

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

June 3, 2013

To: Hamilton County Drainage Board

Re: Sand Creek – 2 Stage Ditch Reconstruction

Attached are the engineering plans for the 2-stage ditch reconstruction for Sand Creek downstream of Cumberland Road, north of 106th Street in Fall Creek Township, Fishers, Indiana. The construction plans were prepared by Christopher B. Burke Engineering LTD dated June 5, 2013.

On March 24, 2011 after a large rain event a meeting was held on site near the Sybesma property to discuss repeated flooding of Sand Creek and Cumberland Road. In attendance at this meeting were Commissioner Steve Dillinger, Surveyor Kent Ward, Jason Armor of the Town of Fishers, Siavash Beik of Christopher Burke, Jan Crider of Indiana Department of Homeland Security and Michelle Sybesma. During this meeting the landowners disclosed that Cumberland Road and their private drive on the west side of Cumberland Road experiences flooding several times a year. The roads are impassable making it impossible to get to work or take their children to school.

After this meeting Mr. Ward asked Mr. Beik to prepare a proposal for a flood mitigation plan for Sand Creek at Cumberland Road. This proposal was presented at a Drainage Board meeting held on April 25, 2011 (see Hamilton County Drainage Board Minutes Book 13, pages 375-376). In attendance at this Drainage Board meeting was Michelle Sybesma, Siavash Beik, Jason Armor and Jeff Heiking.

Ms. Sybesma and Mr. Ward explained that the homes in the area were built to an elevation based on the 1982 FIRM Map from FEMA. The discharge rate that IDNR used to produce this map was incorrect and produced flood elevations that were too low. The flooding is not just a homeowner issue. The Town of Fishers doesn't want their roads to flood and homeowners blocked in. The roads flood at even smaller flood events. Burke has studied the area in 1997 and 2002 in an overall view. Mr. Ward stressed the need for a more focused study to correct flooding from smaller storm frequencies such as the 5, 10 and 25 year storm events. The Drainage Board approved the contract for Burke to prepare the Flood Mitigation Plan for Sand Creek at Cumberland Road.

On July 11, 2011 Mr. Beik presented this study at the Drainage Board meeting (see Hamilton County Drainage Board Minutes Book 13, pages 464-468). He stated that this area experienced 2-3 feet of flooding in the 2003 flood.

The study proposed multiple infrastructure improvements with various levels of flood protection. In order to make Cumberland Road passable in a 100-year storm event and allow free access to Cumberland Road from the collector roads the following improvements are required as shown on the attached exhibit:

- A. Enlarge the bridge over Sand Creek on Cumberland Road to pass more water downstream.
- B. Construct a 2-Stage ditch on Sand Creek downstream of Cumberland Road which will widen the channel.
- C. Raise Cumberland Road above the 100-year flood elevation.
- D. Add two berms to block the path of storm water to the roads when Sand Creek over tops its banks.

The four projects listed above will lower the 100-year flood elevation by 1.2 feet and allow ingress and egress during the storm event to the landowners. Cumberland Road will be passable during the 100-year storm event.

On August 22, 2011 a follow up meeting was held at the Drainage Board with the Town of Fishers (see Hamilton County Drainage Board Minutes Book 13, pages 535-536). At this meeting Fishers agreed to pay for raising Cumberland Road and the cost of the berms mentioned in parts C and D above. Mr. Ward asked the Boards approval to move forward with plans for construction of the 2-stage ditch listed in Part B above. The Drainage Board approved going forward with the plans for the 2-stage ditch. The Hamilton County Highway Department agreed to pay the cost to install a new Conspan bridge crossing over Sand Creek on Cumberland Road (part A above).

2-Stage Ditch Reconstruction

The construction plans have been prepared by Christopher B. Burke Engineering LLC. The proposed 2-Stage Ditch shelves are 20-30 feet wide on both sides of Sand Creek, starting downstream of the new Conspan Bridge replacement for approximately 350 linear feet, (Sta. 10+00 to Sta. 13+50). The west side of Sand Creek will be expanded with a 30' shelf from this point another 510 linear feet in length (Sta. 13+50 to Sta. 18+60). Downstream of Sta. 18+60 the shelf will vary in width, up to 25 feet wide, on both sides of the channel another 265 LF (Sta. 18+60 to Sta. 21+25). The total length of the 2 Stage Ditch Reconstruction is 1,125 feet. The shelves are constructed above the ordinary high water mark of Sand Creek therefore the IDEM, IDNR, Army Corps of Engineers and Fish and Wildlife permits are not required. Export consists of approximately 3,500 cubic yards and will be hauled offsite. The excavated shelves will be seeded with appropriate seed mix and stabilized with erosion control mats.

All of the proposed construction will occur within the regulated drain easements on the following parcels:

<u>Parcel</u>	<u>Owner</u>	<u>Location</u>
13-15-05-00-00-018.003	Tippman, Henry J. & Cynthia S.	East & West side of Sand Creek
19-15-05-00-15-001.000	Gricius, Wendy E. & Mark T.	Possible Minor Clearing
19-15-05-00-16-001.000	Mud Creek Golf Course	East & West side of Sand Creek
19-15-05-00-15-002.000	Vaught, Dawn E. & Gerald K.	Possible Minor Clearing
19-15-05-00-15-003.000	Gray, Darrin D. & Leslie D.	East side of Sand Creek
19-15-05-00-15-004.000	Plessinger, Bradley J. & Lyndsey A.	East side of Sand Creek
19-15-05-00-09-011.000	Collard, Paul D. & Doreen M.	East side of Sand Creek

Recently Jerry Liston and I walked the construction site and found an abandoned gas well in the location of the western shelf of the 2-stage ditch. We contacted Brian Royer of IDNR, the Division of Gas and Oil. He told us the well was constructed in 1937 and was producing gas up to 1973. We will cap this well per IDNR's specifications by an approved IDNR contractor as part of this project.

Hamilton Southeastern Utility (HSE) owns two deep manholes and sanitary lines that cross under Sand Creek within the existing regulated drain easement. The manholes extend above the proposed shelf or the west side of Sand Creek. HSE was notified of the 2 Stage Ditch Reconstruction and was asked to relocate the manholes. Jim Hart of HSE asked us to move the shelf to the opposite bank (east side) in this location at their expense. Christopher Burke has reviewed the hydraulic model and has determined that this change will not impact the function of the 2 Stage Ditch.

This change will be bid as "Alternate 1" on the construction plans. HSE has committed to paying the additional construction and engineering costs associated with this modification.

Construction Costs

The engineering and construction costs are itemized below:

Engineering and Survey

Sand Creek at Cumberland Flood Mitigation Plan	\$ 56,000.00*
Berm Design and Additional Modeling for Bridge	\$ 25,800.00*
Design Plans, Survey and Well Capping	\$ 33,047.95*
Construction Survey and Asbuilts	<u>\$ 12,000.00</u>
Engineering Total	\$126,847.95

*Already paid from Maintenance

Construction

Temporary Access Drives (2)	\$ 10,000.00	
Mobilization and Demobilization	\$ 9,000.00	
Maintenance of Traffic	\$ 10,000.00	
Temporary Erosion Control Measures	\$ 6,000.00	
Tree Removal	\$ 25,000.00	
Cap Gas Well Per IDNR Standards	\$ 20,000.00	
Excavation and Grading (Removal of Export)	\$105,000.00	
Seeding and Site Restoration	\$ 20,000.00	
Erosion Control Mats	<u>\$ 40,000.00</u>	
	Subtotal	\$245,000.00
	15% Contingency	<u>\$ 36,750.00</u>
	Construction Total	\$281,750.00
	Total Projected Cost	\$408,597.95

The cost of the construction listed above will be paid for from the Mud Creek/Sand Creek maintenance fund. The current balance in this fund is \$1,645,551.21. The Mud Creek/Sand Creek maintenance assessment collects \$536,719.72 per year.

Public informational meetings have been held with the surrounding landowners on February 19, March 13, and April 4, 2013.

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

All of the construction of the 2-Stage Ditch will be within the existing 75' regulated drainage easements or platted street right of way of Cumberland Road and Valley Farm Court. Therefore, no additional easements are required for the project. I believe no damages will result to the landowners. Damages are set at zero (0).

I recommend that the Board set a hearing for this proposal for July 22, 2013.

Sincerely,



Christie Kallio, P.E.
Hamilton County Surveyor's Office

CK/llm

STATE OF INDIANA)
) ss:
COUNTY OF HAMILTON)

BEFORE THE HAMILTON COUNTY
DRAINAGE BOARD
NOBLESVILLE, INDIANA

IN THE MATTER OF THE
RECONSTRUCTION OF THE
Sand Creek - 2 Stage Ditch Reconstruction

FINDINGS AND ORDER FOR RECONSTRUCTION

The matter of the proposed Reconstruction of the **Sand Creek - 2 Stage Ditch Reconstruction** came before the Hamilton County Drainage Board for hearing **on July 22, 2013**, 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.

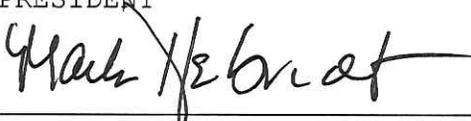
Wherefore, it is ORDERED, that the proposed Reconstruction of the **Sand Creek - 2 Stage Ditch Reconstruction** be and is hereby declared established.

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



Member

ATTEST:


Executive Secretary



New Document 1.txt

To: Hamilton County Drainage Board.
July 1, 2013
One Hamilton County Square, Ste. 188
Noblesville, IN 46060-2230

Subject: Sand Creek-2 Stage Ditch Reconstruction

I will be purchasing the Collord residence, parcel 19-15-05-00-09-011.000, effective July 12, 2013. I have been made aware of the pending project and am aware that the Board will consider two options to alleviate the Sand creek flooding issue.

One proposal that is being considered affects only the west side of Sand Creek and would not affect my future property. However the second option which affects the east side of Sand Creek would have a severe impact on my property as well as two neighboring parcels.

Because I will be away on July 22, I will be unable to attend the hearing on this project at 9:05 AM, in the Commissioner's Court. I appreciate the opportunity to substantiate why the option on the west side is the better choice. Although this project will certainly alleviate the current flooding, I do not yet understand what will be done about the flooding of Mud Creek which is a cause for the current flooding in Sand Creek.

I understand that HSE requested that the original project engineering slated for the west side be moved to the east side because they own two manholes on the side of the original proposal. They have also agreed to pay any additional construction and engineering cost associated with their requested modification.

I submit to the Board that the original plans were far superior since there is less risk of liability and tentative legal action due to the fact that you are on the side of commercial property versus residential property. There is the real potential for accidents to children playing in their own back yards. I do not think it is prudent for the Board to accept a potential costly liability that is so

New Document 1.txt

easily avoided by choosing the original and most cost effective project design.

I do not agree with the statement that no damages will result to the landowners . There is a right to allow your children to play in their own back yard without the unnecessary fear that there is an incline grade that will lead to a Creek much deeper than it is currently. It will become a nuisance to other children due to their natural curiosity. You are opening a "Pandora's Box" with unlimited risk and liability.

I am only requesting that The Board consider the option they first designed before pressure was exerted by HSE.

You can contact me at 317-842-7292 at home, or 317-374-3741 my cell, or E-mail me at mlpayers@comcast.net. Thank you for the opportunity to share what are valid reasons to continue with your original design to alleviate the flooding.

Sincerely,

Paul L. Ayers Jr. new owner

10719 Knightsbridge Lane

Fishers, IN. 46037

Paul D. Collord Existing owner

10719 Knightsbridge Lane

Fishers, IN 46037

10715 Knightsbridge Lane
Fishers, IN 46037

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



Drainage Board:

Please accept this letter as my objection to the Sand Creek – 2 Stage Ditch Reconstruction. My objection is based on the following:

- 1) Knowing that another alternative is available with minimal damage to residential properties.
- 2) Safety issues, especially for my children and other children of the neighborhood.
- 3) Environmental concerns affecting the removal of trees and the shade produced upon my home.

First, it is my understanding that another option is available for this project. This option would have minimal damage to all residential property involved. However, it would require the movement of pipe. I understand that it would be easier not to move the pipe but this would be at the expense of my backyard. Why was this not taken into consideration a few years ago when the pipes in question were replaced?

Second, I am concerned for the safety of my children and the children of my neighbors. Our backyard is used a great deal for play, and I feel this project in its current proposal would take away from the safety we currently possess.

Finally, I am concerned that there would be removal of three large trees under the current proposal. We benefit a great deal from the shade that these trees produce. Therefore, would hate to see these trees removed knowing that another alternative is available.

Thank you for allowing me to voice my concerns. Let me end by asking, would you want this project done to your backyard knowing that there was another proposal?

Sincerely,

A handwritten signature in black ink that reads "Bradley J. Plessinger". The signature is written in a cursive style.

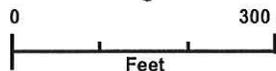
Bradley J. Plessinger



Hamilton County

This is My Map

Printed: Jul 17, 2013



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County of
Hamilton
Indiana
www.hamiltoncounty.in.gov

BEFORE THE HAMILTON COUNTY DRAINAGE BOARD
IN THE MATTER OF

Sand Creek, 2 Stage Ditch 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 **Sand Creek, 2 Stage Ditch Reconstruction** on **July 22, 2013** at **9:05 A.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

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

**IN THE MATTER OF Sand Creek Drain, 2 Stage Ditch
Reconstruction**

NOTICE

Notice is hereby given that the Hamilton County Drainage Board at its regular meeting **July 22, 2013** 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

Mud Crk/Sand Crk #347

Sand Creek - 2 Stage Ditch Reconstruction
 Area SE of Valley Farm Ct & Cumberland Rd
 Hearing: 07/22/13

*No change in current maintenance assessment. This project will affect 1,100' of drain.
 *Reconstruction cost to be paid from the maintenance fund except for Alternate 1.
 Hamilton Southeastern Utility will pay for additional cost & engineering associated with modifications from original plan and will be bid as Alternate 1.

COST ESTIMATE:

Engineering & Survey:	\$ 126,847.95
Construction:	\$ 245,000.00
15% Contingency:	\$ 36,750.00
Construction Total:	\$ 281,750.00
Total Project Cost:	\$ 408,597.95

Parcel	Owner	Description	Benefit	MntAsmt	Reconst	Percent
15-15-06-00-07-002.000	Bacon, Richard W Jr & Karen	S6 T17 R5 Walnut Creek Lot 2	*	*	*	5.555%
15-15-06-00-07-003.000	Black, Brook L & Loretta J	S6 T17 R5 Walnut Creek Lot 3	*	*	*	5.555%
19-15-05-00-09-011.000	Collord, Paul D & Doreen M Tr	S5 T17 R5 Spyglass Hill 4C Lot Pt 232	*	*	*	5.555%
15-15-06-00-07-004.000	Compton, Michael R & Somer N	S6 T17 R5 Walnut Creek Lot 4	*	*	*	5.555%
19-15-05-00-15-003.000	Gray, Darrin D & Leslie D	S5 T17 R5 Spyglass Hill 4I Lot 230	*	*	*	5.555%
19-15-05-00-15-001.000	Gricius, Wendy E & Mark T	S5 T17 R5 Spyglass Hill 4I Lot 228	*	*	*	5.555%
99-99-99-99-99-999.001	Hamilton Co. Highway Dept.	S5 T17 R5 Cumberland Rd, Bridge 163	*	*	*	5.555%
15-15-06-00-07-005.000	Kennedy, Hans & Lelia M	S6 T17 R5 Walnut Creek Lot 5	*	*	*	5.555%
19-15-05-00-16-001.000	Mud Creek Golf Course Inc.	S5 T17 R5 Ironwood, 13.23 Ac	*	*	*	5.555%
19-15-05-00-16-002.000	Mud Creek Golf Course Inc.	S5 T17 R5 Ironwood, 163.57 Ac	*	*	*	5.555%
15-15-06-02-04-016.000	Oruche, Odili E & Ukamaka M	S6 T17 R5 Walnut Hills Lot 16	*	*	*	5.555%
19-15-05-00-15-004.000	Plessinger, Bradley J & Lyndsey A	S5 T17 R5 Spyglass Hill 4I Lot 231	*	*	*	5.555%
15-15-06-02-04-017.000	Replogle, David E & Dawn M	S6 T17 R5 Walnut Hills Lot 17	*	*	*	5.555%
Sanitary lines & manholes.	SAMCO	S5 T17 R5 Move shelf to east side.	*	*	*	5.555%
15-15-06-00-07-001.000	Sybesma, Jamie Michelle	S6 T17 R5 Walnut Creek Lot 1	*	*	*	5.555%
13-15-05-00-00-018.003	Tippmann, Henry J & Cynthia S	S5 T17 R5 Valley Farm Estates Sec 2 Lot 14	*	*	*	5.555%
99-99-99-99-99-999.007	Town Of Fishers	S5 T17 R5 Cumberland Rd, S of Valley Farm Ct	*	*	*	5.555%
19-15-05-00-15-002.000	Vaught, Dawn E & Gerald K	S5 T17 R5 Spyglass Hill 4I Lot 229	*	*	*	5.555%

Parcels: 18



PROPOSED 2-STAGE DITCH SLOPE

PROPOSED 2-STAGE DITCH SHELF

Legend

- 2-Stage Ditch Shelf
- 2-Stage Ditch Slope
- Parcels

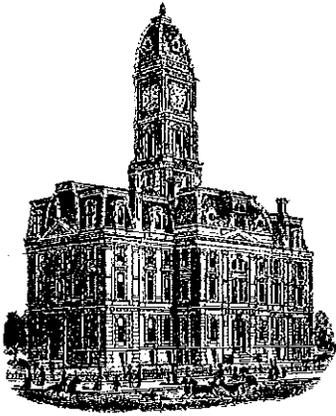
NOTES:
 1. 2009 aerial photography provided by Hamilton County, IN.
 2. This exhibit is not for construction.
 3. Parcel boundaries are approximate and are for reference only. Parcel owners were obtained from the Hamilton County, Indiana GIS Website (<http://gis.hamiltoncounty.in.gov/FlexViewer/Default.aspx>) on June 19, 2013.



Christopher B. Burke Engineering, LLC
 PNC Center, Suite 1368 South
 115 West Washington Street
 Indianapolis, Indiana 46204
 Phone: 317.633.4500

PROJECT: SAND CREEK AT CUMBERLAND ROAD
 2-STAGE DITCH DESIGN
TITLE: PROPOSED 2-STAGE DITCH DESIGN

PROJECT NO.: 11-174 BG 2
APPROX. SCALE: 1" = 100'
DATE: 06/2013
EXHIBIT 1



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

October 6, 2015

TO: Hamilton County Drainage Board

**RE: Sand Creek 2-Stage Ditch Reconstruction
Final Inspection Report**

Please regard this as the Inspector's Final Report on the Sand Creek 2-Stage Ditch Reconstruction, located in Section 5, Township 17 North, Range 4 East in Fall Creek Township, Hamilton County, Indiana.

At the July 22, 2013 meeting of the Hamilton County Drainage Board the hearing for the Sand Creek 2-Stage Ditch Reconstruction was held and the Surveyor's Report dated June 3, 2013 was approved and the Finding and Order signed. Included in the report was a breakdown of Engineering and Survey costs associated with the 2-Stage project. (HCDB Minute Book 15, Pages 88 -94). The cost estimate for Engineering and Survey on the Mud Creek-Sand Creek 2-Stage Reconstruction was \$126,847.95. The cost estimate for the Mud Creek-Sand Creek 2-Stage Reconstruction was \$245,000.00.

At the September 9, 2013 meeting of the Hamilton County Drainage Board contracts were approved and awarded for Construction Inspection to Christopher B. Burke & Associates. The contract was not to exceed \$26,000.00. (HCDB Minute Book 15, Page 157).

At the October 28, 2013 meeting of the Hamilton County Drainage Board contracts were approve and awarded for Construction Staking and As-built Drawings to Structurepoint Engineering. (HCDB Minute Book 15, Page 230).

During the early stages of the project an abandoned/orphan gas well was discovered along the drain on Parcel 19-15-05-00-16-001.000 during a preliminary field check of the plans. The gas well was capped using an IDNR Gas & Well Division approved contactor. At the February 10, 2014 meeting the Hamilton County Drainage Board awarded Gemini Oil Co. the contract to cap the well for \$13,390.00. (HCDB Minute Book 15, Pages 344-345).

2014 meeting the Hamilton County Drainage Board awarded Gemini Oil Co. the contract to cap the well for \$13,390.00. (HCDB Minute Book 15, Pages 344-345)

The capping of the gas well was completed prior to work commencing on the 2-Stage shelf along the drain. The location/coordinates for the capped well were captured using GPS technology by Brian Rayl of the Hamilton County Surveyor's Office. The coordinates for the capped gas well on the Mud Creek-Sand Creek 2-Stage Ditch Reconstruction are as follows:

NAV 88

	N	E	Elev.	
#1001	1710782.002	236157.712	784.39	GS
#1002	1710781.852	236157.303	787.807	Top Well

At the March 24, 2014 meeting of the Hamilton County Drainage Board the contract for the Sand Creek 2-Stage Ditch Reconstruction was awarded to Calumet Civil Contractors, Inc. for \$138,922.00. Calumet's Alternate A bid was \$127,736.00. (HCDB Minute Book 15, Page 369)

The reason for the Alternate Bid was due to existing Hamilton Southeastern Sanitary facilities being in conflict with the proposed 2-Stage ditch reconstruction shelf design. HSE Utilities asked the Board to move the 2-Stage shelf to the opposite bank (east side) of the drain to avoid these existing sanitary facilities. HSE Utilities committed to pay additional construction and engineering costs of \$11,186.00 associated with the modification and design change of the shelf. (HCDB Minute Book 15, Pages 88-94) On September 11, 2015 HSE Utilities reimbursed Hamilton County \$11,186.00 associated with the modification and design change of the shelf for the existing HSE sanitary facilities.

During the project there were Three (3) change orders:

Change Order # 1 dated July 21, 2014 was approved by the Hamilton County Drainage Board at the July 28, 2014 meeting for three (3) tile extensions. (HCDB Minute Book 15, Pages 496-497)

Change Order # 2 dated August 6, 2014 was approved by the Hamilton County Drainage Board at the August 11, 2014 meeting for tree removal, additional grading, seeding and EC Blanket. (HCDB Minute Book 15, Pages 506)

Change Order # 3 dated August 26, 2014 was approved by the Hamilton County Drainage Board at the September 8, 2014 meeting for additional grading and erosion control blanket. (HCDB Minute Book 15, Pages 538-539)

Change Order # 1 (Approved 07/28/2014)

Three Tile Extensions	\$1,875.00
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Change Order # 2 (Approved 08/11/2014)

Additional Grading, Seeding and ERC Blanket	\$2,626.67
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Change Order # 3 (Approved 09/08/2014)
 Additional Grading and ERC Blanket \$7,832.30

Total of Three (3) Change Orders **\$12,333.97**

During the project there were Four (4) Pay Applications:

Pay Application # 1 Total -----\$31,165.00
 Retainage -----\$(4,674.75)
 Amount Paid to Calumet Civil Contractors, Inc. (07/29/2014) -----\$26,490.25

Pay Application # 2 Total -----\$107,757.00
 Retainage -----\$(16,163.55)
 Amount Paid to Calumet Civil Contractors, Inc. (07/29/2014) -----\$91,593.45

Pay Application # 3 Total -----\$12,333.97
 Retainage -----\$(1,850.10)
 Amount Paid to Calumet Civil Contractors, Inc. (07/29/2014) -----\$10,483.87

Pay Application # 4 Total – Retainage (09/15/2015) -----\$22,688.40

The Engineering and Construction costs are itemized below:

Engineering/Survey (Burke) -----\$114,847.95

As-built Drawings (Structurepoint) -----\$12,000.00

Engineering Total: \$126,847.95

Calumet Alt 1 Bid -----\$138,922.00

Change Orders (3) -----\$12,333.97

Total Paid to Calumet Civil Contractors, Inc. -----**\$151,255.97**

Access Drive Survey (Structurepoint) -----\$1,130.00

Construction Staking (Structurepoint) -----\$7,140.00

Construction Inspection (Burke) -----\$15,860.00

Gemini Well Cap -----\$13,390.00

Total: \$188,975.97

HSE Reimbursement (Check # 18417)-----\$(-11,186.00)

Revised Project Cost -----\$177,789.97

Total Project Cost **\$304,637.92**

The costs for the Sand Creek 2-Stage Ditch Reconstruction were taken from the Mud Creek-Sand Creek Drainage Area fund.

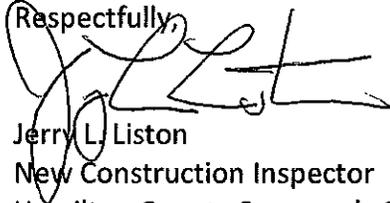
On August 20, 2015 this Office received from Calumet Civil Contractors, Inc. Form E-1 stating that all expenses incurred for labor and material have been paid in full per IC 36-9-27-82.

As-built Drawings were completed by Structurepoint Engineers and have been reviewed by Christopher B. Burke & Associates.

As the date of this report, I hereby attest to and agree that the reconstruction was completed according to specified plans, change orders and inspections. All inspections were and have been completed by Christopher B. Burke & Associates.

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

Respectfully,

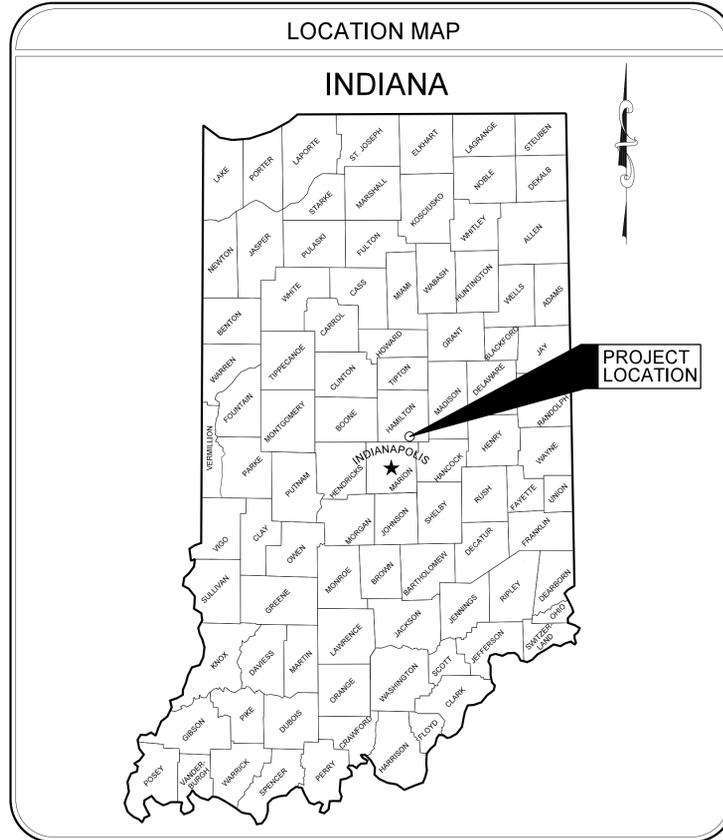
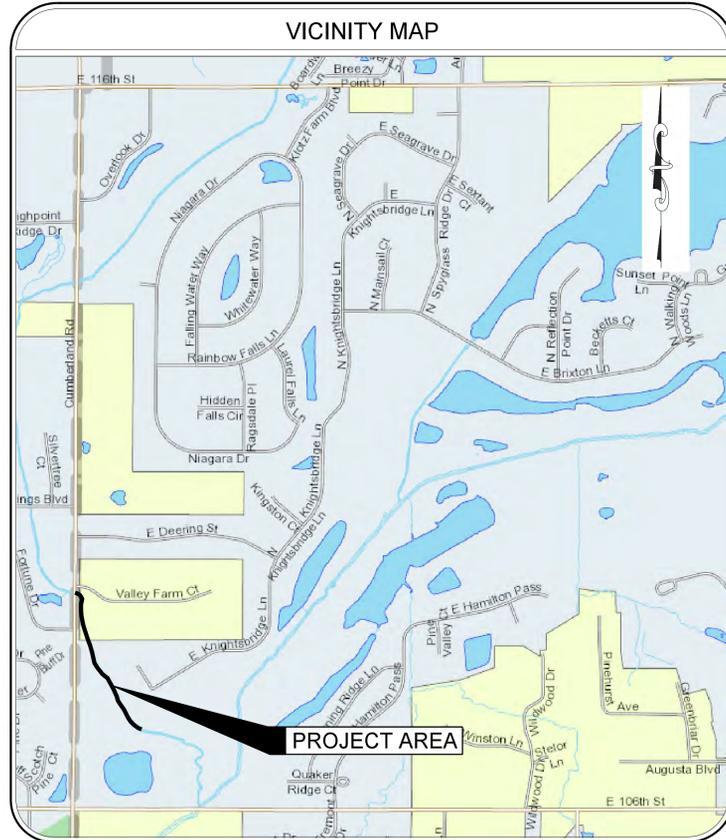


Jerry L. Liston
New Construction Inspector
Hamilton County Surveyor's Office

SAND CREEK 2-STAGE DITCH DESIGN



HAMILTON COUNTY, INDIANA



SHEET INDEX		
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3	SB1	SOIL BORING LOGS
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STORM AS-BUILT

STORM SEWER AS-BUILT STATEMENT

As-Built information for storm sewer rims are based upon above ground evidence of the existing storm sewer system. The strike through data shown on the Storm Sewers are the proposed elevations for all the structures to be placed. Said information has been replaced by the as-built information per elevations collected in the field on November 18, 2014.

Nathan D. Harris
Nathan D. Harris
Registered Land Surveyor No. 21200023



PREPARED BY:

CB CHRISTOPHER B. BURKE ENGINEERING, LLC
PNC Center, Suite 1368 South
115 West Washington Street
Indianapolis, Indiana 46204
Phone: (317) 266-8000 FAX: (317) 632-3306

HAMILTON COUNTY DRAINAGE BOARD

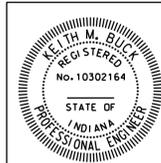
Christine Altman, President
Mark Heirbrandt, Vice President
Steven C. Dillinger, Member
Don Silvey, Alternate
Jerry Rulon, Alternate
Steven A. Holt, Alternate
Mark Heirbrandt, Big Cicero Creek Board Member
Michael Howard, Attorney
Kenton C. Ward, Surveyor
Lynette Mosbaugh, Executive Secretary

PREPARED FOR:

HAMILTON COUNTY DRAINAGE BOARD
1 HAMILTON COUNTY SQUARE
SUITE 188
NOBLESVILLE, IN 46060

UTILITIES	
<p>WATER: CITIZENS ENERGY GROUP CHRIS BRUMFIELD cbrumfield@citizensenergygroup.com 1220 WATERWAY BOULEVARD INDIANAPOLIS, IN 46202 317-263-6382</p> <p>GAS: VECTREN ENERGY DON PERDUE dperdue@vectren.com P.O. BOX 1700 NOBLESVILLE, IN 46061 317-776-5534</p> <p>ELECTRIC: DUKE ENERGY CINDY ROWLAND Cindy.Rowland@duke-energy.com 100 S. MILL CREEK ROAD NOBLESVILLE, IN 46062 317-776-5341</p> <p>CUMBERLAND RD.: TOWN OF FISHERS ERIC PETHTEL pethtele@fishers.in.us ONE MUNICIPAL DRIVE FISHERS, IN 46038 317-595-3160</p>	<p>SANITARY: HSE UTILITIES JIM HART jhart@samcoinc.us 11905 LAKESIDE DRIVE FISHERS, IN 46038 317-577-1150</p> <p>TELEPHONE: AT&T INDIANA BRIAN CRAVENS bc3785@att.com 5858 N. COLLEGE AVENUE INDIANAPOLIS, IN 46220 317-252-4267</p> <p>CABLE TV: COMCAST CABLEVISION MATTHEW STRINGER matthew_stringer@cable.comcast.com 5350 E. 65th STREET INDIANAPOLIS, IN 46220 317-275-6493</p> <p>VALLEY FARMS COURT: HAMILTON COUNTY HIGHWAY DEPT. ROBB CHADWELL Robb.chadwell@hamiltoncounty.in.gov 1700 S. 10th STREET NOBLESVILLE, IN 46060 317-773-7770</p>

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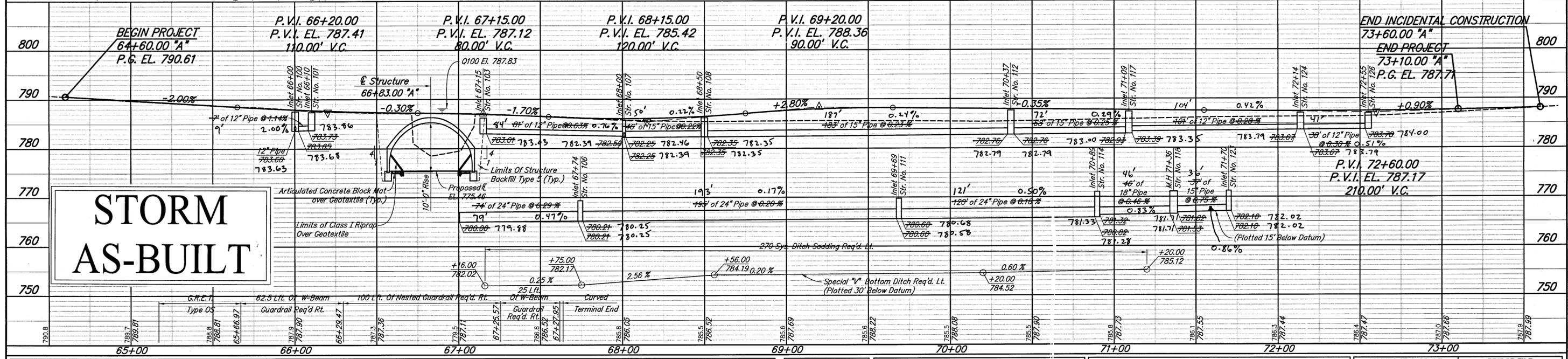
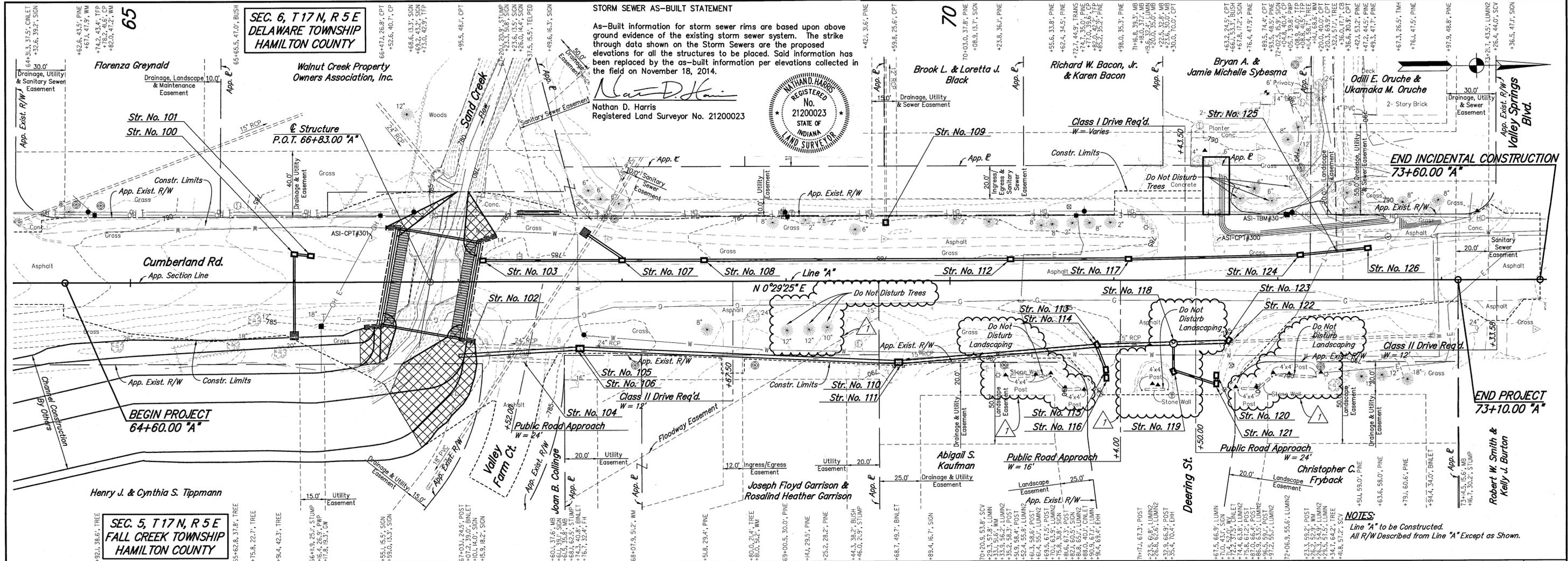


Keith M. Buck
ENGINEER
JUNE 14, 2013
DATE

SAND CREEK 2-STAGE DITCH DESIGN
HAMILTON COUNTY, INDIANA

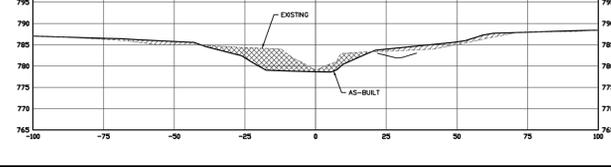
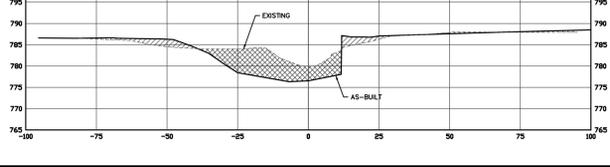
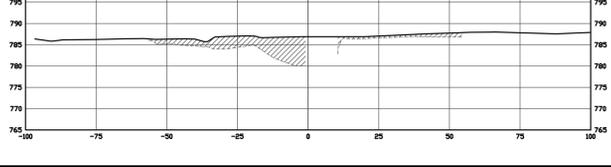
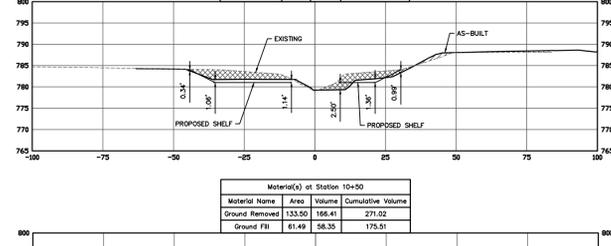
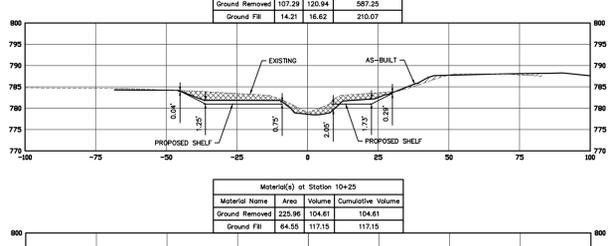
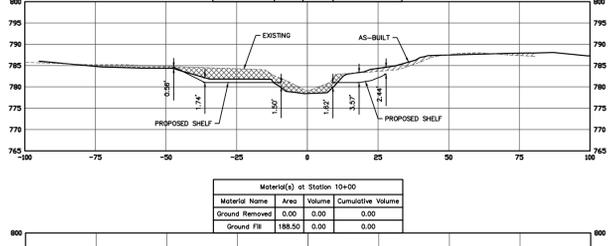
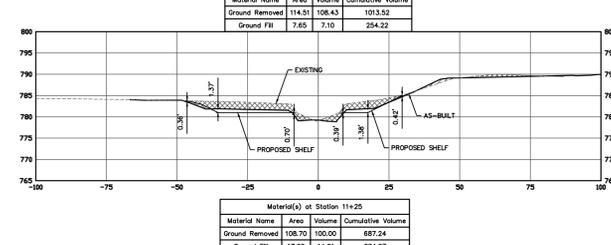
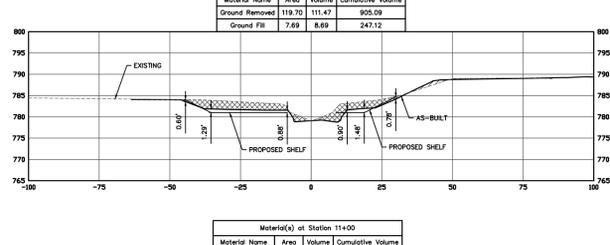
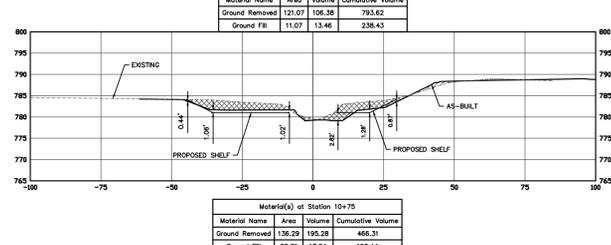
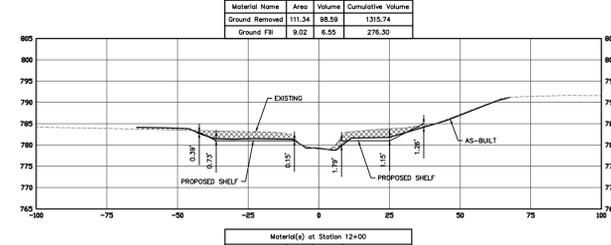
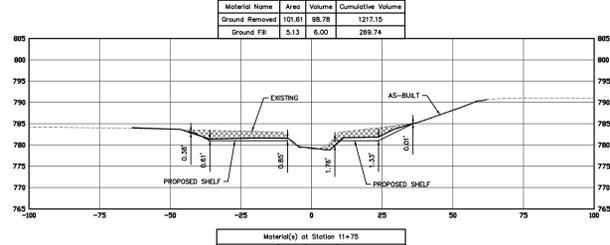
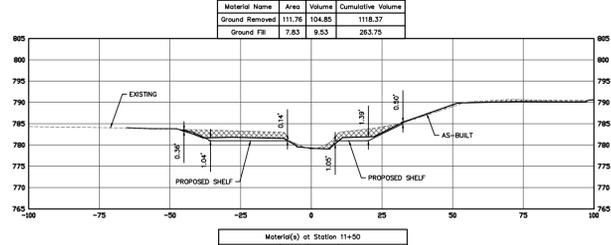
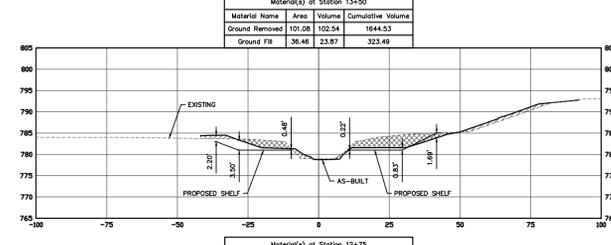
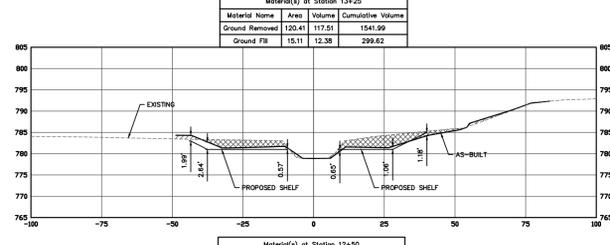
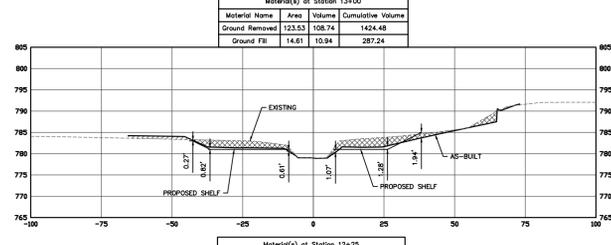
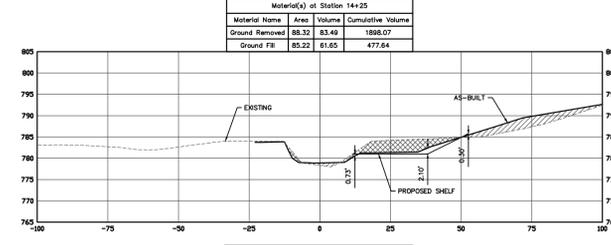
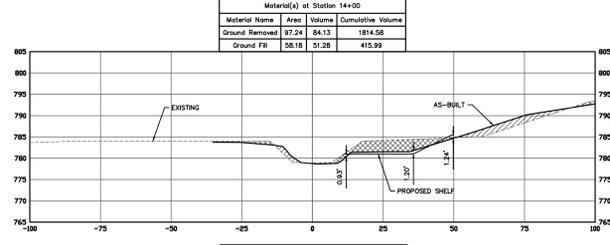
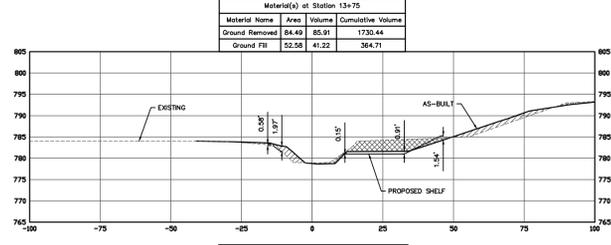
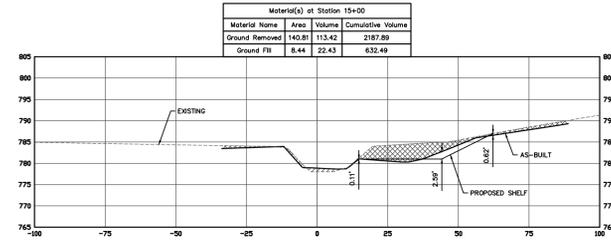
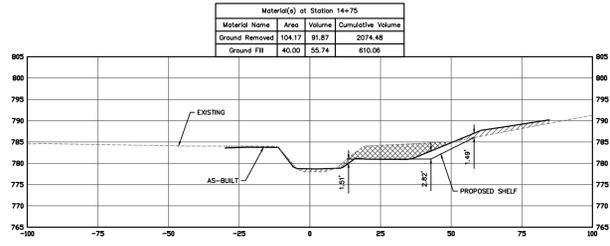
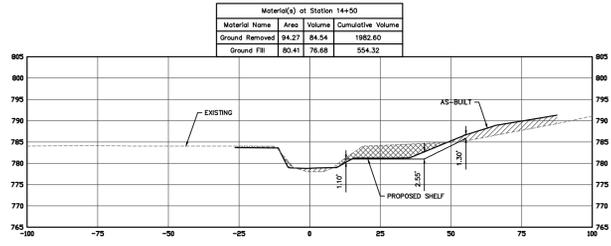
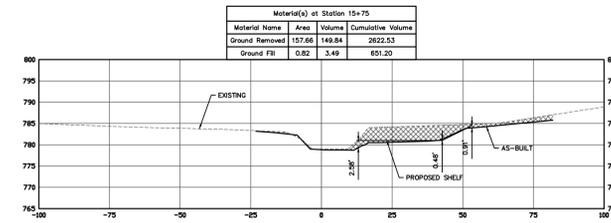
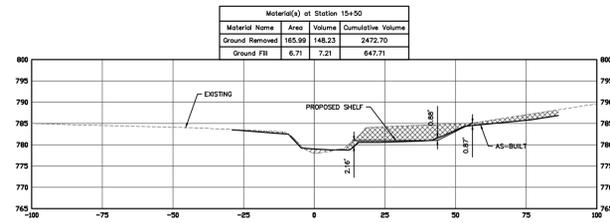
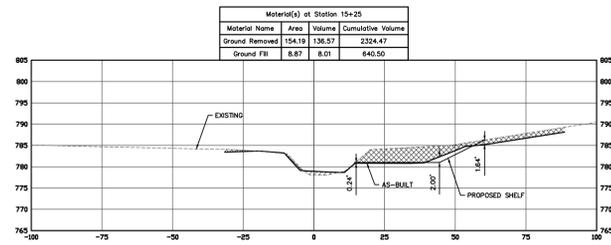


INDIANA STATE LAW (IC8-1-26) REQUIRES THAT ANYONE ENGAGED IN EXCAVATION USING MECHANIZED EQUIPMENT MUST CALL AT LEAST TWO (2) FULL WORKING DAYS PRIOR TO THE START OF THEIR PROJECT. INDIANA UNDERGROUND PLANT PROTECTION SERVICE (IUPPS) OFFERS A ONE-POINT CONTACT TO REACH MEMBER UTILITIES TO NOTIFY THEM OF YOUR PROPOSED EXCAVATION. VISIT IUPPS.ORG



<p>04/23/2014 Revised, Added Note</p>	<p>Benchmarks: (NAVD 88) DNR TBM SC1 - RR Spike W/Aluminum Tag Stamped "SC 1 1989" found in South Face of NE Bridge Seat, 15' E of E of Cumberland Rd. & 38' S of Valley Farm Court El. 785.515 DNR TBM SC2 - Galvanized Anchor Cap W/Tag Stamped "SC 2 1989" set in SW Corner Bridge Seat, 15' W of E of Cumberland Rd. El. 788.962 ASI-TBM#30 - R.R. Spike Set in E. Side CP#890-7521, @ W side Cumberland Rd. & 50'± N of Deering St. El. 788.02</p>		<p>RECOMMENDED FOR APPROVAL</p> <p><i>Alison M. Krupski</i> 04/01/2014 DESIGN ENGINEER DATE</p>	<p>HAMILTON COUNTY HIGHWAY DEPARTMENT</p>	<p>HORIZONTAL SCALE 1"=30'</p>	<p>BRIDGE FILE HAMILTON CO. BRIDGE NO.163</p>
			<p>DESIGNED: AMK DRAWN: RJC</p> <p>CHECKED: BNM CHECKED: BNM</p>	<p>PLAN AND PROFILE LINE "A"</p>	<p>VERTICAL SCALE 1"=10'</p>	<p>DESIGNATION NO.</p>
				<p>SURVEY BOOK</p>	<p>SHEETS 9 of 34</p>	
				<p>CONTRACT</p>	<p>PROJECT NO.</p>	

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 PLOT SCALE: 1:1
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NOTE:
 ALL DIMENSIONS SHOWN AS DISTANCE
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 POINTS.

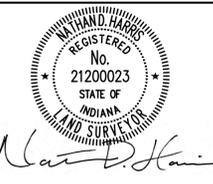
Prepared for:
HAMILTON COUNTY



**SAND CREEK
 2-STAGE DITCH**

**HAMILTON COUNTY
 BRIDGE #163**

FISHERS, IN



CERTIFIED BY

ISSUANCE INDEX	
DATE:	12/19/2014
PROJECT PHASE:	----

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2012.00579

**AS-BUILT CROSS
 SECTIONS**



**SAND CREEK
2-STAGE DITCH**

**HAMILTON COUNTY
BRIDGE #163**

FISHERS, IN

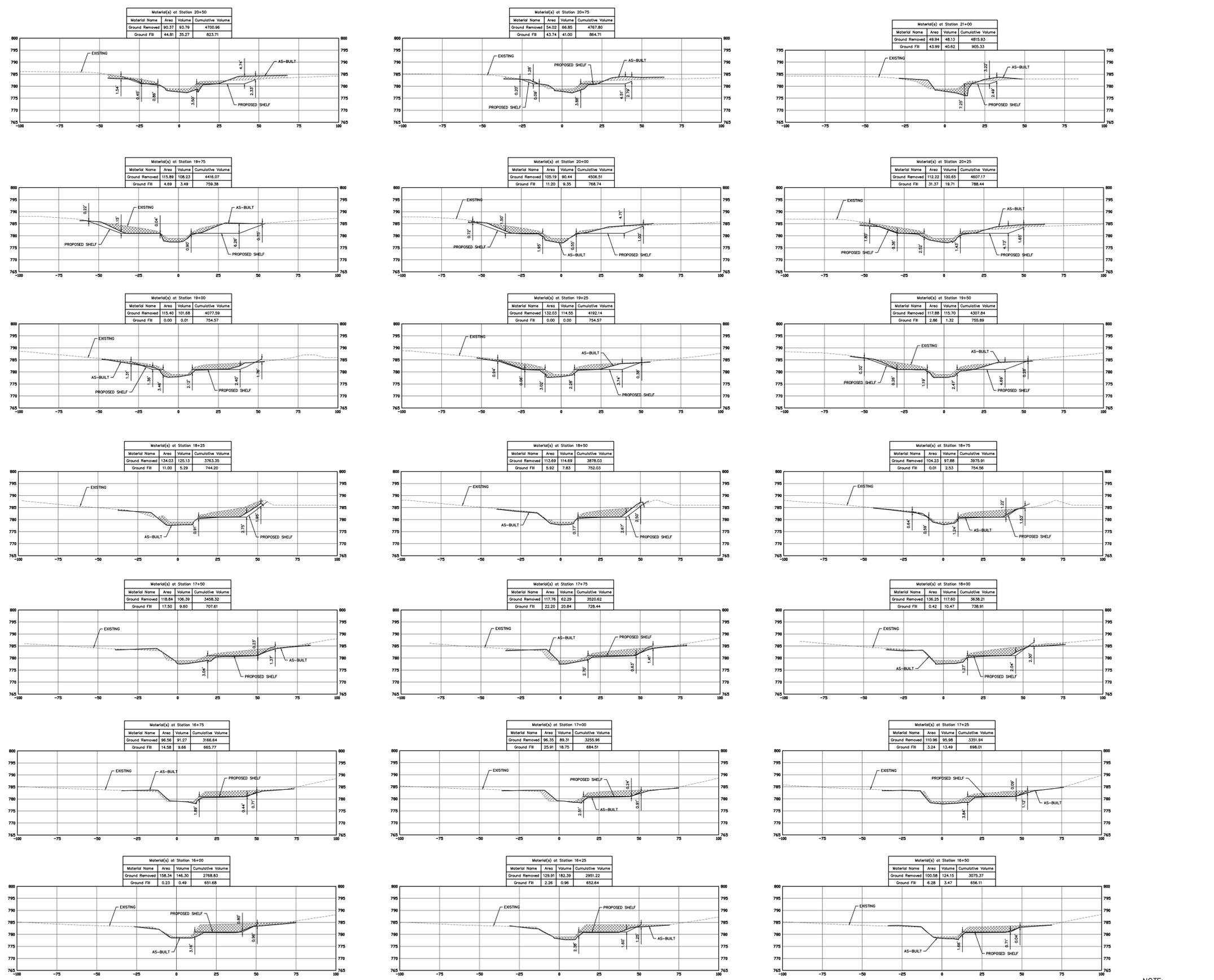


CERTIFIED BY

ISSUANCE INDEX		
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**ASBUILT CROSS
SECTIONS**



NOTE:
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POINTS.

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