



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

March 4, 2009

To: Hamilton County Drainage Board

Re: West Leg Thistlewaite Drain – Spicewood Garden Apartments Arm

Attached is a reconstruction petition filed by HAND, Inc. along with an outlet request, plans, and calculations for the West Leg of the Thistlewaite Drain – Spicewood Garden Apartments Arm to be located in Adams Township, parcels #01-01-31-00-00-027.000 and #02-01-31-00-00-026.000. I have reviewed the submittals and petition and have found each to be in proper form. The cost of constructing the West Leg of the Thistlewaite Drain – Spicewood Garden Apartments Arm will be paid for by HAND, Inc.

I have made a personal inspection of the land described in the petition. Upon doing so, I believe that the drain is practicable, will improve the public health, and be of public utility and that the costs, damages and expenses of the proposed drain will be less than the benefits accruing to the owners of land likely to be benefited. The drain will consist of the following:

15" RCP from structure 10 of the West Leg of the Thistlewaite Drain Reconstruction to structure #741, 15" RCP from structure #741 to structure #740.

The new drain will be 572 feet in length.

The plan for the drain is shown on the construction drawings for the Spicewood Garden Apartments prepared by EMH&T, Job number 2008-1399, dated November 10, 2008.

The engineer's estimate for the offsite drainage improvements for this project is \$68,618.83. The required surety of 120% of the engineer's estimate is \$82,342.60.

The petitioner has submitted surety for the proposed drain at this time. The surety is in the form of an Irrevocable Standby Letter of Credit is as follows:

Agent: Old Nation Bank
Date: February 2, 2010
Standby Letter of Credit No. 2002846362
For: Thistlewaite Drain Extension Storm Sewer
Amount: \$83,000.00

I recommend that upon approval of the above proposed drain that the Board reduce the statutory 150' regulated drain easement to 30 feet in width. The easements will be as described in the following documents recorded in the Hamilton County Recorders Office as Instrument Numbers #2009006853 and #2009009445. Both easements are to be Regulated Drainage Easements.

I recommend the Board set a hearing for this proposed drain for April 27, 2009.

A handwritten signature in black ink, appearing to read 'K. Ward', with a large, sweeping flourish extending to the right.

Kenton C. Ward, CFM
Hamilton County Surveyor

KCW/pll

To: Hamilton County Drainage Board

Date: 11/20/08

Re: West Leg of Thistlewaite Drain

HAND, INC. (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 West Leg of Thistlewaite Drain in order to serve the property of the

petitioner. The petitioner, in support of said petition, advises the Board that:

1. The West Leg of Thistlewaite 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

Printed

Mark Winzenreid

MARK Winzenreid President,
HAND, INC.

**SPICEWOOD GARDEN APARTMENTS - SHERIDAN, IN
OFF-SITE DRAINAGE IMPROVEMENTS
THISTLEWAITE REGULATED DRAIN EXTENSION (WEST LEG)
OPINION OF PROBABLE COST**

11/20/2008

ELEMENTS ENGINEERING, LLC

Item Description	Total Qty	Unit	Unit Cost	Subtotal	Total
EROSION CONTROL					
Temporary Silt Fence	1,200	LFT	\$3.00	\$3,600.00	
Seed Mixture, A	2,000	SYS	\$1.00	\$2,000.00	
Erosion Control Inlet Protection	2	EACH	\$200.00	\$400.00	
					\$6,000.00
DRAINAGE					
Pipe Backfill	425	CYS	\$25.00	\$10,625.00	
Pipe Backfill - "B" Borrow	18	CYS	\$35.00	\$630.00	
Pipe, Storm Sewer, 15 in.	572	LFT	\$55.00	\$31,460.00	
Inlet, Type 'E' with Casting	1	EACH	\$1,850.00	\$1,850.00	
Manhole, 4' Diam., 6' Deep	1	EACH	\$2,700.00	\$2,700.00	
Connect 15" pipe to Existing Storm MH	1	LSUM	\$2,500.00	\$2,500.00	
					\$49,765.00

SUB-TOTAL =	\$55,765.00
CONSTRUCTION ENGINEERING (2%)	\$1,115.30
MOBILIZATION & DEMOBILIZATION (5%)	\$2,788.25
SUB-TOTAL =	\$59,668.55
15% CONTINGENCY	\$8,950.28
TOTAL	\$68,618.83

11/20/2008

BEFORE THE HAMILTON COUNTY DRAINAGE BOARD
IN THE MATTER OF

West Leg Thistlewaite Drain, Spicewood Garden Apartments Arm

NOTICE

To Whom It May Concern and: Vasquez, Michael R.

Notice is hereby given of the hearing of the Hamilton County Drainage Board concerning the reconstruction of the **West Leg Thistlewaite Drain, Spicewood Garden Apartments Arm** on **April 27, 2009**, at **9:15 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 **West Leg Thistlewaite Drain, Spicewood
Garden Apartments Arm**

NOTICE

Notice is hereby given that the Hamilton County Drainage Board at its regular meeting **April 27, 2009** 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: Steven C. Dillinger
PRESIDENT

ATTEST: Lynette Mosbaugh
SECRETARY

STATE OF INDIANA)
) ss:
COUNTY OF HAMILTON)

BEFORE THE HAMILTON COUNTY
DRAINAGE BOARD
NOBLESVILLE, INDIANA

IN THE MATTER OF THE
RECONSTRUCTION OF THE
West Leg Thistlewaite Drain, Spicewood Garden Apartments Arm

FINDINGS AND ORDER FOR RECONSTRUCTION

The matter of the proposed Reconstruction of the *West Leg Thistlewaite Drain, Spicewood Garden Apartments Arm* came before the Hamilton County Drainage Board for hearing on *April 27, 2009*, 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 *West Leg Thistlewaite Drain, Spicewood Garden Apartments Arm* 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

CERTIFICATE OF COMPLETION AND COMPLIANCE

To: Hamilton County Surveyor

Re: THISTLEWATE REGULATED DRAIN EXTENSION
AS PART OF SPICEWOOD GARDEN APARTMENTS
PHASE I, SUMMER 2009

I hereby certify that:

1. I am a Registered ~~and Surveyor~~ Engineer in the State of Indiana.
2. I am familiar with the plans and specifications for the above referenced subdivision.
3. I have personally observed and supervised the completion of the drainage facilities for the above referenced subdivision.
4. The drainage facilities within the above referenced subdivision to the best of my knowledge, information and belief have been installed and completed in conformity with all plans and specifications.
5. The drainage facilities within the above referenced subdivision to the best of my knowledge, information and belief have been correctly represented on the Record Drawings, Digital Record Drawings and the Structure Data Spreadsheet.

Signature: Jennifer L. Roberts Date: 06 OCT 09

Type or Print Name: JENNIFER L. ROBERTS

Business Address: ELEMENTS ENGINEERING, LLC

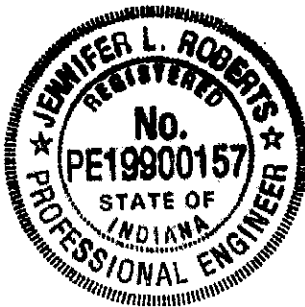
6213 BEHNER WAY INDIANAPOLIS, IN 46250

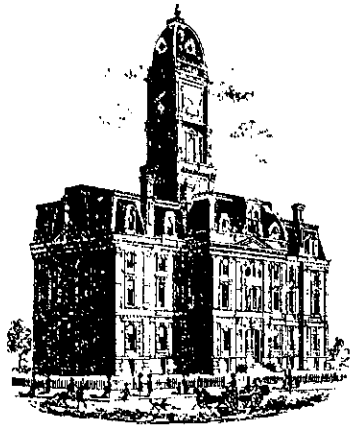
Telephone Number: (317) 490-7054

SEAL

INDIANA REGISTRATION NUMBER

PE19900157





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

March 9, 2010

Re: West Leg Thistlewaite: Spicewood Garden Apartments Arm

Attached are as-builts, certificate of completion & compliance, and other information for Spicewood Garden Apartments. 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 March 4, 2009. The report was approved by the Board at the hearing held April 27, 2009. (See Drainage Board Minutes Book 12, Pages 13-15

The changes are as follows:

The 15" RCP was shortened from 86 feet to 83 feet and the 21" RCP was lengthened from 486 feet to 487 feet. The length of the drain due to the changes described above is now **570 feet**. It should be noted that a 10 foot stub of 15" RCP was removed with this project. The stub of pipe was tied into structure 10. Therefore, the overall watershed was lengthened by 560 feet.

The drainage easements were out lined in two drainage easement grants and recorded under instrument #'s 2009006853 and #2009009445. The following surety was guaranteed by Old Nation Bank and released by the Board on its November 9, 2009 meeting.

Bond-LC No: 2002846362

Insured For: Storm Sewers

Amount: \$83,000.00

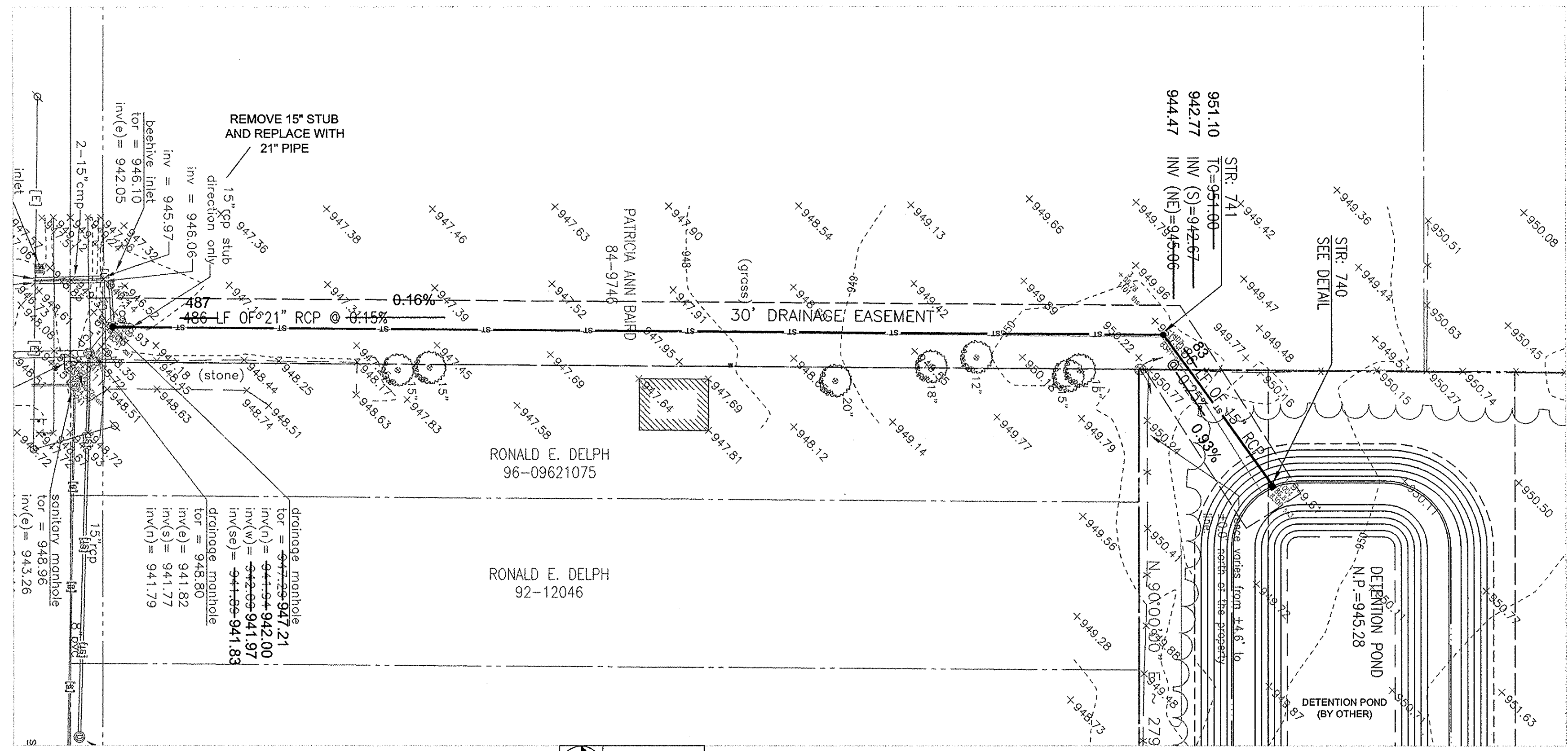
Issue Date: February 2, 2009

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

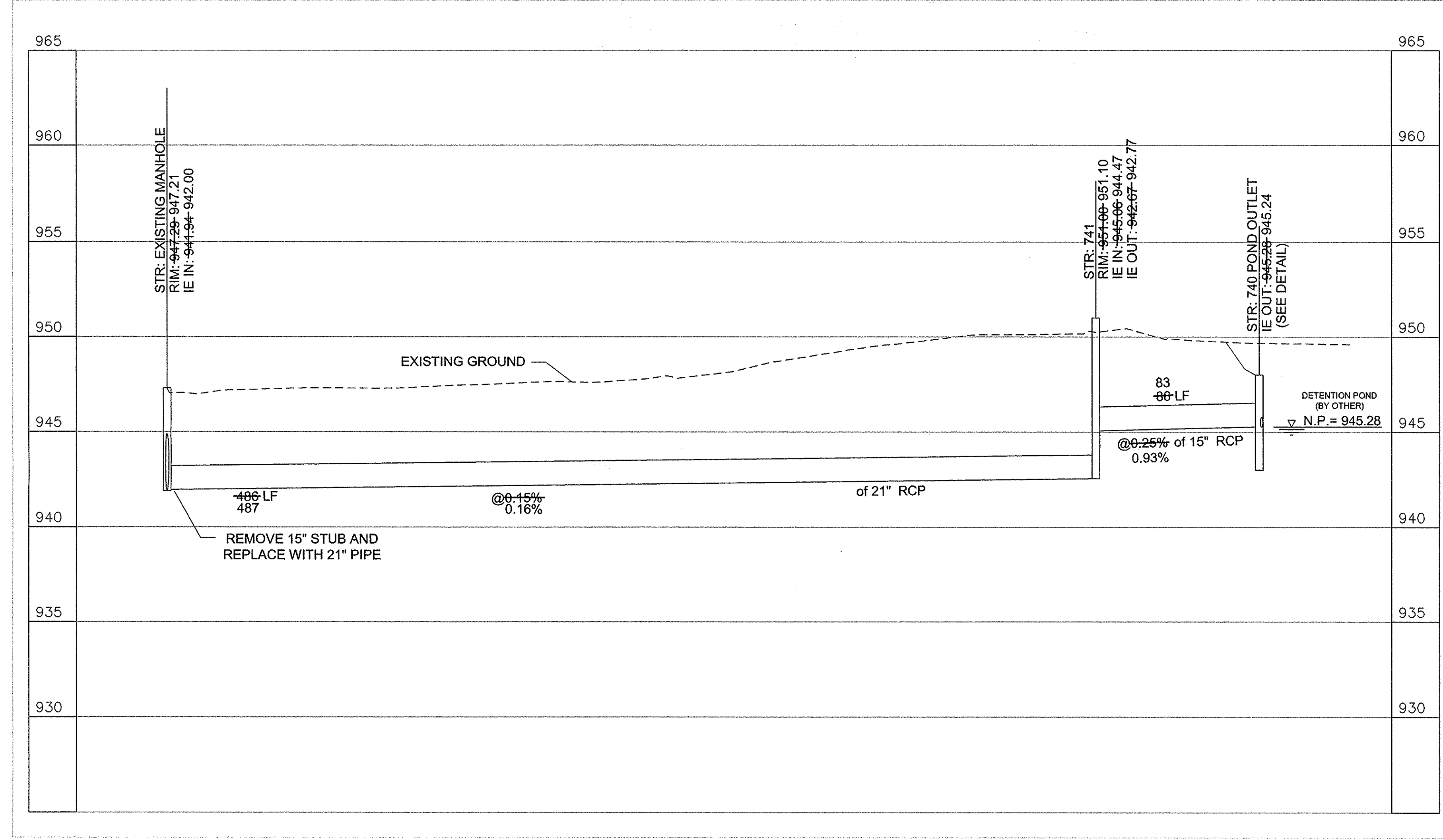
Sincerely,

Kenton C. Ward, CFM
Hamilton County Surveyor

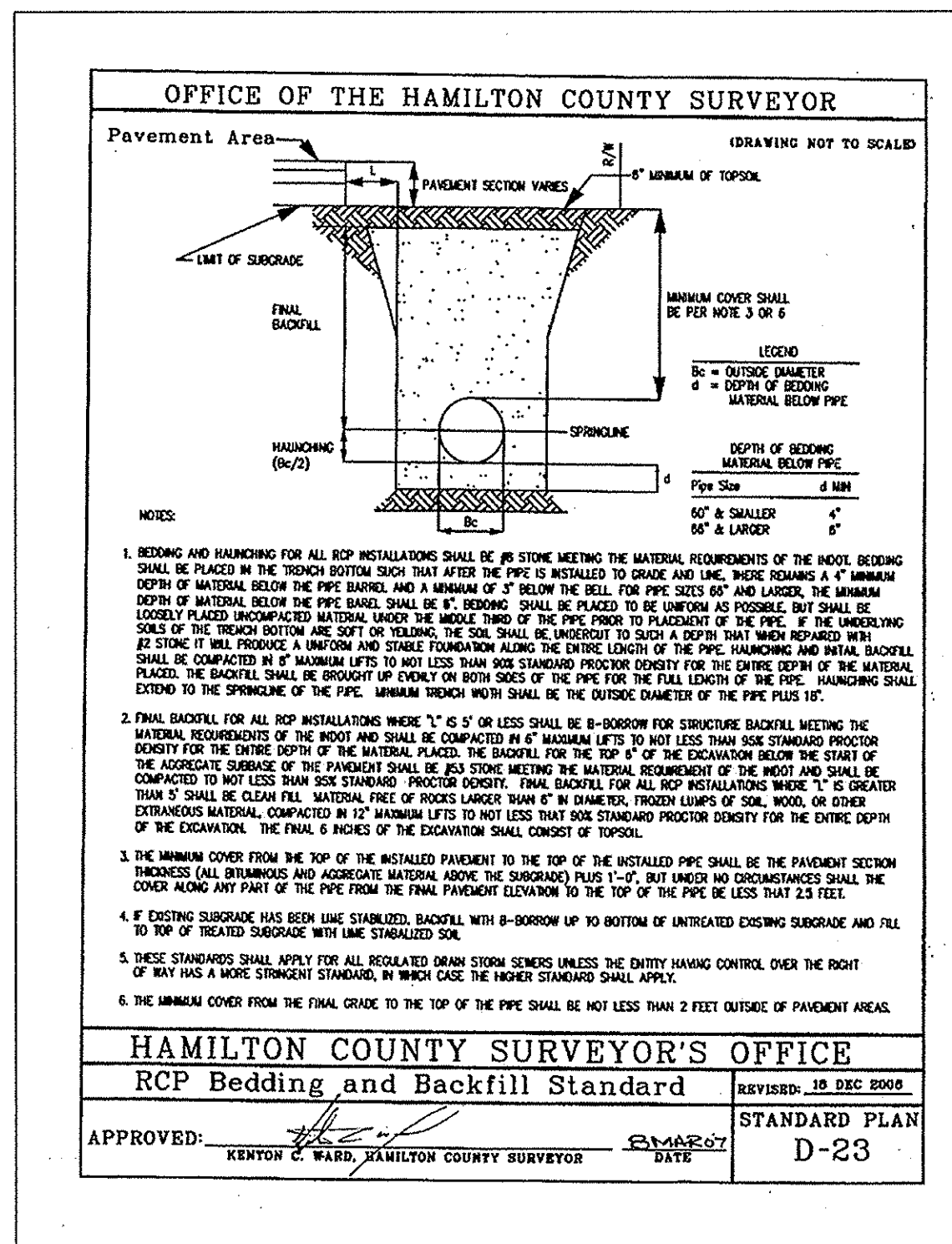
KCW/slm



STR:740 TO EXISTING MH PLAN VIEW

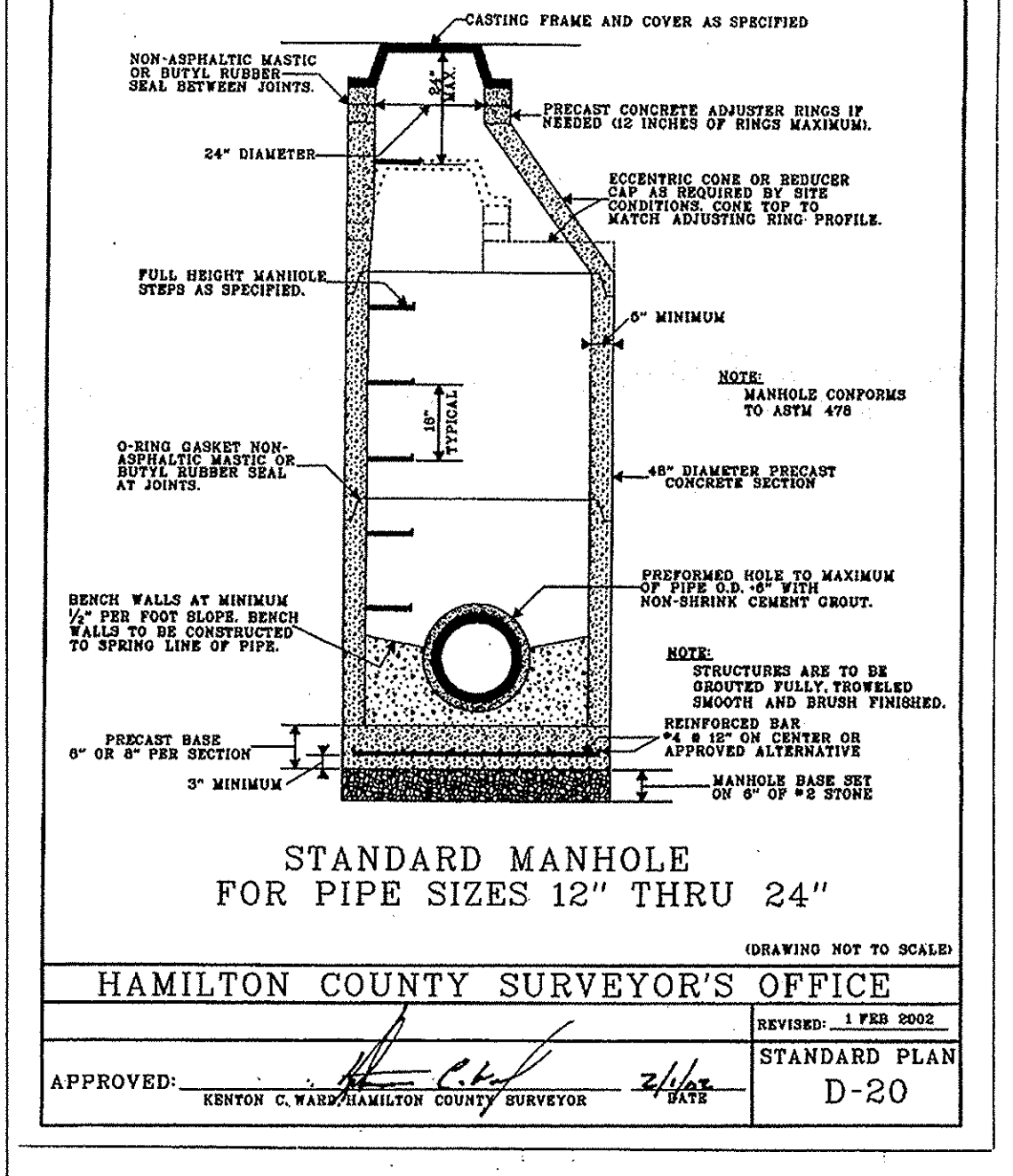


STR:740 TO EXISTING MH PROFILE



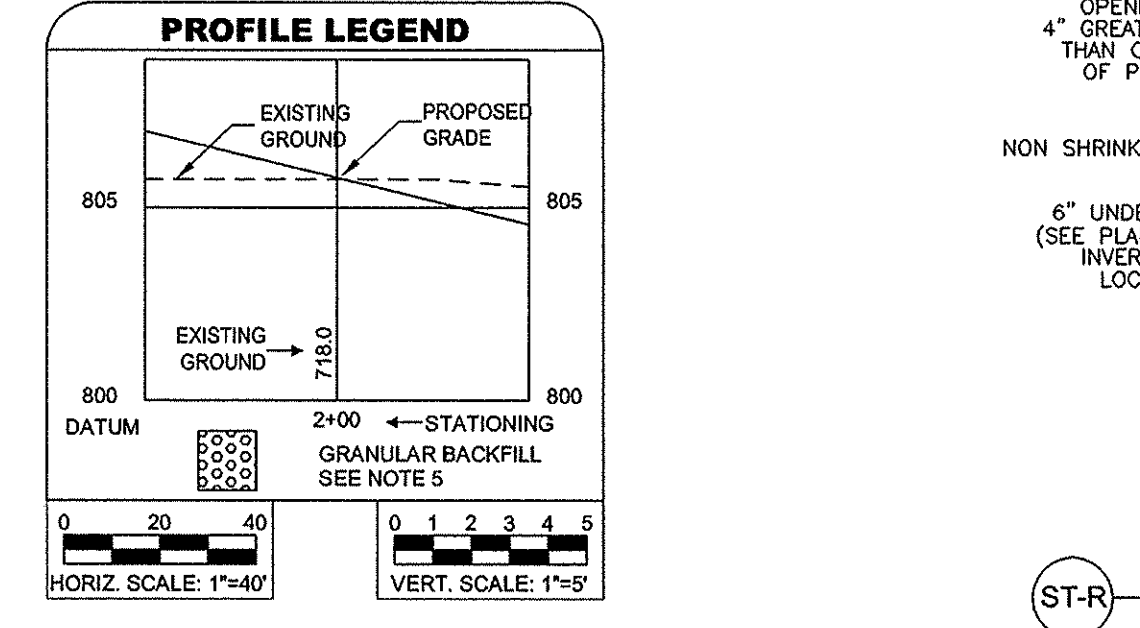
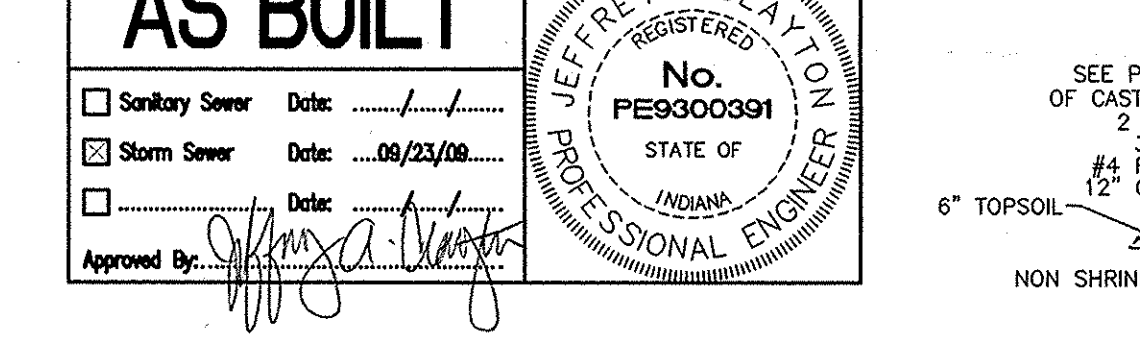
HAMILTON COUNTY SURVEYOR'S OFFICE
RCP Bedding and Backfill Standard

APPROVED: KENTON C. WARD, HAMILTON COUNTY SURVEYOR DATE: 2/14/20
STANDARD PLAN D-23



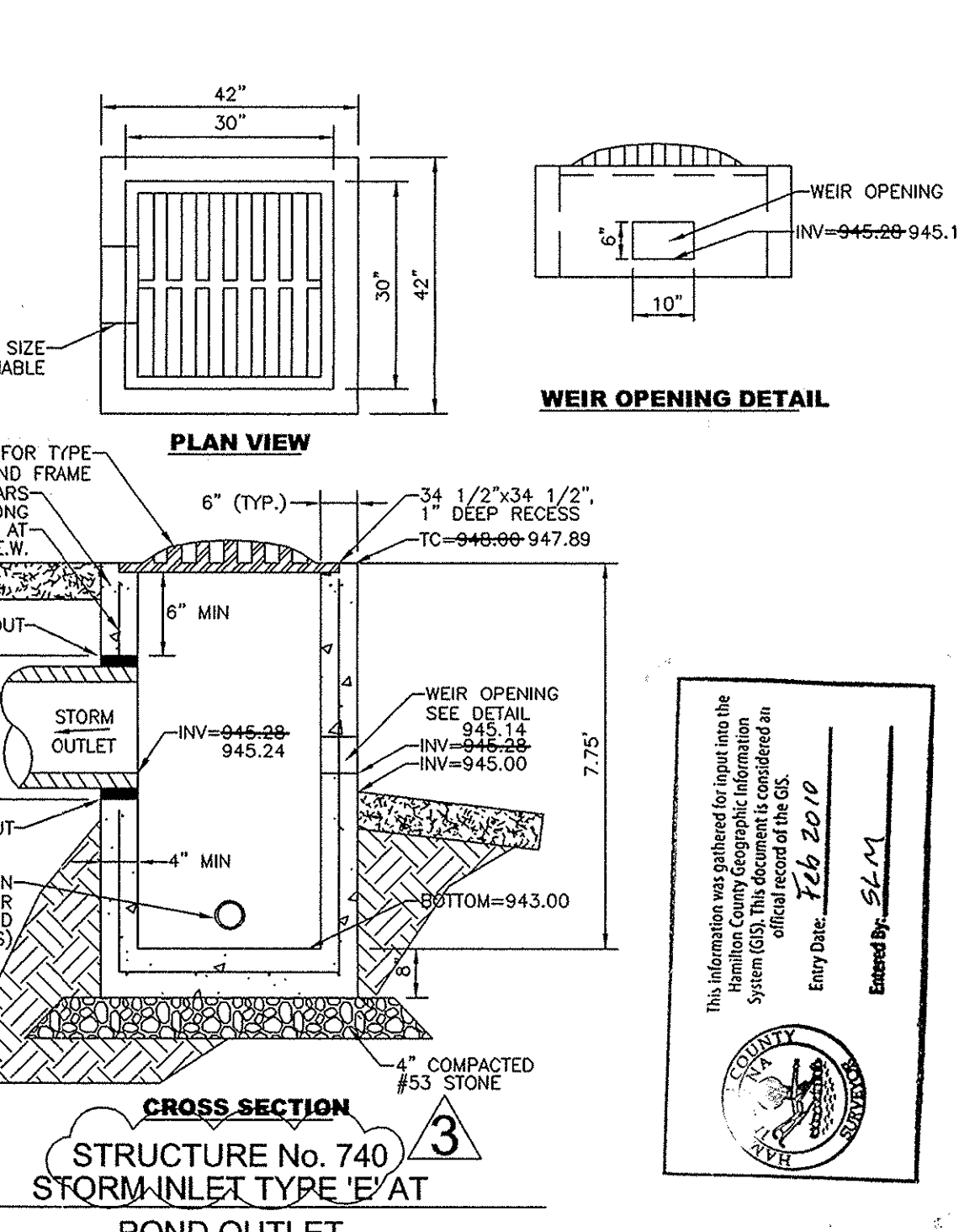
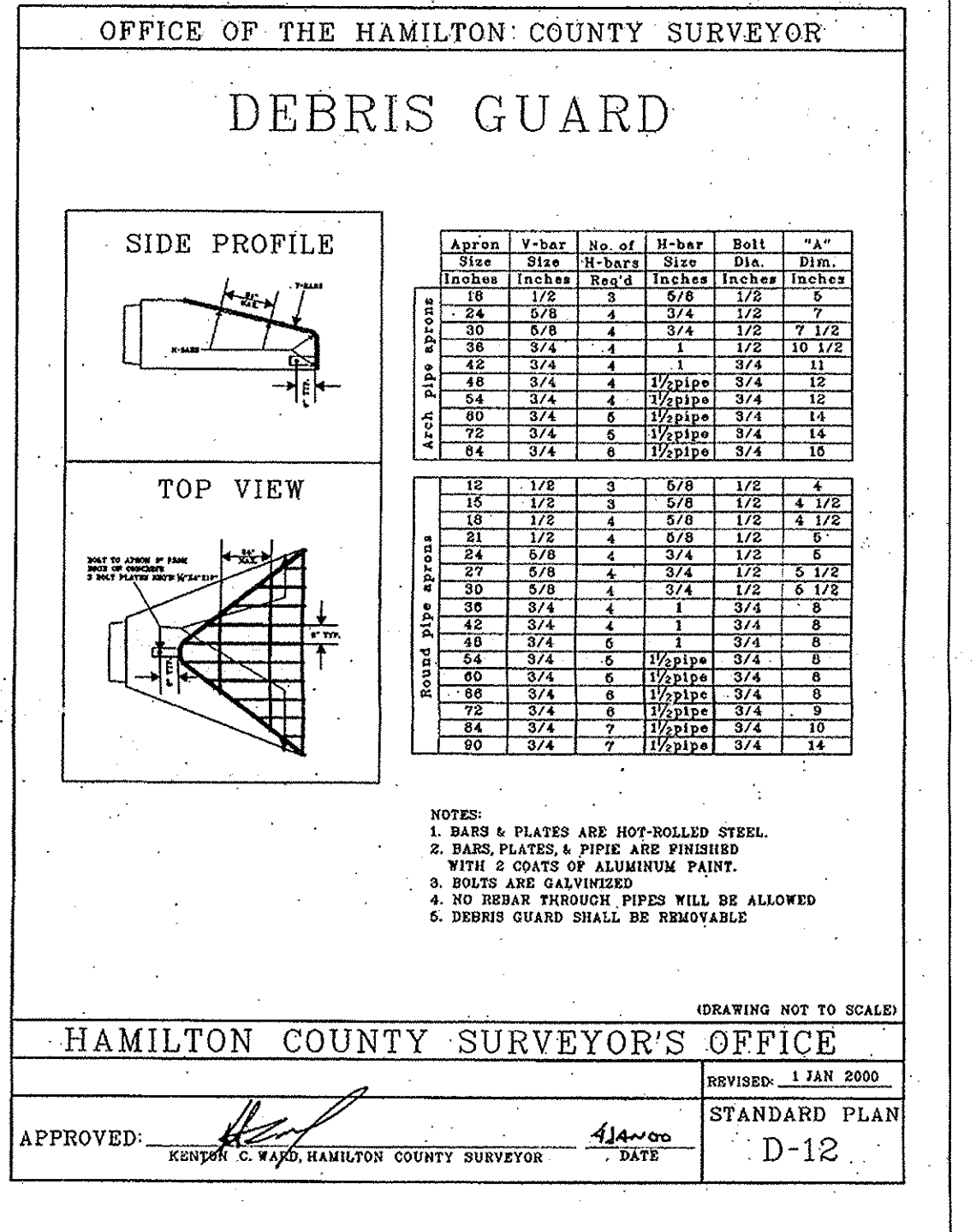
HAMILTON COUNTY SURVEYOR'S OFFICE

APPROVED: KENTON C. WARD, HAMILTON COUNTY SURVEYOR DATE: 2/14/20
STANDARD PLAN D-20



STORM SEWER NOTES

- ALL STRUCTURES SHALL HAVE CASTINGS, JOINTS, LIFT RINGS, STEPS AND PIPE CONNECTIONS WELL GROUTED, TROWELED SMOOTH AND BRUSH FINISHED.
- ALL STRUCTURES (IE: MANHOLES, INLETS) SHALL HAVE POURED FLOW LINES AND BENCH WALLS. THE FLOW LINES AND BENCH WALLS SHALL BE TROWELED SMOOTH AND BRUSH FINISHED.
- FIELD ADJUSTMENTS OF RIM ELEVATIONS OF STRUCTURES MAY BE REQUIRED TO MEET FIELD CONDITIONS. MAXIMUM HEIGHT OF ADJUSTING RINGS SHALL NOT EXCEED 12 INCHES.
- STORM STRUCTURES WITH INLET CASTINGS SHALL BE SET TO MAINTAIN A POSITIVE DRAINAGE FLOW INTO THE STRUCTURE.
- STORM PIPE INVERTS AT OUTLET STRUCTURES (IE: END SECTIONS), AND PIPE LENGTHS MAY REQUIRE FIELD ADJUSTMENTS TO MEET ACTUAL FIELD CONDITIONS.
- FULL DEPTH GRANULAR BACKFILL SHALL BE REQUIRED UNDER AND WITHIN (5) FEET OF ALL PAVED AREAS, INCLUDING CURBS, EDGE OF PAVEMENT, AND SIDEWALKS.
- PIPES LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE AND INCLUDE END SECTIONS.
- THE CONNECTION OF THE PROPOSED STORM SEWER TO AN EXISTING BRICK STRUCTURE MUST BE DONE ACCORDING TO THE FOLLOWING CONDITIONS:
 - A-) REHABILITATE AND COAT THE ENTIRE INTERIOR OF THE MANHOLE WITH NON-SHRINK GROUT.
 - B-) AT THE POINT OF CONNECTION OF THE PROPOSED PIPE, PLACE A THREE FOOT (3') DIAMETER BY A MINIMUM SIX-INCH (6") THICK, 4000-PSI CONCRETE COLLAR WITH 4x4x10 GAUGE WIRE MESH OVER THE EXTERIOR OF THE MANHOLE.
 - C-) ONCE THE CORE HAS BEEN MADE, INSTALL A RUBBER BOOT.
- SHOULD THE INTEGRITY OF THE MANHOLE BE COMPROMISED, THE ENTIRE STRUCTURE MUST BE REPLACED WITH A STANDARD MANHOLE STRUCTURE IN ACCORDANCE WITH THE CITY OF INDIANAPOLIS DEPARTMENT OF CAPITAL ASSET MANAGEMENT'S STORMWATER DESIGN AND CONSTRUCTION SPECIFICATION MANUAL.
- ALL WORK SHALL COMPLY WITH THE HAMILTON COUNTY SURVEYOR'S OFFICE STANDARDS FOR LEGAL DRAIN CONSTRUCTION.



PLANS PREPARED FOR:
ELEMENTS ENGINEERING, LLC
6213 BEHNER WAY
DUBLIN, IN 46017-8280
PH: (317) 486-7054
CONTACT: Ms. Jennifer Roberts, P.E.

PLANS PREPARED BY:
EMH&T
Extension of West Leg of
Thistlewate Legal Drain
SPICEWOOD GARDEN APARTMENTS
SHERIDAN, INDIANA

PLAN & PROFILES

EMH&T JOB NO. 2008-1399
DATE: 11-10-2008
SCALE: AS NOTED
SHEET No. **C1.2**