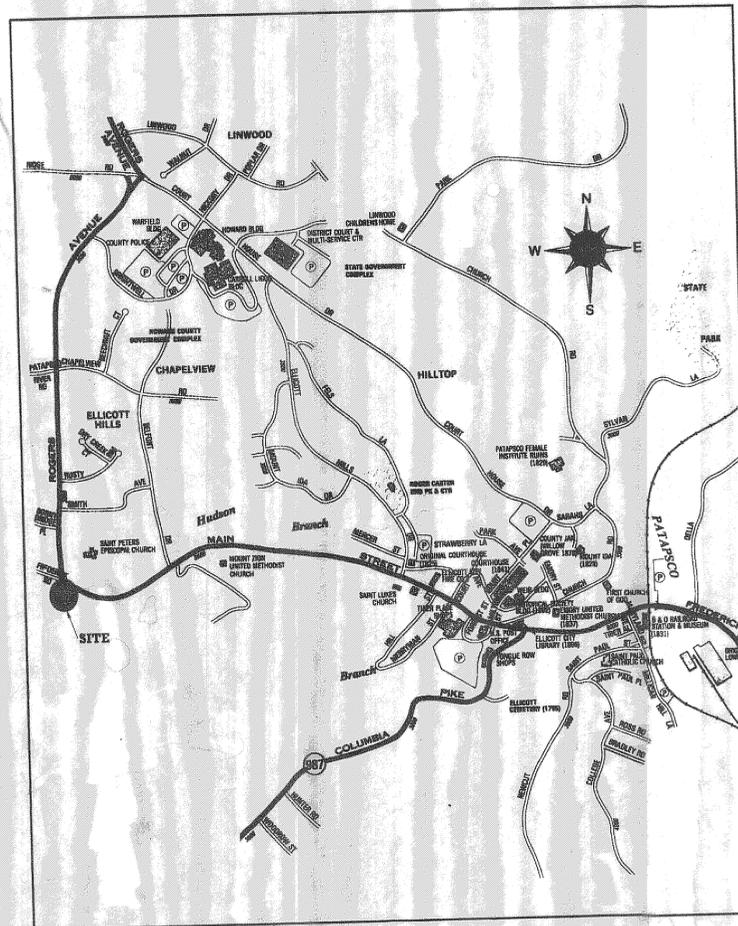


# HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS STREAM REHABILITATION HUDSON BRANCH ELLICOTT CITY COLORED SCHOOL

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1.	TITLE SHEET
2.	PLAN SHEET
3.	PROFILE & DETAILS
4.	CROSS SECTIONS STA. 0+00 TO 0+80
5.	CROSS SECTIONS STA. 0+90 TO 1+70



VICINITY MAP  
SCALE: 1" = 1000'

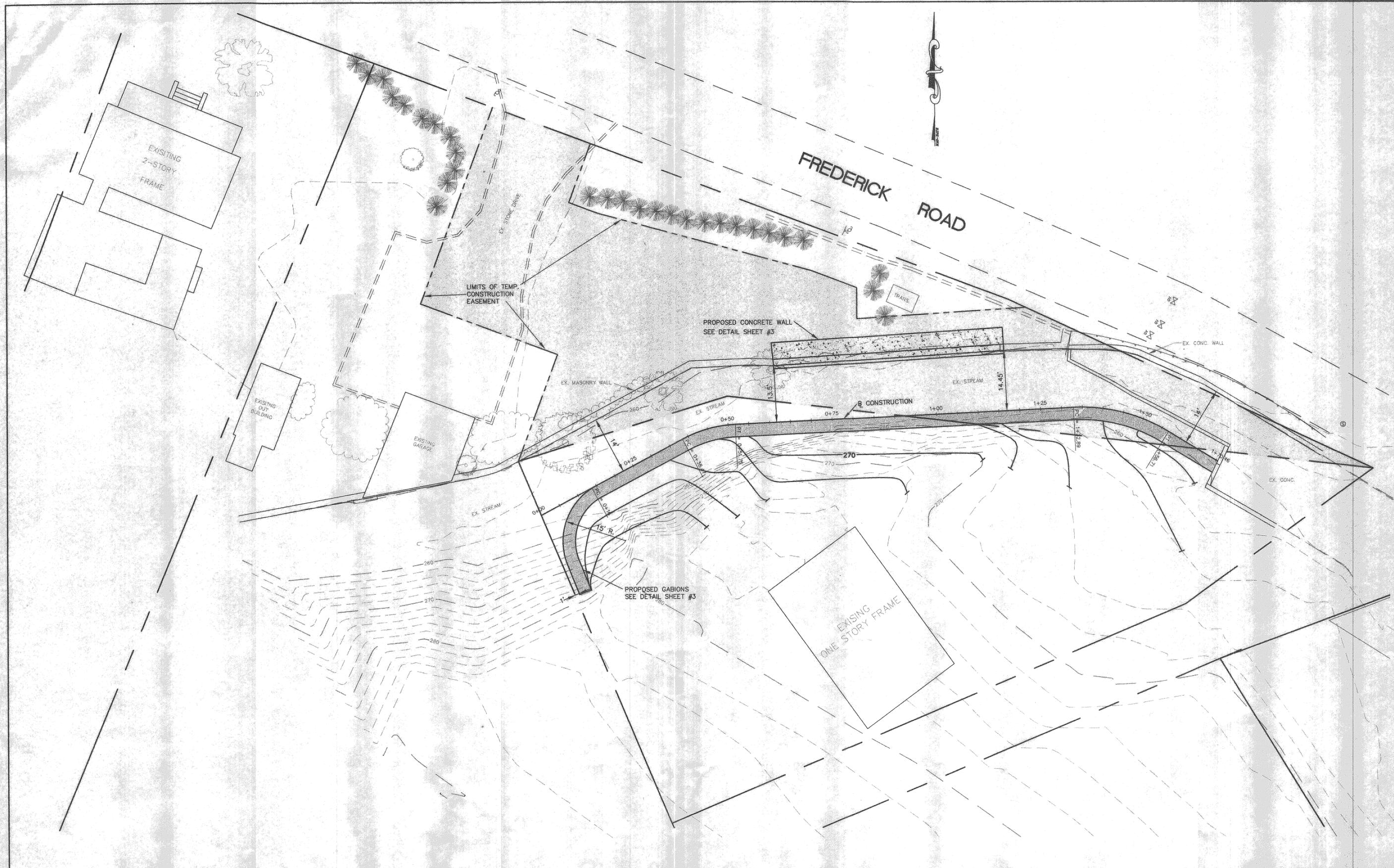
GENERAL NOTES

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH VOLUME IV, HOWARD COUNTY DESIGN MANUAL AND SPECIFICATIONS.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL PERFORM TEST PITS, WHERE DIRECTED BY THE ENGINEER, A MINIMUM OF TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS.
- CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES AT LEAST THREE DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
 

MISS UTILITY	1-800-257-7777
BELL TELEPHONE SYSTEM	393-3649
LONG DISTANCE CABLE DIVISION	393-3553 OR 3554
BALTIMORE GAS AND ELECTRIC	539-8000 EXT. 691
HOWARD COUNTY BUREAU OF UTILITIES	313-2366
HOWARD COUNTY CONSTRUCTION INSPECTION	313-1870
SURVEY DIVISION	313-2417/2418
- INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES 1991 EDITION.
- HORIZONTAL DATUM: NAD 83. VERTICAL DATUM: NGVD 29. MEAN SEA LEVEL DATUM 1929.
- ALL FILL AREAS BEHIND RETAINING WALLS AND/OR UNDER STRUCTURES TO BE FILLED WITH UNIFIED SOIL CLASSIFICATION, SAND & G.P. OR GW OR SW OR SPCOMPACTED TO A MINIMUM 95% OF MAXIMUM OBTAINABLE DENSITY DETERMINED BY PROCTOR ASTM D-698.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.

6. 1979-016 Cover

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND		PREPARED BY: <b>PHOENIX ENGINEERING, INC.</b> CONSULTING ENGINEERS 813 MAIDEN CHOICE LANE, SUITE 300 BALTIMORE, MARYLAND 21220 (410) 247-8655 FAX (410) 247-9397	PREPARED FOR: <b>GMA&amp;D</b> ARCHITECTURE DESIGN	DES: D.R.B. DRN: D.R.B. CHK: J.R.H. DATE: 11/97	BY: NO: REVISION DATE	TITLE SHEET	STREAM REHABILITATION HUDSON BRANCH © ELLICOTT CITY COLORED SCHOOL HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 1 OF 5
DIRECTOR OF PUBLIC WORKS DATE	CHIEF, BUREAU OF ENGINEERING DATE					600' SCALE MAP NO.	BLOCK NO.	
CHIEF, BUREAU OF HIGHWAYS DATE	CHIEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT DATE							



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS \_\_\_\_\_ DATE \_\_\_\_\_ CHIEF, BUREAU OF ENGINEERING \_\_\_\_\_ DATE \_\_\_\_\_  
CHIEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT.

PREPARED BY:  
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PREPARED FOR:

DES:	D.R.B.		
DRN:	D.R.B.		
CHK:	J.R.H.		
DATE:	11/97		
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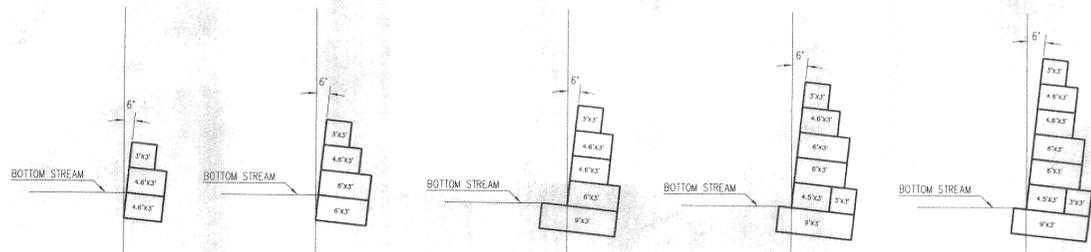
PLAN

600' SCALE MAP NO. \_\_\_\_\_ BLOCK NO. \_\_\_\_\_

STREAM REHABILITATION  
HUDSON BRANCH  
© ELLICOTT CITY COLORED SCHOOL  
HOWARD COUNTY, MARYLAND

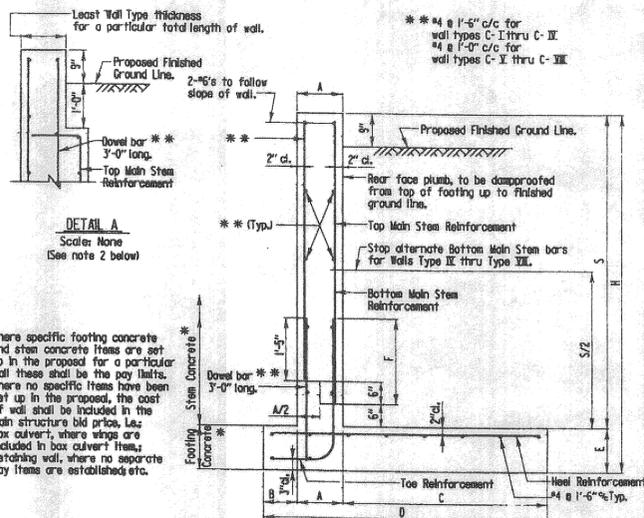
SCALE  
1"=10'  
SHEET  
2 OF 5

6:10797-01B(0) am



TYPICAL GABION DETAILS

SCALE: 1" = 10'



DETAIL A  
Scale: None  
(See note 2 below)

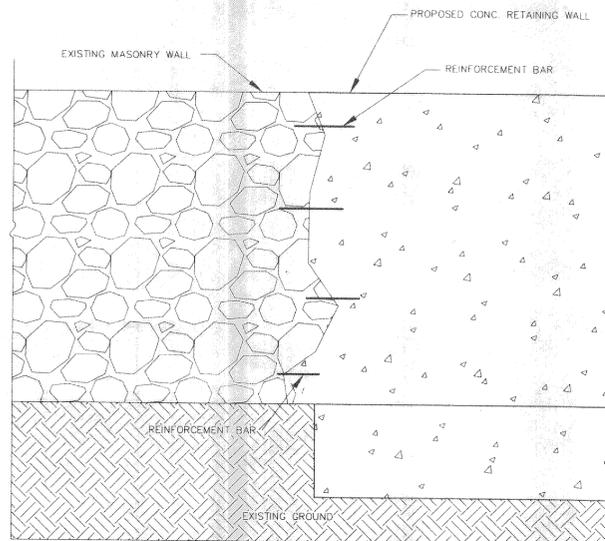
\* Where specific footing concrete and stem concrete items are set up in the proposal for a particular wall these shall be the pay items. Where no specific items have been set up in the proposal, the cost of wall shall be included in the main structure bid price. See box culvert, where wings are included in box culvert items; retaining wall, where no separate pay items are established etc.

TYPICAL SECTION

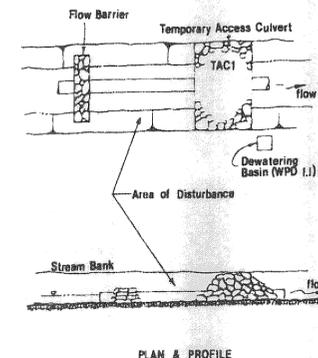
Scales 1/2" = 1'-0"

Wall Type	H	A	B	C	D	E	Toe Reinf.	Heel Reinf.	Top Main Stem Reinf.	Bottom Main Stem Reinf.	F
C-I	6'-0"	1'-0"	3'	4'-0"	5'-9"	1'-0"	#5 @ 1'-0"	#5 @ 1'-0"	#5 @ 1'-0"	#5 @ 1'-0"	
C-II	8'-0"	1'-0"	3'	5'-3"	7'-0"	1'-0"	#5 @ 1'-0"	#5 @ 1'-0"	#5 @ 1'-0"	#5 @ 1'-0"	
C-III	10'-0"	1'-0"	3'	6'-9"	8'-6"	1'-0"	#5 @ 9"	#5 @ 9"	#5 @ 9"	#5 @ 9"	
C-IV	12'-0"	1'-0"	3'	8'-0"	10'-0"	1'-0"	#5 @ 7"	#5 @ 7"	#5 @ 1'-2"	#5 @ 7"	
C-V	14'-0"	1'-3"	1'-0"	9'-0"	11'-3"	1'-3"	#5 @ 6"	#5 @ 6"	#5 @ 1'-0"	#5 @ 6"	
C-VI	16'-0"	1'-6"	1'-0"	10'-0"	12'-6"	1'-6"	#5 @ 5"	#5 @ 5"	#5 @ 10"	#5 @ 5"	
C-VII	18'-0"	1'-6"	1'-9"	11'-0"	14'-3"	1'-6"	#7 @ 5"	#7 @ 5"	#7 @ 10"	#7 @ 5"	
C-VIII	20'-0"	1'-9"	3'-0"	12'-0"	16'-9"	1'-9"	#7 @ 5"	#7 @ 5"	#7 @ 10"	#7 @ 5"	

Notes:  
1. In Poor Soil Condition is that foundation material that can support a safe bearing pressure of 3 k to 4 k/square foot.  
2. If in the length of a wall the type of wall changes and provides for a different thickness of stem, then "Detail A" shall be for all walls of greater than the least wall thickness.



ELEVATION

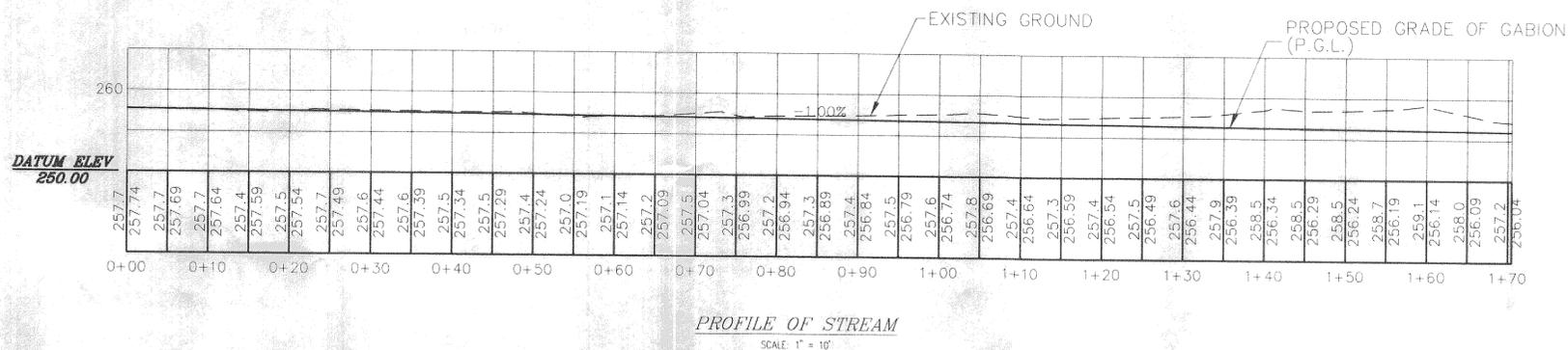


PLAN & PROFILE

- Description**  
The work shall consist of installing a flow diversion structure in conjunction with a temporary culvert crossing during in-stream construction such as utility crossings.
- Construction Requirements**
  - All erosion and sediment control devices shall be installed as the first order of business.
  - Pipes must be sized to accommodate normal stream flow.
  - The flow barrier shall be constructed of sandbags, washed riprap, or other approved material as per WPD.3. The materials shall be sized to withstand normal stream flow velocities.
  - All dewatering of the construction area shall be pumped to a dewatering basin (WPD.1) prior to re-entering the stream.
  - The temporary culvert crossing shall be constructed in accordance with Standard Detail (TAC-1), 1983 Maryland Standards and Specifications for Sediment and Erosion Control.
  - Sediment control devices shall remain in place until all disturbed areas have been stabilized in accordance with an approved sediment and erosion control plan and the inspecting authority approves their removal.

STREAM DIVERSION

CONCRETE RETAINING WALL



PROFILE OF STREAM

SCALE: 1" = 10'

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS DATE  
CHIEF, BUREAU OF ENGINEERING DATE  
CHIEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT

PREPARED BY:  
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PREPARED FOR:  
GMA&D  
ARCHITECTURE  
DESIGN

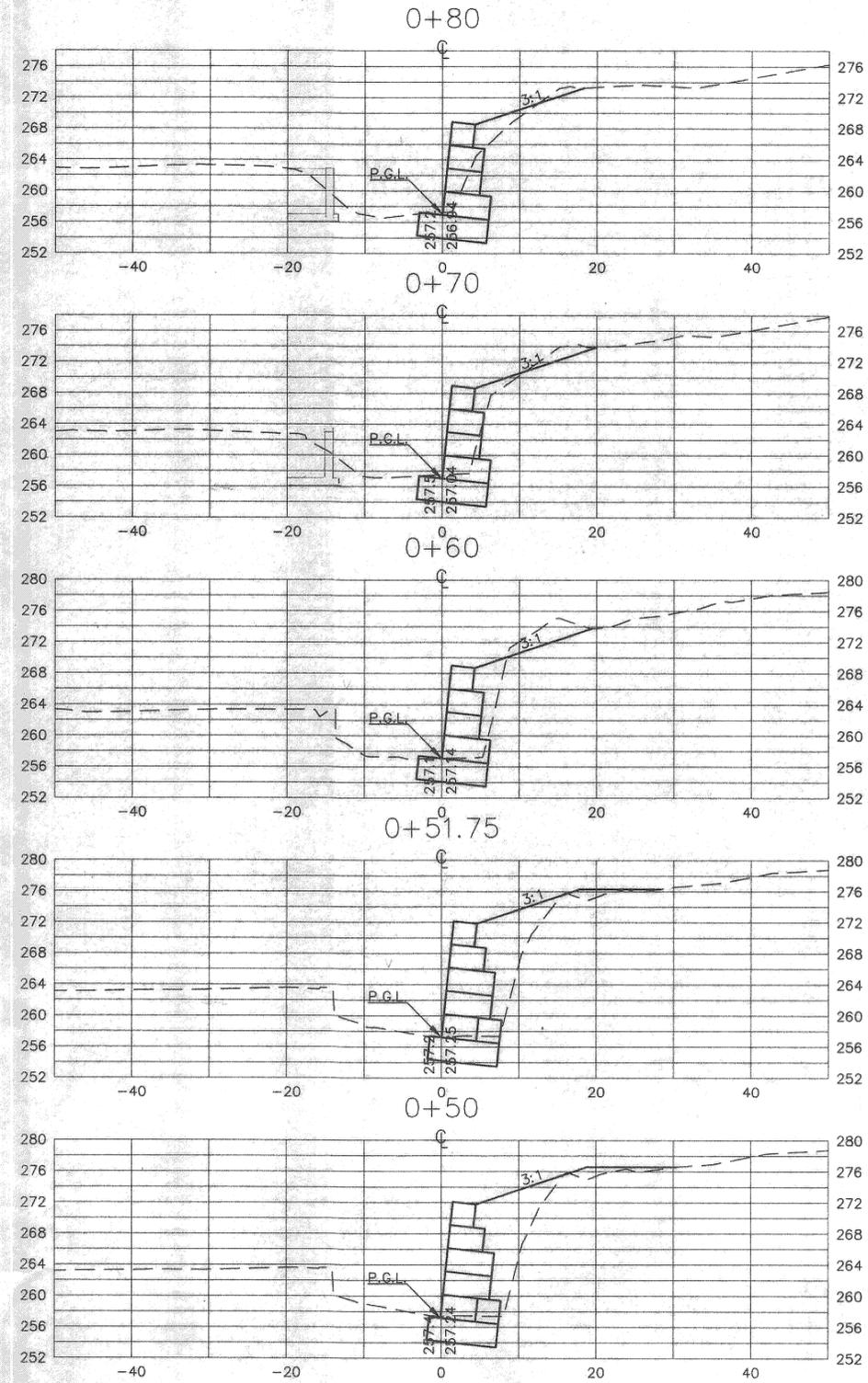
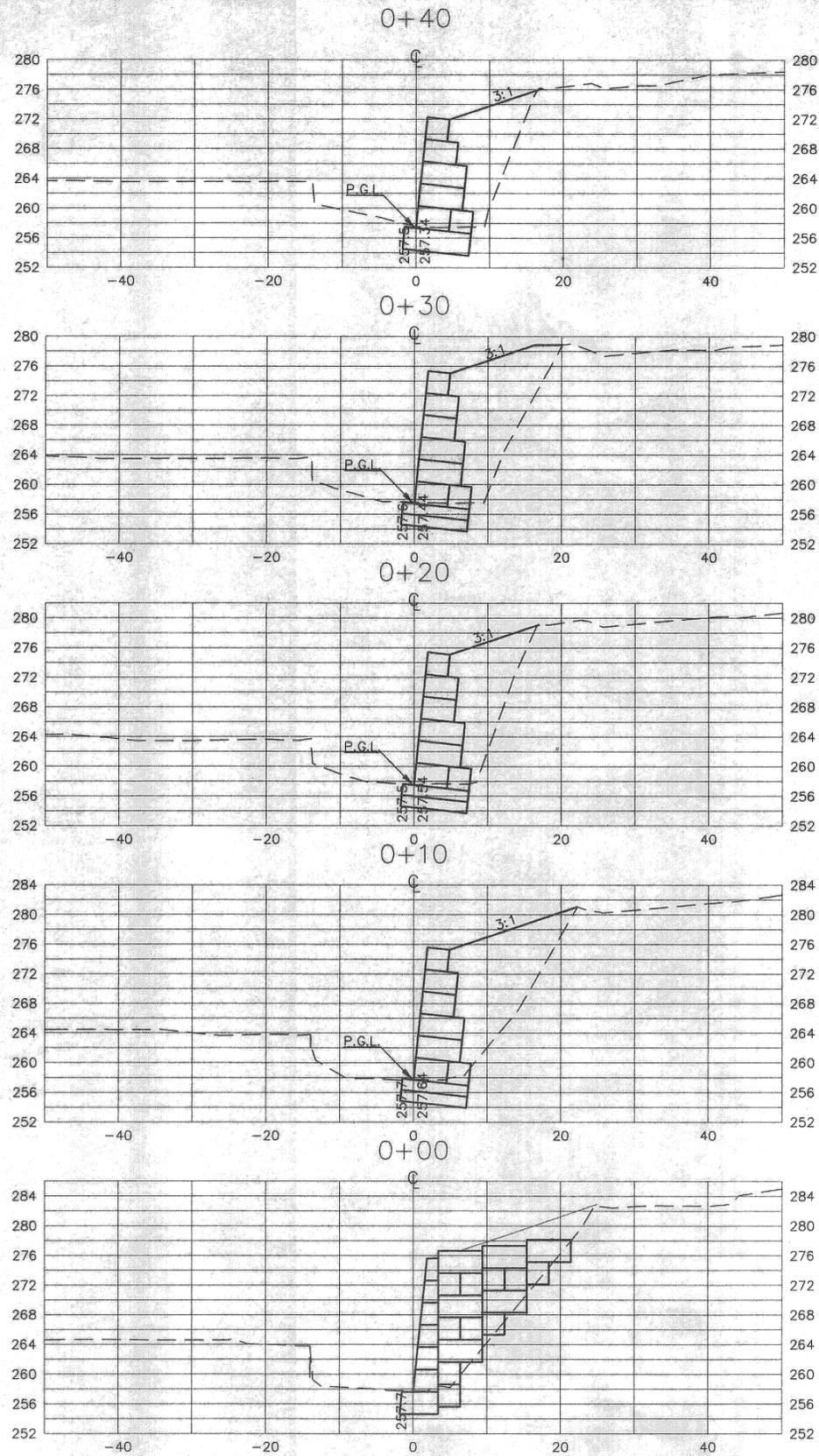
DES: D.R.B.  
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DATE: 11/97  
BY: NO. REVISION DATE

PROFILE & DETAILS

600' SCALE MAP NO. BLOCK NO.

STREAM REHABILITATION  
HUDSON BRANCH  
@ ELLICOTT CITY COLORED SCHOOL  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
SHEET OF



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS \_\_\_\_\_ DATE \_\_\_\_\_ CHIEF, BUREAU OF ENGINEERING \_\_\_\_\_ DATE \_\_\_\_\_  
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CROSS SECTIONS

600' SCALE MAP NO. \_\_\_\_\_ BLOCK NO. \_\_\_\_\_

STREAM REHABILITATION  
HUDSON BRANCH  
© ELLICOTT CITY COLORED SCHOOL  
HOWARD COUNTY, MARYLAND

SCALE  
1"=10'  
SHEET  
4 OF 5

