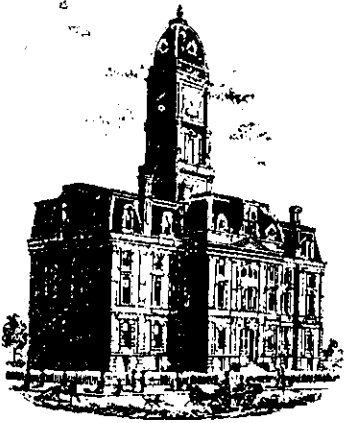


Drain: OLIVER SHOEMAKER **Drain #:** 42
Improvement/Arm: SR 37 BORE
Operator: J. LIVINGSTON **Date:** 6-16-04
Drain Classification: Urban/Rural **Year Installed:** 1999

GIS Drain Input Checklist

- Pull Source Documents for Scanning
- Digitize & Attribute Tile Drains
- Digitize & Attribute Storm Drains
- Digitize & Attribute SSD
- Digitize & Attribute Open Ditch
- Stamp Plans
- Sum drain lengths & Validate
- Enter Improvements into Posse
- Enter Drain Age into Posse
- Sum drain length for Watershed in Posse
- Check Database entries for errors

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JL



SURVEYOR'S OFFICE
Hamilton County

Kenton C. Ward, Surveyor

Phone (317) 776-8495

Fax (317) 776-9628

Suite 146

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

TO: Hamilton County Drainage Board

July 28, 1999

RE: Oliver Shoemaker Drain

Attached is a petition, non-enforcement request, plans, calculations, quantity summary and assessment roll for the reconstruction of the Oliver Shoemaker and John Sutton Drains. I have reviewed the submittals and petition and have found each to be in proper form.

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 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 benefited.

The proposed reconstruction will replace the existing John Sutton Drain between STA 11+00 and STA 13+50 and the Oliver Shoemaker Drain between STA 72+50 and 75+00. These drain sections are located in the right of way of State Road 37 and will be vacated. These sections will be replaced by 215 feet of 48" RCP in the right of way. Along the East right of way line within the Woods of Brittan Apartments 160 feet of 27" RCP will be installed along with 25 feet of 48" RCP which will serve as the outlet for the detention for the Apartments. The downstream portion will connect to the new line recently installed in the Fishers Trade Center by Mann Realty Company (see report dated April 23, 1999). The upstream portion will connect to the storm sewer constructed for the Woods of Brittan Apartments (see report dated April 21, 1996). This proposal will reduce the John Sutton Drain by 250 feet. The proposal will also increase the Oliver Shoemaker Drain by 150 feet.

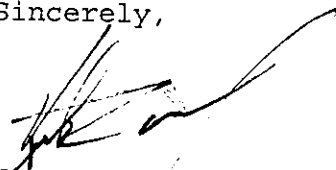
I recommend the cost of \$140,000.00 for this work be assessed as follows:

Indiana State Highway - S.R. 37 \$70,000.00
Regency Windsor Capital, Inc. &
Lambert Properties LP
15-11-19-00-00-016.000 - 8.27 ac. \$ 8,616.00
15-11-19-00-00-017.000 - 1.97 ac. \$ 2,050.00
Woods of Brittan LTD Liability Co.
15-11-19-00-00-016.002 - 56.95 ac. \$59,334.00

At this time the drainage shed is assessed at a rate of \$1.00 per acre, \$5.00 per platted lot and \$5.00 minimum. This assessment brings in \$4,021.92 per year and now has a balance of \$25,745.22. However, this is a rapidly developing drainage shed and maintenance expenses will be increasing in the future. I recommend that the assessment be increased to \$2.00 per acre, \$35.00 per platted lot and \$10.00 minimum. This increase is in line with other drainage sheds within the area.

I recommend the Board set this for hearing for September 27, 1999.

Sincerely,



Kenton C. Ward
Hamilton County Surveyor

KCW/llm

CERTIFICATE OF COMPLETION AND COMPLIANCE

To: Hamilton County Surveyor

Re: Woods of Britton
Section 19, Township 18 North, Range 5 East
Weihe Job #W000332

I hereby certify that:

1. I am a Registered Land Surveyor or 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 comformity with all plans and specifications .

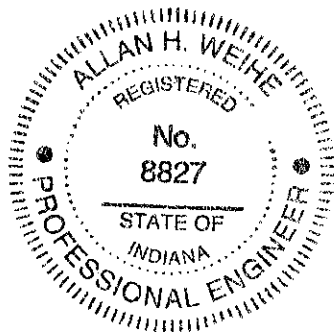
Signature: Allan H. Weihe Date: September 13, 2002

Type or Print Name: Allan H. Weihe

Business Address: 10505 N. College Ave., Indianapolis, IN. 46280

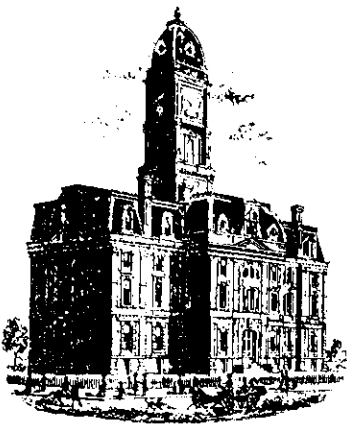
Telephone Number: 846-6611

SEAL



INDIANA REGISTRATION NUMBER

#8827



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7 Feb - 03

SURVEYOR'S OFFICE
Hamilton County

Kenton C. Ward, Surveyor

Phone (317) 776-8495

Fax (317) 776-9628

Suite 188

One Hamilton County Square

Noblesville, Indiana 46060-2230

To: Hamilton County Drainage Board

December 9, 2002

**Re: Oliver Shoemaker Drain Reconstruction:
Bore Under State Road 37**

Attached are as-builts, certificate of completion & compliance, and other information for Oliver Shoemaker Drain Reconstruction. An inspection of the drainage facilities for this section has been made and the facilities were found to be complete and acceptable.

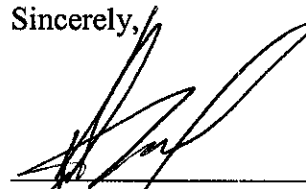
During construction, changes were made to the drain, which will alter the plans submitted with my report for this drain-dated July 28, 1999. The report was approved by the Board at the hearing held September 27, 1999. (See Drainage Board Minutes Book 5, Pages 235-240) The changes are as follows: The 48" RCP under State Road 37 was reduced from 215 feet to 205 feet.

The length of the drain due to the changes described above is now **315 feet**. The reconstruction reduced the John Sutton Drain by 250 feet. The Oliver Shoemaker Drain was vacated from Sta 72+50 to Sta 75. Therefore, the net gain of drain for the Oliver Shoemaker was **65 feet**.

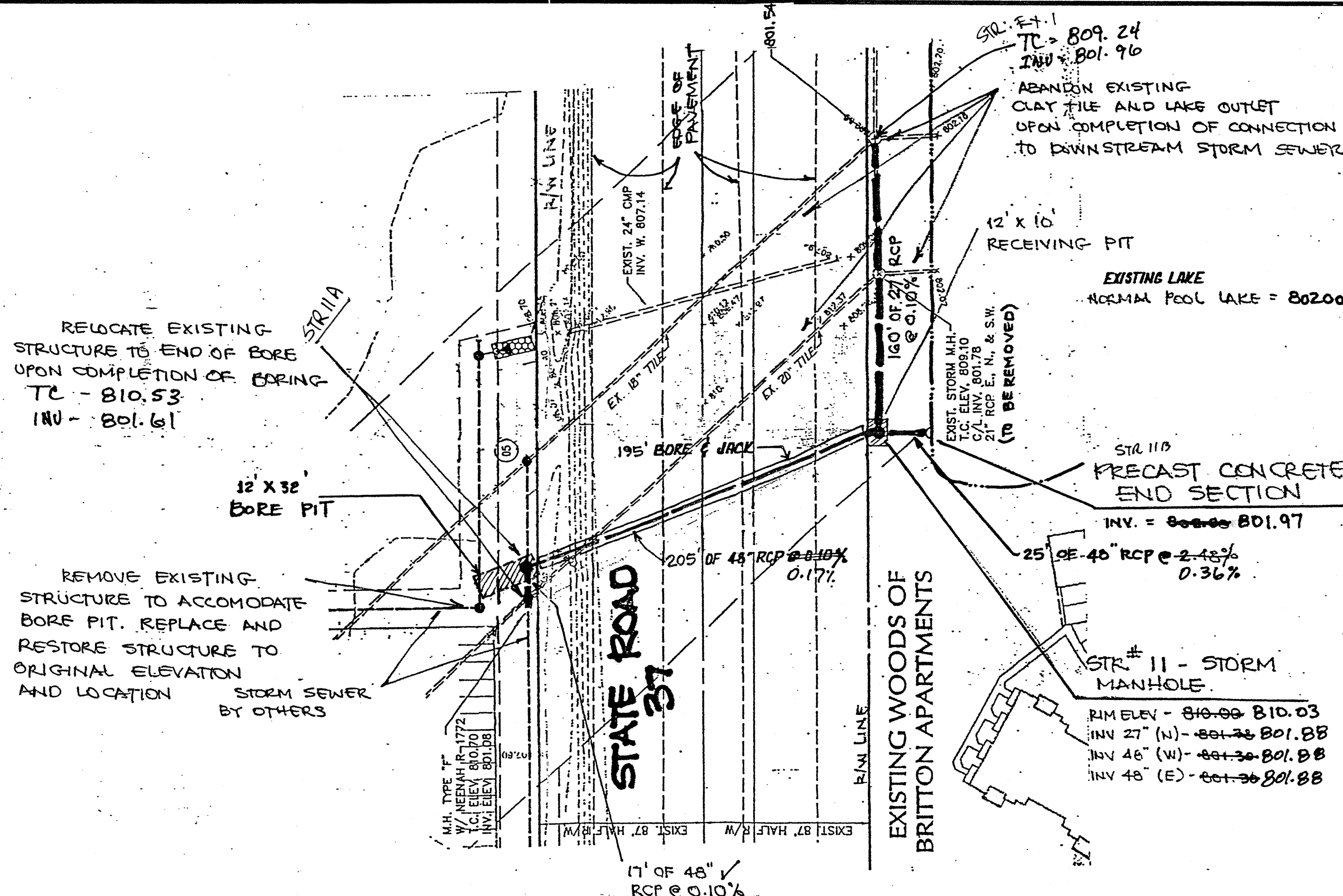
A non-enforcement was not required because all the drain was installed within the Right of Way. The project was paid for by Indiana State Highway, Regency Windsor Capital Inc, Lambert Properties LLC, Woods of Britton Ltd Liability and the remaining portion was distributed throughout the watershed by assessment.

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

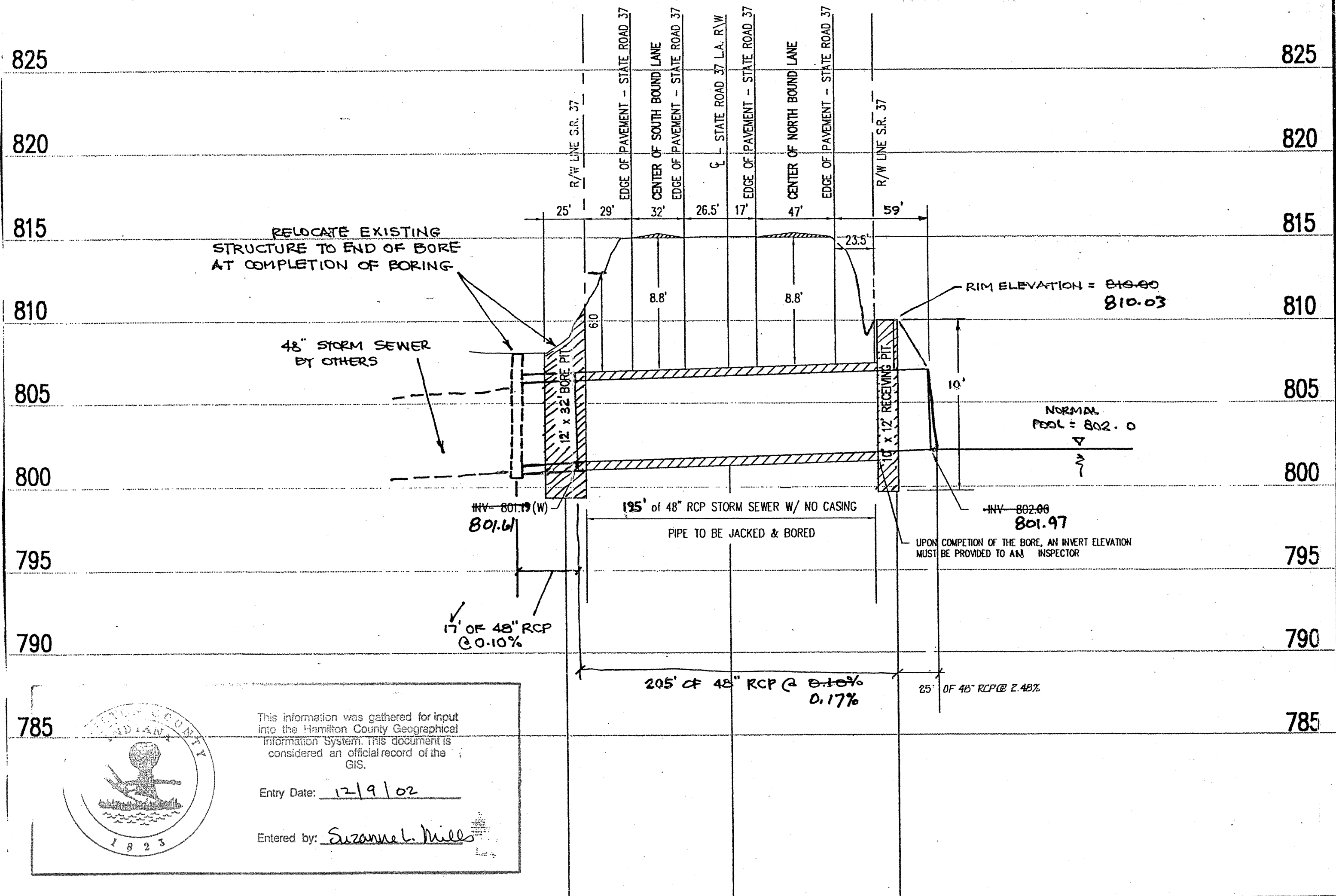
Sincerely,



Kenton C. Ward,
Hamilton County Surveyor



ROAD BORING PLAN SCALE: 1"=50'

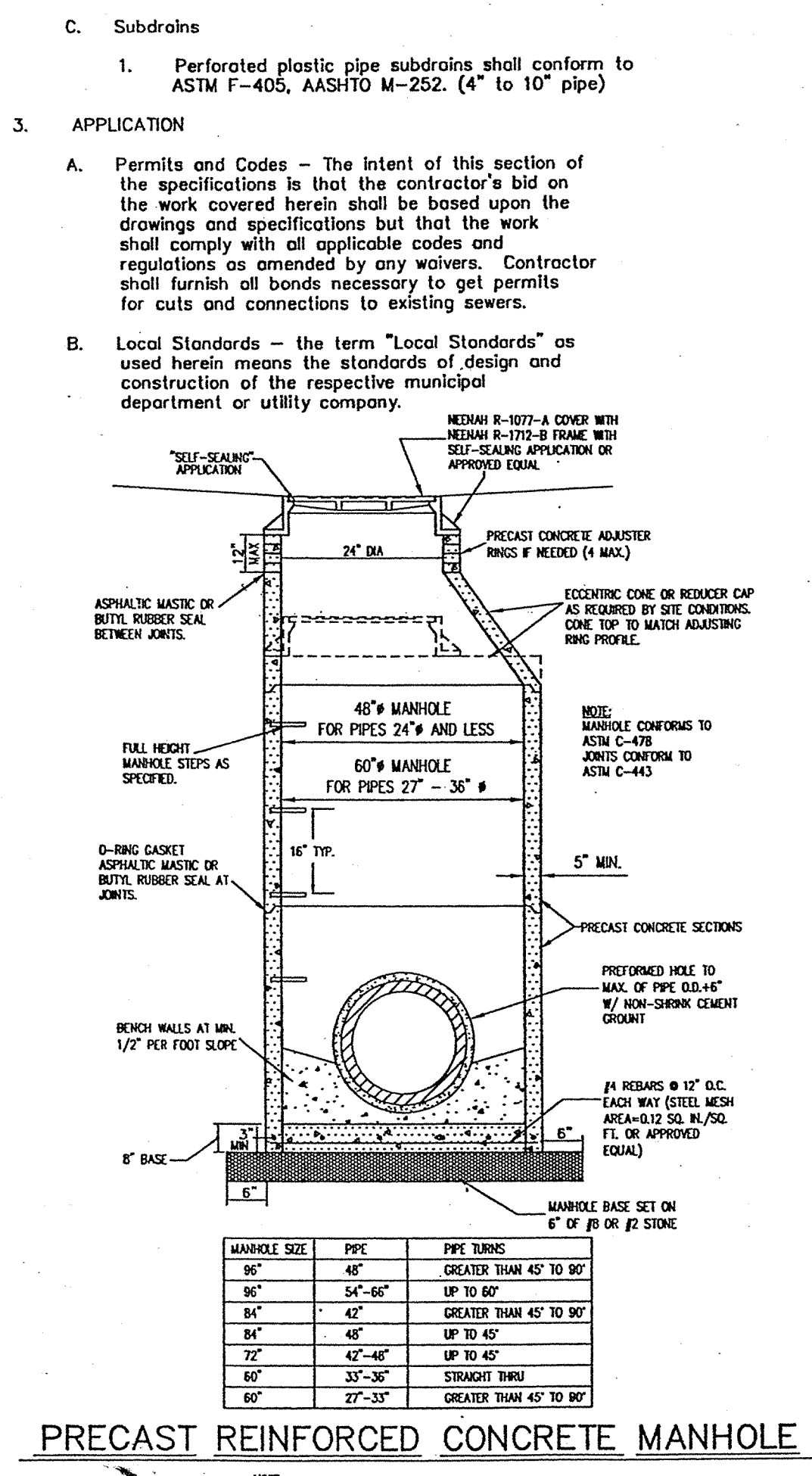


ROAD BORING PROFILE SCALE: HORZ.: 1"=50' VERT.: 1"=5'

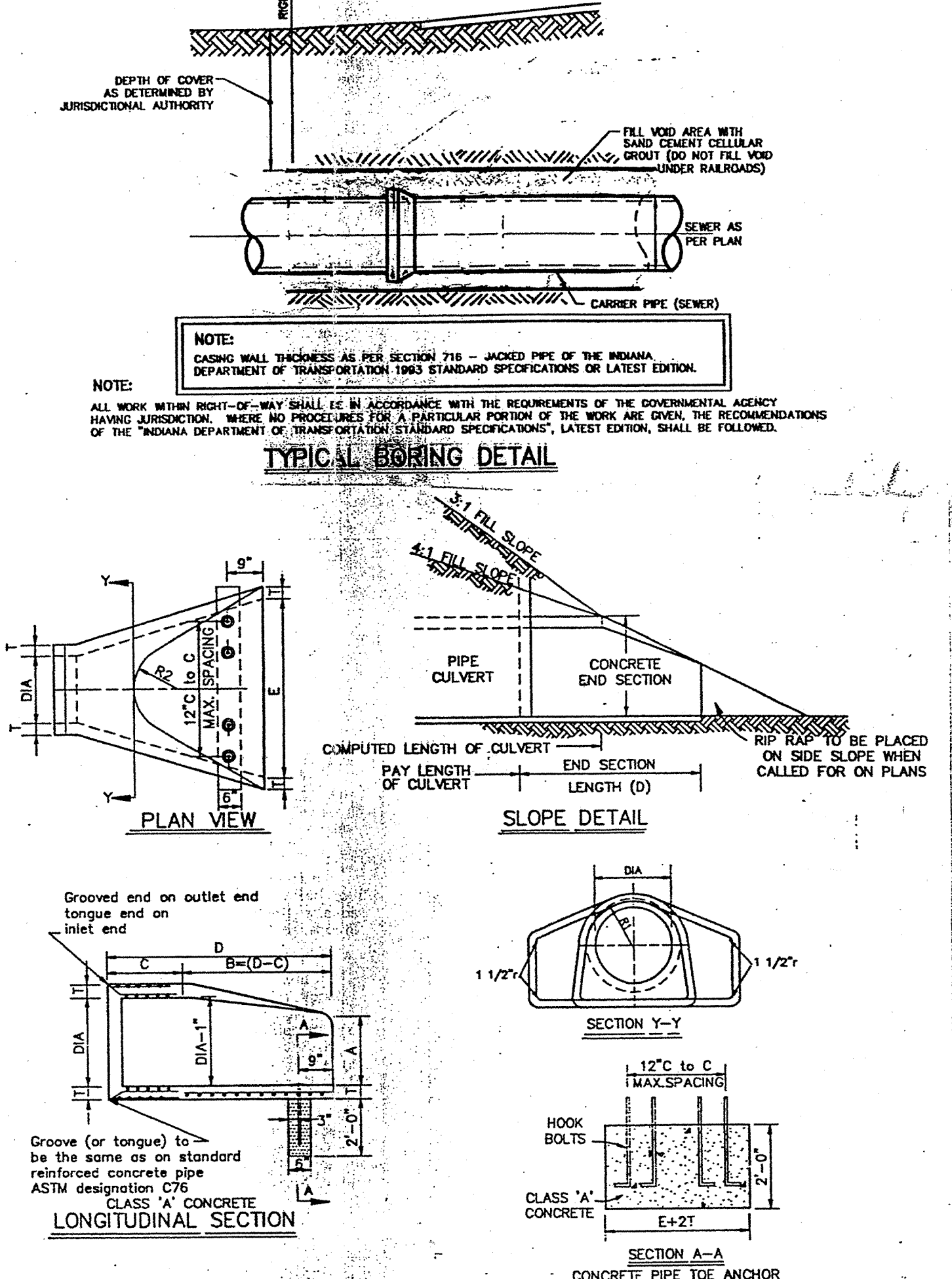
STORM SEWER SYSTEMS

- SCOPE OF WORK

The work under this section includes all storm sewers, storm water inlets, and related items, including excavating and backfilling, necessary to complete the work shown on the drawings.
- MATERIALS
 - Storm Sewers
 - Reinforced concrete sewer pipe shall conform to ASTM C-76 latest revision, with joints conforming to ASTM C-443 latest revision.
 - Corrugated High Density Polyethylene Type S (HDPE) pipe shall conform to AASHTO M 294, and shall have a minimum Cell Class of 4 324420C in accordance with ASTM D 3350. The flexibility factor of HDPE pipe shall not exceed 0.095. Ribbed Polyethylene pipe shall conform to ASTM F 894, meeting the requirements for RSC 100 or RSC 180, and shall have a minimum Cell Class of 334433C in accordance with ASTM D 3350. Smoothwall Polyethylene pipe shall conform to ASTM F 714, and shall have a minimum Cell Class of 35434C in accordance with ASTM D 3350. All polyethylene pipe and fittings shall be made from high molecular weight high density polyethylene material meeting the applicable Cell Class requirements. All polyethylene material used in storm sewer pipe manufacture shall be virgin resin. Only sizes of 12" to 18" allowed. High Density Polyethylene pipe overlapping, gasketed pipe joints shall conform to ASTM D 3212. The gasket material shall conform to the requirements of ASTM F 477. As an alternative, pipe joints utilizing external coupling bands will be accepted, provided the minimum AASHTO requirements for satisfying soil tightness are also achieved.
 - All inlets located within proposed or dedicated right-of-way shall be bicycle safe.
 - Manholes
 - Precast reinforced concrete manhole sections and steps shall conform to ASTM C-478 latest revision.
 - Coating shall be of uniform quality, free from blow holes, porosity, hard spots, shrinkage distortion or other defects. It shall be smooth and well cleaned by shot-blasting or by some other approved method. They shall be coated with asphalt paint which shall result in a smooth coating, tough and tenacious when cold, not tacky or brittle. They shall be gray iron meeting ASTM A-48 latest revision.
 - Joints - Manhole sections shall be jointed with rubber type gaskets. The rubber type gaskets shall meet ASTM C-443 latest revision, when manhole and storm pipe are continuously in water.
 - Manhole steps shall be provided in all storm sewer structures 48-inches in diameter or larger. The maximum distance from grade to the first manhole step shall be 24", the maximum distance between steps shall be 16", and the maximum distance from the last step to the structure benchwall shall be 24". Manhole steps shall be made from a steel reinforcing rod encapsulated in a copolymer polypropylene resin. The manhole steps shall equal or exceed OSHA requirements.
- Subdrains
 - Perforated plastic pipe subdrains shall conform to ASTM F-405, AASHTO M-252. (4" to 10" pipe)
- APPLICATION
 - Permits and Codes - The intent of this section of the specifications is that the contractor's bid on the work covered herein shall be based upon the drawings and specifications but that the work shall comply with all applicable codes and regulations as amended by any orders. Contractor shall furnish all bonds necessary to get permits for cuts and connections to existing sewers.
 - Local Standards - The term "Local Standards" as used herein means the standards of design and construction of the respective municipal department or utility company.



PRECAST REINFORCED CONCRETE MANHOLE



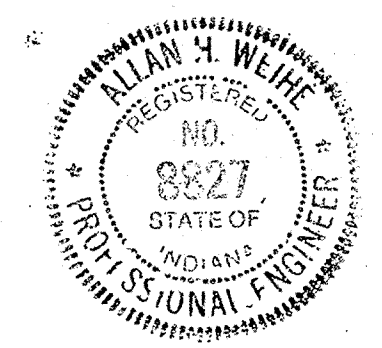
PRECAST CONCRETE END SECTION

HOLEY MOLEY SAYS
"DON'T DIG BLIND"

1-800-382-5544
 CALL TOLL FREE
 1-800-428-5200
 FOR CALLS OUTSIDE OF INDIANA
 PER INDIANA STATE LAW 86-1001, IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

RECORD DRAWING
 STORM SEWER AS-BUILTS
 12/22/00

Allan H. Weihe
 ALLAN H. WEIHE-REG. P.E.-IN #8827



WEIHE ENGINEERS, INC.
 10005 NORTH COLLEGE AVENUE
 INDIANAPOLIS, INDIANA 46260
 (317) 846-8911

WEIHE ENGINEERS, INC. REGISTERED PROFESSIONAL ENGINEER
 No. 8827
 STATE OF INDIANA

REGENCY WINDSOR DEV. INC.
 WOODS OF BRITTON
 LAKE OUTLET - AS-BUILTS
 PART OF THE SE/4 OF SEC. 18, T14N, R3E, HAMILTON COUNTY, INDIANA

FILED
 PREPARED FOR: REGENCY WINDSOR DEV. INC.
 SHEET NO. 1