

SURVEYOR'S OFFICE
Hamilton County

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

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

January 3, 2013

To: Hamilton County Drainage Board

Re: Clara Knotts Drain, 103rd Street and Pennsylvania Street Intersection Reconstruction

Attached are petition, plans, and other information for the proposed reconstruction of the Clara Knotts Drain, for the 103rd Street and Pennsylvania Street intersection reconstruction. The reconstruction was petitioned by the City of Carmel. During the road reconstruction, the City of Carmel was asked to extend the Clara Knotts Drain in the ROW to the north end of parcel 16-13-11-02-15-001.000, so that Phase 2 of the Clara Knotts Reconstruction could take place without cutting the new roadway. This proposed Phase 2 Arm would provide drainage to Delaware Street and Washington Boulevard from 103rd to 106th Street. This project affected the Clara Knotts Drain – Reconstruction Phase 1 and Meridian Corporate Plaza Arms with the intersection reconstruction project. Those changes are as follows:

Clara Knotts Drain

Clara Knotts Drain – Meridian Corporate Plaza Arm: The road project installed all new storm sewers at the round-a-bout intersection of 103rd Street and Pennsylvania Street and removed the old regulated drain system. The removal starts at Str. 673 of the Meridian Corporate Plaza Arm, as shown on the plans prepared by Paul I. Cripe, Inc., having job number 86391-20000, and dated July 29, 1988. The pipes from Str. 673 to Str. 672, Str. 671 to Str. 671, Str 671 to Str. 707 of the Clara Knotts Reconstruction Phase 1 Arm, Str. 674 to Str. 707, and Str. 675 to Str. 706 of the Clara Knotts Reconstruction Phase 1 Arm, shall be removed. This will remove a total of 207' of drain from the Clara Knotts – Meridian Corporate Plaza Arm.

Clara Knotts Drain – Reconstruction Phase 1 Arm: The road project removed Structure 707 of the Reconstruction Phase 1 Arm, as shown on the plans prepared by Weihe Engineering, Inc., having job number 85-530, and dated March 28, 1986. This structure will be replaced with the new drainage system for the intersection improvements. This results in 0 feet being removed from the Clara Knotts – Reconstruction Phase 1 Arm.

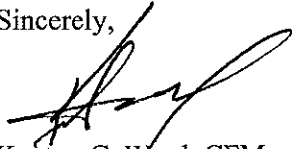
Clara Knotts Drain – 103rd Street and Pennsylvania Street Intersection Improvements Arm: The new drain shall begin at Str. 9, then to Str. 20, and Str. 32, as shown on Sheets 3, 4, and 9 of the as-built plans prepared by Crossroad Engineers, PC, and having Carmel Project Number 06-18. Also to be included is the drain from Str. 14 to Str. 9, Str. 71 to Str. 12, Str 12 to Str. 9, Str. 74 to Str. 73, and Str. 73 to Str. 9. This is a total of 986 feet of new storm sewer drain of various sizes from 12” RCP to 36” RCP.

The road project will add 779 feet to the total length of the Clara Knotts Drain.

The cost of the reconstruction is to be paid by the City of Carmel. Because the project is to be paid by the petitioner and is being completed within the right of way owned by the City of Carmel, the project falls under the requirements as set out in IC 36-9-27-52.5. Therefore, a hearing with 30 day notice is not required for the petition.

I recommend the Board approve the project at this time.

Sincerely,



Kenton C. Ward, CFM
Hamilton County Surveyor

KCW/pll

HAMILTON COUNTY DRAINAGE BOARD
NOBLESVILLE, INDIANA

IN RE: Clara Knotts Drain)
Hamilton County, Indiana)

PETITION FOR RELOCATION AND RECONSTRUCTION

City of Carmel (hereinafter "Petitioner"),
hereby petitions the Hamilton County Drainage Board for authority to relocate and improve a
section of the Clara Knotts Drain, and in support of
said petition advises the Board that:

1. Petitioner owns real estate through which a portion of the Clara Knotts Drain runs.
2. Petitioner plans to develop its real estate with roads, buildings, utilities, storm drains, sanitary sewers and other structures.
3. Petitioner's proposed development of its real estate will require relocation and reconstruction of a portion of the Clara Knotts Drain, as specifically shown on engineering plans and specifications filed with the Hamilton County Surveyor.
4. The work necessary for the proposed relocation and reconstruction will be undertaken at the sole expense of the Petitioner and such work will result in substantial improvement to the Clara Knotts Drain, without cost to other property owners on the watershed of the Clara Knotts Drain.
5. Proposed relocation and reconstruction will not adversely affect other land owners within the drainage shed.
6. Petitioner requests approval of the proposed relocation and reconstruction under IC 36-9-27-52.5.

WHEREFORE, Petitioner requests that an Order issued from the Hamilton County Drainage Board authorizing relocation and reconstruction of the Clara Knotts Drain, in conformance with applicable law and plans and specifications on file with the Hamilton County Surveyor.

M. T. McBride
Signed
MICHAEL T. MCBRIDE
Printed CARMEL CITY ENGINEER



HAMILTON COUNTY DRAINAGE BOARD
NOBLESVILLE, INDIANA

IN RE: Clara Knotts Drain)
Hamilton County, Indiana)

PETITION FOR RELOCATION AND RECONSTRUCTION

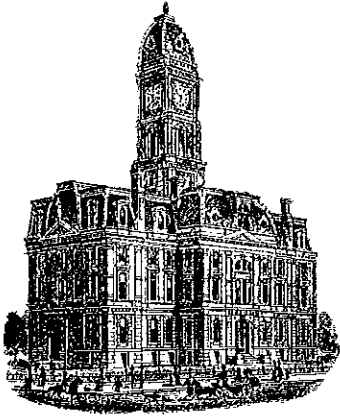
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section of the Clara Knotts Drain, and in support of
said petition advises the Board that:

1. Petitioner owns real estate through which a portion of the Clara Knotts Drain runs.
2. Petitioner plans to develop its real estate with roads, buildings, utilities, storm drains, sanitary sewers and other structures.
3. Petitioner's proposed development of its real estate will require relocation and reconstruction of a portion of the Clara Knotts Drain, as specifically shown on engineering plans and specifications filed with the Hamilton County Surveyor.
4. The work necessary for the proposed relocation and reconstruction will be undertaken at the sole expense of the Petitioner and such work will result in substantial improvement to the Clara Knotts Drain, without cost to other property owners on the watershed of the Clara Knotts Drain.
5. Proposed relocation and reconstruction will not adversely affect other land owners within the drainage shed.
6. Petitioner requests approval of the proposed relocation and reconstruction under IC 36-9-27-52.5.

WHEREFORE, Petitioner requests that an Order issued from the Hamilton County Drainage Board authorizing relocation and reconstruction of the Clara Knotts Drain, in conformance with applicable law and plans and specifications on file with the Hamilton County Surveyor.

M.T. McBride
Signed

MICHAEL T. McBRIDE
Printed CARMEL CITY ENGINEER



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

August 8, 2013

Re: Clara Knotts Drain: 103rd St. & Pennsylvania St. Intersection Reconstruction

Attached are as-builts and other information for 103rd Street and Pennsylvania St. Intersection Reconstruction. An inspection of the drainage facilities for this section has been made and the facilities were found to be complete and acceptable.

During construction, changes were made to the drain, which will alter the plans submitted with my report for this drain-dated January 3, 2013. The report was approved by the Board at the hearing held July 8, 2013. (See Drainage Board Minutes Book 14)

The changes are as follows:

The 36" RCP was shortened from 596 feet to 595 feet.

The length of the drain due to the changes described above is now **985 feet**.

The project removed 207 feet of existing drain. Therefore, there was a total of 778 feet of drain added to the overall watershed length.

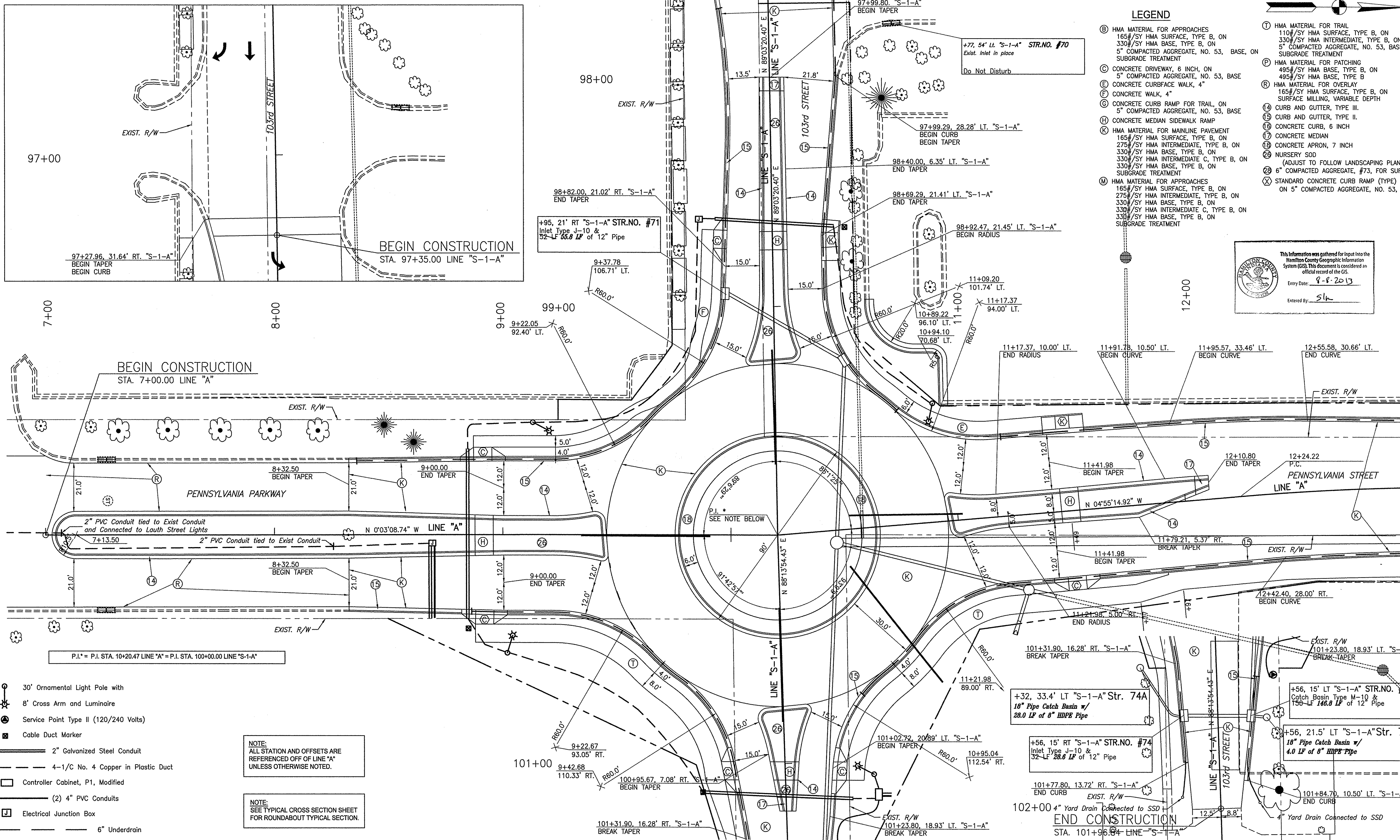
The work for this project took place in the road right of way. There a non-enforcement was not needed. The City of Carmel paid for the construction of the project. Thus, no sureties were required for the work.

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

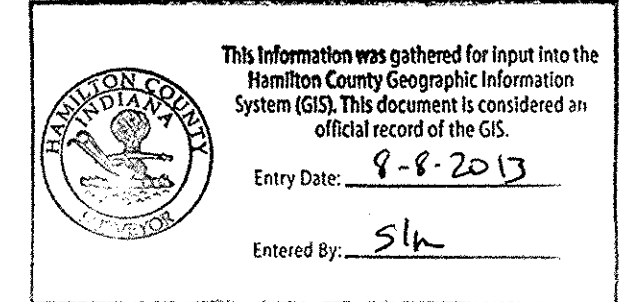
Sincerely,

Kenton C. Ward, CFM
Hamilton County Surveyor

KCW/slm



- ### LEGEND
- (B) HMA MATERIAL FOR APPROACHES
110#/SY HMA SURFACE, TYPE B, ON
330#/SY HMA BASE, TYPE B, ON
5" COMPACTED AGGREGATE, NO. 53, BASE, ON
SUBGRADE TREATMENT
 - (C) CONCRETE DRIVEWAY, 6 INCH, ON
5" COMPACTED AGGREGATE, NO. 53, BASE
 - (E) CONCRETE CURBFACE WALK, 4"
 - (F) CONCRETE WALK, 4"
 - (G) CONCRETE CURB RAMP FOR TRAIL, ON
5" COMPACTED AGGREGATE, NO. 53, BASE
 - (H) CONCRETE MEDIAN SIDEWALK RAMP
 - (K) HMA MATERIAL FOR MAINLINE PAVEMENT
165#/SY HMA SURFACE, TYPE B, ON
275#/SY HMA INTERMEDIATE, TYPE B, ON
330#/SY HMA BASE, TYPE B, ON
330#/SY HMA INTERMEDIATE C, TYPE B, ON
330#/SY HMA BASE, TYPE B, ON
SUBGRADE TREATMENT
 - (M) HMA MATERIAL FOR APPROACHES
165#/SY HMA SURFACE, TYPE B, ON
275#/SY HMA INTERMEDIATE, TYPE B, ON
330#/SY HMA BASE, TYPE B, ON
330#/SY HMA INTERMEDIATE C, TYPE B, ON
330#/SY HMA BASE, TYPE B, ON
SUBGRADE TREATMENT
 - (1) HMA MATERIAL FOR TRAIL
110#/SY HMA SURFACE, TYPE B, ON
330#/SY HMA INTERMEDIATE, TYPE B, ON
5" COMPACTED AGGREGATE, NO. 53, BASE, ON
SUBGRADE TREATMENT
 - (P) HMA MATERIAL FOR PATCHING
495#/SY HMA BASE, TYPE B, ON
495#/SY HMA BASE, TYPE B
 - (R) HMA MATERIAL FOR OVERLAY
165#/SY HMA SURFACE, TYPE B, ON
SURFACE MILLING, VARIABLE DEPTH
 - (14) CURB AND GUTTER, TYPE III.
 - (15) CURB AND GUTTER, TYPE II.
 - (16) CONCRETE CURB, 6 INCH
 - (17) CONCRETE MEDIAN
 - (18) CONCRETE APRON, 7 INCH
(ADJUST TO FOLLOW LANDSCAPING PLAN)
 - (28) 6" COMPACTED AGGREGATE, #73, FOR SURFACE
ON 5" COMPACTED AGGREGATE, NO. 53, BASE
 - (X) STANDARD CONCRETE CURB RAMP (TYPE)



- 30' Ornamental Light Pole with
8' Cross Arm and Luminaire
- Service Point Type II (120/240 Volts)
- Cable Duct Marker
- 2" Galvanized Steel Conduit
- - - 4-1/C No. 4 Copper in Plastic Duct
- Controller Cabinet, P1, Modified
- (2) 4" PVC Conduits
- ⌋ Electrical Junction Box
- - - 6" Underdrain

NOTE:
ALL STATION AND OFFSETS ARE
REFERENCED OFF OF LINE "A"
UNLESS OTHERWISE NOTED.

NOTE:
SEE TYPICAL CROSS SECTION SHEET
FOR ROUNDABOUT TYPICAL SECTION.

P.I.* = P.I. STA. 10+20.47 LINE "A" = P.I. STA. 100+00.00 LINE "S-1-A"

gai consultants
941 Chestnut Hills Parkway
Fort Wayne, Indiana 46814
Tel: (260)625-4155 Fax: (260)625-3305
www.gaiconsultants.com

CROSSROAD ENGINEERS, P.C.
Transportation & Development Consultants
301 W. 10th St., Suite 200, Fort Wayne, IN 46802

AS BUILT PLANS BY:
RECOMMENDED FOR APPROVAL: CROSSROAD ENGINEERS, P.C.
DESIGN ENGINEER: _____ DATE: _____

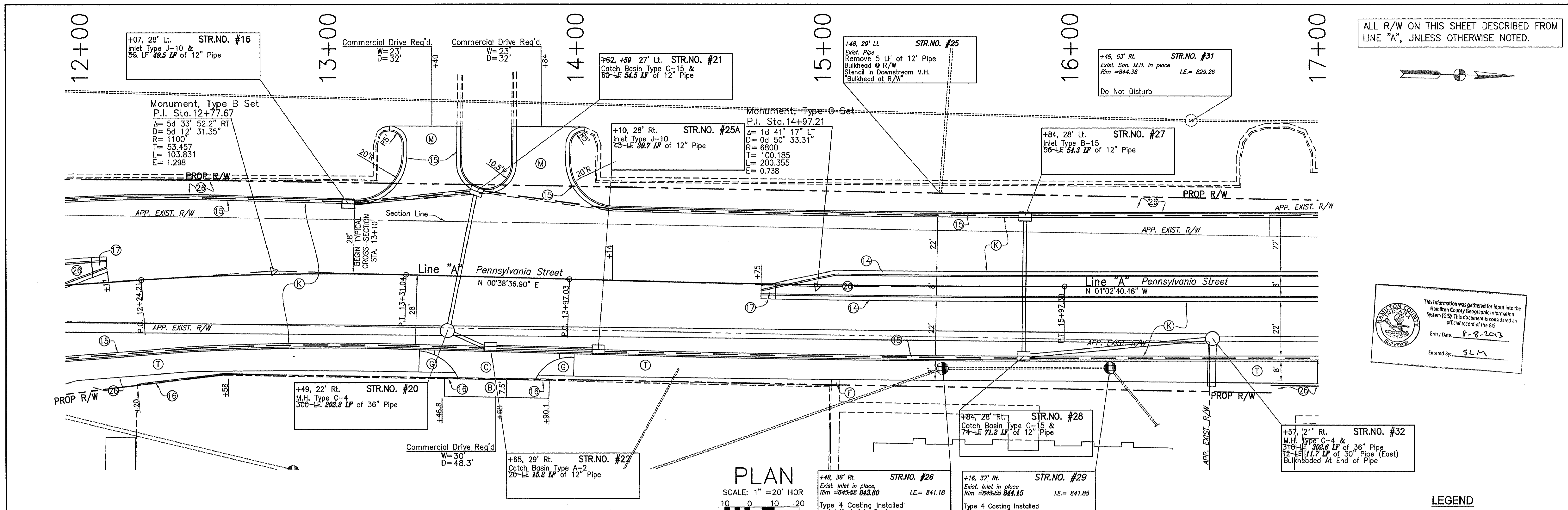
DESIGNED: _____ DRAWN: JD

CHECKED: _____ CHECKED: LS

CITY OF CARMEL
PENNSYLVANIA STREET IMPROVEMENTS
AS BUILT PLANS

ROUNDABOUT DETAIL
103RD STREET

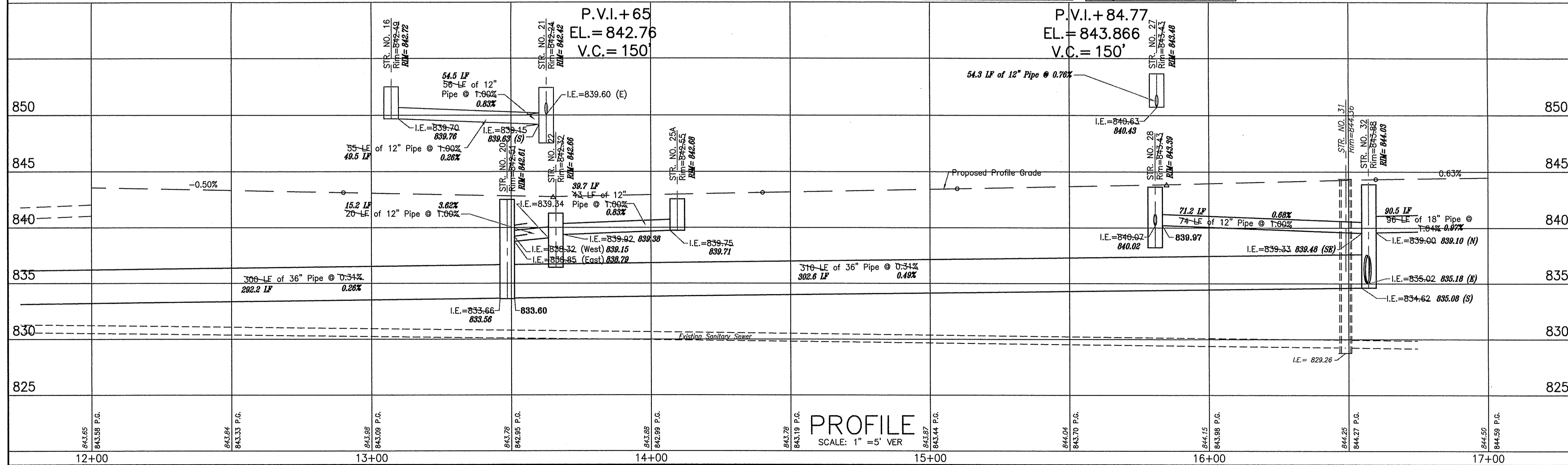
HORIZONTAL SCALE 1" = 20'	HORIZONTAL SCALE 1" = 40'
VERTICAL SCALE N/A	VERTICAL SCALE N/A
SURVEY BY: SHEETS	
CROSSROAD ENGINEERS	9 of 11
AS BUILT PLANS BY: CARMEL PROJECT	
CROSSROAD ENGINEERS 06-18	



ALL R/W ON THIS SHEET DESCRIBED FROM LINE "A", UNLESS OTHERWISE NOTED.

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: 8-2-2013
Entered by: SLM

PLAN
SCALE: 1" = 20' HOR



PROFILE
SCALE: 1" = 5' VER

- LEGEND**
- ⊙ HMA MATERIAL FOR APPROACHES
165#/SY HMA SURFACE, TYPE B, ON
330#/SY HMA BASE, TYPE B, ON
5" COMPACTED AGGREGATE, NO. 53, BASE, ON
SUBGRADE TREATMENT
 - ⊙ CONCRETE DRIVEWAY, 6 INCH, ON
5" COMPACTED AGGREGATE, NO. 53, BASE
 - ⊙ CONCRETE CURBFACE WALK, 4"
 - ⊙ CONCRETE WALK, 4"
 - ⊙ CONCRETE CURB RAMP FOR TRAIL, ON
5" COMPACTED AGGREGATE, NO. 53, BASE
 - ⊙ CONCRETE MEDIAN SIDEWALK RAMP
 - ⊙ HMA MATERIAL FOR MAINLINE PAVEMENT
165#/SY HMA SURFACE, TYPE B, ON
275#/SY HMA INTERMEDIATE, TYPE B, ON
330#/SY HMA BASE, TYPE B, ON
330#/SY HMA INTERMEDIATE C, TYPE B, ON
330#/SY HMA BASE, TYPE B, ON
SUBGRADE TREATMENT
 - ⊙ HMA MATERIAL FOR APPROACHES
165#/SY HMA SURFACE, TYPE B, ON
275#/SY HMA INTERMEDIATE, TYPE B, ON
330#/SY HMA BASE, TYPE B, ON
330#/SY HMA INTERMEDIATE C, TYPE B, ON
330#/SY HMA BASE, TYPE B, ON
SUBGRADE TREATMENT
 - ⊙ HMA MATERIAL FOR TRAIL
110#/SY HMA SURFACE, TYPE B, ON
330#/SY HMA INTERMEDIATE, TYPE B, ON
5" COMPACTED AGGREGATE, NO. 53, BASE, ON
SUBGRADE TREATMENT
 - ⊙ HMA MATERIAL FOR PATCHING
495#/SY HMA BASE, TYPE B, ON
495#/SY HMA BASE, TYPE B
 - ⊙ HMA MATERIAL FOR OVERLAY
165#/SY HMA SURFACE, TYPE B, ON
SURFACE MILLING, VARIABLE DEPTH
 - ⊙ CURB AND GUTTER, TYPE III
 - ⊙ CURB AND GUTTER, TYPE II
 - ⊙ CONCRETE CURB, 6 INCH
 - ⊙ CONCRETE MEDIAN
 - ⊙ CONCRETE APRON, 7 INCH
 - ⊙ NURSERY SOD
(ADJUST TO FOLLOW LANDSCAPING PLAN)
 - ⊙ 6" COMPACTED AGGREGATE, #73, FOR SURFACE
 - ⊙ STANDARD CONCRETE CURB RAMP (TYPE)
ON 5" COMPACTED AGGREGATE, NO. 53, BASE

REVISIONS

DATE	REVISION
2006-10-16	REVISED PROPOSED STORM SEWER

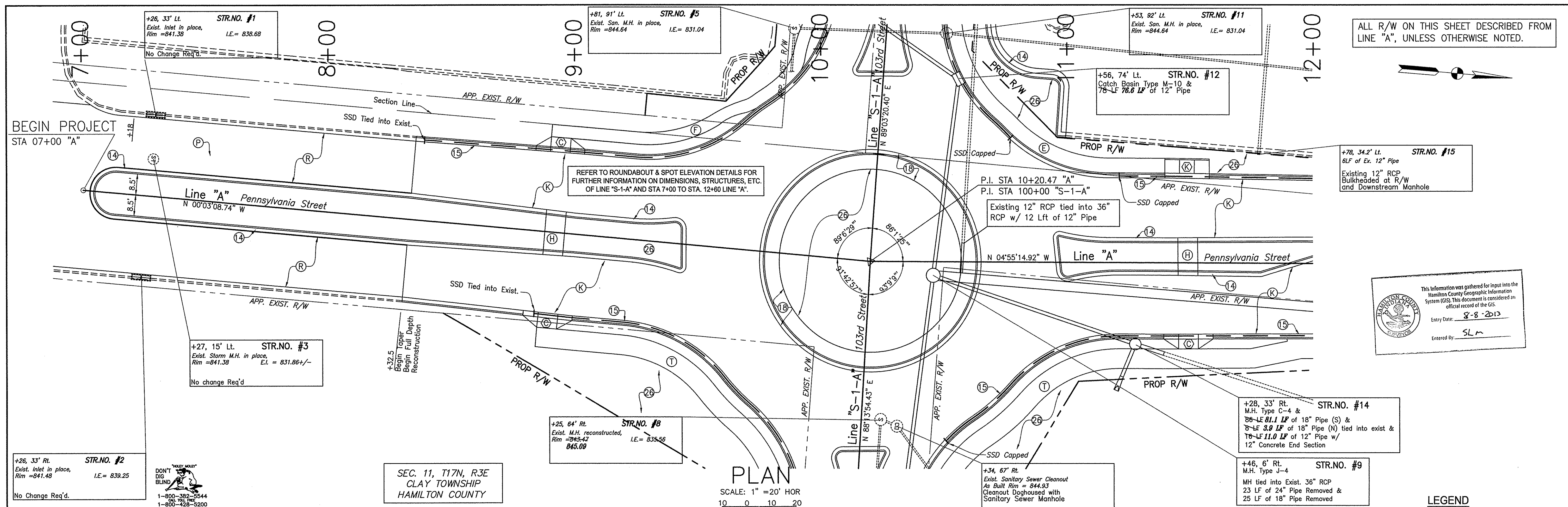
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CROSSROAD ENGINEERS, P.C.
Transportation & Development Consultants
2733 N. 42nd Ave. #200
Fort Wayne, IN 46814

AS BUILT PLANS BY:
RECOMMENDED FOR APPROVAL: CROSSROAD ENGINEERS, P.C.
DESIGNED: _____ DRAWN: JD
CHECKED: _____ CHECKED: LS

CITY OF CARMEL
PENNSYLVANIA STREET IMPROVEMENTS
AS BUILT PLANS
PLAN & PROFILE
LINE "A" - SHEET 2

HORIZONTAL SCALE	HORIZONTAL SCALE
1"=20'	1"=40'
VERTICAL SCALE	VERTICAL SCALE
1"=5'	1"=10'
SURVEY BY:	SHEETS
CROSSROAD ENGINEERS	4 of 11
AS BUILT PLANS BY:	CARMEL PROJECT
CROSSROAD ENGINEERS	06-18



ALL R/W ON THIS SHEET DESCRIBED FROM LINE "A", UNLESS OTHERWISE NOTED.

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: 8-8-2013
 Entered By: SLM

PLAN
 SCALE: 1" = 20' HOR

STR. NO. #2
 +26, 33' Rt.
 Exist. Inlet in place,
 Rim = 841.48
 I.E. = 839.25
 No Change Req'd.



SEC. 11, T17N, R3E
 CLAY TOWNSHIP
 HAMILTON COUNTY

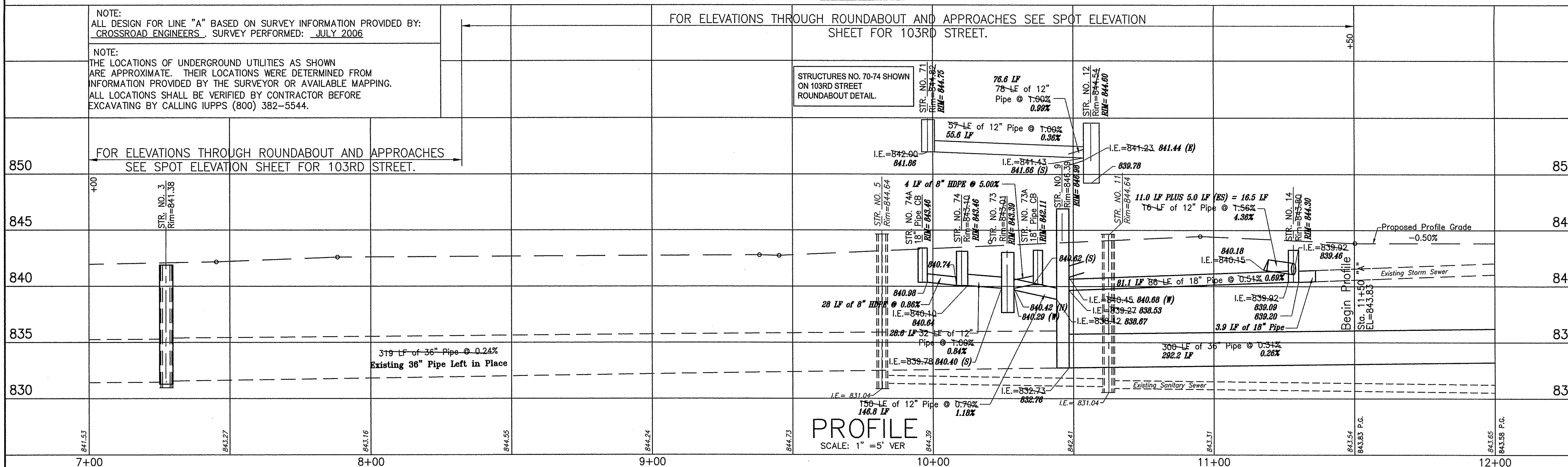
STR. NO. #8
 +25, 64' Rt.
 Exist. M.H. reconstructed,
 Rim = 845.42
 845.09
 I.E. = 835.56

STR. NO. #9
 +46, 6' Rt.
 M.H. Type J-4
 MH tied into Exist. 36" RCP
 23 LF of 24" Pipe Removed &
 25 LF of 18" Pipe Removed

STR. NO. #14
 +28, 33' Rt.
 M.H. Type C-4 &
 88-LF 81.1 LF of 18" Pipe (S) &
 8-LF 8.9 LF of 18" Pipe (N) tied into exist &
 76-LF 11.0 LF of 12" Pipe w/
 12" Concrete End Section

LEGEND

- (B) HMA MATERIAL FOR APPROACHES
 165#/SY HMA SURFACE, TYPE B, ON
 330#/SY HMA BASE, TYPE B, ON
 5" COMPACTED AGGREGATE, NO. 53, BASE, ON
 SUBGRADE TREATMENT
- (C) CONCRETE DRIVEWAY, 6 INCH, ON
 5" COMPACTED AGGREGATE, NO. 53, BASE
- (E) CONCRETE CURBFACE WALK, 4"
- (F) CONCRETE WALK, 4"
- (G) CONCRETE CURB RAMP FOR TRAIL, ON
 5" COMPACTED AGGREGATE, NO. 53, BASE
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 165#/SY HMA SURFACE, TYPE B, ON
 275#/SY HMA INTERMEDIATE, TYPE B, ON
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 330#/SY HMA INTERMEDIATE C, TYPE B, ON
 330#/SY HMA BASE, TYPE B, ON
 SUBGRADE TREATMENT
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 165#/SY HMA SURFACE, TYPE B, ON
 275#/SY HMA INTERMEDIATE, TYPE B, ON
 330#/SY HMA BASE, TYPE B, ON
 330#/SY HMA INTERMEDIATE C, TYPE B, ON
 330#/SY HMA BASE, TYPE B, ON
 SUBGRADE TREATMENT
- (T) HMA MATERIAL FOR TRAIL
 110#/SY HMA SURFACE, TYPE B, ON
 330#/SY HMA INTERMEDIATE, TYPE B, ON
 5" COMPACTED AGGREGATE, NO. 53, BASE, ON
 SUBGRADE TREATMENT
- (P) HMA MATERIAL FOR PATCHING
 495#/SY HMA BASE, TYPE B, ON
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- (R) HMA MATERIAL FOR OVERLAY
 165#/SY HMA SURFACE, TYPE B, ON
 SURFACE MILLING, VARIABLE DEPTH
- (14) CURB AND GUTTER, TYPE III
- (15) CURB AND GUTTER, TYPE II
- (16) CONCRETE CURB, 6 INCH
- (17) CONCRETE MEDIAN
- (18) CONCRETE APRON, 7 INCH
- (25) NURSERY SOD
 (ADJUST TO FOLLOW LANDSCAPING PLAN)
- (26) 6" COMPACTED AGGREGATE, #73, FOR SURFACE
- (X) STANDARD CONCRETE CURB RAMP (TYPE)
 ON 5" COMPACTED AGGREGATE, NO. 53, BASE



PROFILE
 SCALE: 1" = 5' VER



RECOMMENDED FOR APPROVAL: AS BUILT PLANS BY: CROSSROAD ENGINEERS, P.C.
 DESIGN ENGINEER: _____ DATE: _____
 DRAWN: JD
 CHECKED: _____
 CHECKED: LS

CITY OF CARMEL
 PENNSYLVANIA STREET IMPROVEMENTS
 AS BUILT PLANS
 PLAN & PROFILE
 LINE "A" - SHEET 1

HORIZONTAL SCALE 1"=20'	HORIZONTAL SCALE 1"=40'
VERTICAL SCALE 1"=5'	VERTICAL SCALE 1"=10'
SURVEY BY: CROSSROAD ENGINEERS	SHEETS 3 of 11
AS BUILT PLANS BY: CROSSROAD ENGINEERS	CARMEL PROJECT 06-18