

Kenton C. Ward, CFM
Surveyor of Hamilton County
Phone (317) 776-8495
Fax (317) 776-9628

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

To: Hamilton County Drainage Board

June 3, 2013

Re: Mary Hodkins Drain Reconstruction
Final Inspection Report

FINAL INSPECTION REPORT

Please regard this letter as the inspector's final report on the Mary Hodkins Drain Reconstruction in Section 26, Township 20 North, Range 4 East, in Jackson Township, Hamilton County, Indiana.

The hearing for the Mary Hodkins Drain Reconstruction was held on March 26, 2012 (D.B. 14, Page 132).

The Hamilton County Drainage Board approved the reconstruction of the Mary Hodkins Drain by Beck's Hybrids. Beck's Hybrids paid all costs associated with the reconstruction. The design for the reconstruction was done for Beck's by John South with the Hamilton County Soil and Water Conservation District.

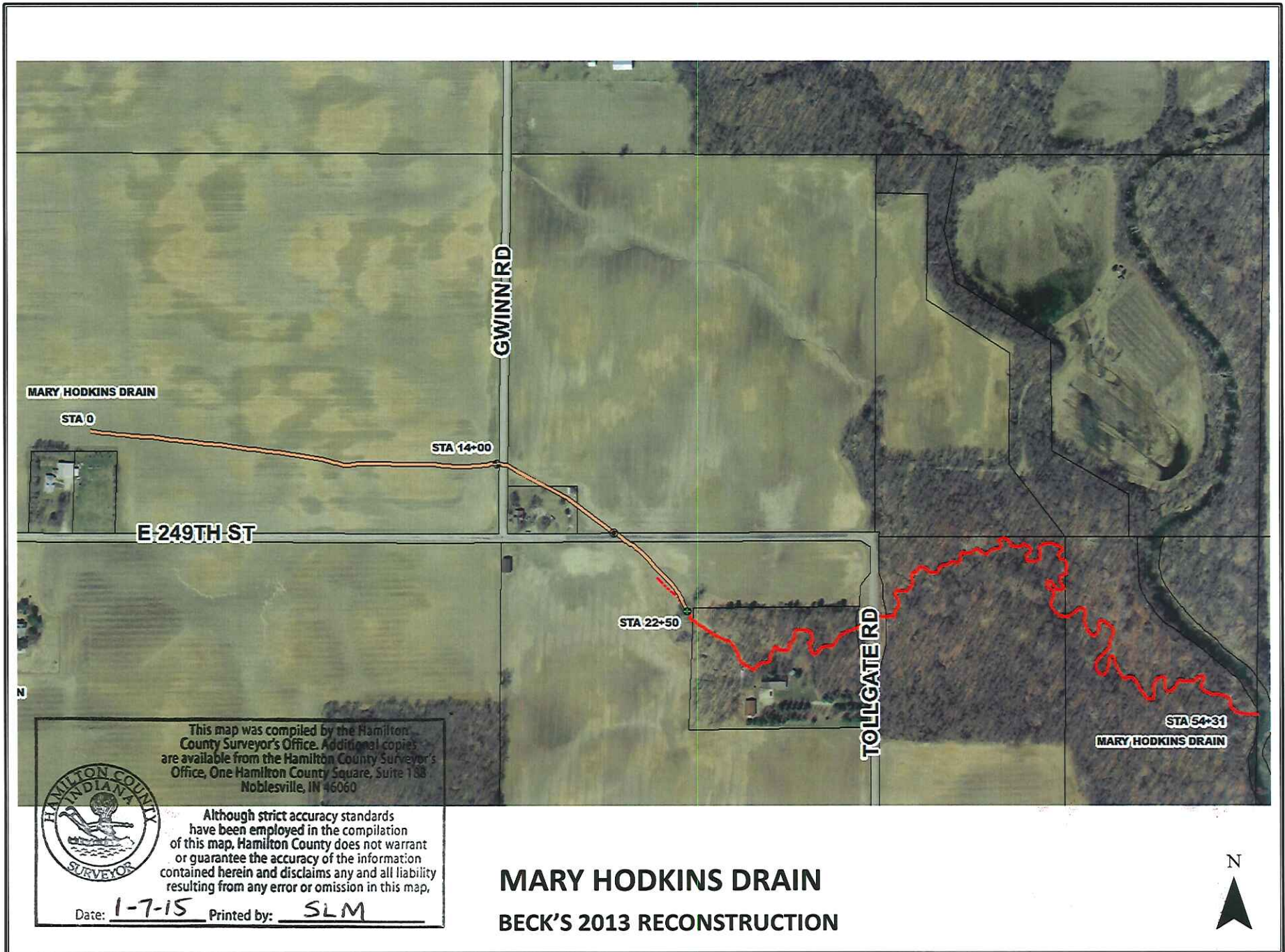
The tile west of Gwinn Road was first installed in the incorrect location. After meeting with personnel from Beck's Hybrids, the tile was reinstalled in the correct location per the legal description.

As of the date of this report, I hereby attest to and agree that the reconstruction have been installed according to the specified plans. All inspections have been completed. Mapping of the tile location was done by Beck's.

The Mary Hodkins Drain Reconstruction consists of 850 feet of 15" dual wall HDPE pipe and 1400 feet of 8" dual wall HDPE pipe.

Submitted by:

Andrew D. Conover
Inspector



March 26, 2012

Liston stated that his understanding is they are required to report. I asked the Surveyor at his Service Advisory Board meeting to get me a contact for the environmental side of the energy group. I left a message with Ann Melver on Friday morning and I have yet to get a call back from her. In speaking with the Gary Young, the dispatch supervisor, which is where the most of this report came from this spill occurred early Tuesday morning. Crews were dispatched and repaired it. I also learned that in the same area within about 100 feet on March 5th a break in the line occurred. I'm waiting on Ann's call back to see if we can improve our communications between the county and who they need to call. The call came through the Hamilton County Health Department from the Marion County Health Department and Fishers wasn't notified; the area is in their MS4 area.

Holt asked why Citizens was in the sewer business.

Liston stated that this is part of that new agreement.

Altman asked where they were pushing it to; it's up in Hamilton County.

The Surveyor stated that Hamilton County has a lot of Indianapolis sewer around it.

Holt stated that he thought Citizens bought the water company and they were in the gas business. They do all of Indianapolis sewers?

The Surveyor stated that Citizens has all Indianapolis sewers.

Mary Hodkins Drain:

Ken Noe was present for this item.

The Surveyor stated that this is a reconstruction of a rural drain by property owner. Beck's has received permission to reconstruct from the other property owners downstream. We don't have a petition on this drain.

Conover stated that we have a petition for the downstream we had asked for additional plans for the upstream portion west of Gwinn Road.

The Surveyor stated that the plans came in while Conover was on bereavement leave. Beck's is asking to go forward with this project. We have looked at the plans and the plans look acceptable. I would like to know if the Board would like to go forward with that or do they want a hearing because it does involve downstream landowners.

Altman asked if there was written permission from the downstream landowners?

Conover stated that Beck's has been working on that.

Noe stated that they have been in contact with the property owners all the way through this project. One property owner is in Ohio and we have contacted them. The fellow that farms the field, Kip Bergman, says they have no problem with it, but they did not send the paper work back; they just gave a verbal. The two other property owners that are small lot owners have been contacted, we told them of our plans and they have no problems. Beck's Seed Corporation owns the majority of the ground. We are asking to do this project and are going to pick up the cost of this project with no expense to anyone. Bergman will probably help us with the construction of this project, which is the farmer for the property owner in Ohio. We're just waiting for the Board's approval.

Dillinger stated there are four downstream?

Noe stated that there are only four property owner involved. Two lot owners, Beck's Seed and the couple that owns the farm ground that live in Ohio.

Altman stated that Noe is verifying on the record that he has received permission from all the downstream owners?

Noe stated that they have received either written or verbal commitment from all the landowners.

Holt made the motion to approve the project, seconded by Altman and approved unanimously. Holt made the motion to adjourn seconded by Altman and approved unanimously.


Steven C. Dillinger - President


Executive Secretary

To: Hamilton County Drainage Board

OFFICE OF HAMILTON COUNTY SURVEYOR

Re: In the matter of the MARY HODKINS 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 that a 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 26, township 20 north, range 4 east, Hamilton County, Indiana.
5. That the proposed reconstruction consists of replacing 3-7" tiles with
1-15" tile. see plans for details.
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 the 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 expense if the petition is dismissed.
9. Petitioners 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

Lawrence C. Beck

Lawrence C. Beck
President

Becky Hybrids
6767 E. 276th St., Atlanta, IN 46031

Glenda Grimes

Glenda Grimes

7050th 249th St - Cairo 46034





BECK'S SUPERIOR HYBRIDS

6767 East 276th Street Atlanta, IN 46031

(317) 984-3508 (800) 937-2325 Fax (317) 984-3500

www.beckshybrids.com

February 24, 2012

Hamilton County Drainage Board
C/O Kenton Ward, Surveyor
One Hamilton Square, Suite 188
Noblesville, IN 46060

FILED

FEB 27 2012

OFFICE OF HAMILTON COUNTY SURVEYOR

Re: Reconstruction of the Mary Hodkins Drain

Dear Kenton,

Beck's Hybrids owns the farm on the north-west corner of the intersection of 249st and Gwinn Road. The south end of the "Day" farm is drained by the Mary Hodkins tile drain. Beck's would like to improve the tile drainage on the farm and would like to improve the capacity and condition of the Mary Hodkins Drain to facilitate the improved drainage. The plans attached with this petition provide a new 15" tile from the outlet ditch to the west side of Gwinn Road to replace the existing 3-7" tiles.

Becks would also request to vacate the regulated tile west of Gwinn road. The tile services two landowners- Becks and John and Glenda Grimes. Both parties have signed a letter requesting the vacation of the tile, which is attached.

Beck's is willing to pay for the proposed reconstruction of the Mary Hodkins Drain, if the Drainage Board grants Beck's permission to perform the reconstruction, and would like to move this project forward. Beck's would comply with normal reconstruction standards set by the Hamilton County Surveyor's Office. Time is of the essence and we would like permission to perform this work this spring. If any of the attached items are incomplete or missing, please let us know and we'll make the necessary changes.

Sincerely,

Jason Morehouse

FILED

FEB 2 / 2012

OFFICE OF HAMILTON COUNTY SURVEYOR

Hamilton County

COUNTY SOIL AND WATER CONSERVATION DISTRICT
INDIANA

DETAIL PLANS FOR

(PRACTICE) Mary Hodkins Tile Replacement

(COOPERATOR) Becks Hybrids

(LOCATION) Jackson Twp SEC. 26 T 20N R 4E

NOTICE TO THE COOPERATOR AND CONTRACTOR

NO REPRESENTATION IS MADE BY THE NATURAL RESOURCES CONSERVATION SERVICE AS TO THE EXISTENCE OR NONEXISTENCE OF UNDERGROUND HAZARDS. AT LEAST 2 WORKING DAYS PRIOR TO THE START OF CONSTRUCTION, THE OWNERS OF PIPELINES OR OTHER UNDERGROUND UTILITIES MUST BE

INDEX OF DRAWINGS

TITLE	SHEET NO.
COVER SHEET	1
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Casting Detail	6
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CONSTRUCTION DATA

LAYOUT BY: _____ DATE: _____

CONTRACTOR NAME AND ADDRESS: _____

CONSTRUCTION COMPLETED (DATE): _____

PRACTICE (DOES) (DOES NOT) MEET STANDARDS AND SPECIFICATIONS. _____ DATE: _____

TITLE: _____

AS-BUILT DRAWINGS

SUBMITTED BY: _____

TITLE: _____

REVIEWED AND APPROVED BY: _____

DATE: _____

TITLE: _____

PREPARED BY: John South DATE: 2/1/2012

TITLE: Conservation Engineer

REVIEWED AND APPROVED BY: _____ DATE: _____

TITLE: _____

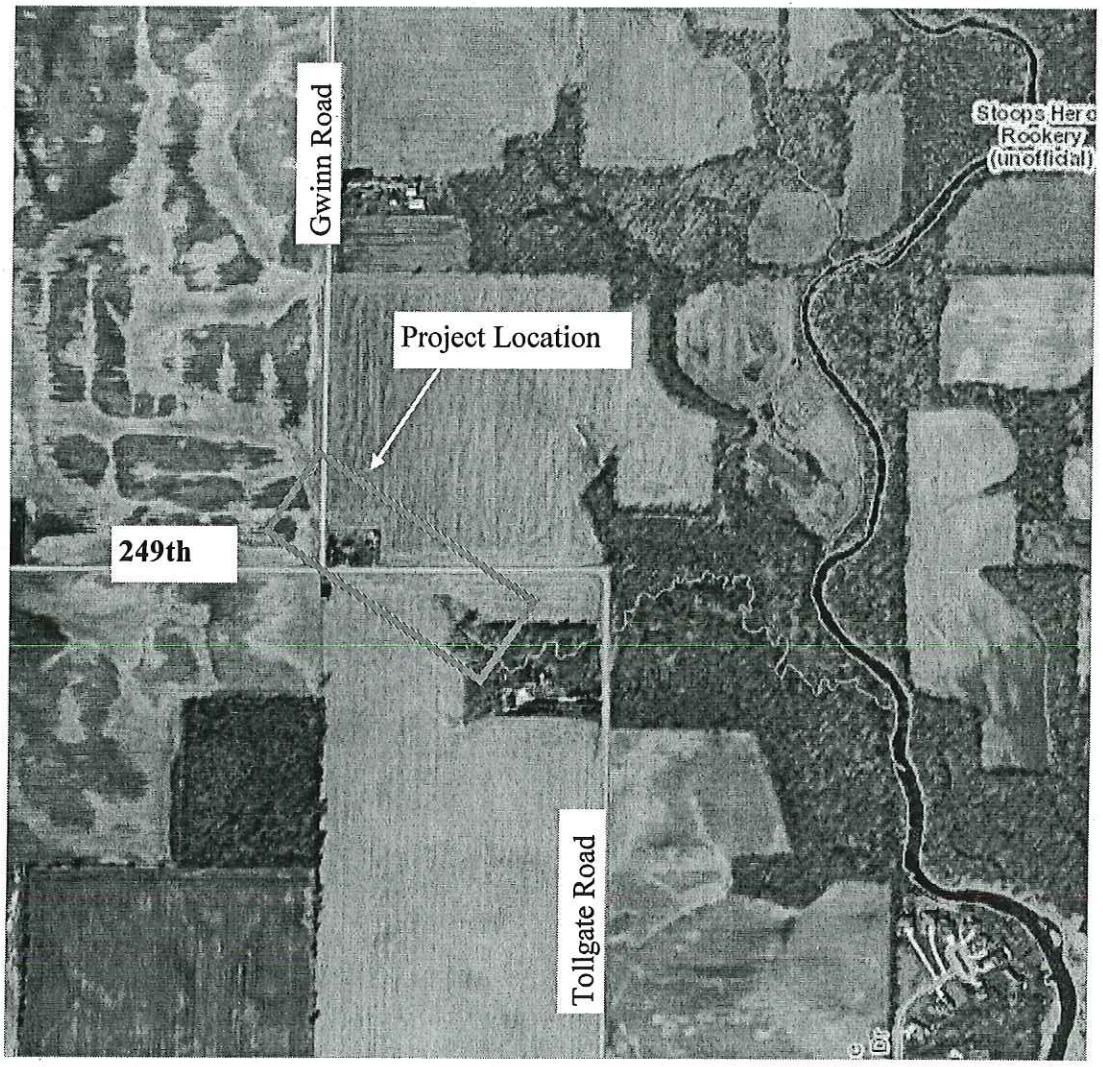
REVIEWED AND CONCURRED BY: _____ DATE: _____

TITLE: _____

SHEET 1 OF 12

IN-ENG-57L

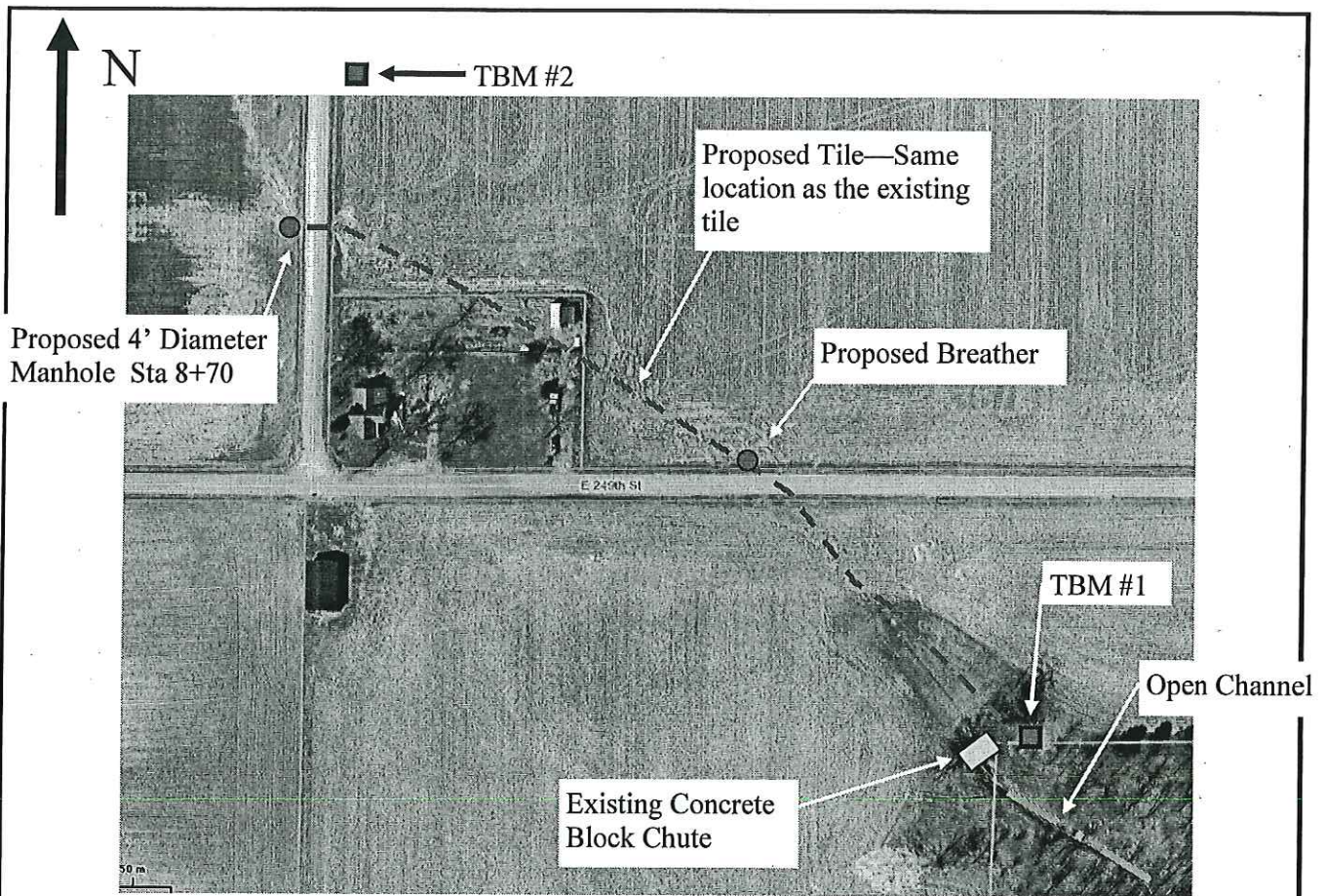
DRAWING NO. IN-ENG-57L.XLS (REVISED 4/99)



No Scale

Site Location Map for Mary Hodkins Drain

Mary Hodkins Tile Reconstruction:
Drawn By: John South 12/2012
Provided by the Hamilton County
Soil and Water Conservation District



No Scale

Plan for Mary Hodkins Tile Drain

Construction Notes

1. Contact Under Ground Plant Protection (811 or 800-382-5544) a minimum of 2 working days prior to excavation to locate buried utilities.
2. Remove trees and brambles from concrete block structure site. Replace the exit apron per the attached plans.
3. Start the new tile where the existing outlet is located. Dip out channel 50' downstream to improve flow. Install animal guard at tile outlet.
4. Sta 0+00 to 8+70 install 15" dual wall plastic tile.
5. Install breather on the north side of 249th. At sta 3+98
6. Replace fence to original or better condition
7. Install 4' diameter manhole at sta 8+70 on the west side of Gwinn Road.
8. Both road crossings require a County Highway permit and installed per County standards.
9. The proposed tile will follow the same line as the existing tile. The existing tile will be destroyed. All lateral tiles will be connected to the new tile.

Benchmark Descriptions

TBM#1- Nail in west side of 14" Cherry tree, 25' east of existing tile outlet

Elevation 100.00

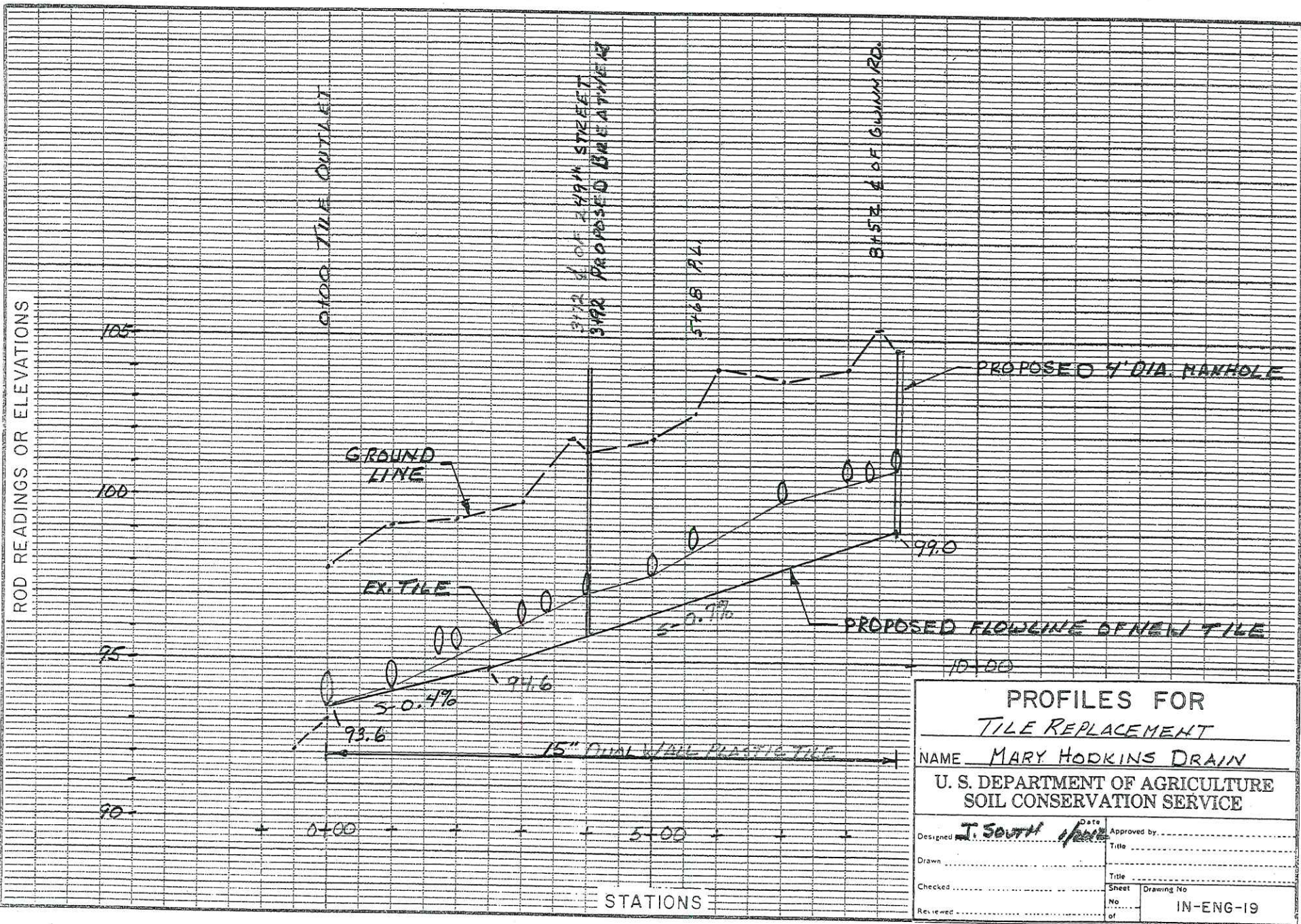
TBM#2- Nail in south side of utility pole, east side of Gwinn Road, 150' north of tile crossing

Elevation 106.20

Mary Hodkins Tile Reconstruction:
 Drawn By: John South 2/2012
 Provided by the Hamilton County
 Soil and Water Conservation District

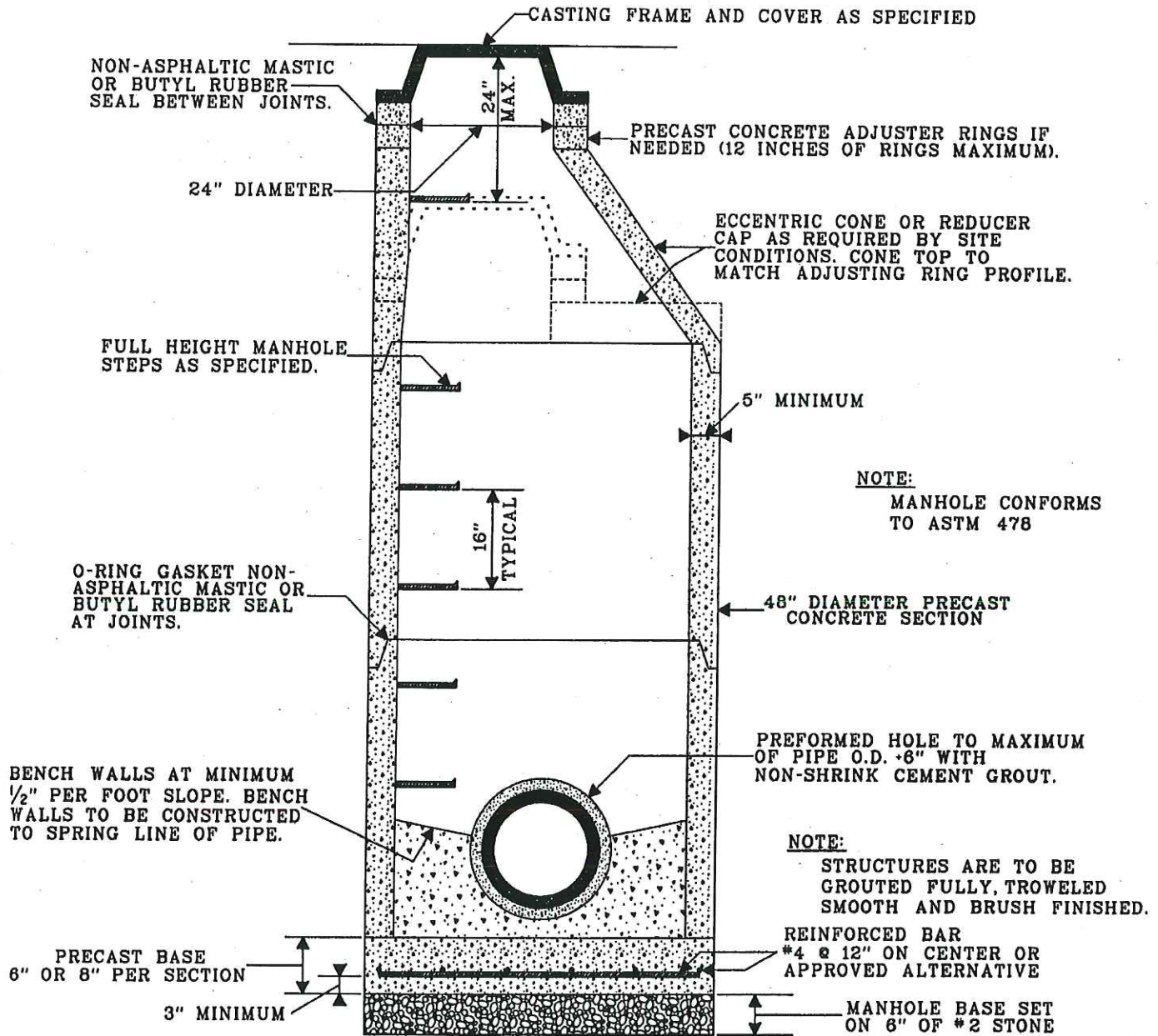
4 OF 12

5, L-34, 762-1(2)



PROFILES FOR TILE REPLACEMENT		
NAME <u>MARY HODKINS DRAIN</u>		
U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE		
Designed <u>J. South</u>	Date <u>1/28/52</u>	Approved by
Drawn	Sheet	Title
Checked	No	Drawing No
Reviewed	of	IN-ENG-19

OFFICE OF THE HAMILTON COUNTY SURVEYOR



STANDARD MANHOLE
FOR PIPE SIZES 12" THRU 24"

(DRAWING NOT TO SCALE)

HAMILTON COUNTY SURVEYOR'S OFFICE

REVISED: 1 FEB 2002

APPROVED:

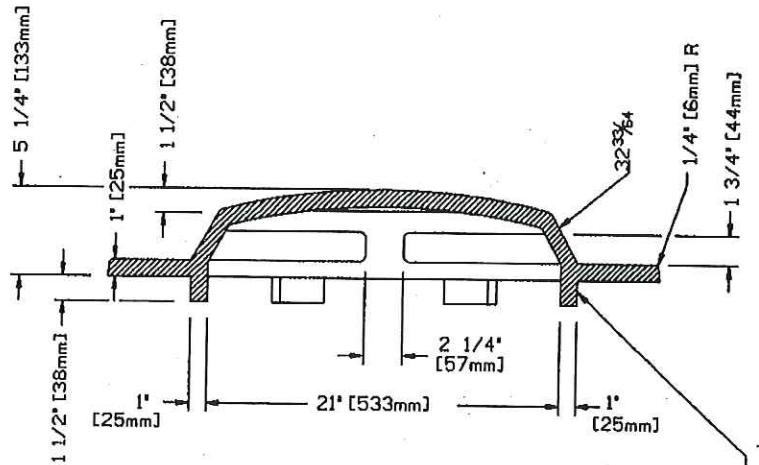
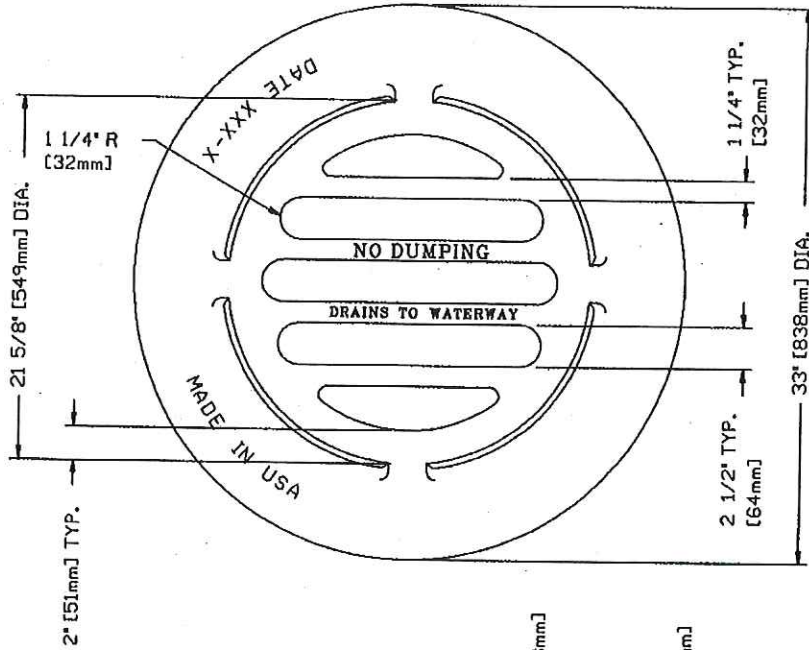
KENTON C. WARD, HAMILTON COUNTY SURVEYOR

2/1/02
DATE

STANDARD PLAN

D-20

OFFICE OF THE HAMILTON COUNTY SURVEYOR



NOTE: ALL DIMENSIONS SHOWN ARE IN ENGLISH AND [METRIC].
 FREE OPEN AREA: 278 SQUARE INCHES
 MATERIAL: CAST GRAY IRON ASTM A-48, CLASS 35B
 FINISH: NO PAINT
 WEIGHT: 200*

(6) - 1" X 1 1/2" X 3"
 [25mm] X [38mm] X [76mm]
 LUGS, EVENLY SPACED

NEENAH	4342
EAST JORDAN	6489N

* Or approved by Hamilton County Surveyor's Office

(DRAWING NOT TO SCALE)

HAMILTON COUNTY SURVEYOR'S OFFICE

BEEHIVE INLET CASTING

REVISED: 11/16/2004

APPROVED: _____

KENTON C. WARD, HAMILTON COUNTY SURVEYOR

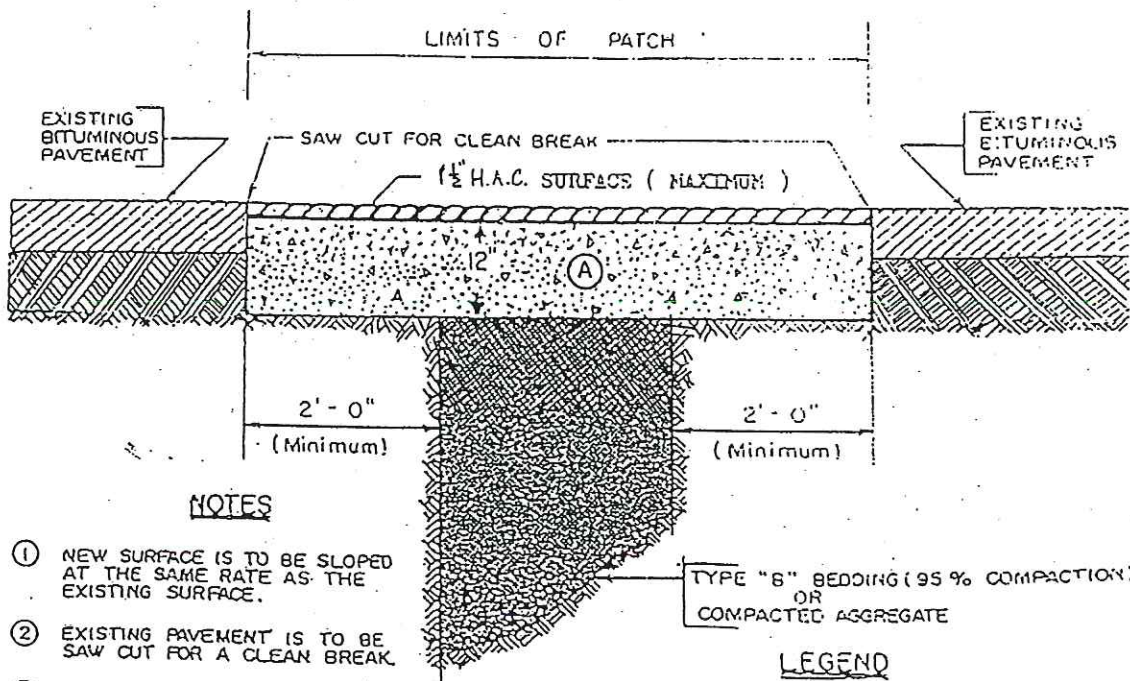
_____ DATE

STANDARD PLAN

CT-10

DETAIL FOR CUT ROAD PATCHING

ON ALL CUTS, ROADS THAT REQUIRE THE EXISTING PAVEMENT TO BE REMOVED. THE DETAIL AS SHOWN BELOW SHALL BECOME A PART OF THIS PERMIT.



NOTES

- ① NEW SURFACE IS TO BE SLOPED AT THE SAME RATE AS THE EXISTING SURFACE.
- ② EXISTING PAVEMENT IS TO BE SAW CUT FOR A CLEAN BREAK.
- ③ COMPACTED AGGREGATE IS TO BE LAID AT 6" LIFTS AND IS TO BE COMPACTED TO A MINIMUM OF 95%.
- ④ TRENCH SPOIL IS TO BE REMOVED FROM THE WORK SITE.
- ⑤ 1 1/2" H.A.C. #11 SURFACE.
- ⑥ BITUMINOUS TACK APPLIED AS PER INDIANA DEPT. OF HIGHWAYS STANDARD SPECIFICATIONS - 1988 SECTION 409 B 902.

TYPE "B" BEDDING (95% COMPACTION)
OR
COMPACTED AGGREGATE

LEGEND

- Ⓐ PLAIN CONCRETE IS TO BE FINISHED 1/4" BELOW THE EXISTING PAVEMENT.

HAMILTON COUNTY HIGHWAY DEPARTMENT

	REVISED: <u>1-14-92</u>
RECOMMENDED: <u>[Signature]</u> HAMILTON COUNTY ENGINEER	6-17-91 DATE
APPROVED: <u>[Signature]</u> HAMILTON COUNTY DIRECTOR	6-28-91 DATE
STANDARD PLAN U-1	

70512

**NATURAL RESOURCE CONSERVATION SERVICE
CONSTRUCTION SPECIFICATION**

SUBSURFACE DRAINAGE SYSTEMS

1. SCOPE

The work shall consist of furnishing and installing drain tile or tubing and necessary fittings and appurtenances.

2. MATERIALS

Subsurface drain tile shall meet the requirements of ASTM Specification C-4 (Clay) or C-412 (Concrete). Subsurface polyethylene drain tubing shall meet the requirements of ASTM Specification F-405 (3 to 6 inch) or F-667 (8 to 24 inch).

3. EXCAVATION

Unless otherwise specified, excavation for and subsequent installation of each drain line shall begin at the outlet end and progress upstream.

The trench or excavation for the drain shall be constructed to the depths and cross-sections shown on the drawings. The trench width may be increased above the top of the tile, at the option of the Contractor.

Trench shields, shoring and bracing, or other methods, necessary to safeguard the workers and work, and to prevent damage to the existing improvements shall be furnished, placed and subsequently removed by the Contractor.

4. PREPARING THE TILE BED

In stable soils, the tile or tubing shall be firmly and uniformly bedded throughout its entire length to the specified depth and in the specified manner.

If the bottom of the trench does not provide a sufficiently stable or firm foundation for the drain tile, cradles for the tile (constructed of timber or fabricated lumber of a cleat-and-rail type construction), a sand-gravel mix or other approved materials shall be used to stabilize the bottom of the trench.

Drain tile or tubing shall not be laid on rock foundation. In the event that boulders, rocks or ledge rock or cemented materials that prevent satisfactory bedding are encountered at the required grade, the trench shall be excavated to a depth of at least 6 inches below grade and backfilled to grade with a sand-gravel mixture or other approved material. The bedding material shall be compacted and shaped to grade.

5. PLACEMENT AND JOINT COVERING

All drains shall be laid to grade. Outlet pipe, animal guards and other appurtenances shall be as shown in the drawings.

When using clay or concrete tiles the gap between the tiles shall be maintained at $\frac{1}{8}$ to $\frac{1}{4}$ inches.

The ends and inside surfaces of all tile shall be kept clean during laying. All earth or other extraneous material in the tile shall be removed. At the end of each day's work and when laying has been temporarily suspended, the inlet end shall be blocked so that earth or other extraneous materials will not enter the tile. The upper end of each tile line shall be blocked with permanent type materials on completion of the line.

All water loving trees such willow, elm, soft maple, and cottonwood should be removed distance of 100 feet on each side of the drain. A distance of 50 feet should be maintain other species of trees, shrubs or vines. If the trees can not be removed or the line rec closed line with sealed joints shall be installed. This type of construction shall extend t the tree root zone.

After placement of tubing in the trench and after blinding but prior to backfilling, sufficient time shall elapse to allow the tubing to conform to the temperature of the trench. All split fittings shall be securely tied before any backfill is placed.

6. CONNECTIONS

Lateral connections will be made with manufactured junctions comparable in strength with the specified tile or tubing unless otherwise specified.

Where existing drain lines not shown on the drawings are crossed, they shall be bridged across the new trench or they shall be connected into the new drain lines, as directed by the Engineer or designated representative.

Surface water inlets shall not be connected to the subsurface drain unless shown in the drawings.

7. FILTER OR ENVELOPE MATERIAL

When a filter or envelope is specified, it shall be installed as shown on the drawings. Fabric socks or filters if specified, shall be installed according to the manufacturer's recommendations.

8. BLINDING MATERIAL

As soon as the tile or tubing is placed, it shall be blinded by covering with friable topsoil to a depth of at least 6 inches. Material used for blinding shall not be frozen and shall contain no stones large enough to damage the tile or a specific size if specified. Sandy and other non-cohesive soils shall not be used for blinding unless the joints are covered. All tile or tubing placed during any day shall be blinded by the end of that day's work.

9. BACKFILLING

The backfilling of the trench shall be completed as rapidly as consistent with the soil conditions.

Automatic backfilling machines may be used only when approved by the NRCS Engineer or designated representative. Backfill shall extend above the ground surface and be well rounded over the trench.

Unless otherwise specified, where drain tile or tubing is laid under roads and at other designated locations shown on the drawings, the backfill shall be placed in successive layers of not more than 6 inches and each layer shall be tamped before the next layer is placed.

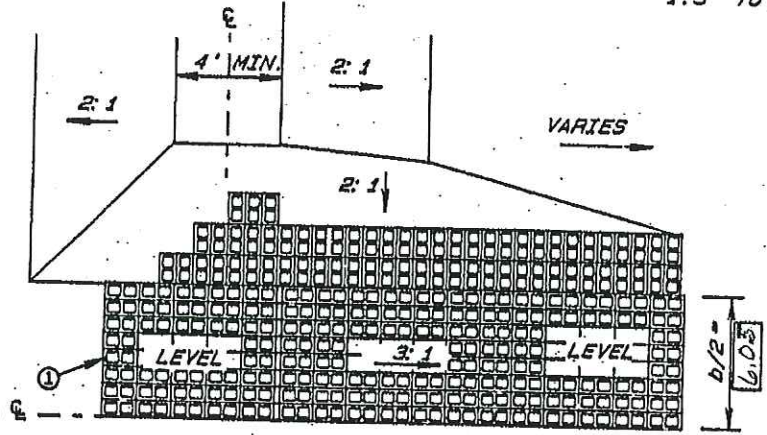
10. ADDITIONAL ITEMS WHICH APPLY TO THIS JOB

- a. All tile will be dual wall or smooth core plastic tile.
- b. A road cut permit will be required from the Hamilton County Highway Department.
- c. The manhole will have preformed holes for the proposed tile connections.
- d. A 20' length of 18" CMP with animal guard will be used at the outlet.

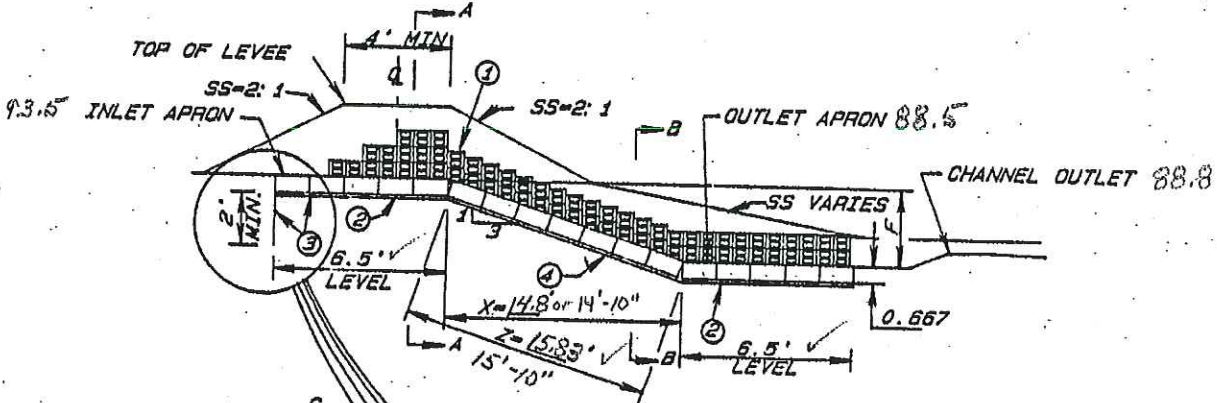
CONSTRUCTION DATA
 LAYOUT BY J. Smith DATE 11-90
 CONTRACTOR Taylor Exc. COMPLETED DATE 11-26-90

PRACTICE (DOES) DOES NOT MEET STANDARDS AND SPECIFICATIONS.
 CHECKED BY John Smith DATE 11-30-90

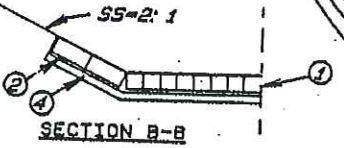
PROVIDE AN EMERGENCY SPILLWAY,
 ONE ON EACH SIDE IF FEASIBLE,
 1.3' TO 1.5' BELOW TOP OF LEVEE.



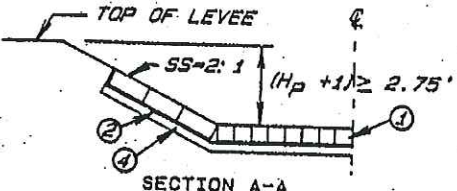
HALF PLAN



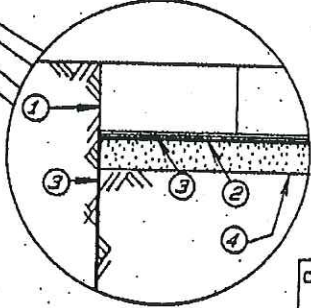
SECTION ALONG CHUTE



SECTION B-B



SECTION A-A



- LEGEND**
- ① CONCRETE BLOCKS
 - ② FILTER FABRIC
 - ③ PLASTIC SHEETING
 - ④ BEDDING 1" TO 3" THICK

COOPERATOR Joe Day
HAMILTON COUNTY SWCD, INDIANA
 LOCATION See 26 Jack son Turp

ELEVATIONS		STRUCTURE DIMENSIONS	
TOP OF LEVEE	96.7 ok	b =	12.1 CFS
EMERGENCY SPILLWAY	95.4 ok	H _p =	2.2 FT
INLET APRON	93.5 93.8 ok	F =	5.0 FT
OUTLET APRON	88.5 88.7 ok	b =	12.1 FT
CHANNEL OUTLET	88.8 ✓		

CONCRETE BLOCK CHUTE
 (SHEET 1 OF 3)
 GENERAL LAYOUT

U. S. DEPARTMENT OF AGRICULTURE
 SOIL CONSERVATION SERVICE

BENCH MARK
 ELEVATION 100.0
 DESCRIPTION NAH - SOUTH SIDE OF WEST GRACE POST - 150' N.E. OF STRUCTURE SITE

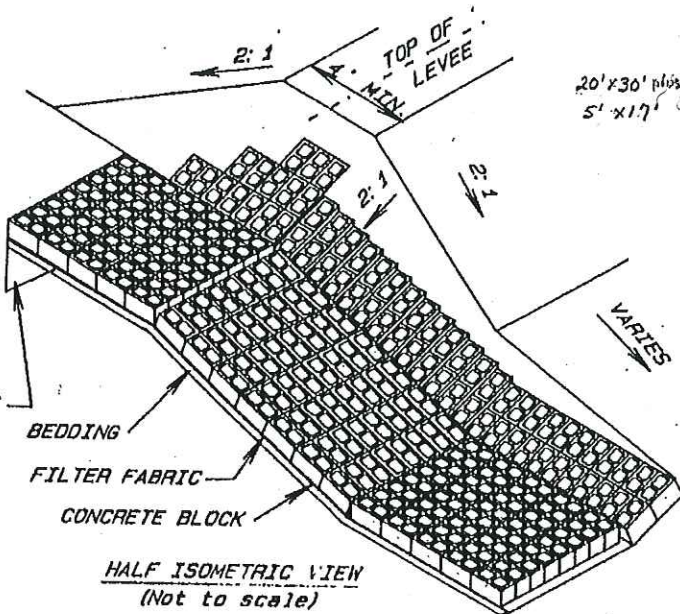
Designed J. Smith Approved by _____
 Drawn _____ Title _____
 Traced _____ Title _____
 Checked _____ Date _____ Drawing No. _____

10/12

CONSTRUCTION NOTES

- 1- Site preparation:
 - A- Remove all vegetation, roots and topsoil from chute site.
 - B- Excavate and/or place compacted fill to chute slope and side slope subgrade approximate 0:8 ft. below finished grade. Compacted fill shall be denser than adjacent undisturbed material.
- 2- Excavate cutoff trench:
 - A- Cutoff trench shall be excavated upstream of inlet apron to 24 inches minimum below stone/sand bedding grade.
 - B- Cutoff trench shall extend to full width of block placement (2.3 feet outside bottom width "b" on each side).
- 3- Place polyvinyl sheet in cutoff trench:
 - A- Plastic sheeting shall be 6 mil minimum thickness.
 - B- Place plastic to bottom of trench and backfill.
 - C- Fold plastic above trench (24 inches minimum) upstream.
- 4- Bedding:

Place 1 to 3 inches thickness of stone/sand, such as IDOH no. 23, 24, or 15 over entire chute bottom and side slope to grade required.
- 5- Place filter fabric:
 - A- Filter fabric shall be ultraviolet resistant, with openings ≤ 0.25 mm (U.S. Standard Sieve Size #60, #100 or larger), burst strength greater than 200 psi, and tear strength greater than 50 pounds.
 - B- Place filter fabric over and outside of entire stone/sand bedding and anchor with pins or staples in accordance with manufacturer's recommendations.
 - C- Place fabric in trench outside of stone/sand bedding and anchor with earth.
 - D- Do not place stone/sand or earth on fabric under block.
- 6- Fold plastic cutoff material over filter fabric.
- 7- Place concrete blocks starting at downstream end and proceed upstream.
 - A- Concrete blocks shall be nominal 8"x8"x16", in good condition and free of excess mortar.
 - B- Concrete blocks shall be placed with small end of holes up.
 - C- Concrete blocks in floor shall be placed with length parallel to direction of flow.
 - D- Concrete blocks in side slopes shall be placed with length perpendicular (90 degrees) to direction of flow.
 - E- Concrete blocks shall not be driven on by any machinery during or after placement.
- 8- Finish operations:
 - A- Fill holes in concrete blocks with soil. Seed with same mixture used on disturbed areas.
 - B- Lime, fertilize, seed and mulch all disturbed areas.



QUANTITIES

Concrete blocks	590	Each
Filter fabric	54	Sq. Yds.
Plastic sheeting	8	Sq. Yds.
Bedding	8	Tons
Revegetation	0.1	Acres

COOPERATOR Joc Day
Hamilton COUNTY SWCD, INDIANA
 LOCATION _____

CONCRETE BLOCK CHUTE
 (SHEET 2 OF 3)

U. S. DEPARTMENT OF AGRICULTURE
 SOIL CONSERVATION SERVICE

Soil grad. <u>J. Smith</u>	Approved By _____
Drawn _____	Title _____
Traced _____	Date _____
Checked _____	Sheet No. <u>2</u>
	Drawing No. _____

(Based on Illinois development)
 Revised 4-88

Bid Schedule

Grassed Waterway

Landuser: Mary Hodkins Drain
 County: Hamilton

Item	Quantity				Unit Cost			Total Cost
Dip out open ditch	50	feet	@		per foot	=		
Seeding/Mulching	0.1	acres	@		per acre	=		
15 -inch Plastic Drainage Tubing	870	feet	@		per foot	=		
18 -inch CMP tile outlet w/ animal guard	20	feet	@		per foot	=		
Repair Existing block chute	1	sum job	@		sum job	=		
Breather	1	each	@		per each	=		
Tile Road Crossing	2	each	@		per each	=		
Catch basin "	1	each	@		per each	=		
Repair tile and add connections as needed								

Total:

Contractor: _____

Date: _____



See Plan View

LOCATION PLAN
Scale: 1 inch = feet

LEGEND

Road-----		New drain installed-----	
Farm boundary-----		Existing deep ditch-----	
Permanent fence-----		Proposed deep ditch-----	
Existing drain line-----		Existing shallow ditch-----	
Proposed drain line-----		Proposed shallow ditch-----	

DESIGN DETAILS

Line	Stations	Drain area acres	Dominant soil type	Grade %	Drain coef.	Capacity required CFS	Drain size inches	Capacity available CFS
Main	0+00 to 2+50	120	Br- CrA	0.4	3/8	1.9	15	3.8
Main	2+50 to 8+70	120	same	0.86	3/8	1.9	15	4.8

Materials:

SUBSURFACE DRAINAGE PLAN

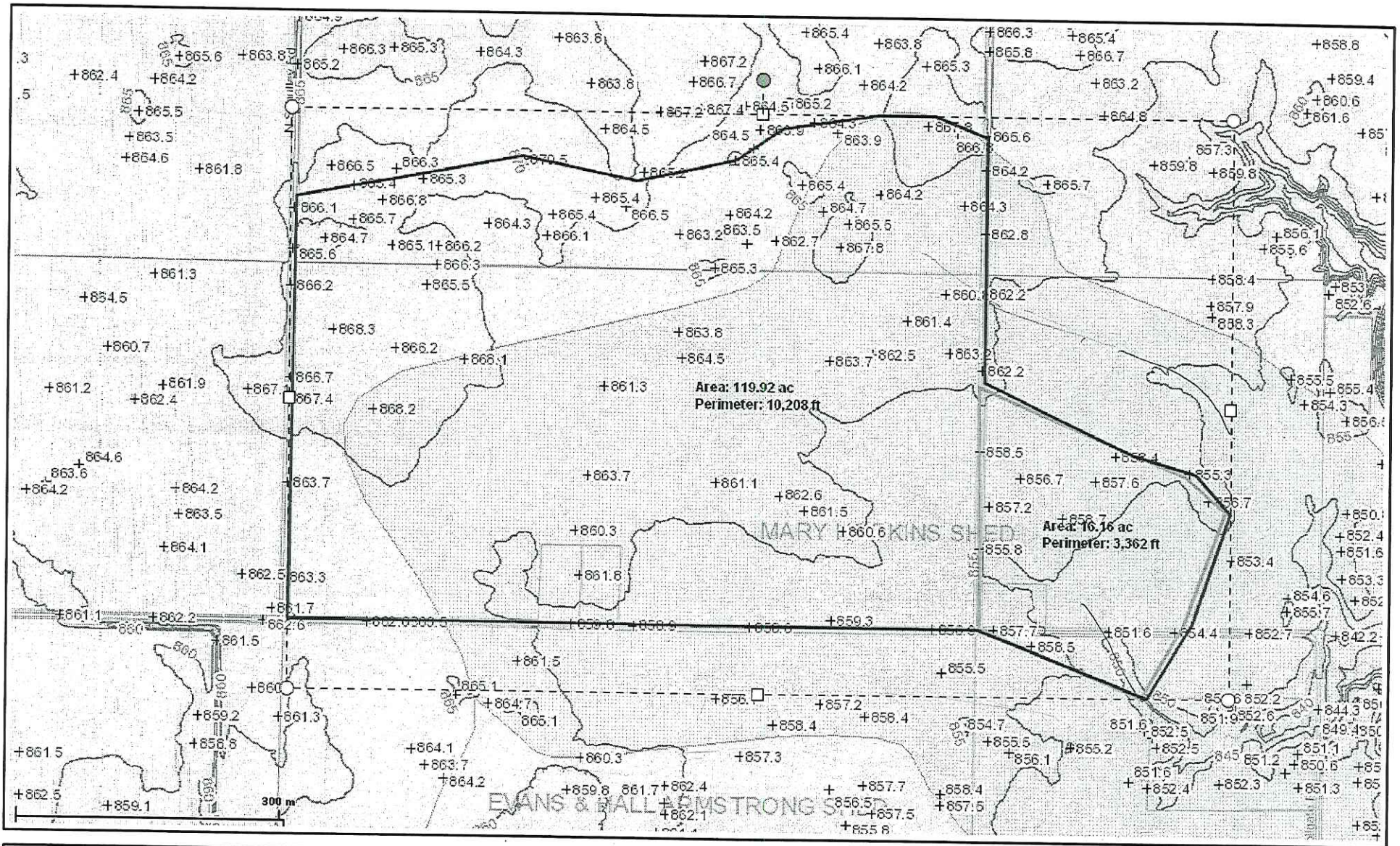
NAME: Mary Hodkins Drain

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

Designed.....	Date	Approved by:	Date:
Checked.....	

Sheet of

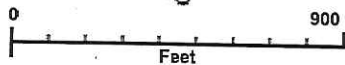
IN-ENG-32 1(2) Rev. 1-03



Mary Hodkins Tile Watershed Map

Total WS-120 ac / Area east of Gwinn Rd- 16 ac

Printed: Dec 22, 2011



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County of
Hamilton
Indiana
www.hamiltoncounty.in.gov

Cost Estimate

Grassed Waterway

Landuser: Mary Hodkins Drain
 County: Hamilton

Designed by: John South
 Checked by: _____

Date: 2/24/2012
 Date: _____

Item	Quantity		Unit Cost		Total Cost
Dip out open ditch	50	feet	@ \$ 4.00	per foot	= \$ 200.00
Seeding/Mulching	0.1	acres	@ \$ 1,000.00	per acre	= \$ 100.00
15 -inch Plastic Drainage Tubing	870	feet	@ \$ 9.00	per foot	= \$ 7,830.00
18 -inch CMP w/ Animal Guard	20	feet	@ \$ 20.00	per foot	= \$ 400.00
Repair Block Chute	1	sum job	@ \$ 1,000.00	sum job	= \$ 1,000.00
Breather	1	each	@ \$ 250.00	per each	= \$ 250.00
Tile Road Crossing	2	each	@ \$ 3,500.00	per each	= \$ 7,000.00
Catch basin	1	each	@ \$ 1,500.00	per each	= \$ 1,500.00
Other: repair tile and add connections as required					

Subtotal: \$ 18,280

+10% \$ 1,828

Total: \$ 20,200

Pass Label
21 A115

Rod 1
21

MIN.SLOPE %
/ + 0.1 \ -

Menu

G W
V B ?

8

Speed
0

<== PTL

Blade0:ON

AUTO
CAPTURE
ON

Slope %
Grade
1.858

Current Position (NF7)
14583092 1908170 **858.91**

Ordnmeter
0.02

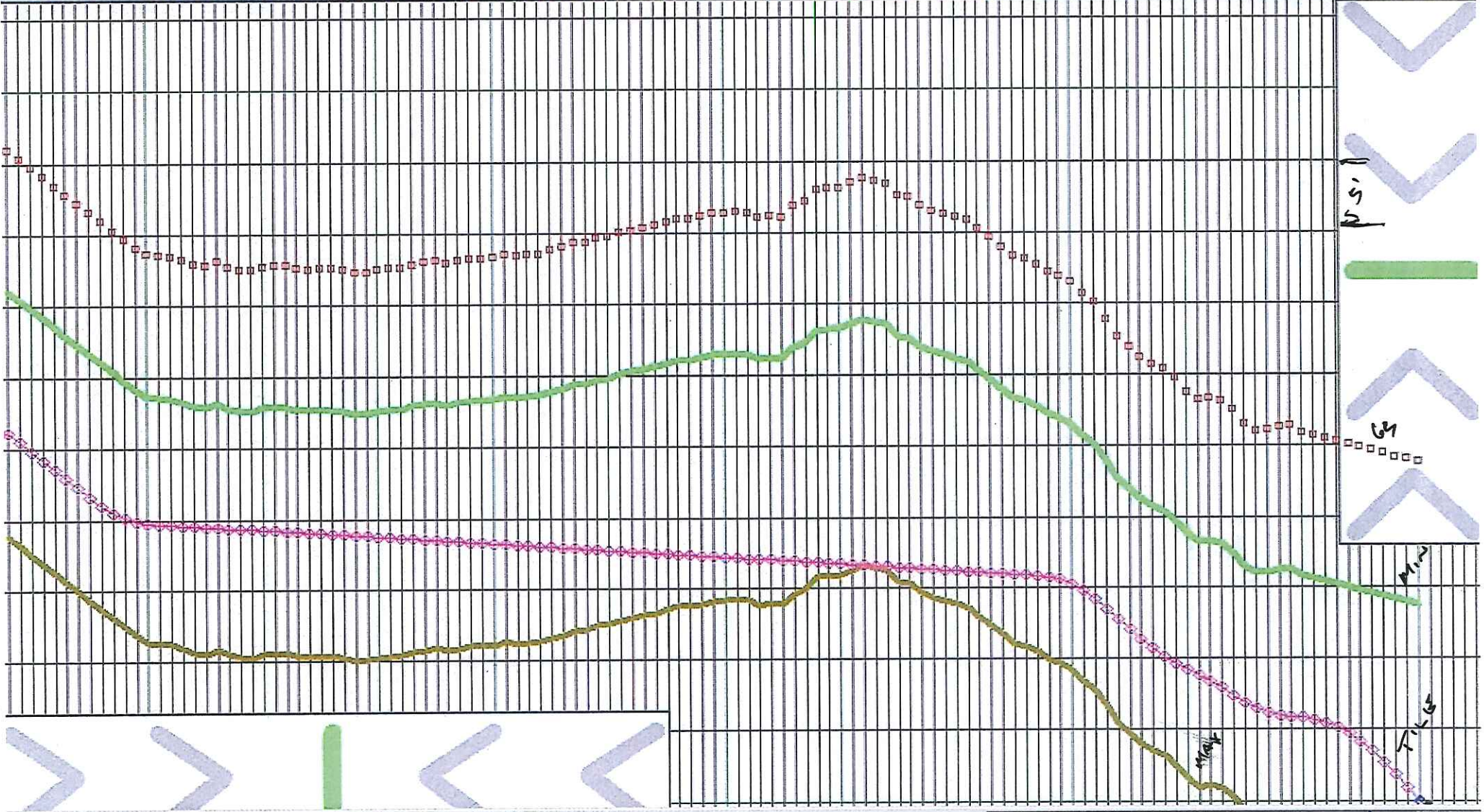
UP .02

Status
ok: 13 50 0.0170 /16

Path
==> 2.58

Grid

Scroll





Beech Grove (317) 788-2820 Indianapolis (317) 246-1130
Indianapolis East (317) 568-1969 Whiteland (317) 535-0339

MARY HODKINS DRAIN 3-9-2012
BECK'S HYBRID RECONSTRUCTION PLANS - REVIEW
W/KEAT WARD

- ASSESSED SHED -

- CHECK TOPO S. OF 249TH

- NO VACATION OF EXISTING TILE W OF
GWINN ROAD
- WHAT IS PLANNED W/OF GWINN ROAD?

- FIRE RUN TO GRIMES PROPERTY

- CHECK - DO THEY HAVE LETTERS FROM MARSHALL
REED?

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