



SURVEYOR'S OFFICE

Hamilton County

Kenton C. Ward, Surveyor

Phone (317) 776-8495

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Suite 188

*One Hamilton County Square
Noblesville, Indiana 46060-2230*

To: Hamilton County Drainage Board

Date: January 31, 2005

Re: Arm #1 of Washington Township Regulated Drain Construction

Attached are plans, specifications, drain map, drainage-shed map, and schedule of assessments for the Construction of Arm#1 of the Washington Township Drainage Area located in Washington Township. This proposal was petitioned by the INDOT (Greenfield District) on March 5, 2004. This proposed Arm #1 will be a 27" diameter reinforced concrete pipe and will cover a distance of 997 feet that will outlet into the newly reconstructed open drain of Washington Township Drain. This pipe conveyance will begin at sta. 9+97 which is approximately 17 feet south of the R/W of S.R. 32 on tract 08-09-03-00-00-007.000, which is owned by the State of Indiana. The drainage area covers portions of Sections 33 and 34, Township 19 North, Range 3 East with a total acreage of approximately 15.95 acres.

Construction Project:

The Arm #1 of Washington Township Drain project will consist of new construction. The location will outlet (sta. 0+00 of proposed arm)) at sta. 71+15 of the 2004 reconstruction of the Washington Township Drain. It was determined that isolated flooding occurs south of SR 32 in the watershed on parcels owned by Harold Lawson, Michael V. Curley, R.L. Wilfong Land Corp. and INDOT's Westfield Unit. As a part of the petition process, INDOT requested constructing a new 36" RCP to be placed parallel to a line that divides parcels 08-05-34-00-00-021.001, Westfield Golf Practice Center and 08-05-34-00-00-022.002 Ken Casey Et al. However, upon further analysis an 27" RCP was determined to meet the 10 year storm requirement. Mr. Curley will extend a pipe into the new structure at Sta. 9+97. Below is the hydraulic data for the proposed arm:

| | |
|---------------------------------------|---------------|
| Watershed | = 15.95 acres |
| Arm#1 Washington Twp. Q ₂ | = 1.3 cfs |
| Arm#1 Washington Twp. Q ₁₀ | = 15 cfs |

| | |
|--|-------------|
| Arm#1 Washington Twp. Q ₂₅ | = 19 cfs |
| Arm#1 Washington Twp. Q ₁₀₀ | = 27 cfs |
| Pipe Capacity (27" RCP) | = 15.01 cfs |

A 27" dia. RCP will convey the flow of the 10-year storm.

The construction of this drain will require acquisition of new easement from Sta. 0+00 to Sta. north of S.R. 32. The new easement will reflect a 30 foot easement from the centerline of the new pipe conveyance. The easement is described as follows:

Being a part of the Southwest Quarter of the Southeast Quarter of Section 34, Township 19 North, Range 3 East, and a part of the Northwest Quarter of the Northeast Quarter of Section 3, Township 18 North, Range 3 East, all in Washington Township, Hamilton County, Indiana.

Being a 30 foot wide, 15 feet each side measured at right angles of the center line of the Arm #1 of the Washington Township regulated Drain, said easement being more particularly described as follows:

Commencing at a point in the center of the Washington Township regulated Drain (open ditch), said point being North 90 degrees 00 minutes 00 seconds West, a distance of 77.54 feet and North 00 degrees 00 minutes 00 seconds East a distance of 962.15 feet, of the Southeast corner of the Southwest Quarter of the Southeast Quarter of Section 34, Township 19 North, Range 3 East, in Washington Township, Hamilton County, Indiana, with the South line of the said Quarter-Quarter Section having a assumed bearing of North 89 degrees 30 minutes 56 seconds East; Thence South 0 degrees 04 minutes 45 seconds West, along the center line of the said regulated drainage, being parallel with the East of the said Quarter-Quarter Section a distance of 965.00 feet to the South line of the said Quarter-Quarter Section. Said easement is to be extended or shortened as to terminate at the said South line of the said Quarter-Quarter Section. Containing 0.665 acres more or less.

COST ESTIMATE

The cost estimate for this work shall be as follows(jack-and-bore operation):

| | |
|--|------------------|
| 27" Dia. RCP – 907' @ \$45.70 per foot | \$ 41,449.90 |
| **27" Dia. RCP – 90' @ \$500.00 per foot (INDOT's cost includes jack and bore operation) | \$ 45,000.00 |
| 27" RCP, end section – 1 @ \$450.00 | \$450.00 |
| Install 5'X5'X6' Manhole w/ Grating. | \$2,475.00 |
| Install 5'X5'X8' Manhole w/ Grating. | \$ 2,990.00 |
| Rip Rap, lump sum, | \$1,500.00 |
| Erosion Control (Catch Basin Baskets & Permanent Seeding) | \$2,000.00 |
| Damages (30' Easement on Casey,Casey Hunt LLC parcel) | \$ 19,950.00 |
| Sub Total | \$115,814.90 |
| + 15% contingencies | \$17,372.24 |
| <hr/> | |
| Total | \$133,187.14 |

** The cost of the pipe structure under S.R. 32 shall be assessed to the Indiana Department of Transportation as per IC 36-9-27-71.

ALTERNATE COST ESTIMATE

The cost estimate for this work shall be as follows(road cut operation):

| | |
|--|------------------|
| 27" Dia. RCP – 907' @ \$45.70 per foot | \$ 41,449.90 |
| **27" Dia. RCP – 90' @ \$75.70 per foot (INDOT's cost includes road cut and asphalt placement) | \$ 6,813.00 |
| 27" RCP, end section – 1 @ \$450.00 | \$450.00 |
| Install 5'X5'X6' Manhole w/ Grating. | \$2,475.00 |
| Install 5'X5'X8' Manhole w/ Grating. | \$ 2,990.00 |
| Rip Rap, lump sum, | \$1,500.00 |
| Erosion Control (Catch Basin Baskets & Permanent Seeding) | \$2,000.00 |
| Damages (30' Easement on Casey,Casey Hunt LLC parcel) | \$ 19,950.00 |
| Sub Total | \$77,627.90 |
| + 15% contingencies | \$11,644.19. |
| <hr/> | |
| Total | \$89,272.09 |

** The cost of the pipe structure under S.R. 32 shall be assessed to the Indiana Department of Transportation as per IC 36-9-27-71.

I have reviewed the drainage shed for Arm #1 of the Washington Township 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 as commercial at a reconstruction assessment of \$5,528.97 per acre. A special assessment of \$45,000 will be assessed to INDOT for the pipe crossing to be placed under S.R. 32.

The Indiana Department of Transportation will provide complete funding of this project within the S.R. 32 Right-of-Way per IC 36-9-27-71.

The drain was placed on maintenance by the Drainage Board on May 14, 1984 and the maintenance assessment revised by the Board per my report dated August 11, 2003. The construction of this arm will not necessitate a change from the current maintenance assessments.

The following tracts should be assessed as indicated:

| Property Owner | Parcel # | Acres Benefitted |
|-------------------------|------------------------|-------------------------|
| Lawson, Harold | 08-09-03-00-00-005.000 | 0.05 |
| Curley, Michael V. | 08-09-03-00-00-006.000 | 6.00 |
| State of Indiana | 08-09-03-00-00-007.000 | 5.28 |
| R.L. Wilfong Land Corp. | 08-09-03-00-00-008.001 | 3.00 |
| Prine Realty LLC. | 08-09-03-00-00-009.000 | 0.30 |
| U.S. Vest Corp. | 08-09-03-00-00-026.000 | 0.13 |
| Curley, Michael V. | 08-09-03-00-00-026.001 | 0.15 |
| INDOT(Road R/W) | 99-99-99-99-99-999.002 | 1.04 |
| | Total Acres | 15.95 |

I believe that there will be damages on the parcel owned by Casey, Casey, Hunt LLC. (Parcel # 08-09-03-00-00-022.000) on this project. Based on the market value of \$30,000 per acre and .665 acres of easement on this land, damages to be given to Casey, Casey, Hunt LLC. will total \$19,950.00.

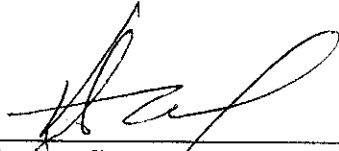
Arm #1 will be an urban drain per the Washington Regulated Drain Reconstruction report dated August 11, 2003, approved by the Hamilton County Drainage Board on September 22, 2003, Book 7, Page 188

This project will not require a Rule 5 NPDES permit since the area of disturbed land will be less than 1 acre.

A road cut permit has been prepared and sent to INDOT for a jack and bore operation for the portion of pipe to be placed under S.R. 32. If INDOT requests an open cut permit, a

detour plan will be provided by this office. However, the signage and coordination of detour will be the responsibility of INDOT.

I recommend that the Board set a hearing for this reconstruction for March 28, 2005.

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

Kenton C. Ward,
Hamilton County Surveyor

KCW/jh

To: Hamilton County Drainage Board

Date: MARCH 5, 2004

Re: WASHINGTON TOWNSHIP Drain

INDIANA DEPARTMENT OF TRANSPORTATION (Here-in-after "Petitioner"),

hereby petitions the Hamilton County Drainage Board under IC 36-9-27-66 for an arm to be installed to the WASHINGTON TOWNSHIP Drain in order to serve the property of the petitioner. The petitioner, in support of said petition, advises the Board that:

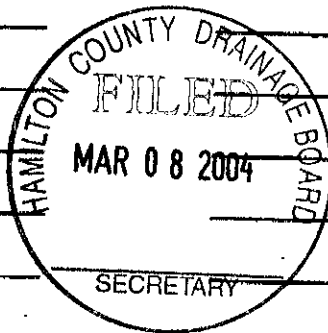
1. The WASHINGTON TOWNSHIP Drain is presently on a maintenance program and that land of the petitioner is assessed as benefited by the maintenance of the regulated drain;
2. There is no known adequate open or tiled drain connecting the land of the petitioner with the regulated drain;
3. The waters from the petitioners land flow over or through land owned by others to reach the regulated drain;
4. The legal description of lands through which the new regulated drain will run along with the parcel numbers, name and address of each owner of that land is shown on Exhibit "A" which is attached;
5. The general route of the proposed new regulated drain and method of construction is shown on Exhibit "B" which is attached.
6. Petitioner agrees to pay all legal and construction costs involved with the construction of the proposed new regulated drain.

Signed

Robert E. Williams

Printed

ROBERT E. WILLIAMS



FINDINGS AND ORDER

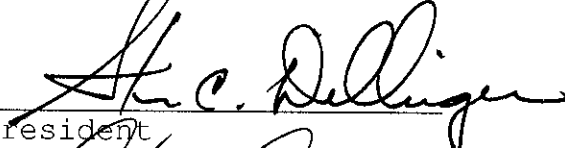
CONCERNING THE MAINTENANCE OF THE

Washington Township Drain Arm 1


On this *28th day of March 2005*, the Hamilton County Drainage Board has held a hearing on the Maintenance Report and Schedule of Assessments of the *Washington Township Drain Arm 1*.

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

HAMILTON COUNTY DRAINAGE BOARD



President



Member

Member

Attest: _____

STATE OF INDIANA)
) ss:
COUNTY OF HAMILTON)

BEFORE THE HAMILTON COUNTY
DRAINAGE BOARD
NOBLESVILLE, INDIANA

IN THE MATTER OF THE
RECONSTRUCTION OF THE
Washington Township Drain, Arm 1

FINDINGS AND ORDER FOR RECONSTRUCTION

The matter of the proposed Reconstruction of the **Washington Township Drain, Arm 1** came before the Hamilton County Drainage Board for hearing on **March 28, 2005**, 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.

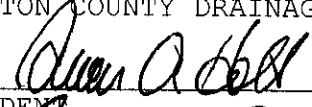
The Board having considered the evidence and objections, upon motion duly made, seconded and unanimously carried, did adopt the Schedule of Assessments as proposed, subject to amendment after inspection of the subject drain as it relates to the lands of any owners which may have been erroneously included 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 **Washington Township Drain, Arm 1** 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

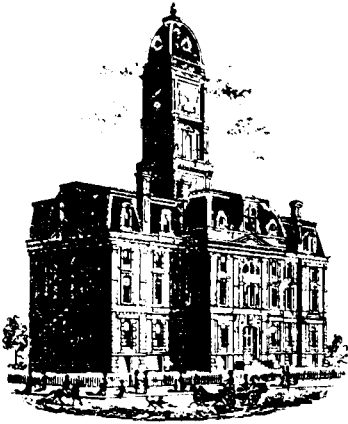


Member



Member

ATTEST: _____
Executive Secretary



Kenton C. Ward, Surveyor

Phone (317) 776-8495

Fax (317) 776-9628

Suite 188

One Hamilton County Square

Noblesville, Indiana 46060-2230

To: Hamilton County Drainage Board

Date: November 15, 2005

**Re: Washington Township Arm 1 Regulated Drain Construction
Final Inspection Report**

FINAL REPORT

Please regard this letter as the inspector's final report on the Washington Township Regulated Drain Arm 1 construction, located in Section 34 Township 19 North, Range 3 East, & Section 3, Township 18 North, Range 3 East, Washington Township in Hamilton County, Indiana.

The construction installed a new arm to the Washington Township Drain and consisted of 918 feet of 30" Reinforced Concrete Pipe, two concrete manhole structures and 60' of 36" Steel Casing for new road crossing under State Road 32. The as-built plans have been completed and are attached.

The Date of the Surveyor's Report for the Washington Township Drain Construction was January 3, 2005. The Construction Hearing was held on March 28, 2005. (Drainage Board Minutes Book 8, Pages 247 -250).

The Hamilton County Drainage Board awarded the contract on June 27, 2005 to Fleetwood Contracting Corporation. Fleetwood Contracting Corporation bid amount was \$90,242.00 (Drainage Board Minute Book 8, Page 351).

The contractor provided a surety bond to the Board in the amount of \$108,290.40. The bond provider is Developers Surety and Indemnity Company and the bond number is 716734P dated June 27, 2005.

As of October 27, 2005, I hereby attest to and agree that the reconstruction was installed according to the specified plans and change orders and have approved such work under IC 36-9-27-82(a). All inspections have been completed. Final inspection was on October 19, 2005 for the work.

Statement of All Incurred Expenses Paid signed by the contractor as required in IC 36-9-27-82(b) was received on November 7, 2005. The contractors claim for release of retainage was submitted on October 21, 2005.

Pay Requests for this project submitted and paid as allowed in IC 36-9-27-81 are as follows:

| | | | |
|---|----------------|---------------|--------------------|
| Pay Request #1 submitted 7-27-05 | Claim # 05-098 | Paid 8-23-05 | \$73,730.70 |
| Pay Request #2 submitted 8-12-05 | Claim # 05-102 | Paid 9-13-05 | \$1,200.00 |
| Retainage Request submitted 10-21-05 | Claim # 05-115 | Paid 11-15-05 | <u>\$16,691.30</u> |
| Total – Fleetwood Contracting Corporation | | | \$91,442.00 |
| | | | |
| Easement Purchase | Claim #05-097 | Paid 8-23-05 | <u>\$19,950.00</u> |
| | | | |
| Construction Total | | | \$111,392.00 |

There was a total of one change order for additional work or field revisions on the project as allowed by IC 36-9-27-80.5. Change Order #1 was approved on August 22, 2005 by the Hamilton County Drainage Board and consisted of \$1,200.00 for stone bedding for the 27" RCP. (Drainage Board Minutes Book 8, page 395).

The change order details are as follows:

Change Order #1

Change Order #1 consisted of the addition of stone bedding due to soft soil types encountered on project

| | | |
|-----------------------|----------|-------------------|
| Stone Bedding | Lump Sum | <u>\$1,200.00</u> |
| Change Order #1 Total | | \$1,200.00 |

The final costs for the construction are as follows:

| | |
|-------------------------------|---------------------|
| Bid Item Totals | \$90,242.00 |
| Change Order # 1 | <u>\$1,200.00</u> |
| Construction Cost | \$91,442.00 |
| | |
| Construction Cost | \$91,442.00 |
| Easement Purchase | <u>\$19,950.00</u> |
| Total Construction Cost | \$111,392.00 |
| | |
| Engineer's Estimate | \$133,187.14 |
| Total Construction Cost | <u>\$111,392.00</u> |
| Unexpended Construction Funds | \$21,795.14 |

Per Indiana Code 36-9-27-85(d), I recommend that the unexpended construction funds be transferred to the periodic maintenance fund for the Washington Township Drain.

I recommend the Board approve the construction as complete and acceptable. I also recommend that the Board release the surety provided by the contractor per IC 36-9-27-78

Respectfully,

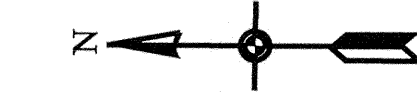


Andrew Conover
Inspector

Washington Township Ditch

021.001

007.000



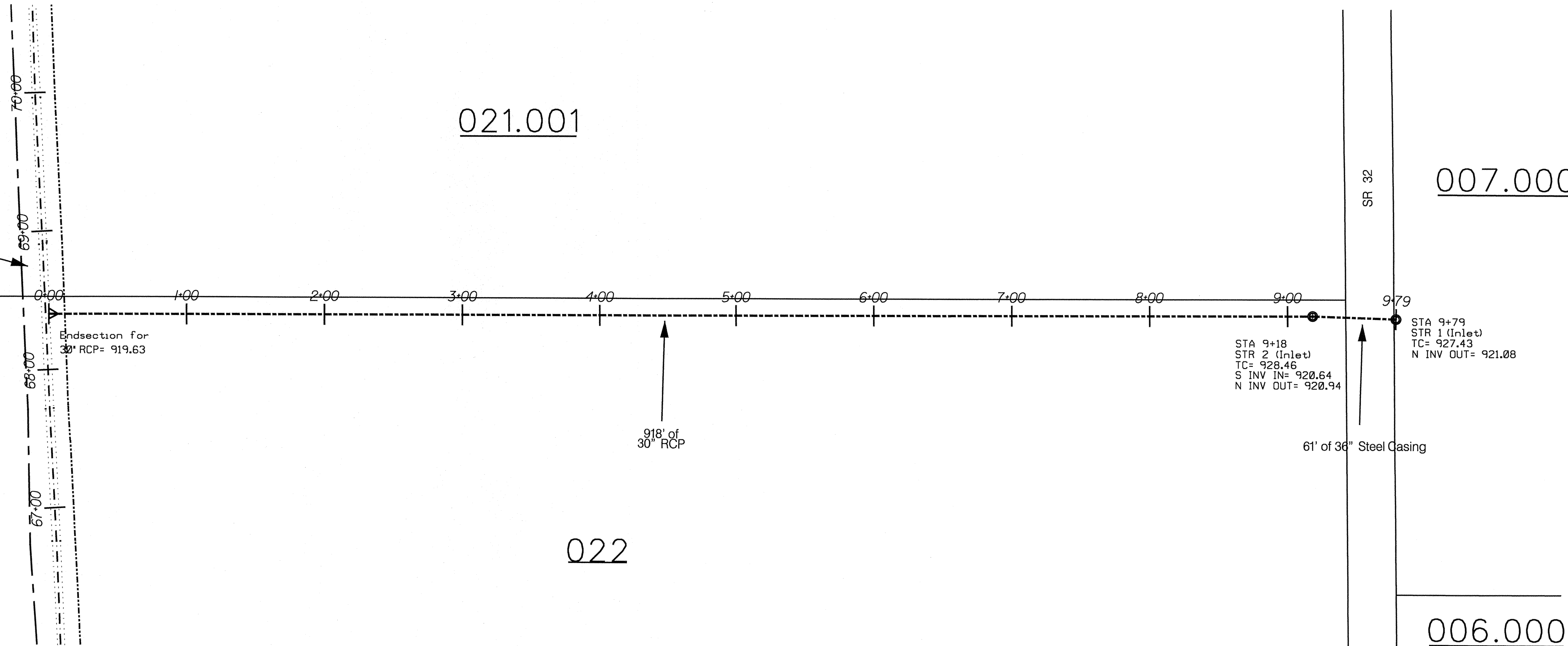
PLAN VIEW

SCALE 1" = 50'

PROFILE VIEW

HORIZONTAL SCALE 1" = 50'

VERTICAL SCALE 1" = 5'

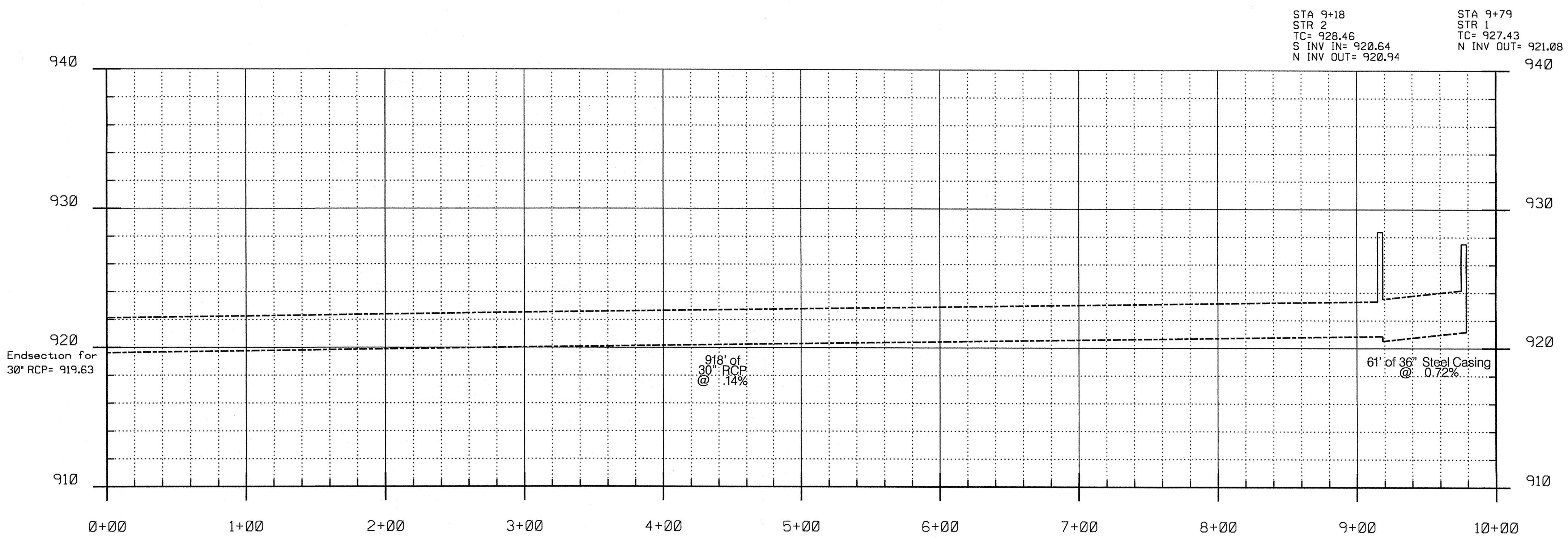


STA 9+18
STR 2 (Inlet)
TC= 928.46
S INV IN= 920.64
N INV OUT= 920.94

STA 9+79
STR 1 (Inlet)
TC= 927.43
N INV OUT= 921.08

022

This information was gathered for input into the Hamilton County Geographic Information System (GIS). This document is considered an official record of the GIS.
Entry Date: 6-15-07
Entered By: SLM



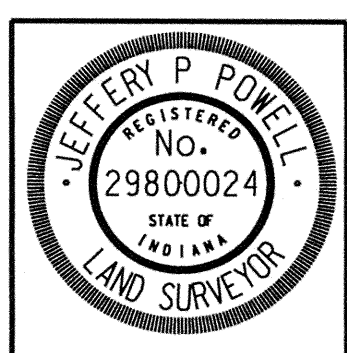
STA 9+18
STR 2
TC= 928.46
S INV IN= 920.64
N INV OUT= 920.94

STA 9+79
STR 1
TC= 927.43
N INV OUT= 921.08

HAMILTON COUNTY, INDIANA
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| | | | | | | |
|-------------|-------------------------------------|-----------|-----------|-----------|-------------|-------|
| Project No: | Watershed No: | Dgn Name: | Field By: | Drawn By: | Checked By: | Date: |
| | | | | RAE | | |
| By: | J.P. | | | | | |
| Date: | 2-6-07 | | | | | |
| Revisions: | Fixed Str. Elevation per Level Work | | | | | |



Certified By:
Jeffery P. Powell
Jeffery P. Powell L.S.

Project Name: As-Built
Arm 1 - Washington Tsp. Drain
Plan and Profile Sheet

PLOT DATE: \$\$\$\$\$\$DATE\$\$\$\$\$\$

SHEET NO.