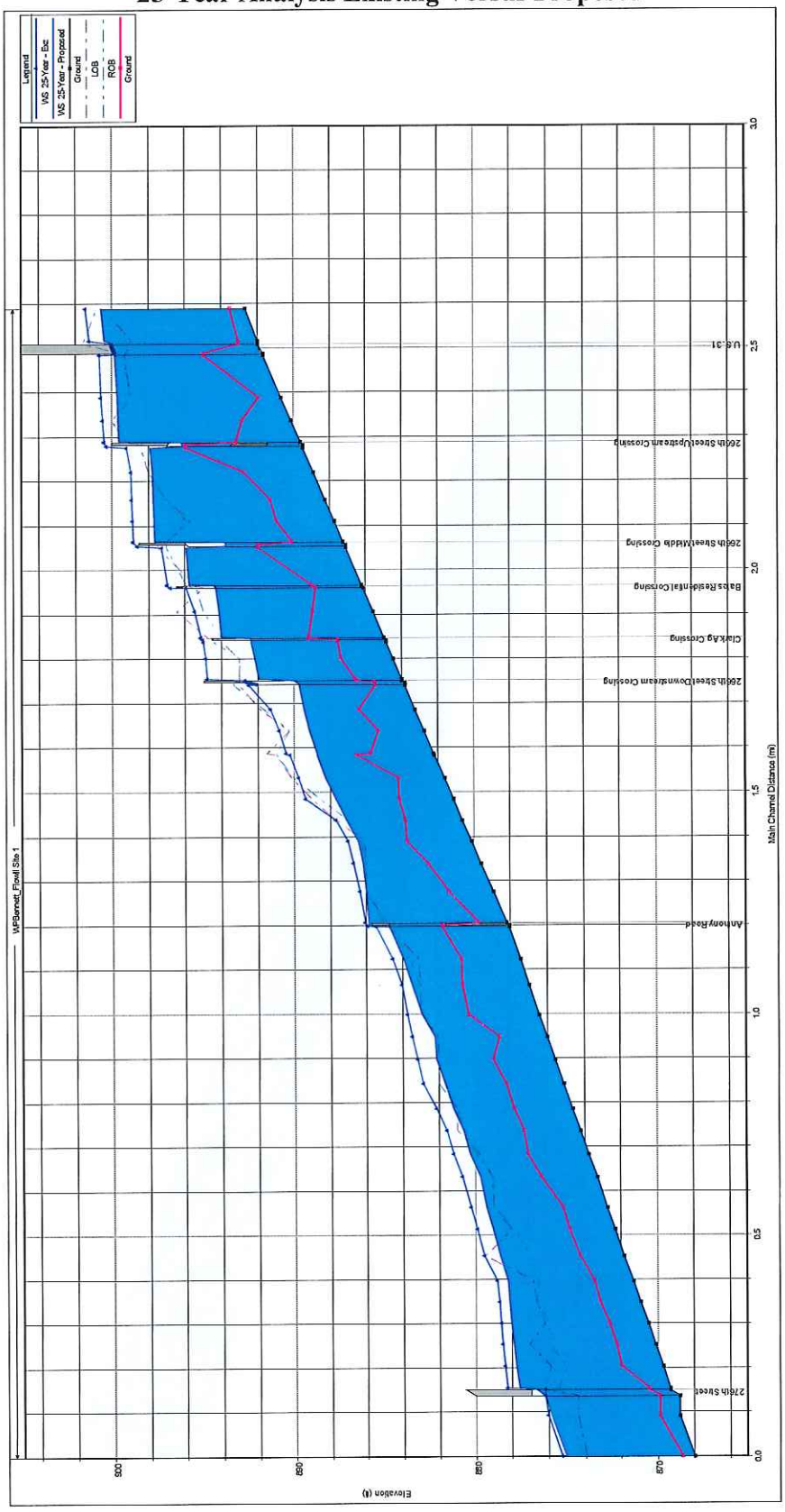
This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

10-Year Analysis Existing Versus Proposed



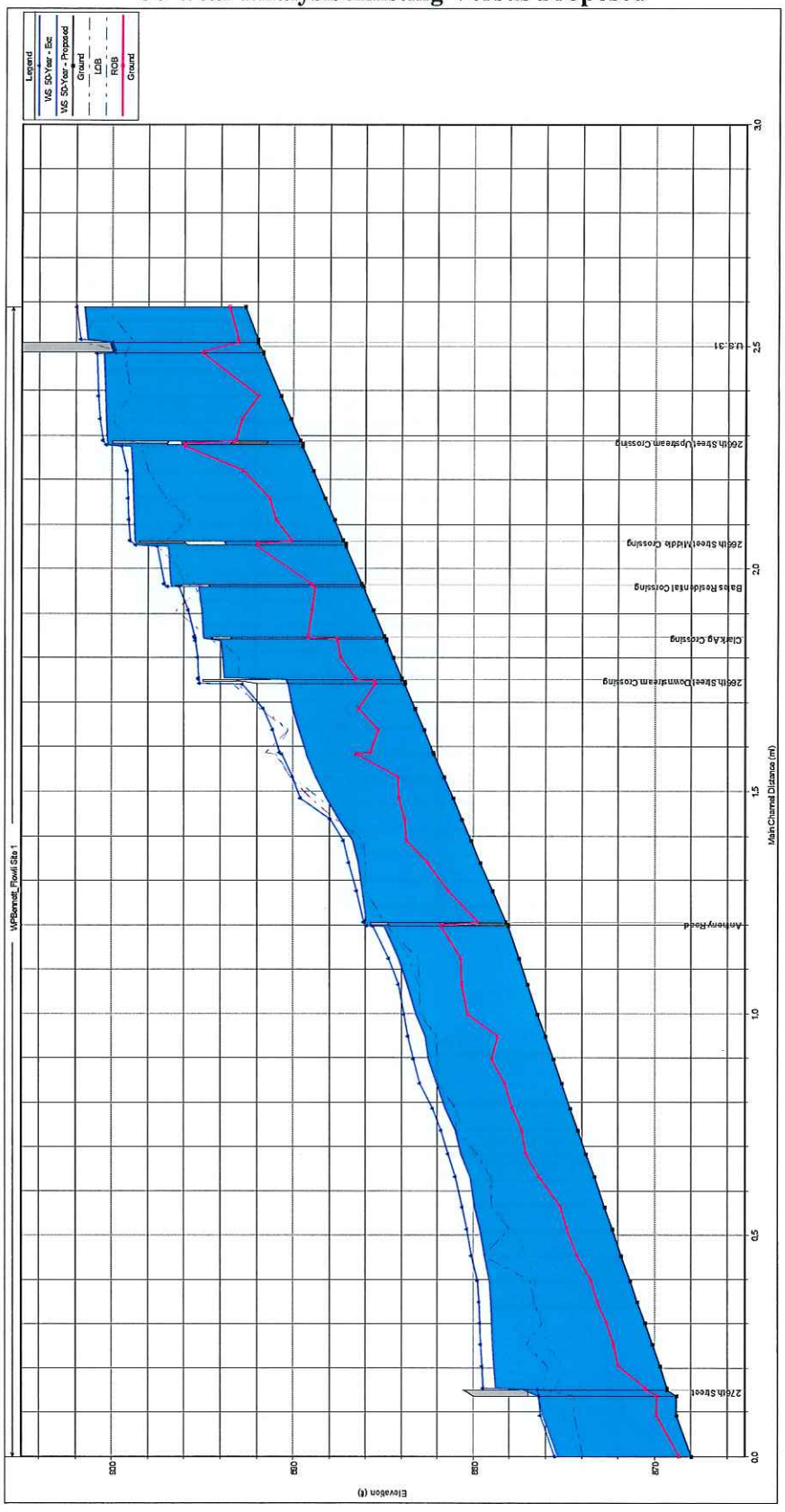
This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

25-Year Analysis Existing Versus Proposed



This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

50-Year Analysis Existing Versus Proposed



This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060

APPENDIX B - Cost Opinion

CONSTRUCTION COST OPINION
for
WP Bennett Reconstruction

Date: 8/28/2015
By: JLM

Item No.	Description	Quantity	Unit	Unit Price	Amount
1	Clearing	1	LS	65,000.00	65,000.00
2	Excavate 4' Channel Bottom	6925	LFT	6.30	43,627.50
3	Excavate 5' Channel Bottom	3200	LFT	8.00	25,600.00
4	Excavate 6' Channel Bottom	3555	LFT	9.50	33,772.50
6	Riprap	172	Tons	75.00	12,900.00
7	Seeding Channel Banks	10.8	Acres	2,500.00	27,000.00
8	Seeding Filter Strip	7.0	Acres	1,750.00	12,250.00
9	Surface Water Pipe	8	EA	1,150.00	9,200.00
10	6" x 20' CMP with Animal Guard	5	EA	500.00	2,500.00
11	8" x 20' CMP with Animal Guard	3	EA	525.00	1,575.00
12	10" x 20' CMP with Animal Guard	1	EA	575.00	575.00
13	12" x 20' CMP with Animal Guard	6	EA	625.00	3,750.00
14	15" x 20' CMP with Animal Guard	1	EA	700.00	700.00
15	18" RCP Extension	1	LS	1,500.00	1,500.00
16	Ford Crossing	2	EA	3,000.00	6,000.00
17	8.5' Diam. X 24' CMP w/ backfill	1	EA	12,000.00	12,000.00
18	8.5' Diam. X 26' CMP w/ backfill	1	EA	13,000.00	13,000.00
19	Remove (2) Driveway CMPs	2	EA	1,500.00	3,000.00
20	Driveway Crossing Stone	2	EA	1,000.00	2,000.00
21	Remove and Replace Fences as needed	1	LS	12,500.00	12,500.00
			Total		$ 288,450.00
			Contingencies	15%	$43,267.50
			Net Total		$ 331,720.00

Work for County Roads

Item No.	Description	Quantity	Unit	Unit Price	Amount
22	117" x 79" CMP Arch Pipe x 40 LFT w/ backfill	1	EA	$20,000.00	$20,000.00
23	117" x 79" CMP Arch Pipe x 50 LFT w/ backfill	3	EA	$25,000.00	$75,000.00
24	Sawcut & Remove old culverts	4	EA	$4,000.00	$16,000.00
25	6' Channel under 276th Street	135	LFT	$35.00	$4,725.00
36	Re-aligned 6' Channel	310	LFT	35.00	10,850.00
27	3' Stone Shoulder (#53s 6" Thick)	172	LFT	7.50	1,290.00
28	Pavement Repair	4	EA	$7,500.00	$30,000.00
			Total		$ 157,865.00
			Contingencies	15%	$23,679.75
			Net Total		$ 181,540.00

This copy printed from Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste., Noblesville, In 46060