

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

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

June 15, 2006

To: Hamilton County Drainage Board

Re: Russell Johnson Drain Reconstruction

Attached are plans, drainage-shed map and assessment roll for the proposed reconstruction of the Russell Johnson Drain. This project will eliminate a potential road hazard to the motoring public as identified by the Hamilton County Highway Engineer, James W. Neal in a letter dated September 25, 2005. The work was identified as needing done in the 2005 and 2006 Surveyor's Classification List to the Hamilton County Drainage Board. The proposed reconstruction will repair and move the existing drain on the east side of Hoosier Road and also rebuild the east side shoulder. The existing drain is located in sections 33 of Township 18 north, Range 5 east in Fall Creek Township.

Below is the hydraulic data for the proposed project:

Russell Johnson Watershed= 525.38 acresWatershed to Hoosier Road= 395.2 acresRussell Johnson Drain Q10= 135 cfsRussell Johnson Drain Q100= 230 cfsHoosier Rd. Culvert Capacity= 335.4 cfs

The proposal is to move the drain approximately 10 feet east in order to construct a road guardrail and provide the motoring public a safer driving environment. An existing Hamilton Southeastern Utilities Inc., sanitary sewer pipe and easement are within the east side of the regulated drain easement. Upon the review of this project's preliminary plan, James C. Hart with SAMCO, Hamilton Southeastern Utilities' consulting engineer, has indicated that a separation of 20 feet between the existing sewer pipe and the proposed east top of bank is preferred. However, Hamilton County Surveyor's Office standards allows a 15 foot minimum. Therefore, 15 feet will be used for this project. Also, there is a non-enforcement in our easement.

Not shown on the plans, but shall be considered as part of the reconstruction plans is the placement of a twenty foot (20') filter strip along the east side of the drain. This shall be installed by the Contractor as part of the leveling and seeding of the spoil. This shall be maintained annually as part of the drain maintenance program. Other work proposed is clearing, erosion control and tile extensions along the open drain. The proposed reconstruction will neither add new drain nor additional length to the Russell Johnson Drain.

The easement is based on existing top of bank, existing conditions and will not be enlarged. All work is to be done within the easement. The proposed reconstruction of the Russell Johnson Drain will not add any easement to the regulated drain. The following is a description of the existing easement for the proposed reconstruction of the Russell Johnson Drain:

### Drainage Easement across Johnson Management Company LLC.

A part of the Southeast Quarter of Section 33, Township 18 North, Range 5 East, Hamilton County, Indiana.

Commencing at the Northwest corner of the of the said Southeast Quarter, said point being the POINT OF BEGINNING of the easement herein described; thence North 89 degrees 13 minutes 10 seconds East, along the North line of the said Southeast Quarter a distance of 200.36 feet to a point being 75 feet Southeast, perpendicular to the East top of bank of an existing ditch as it was located June of 2006; the next three calls being 75 feet East and Southeast perpendicular to and being parallel with the East top of bank of the said ditch, thence South 38 degrees 55 minutes 21 seconds West, a distance of 142.65 feet; thence South 0 degrees 57 minutes 54 seconds East, a distance of 832.55 feet; thence South 53 degrees 25 minutes 20 seconds West, a distance of 151.24 feet to a point on the West line of the said Southeast Quarter; thence North 0 degrees 10 minutes 57 seconds West, along the West line of the said Southeast Quarter a distance of 1030.81 feet to the POINT OF BEGINNING; said described easement containing 2.733 acres, more or less.

The following is an approximate description of the proposed reconstructed centerline of the Russell Johnson Drain:

### Description for the proposed new center line.

A part of the Southeast Quarter of Section 33, Township 18 North, Range 5 East, Hamilton County, Indiana.

Commencing at the Northwest corner of the of the said Southeast Quarter; thence North 89 degrees 13 minutes 10 seconds East, a distance of 57.66 feet to the POINT OF BEGINNING of the proposed center line; thence South 15 degrees 56 minutes 43 seconds West, a distance of 106.68 feet; thence South 0 degrees 45 minutes 00 seconds East, a distance of 798.53 feet; thence South 54 degrees 27 minutes 44 seconds West, a distance of 44.06 feet to the West line of the said Southeast Quarter, said point being the POINT OF ENDING.

## COST ESTIMATE - Hoosier Road over Russell Johnson Drain

Clearing, 0.92 acres @ \$10,000.00/ acre Common Excavation, 788 Lineal Feet @ \$55.00/LF	\$  9,200.00 \$43,340.00
Silt Basin, 4'X50', 1 each @ \$500.00	\$ 500.00
Gabion Baskets, 3'x3'x6', 189 cys @ \$120.00/cys Erosion Control Blankets (includes seeding cost)	\$22,680.00
2833 Square Yards @ \$8.50/sys	\$24,080.50
Seeding, Permanent, 1.15 acres @ \$5,000.00/acre	\$ 5,750.00
CMP Pipe Extensions 24"X 20', 1 ea. @ \$800.00 each	\$ 800.00
CMP Pipe Extensions 24"X 20', 1 ea. @ \$600.00 each	\$ 600.00
Rip Rap (corner armoring), 56 SYS @ \$30.00	<u>\$_1,680.00</u>
Sub-Total	\$108,630.50
15 % Contingency	<u>\$ 16,294.50</u>
TOTAL COSTS	\$124,925.00

The improvements within the right-of-way of Hoosier Road will be paid partially for by the Hamilton County Highway Department. The contribution from the Highway Department is \$90,000.00 as a lump sum.

At this time, the maintenance fund for the Russell Johnson Drain has a balance of \$38,777.76. Per IC 36-9-27-45.5, the drainage board can declare up to 75% of a fund surplus and utilize the funds for reconstruction. I recommend the board do this in the amount of \$29,000.00. The remaining funds required for the project, \$5,925.00 be assessed to the landowners within the drainage shed.

I have reviewed the drainage shed for Russell Johnson Drain and upon considering all parcels individually; I believe that each parcel within the drainage shed will have equal benefits by land use as provided by the drain. Therefore I recommend each tract be assessed on the same basis equally by land use. I recommend that each tract be assessed at a reconstruction assessment of \$4.48 per acre with a \$5.00 minimum for this work.

At this time the drain is assessed at a rate of \$2.00/Ac, \$10.00 minimum for maintenance. With 516.66 acres and 672 lots in the drainage shed this rate generates an annual assessment of \$8,558.98. At this time I recommend the Board increase the rate of assessment to the following:

- 1. Current minimum rate for unplatted residential and agricultural be increased from \$10.00 to \$15.00.
- 2. Unregulated platted lots be set at \$5.00 per acre, \$15.00 minimum.
- 3. Regulated platted lots be set at \$10.00 per acre, \$65.00 mimimum.
- 4. Commercial, institutional and multi-family be set at \$10.00 per acre, \$75.00 minimum.
- 5. Roads be increased from \$2.00 per acre to \$10.00 per acre.

This will increase the annual assessment for this drain from \$8,558.98 to \$13,967.36. The new rate will be effective for the 2007 collections.

This project will require a Rule 5 NPDES permit since the area of disturbed land will be more than 1 acre. This NPDES plan has not received a Notice of Sufficiency at the time of this report. A letter to the Army Corps of Engineers was sent on May 8, 2006 to determine if a Section 404 permit would be required for this project. The Corps of Engineers have not responded at the time of this report.

Currently, no floodplain mapping has been determined within the drainage area. Also, no study has been done to determine the floodway for this drain.

Upon, a check of USGS Quad Maps, I find the length of the proposed open drain extension is approximately 0.2 miles. Therefore, under IC 14-28-1-22 a permit from IDNR is not required.

I recommend a reconstruction hearing be held on July 24, 2006.

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Walter A. Evans P.E. Project Engineer Hamilton County Surveyor's Office

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### FINDINGS AND ORDER

### CONCERNING THE MAINTENANCE OF THE

### Russell Johnson Drain

On this **24th** *day of July 2006*, the Hamilton County Drainage Board has held a hearing on the Maintenance Report and Schedule of Assessments of the *Russell Johnson Drain*.

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

Member

Member

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STATE OF INDIANA ) ) ss: COUNTY OF HAMILTON )

BEFORE THE HAMILTON COUNTY DRAINAGE BOARD NOBLESVILLE, INDIANA

IN THE MATTER OF THE RECONSTRUCTION OF THE Russell Johnson Drain, Hoosier Road Reconstruction

### FINDINGS AND ORDER FOR RECONSTRUCTION

The matter of the proposed Reconstruction of the **Russell Johnson Drain, Hoosier Road Reconstruction** came before the Hamilton County Drainage Board for hearing **on July 24, 2006**, 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 Russell Johnson Drain, Hoosier Road 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:

DR AINAGE BOARD PRESIDE Member

Member

ATTES



*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

April 27, 2007

RE: Russell Johnson Drain - Hoosier Road Reconstruction Final Report

The Hamilton County Surveyor's Office has completed the inspection of the Russell Johnson reconstruction, Hoosier Road project. This project is located in Fall Creek Township, Hamilton County, Indiana; Section 33, Township 18, Range 5 East.

This project involved the clearing and reconstruction of 788 feet of open ditch in order to move the Drain east, away from Hoosier Road. Gabion baskets were installed to help with stabilizing the west side of the ditch. There was a conflict with the Pipeline Company which slowed the project for about a week, but did get resolved and the project was completed on time.

The Surveyor's report for the Russell Johnson reconstruction dated July 24, 2006 was approved at the Drainage Board Meeting, (Hamilton County Drainage Board Minutes Book 9, Pages 322 - 325). The Board awarded the contract to Vanhorn Excavating in the amount of \$119,084.50 on August 28, 2006, (Hamilton County Drainage Board Minutes Book 9, Page 376).

Vanhorn Excavating provided a Bid Bond for the bid amount through Ohio Farmers Insurance, Co., bond number BND5845266, dated August 11, 2006. The Bond was released by Jerry Liston on March 26, 2007, (Hamilton County Drainage Board Minutes Book 10, page 200).

The Statement of Incurred expenses signed by the contractor as required in IC 36-9-27-82(b) was received on November 15, 2006. The contractor's claim for retainage release was prepared on January 11, 2007.

Pay requests for this project are detailed below:

- N.O.I. Permit was for \$ 100.00 paid on 06/26/2006
- Pay request #1 was for \$ 5,644.00 paid on 10/24/2006
- Pay request #2 was for \$57,844.20 paid on 11/14/2006

- Pay request #3 was for \$39,787.82 paid on 11/28/2006
- Change order #1 was for \$ 414.37 paid on 11/28/2006
- Pay request #4 was for \$ 1,972.00 paid on 12/12/2006
- Retainage request for \$18,646.31 paid on 2/13/2007

The total reconstruction cost will be \$124,408.70. The engineer's estimate was \$120,107.14. The project went over the reconstruction cost by \$4,301.56. The additional expenses were incurred for equipment use around the pipeline, placing 9 rock chutes, and pipe extensions with animal guards.

A request was submitted to the Board February 26, 2007, (Hamilton County Drainage Board Minutes Book 10, page 82) to determine how to pay the \$5,408.70 shortfall. At that time the Board determined that the shortfall amount be borrowed from the General Drain Improvement Fund and repay with the 2007 collections.

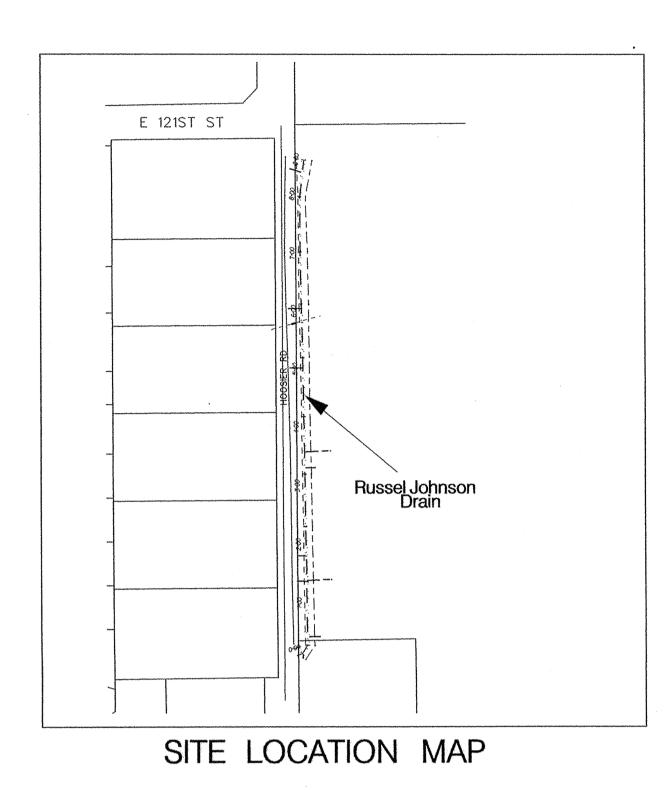
This project should be approved by the Board as the project is acceptable and complete.

Sincerely,

Mary Darmon

Mary Garmon, Permit Inspector Hamilton County Surveyor's Office





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SHEET NO.	Description
1	Plan and Profile Sheet

# HAMILTON COUNTY SURVEYOR'S OFFICE



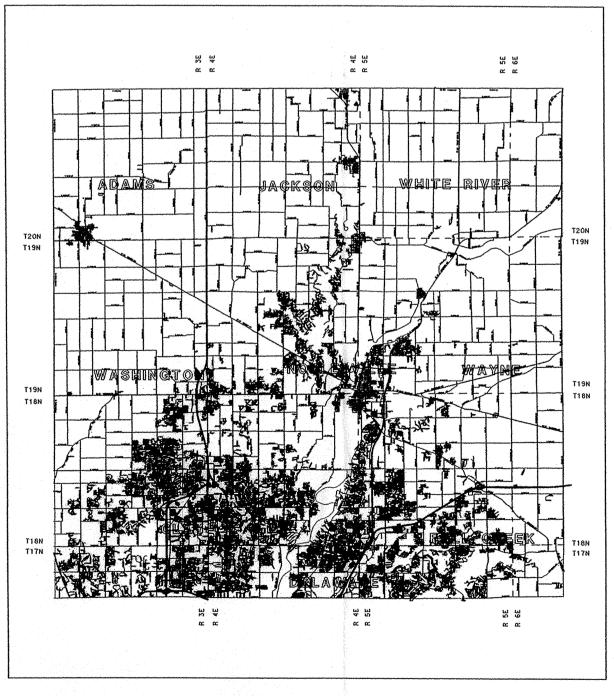
HAMILTON COUNTY SURVEYOR'S OFFICE

KENTON C. WARD, COUNTY SURVEYOR

HAMILTON COUNTY DRAINAGE BOARD

STEVEN A. HOLT, PRESIDENT CHRISTINE ALTMAN, MEMBER STEVEN C. DILLINGER, MEMBER JERRY RULON, ALTERNATE MEMBER

## Russel Johnson As-Built



HAMILTON COUNTY

