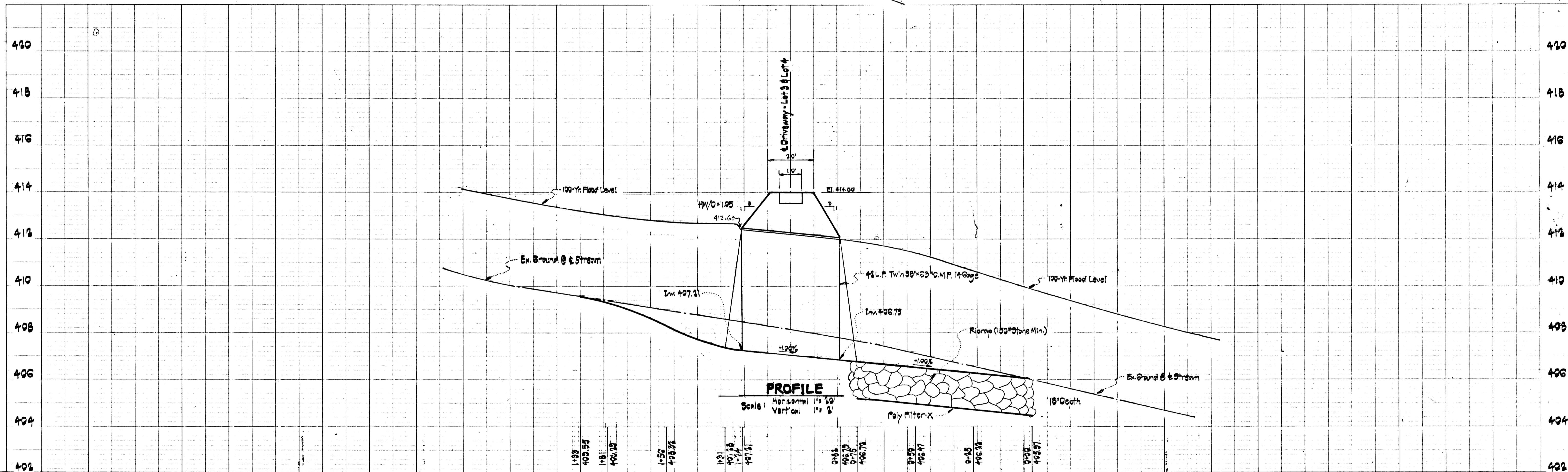


- NOTES**
- All construction shown hereon shall be in accordance with the 'Howard County Road Construction Code & Standard Specifications'.
  - References to drawing and page numbers shown hereon are referred to the above mentioned 'Howard County Road Construction Code & Standard Specifications'.
  - All fill areas shall be compacted to a minimum of 95% compaction.
  - Elevations shown hereon are based on the Maryland State Grid System.



APPROVED: Department of Public Works.  
*W. J. Grawl, Sr.* 3-16-79  
 Chief, Bureau of Engineering Date

APPROVED: Office of Planning and Zoning.  
*W. J. Grawl, Sr.* 3-16-79  
 Chief, Div. of Land Development Date

Reviewed for Howard Soil Conservation District and meets Technical Requirements.  
*W. J. Grawl, Sr.* 1-19-79  
 U.S.D.A. Soil Conservation Service Date

This development plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.  
*W. J. Grawl, Sr.* 1-19-79  
 District Coordinator, Howard S.C.D. Date

**DEVELOPER'S CERTIFICATE**  
 I certify that all development and/or construction will be done according to this plan of development and plan for Erosion Control, and I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary. Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District.  
*W. J. Grawl, Sr.* 3/16/79  
 Irvin J. Grawl, Sr. Date

**ENGINEER'S CERTIFICATE**  
 I certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.  
*John F. Lippman* 4/24/79  
 John F. Lippman, Md. Reg. No. 8410 Date

**CROVO & ASSOCIATES, INC.**  
 CIVIL ENGINEERING  
 LAND SURVEYING  
 8669 OAK ROAD  
 BALTIMORE, MD. 21234  
 301-661-9373

OWNER/DEVELOPER  
 IRVIN GRAWL, SR.  
 600 BRISBANE ROAD  
 BALTIMORE, MD. 21220

PLAN & PROFILE: STREAM CROSSING  
**PROPERTY OF**  
**IRVIN J. GRAWL, SR., ETAL.**  
 LOTS 1 THRU LOT 4  
 2<sup>ND</sup> ELECTION DISTRICT HOWARD COUNTY, MD.  
 MAY 1978 SHEET 1 OF 3 SCALE: AS SHOWN

**SEDIMENT CONTROL NOTES**

- The developer shall notify the Howard County Bureau of Inspections and Permits at least 24 hours prior to beginning any construction shown herein. (938-4436)
- All sediment control structures to be constructed prior to any onsite grading or disturbance to any existing surface material, and are to be stabilized as soon as constructed.
- All sediment control structures to remain in place until permission for their removal has been obtained from the Howard Soil Conservation District.
- All graded areas, not to be moved shall be stabilized in accordance with the following:
  - Place 3" compacted layer of topsoil to finished grade
  - Spread pulverized dolomitic limestone at the rate of 40 lbs./1,000 sq. ft.
  - Spread 5-10 commercial grade fertilizer at the rate of 25 lbs./1,000 sq. ft. and immediately disc into soil to a 2" depth.
  - Seed prepared areas at the rate of 3 lbs./1,000 sq. ft. using the following mixtures:
    - Temporary mixture: Italian or Perennial Rye Grass;
    - Permanent mixture: 40% Merion Kentucky Bluegrass; 40% Common Kentucky Bluegrass; 20% Penn Lawn.
  - All seeding shall be raked with a disk rake (minimum of 2 passes) and covered and compacted with a culti packer or other approved method.
  - Mulch all areas immediately after seeding with unweathered small grain straw at the rate of 70 lbs./1,000 sq. ft. and spray with emulsified asphalt at the rate of 0.04 gal./sq. yd.
  - All seeded areas which do not show signs of germination within 4 weeks after seeding shall be reseeded or sodded if necessary.
- Periodic inspection and required maintenance must be provided by the developer or his representative on a daily basis to ensure proper functioning of all sediment control structures.
- All sediment control structures to be constructed in accordance with this plan and the Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas (G/75)
- Sediment and Erosion Control Requirements shown herein are for road and storm drain construction only. Further development of individual lots are subject to additional Sediment and Erosion Control Requirements.
- The developer shall provide a sediment control plan for improvements for the individual lots, and if more than one lot is being developed at a time, an overall plan for sediment control shall be submitted for review and approval.
- All graded areas shall be stabilized in accordance with the following:
  - Spread 5-10 commercial grade fertilizer at the rate of 25 lbs./1,000 sq. ft.
  - Spread ground agricultural limestone at the rate of 50 lbs./1,000 sq. ft.
  - Disc limestone and fertilizer into soil and firm up after discing.
  - Lay soil to a tight fit and roll to ensure contact with the underlying soil. Water as necessary for first two weeks (in summer) to ensure establishment.

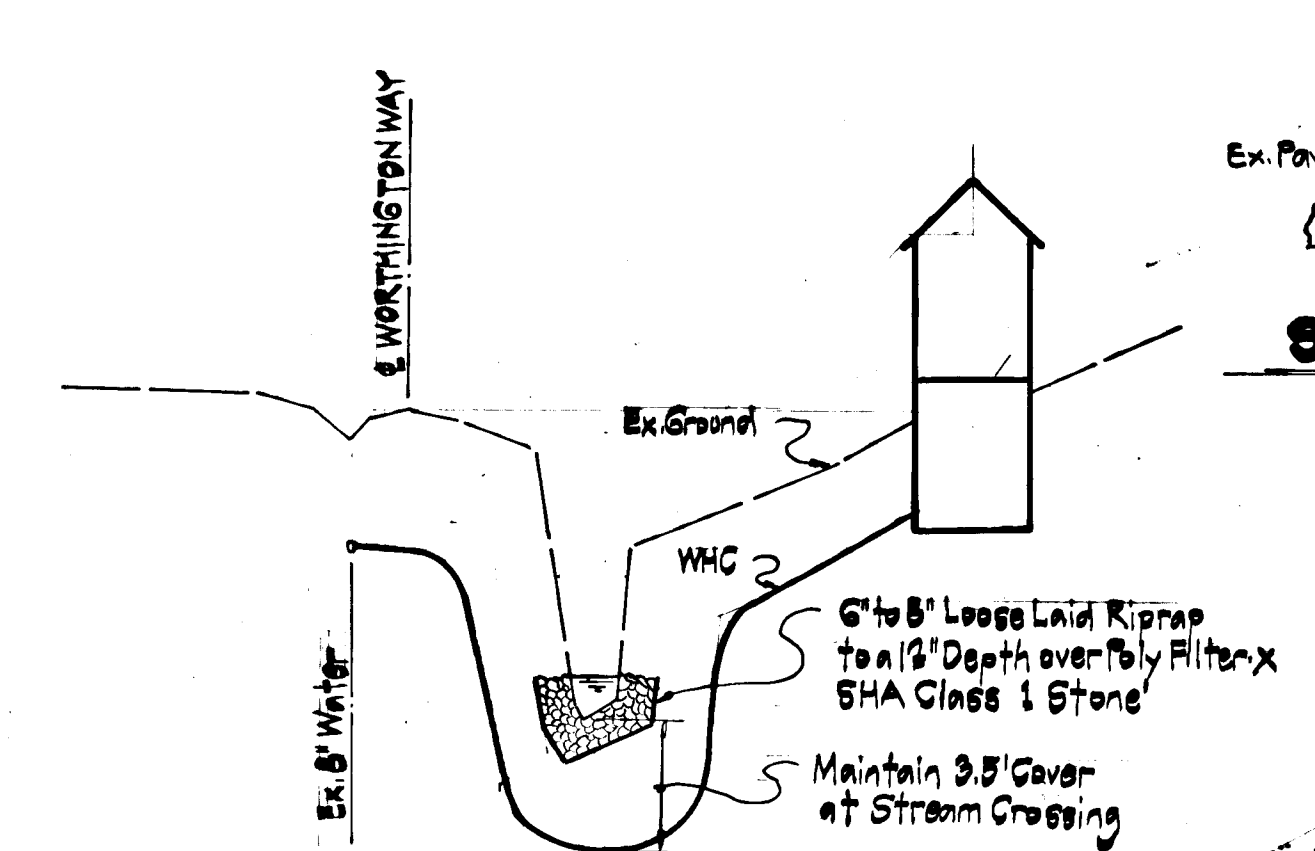
**CONSTRUCTION SEQUENCE**

- Obtain grading permit.
- Place stabilized construction entrance.
- Place all dikes, sediment traps and stone outlet structure.
- Install Twin 36" x 36" M.P.
- Place riprap channel and add upstream of pipe.
- Stabilize cut and fill slopes.
- Remove sediment control structures.

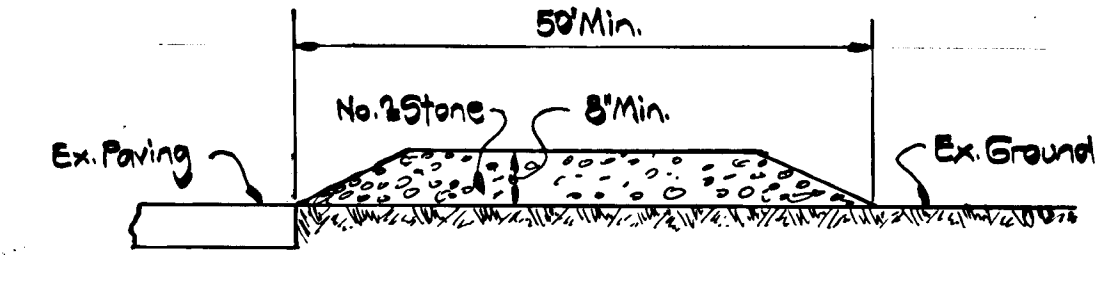
**SITE ANALYSIS**

1. Total Area of Subdivision	4.5 Ac.±
2. Total Area to be Disturbed	1.3 Ac.±
3. Total Area to be Revegetated	1.9 Ac.±
4. Total Area to be Undisturbed	3.2 Ac.±

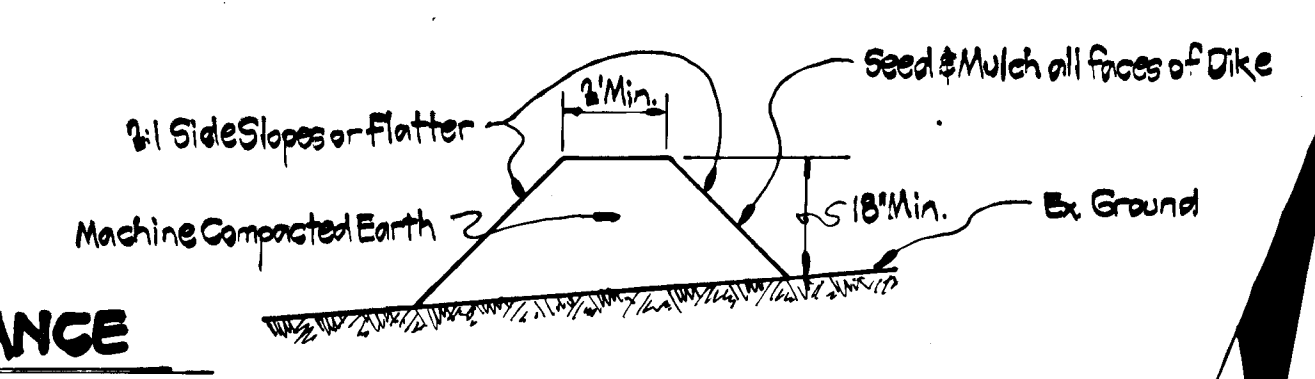
**TYPICAL WATER HOUSE CONNECTION**



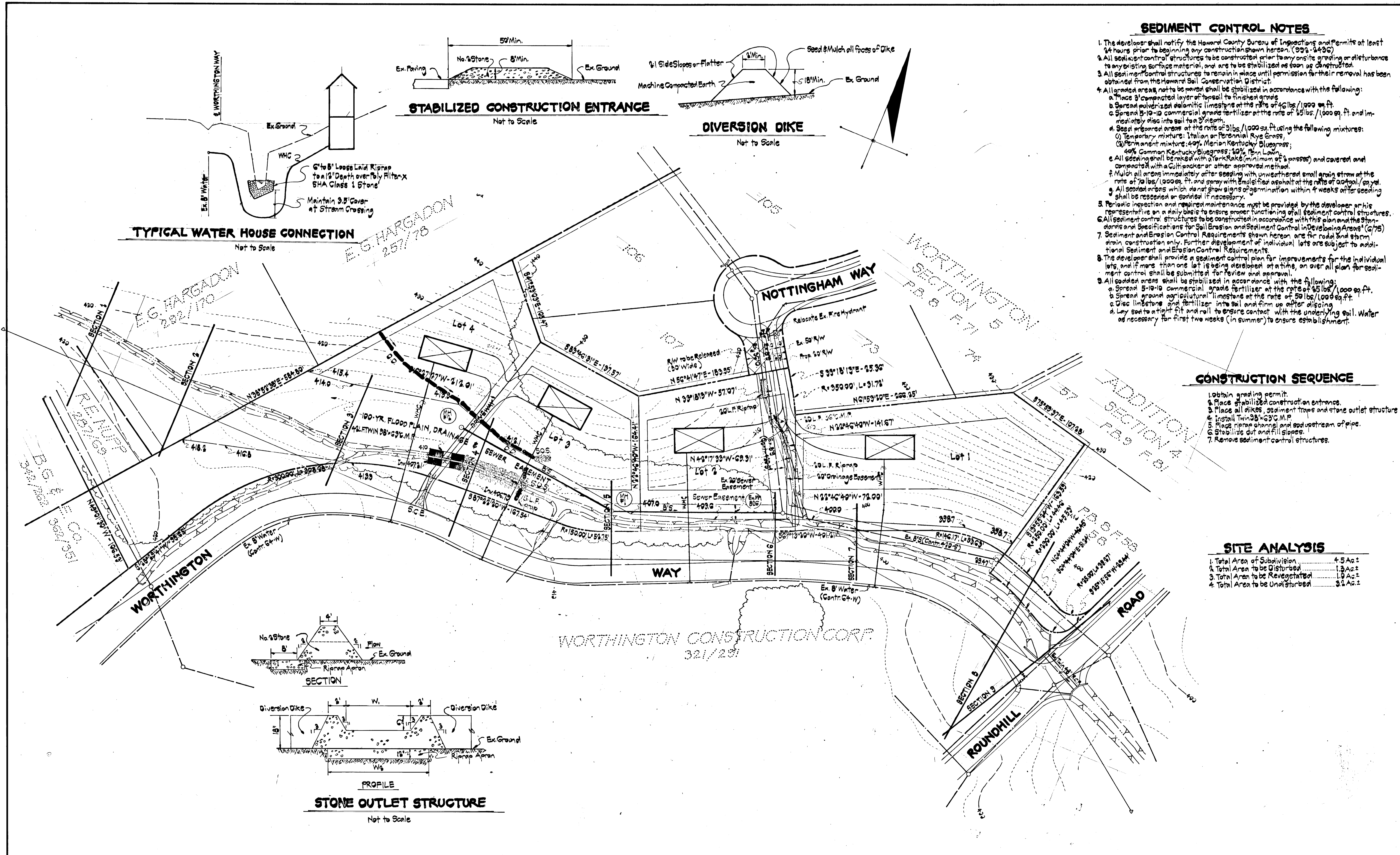
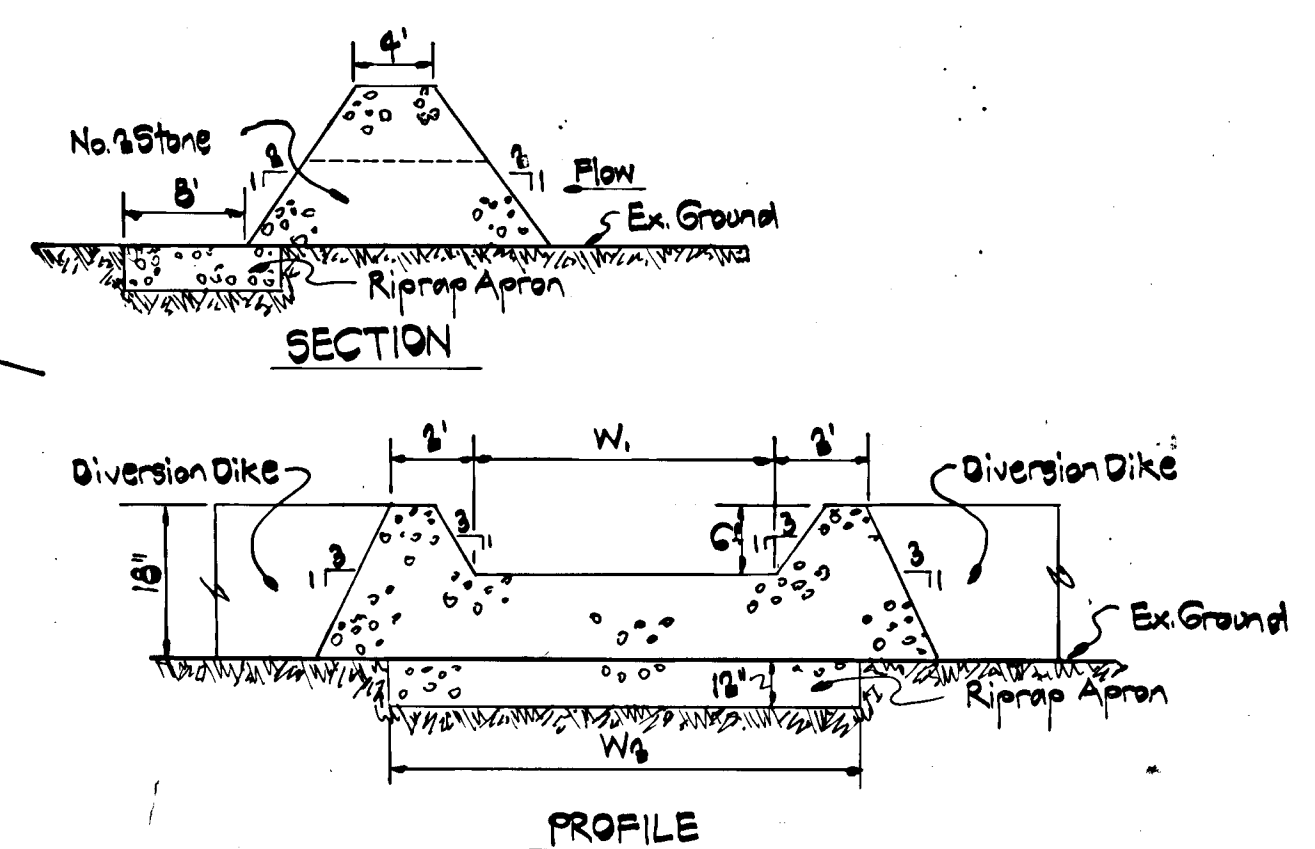
**STABILIZED CONSTRUCTION ENTRANCE**



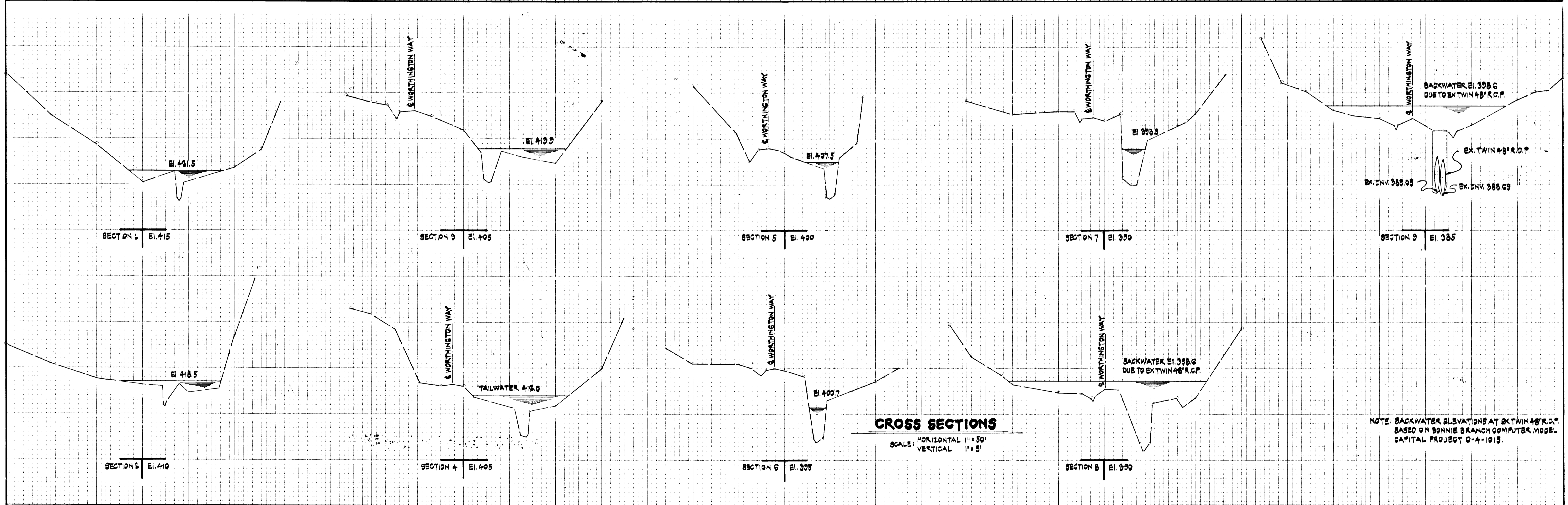
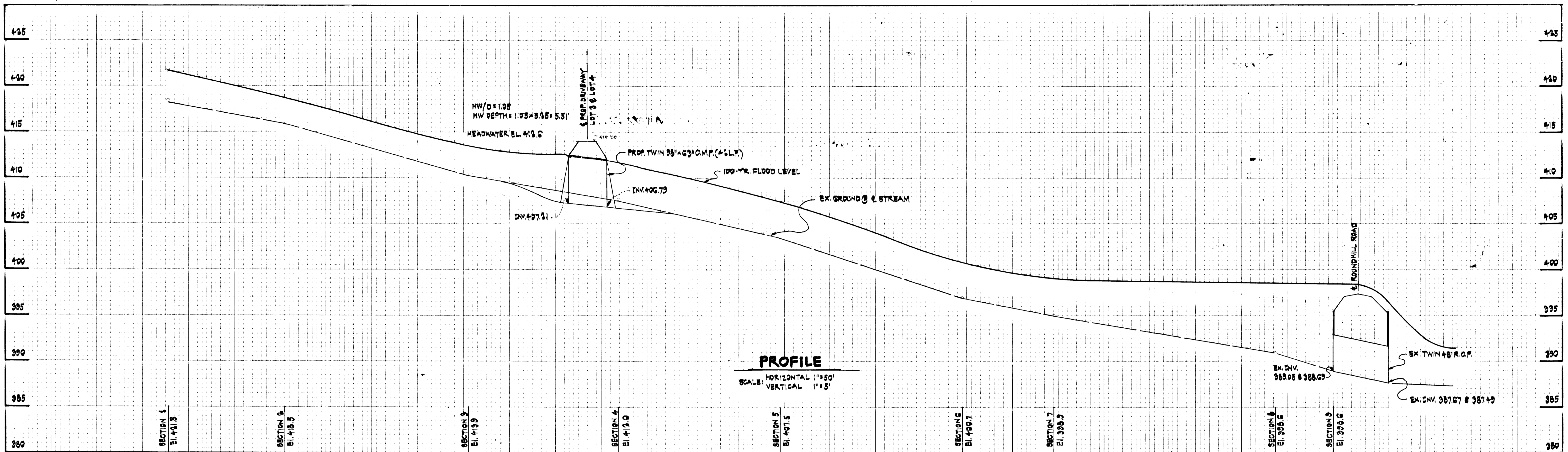
**DIVERSION DIKE**



**STONE OUTLET STRUCTURE**



<p>APPROVED: Department of Public Works.</p> <p><i>W.O. Lort</i> 3-16-79 Chief, Bureau of Engineering Date</p> <p>APPROVED: Office of Planning and Zoning.</p> <p><i>John H. ...</i> 7-7-79 Chief, Div. of Land Development Date</p>	<p>Reviewed for Howard Soil Conservation District and meets Technical Requirements.</p> <p><i>Wanda ...</i> 1-19-79 U.S.D.A. Soil Conservation Service Date</p> <p>This development plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District</p> <p><i>Wes ...</i> 1-19-79 District Coordinator Howard S.C.D. Date</p>	<p><b>DEVELOPER'S CERTIFICATE</b></p> <p>I certify that all development and/or construction will be done according to this plan of development and plan for Erosion Control, and I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as and when necessary. Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District.</p> <p><i>Irvin J. Crowl, Sr.</i> 4/24/79 Irvin J. Crowl, Sr. Date</p>	<p><b>ENGINEER'S CERTIFICATE</b></p> <p>I certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.</p> <p><i>John ...</i> 4/24/79 John ... Date</p>	<p><b>CROYO &amp; ASSOCIATES, INC.</b></p> <p>CIVIL ENGINEERING LAND SURVEYING</p> <p>8663 OAK ROAD BALTIMORE, MD. 21234 301-661-9378</p>	<p><b>OWNER/DEVELOPER</b></p> <p>IRVIN CROWL, SR. 600 BRISBANE ROAD BALTIMORE, MD. 21225</p>	<p><b>100-YEAR FLOOD PLAIN STUDY</b></p> <p><b>PROPERTY OF</b></p> <p><b>IRVIN J. CROWL, SR., ET AL.</b></p> <p>LOTS 1 THRU LOT 4</p> <p>2<sup>ND</sup> ELECTION DISTRICT HOWARD COUNTY, MD. MAY, 1978 SHEET 2 OF 3 SCALE: 1"=50'</p>
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<p>APPROVED: Department of Public Works.  <i>Noted</i> 3-16-79          Chief Bureau of Engineering Date</p>	<p>Reviewed for Howard Soil Conservation District and meets Technical Requirements.  <i>Walter Bonlett</i>          U.S.D.A. Soil Conservation Service Date 1-18-79</p>	<p>DEVELOPER'S CERTIFICATE          I certify that all development and/or construction will be done according to this plan of development and plan for Erosion Control, and I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary. Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District.  <i>Irvin J. Crowl, Sr.</i> 4/24/78          Irvin J. Crowl, Sr. Date</p>	<p>ENGINEER'S CERTIFICATE          I certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.  <i>John F. Linnane</i> 4/24/78          John F. Linnane, Md. Reg. No. 8479 Date</p>	<p><b>CROVO &amp; ASSOCIATES, INC.</b>          CIVIL ENGINEERING          LAND SURVEYING          8669 OAK ROAD          BALTIMORE, MD. 21234          301-661-3973</p>	<p>OWNER/DEVELOPER          IRVIN CROWL, SR.          600 BRISBANE ROAD          BALTIMORE, MD. 21223</p>	<p>100-YEAR FLOOD PLAIN STUDY  <b>PROPERTY OF</b>  <b>IRVIN J. CROWL, SR., ETAL.</b>          LOTS 1 thru LOT 4          2<sup>ND</sup> ELECTION DISTRICT HOWARD COUNTY, MD.          MAY, 1978 SHEET 3 OF 3 SCALE: AS SHOWN</p>
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