

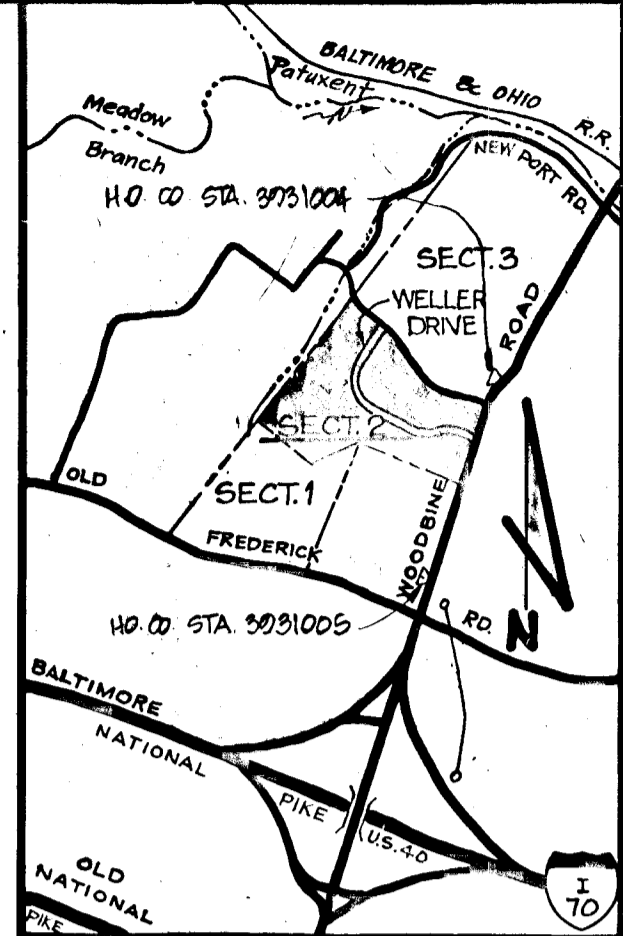
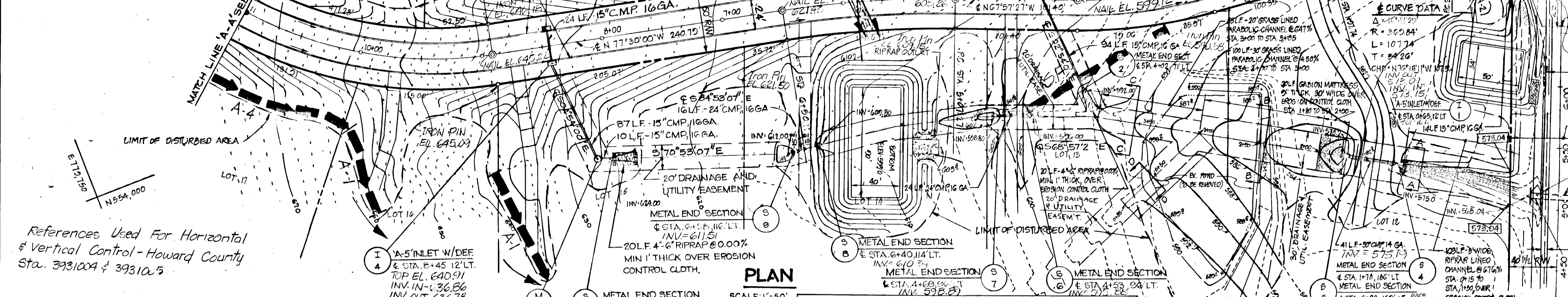
TRAP NO.	D.A. (AC)	VOLUME OF REG'D	PROVID	BOTTOM SIZE	SPWY. WIDTH	BOTTOM ELEV.	SPILLWAY ELEV. @ 4'	C.O. ELEV.
1	4.04	8,820	9,872	54" x 50"	20	569.0	574.0	571.0
2	28.8	17,640	18,944	40" x 90"	12	599.0	604.0	601.0

SEDIMENT TRAP SCHEDULE

BENCH MARKS

NO. CO. CONTROL STA. 3931004
 N. 553, 230.66 E. 571.811
 E. 781, 000.05

NO. CO. CONTROL STA. 3931005
 N. 991, 982.54 E. 634.966
 E. 780, 345.58



VICINITY MAP
 SCALE: 1" = 2,000'
 AS-BUILT SURVEY CERTIFIED BY LUTHER BATHURST, MD P.E. 11/393 ON JAN. 19, 1988

OWNER & DEVELOPER

GEORGIA AVENUE PROPERTIES, INC.
 % BROOKE LEE III
 13838 GEORGIA AVENUE
 WHEATON, MD 20906

WELLER DRIVE STA. 0+00 - STA. 1+00 PATAPSCO OVERLOOK - SECTION 2

LOCATION	4TH ELECTION DISTRICT TAX MAP 2 PART OF PARCEL 32	HOWARD COUNTY, MD
DATE	AUGUST, 1981	DESIGN BY: J.U.B. & R.L.M.
SCALE	AS SHOWN	JOB NO.: 8013
		DRAWN BY: J.C.B. & B.S. & M.G.
		CHECKED BY:
		DRAWING NO.: 1 OF 5

boender associates
 3965 ELLIOTT MILLS DRIVE
 ELLIOTT CITY, MD 21043
 BALTIMORE 301-465-7377 • SALISBURY 301-749-1286

engineers
 surveyors
 planners

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.
 DATE: 4-18-86

DEVELOPER'S CERTIFICATE

I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT ON THEIR AUTHORIZED AGENTS, AS AND DEEMED NECESSARY.

DATE: 12-1-85

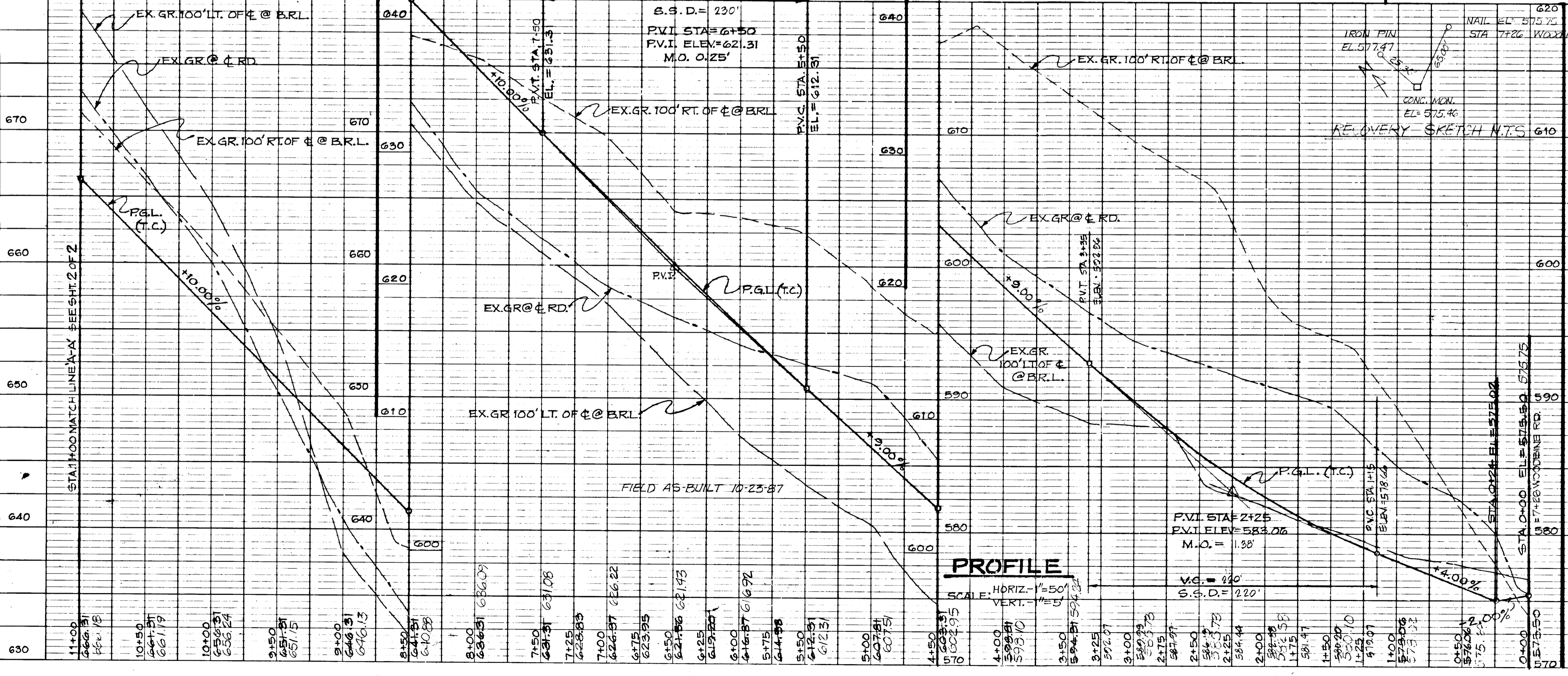
ENGINEER'S CERTIFICATE

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON PERSONAL KNOWLEDGE OF THE SITE, CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

DATE: 10-18-85



APPROVED: DEPARTMENT OF PUBLIC WORKS
 DATE: 4-24-86
 CHIEF, BUREAU OF ENGINEERING
 APPROVED: OFFICE OF PLANNING AND ZONING
 DATE: 4-18-86
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION



GENERAL NOTES

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HO. CO. DESIGN MANUAL, VOL. IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
- APPROXIMATE LOCATION OF EX. UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EX. 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 TEST FIT EX. UTILITIES WHERE OBSERVED BY THE ENGINEER A MINIMUM OF 2 WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS.
- CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES AT LEAST 5 DAYS BEFORE STARTING WORK (OWNERS ON THESE SERVICES):
 MD POT
 WELL TELEPHONE SYSTEM
 LONG DISTANCE CABLE COMPANY
 BALTO. GAS & ELECTRIC COMPANY
 HO. CO. BUREAU OF UTILITIES
 HO. CO. CONSTRUCTION/INSPECTION SURVEY DIVISION
 (24 HRS. NOTICE PRIOR TO COMMENCEMENT OF WORK)
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HO. CO. SPECIFICATIONS.
- ALL STREET CURBS RETURNED SHALL HAVE 98% OF EACH UNDERLAYER REPAIRED.
- STORM DRAIN TRENCHES WITHIN ROAD RIGHT-OF-WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HO. CO. DESIGN MANUAL, VOL. IV, I.E. AND SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
- INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING, AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES OF 1971 (EDITION).
- PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH LOCATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
- DESIGNATED TRAFFIC SPEEDS IN ACCORDANCE WITH THE A.A. & H.O. STDS. ALL 30' R/W - 30 MPH ALL 20' R/W - 20 MPH.
- ALL ELEVATIONS SHOWN ARE BASED ON D.M.E. AND 84-THEM SEA LEVEL DATUM 1929.
- ALL FILL AREAS WITHIN ROADWAYS AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM 98% COMPACTION.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- PROFILE DIMENSIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAIN DIMENSIONS.
- SUBJECT PROPERTY ZONED - R. PER 10-29-77 COMPREHENSIVE ZONING PLAN.
- TOPO TAKEN FROM AERIAL PHOTOGRAPHY PROVIDED BY FORMER AERIAL SURVEYS.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 1' OF FINISHED GRADE.
- REGULATION OF UTILITIES TO BE AT DEVELOPER'S EXPENSE.

PROFILE

SCALE: HORIZ. - 1" = 50'
 VERT. - 1" = 5'

#1176

TRAP NO.	D.A.	VOLUME (CF)	BOTTOM SIZE	DEPTH	BOTTOM ELEV.	SPILLWAY ELEV.	C.O. ELEV.
3	1.1 AC	2,472	1800	24" x 34"	3'	666.0	669.0

* AT ELEV. 668.0

SEDIMENT TRAP SCHEDULE

DEVELOPER'S CERTIFICATE

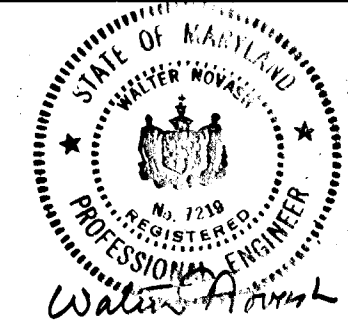
I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

DEVELOPER: *Chala* DATE: *12-1-85*

ENGINEER'S CERTIFICATE

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

ENGINEER: *Walter Arnold* DATE: *10-18-85*



OWNER & DEVELOPER
 GEORGIA AVENUE PROPERTIES, INC.
 1809 GEORGIA AVENUE
 WHEATON, MD. 20906

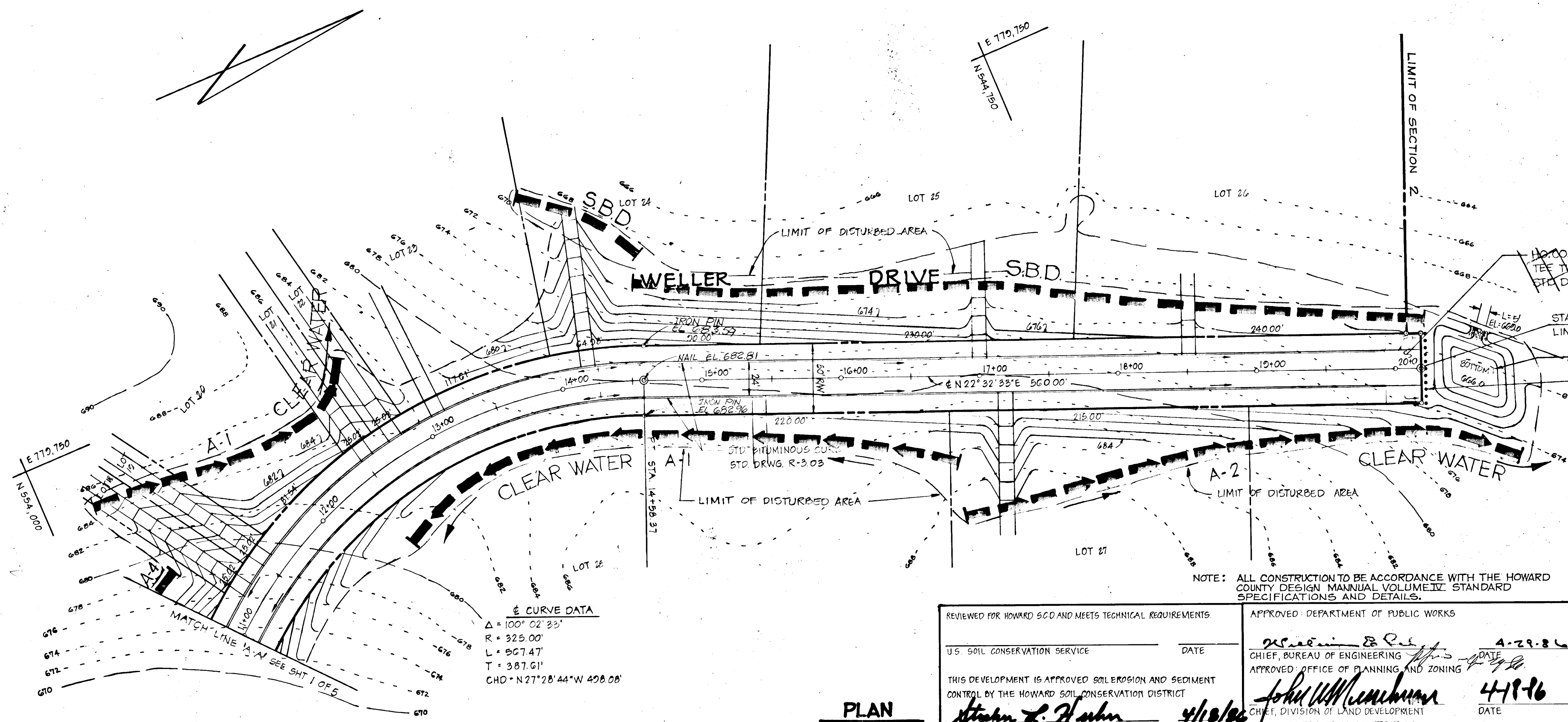
AS-BUILT SURVEY CERTIFIED BY LUTHER E. BATHURST, MD. P.E. # 11323 ON JAN. 19, 1988

WELLER DRIVE STA. 11+00-STA. 20+18
PATAPSCO OVERLOOK-SECTION 2

LOCATION	4TH ELECTION DISTRICT TAX MAP 2 PART OF PARCEL 32	HOWARD COUNTY, MD.
DATE	AUGUST, 1981	DESIGN BY: J.J.B. & P.L.M.
SCALE	AS SHOWN	DRAWN BY: B.S. #JJB
		CHECKED BY:
		JOB NO.: 80113
		DRAWING NO.: 2 OF 5
boender associates 3645 ELLICOTT MILLS DR. ELLICOTT CITY, MD 21043 BALTIMORE 301-465-7777		engineers surveyors planners

PLAN	DATE
NO.	

PROFILE	DATE
NO.	

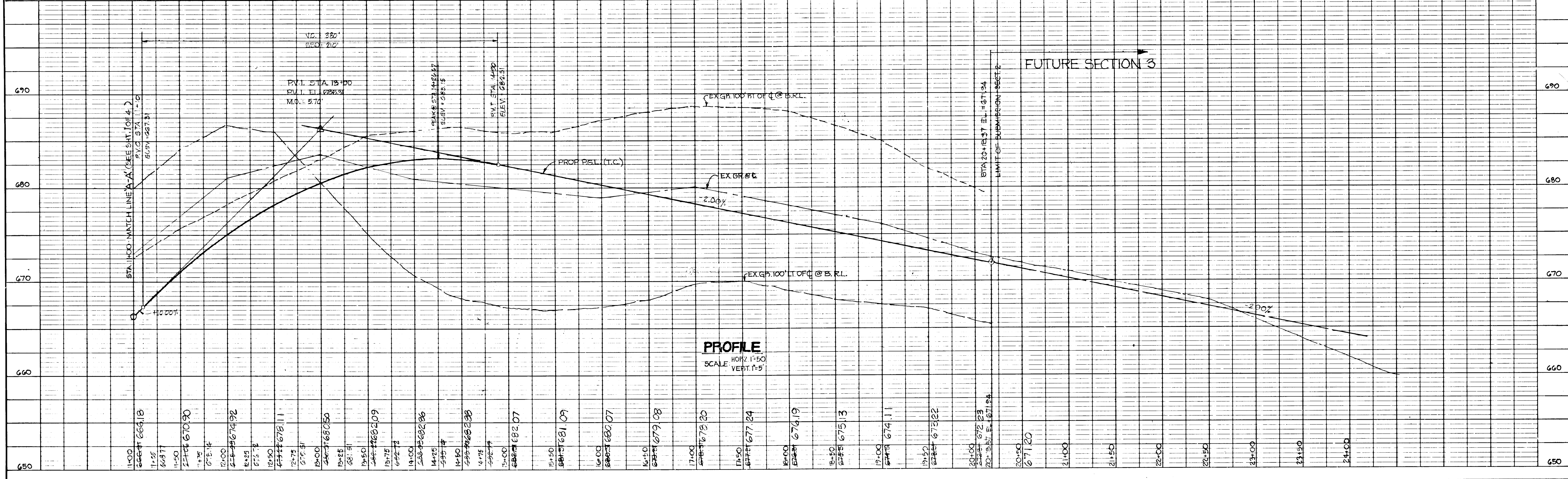


PLAN
SCALE: 1"=50'

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS APPROVED - DEPARTMENT OF PUBLIC WORKS

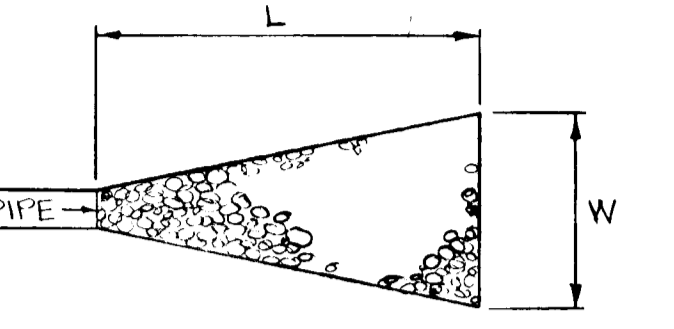
U.S. SOIL CONSERVATION SERVICE DATE: *4-29-86*
 CHIEF, BUREAU OF ENGINEERING
John W. Leubman 4-29-86
 APPROVED - OFFICE OF PLANNING AND ZONING
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
Stephen L. Hahn 4/18/86
 HOWARD SOIL CONSERVATION DISTRICT

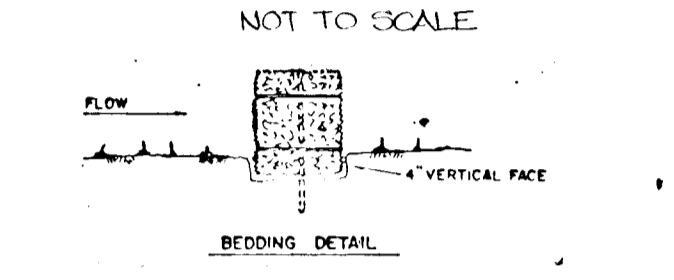


PROFILE
SCALE: HORIZ. 1"=50' VERT. 1"=5'

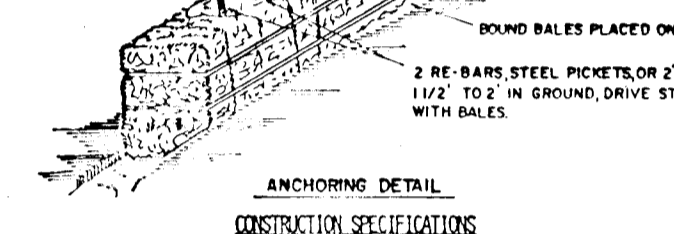
STRUCT.	L	W	STONE SIZE
S-1	20'	10'	4" - 6"
S-2	20'	10'	4" - 6"
S-3	20'	10'	4" - 6"



**OUTLET PROTECTION
DETAIL FOR S-1, S-2 & S-3**
NOT TO SCALE

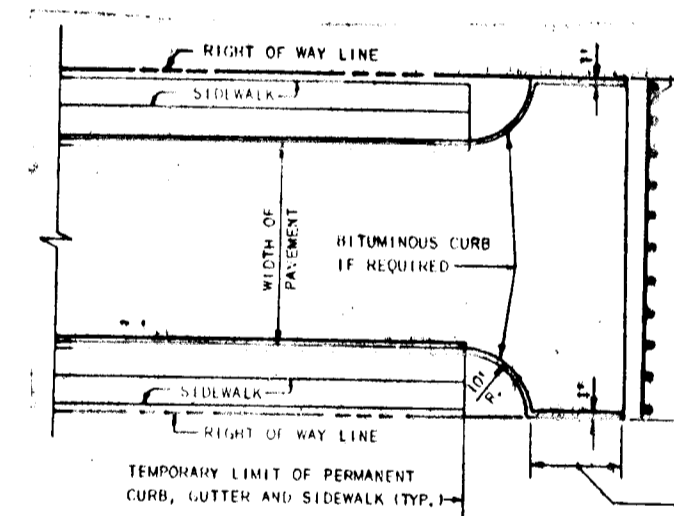


**ANCHORING DETAIL
CONSTRUCTION SPECIFICATIONS**



- Bales shall be placed at the toe of a slope or on the contour and in a row with ends tightly abutting the adjacent bales.
- Each bale shall be embedded in the soil a minimum of (10) inches, and placed so the bierings are horizontal.
- Bales shall be securely anchored in place by either two stakes or re-bar driven through the bale. The first stake in each bale shall be driven through the previous stake laid in at an angle to force the bales together. Stakes shall be driven flush with the first stake.
- Inspection shall be frequent and repair replacement shall be made promptly as needed.
- Bales shall be removed when they have served their usefulness so as not to block or impede storm flow or drainage.

STRAW BALE DIKE - S.D.O.
NOT TO SCALE



TEMPORARY TEE TURN-AROUND
NOT TO SCALE

- CONSTRUCTION SEQUENCE**
- OBTAIN GRADING PERMIT
 - NOTIFY THE HOWARD COUNTY BUREAU OF LICENSE, INSPECTIONS AND PERMITS 24 HOURS PRIOR TO GRADING OPERATIONS
 - INSTALL TEMPORARY SEDIMENT CONTROL MEASURES (S.C.E., D.D., S.B.D., S.F.I.S., AND SED TRAPS 1, 2 AND 3)
 - INSTALL DRAINAGE BLACK INLETS AS SHOWN
 - ROUGH GRADE SITE. STABILIZE ROADS WITH BASE COURSE. STABILIZE DISTURBED AREAS
 - PAVE ROADS
 - FINE GRADE SITE. INSTALL PERMANENT STABILIZATION MEASURES ACCORDING TO SEDIMENT CONTROL NOTE NO. 2
 - REMOVE TEMPORARY SEDIMENT CONTROL MEASURES WITH THE APPROVAL OF THE HOWARD COUNTY BUREAU OF LICENSE, INSPECTIONS AND PERMITS.

DEVELOPER'S CERTIFICATE

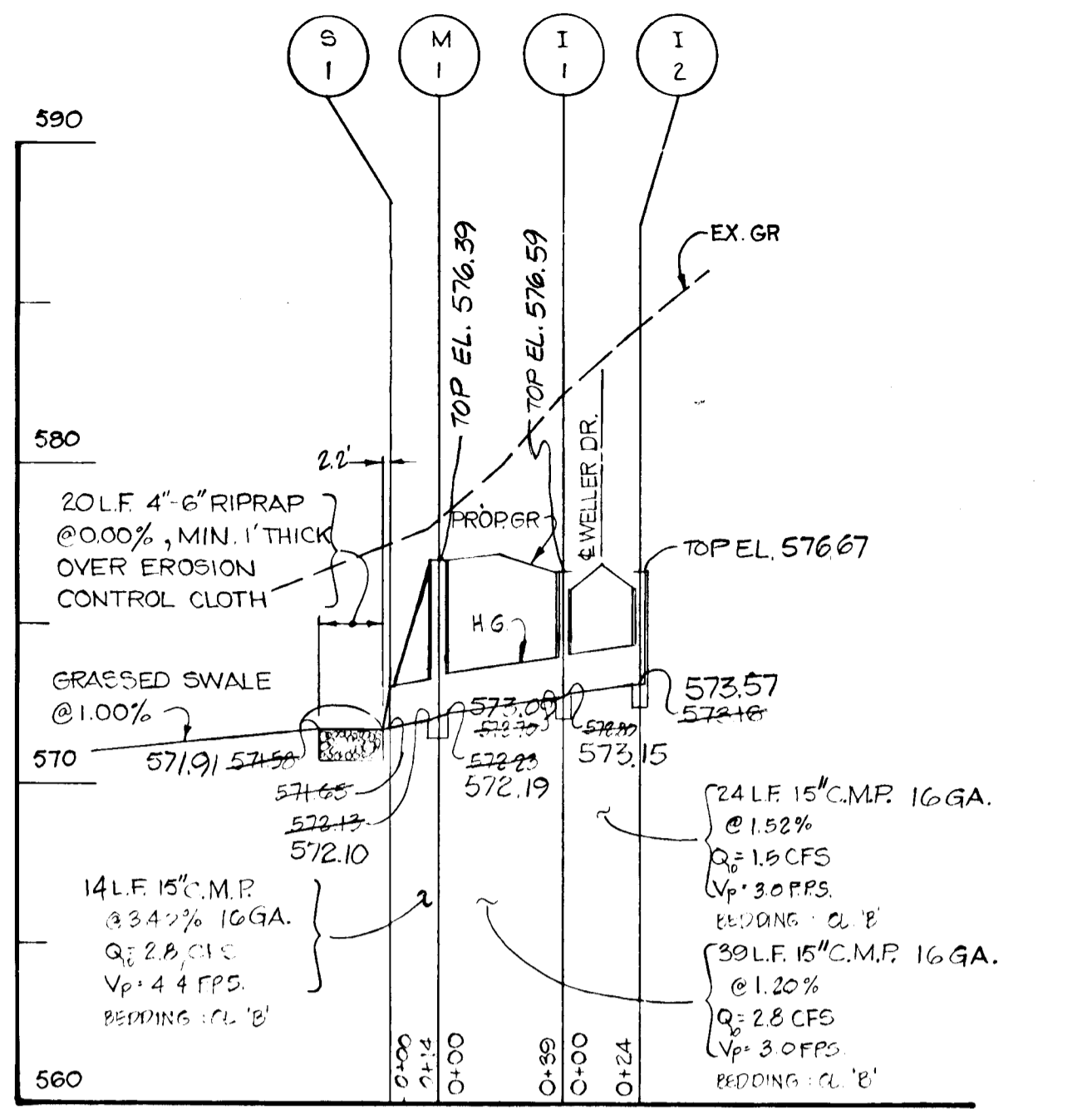
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Developer: *John Ford* DATE: *12/1/85*

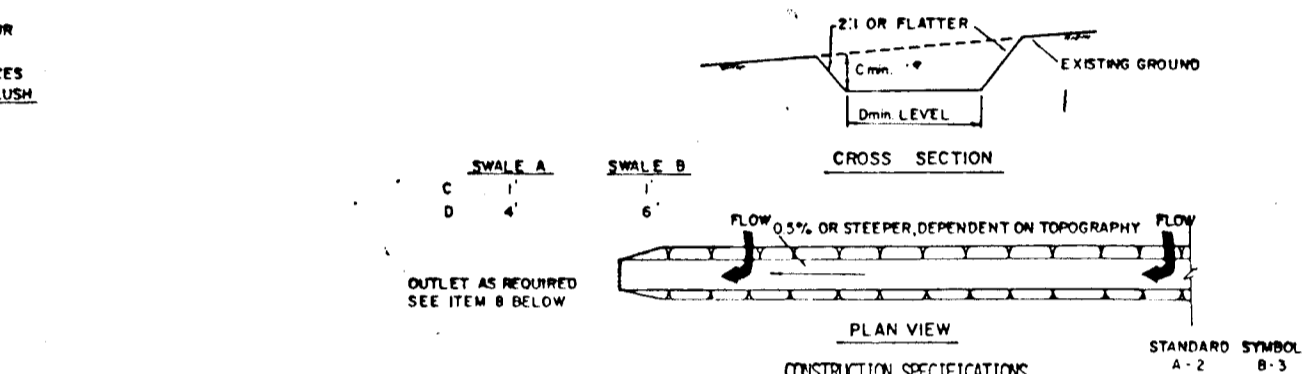
ENGINEER'S CERTIFICATE

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Engineer: *Walter A. Novack* DATE: *10-18-85*



PROFILE
SCALE: HORIZ. 1" = 50'
VERT. 1" = 5'

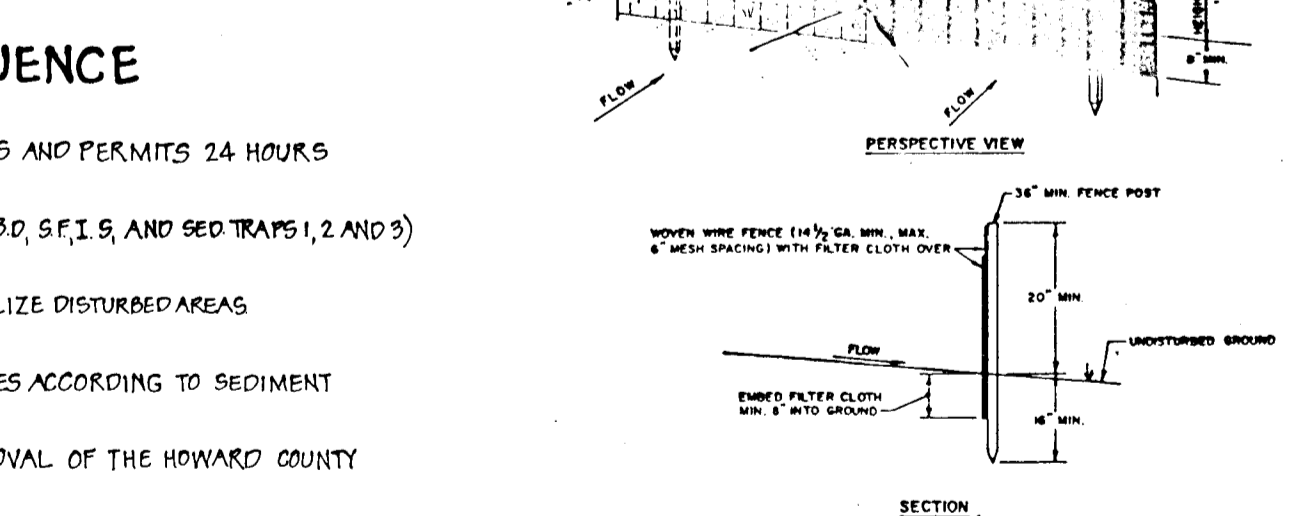


- ALL TEMPORARY SHALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
- DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
- DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
- ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SHALE.
- THE SHALE SHALL BE DECAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL SPEED NORMAL FLOW.
- FILLS SHALL BE COMPACTED BY EARTH-POUNDING EQUIPMENT.
- ALL EARTH REMOVED AND NOT NEEDED ON CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SHALE.
- STABILIZATION SHALL BE AS PER THE CHART BELOW:

TEMPORARY SHALE
NOT TO SCALE

TYPE OF DISTURBANCE	CORREL. SIZE	ELM. CHANNEL STABILIZATION	R (S.C. OR 10:1)
1	0.5-3.00	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.00	SEED AND STRAW MULCH	SEED USING ATE OR EXCELLEN
3	5.1-8.00	SEED WITH ATE OR EXCELLEN	LINED RIP-RAP 4-8"
4	8.1-20.00	LINED 4-8" RIP-RAP	ENGINEERED DESIGN

TEMPORARY SHALE
NOT TO SCALE



STABILIZED CONSTRUCTION ENTRANCE - S.C.E.
NOT TO SCALE

- Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
- Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
- Thickness - Not less than six (6) inches.
- Width - Ten (10) foot minimum, but not less than the full width at points where entrance or exits occur.
- Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
- Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mounded berm with 5:1 slope will be provided.
- Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanup of any measures used to trap sediment. All sediment applied, dropped, washed or tracked onto public rights-of-way must be removed immediately.
- Washing - Where washing is required, it shall be done on an area established with stone and which drains into an approved sediment trapping device.
- Periodic inspection and required maintenance shall be provided after each rain.

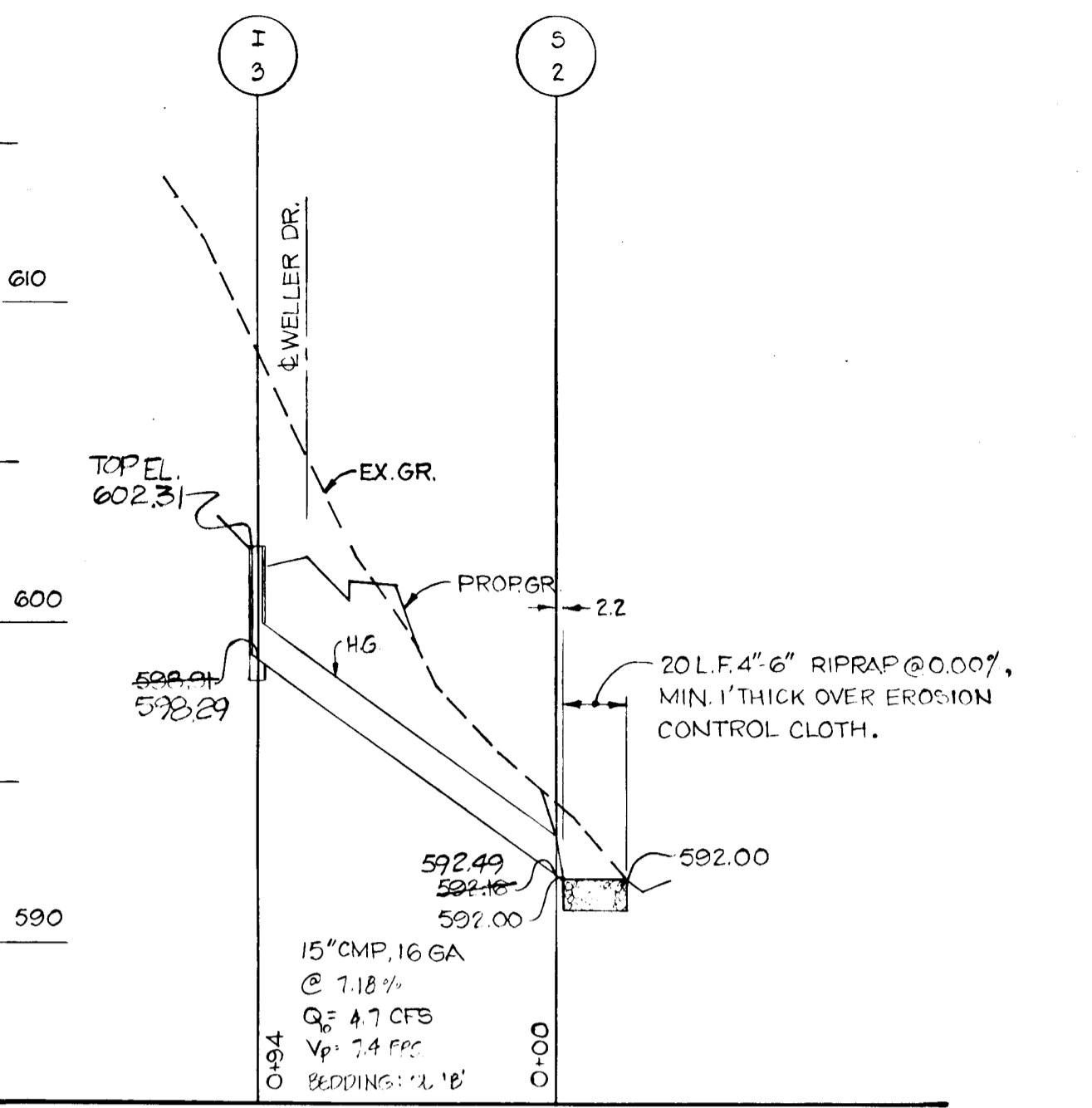
CONSTRUCTION ENTRANCE - S.C.E.
NOT TO SCALE



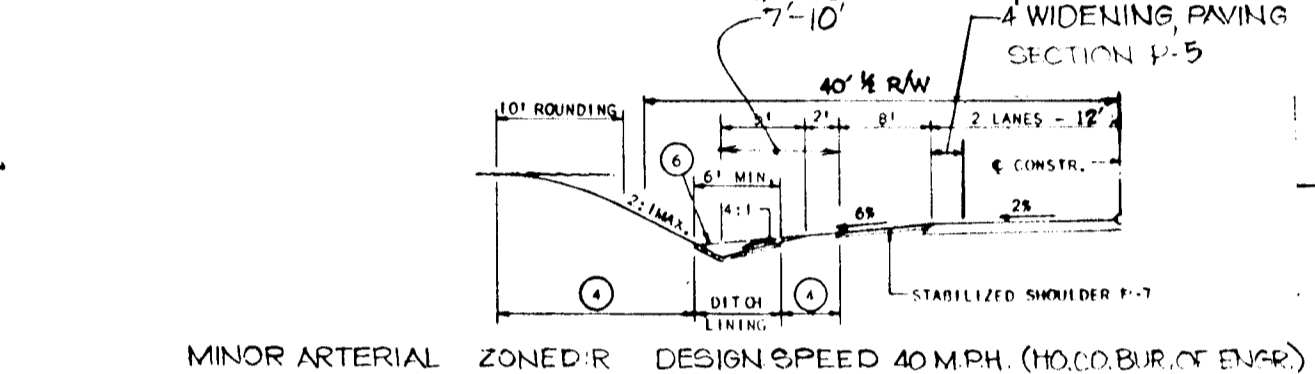
PERIMETER DIKE
NOT TO SCALE

PAVING NOTES

- ALL PERIMETER DIKE/SHALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
- DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
- DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
- THE SHALE SHALL BE DECAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED IN THE STANDARD.
- STABILIZATION OF THE AREA DISTURBED BY THE DIKE AND SHALE SHALL BE DONE IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SEED AND STRAW MULCH, AND SHALL BE DONE WITHIN 30 DAYS.
- PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.



PROFILE
SCALE: HORIZ. 1" = 50'
VERT. 1" = 5'

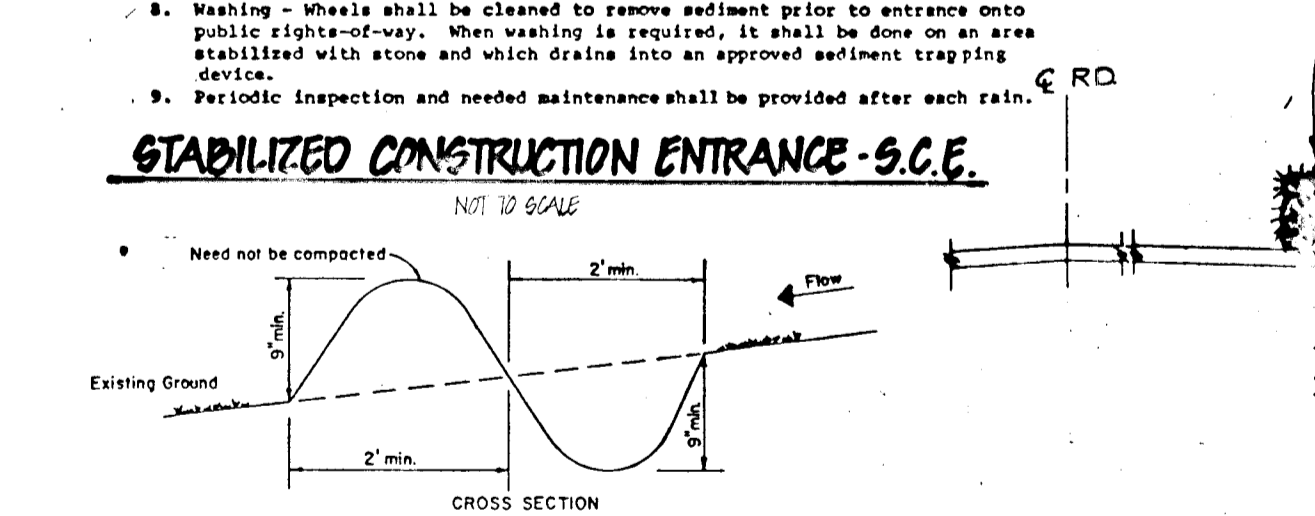


- ALL TEMPORARY SHALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
- DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
- DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
- ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SHALE.
- THE SHALE SHALL BE DECAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL SPEED NORMAL FLOW.
- FILLS SHALL BE COMPACTED BY EARTH-POUNDING EQUIPMENT.
- ALL EARTH REMOVED AND NOT NEEDED ON CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SHALE.
- STABILIZATION SHALL BE AS PER THE CHART BELOW:

TEMPORARY SHALE
NOT TO SCALE

TYPE OF DISTURBANCE	CORREL. SIZE	ELM. CHANNEL STABILIZATION	R (S.C. OR 10:1)
1	0.5-3.00	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.00	SEED AND STRAW MULCH	SEED USING ATE OR EXCELLEN
3	5.1-8.00	SEED WITH ATE OR EXCELLEN	LINED RIP-RAP 4-8"
4	8.1-20.00	LINED 4-8" RIP-RAP	ENGINEERED DESIGN

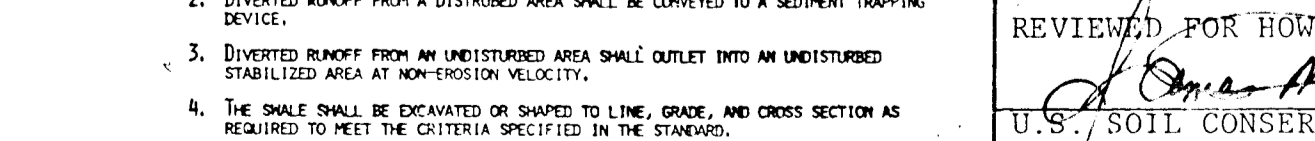
TEMPORARY SHALE
NOT TO SCALE



STABILIZED CONSTRUCTION ENTRANCE - S.C.E.
NOT TO SCALE

- Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
- Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
- Thickness - Not less than six (6) inches.
- Width - Ten (10) foot minimum, but not less than the full width at points where entrance or exits occur.
- Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
- Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mounded berm with 5:1 slope will be provided.
- Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanup of any measures used to trap sediment. All sediment applied, dropped, washed or tracked onto public rights-of-way must be removed immediately.
- Washing - Where washing is required, it shall be done on an area established with stone and which drains into an approved sediment trapping device.
- Periodic inspection and required maintenance shall be provided after each rain.

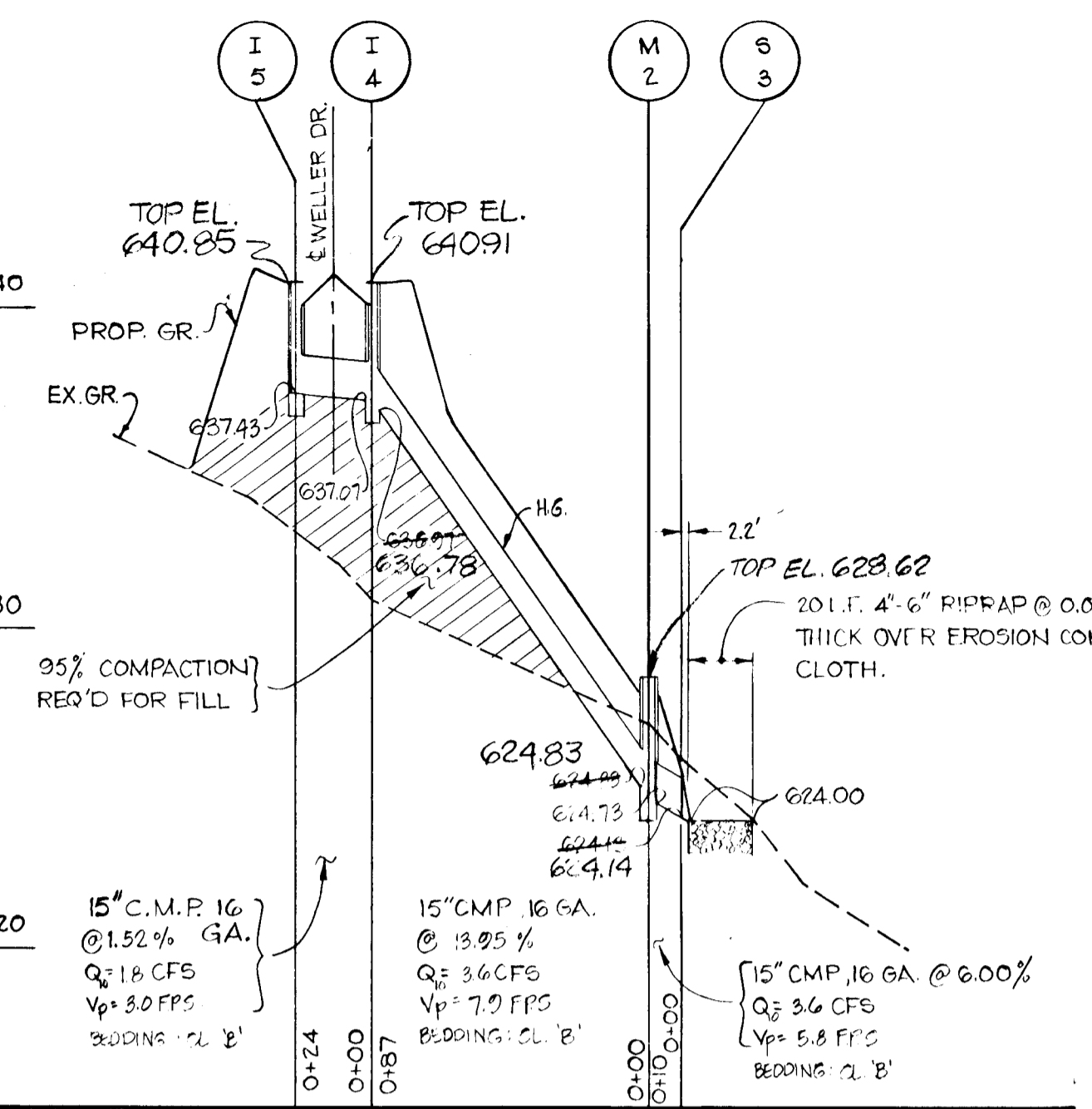
CONSTRUCTION ENTRANCE - S.C.E.
NOT TO SCALE



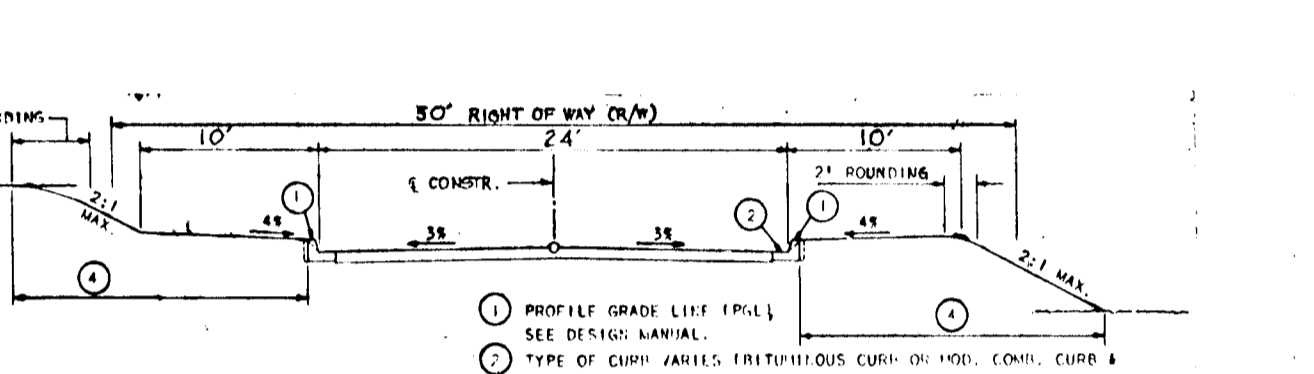
PERIMETER DIKE
NOT TO SCALE

PAVING NOTES

- ALL PERIMETER DIKE/SHALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
- DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
- DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
- THE SHALE SHALL BE DECAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED IN THE STANDARD.
- STABILIZATION OF THE AREA DISTURBED BY THE DIKE AND SHALE SHALL BE DONE IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SEED AND STRAW MULCH, AND SHALL BE DONE WITHIN 30 DAYS.
- PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.



PROFILE
SCALE: HORIZ. 1" = 50'
VERT. 1" = 5'

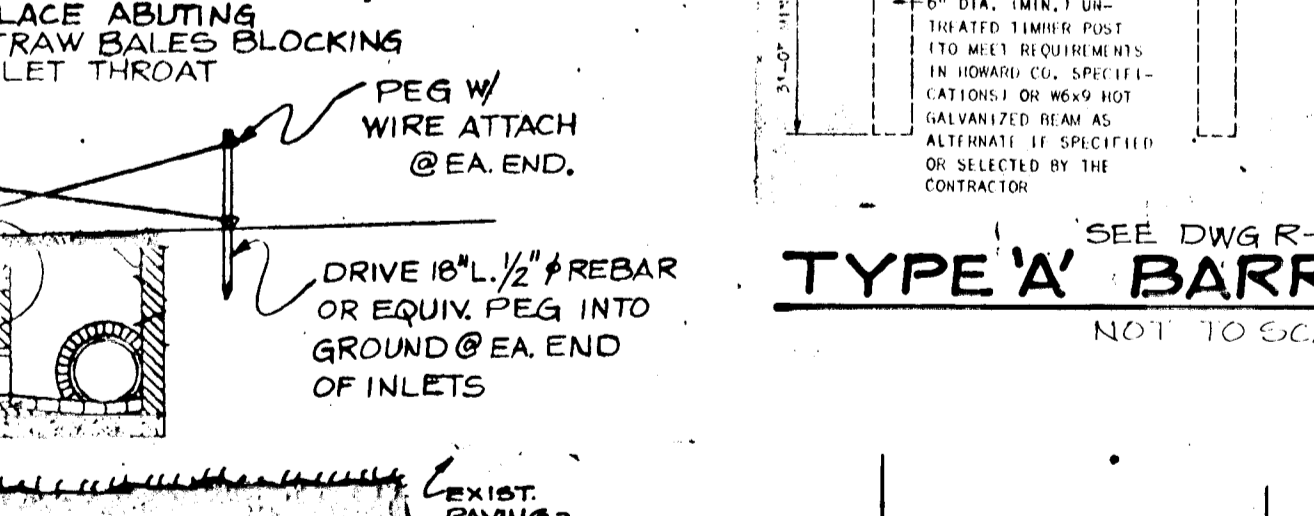


- ALL TEMPORARY SHALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
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- ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SHALE.
- THE SHALE SHALL BE DECAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL SPEED NORMAL FLOW.
- FILLS SHALL BE COMPACTED BY EARTH-POUNDING EQUIPMENT.
- ALL EARTH REMOVED AND NOT NEEDED ON CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SHALE.
- STABILIZATION SHALL BE AS PER THE CHART BELOW:

TEMPORARY SHALE
NOT TO SCALE

TYPE OF DISTURBANCE	CORREL. SIZE	ELM. CHANNEL STABILIZATION	R (S.C. OR 10:1)
1	0.5-3.00	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.00	SEED AND STRAW MULCH	SEED USING ATE OR EXCELLEN
3	5.1-8.00	SEED WITH ATE OR EXCELLEN	LINED RIP-RAP 4-8"
4	8.1-20.00	LINED 4-8" RIP-RAP	ENGINEERED DESIGN

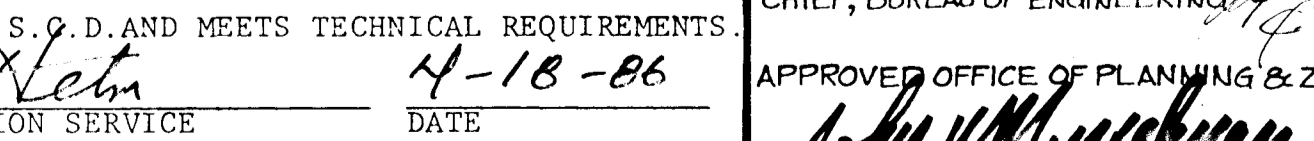
TEMPORARY SHALE
NOT TO SCALE



STABILIZED CONSTRUCTION ENTRANCE - S.C.E.
NOT TO SCALE

- Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
- Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
- Thickness - Not less than six (6) inches.
- Width - Ten (10) foot minimum, but not less than the full width at points where entrance or exits occur.
- Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
- Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mounded berm with 5:1 slope will be provided.
- Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanup of any measures used to trap sediment. All sediment applied, dropped, washed or tracked onto public rights-of-way must be removed immediately.
- Washing - Where washing is required, it shall be done on an area established with stone and which drains into an approved sediment trapping device.
- Periodic inspection and required maintenance shall be provided after each rain.

CONSTRUCTION ENTRANCE - S.C.E.
NOT TO SCALE



PERIMETER DIKE
NOT TO SCALE

PAVING NOTES

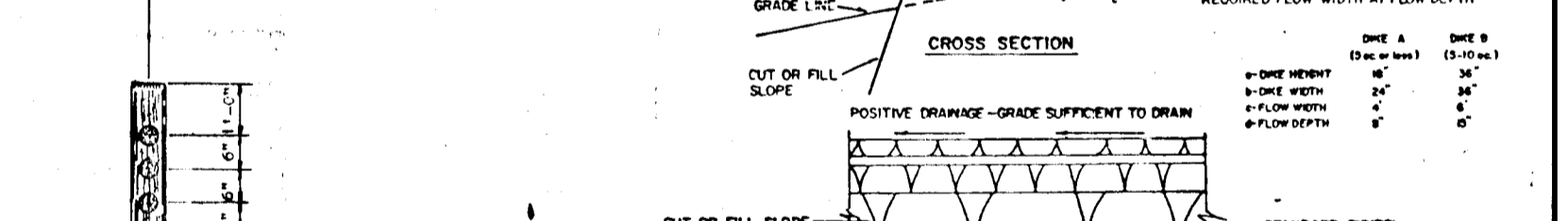
- ALL PERIMETER DIKE/SHALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
- DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
- DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
- THE SHALE SHALL BE DECAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED IN THE STANDARD.
- STABILIZATION OF THE AREA DISTURBED BY THE DIKE AND SHALE SHALL BE DONE IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SEED AND STRAW MULCH, AND SHALL BE DONE WITHIN 30 DAYS.
- PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

STRUCTURE SCHEDULE					
NO.	TYPE	INV. IN	INV. OUT	TOP EL.	REMARKS
I-1	'A-5' INLET W/ DEFLECTORS	573.00	573.15	576.50	HO. CO. STD. DRWG. SD-4.01
I-2	" " " " " "	573.00	573.15	576.50	" " " " " "
I-3	'A-10' " " " "	573.00	573.15	576.50	" " " " " "
I-4	'A-5' " " " "	573.00	573.15	576.50	" " " " " "
I-5	" " " " " "	573.00	573.15	576.50	" " " " " "
M-1	'B' MANHOLE	572.10	572.10	576.50	" " " " " "
M-2	'B' MANHOLE	572.10	572.10	576.50	" " " " " "
S-1	METAL END SECTION	571.65	571.65	572.00	" " " " " "
S-2	" " " " " "	571.65	571.65	572.00	" " " " " "
S-3	" " " " " "	571.65	571.65	572.00	" " " " " "
S-4	" " " " " "	571.65	571.65	572.00	" " " " " "
S-5	" " " " " "	571.65	571.65	572.00	" " " " " "
S-6	" " " " " "	571.65	571.65	572.00	" " " " " "
S-7	" " " " " "	571.65	571.65	572.00	" " " " " "
S-8	" " " " " "	571.65	571.65	572.00	" " " " " "
S-9	" " " " " "	571.65	571.65	572.00	" " " " " "
S-10	EXISTING HEADWALL	571.65	571.65	572.00	EXISTING
S-11	TYPE 'A' HEADWALL, MODIFIED	571.65	571.65	572.00	SEE DETAIL, SHIT. 5 OF 5

SEDIMENT CONTROL NOTES

- A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permitting prior to the start of any construction. (902-2433)
- All sediment control and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
- All sediment traps/haunts shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12 of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above. In accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent stabilization, the following shall be done: a) temporary stabilization shall be done within 72 hours of disturbance, b) permanent stabilization shall be done within 14 days of disturbance, c) temporary stabilization shall be done within 72 hours of disturbance, d) permanent stabilization shall be done within 14 days of disturbance.
- All sediment control structures are to remain in place and are to be maintained in operative condition until permanent stabilization has been obtained from the Howard County Sediment Control Inspector.
- Site Analysis: Total Area of Site: 7.0 Acres, Area Disturbed: 1.0 Acres, Area to be stabilized: 6.0 Acres, Area to be vegetatively stabilized: 6.0 Acres, Total Soil: 10,000 Cu. Yds, Total Fill: 10,000 Cu. Yds, Off-site water/borrow area location: [blank]
- Any sediment control practice which is disturbed by construction activity shall be repaired and must be repaired on the same day of disturbance.
- The structures shall be removed and the area stabilized when the drainage area has been properly stabilized.
- On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be obtained upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may be authorized until this initial approval by the inspection agency is made.

STONE OUTLET SEDIMENT TRAP
NOT TO SCALE



STONE OUTLET SEDIMENT TRAP
NOT TO SCALE

- ALL DIKES SHALL BE CONSTRUCTED BY EARTH-POUNDING EQUIPMENT.
- ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
- ALL DIKES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANUP OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT APPLIED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- Washing - Where washing is required, it shall be done on an area established with stone and which drains into an approved sediment trapping device.
- Periodic inspection and required maintenance shall be provided after each rain event.

CONSTRUCTION SPECIFICATIONS FOR STONE OUTLET SEDIMENT TRAP

AS-BUILT SURVEY CERTIFIED BY LUTHER E. BATHURST MD. P.E. #11393 ON JAN. 19, 1988

EARTH DIKE - E.O.

OWNER / DEVELOPER

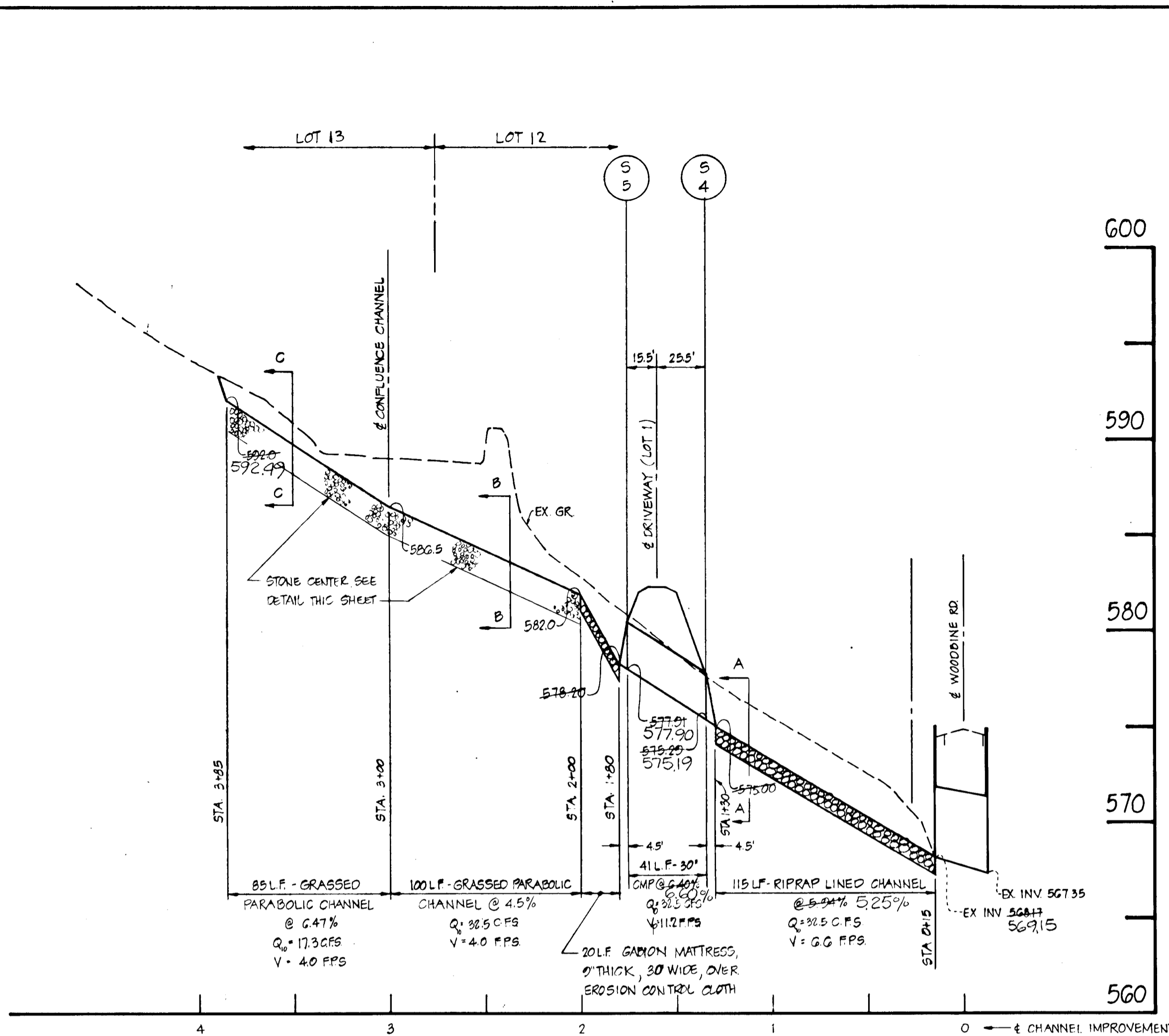
GEORGIA AVENUE PROPERTIES, INC.
% E. BROOKE LEE III
18856 GEORGIA AVENUE
WHEATON, MD. 20906

TITLE STORM DRAIN PROFILES & DETAILS

PROJECT: PATAPSCO OVERLOOK - SECTION 2
LOCATION: 4TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
DATE: AUGUST 1981
SCALE: AS SHOWN
DESIGN BY: J.C.B.
DRAWN BY: J.C.B.
CHECKED BY: J.C.B.
DRAWING NO.: 4 OF 5
JOB NO.: 80113

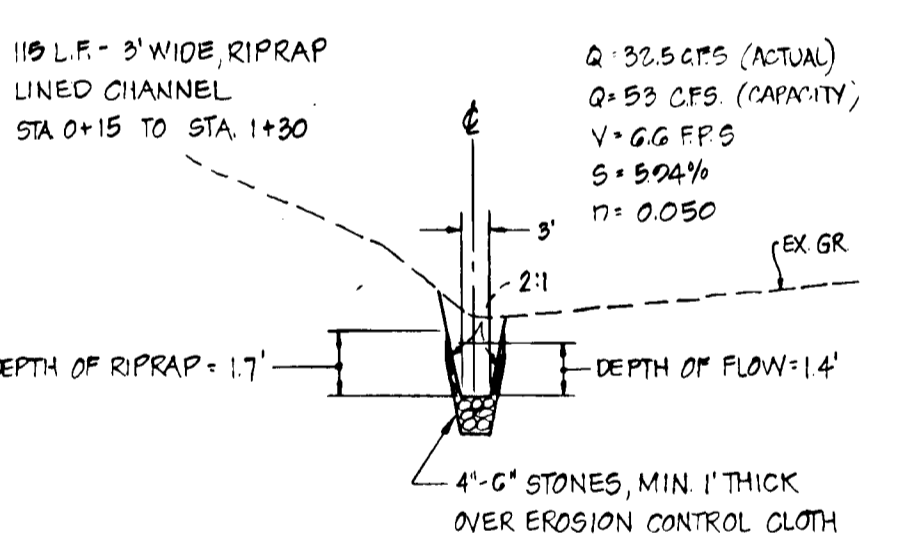
boender associates engineers/surveyors/planners
TOWN & COUNTRY PROFESSIONAL BUILDING, SUITE 101 - 107
ELLCOTT CITY, MARYLAND 21043
301-465-7777

F-86-93 AS EXHIBIT 1-19-85



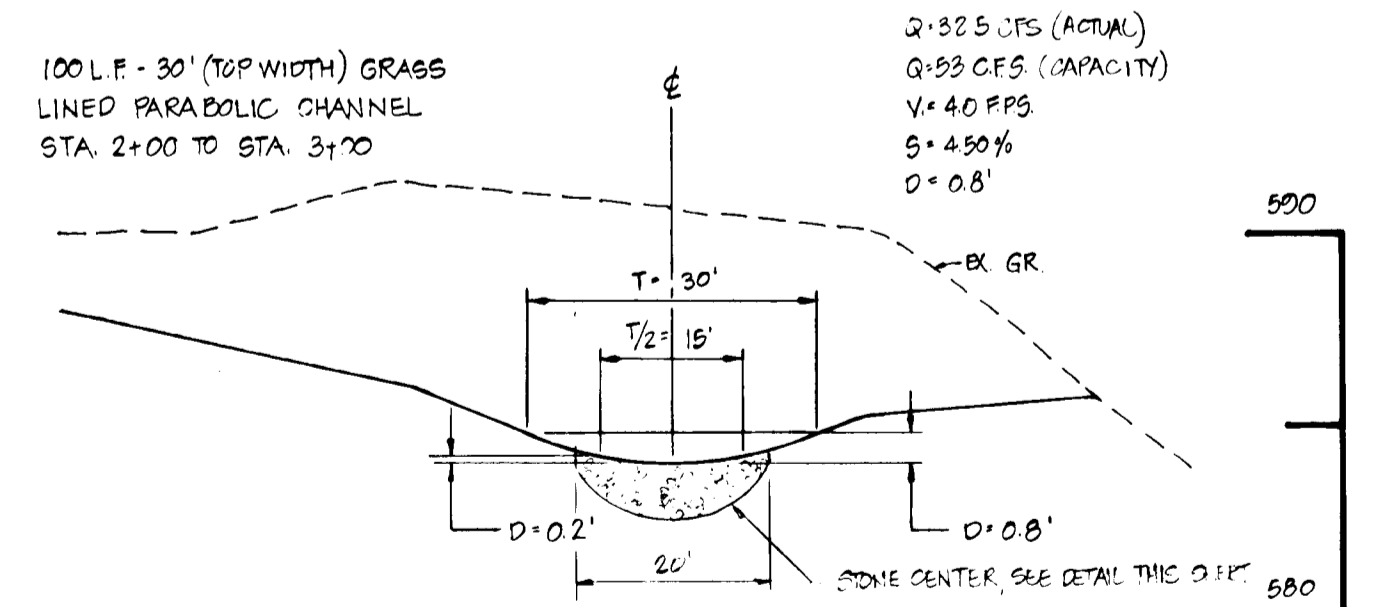
**PROFILE: IMPROVED CHANNEL
ACROSS LOTS 12 AND 13**

SCALE: HORIZ 1"=50'
VERT 1"=5'



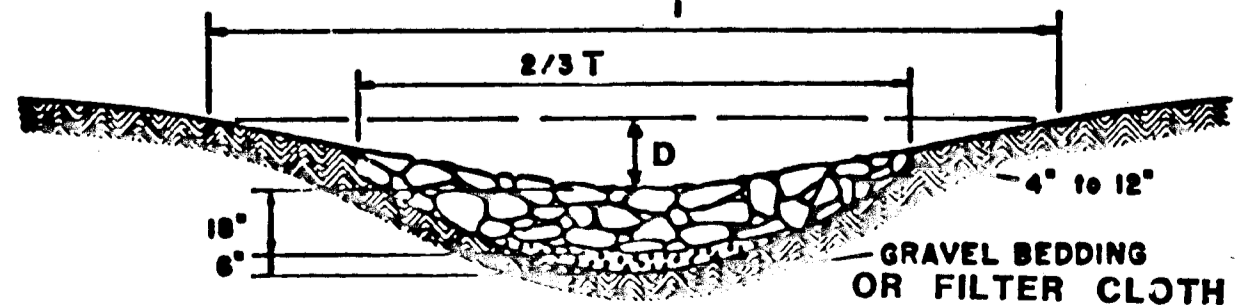
SECTION A-A

SCALE: HORIZ 1"=20'
VERT 1"=5'



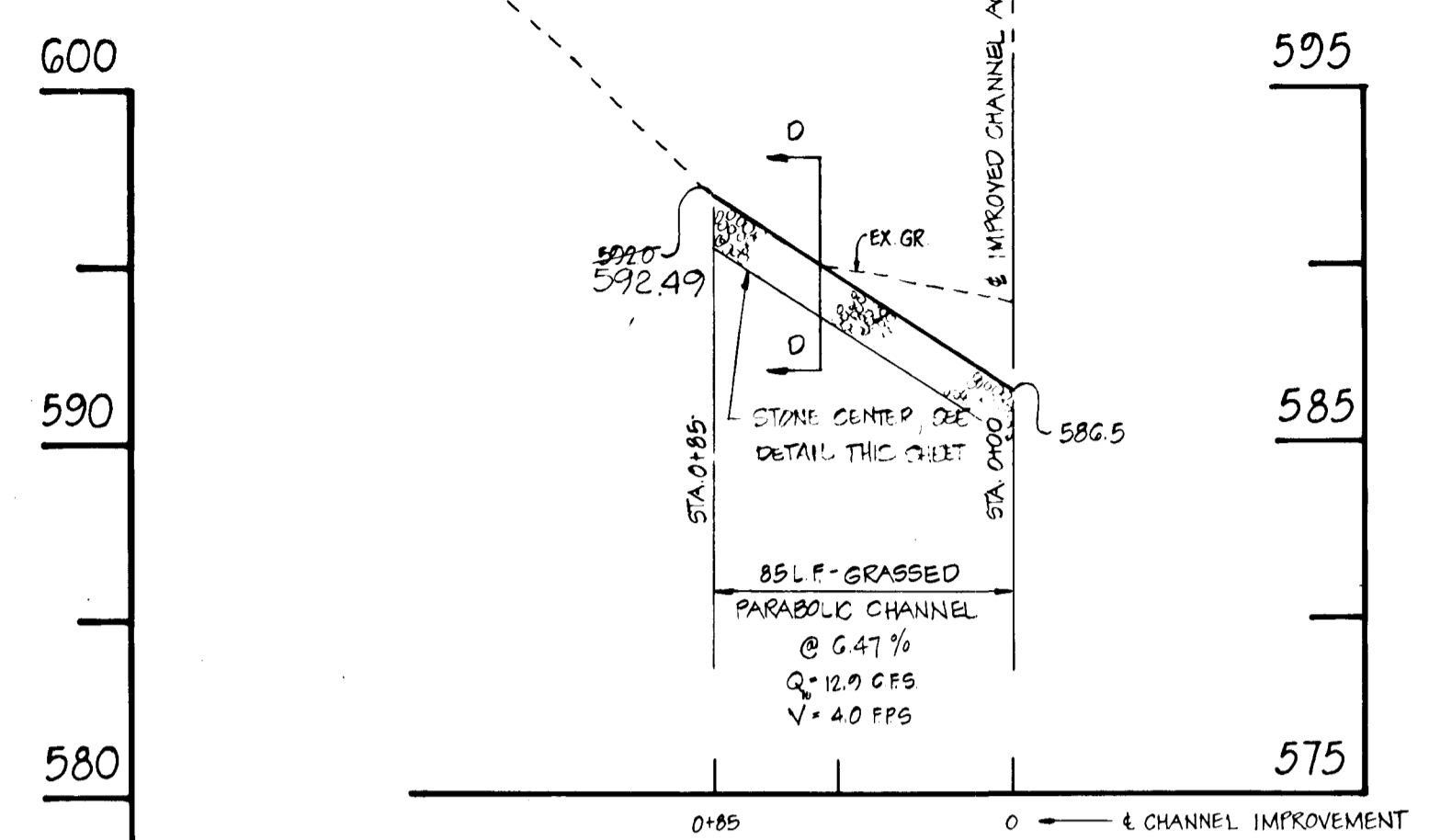
SECTION B-B

SCALE: HORIZ 1"=20'
VERT 1"=5'



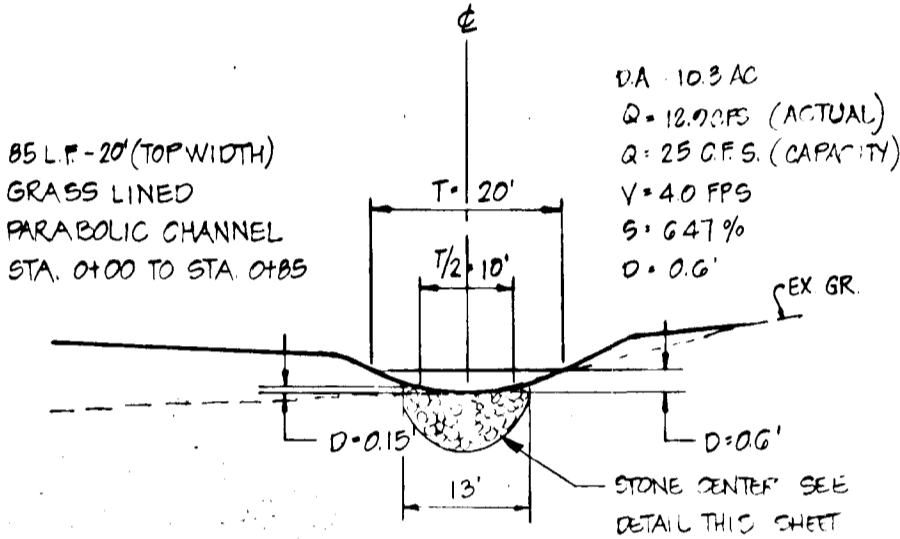
STONE CENTER FOR PARABOLIC WATERWAYS

SEE S.C.S. MANUAL, PG 3G05



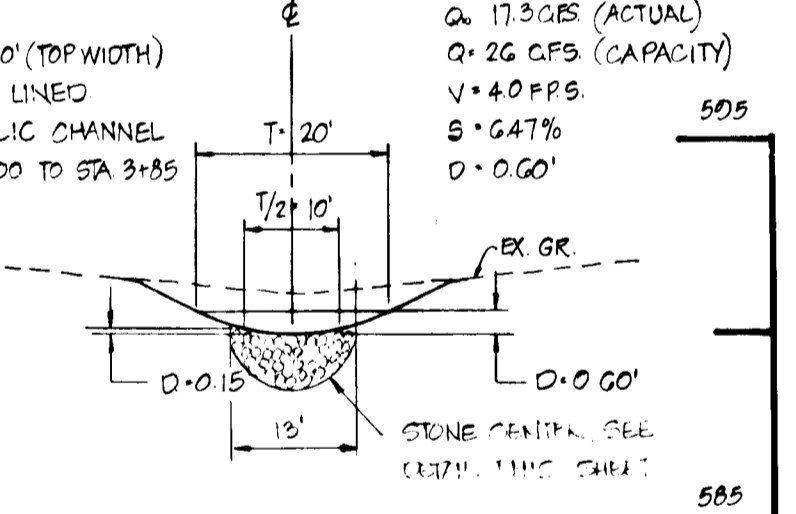
PROFILE: CONFLUENCE CHANNEL

SCALE: HORIZ 1"=50'
VERT 1"=5'



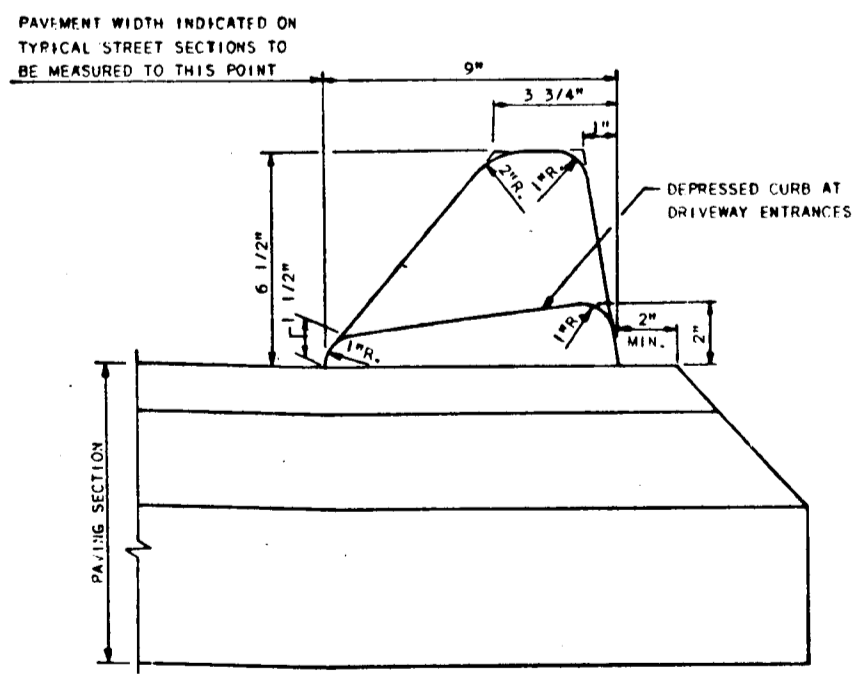
SECTION D-D

SCALE: HORIZ 1"=20'
VERT 1"=5'



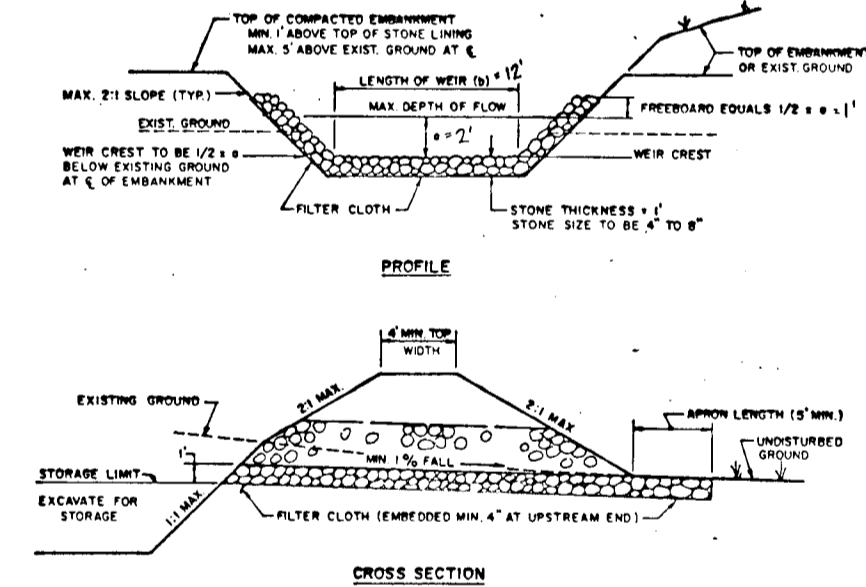
SECTION C-C

SCALE: HORIZ 1"=20'
VERT 1"=5'



STD. BITUMINOUS CURB

NOT TO SCALE



RIPRAP OUTLET SEDIMENT TRAP

SEE S.C.S. MANUAL, PG 16-01

NOTE: ALL CONSTRUCTION TO BE ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL VOLUME 2 STANDARD SPECIFICATIONS AND DETAILS.

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS
U.S. SOIL CONSERVATION SERVICE
DATE: 4-18-86

APPROVED: DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF ENGINEERING
DATE: 4-29-86

DEVELOPER'S CERTIFICATE
I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

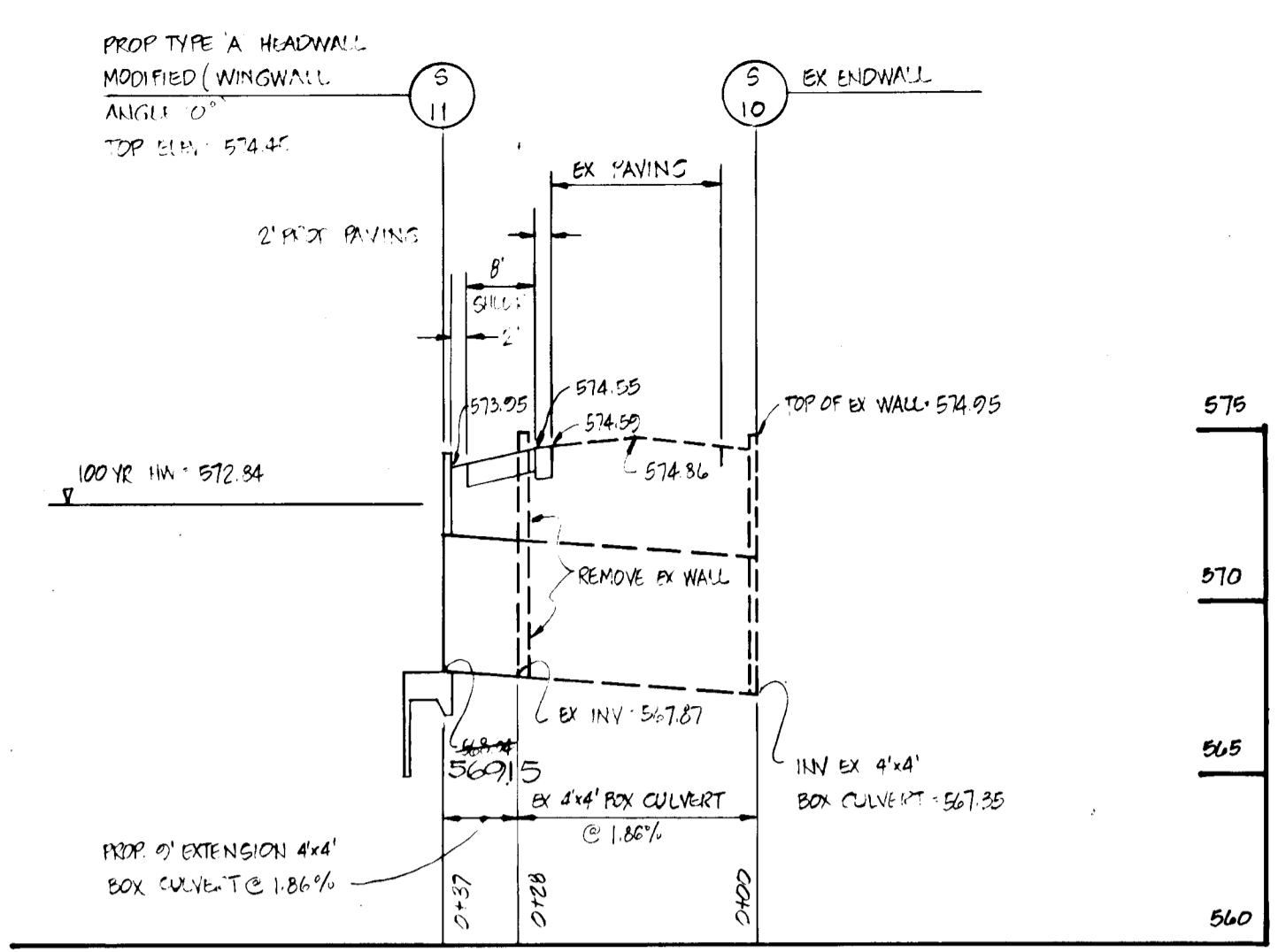
DEVELOPER: *John A. Rad* DATE: 12-1-85

ENGINEER'S CERTIFICATE
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

ENGINEER: *Walter Dennis* DATE: 4-16-86

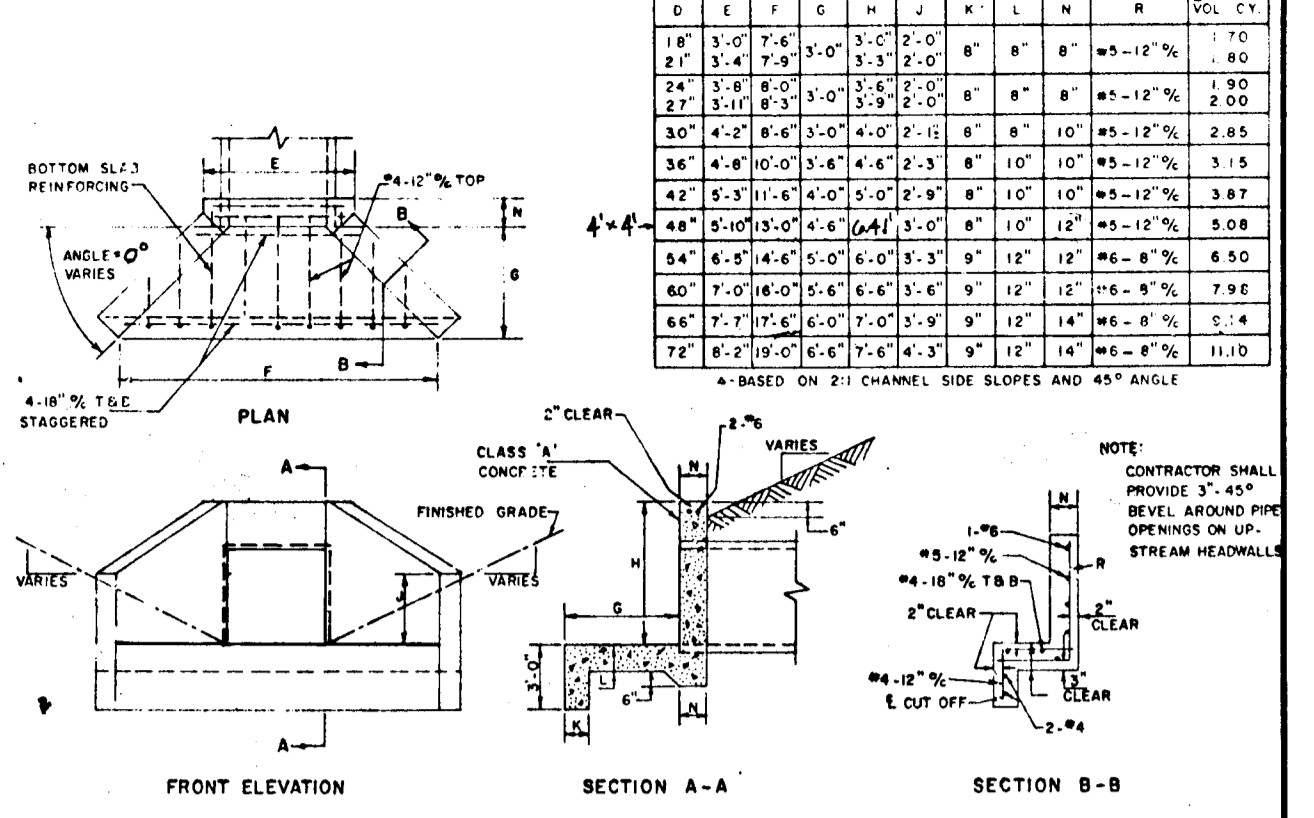


TITLE		PROFILES AND DETAILS	
PROJECT		PATAPSCO OVERLOOK - SECTION 2	
LOCATION		4TH ELECTION DISTRICT HOWARD COUNTY, MD.	
DATE	SCALE	DESIGN BY	DRAWN BY
AUGUST, 1985	A6 SHOWN		
CHECKED BY	DRAWING NO.	JOB NO.	
	5 07 B	80113	
boender associates		engineers surveyors planners	
5555 ELLICOTT MILLS DRIVE ELLICOTT CITY, MARYLAND 21043 301-465-7777			



PROFILE - BOX CULVERT UNDER WOODBINE RD.

SCALE: HORIZ 1"=20'
VERT 1"=5'



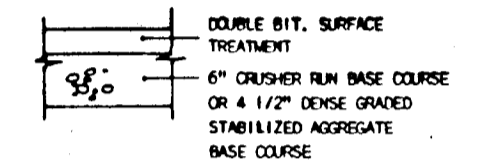
TYPE 'A' HEADWALL - MODIFIED

HO. CO. STD. DRAWG. 50-511
NOT TO SCALE

PAVING SECTION - P5 - ROAD WIDENING

WOODBINE ROAD

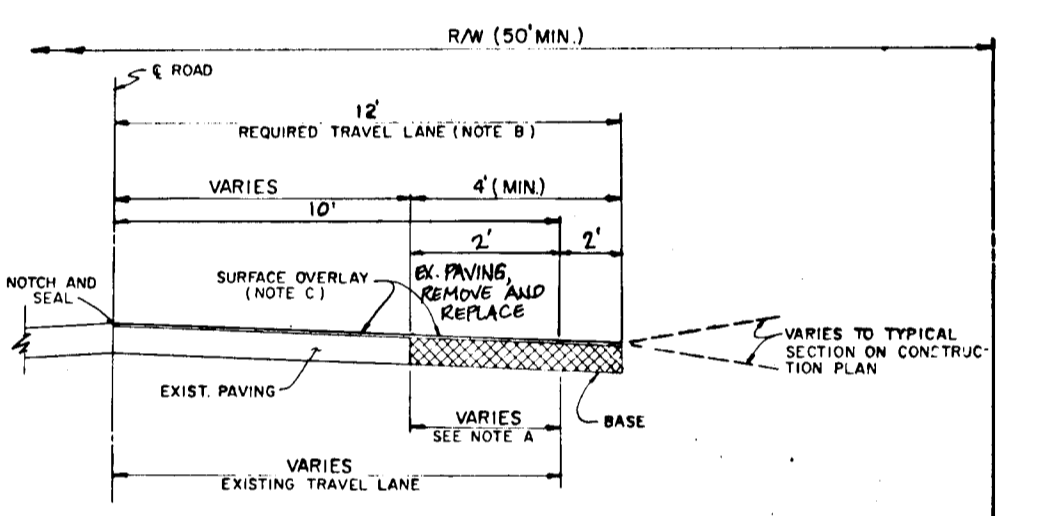
NOT TO SCALE



PAVING SECTION - P7 - SHOULDER

WOODBINE ROAD

NOT TO SCALE



WIDENING FOR WOODBINE RD.

HO. CO. STD. DRAWG. R-10-01
NOT TO SCALE

AS-BUILT SURVEY CERTIFIED
BY LUTHER E. BATHURST, MD. P.E.
#11393 ON JAN. 19, 1988

OWNER & DEVELOPER
GEORGIA AVENUE PROPERTIES, INC.
% E. BRADLEE LEE, III
13838 GEORGIA AVE.
WHEATON, MD. 20996

#1176

AS-BUILT 1-19-88