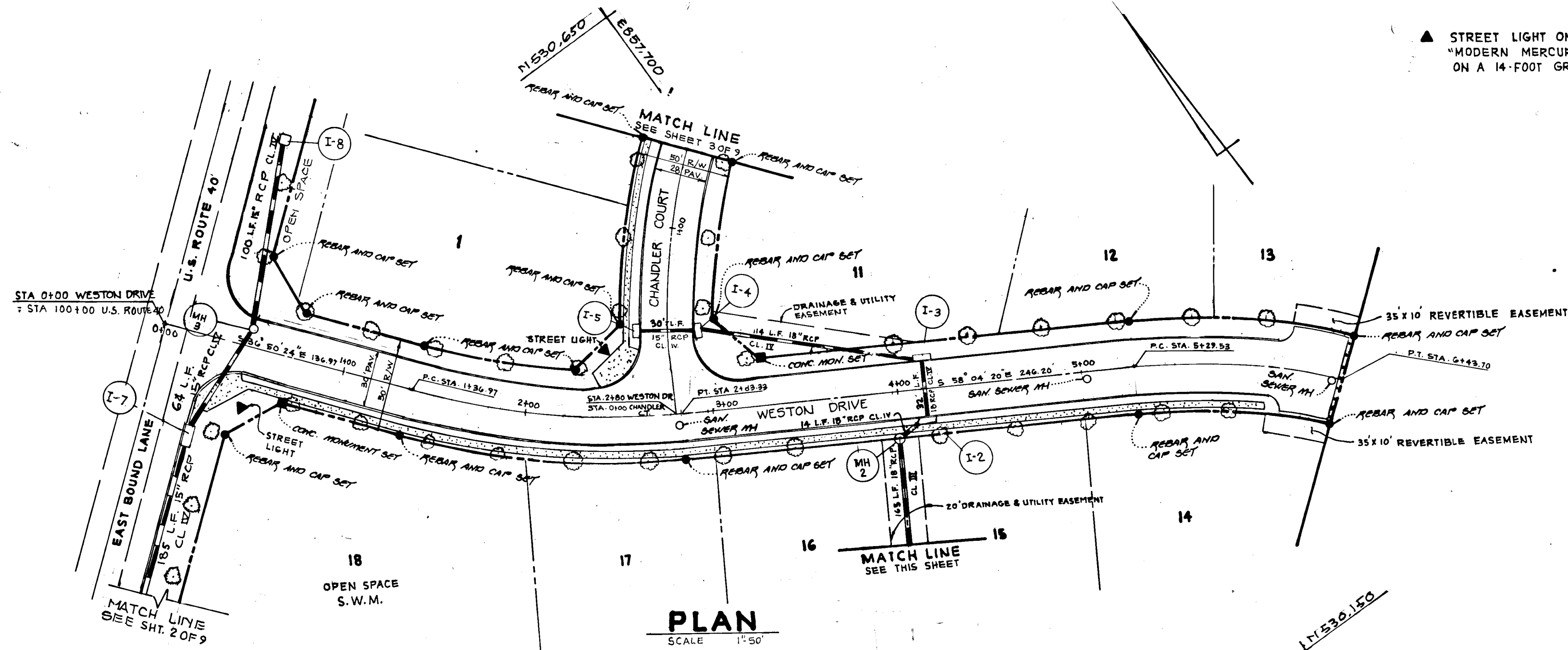


PLAN SURVEYED, PLOTTED, & CHECKED BY: [Signature]
 NOTE BOOK NO. [Blank]
 DATE [Blank]

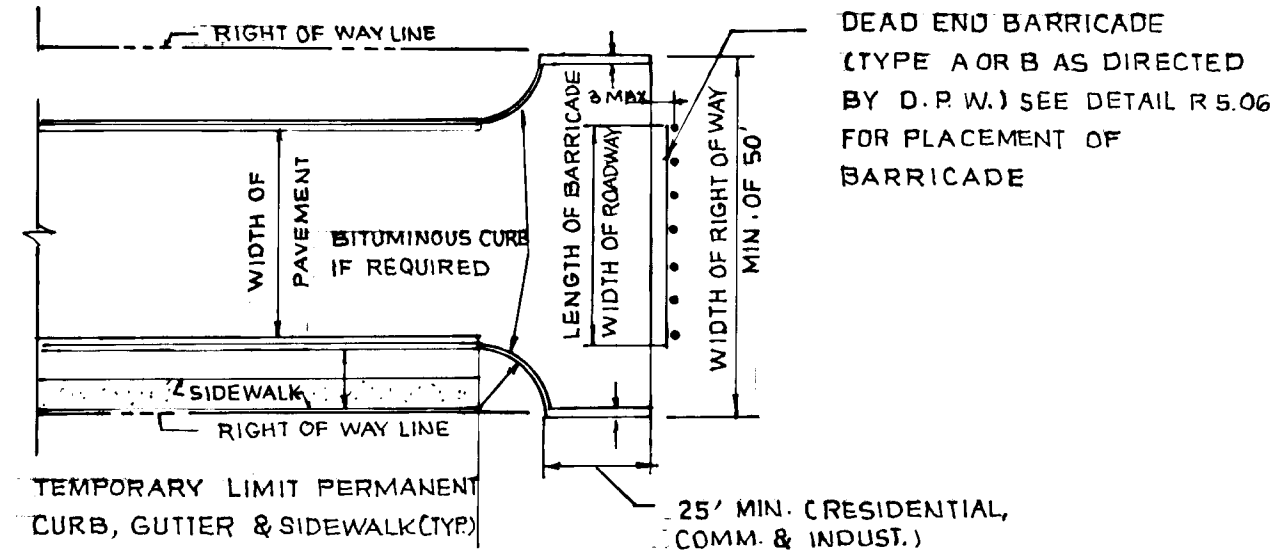


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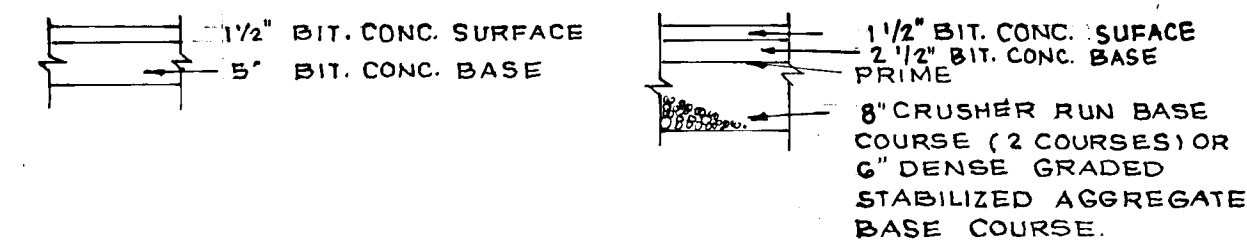
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CHD	= 145.53

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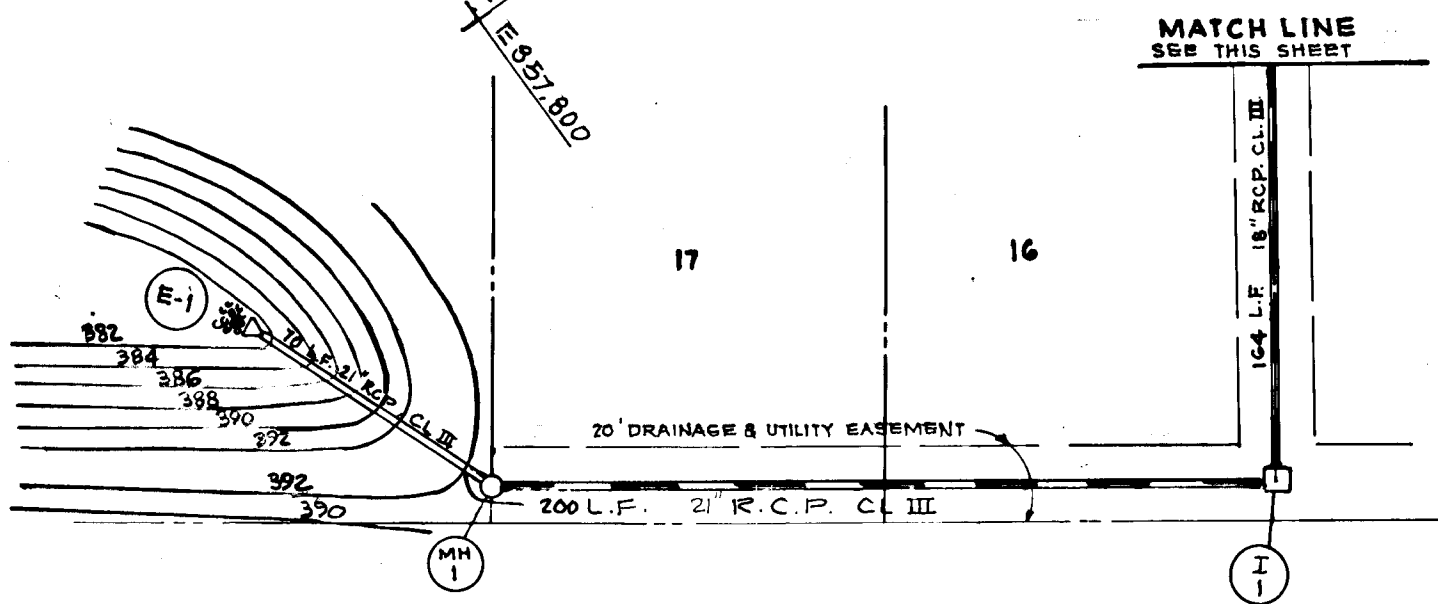
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CHD	= 113.78



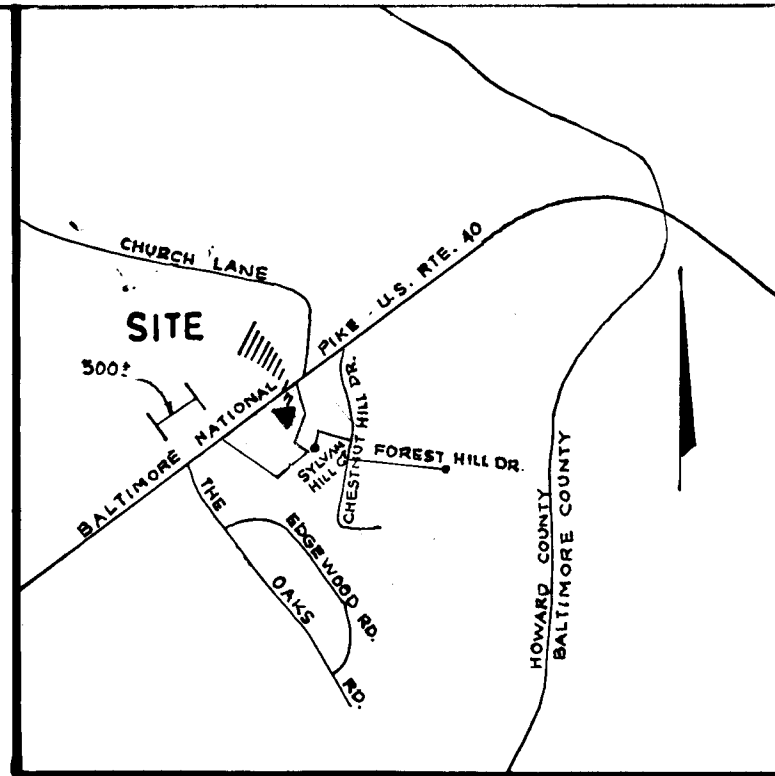
TEE TURN AROUND
NOT TO SCALE



P-2 TYPICAL PAVING SECTION
WESTON DRIVE
NOT TO SCALE



WESTON DRIVE TYPICAL SECTION
NOT TO SCALE



APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 [Signature] 10/16/92
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
 APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 [Signature] 10/16/92
 CHIEF, LAND DEVELOPMENT DIVISION
 [Signature] 9/15/90
 CHIEF, BUREAU OF HIGHWAYS
 [Signature] 10-1-90
 CHIEF, BUREAU OF ENGINEERING MK DATE

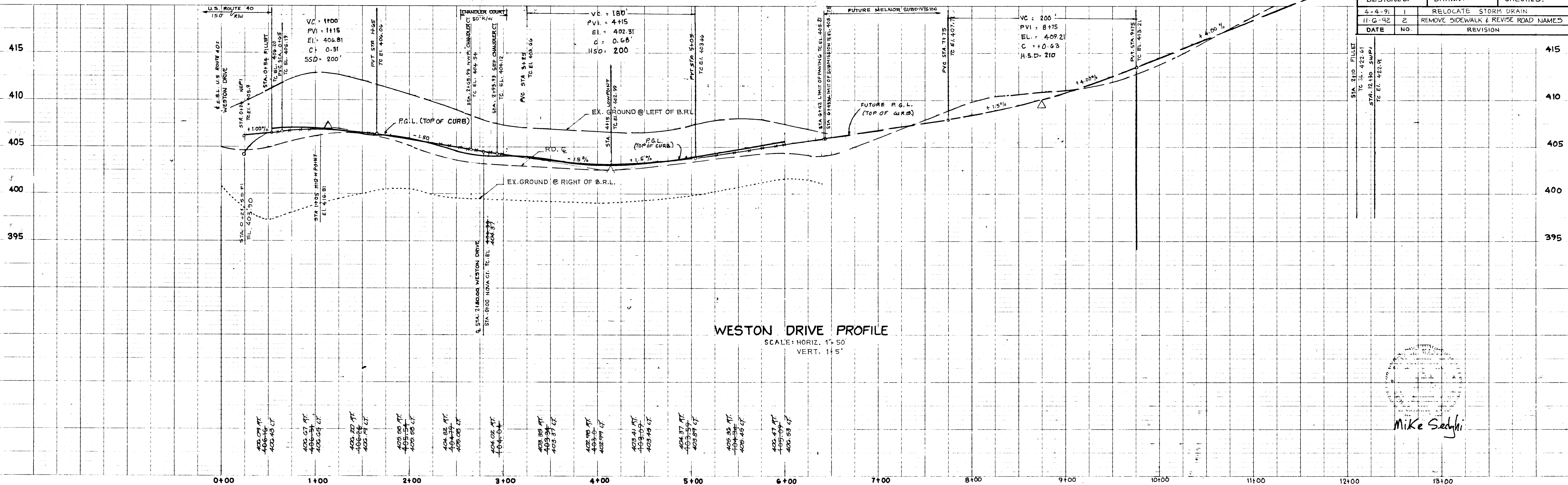
NOVA SQUARE
 LOTS 1-18
 TAX MAP 18 PARCEL 62
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

PLAN & PROFILE WESTON DRIVE

OWNER/DEVELOPER
 40 WEST BUILDERS
 1007 LESLIE AVENUE
 CATONSVILLE, MD 21223

SCALE: 1"=50'	DATE: 10-12-89	SHEET NO: 1 OF 2
DESIGNED: 4-4-91	DRAWN: 11-6-92	CHECKED: 11-6-92
RELOCATE STORM DRAIN		
REMOVE SIDEWALK & REVISE ROAD NAMES		
DATE	NO.	REVISION

PROFILE SURVEYED, PLOTTED, & CHECKED BY: [Signature]
 NOTE BOOK NO. [Blank]
 DATE [Blank]



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



Mike Sedghi

1594



Mike Sedghi

SEDGHI & ASSOCIATES, LTD.
ENGINEERS, PLANNERS, SURVEYORS
3217 CORPORATE COURT
ELLCOTT CITY, MD 21043
(301) 750-9003

APPROVED:
HOWARD COUNTY DEPT. OF PLANNING & ZONING
Frank J. Taylor 1/14/92
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT. DATE

APPROVED:
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
John M. Sangster 10/1/90
CHIEF, LAND DEVELOPMENT DIVISION DATE
Lawrence W. Ueland 9/5/90
CHIEF, BUREAU OF HIGHWAYS DATE
Michael J. Kelly 11/2/90
CHIEF, BUREAU OF ENGINEERING MK DATE

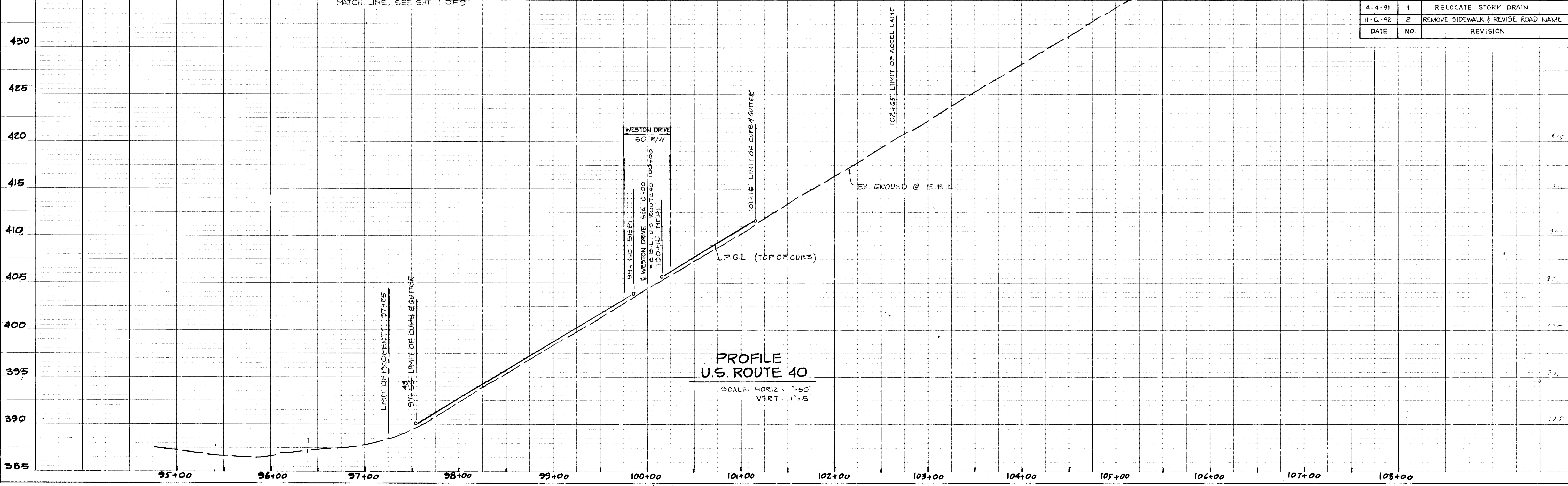
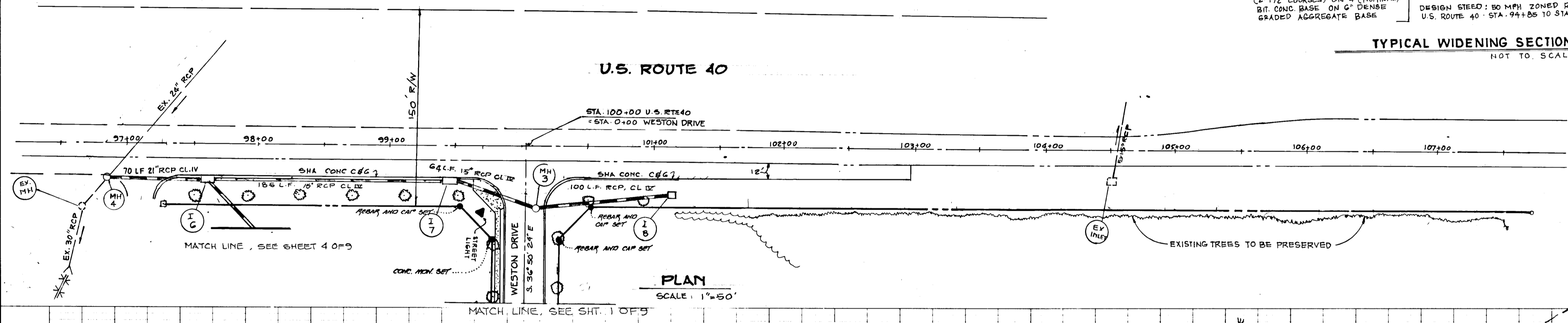
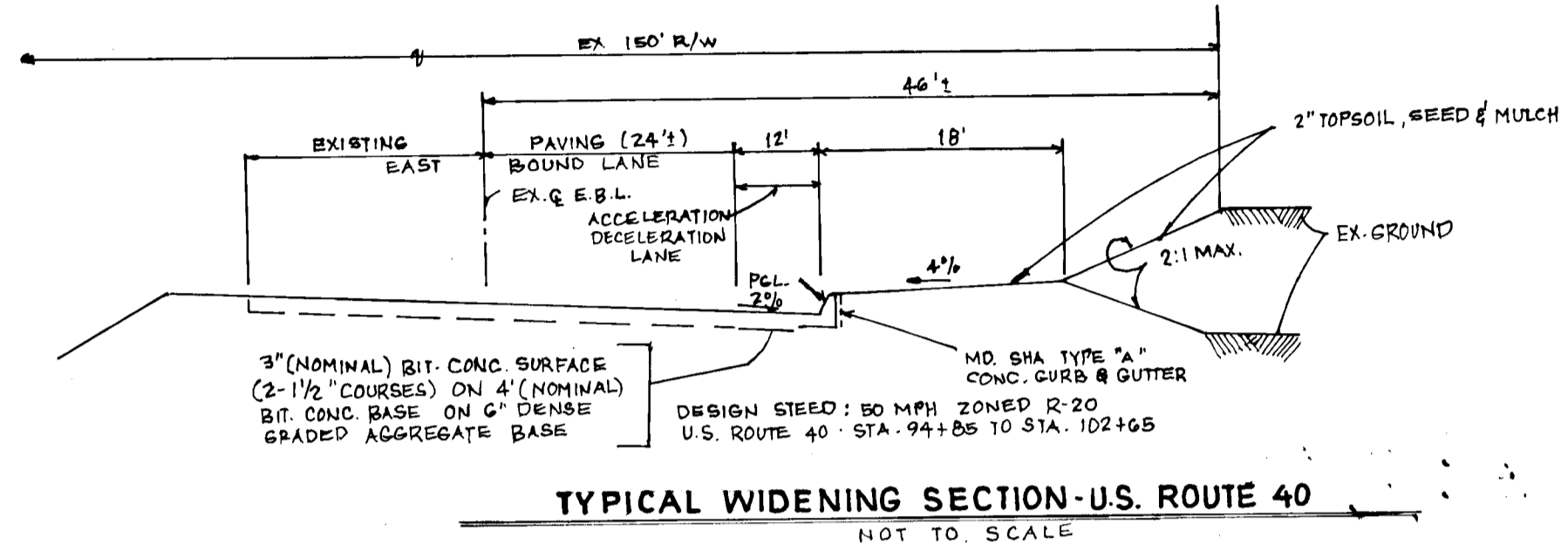
NOVA SQUARE
TAX MAP 18 PARCEL 62
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

PLAN & PROFILE
U.S. ROUTE 40

OWNER/DEVELOPER
40 WEST BUILDERS
1007 LESLIE AVENUE
CATONSVILLE, MD 21223

SCALE: 1"=50'	DATE: 10-12-89	SHEET NO: 2 OF 9
DESIGNED:	DRAWN:	CHECKED:
4-4-91	1	RELOCATE STORM DRAIN
11-6-92	2	REMOVE SIDEWALK & REVISE ROAD NAME
DATE	NO.	REVISION

▲ STREET LIGHT ON THIS PLAN SHALL BE 250 WATT MERCURY VAPOR LAMP PENDANT MOUNTED FIXTURE ON A 30 FOOT GALVANIZED STEEL POLE



PLAN
SURVEYED: _____
NOTED: _____
CHECKED: _____
DATE: _____

PROFILE
SURVEYED: _____
NOTED: _____
CHECKED: _____
DATE: _____

1594

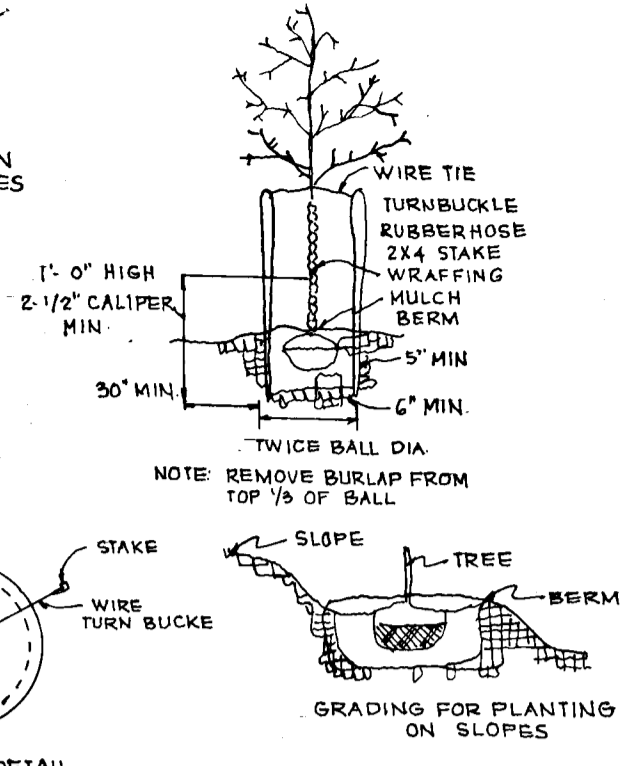
CURVE DATA TABLE FROM STA. 0+25 TO 1+42.68

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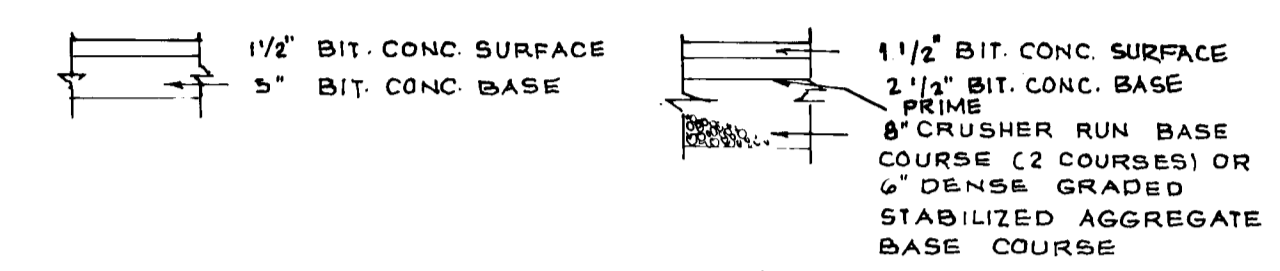
CURVE DATA TABLE FROM STA. 2+90.97 TO 3+67.43

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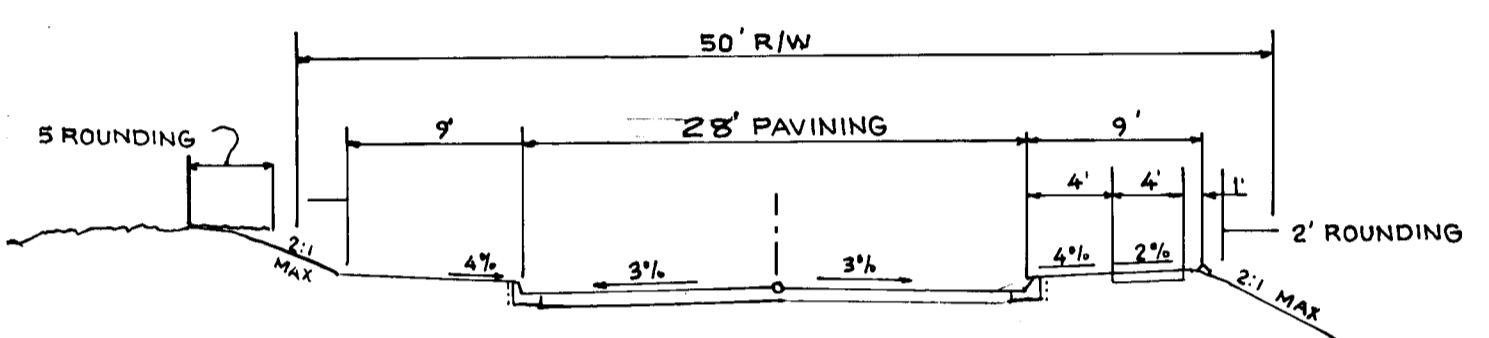
⊙ DENOTES APPROXIMATE LOCATION OF UNDERGROUND UTILITIES PRIOR TO DIGGING. FINAL LOCATIONS OF TREES MAY BE ADJUSTED SLIGHTLY TO ACCOMMODATE FIELD CONDITIONS. PLANTING PROCEDURES SHALL COMPLY WITH 'LANDSCAPE SPECIFICATIONS FOR BALTIMORE-WASHINGTON METROPOLITAN AREAS'. SUBSTITUTION TO THE ABOVE SPECIES MAY BE PERMITTED PROVIDED THAT THE PLANTING IS IN ACCORDANCE WITH THE STREET TREE AND LANDSCAPE REQUIREMENTS AS SPECIFIED IN SECTION 16.13 OF THE HOWARD COUNTY SUBDIVISION REGULATIONS.



TREE PLANTING
N.T.S.



P-2 TYPICAL PAVING SECTION
CHANDLER COURT
NOT TO SCALE



CHANDLER COURT TYPICAL SECTION
NOT TO SCALE
ZONED: R-20
DESIGN SPEED 25 MPH.

SEDGHI & ASSOCIATES, LTD.
 ENGINEERS, PLANNERS, SURVEYORS
 3217 CORPORATE COURT
 ELLICOTT CITY, MD. 21043
 (301) 750-9003

APPROVED:
 HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
David S. J. ... 11/1/92
 CHIEF, DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT

APPROVED:
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Chad M. ... 10/1/92
 CHIEF, LAND DEVELOPMENT DIVISION

APPROVED:
William W. ... 9/5/90
 CHIEF, BUREAU OF HIGHWAYS

APPROVED:
William A. ... 10/2/90
 CHIEF, BUREAU OF ENGINEERING

NOVA SQUARE
 TAX MAP 18 PARCEL 62
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

PLAN & PROFILE
CHANDLER COURT

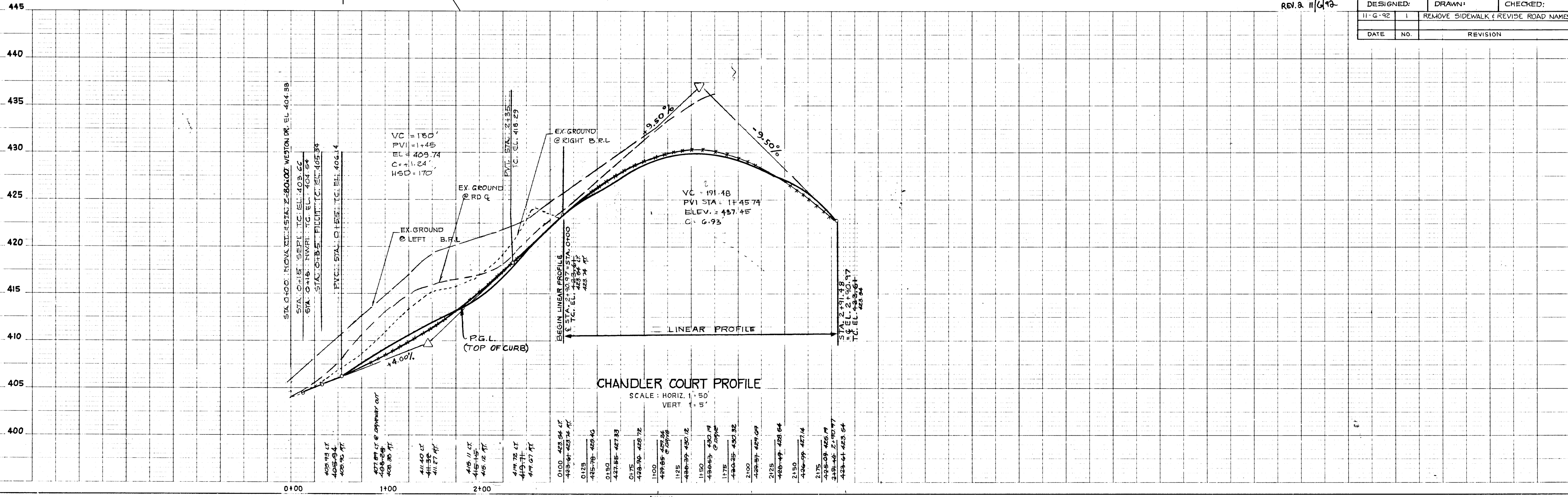
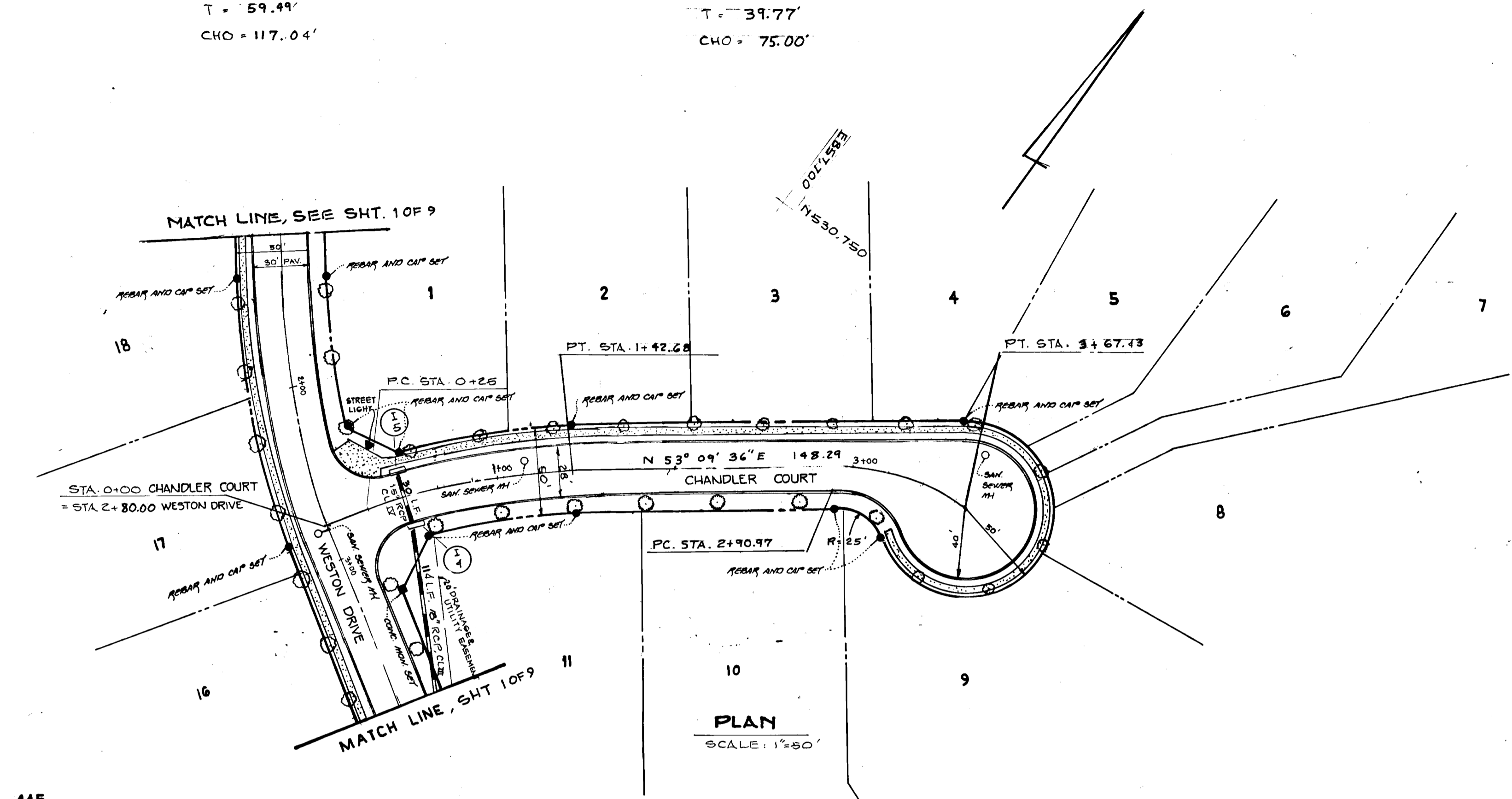
OWNER/DEVELOPER
 40 WEST BUILDERS
 1007 LESLIE AVENUE
 CATONSVILLE, MD. 21223

SCALE: 1"=50'
 DESIGNED: DATE 11-02-89 SHEET NO. 3 OF 9
 DRAWN: CHECKED:

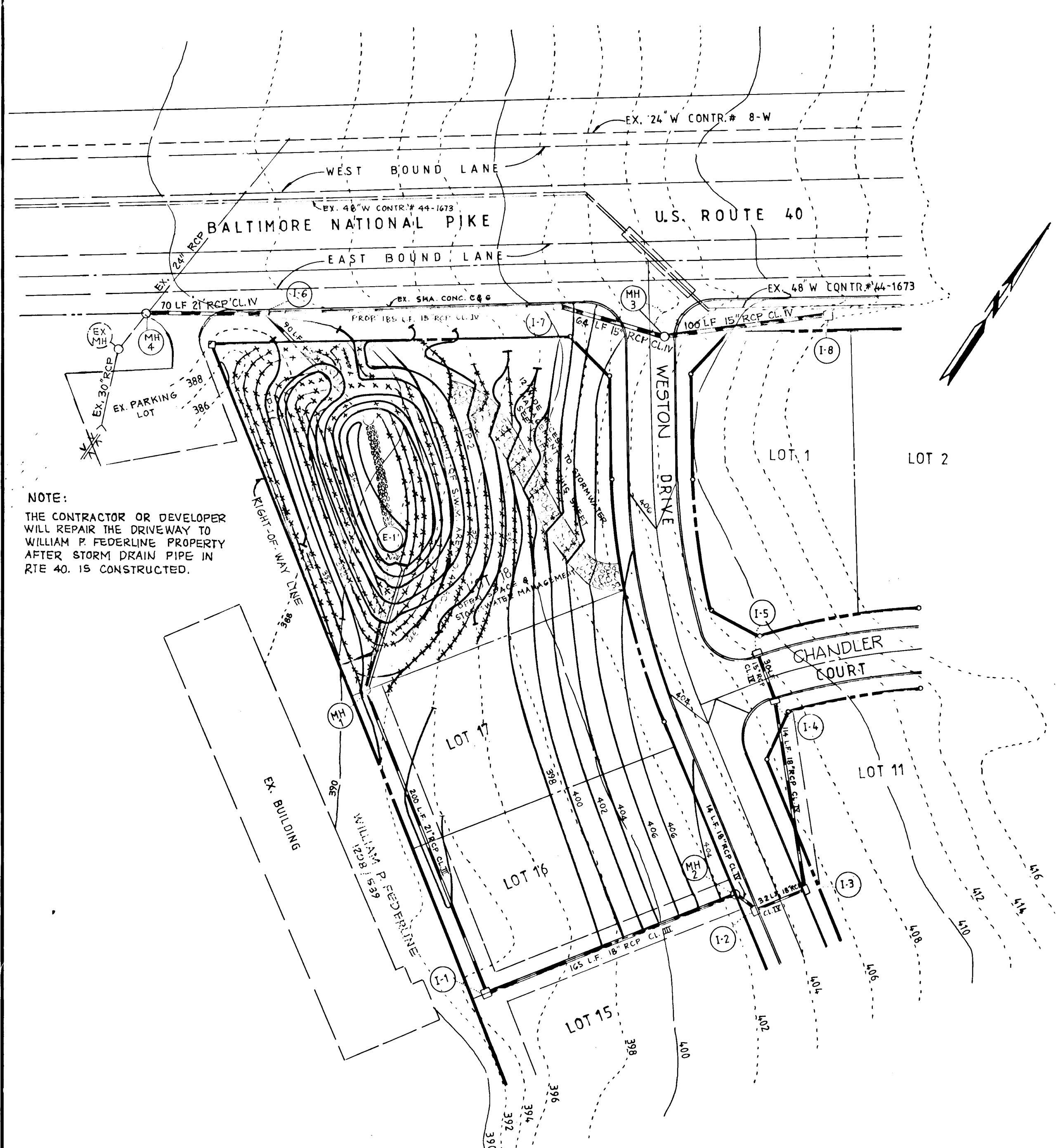
DATE	NO.	REVISION
11-02-89	1	REMOVE SIDEWALK & REVISE ROAD NAMES

PLAN
 REVISIONS
 NO. BY DATE
 1. BY DATE
 2. BY DATE
 3. BY DATE
 4. BY DATE
 5. BY DATE
 6. BY DATE
 7. BY DATE
 8. BY DATE
 9. BY DATE
 10. BY DATE
 11. BY DATE
 12. BY DATE
 13. BY DATE
 14. BY DATE
 15. BY DATE
 16. BY DATE
 17. BY DATE
 18. BY DATE

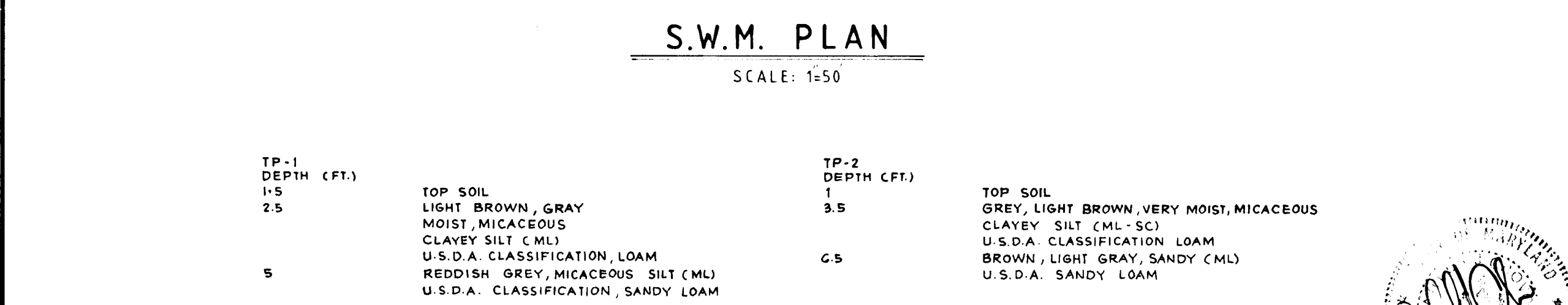
PROFILE
 REVISIONS
 NO. BY DATE
 1. BY DATE
 2. BY DATE
 3. BY DATE
 4. BY DATE
 5. BY DATE
 6. BY DATE
 7. BY DATE
 8. BY DATE
 9. BY DATE
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 14. BY DATE
 15. BY DATE
 16. BY DATE
 17. BY DATE
 18. BY DATE



1594

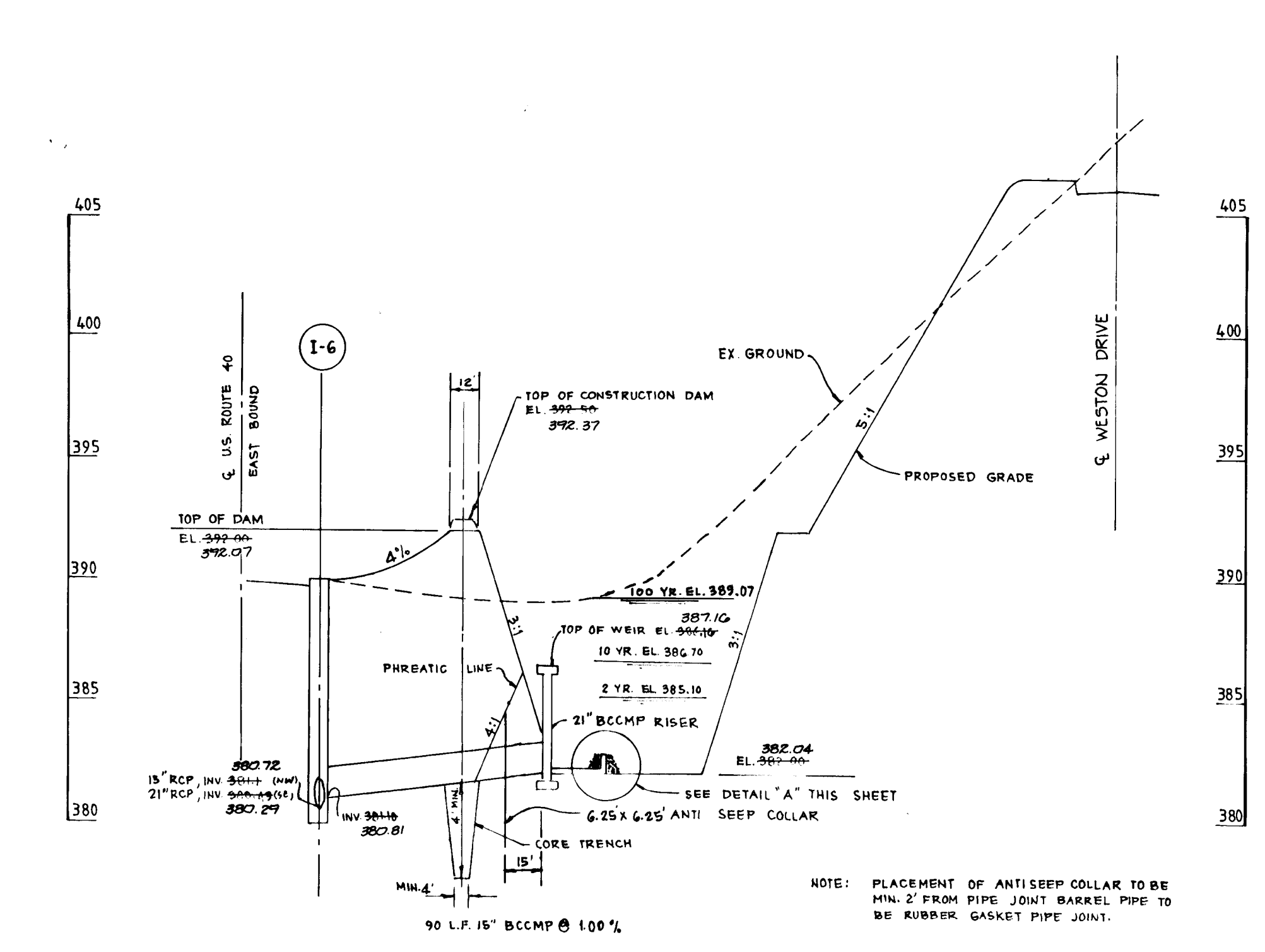


NOTE: THE CONTRACTOR OR DEVELOPER WILL REPAIR THE DRIVEWAY TO WILLIAM P. FEDERLINE PROPERTY AFTER STORM DRAIN PIPE IN RTE 40. IS CONSTRUCTED.



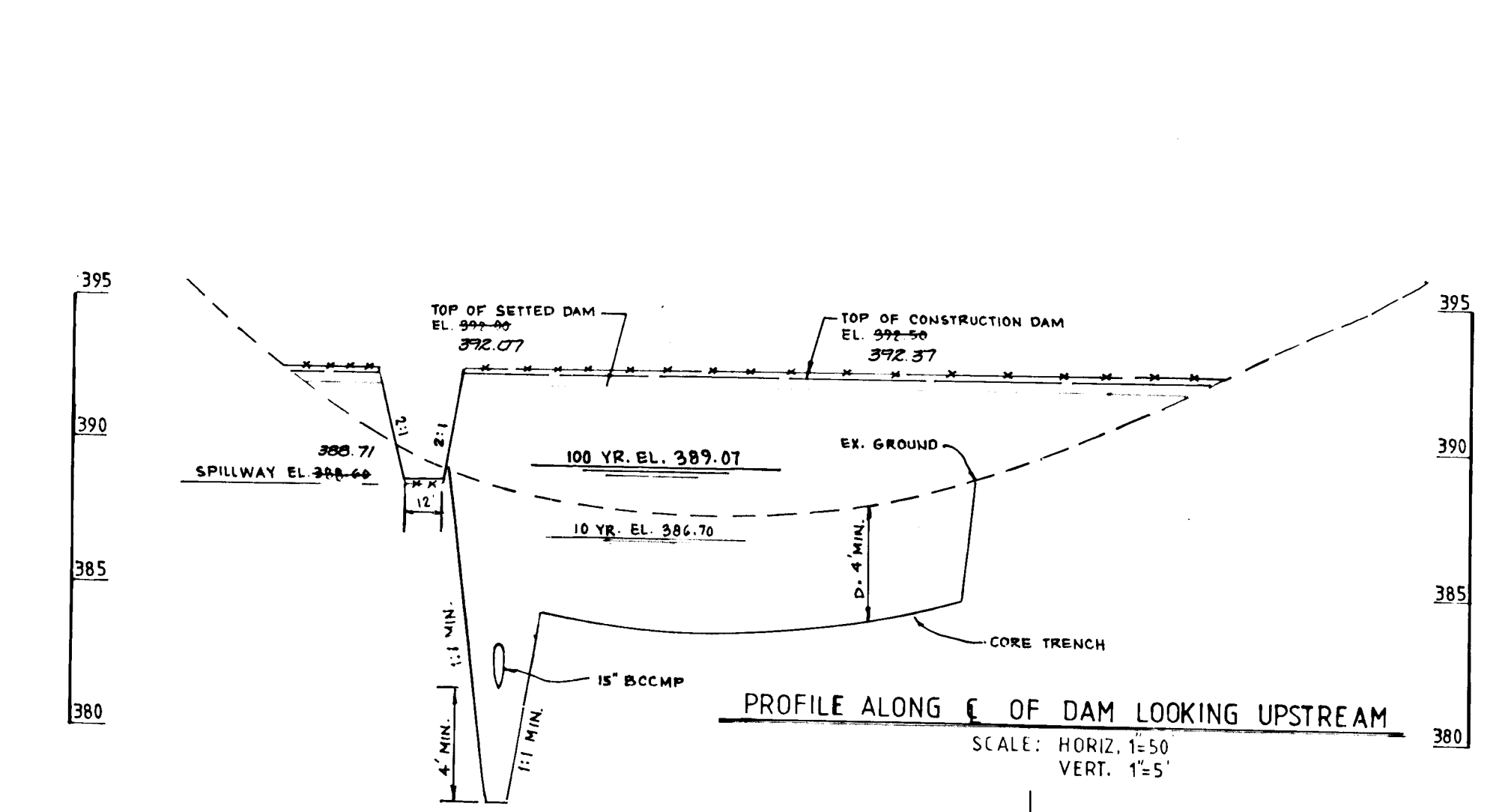
S.W.M. PLAN
SCALE: 1:50

TP-1 DEPTH (FT.) 1-5 2-5	TOP SOIL LIGHT BROWN, GRAY MOIST, MICACEOUS CLAYEY SILT (CL)	TP-2 DEPTH (FT.) 1 3-5	TOP SOIL GREY, LIGHT BROWN, VERY MOIST, MICACEOUS CLAYEY SILT (CL-SC)
5	U.S.D.A. CLASSIFICATION, LOAM REDDISH GREY, MICACEOUS SILT (ML) U.S.D.A. CLASSIFICATION, SANDY LOAM	6-5	U.S.D.A. CLASSIFICATION, LOAM BROWN, LIGHT GRAY, SANDY (ML) U.S.D.A. CLASSIFICATION, SANDY LOAM

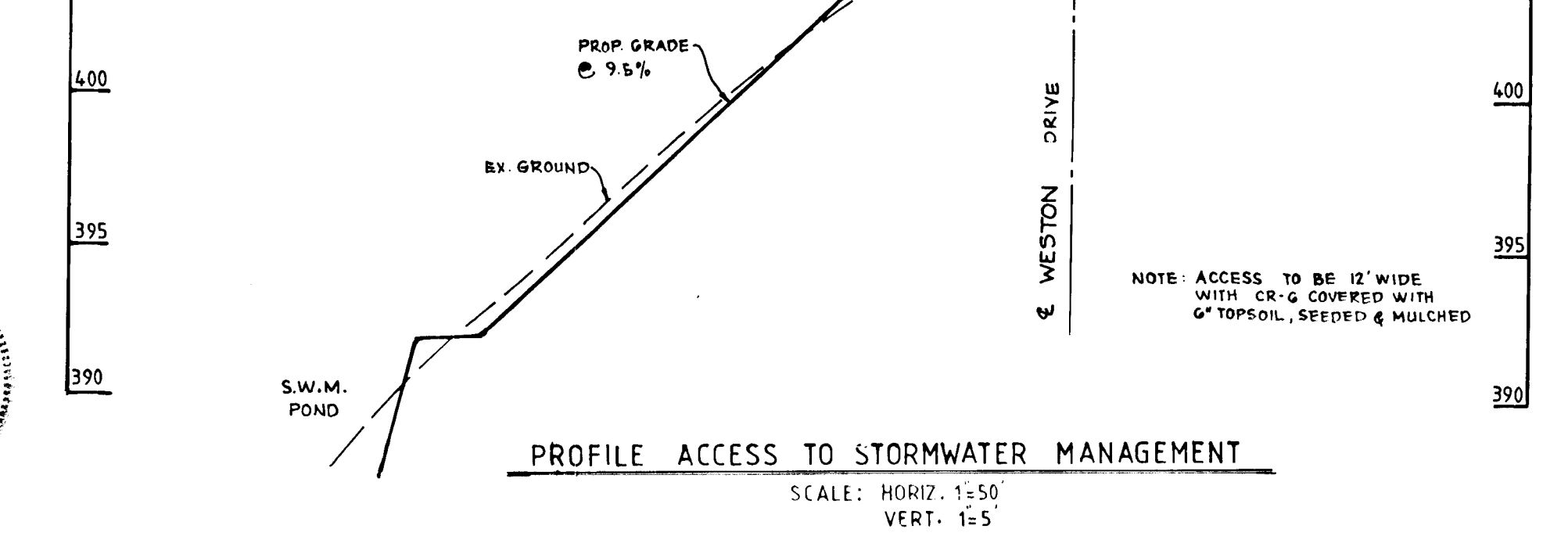


NOTE: THIS IS TO CERTIFY THAT THE AS-BUILT IS ACCURATE AND COMPLETE AND THAT THE POND AS CONSTRUCTED MEETS THE REQUIREMENTS OF THE STANDARDS AND SPECIFICATIONS FOR PONDS.

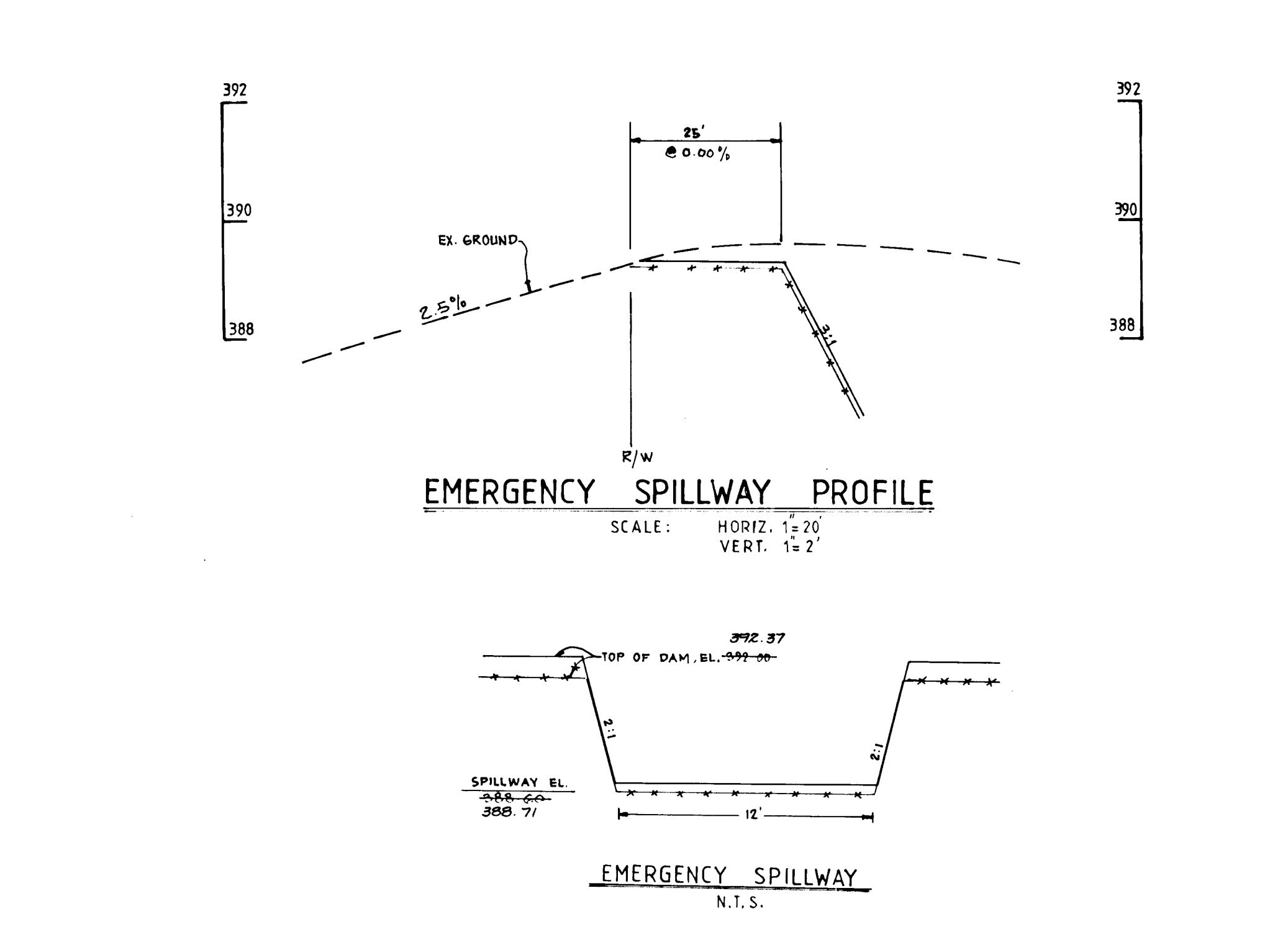
SECTION THROUGH DAM
SCALE: HORIZ. 1:50
VERT. 1:5'



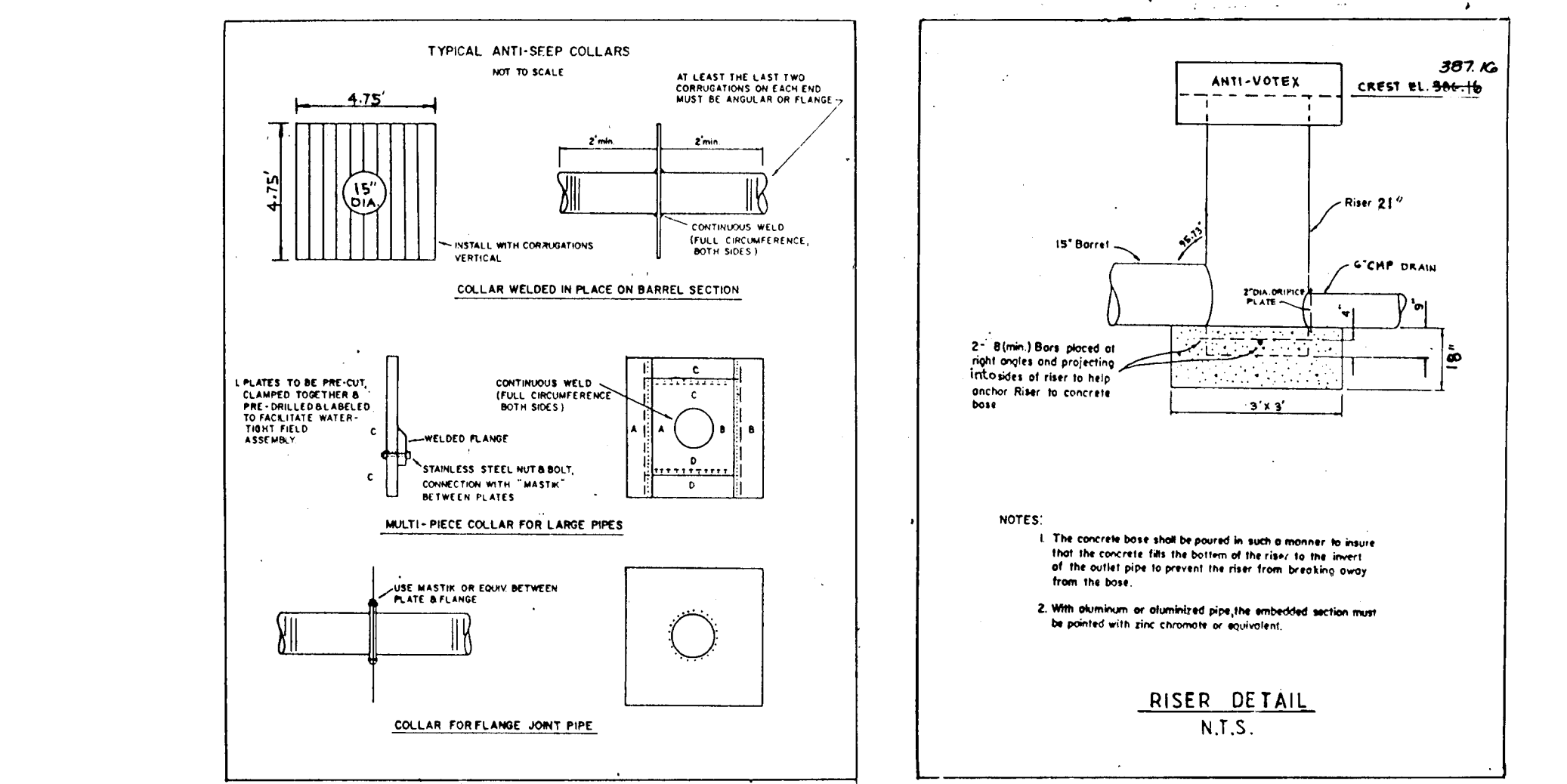
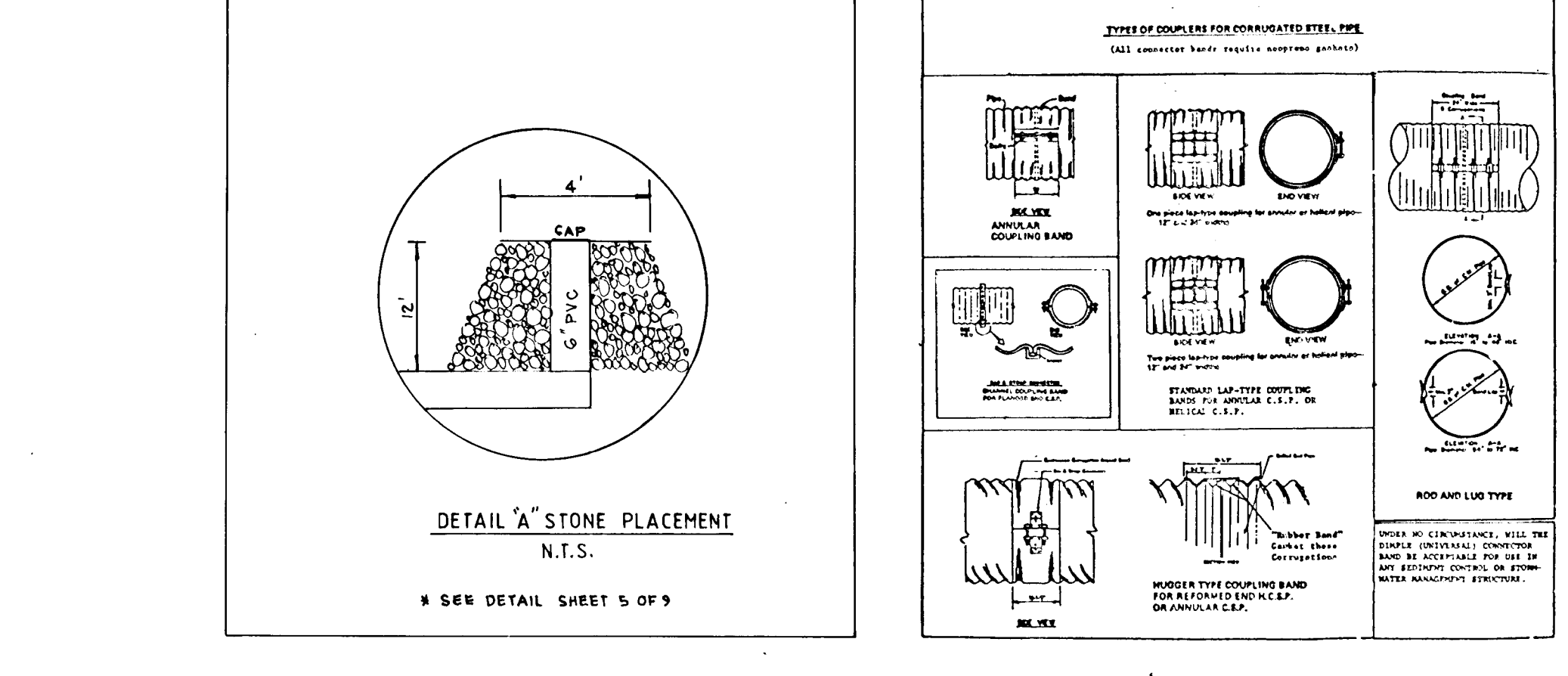
PROFILE ALONG E OF DAM LOOKING UPSTREAM
SCALE: HORIZ. 1:50
VERT. 1:5'



PROFILE ACCESS TO STORMWATER MANAGEMENT
SCALE: HORIZ. 1:50
VERT. 1:5'



EMERGENCY SPILLWAY
SCALE: HORIZ. 1:20
VERT. 1:2'



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
 [Signature] 11/15/90
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
 APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 [Signature] 10/1/90
 CHIEF, LAND DEVELOPMENT DIVISION
 APPROVED: [Signature] 9/5/90
 CHIEF, BUREAU OF HIGHWAYS
 APPROVED: [Signature] 11/15/90
 CHIEF, BUREAU OF ENGINEERING

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.
 [Signature] 8/21/90
 SOIL CONSERVATION SERVICE
 THESE PLANS FOR SMALL POND CONSTRUCTION SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 [Signature] 8/21/90
 HOWARD COUNTY SOIL CONSERVATION DISTRICT

NUMBER	REVISION	DATE	BY
1	RELOCATE STORM DRAIN	4-4-91	V.S.
2	REVISE ROAD NAMES	11-6-92	D.L.H.

BY THE DEVELOPER:
 I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL OBTAIN ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.
 [Signature] 7-7-89
 SIGNATURE OF DEVELOPER DATE

BY THE ENGINEER:
 I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.
 [Signature] 7-10-90
 SIGNATURE OF ENGINEER DATE

SEDGHI & ASSOCIATES, P.C.
 Civil Engineers • Site Planners • Surveyors
 3217 Corporate Court
 Ellicott City, MD 21043
 (301) 750-9008
STORMWATER MANAGEMENT PLAN
NOVA SQUARE
 TAX MAP 18 PARCEL 62
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MD.
 SCALE: 1:50 SHEET 4 OF 9
 DATE: 3-13-90
 DEVELOPER
 400 WEST BUILDERS
 107 LESLIE AVENUE
 CATONSVILLE, MD. 21223
 AS-BUILT 7-15-90

1594

SOIL CONSERVATION SERVICE
MARYLAND
CONSTRUCTION SPECIFICATIONS
FOR
PONDS

These specifications are appropriate to ponds within the scope of the Standard for practice 378.

I. SITE PREPARATION

Areas under the borrow areas, embankment, and structural works shall be cleared, grubbed and the topsoil stripped to remove all trees, vegetation, roots or other objectionable material. Channel banks and sharp breaks shall be sloped to no steeper than 1:1.

Areas covered by the pond or reservoir will be cleared of all trees, brush, logs, fences, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush and stumps shall be cut approximately level with the ground surface.

All cleared and grubbed material shall be disposed of outside the limits of the dam and reservoir as directed by the owner or his representative. When specified, a sufficient quantity of topsoil shall be stockpiled in a suitable location for use on the embankment and other designated areas.

II. EARTH FILL

Material

The fill material shall be taken from approved designated borrow area or areas. It shall be free of roots, stumps, wood, rubbish, over-size stones, frozen or other objectionable materials. The embankment shall be constructed to an elevation which provides for anticipated settlement to the design elevation. The fill height all along the length of the embankment shall be increased above the design elevation (including freeboard) as shown on the plans.

Placement

Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in 8-inch maximum thickness (before compaction) layers which are to be continuous over the entire length of the fill. The most porous borrow material shall be placed in the downstream portions of the embankment.

Compaction

The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of the equipment or compaction shall be achieved by a minimum of four complete passes of a sheepfoot, rubber tired or vibrator roller. Fill material shall contain sufficient moisture such that the required degree of compaction can be obtained with the equipment used.

ALL SOIL IDENTIFY AS M.C.L.C. OR M.H. SHOULD BE COMPACTED.

Cutoff Trench

Where specified, a cutoff trench shall be excavated along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation, with the minimum width being four feet. The depth shall be at least four feet or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill material for the cutoff trench shall be the most impervious material available and shall be compacted with equipment or rollers to assure maximum density and minimum permeability.

III. STRUCTURAL BACKFILL

Backfill material shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall the contractor drive equipment over any part of a concrete structure or pipe unless there is a compacted fill of twenty-four inches or greater over the structure or pipe.

IV. PIPE CONDUITS

A. Corrugated Metal Pipe

1. Materials - (Steel Pipe) - This pipe and its appurtenances shall be galvanized and fully bituminous coated and shall conform to the requirements of AASHTO Specification M-19C Type A with watertight coupling bands. Any bituminous coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound.

Materials - (Aluminum Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-19B or M-211 with watertight coupling bands. Coupling bands, anti-seep collars, end sections, etc. must be composed of the same material as the pipe. Metals must be insulated from dissimilar materials with use of rubber or plastic insulating materials at least 24 mils in thickness. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer. Hot dip galvanized bolts may be used for connections. The pH of the surrounding soils shall be less than 9 and greater than 4.

Helically corrugated pipe in addition to the requirements above shall have either continuous welded seams or have lock seams which are caulked, during fabrication with a neoprene bead.

2. Connections - All connections with pipe must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe and riser are metal. Watertight coupling bands shall be used at all joints. Anti-seep collars shall be connected to the pipe in such a manner as to be completely watertight.

3. Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.

4. Laying pipe - The pipe shall be placed with inside circumferential laps pointing downstream and with the longitudinal laps at the sides.

5. Backfilling shall conform to structural backfill as shown above.

6. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

B. Reinforced Concrete Pipe

1. Materials - Reinforced concrete pipe shall have a rubber gasket joint and shall equal or exceed ASTM Specification C-361. Approved equivalents are AWWA Specification C-300, 301, and 302.

2. Bedding - All reinforced concrete pipe conduits shall be laid in a concrete bedding for their entire length. This bedding shall consist of high slump concrete placed under the pipe and up the sides of the pipe at least 1 1/2" of its diameter with a minimum thickness of 3", or as shown on the drawings.

3. Laying pipe - Bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. After the joints are sealed for the entire length, the bedding shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and grade of the pipe.

4. Backfilling shall conform to structural backfill as shown above.

5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

C. For pipes of other materials, specific specifications shall be shown on the drawings.

V. CONCRETE

1. Materials

a. Cement - Normal Portland cement shall conform to the latest ASTM Specification C-150.

b. Water - The water used in concrete shall be clean, free from oil, acid, alkali, scales, organic matter or other objectionable substances.

c. Sand - The sand used in concrete shall be clean, hard, strong and durable, and shall be well graded with 100 percent passing a one-quarter inch sieve. Limestone sand shall not be used.

d. Coarse Aggregate - The coarse aggregate shall be clean, hard, strong and durable, and free from clay or dirt. It shall be well graded with a maximum size of one and one-half (1-1/2) inches.

e. Reinforcing Steel - The reinforcing steel shall be deformed bars of intermediate grade billet steel or rail steel conforming to ASTM Specification A-615

2. Design Mix - The concrete shall be mixed in the following proportions, measured by weight. The water-cement ratio shall be 5-1/2 to 6 U. S. gallons - water per 94 pound bag of cement. The proportion of materials for the trial mix shall be 1:2:3-1/2. The combination of aggregates may be adjusted to produce a plastic and workable mix that will not produce harshness in placing or honeycombing in the structure.

3. Mixing - The concrete ingredients shall be mixed in batch mixers until the mixture is homogeneous and of uniform consistency. The mixing of each batch shall continue for not less than one and one-half minutes after all the ingredients, except the full amount of water, are in the mixer. The minimum mixing time is predicted on proper control of the speed of rotation of the mixer and of the introduction of the materials, including water, into the mixer. Water shall be added prior to, during, and following the mixer-charging operations. Excessive overmixing requiring the addition of water to preserve the required concrete consistency shall not be permitted. Truck mixing will be allowed provided that the use of this method shall cause no violation of any applicable provisions of the specifications given here.

4. Forms - The forms shall have sufficient strength and rigidity to hold the concrete and to withstand the necessary pressure,umping, and vibration without deflection from the prescribed lines. They shall be mortar-tight and constructed so that they can be removed without hammering or prying against the concrete.

The inside of forms shall be oiled with a non-staining mineral oil or thoroughly wetted before concrete is placed. Forms may be removed 24 hours after the placement of concrete. All wire ties and other devices used shall be recessed from the surface of the concrete.

5. Reinforcing Steel - All reinforcing material shall be free of dirt, rust, scale, oil, paint or any other coatings. The steel shall be accurately placed and securely tied and blocked into position so that no movement of the steel will occur during placement of concrete.

6. Consolidating - Concrete shall be consolidated with internal type mechanical vibrators. Vibration shall be supplemented by spading and hand tamping as necessary to insure smooth and dense concrete along form surfaces, in corners, and around embedded items.

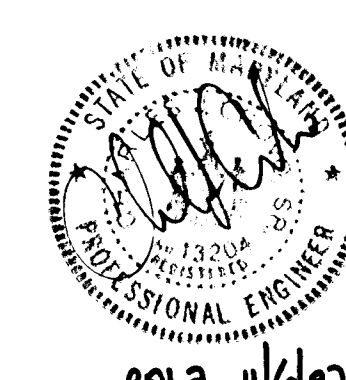
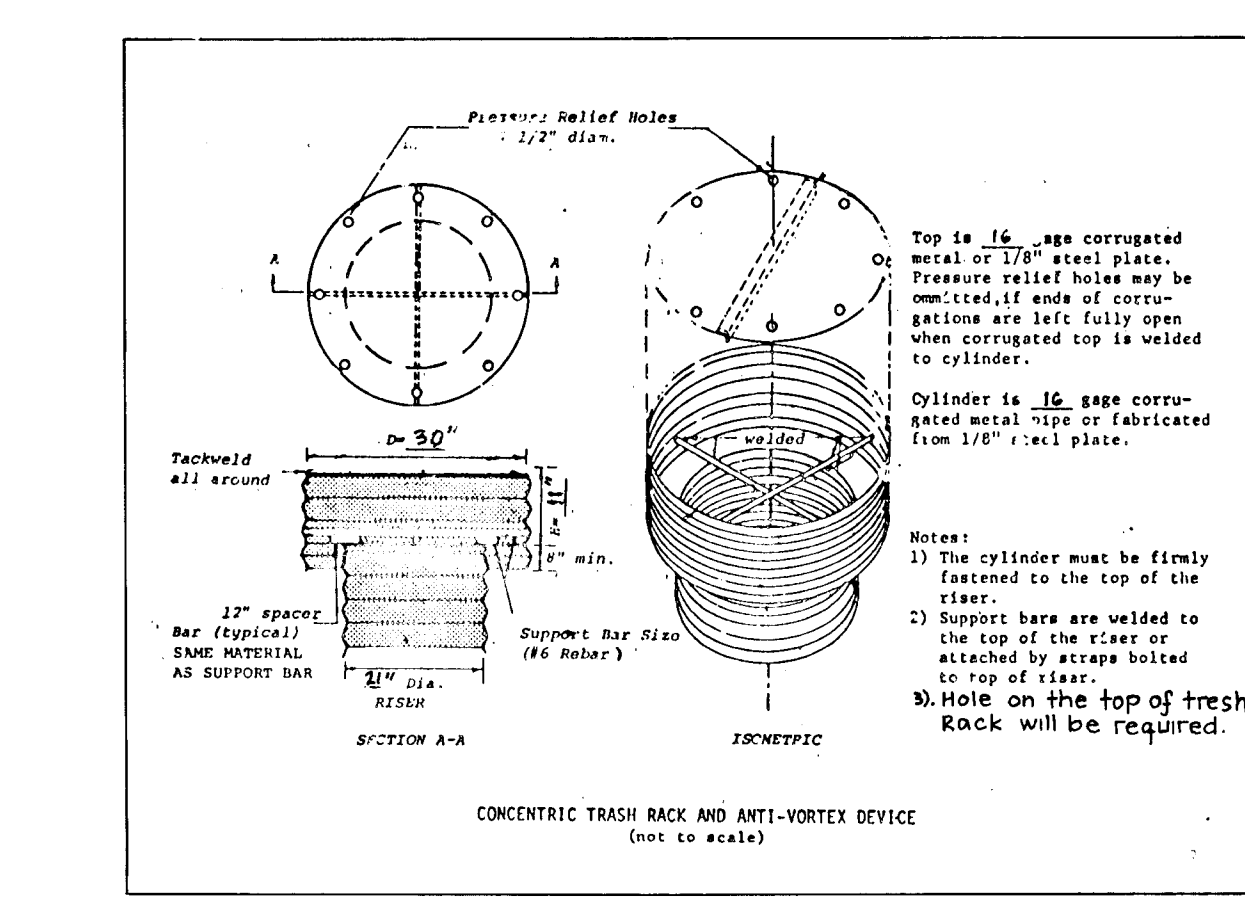
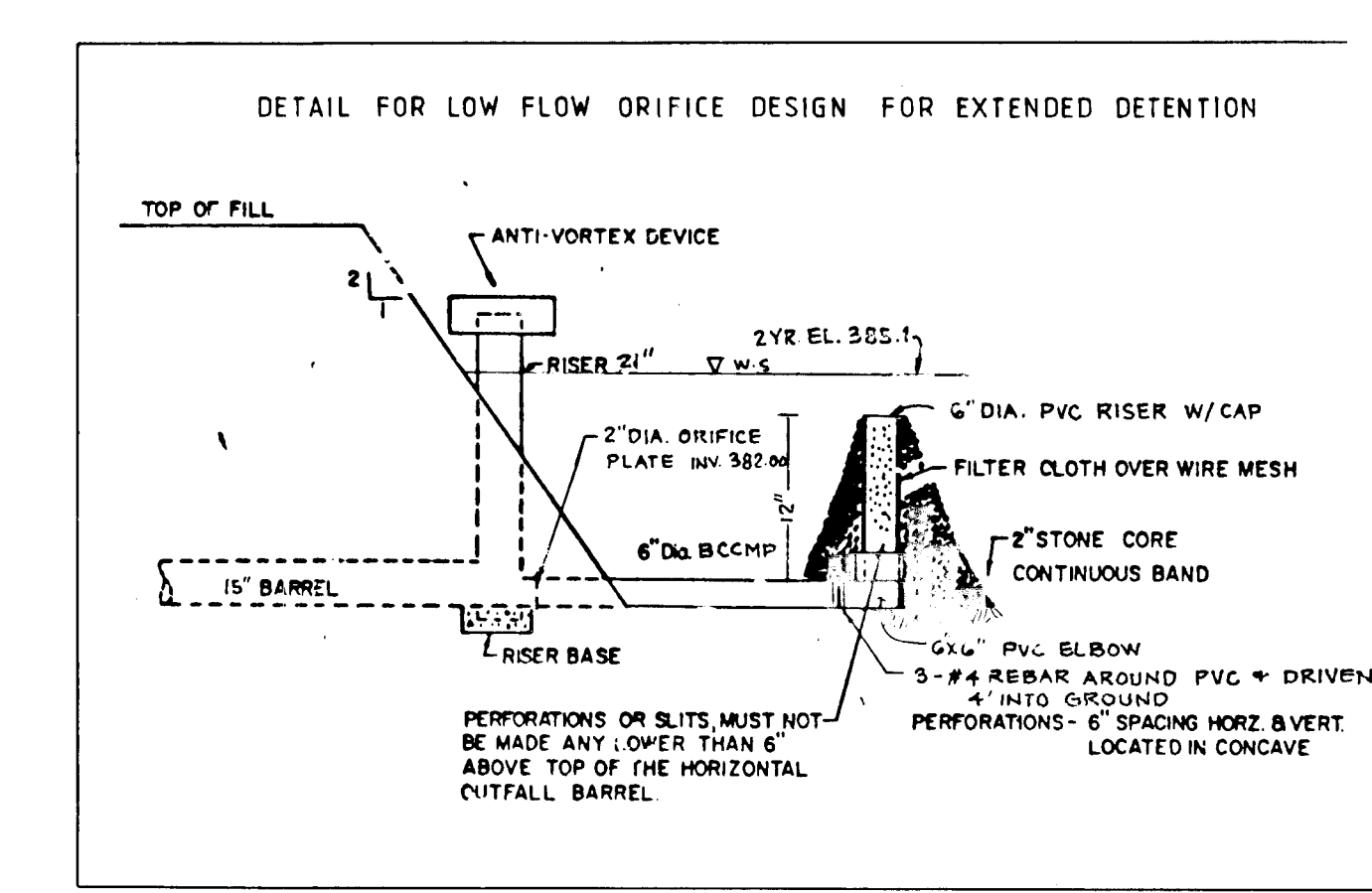
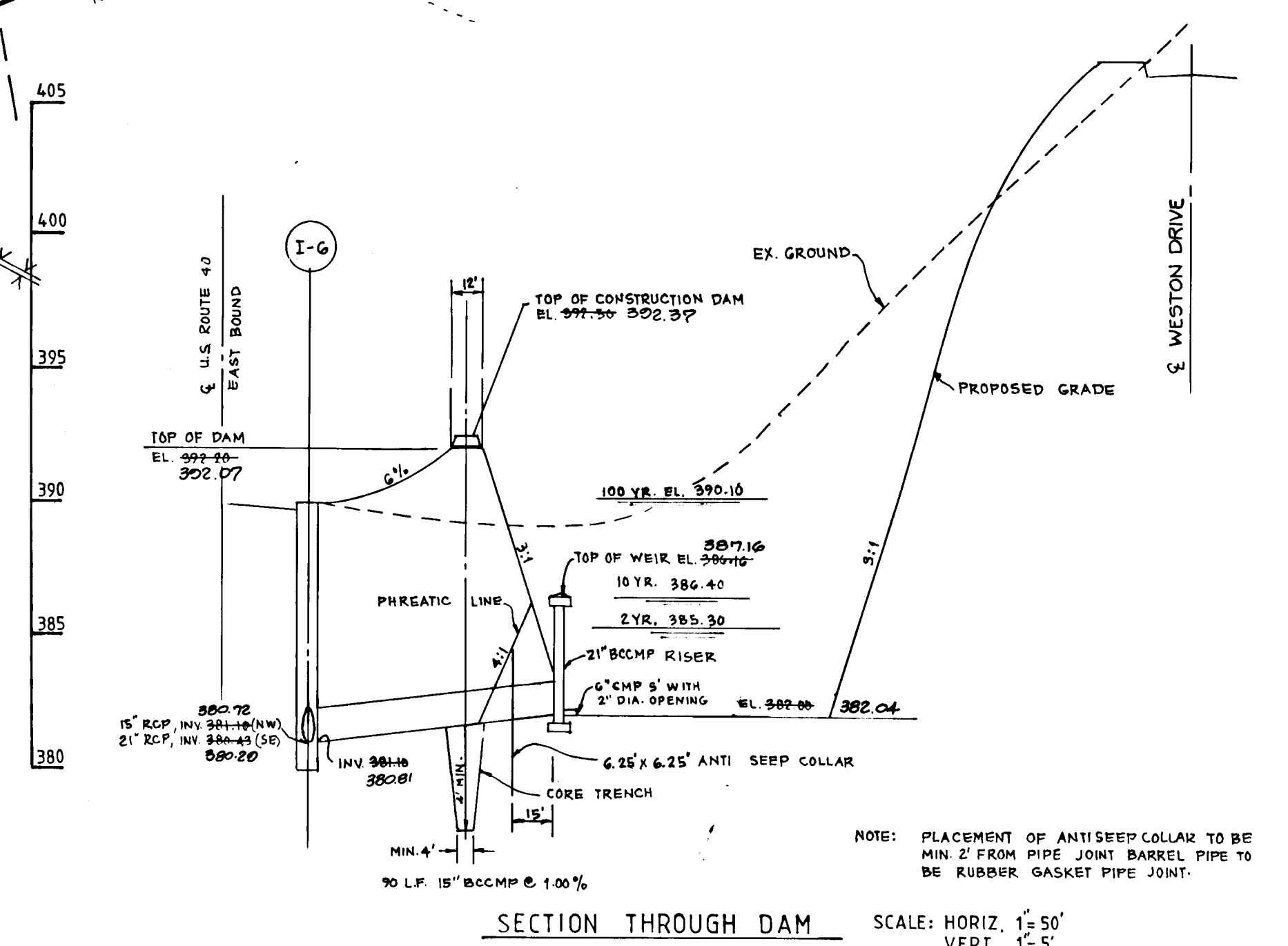
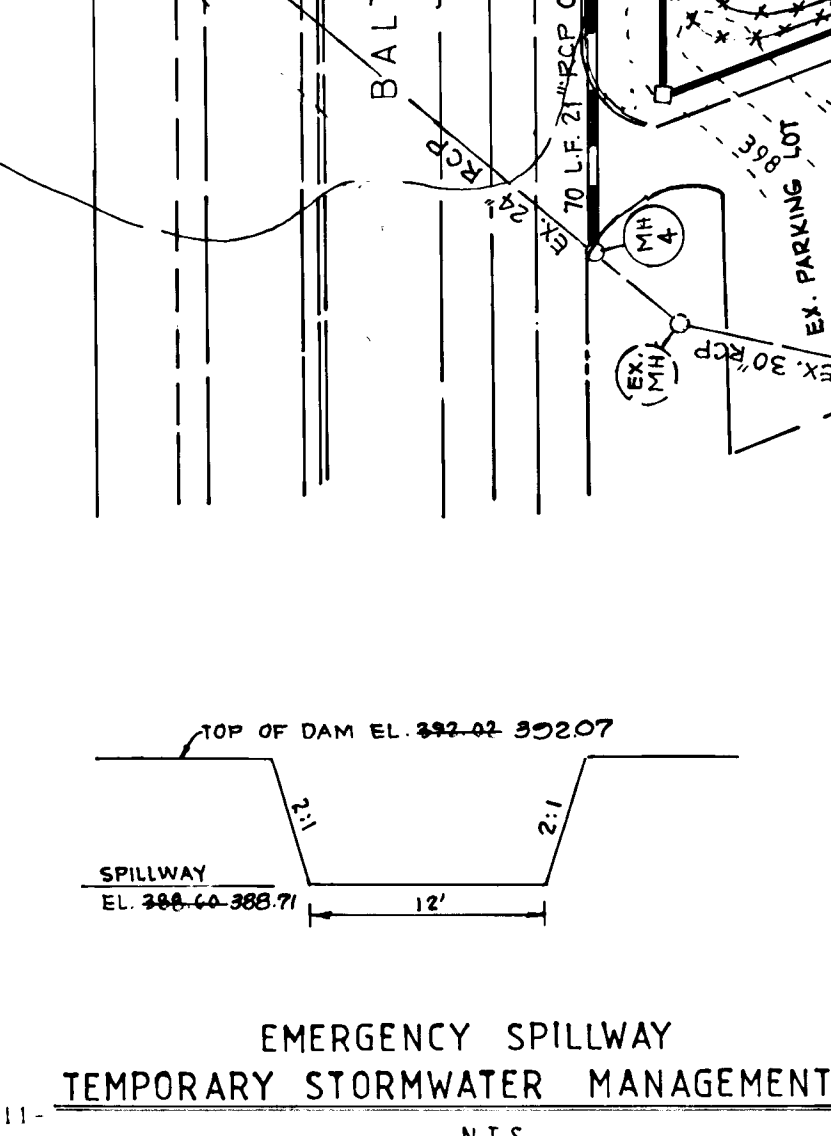
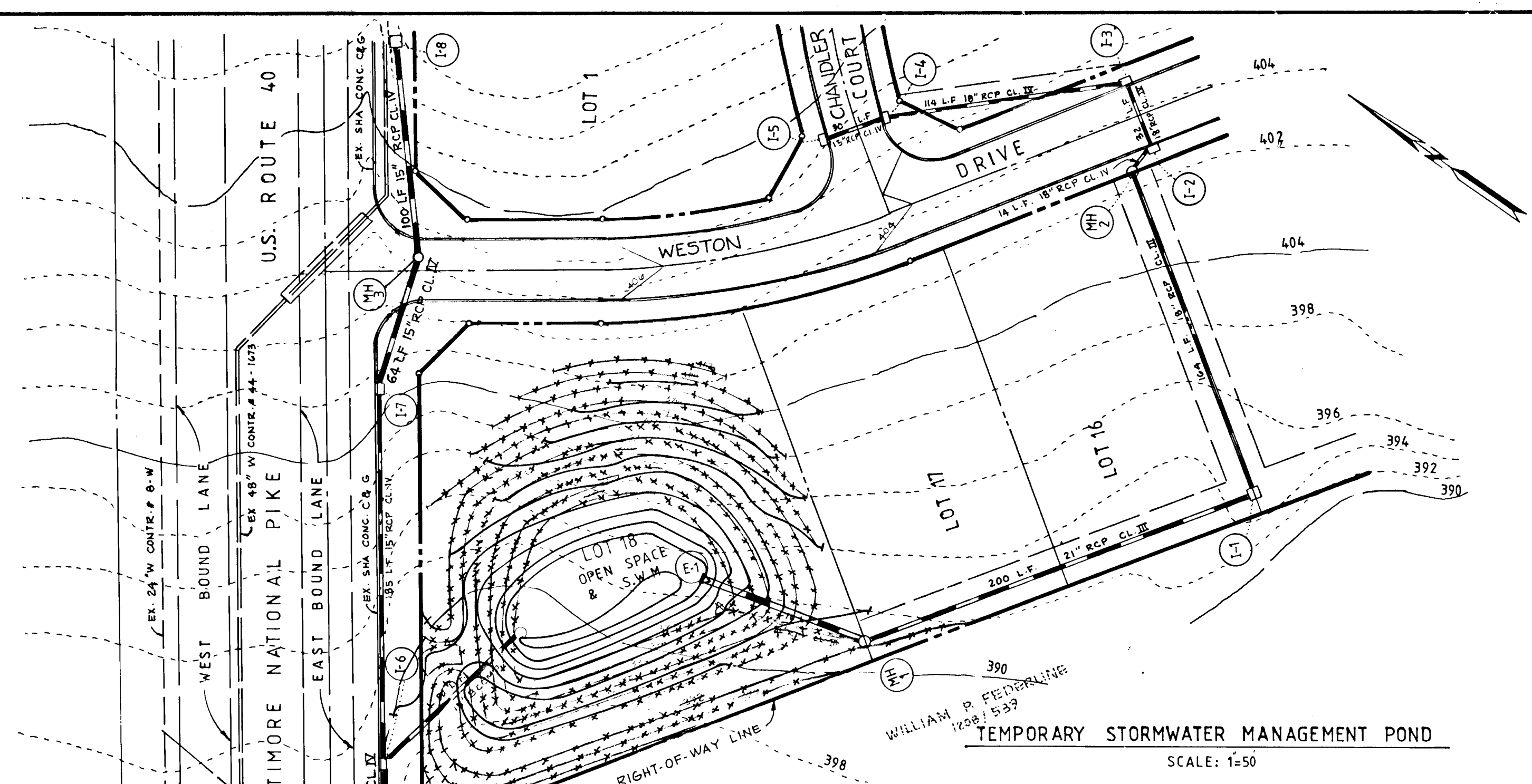
7. Finishing - Defective concrete, honeycombed areas, voids left by the removal of tie rods, ridges on all concrete surfaces permanently exposed to view or exposed to water on the finished structure, shall be repaired immediately after the removal of forms. All voids shall be reamed and completely filled with dry-patching mortar.

8. Protection and Curing - Exposed surfaces of concrete shall be protected from the direct rays of the sun for at least the first three (3) days. All concrete shall be kept continuously moist for at least ten (10) days after being placed. Moisture may be applied by spraying or sprinkling as necessary to prevent the concrete from drying. Curing compounds may also be used.

9. Placing Temperature - Concrete may not be placed at temperatures below 32° F with the temperature falling, or 32° with the temperature rising.

VI. STABILIZATION

All borrow areas shall be graded to provide proper drainage and left in a slightly condition. All exposed surfaces of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized by seeding, fertilizing and mulching (if required) in accordance with the spec.



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
Howard J. ... 12/16/91
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
 APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Olaf M. ... 10/1/90
 CHIEF, LAND DEVELOPMENT DIVISION
 APPROVED: HOWARD COUNTY DEPARTMENT OF HIGHWAYS
Franklin W. ... 9/6/90
 CHIEF, BUREAU OF HIGHWAYS
 APPROVED: HOWARD COUNTY DEPARTMENT OF ENGINEERING
William E. ... 10-2-90
 CHIEF, BUREAU OF ENGINEERING

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.
James M. ... 8/21/90
 SOIL CONSERVATION SERVICE
 THESE PLANS FOR SMALL POND CONSTRUCTION SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
Robert J. ... 8/21/90
 HOWARD COUNTY SOIL CONSERVATION DISTRICT

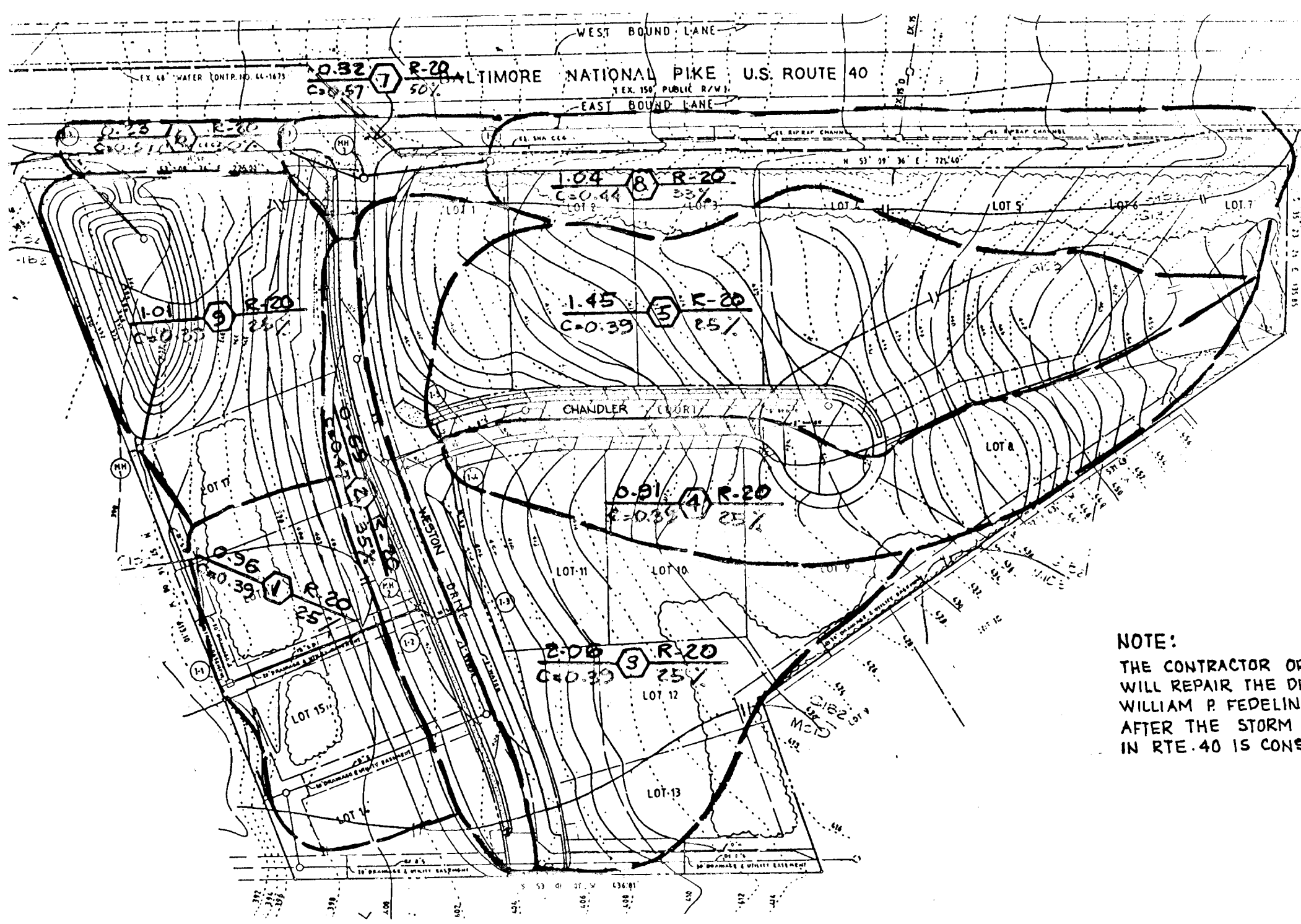
NUMBER	REVISION	DATE	BY
1	RELOCATE STORM DRAIN	4-4-91	V.S.
2	REVISE ROAD NAMES	11-1-92	

BY THE DEVELOPER
 I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.
Michael ... 7-7-89
 SIGNATURE OF DEVELOPER DATE

BY THE ENGINEER
 I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST SUBMIT HIS "AS-BUILT" PLAN TO THE HOWARD SOIL CONSERVATION DISTRICT WITHIN 30 DAYS OF COMPLETION.
Mike ... 7-10-90
 SIGNATURE OF ENGINEER DATE

SEDGHI & ASSOCIATES, LTD
 Civil Engineers - Site Planners - Surveyors
 3217 Corporate Court
 Ellicott City, MD 21043
 (301) 750-9003
 STORMWATER MANAGEMENT PLAN & DETAIL
 NOVA SQUARE
 TAX MAP 18 PARCEL 62
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MD.
 SCALE: 1"=50' SHEET 9 OF 9
 DATE: 3-13-90
 DEVELOPER
 40 WEST BUILDERS
 1007 LESLIE AVENUE
 CATONSVILLE, MD. 21223
 AS-BUILT 7-15-90

1594

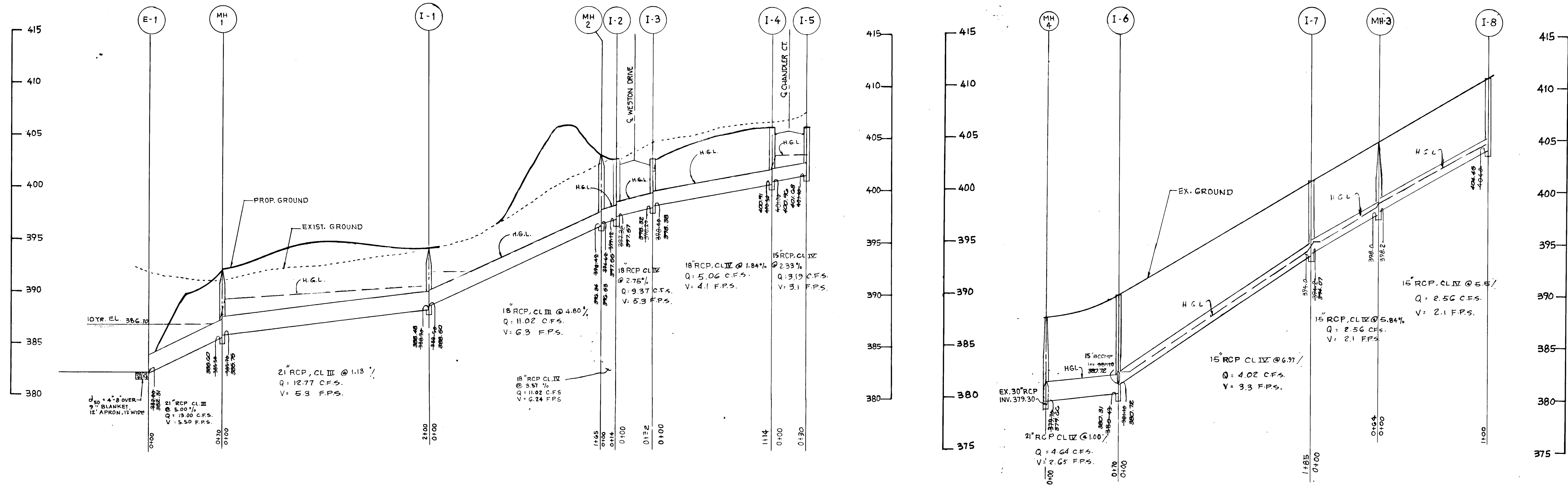


DRAINAGE AREA MAP

SCALE: 1"=100'

STORM DRAIN STRUCTURE SCHEDULE					
NO.	TYPE	TOP EL.	INV. IN	INV. OUT	REMARKS
E-1	END SECTION		388.00		
MH-1	STANDARD PRECAST MANHOLE HO. CO. 6.5 II	399.00	395.75	385.50	6" IN 10' FROM R.L.
I-1	E INLET HOWARD COUNTY S.D. 4.2 I	399.00	395.50	388.00	6" INLET 10' FROM R.L.
I-2	A-10 INLET HOWARD COUNTY S.D. 4.02	400.00	397.50	394.00	AT STA. 414.00 WESTERN DR. 10' R.L.
I-3	A-10 INLET HOWARD COUNTY S.D. 4.02	400.00	398.00	395.70	AT STA. 414.00 WESTERN DR. 10' R.L.
I-4	A-10 INLET HOWARD COUNTY S.D. 4.02	400.00	398.00	395.70	AT STA. 414.00 WESTERN DR. 10' R.L.
I-5	A-10 INLET HOWARD COUNTY S.D. 4.02	400.00	398.00	395.70	AT STA. 414.00 WESTERN DR. 10' R.L.
EX	STANDARD PRECAST MANHOLE HO. CO. 6.5 II	388.00	379.00		AT STA. 414.00 WESTERN DR. 10' R.L.
I-6	A-5 INLET HOWARD COUNTY S.D. 4.01	399.00	396.00	380.30	AT STA. 414.00 WESTERN DR. 10' R.L.
I-7	A-5 INLET HOWARD COUNTY S.D. 4.01	399.00	396.00	380.30	AT STA. 414.00 WESTERN DR. 10' R.L.
MH-2	STANDARD PRECAST MANHOLE HO. CO. 6.5 II	400.00	398.00	394.00	AT STA. 414.00 WESTERN DR. 10' R.L.
I-8	E INLET HOWARD COUNTY S.D. 4.2 I	400.00	398.00	394.00	AT STA. 414.00 WESTERN DR. 10' R.L.
MH-3	STANDARD PRECAST MANHOLE HO. CO. 6.5 II	400.00	398.00	394.00	AT STA. 414.00 WESTERN DR. 10' R.L.
MH-4	STA. PRECAST MH. HOWARD COUNTY 6.5 II	400.00	398.00	394.00	AT STA. 414.00 WESTERN DR. 10' R.L.

TOP EL.	INV. IN	INV. OUT	REMARKS
391.70	385.00	385.75	E IN 10' FROM R.L.
392.89	388.50	388.40	E INLET 10' FROM R.L.
402.93	397.57	397.55	AT STA. 414.00 WESTERN DR. 10' R.L.
402.87	398.35	398.32	AT STA. 414.00 WESTERN DR. 10' R.L.
405.93	400.00	400.01	AT STA. 414.00 WESTERN DR. 10' R.L.
405.90	401.68	401.68	AT STA. 414.00 WESTERN DR. 10' R.L.
387.00	379.00		AT STA. 414.00 WESTERN DR. 10' R.L.
391.95	380.72	380.31	AT STA. 414.00 WESTERN DR. 10' R.L.
401.94	394.07	394.00	AT STA. 414.00 WESTERN DR. 10' R.L.
405.68	398.80	398.00	AT STA. 414.00 WESTERN DR. 10' R.L.
411.75	404.45	398.24	E IN 10' FROM WESTERN DR. 10' R.L.
405.39	396.53	396.24	E IN 10' FROM WESTERN DR. 10' R.L.
388.00	379.00	379.30	AT STA. 414.00 WESTERN DR. 10' R.L.



APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
 Chief, Division of Community Planning and Land Development
 10/15/90

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Chief, Land Development Division
 10/1/90

1594
 Chief, Bureau of Highways
 9/5/90

Chief, Bureau of Engineering
 10/2/90

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
 District Engineer
 8/21/90

SOIL CONSERVATION SERVICE

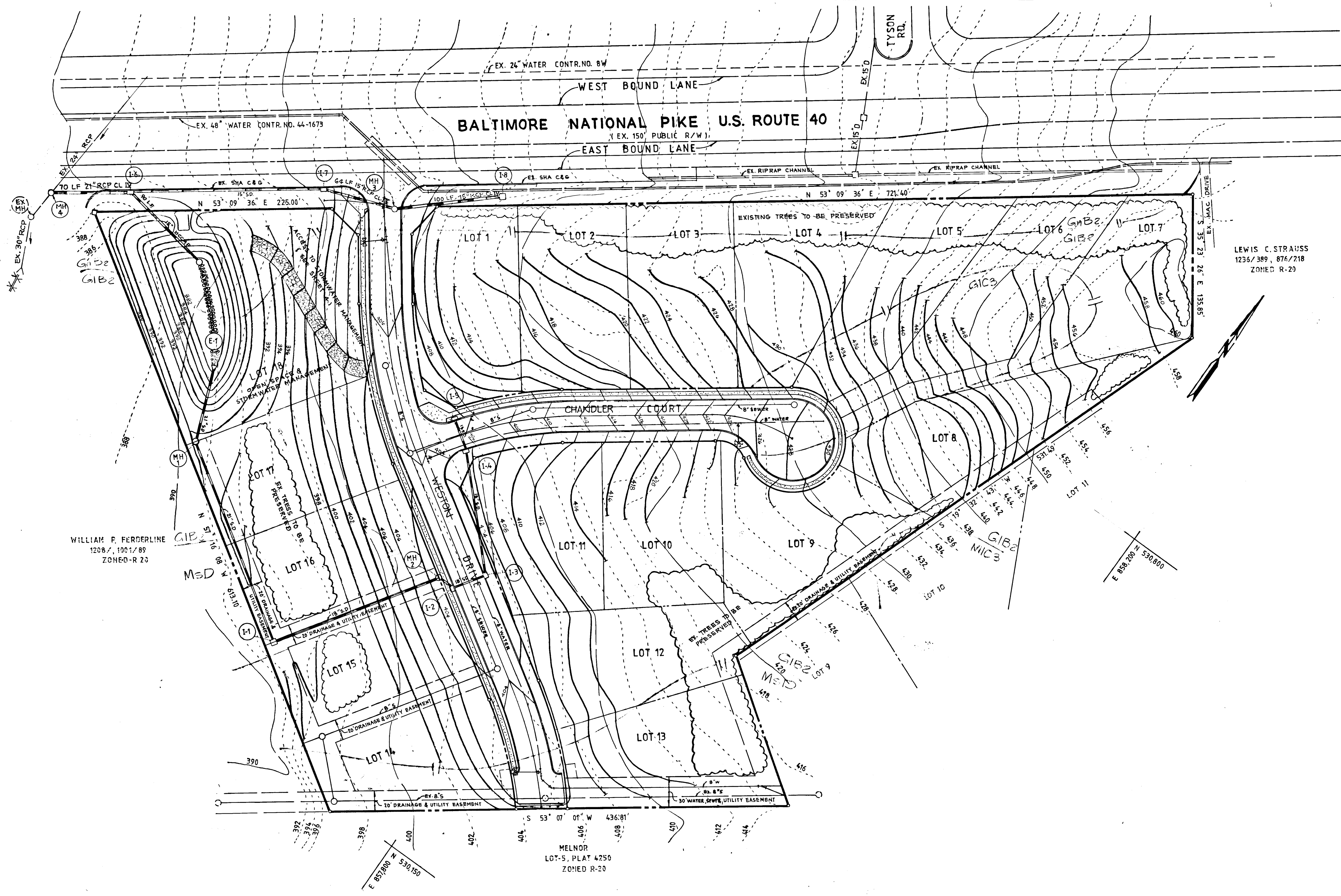
THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
 District Engineer
 8/21/90

SEDGHI & ASSOCIATES, LTD.
 Engineers • Site Planners • Surveyors
 3217 Corporate Court
 Ellicott City, MD 21043
 (301) 750-9003

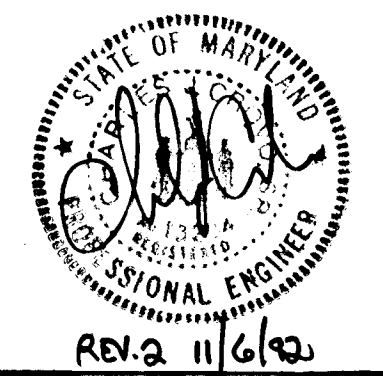
ENGINEER'S CERTIFICATE
 I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOILS CONSERVATION DISTRICT
 Signature: [Signature]
 Date: 7-10-90

DEVELOPER'S CERTIFICATE
 I HEREBY 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 ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY.
 Signature: [Signature]
 Date: 7-7-89

4-4-91	1	RELOCATE STORM DRAIN
11-6-92	2	REMOVE SIDEWALK & REVISE ROAD NAMES
DATE	NO.	REVISION
DESIGNED	STORM DRAIN PROFILE	
DRAWN	NOVA SQUARE	
CHECKED	LOT 1 TO 18	
DATE	TAX MAP 18, PARCEL 62	
	2ND ELECTION DISTRICT	
	HOWARD COUNTY, MARYLAND	
	DEVELOPER	
	1007 LESLIE AVENUE	
	CATONSVILLE, MD. 21223	
	15-BUILT 7-15-76	
SCALE: 1"=50'	DRAWING NO. 6 OF 9	JOB NO.
		FILE NO.



PLAN
SCALE: 1"=50'



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
Mark J. Taylor 1/11/90
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
 DATE

APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Alan M. Ferguson 10/1/90
 CHIEF, LAND DEVELOPMENT DIVISION MK
 DATE

Branville W. Wehland 9/5/90
 CHIEF, BUREAU OF HIGHWAYS
 DATE

Kristen B. Deary 10-2-90
 CHIEF, BUREAU OF ENGINEERING
 DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
John H. Hester 8/21/90
 SOIL CONSERVATION SERVICE
 DATE

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Robert W. Zichem 8/21/90
 HOWARD COUNTY SOIL CONSERVATION DISTRICT
 DATE

NUMBER	REVISION	DATE	BY
1	RELOCATE STORM DRAIN	4-4-91	V.S.
2	REMOVE SIDEWALK & REVISE ROAD NAMES	11-6-92	D.L.H.

ENGINEER'S CERTIFICATE
 I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENT 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 SOILS CONSERVATION DISTRICT.

V. S. Sedghi 7-10-90
 SIGNATURE OF ENGINEER DATE

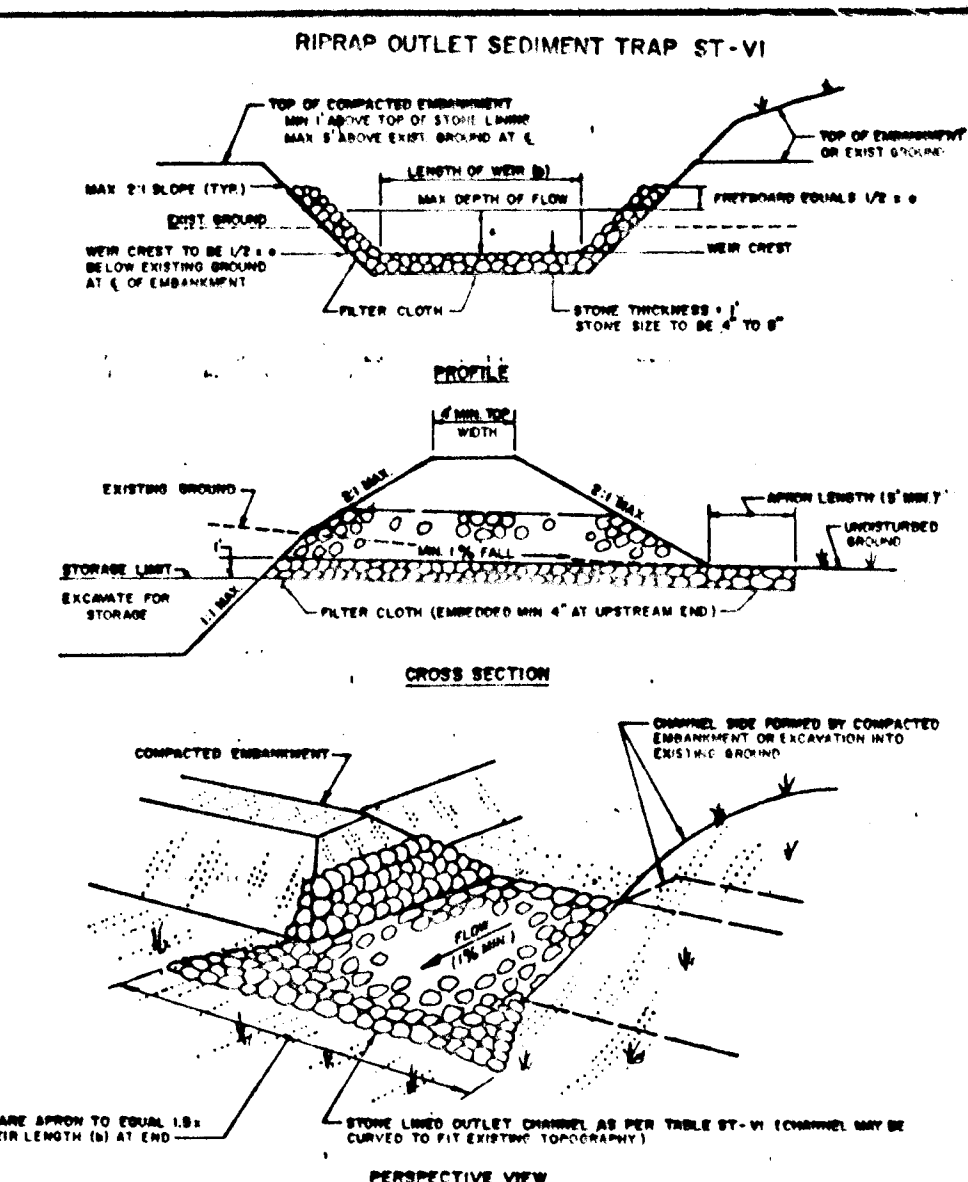
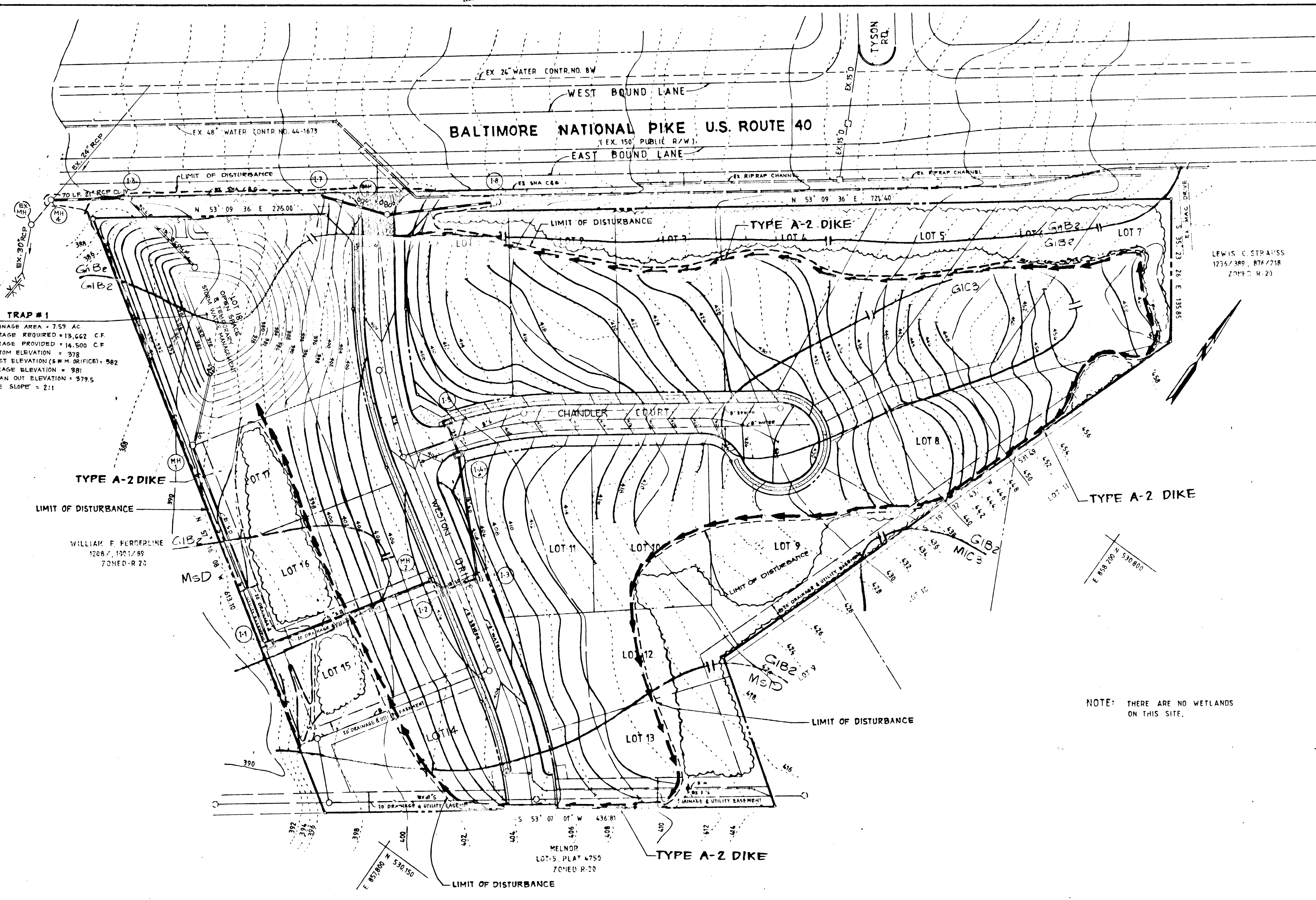
DEVELOPER'S CERTIFICATE
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ONSITE INSPECTOR BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS AS DEEMED NECESSARY.
Mark H. Carlin 7-7-89
 SIGNATURE OF DEVELOPER DATE

SEDGHI & ASSOCIATES, LTD.
 Civil Engineers • Site Planners • Surveyors
 3217 Corporate Court
 Ellicott City, MD 21043
 (301) 750-9003

**GRADING PLAN
 NOVA SQUARE**
 LOTS 1 TO 18
 TAX MAP 18 PARCEL 62
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MD.
 SCALE: 1"=50' SHEET 7 OF 9
 DATE: 3-13-90

DEVELOPER
 40 WEST BUILDERS
 1007 LESLIE AVENUE
 CATONSVILLE, MD. 21223
BUILT 7-15-90

1594



SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT
2. NOTIFY HOWARD COUNTY OFFICE OF INSPECTION & PERMITS AT 792-7272. A MINIMUM OF 24 HRS. PRIOR TO THE START OF ANY WORK.
3. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
4. CONSTRUCT TEMPORARY STORM WATER MANAGEMENT AND SEDIMENT TRAPS. THE S.W.M. WILL BE USED AS SEDIMENT TRAP.
5. INSTALL DIKES & SILT FENCES.
6. CLEAR & GRADE THE SITE.
7. CONSTRUCT STORM DRAINS & UTILITIES.
8. DURING CONSTRUCTION AND AFTER EACH RAINFALL, THE CONTRACTOR SHALL INSPECT & PROVIDE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL STRUCTURES SHOWN HEREON.
9. DURING CONSTRUCTION, THE CONTRACTOR SHALL REMOVE THE SEDIMENT FROM ALL SEDIMENT TRAPS WHEN THE CLEANOUT ELEVATION HAS BEEN REACHED.
10. CONSTRUCT CURB & GUTTER AND LAY BASE COURSE.
11. CLEAN BASE COURSE, APPLY TACK COAT TO BASE COURSE AND LAY SURFACE COURSE, STABILIZE ALL REMAINING OF DISTURBED AREA.
12. WHEN THE WHOLE SITE IS STABILIZED CONVERT THE TEMPORARY STORM WATER MANAGEMENT AND SEDIMENT TRAP IN THE BOTTOM OF IT TO PERMANENT S.W.M. AS SHOWN ON THE S.W.M. PLANS. THE GRADES IN THE BOTTOM OF POND WILL BE BROUGHT UP TO 382, AND 13" DIA. PIPE FOR LOW FLOW ORIFICE AND THE 6" DIA RISER FOR EXTENDED DETENTION WILL BE INSTALLED.
13. REMOVE ALL SEDIMENT CONTROL MEASURES WITH THE APPROVAL OF SEDIMENT CONTROL INSPECTORS.

SEDIMENT & EROSION CONTROL LEGEND

- STABILIZE CONSTRUCTION ENTRANCE
- INLET PROTECTION
- SEDIMENT TRAP
- SOIL LINES
- TYPE A-2 DIKES
- DRAINAGE AREA
- LIMIT OF DISTURBANCE
- SILT FENCE

PLAN
SCALE: 1"=50'

NOTE: THERE ARE NO WETLANDS ON THIS SITE.



HOWARD COUNTY SOIL MAP # 16

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Michael V. DeWitt 11/14/92
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
 APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
John M. Pagan 10/1/90
 CHIEF, LAND DEVELOPMENT DIVISION MK
Francis W. Williams 9/5/90
 CHIEF, BUREAU OF HIGHWAYS
Robert E. Raley 10/2/92
 CHIEF, BUREAU OF ENGINEERING

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
James R. Hill 8/31/90
 SOIL CONSERVATION SERVICE
 THE DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Robert J. Zedner 8/21/90
 HOWARD COUNTY SOIL CONSERVATION DISTRICT

NUMBER	REVISION	DATE	BY
1	RELOCATE STORM DRAIN	4-4-91	V.S
2	REMOVE SIDEWALK & REVISE ROAD NAMES	11-9-92	D.L.H.

ENGINEER'S CERTIFICATE
 I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENT 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 SOILS CONSERVATION DISTRICT.
Michael V. DeWitt
 SIGNATURE OF ENGINEER
 7-10-92
 DATE

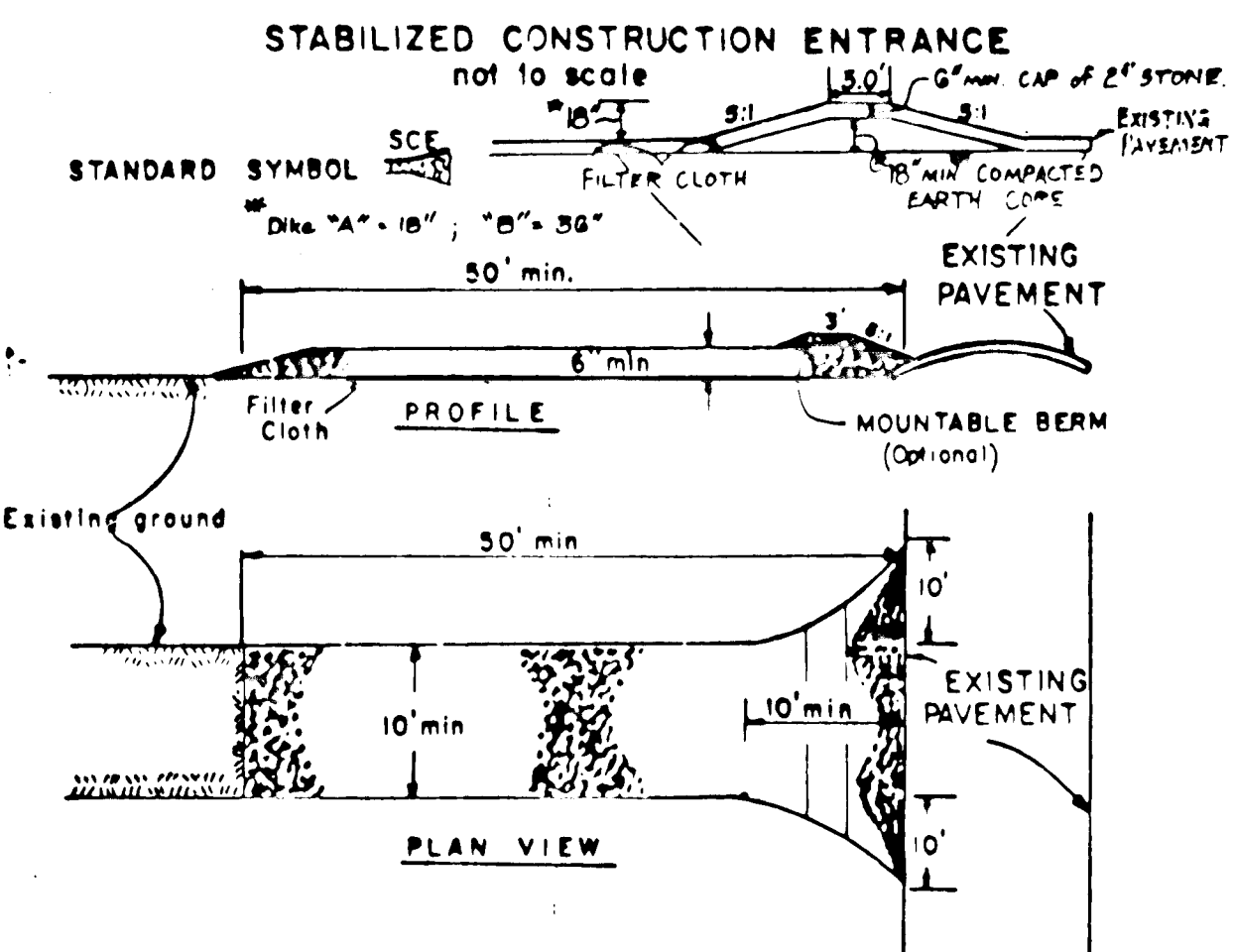
DEVELOPER'S CERTIFICATE
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ONSITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS AS DEEMED NECESSARY.
Michael V. DeWitt
 SIGNATURE OF DEVELOPER
 7-7-89
 DATE

SEDGHI & ASSOCIATES, LTD.
 Civil Engineers • Site Planners • Surveyors
 3217 Corporate Court
 Ellicott City, MD 21043
 (301) 750-9003

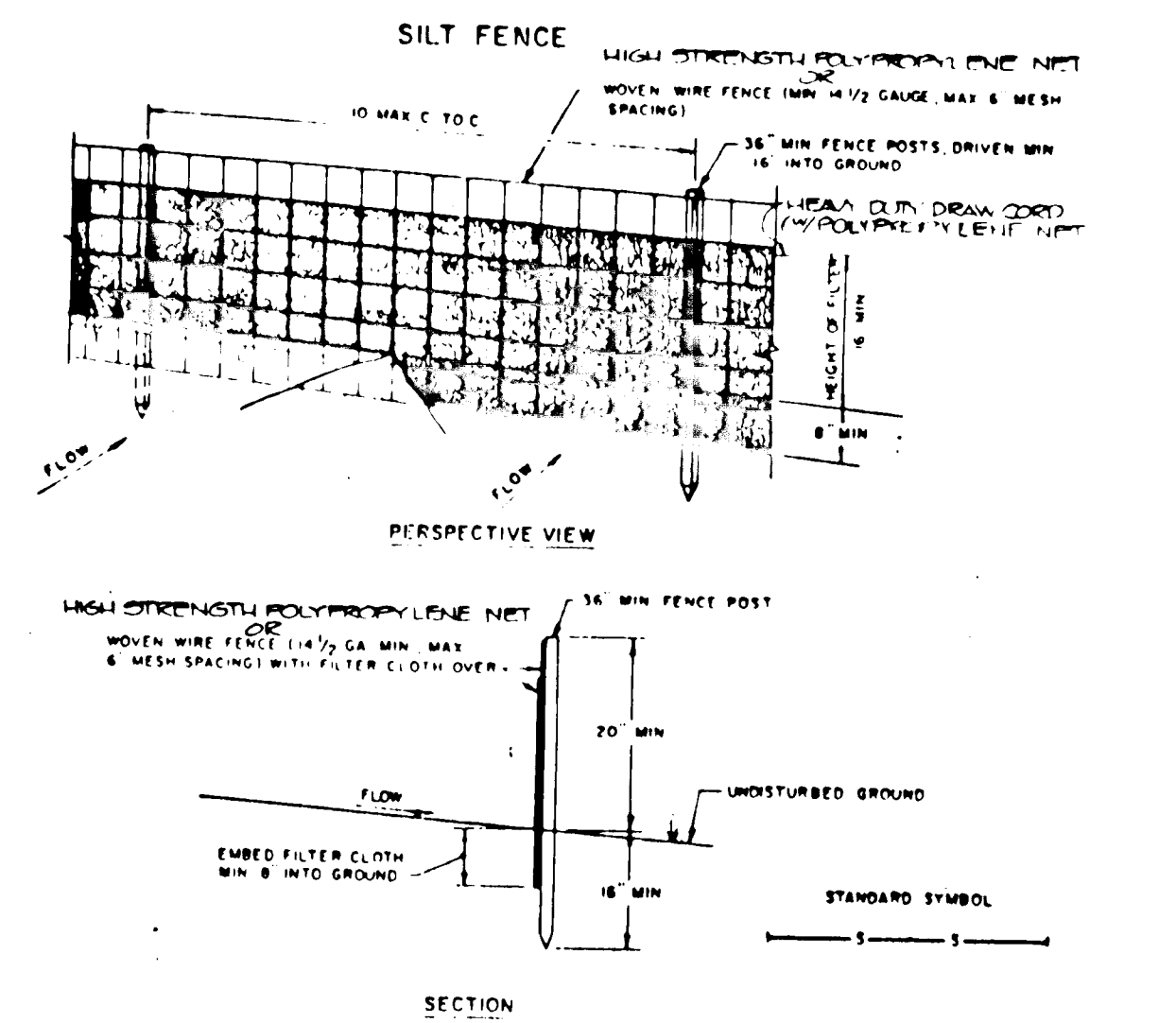
SEDIMENT & EROSION CONTROL PLAN
NOVA SQUARE
 LOTS 1 TO 18
 TAX MAP 18 PARCEL 62
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MD.
 SCALE: 1"=50' SHEET 6 OF 9
 DATE: 3-13-1990

DEVELOPER
 40 WEST BUILDERS
 1067 LESLIE AVENUE
 CATONSVILLE, MD 21223
 AS-BUILT 7-15-90

1594



- CONSTRUCTION SPECIFICATIONS**
- 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 ingress or egress occurs.
 - 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 permitted.
 - 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 replacement of any materials used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
 - Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
 - Periodic inspection and needed maintenance shall be provided after each rain.



- CONSTRUCTION NOTES FOR FABRICATED SILT FENCE**
- Woven wire fence to be fastened securely to fence posts with wire ties of staples.
 - Filter cloth to be fastened securely to woven wire fence with 1/2" x 3/4" x 1/2" x 1/2" mesh section.
 - When two sections of filter cloth adjoin each other they shall be overlapped by six inches and folded.
 - Maintenance shall be performed as needed and material removed when bulges develop in the filter cloth.
- POSTS:** STEEL EITHER 1 1/2" TYPE OR 1 1/4" x 1/4" MIN (ACTUAL)
- FENCE:** WOVEN WIRE 14 GA. 2" x 4" MESH OPENING
- FILTER CLOTH:** HIGH STRENGTH POLYPROPYLENE NETTING
- PRE-FABRICATED UNIT:** GEOTECH, ENVIROFENCE, OR APPROVED EQUAL.

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREA NOT SUBJECT TO IMMEDIATE FUTURE DISTURBANCE. WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

Seeding Preparation: Loosen upper 3 inches of soil by raking, disking or other acceptable means before seeding.

Soil Amendments: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES.

- Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs./1000 square ft.) and 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq. ft.) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9lbs./1000 sq. ft.).
- Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs./1000 sq. ft.) and 1000 lbs. per acre 10-10-10 fertilizer (23 lbs./1000 sq. ft.) before seeding. Harrow or disc into upper three inches of soil.

Seeding: - For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs. per acre (1.4 lbs./1000 sq. ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (.05 lbs./1000 sq. ft.) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs./acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

Mulching: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal./1000 sq. ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal./1000 sq. ft.) for anchoring.

Maintenance: - Inspect all seeded areas and make needed repairs, replacements and reseedings.

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREA LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

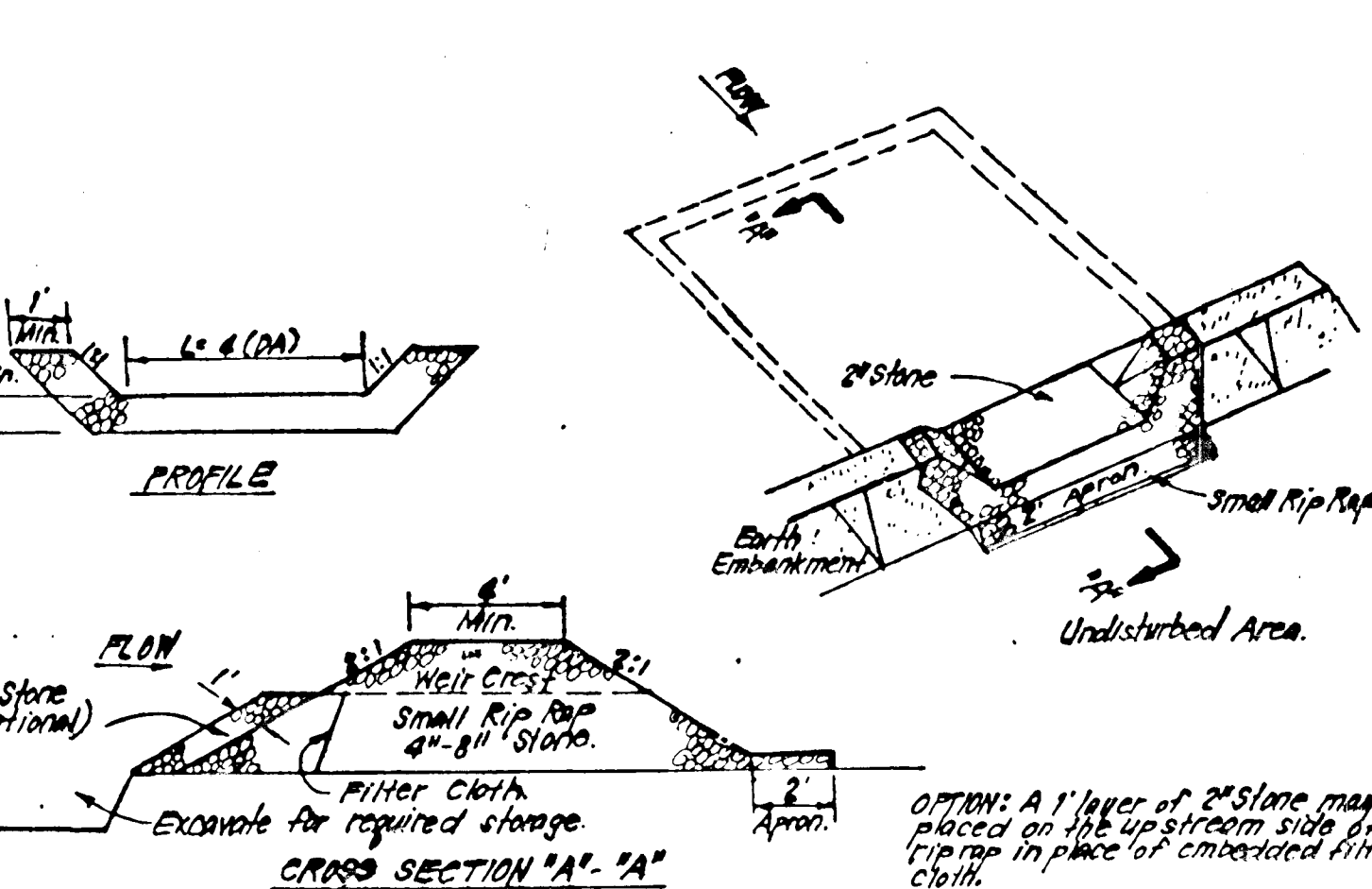
Seeding Preparation: Loosen upper 3 inches of soil by raking, disking or other acceptable means before seeding.

Soil Amendments: Apply 60 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq. ft.).

Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 24 lbs. per acre of annual ryegrass (3.2 lbs./1000 sq. ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (.07 lbs./1000 sq. ft.). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

Mulching: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal./1000 sq. ft.) of emulsified asphalt on flat areas. On slopes 8 ft. or higher, use 348 gal. per acre (8 gal./1000 sq. ft.) for anchoring.

REFER TO THE 1983 MD. STANDARD AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.



- CONSTRUCTION SPECIFICATIONS:**
- Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The soil shall be 2' deep.
 - The fill material for the embankment shall be free of roots and other woody vegetation as well as oversized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.
 - All cut and fill slopes shall be 2:1 or flatter.
 - The stone used in the outlet shall be small rip rap 4" x 4" x 4" with 1" thickness of 2" aggregate placed on the up-grade side on the small rip rap or embedded filter cloth in the rip rap.
 - Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap.
 - The structure shall be inspected after each rain and repairs made as needed.
 - Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
 - The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

STONE OUTLET SEDIMENT TRAP (S.O.S.T.) STY.
NO SCALE

STANDARD AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION WITH SOD

SPECIFICATIONS

- Class of turfgrass sod shall be Maryland or Virginia State Certified, or Maryland or Virginia State approved sod.
- Sod shall be machine cut at a uniform soil thickness of 3/4 inch, plus or minus 1/4 inch, at the time of cutting. Measurement for thickness shall exclude top growth and thatch.
- Standard size sections of sod shall be strong enough to support their own weight and retain their size and shape when suspended vertically with a firm grasp on the upper 10 percent of the section.
- Individual pieces of sod shall be cut to the suppliers width and length. Maximum allowable deviation from standard widths and lengths shall be 3 percent. Broken pads and torn or uneven ends will not be acceptable.
- Sod shall not be harvested or transplanted when moisture content (excessively dry or wet) may adversely affect its survival.
- Sod shall be harvested, delivered and installed within a period of 36 hours. Sod not transplanted within this period shall be inspected and approved prior to its installation.

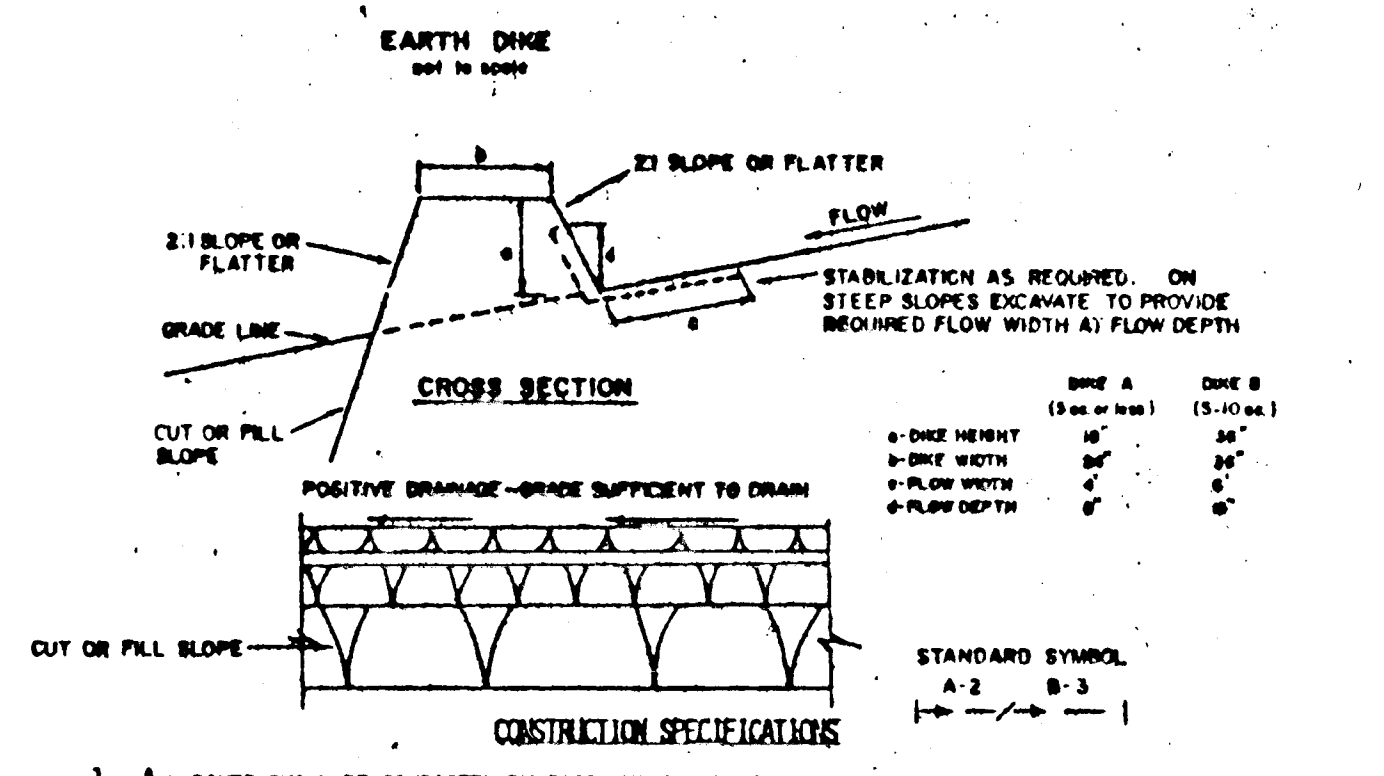
Site Preparation

Fertilizer and lime application rates shall be determined by soil tests. Under unusual circumstances where there is insufficient time for a complete soil test, fertilizer and lime materials may be applied in amounts shown under B, below.

- Prior to sodding, the surface shall be cleared of all trash, debris, and of all roots, brush, wire, grade stakes and other objects that would interfere with planting, fertilizing or maintenance operations.
- Where the soil is acid or composed of heavy clays, ground limestone shall be spread at the rate of 2 tons/acre or 100 pounds per 1,000 square feet. In all soils 1,000 pounds per acre or 25 pounds per 1,000 square feet of 10-10-10 fertilizer or equivalent shall be uniformly applied and mixed into the top 3 inches of soil with the required lime.
- All areas receiving sod shall be uniformly fine graded. Hard-packed earth shall be scarified prior to placement of sod.

- SEDIMENT CONTROL NOTES:**
- A minimum of 30 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (892-2437)
 - All vegetative 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 redisturbance, 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/basins 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 seedings (Sec. 31) and (Sec. 34), temporary seedings (Sec. 50) and mulching (Sec. 52.) Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
 - All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
 - Site Analysis:
Total Area of Site: 3.47 Acres
Area Disturbed: 1.80 Acres
Area to be roofed or paved: 1.85 Acres
Area to be vegetatively stabilized: 5.55 Acres
Total Cut: 14,000 Cu. yds
Total Fill: 14,000 Cu. yds
Offsite waste/borrow area location: N/A
 - Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
 - Additional sediment control must be provided, if deemed necessary by the Howard County DCM sediment control inspector.
 - On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested 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 not be authorized until this initial approval by the inspection agency is made.
 - If houses are to be constructed on an "As-Built" basis, at random, Single Lot Sediment Control as shown below shall be implemented.
 - All pipes to be blocked at the end of each day (see detail below).
 - The total amount of straw bale dikes/silt fence equals 2,400 L.F.

- GENERAL NOTES**
- Refer to "1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control" for standard details and detailed specifications of each practice specified herein.
 - With the approval of the sediment control inspector, minor field adjustments can and will be made to insure the control of any sediment. Changes in sediment control practices require prior approval of the sediment control inspector and the County Soil Conservation District.
 - At the end of each working day, all sediment control practices will be inspected and left in operational condition.
 - Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a.) seven calendar days as to the surface of all perimeter controls, dikes, walls, ditches, perimeter slopes, and all slopes greater than 3 horizontal to 1 vertical (3:1) and b.) fourteen days as to all other disturbed or graded areas on the project site.
 - Any change to the grading proposed on this plan requires re-submission to County Soil Conservation District for approval.
 - Dust control will be provided for all disturbed areas. Refer to 1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control, pp 820 and 81.07 for acceptable methods and specifications for dust control.
 - Any variation from the sequence of operations stated on this plan requires the approval of the sediment control inspector and the County Soil Conservation District prior to the initiation of the change.
 - Excess cut or borrow material shall go to or come from, respectively, a site with an approved sediment control plan.
- The following item may be used as applicable:
- Refer to "Maryland's Guidelines to Waterway Construction" by the Water Resources Administration (WRA), dated January, 1986 for standard details and detailed specifications of each practice specified herein for waterway construction.



- CONSTRUCTION SPECIFICATIONS**
- All dikes shall be compacted by earth-moving equipment.
 - All dikes shall have positive drainage to an outlet.
 - Top width may be wider and side slopes may be flatter if desired to facilitate crossing by construction traffic.
 - Field location should be adjusted as needed to utilize a stabilized safe outlet.
 - Earth dikes shall have an outlet that functions with a minimum of erosion. Runoff shall be conveyed to a sediment trapping device such as a sediment trap or sediment basin where either the dike channel or the drainage area above the dike are not adequately stabilized.
 - Stabilization shall be: (A) in accordance with standard specifications for seed and straw mulch or straw mulch (if not in seeding season), (B) flow channel as per the chart below.
- | TYPE OF TREATMENT | FLOW CHANNEL STABILIZATION | |
|-------------------|----------------------------|----------------------------------|
| | DIKE A | DIKE B |
| 1 | 5-3.0R | SEED AND STRAW MULCH |
| 2 | 3.1-5.0R | SEED AND STRAW MULCH |
| 3 | 5.1-8.0R | SEED WITH JUTE, OR SOD, 2" STONE |
| 4 | 8.1-20R | LINED RIP-RAP 4-8" |
- STANDARD SYMBOL**
A-2 B-3
- EARTH DIKE**
NO SCALE
- STONE TO BE 2 INCH STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 3 INCHES IN THICKNESS AND BE PRESSED INTO THE SOIL WITH CONSTRUCTION EQUIPMENT.
 - RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 8 INCHES THICKNESS AND PRESSED INTO THE SOIL.
 - APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.
 - PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
 10/18/89
 APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 10/1/89
 APPROVED: 10/22/89

Reviewed for HOWARD SOIL CONS. DISTRICT
 Signature: [Signature]
 U.S. SOIL CONSERVATION SERVICE
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY HOWARD COUNTY SOIL CONSERVATION DISTRICT.
 Signature: [Signature]
 Date: 8/21/89

DEVELOPER'S/BUILDER'S CERTIFICATE

I/WE 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 DEPT. OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

Signature: [Signature]
 Date: 7-7-89

ENGINEER'S CERTIFICATE

I HEREBY 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 COUNTY SOIL CONSERVATION DISTRICT.

Signature: [Signature]
 Date: 7-10-89

DATE	NO.	REVISION

SEDGHI & ASSOCIATES, LTD.
 Engineers • Site Planners • Surveyors
 3217 Corporate Court
 Ellicott City, MD 21043
 (301) 775-0093

DESIGNED: [Signature]
 DRAWN: [Signature]
 CHECKED: [Signature]
 DATE: 7-10-89

NOVA SQUARE
 LOT 1 TO 18
 TAX MAP-18 PARCEL-62
 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: 1"=50' SHEET 9 OF 9
 DATE: 10-12-89
 OWNER/DEVELOPER
 40 WEST BUILDERS
 1007 LESLIE AVENUE
 CATONSVILLE, MD. 21223
 7-10-89

AS SHOWN
 DRAWING 9 OF 9
 JOE NO.
 FILE NO.