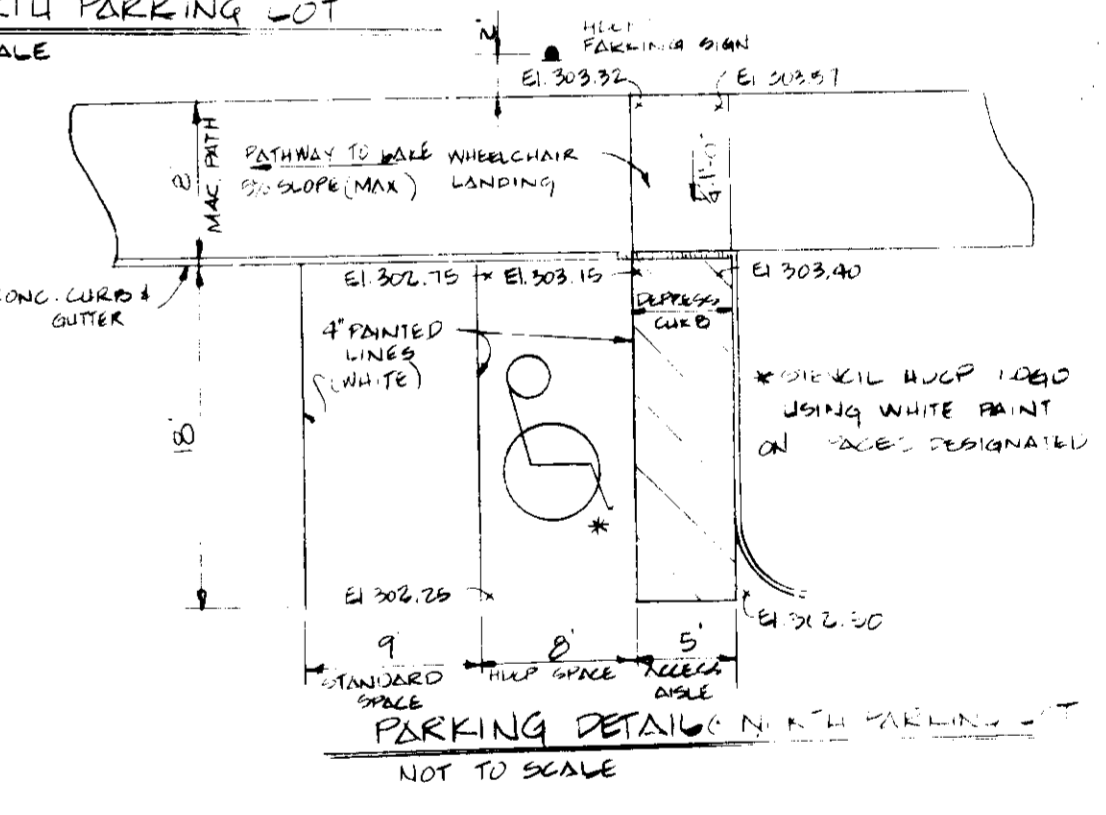
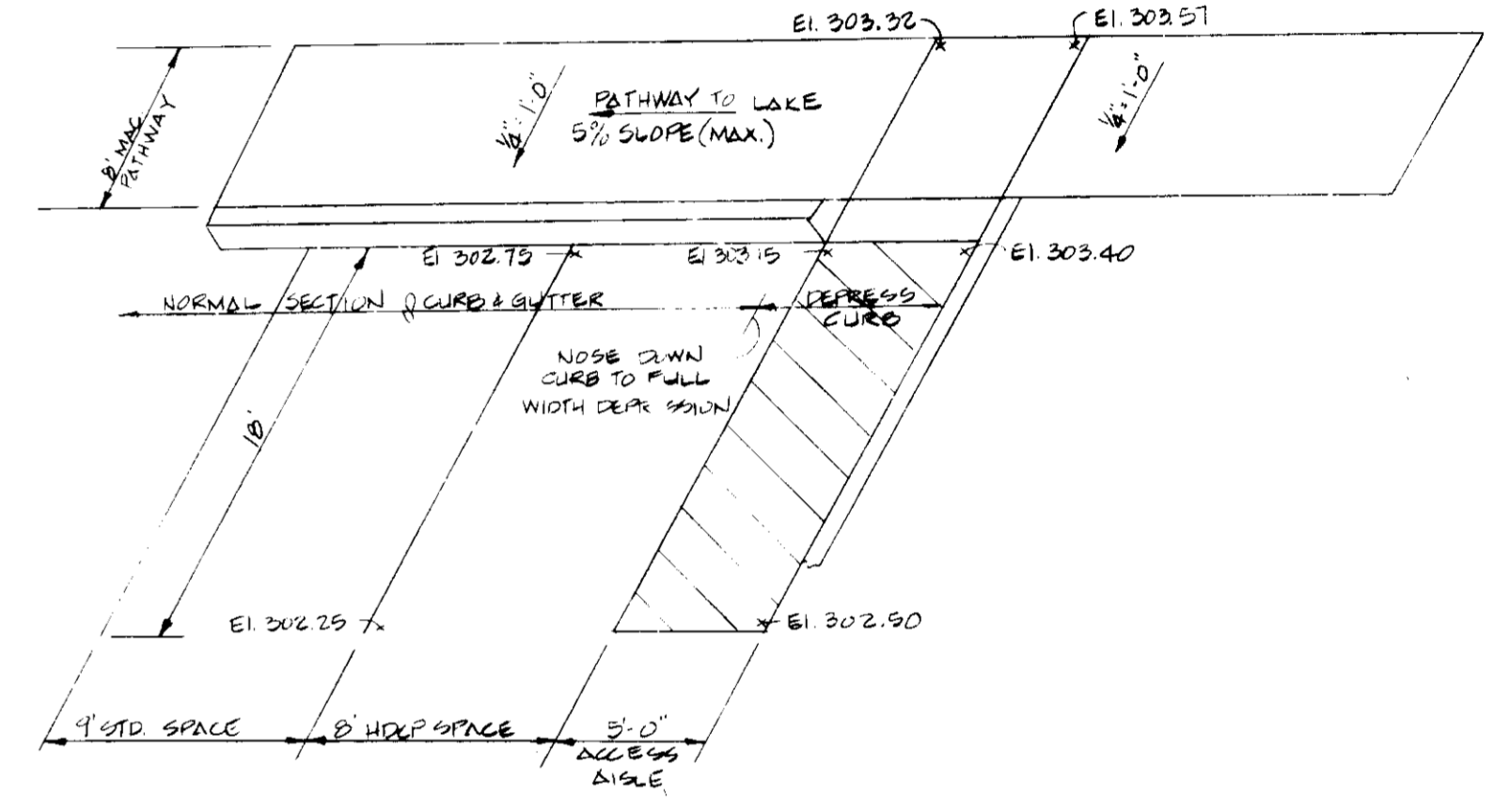
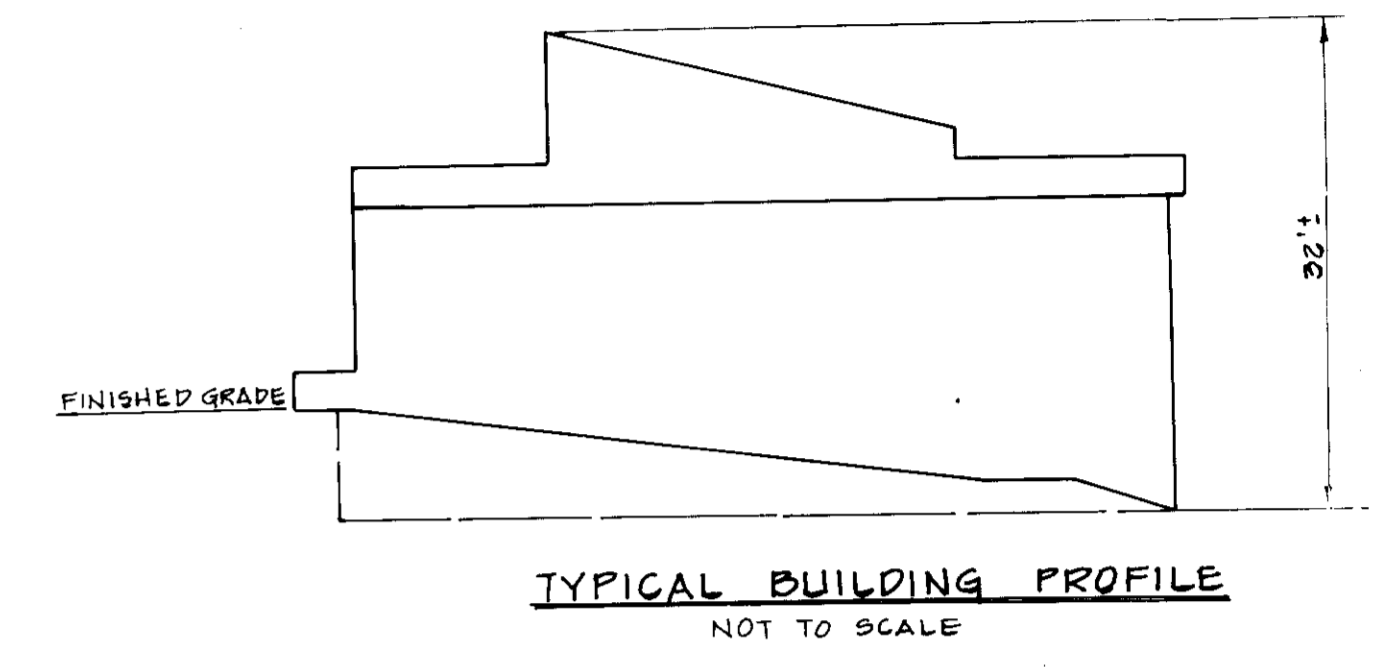
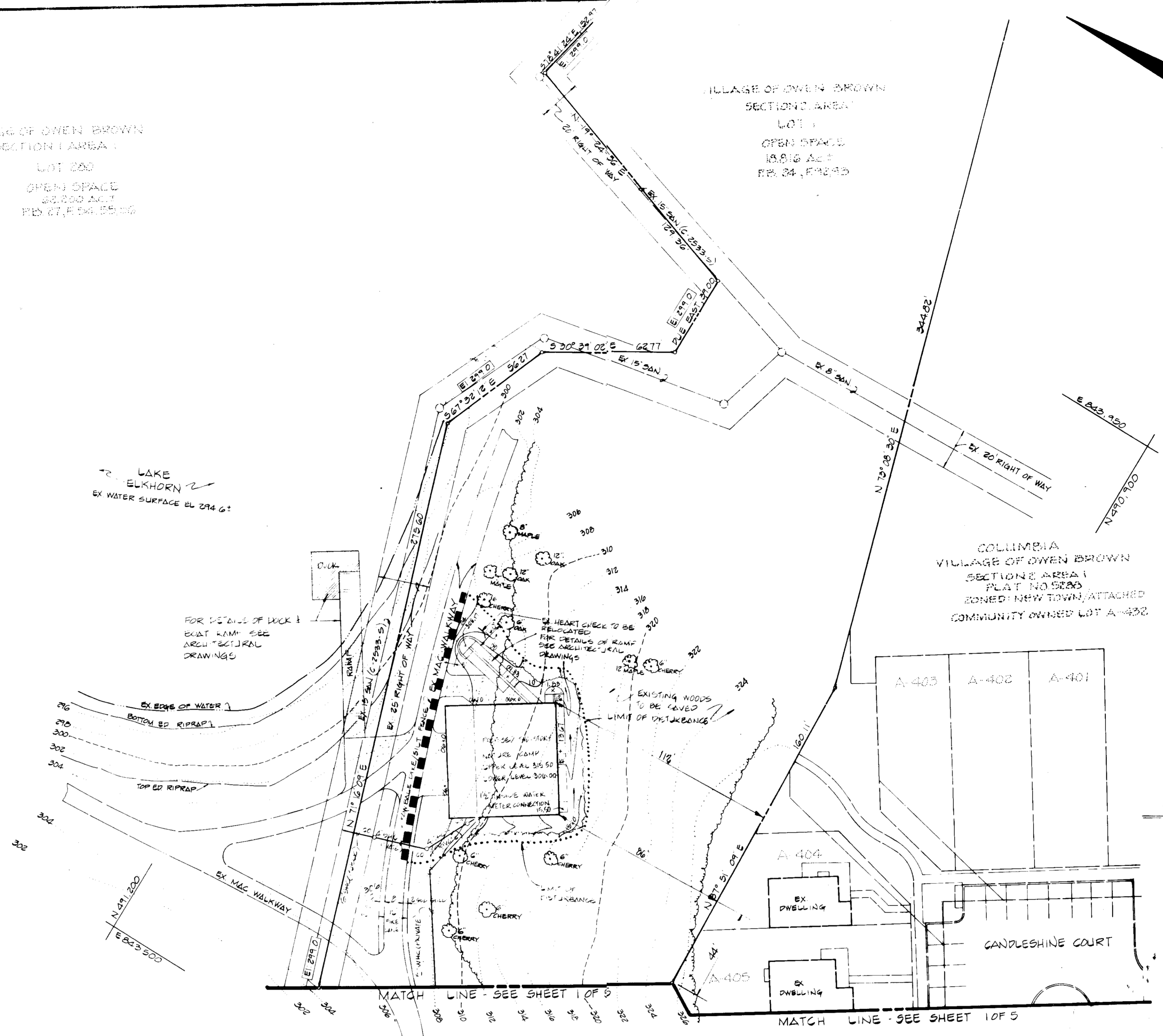


VILLAGE OF OWEN BROWN
SECTION 1 AREA 1
LOT 280
OPEN SPACE
10,000 S.F.
P.D. 27, 28, 29, 30, 31, 32

VILLAGE OF OWEN BROWN
SECTION 2 AREA 1
LOT 1
OPEN SPACE
10,016 S.F.
P.D. 34, 35, 36, 37



APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 3-26-86

Chas. J. Conrad

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERS & LAND SURVEYORS
8388 COURT AVENUE
ELLICOTT CITY, MARYLAND 21043
(301) 461-2855

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 SOIL CONSERVATION DISTRICT.
Chas. J. Conrad
SIGNATURE OF ENGINEER
4/15/86
DATE

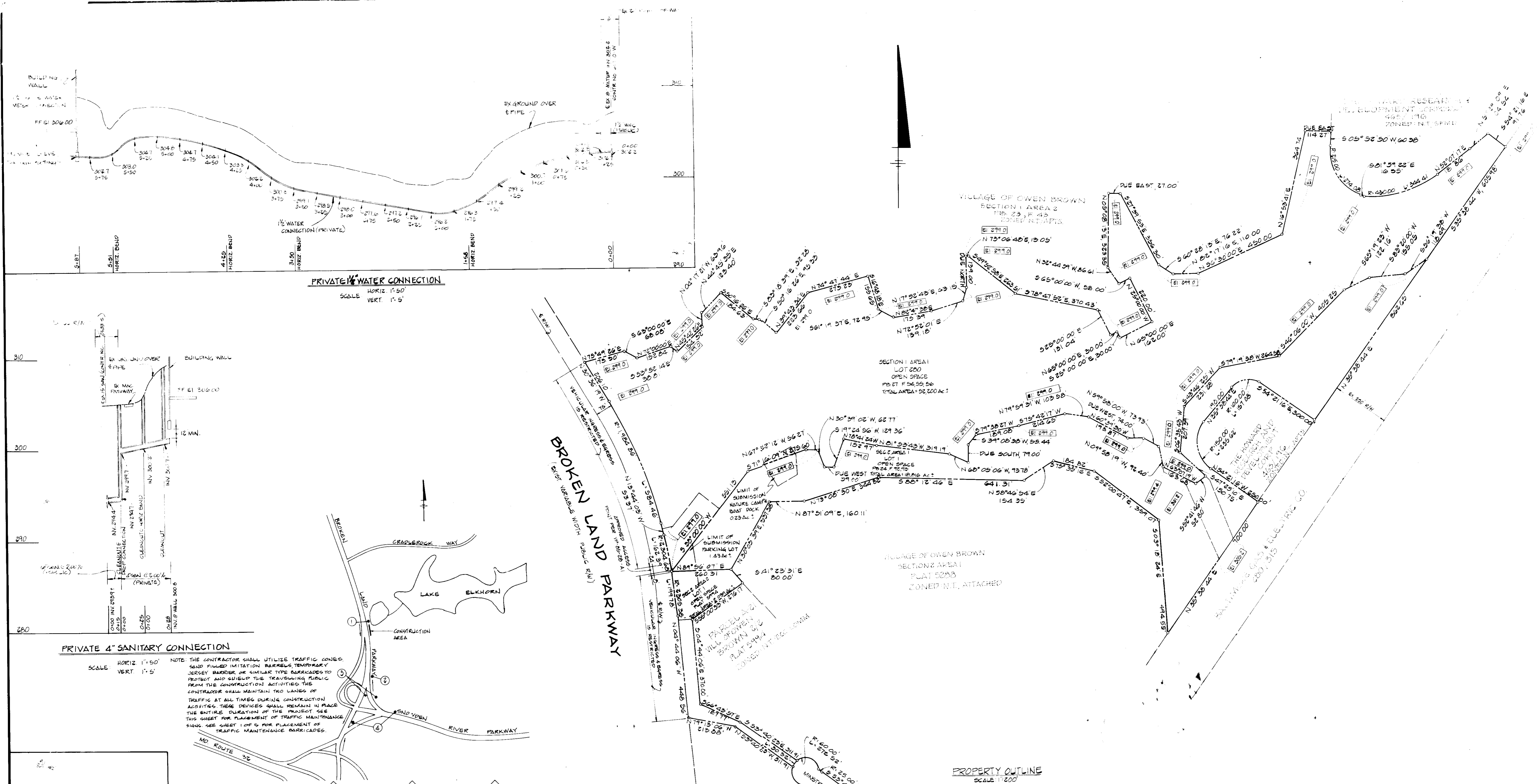
DEVELOPER'S CERTIFICATE
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES 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 ARE DEEMED NECESSARY."
Jacqueline Dancy
SIGNATURE OF DEVELOPER
4/15/86
DATE

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
James H. ...
4-17-86
DATE
U.S. SOIL CONSERVATION SERVICE
THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT APPROVED:
Stephen L. Huber
4/17/86
DATE
DISTRICT
HOWARD SOIL CONSERVATION DISTRICT

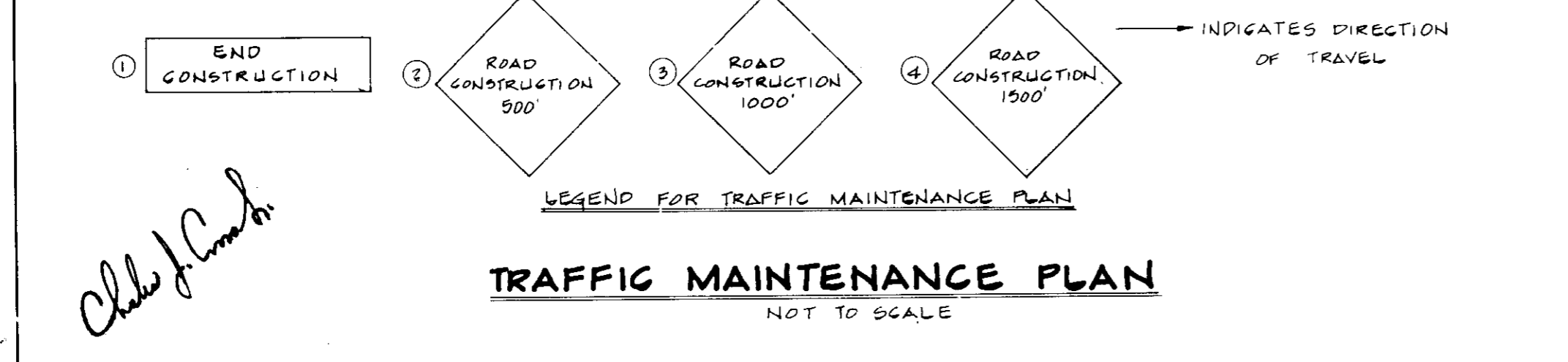
APPROVED: OFFICE OF PLANNING AND ZONING
PLANNING DIRECTOR
John M. ...
4-24-86
DATE
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION
APPROVED: HOWARD COUNTY HEALTH DEPARTMENT FOR PUBLIC WATER AND SEWERAGE SYSTEMS
HEALTH OFFICER
DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS FOR PUBLIC WATER & SEWER AND STORM DRAINAGE SYSTEMS AND ROADS.
DIRECTOR, PUBLIC WORKS
DATE
CHIEF, BUREAU OF ENGINEERING
DATE
SUBDIVISION: VILLAGE OF OWEN BROWN
SECTION/AREA: 1/1, 2/1, 2/2
LOT NO.: 280, 1, 1
PLAT NO.: 27, 28, 29, 30, 31, 32
BLOCK NO.: 28, 4
ZONE: NT/05
TAX/ZONE: 36, 42
ELEC. DIST: 6th
CENSUS TR.: 8001, 05
WATER CODE: E-12
SEWER CODE: 222, 000

SITE DEVELOPMENT PLAN
COLUMBIA
VILLAGE OF OWEN BROWN
SECTION 1 AREA 1 LOT 280
SECTION 2 AREA 1 LOT 1
SECTION 2 AREA 2 LOT 1
4th ELECTION DISTRICT HOWARD COUNTY, MD
SCALE AS SHOWN DATE OCTOBER 31, 1985
REVISED: APRIL 8, 1986
SHEET 2 OF 5
OWNER/DEVELOPER
COLUMBIA ASSOCIATION
ONE KNOW NORTH DRIVE
SUITE 400
COLUMBIA, MD 21046
SDP-86-105c



APPROVED
PLANNING BOARD
OF HOWARD COUNTY
 DATE 3-26-86
[Signature]



FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERS & LAND SURVEYORS
 8388 COURT AVENUE
 ELLICOTT CITY, MARYLAND 21043
 (301) 461-2855

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 SOIL CONSERVATION DISTRICT.
[Signature]
 SIGNATURE OF ENGINEER
 DATE 4/15/86

DEVELOPER'S CERTIFICATE
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[Signature]
 SIGNATURE OF DEVELOPER
 DATE 4/15/86

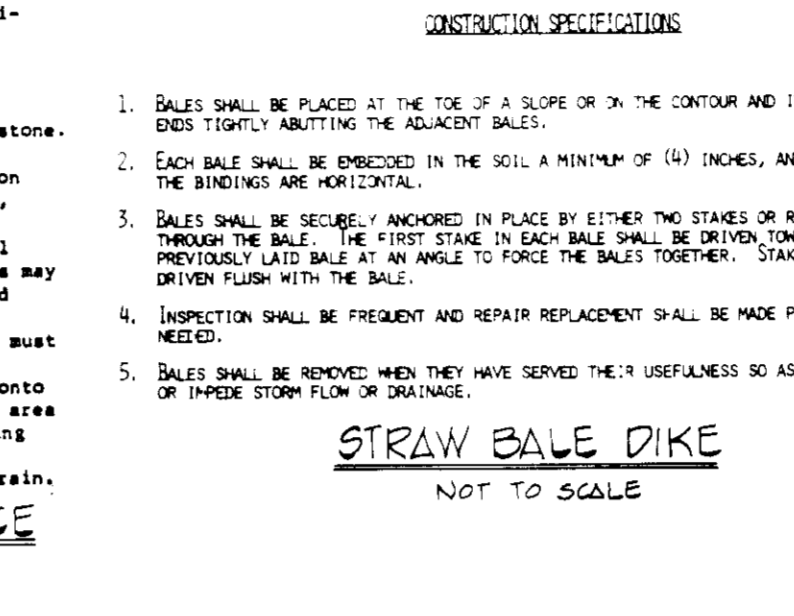
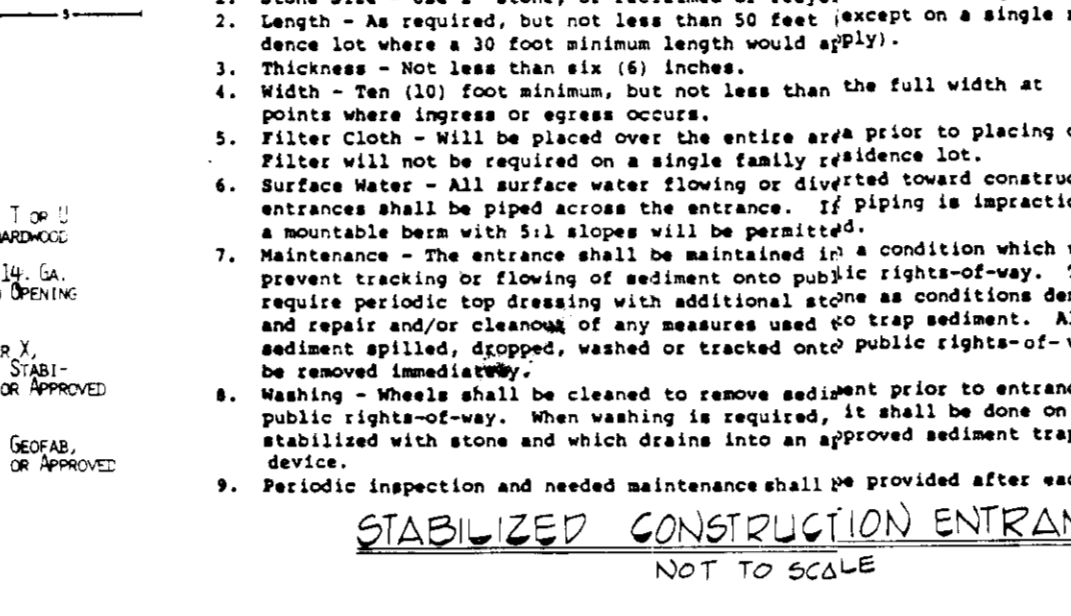
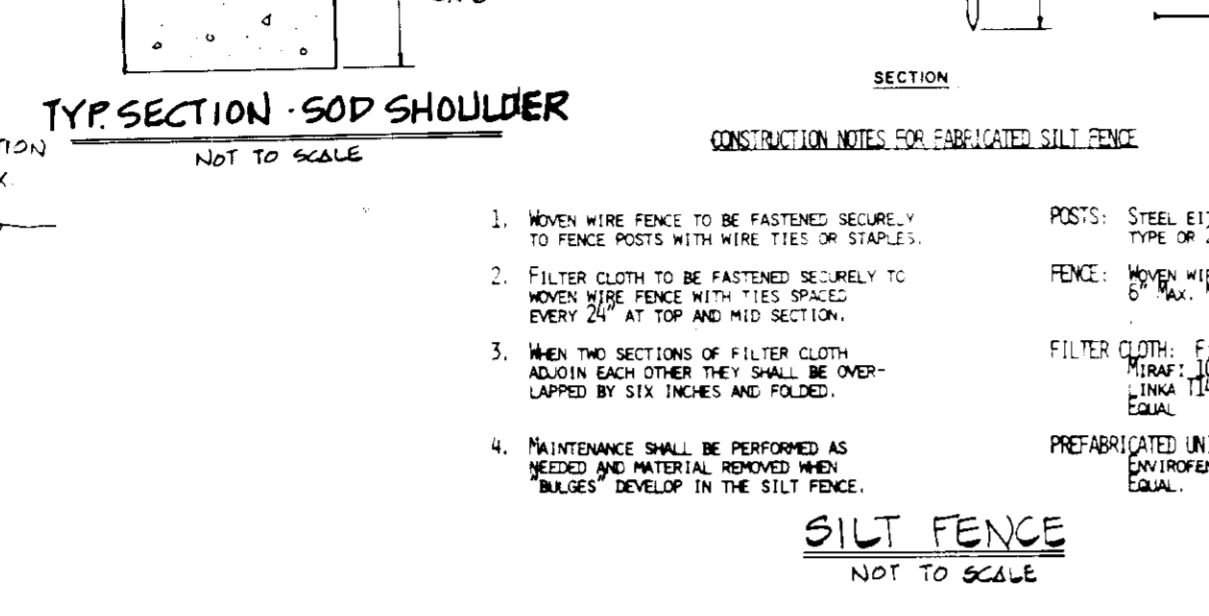
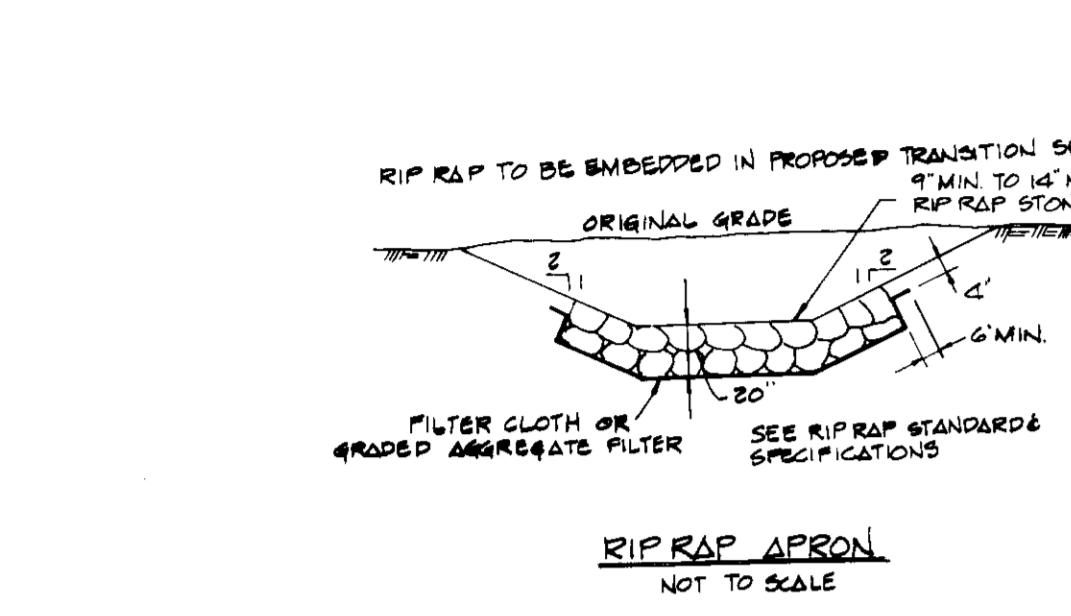
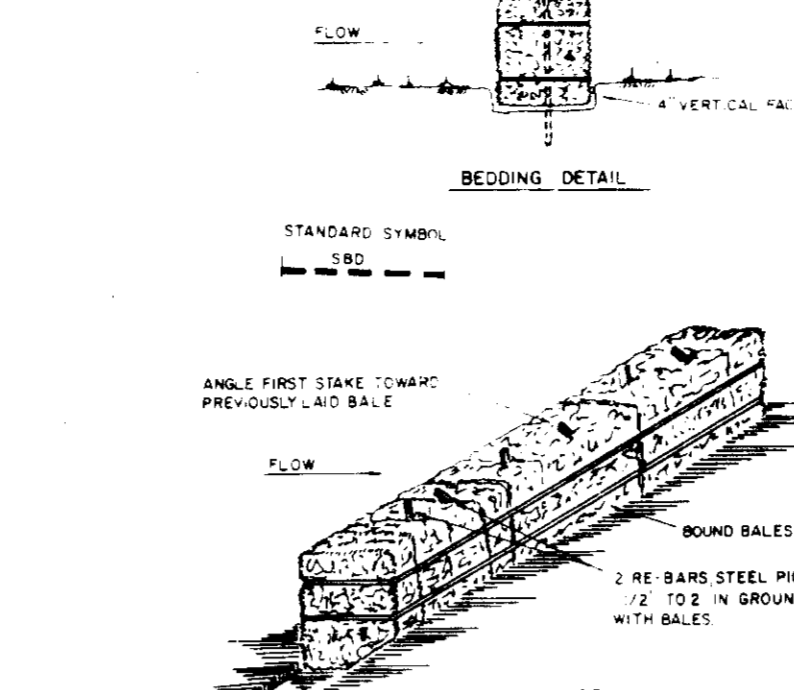
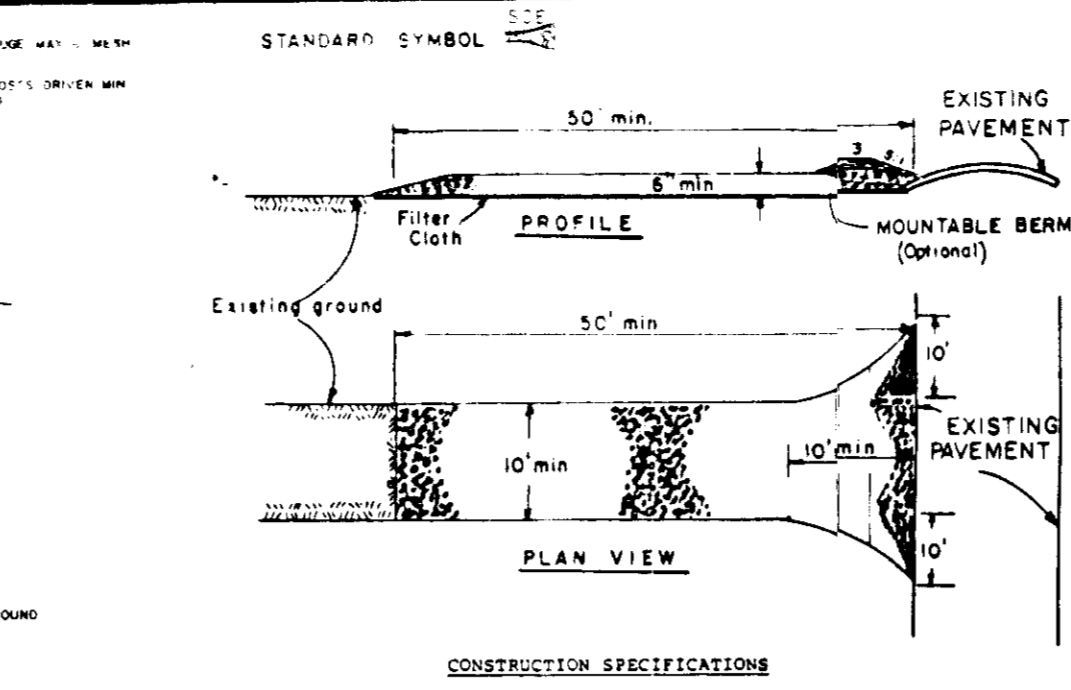
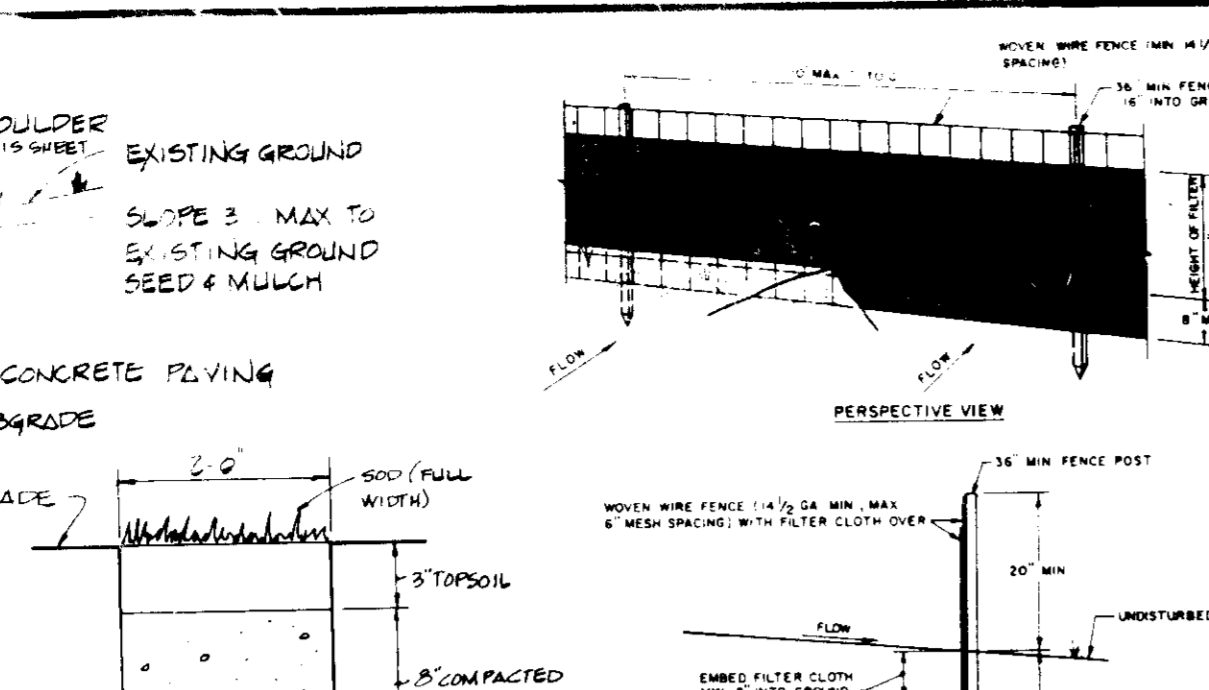
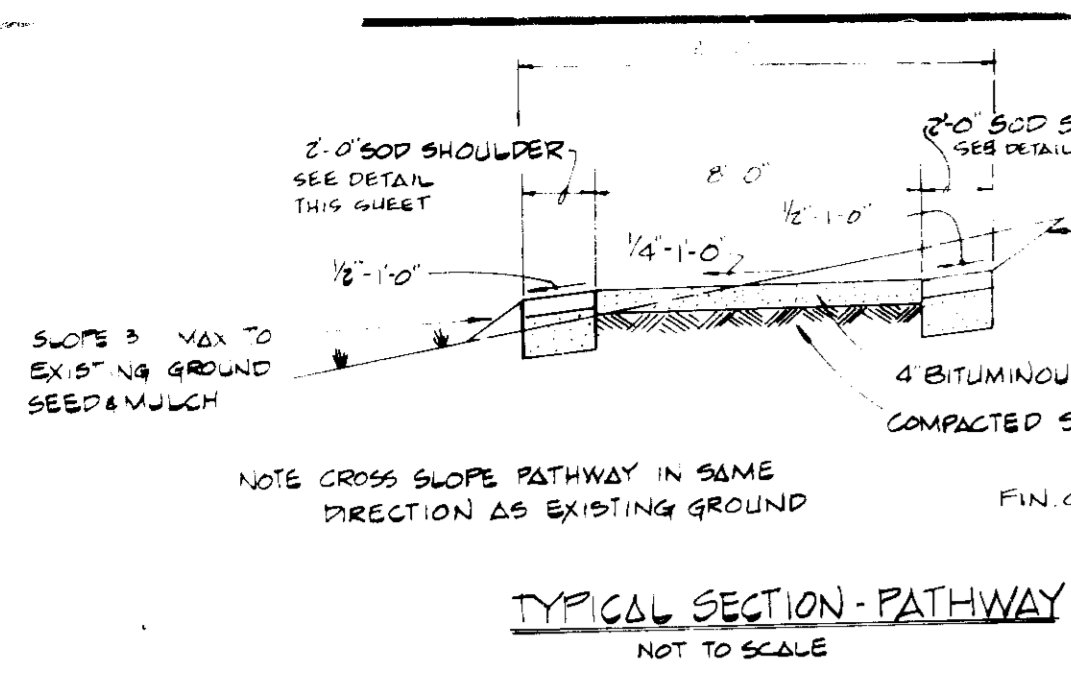
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
[Signature] DATE 4-17-86
 U.S. SOIL CONSERVATION SERVICE
 THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED:
[Signature] DATE 4/17/86
 DISTRICT
 HOWARD SOIL CONSERVATION DISTRICT

APPROVED: OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR
[Signature] DATE 4-24-86
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION
 APPROVED: HOWARD COUNTY HEALTH DEPARTMENT FOR PUBLIC WATER AND SEWERAGE SYSTEMS
 HEALTH OFFICER
 DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS FOR PUBLIC WATER & SEWER AND STORM DRAINAGE SYSTEMS AND ROADS.
 DIRECTOR, PUBLIC WORKS
 DATE
 CHIEF, BUREAU OF ENGINEERING
 DATE
 SUBDIVISION: VILLAGE OF OWEN BROWN
 SECTION/AREA: 1/1, 2/1, 2/2
 LOT NO: 280 1, 1
 PLAT NO: #5994
 BLOCK NO: 22.4
 ZONE: NT/05
 TAX/ZONE: 36.42
 ELEC. DIST: 4th
 CENSUS TR.: 6061.02
 WATER CODE: E-12
 SEWER CODE: 5520200

NOTES AND DETAILS
COLUMBIA
 VILLAGE OF OWEN BROWN
 SECTION 1 AREA 1 LOT 280
 SECTION 2 AREA 1 LOT 1
 SECTION 2 AREA 2 LOT 1
 6th ELECTION DISTRICT HOWARD COUNTY MD
 SCALE AS SHOWN DATE OCTOBER 3 1985
 REVISED APRIL 8 1986
 SHEET 3 OF 5

OWNER/DEVELOPER
 COLUMBIA ASSOCIATION
 ONE KINGS NORTH DRIVE
 SUITE 400
 COLUMBIA, MD 21046

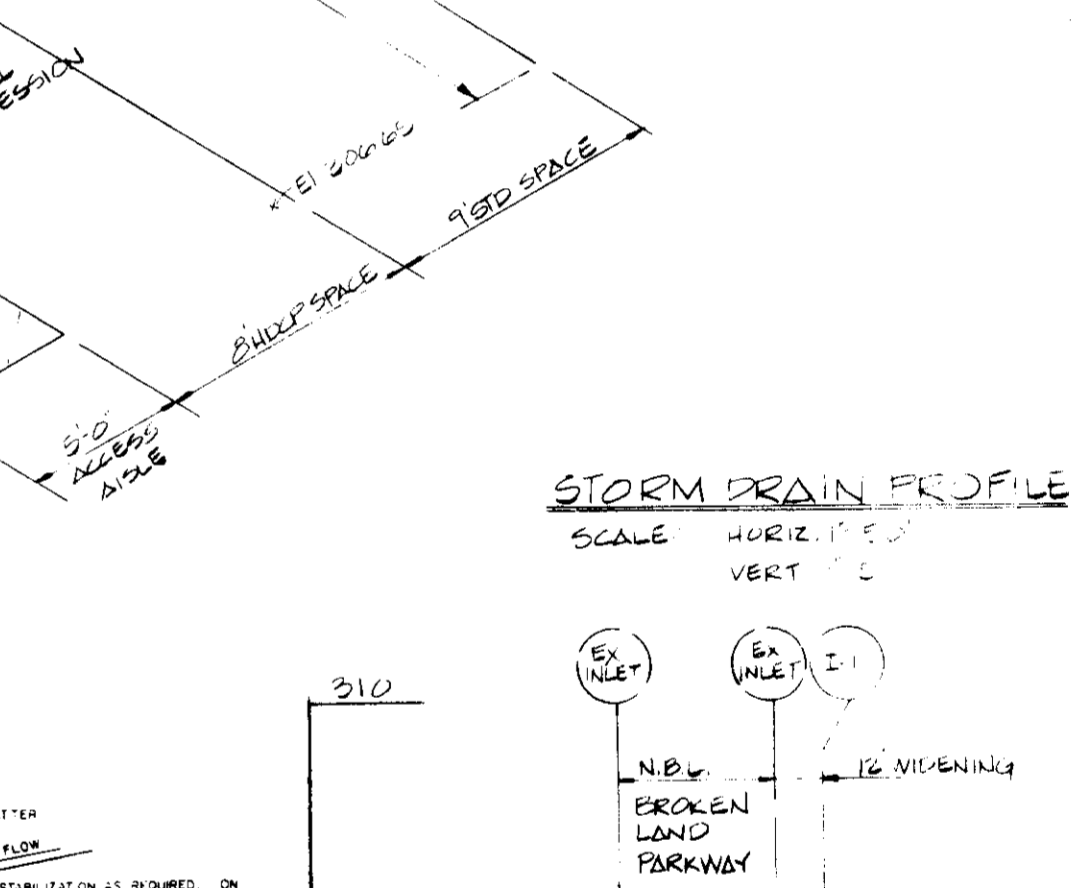
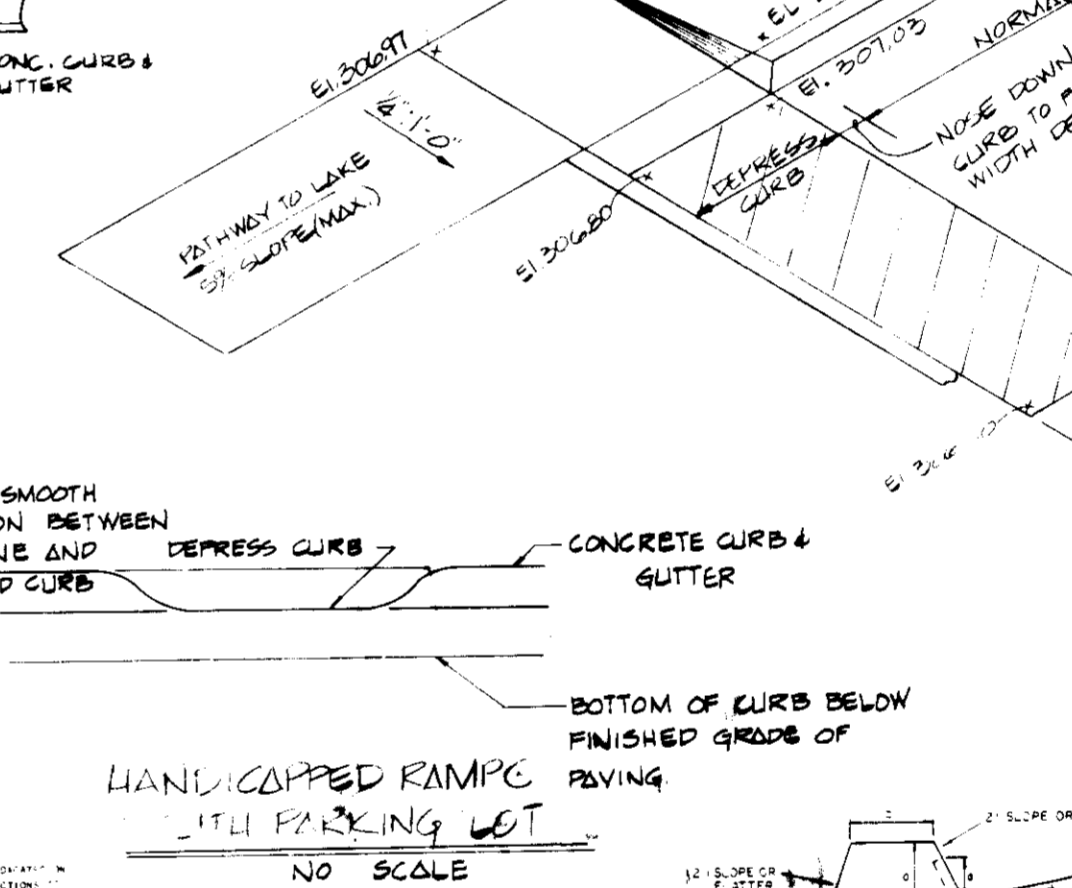
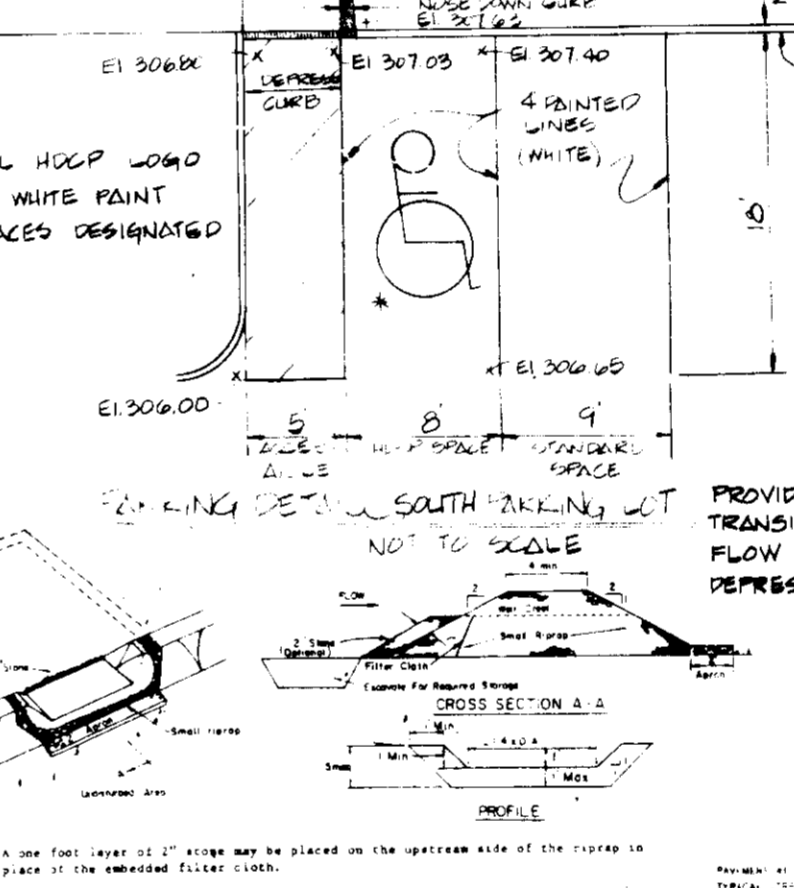
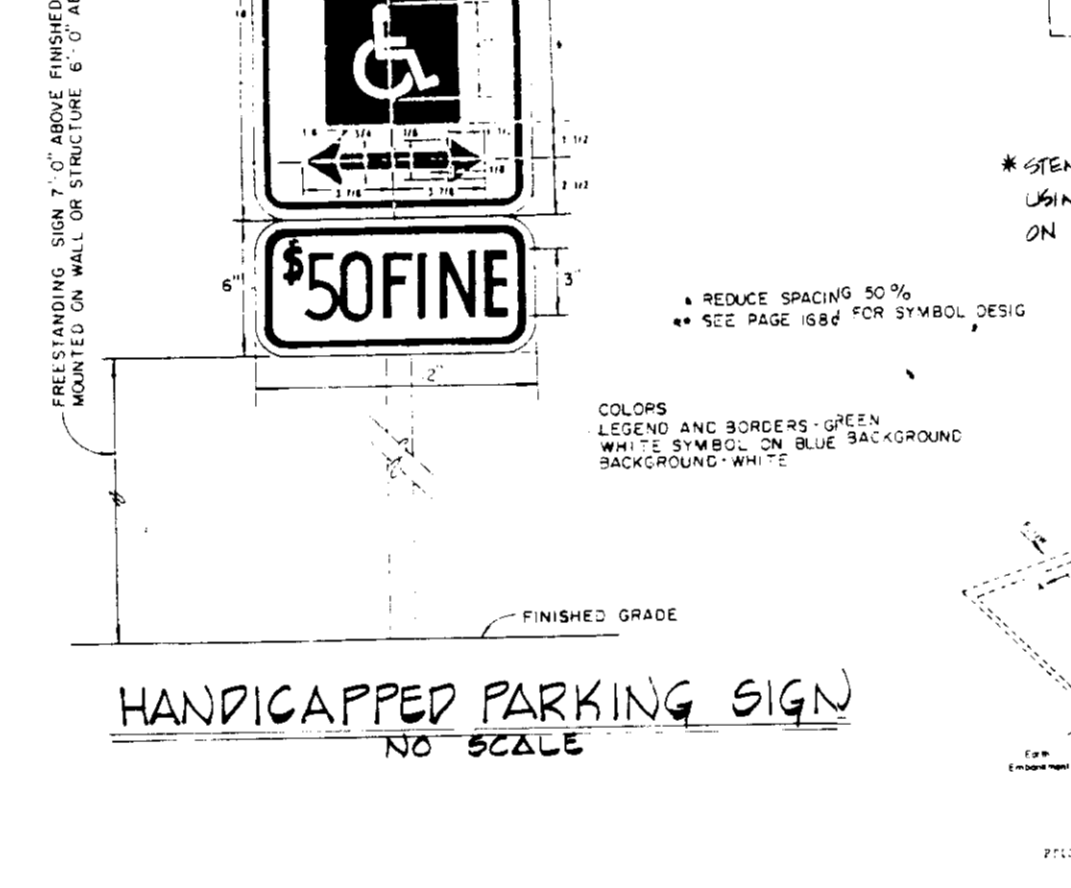
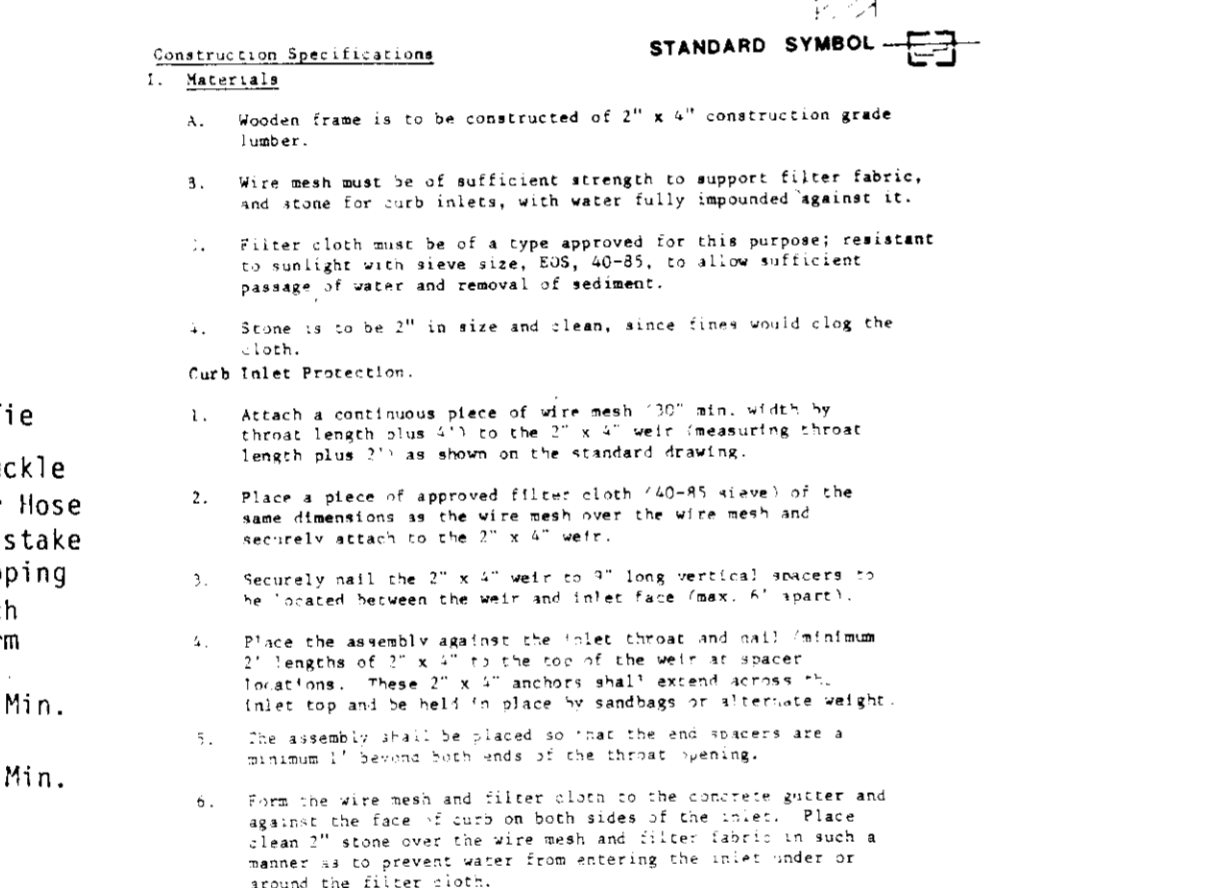
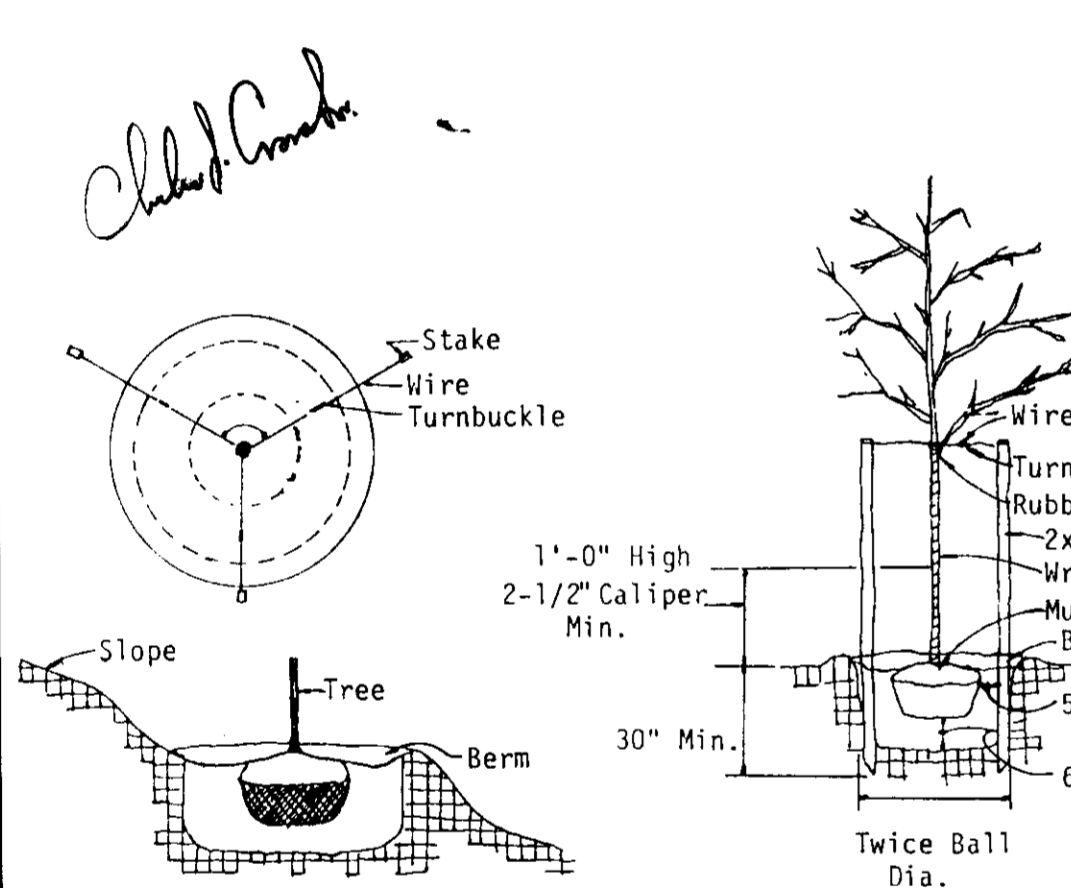


- CONSTRUCTION SPECIFICATIONS**
- The subgrade for the filter, riprap or gabion shall be prepared to the required lines and grades. All fill required in the subgrade shall be compacted to a density of approximately that of the surrounding undisturbed material.
 - The rock or gravel shall conform to the specified grading limits when loosened respectively on the crest or slope.
 - Filter cloth shall be protected from punching, cutting or tearing. Any damage other than an occasional small hole shall be repaired by placing another piece of cloth over the damaged part to be completely replacing the cloth. All overlapped sections for repairs or for joining two pieces of cloth shall be a minimum of 18 inches.
 - Stone for the riprap or gabion shall be placed by equipment. Each shall be constructed to the full depth and thickness as shown on the operation and in such a manner as to avoid displacement of underlying materials. The stone for gabion or riprap shall be delivered and placed in a manner that will insure that it is reasonably homogeneous with the smaller stones and spaces filling the voids between the larger stones. Riprap shall be placed in a manner to prevent damage to the filter blanket or filter cloth. Sand placement will be required to the extent necessary to prevent damage to the permanent works.

- CONSTRUCTION NOTES FOR FABRICATED SILT FENCE**
- When wire fence to be fastened securely to fence posts with wire ties or staples.
 - Filter cloth to be fastened securely to wooden fence with ties spaced every 4' at top and mid-section.
 - When the sections of filter cloth adjoin each other they shall be overlapped by six inches and folded.
 - Maintenance shall be performed as needed to remove debris which may build up in the silt fence.

- CONSTRUCTION SPECIFICATIONS**
- Stone size - Use 2" stone, or reclaimed or recycled concrete equivalent.
 - Lap - 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.
 - Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mounded beam with 5' 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 cleaning of any measures used for sediment.
 - Washing - Areas 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 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 (4) inches, and placed so the binding are horizontal.
 - Bales shall be securely anchored in place by either two stakes or re-bars driven through the bale. The first stake in each bale shall be driven toward the previously laid bale at an angle to force the bales together. Stakes shall be driven flush with the bale.
 - 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 off these storm flow or drainage.



GRADING FOR PLANTING ON SLOPES

OWNER/DEVELOPER
COLUMBIA ASSOCIATION
ONE KNOW NORTH DRIVE
SUITE 400
COLUMBIA, MD 21045

TREE PLANTING

Note: Remove Burlap from Top 1/3 of Ball

INLET CURB PROTECTION

CONSTRUCTION SPECIFICATIONS FOR INLET CURB PROTECTION

- Attach a continuous piece of wire mesh 30" min. with vertical length plus 1" to the 2" x 2" wire reinforcing strand length plus 1" as shown on the standard drawing.
- Place a piece of approved filter cloth (40-60 sizes) of the same dimensions as the wire mesh over the wire mesh and securely attach to the 2" x 2" wire.
- Securely nail the 2" x 2" wire to 3" long vertical rebar to be located between the wire and inlet face (max. 4" apart).
- Place the assembly against the inlet throat and nail minimum 2" lengths of 2" x 2" to the top of the inlet throat location. These 2" x 2" anchors shall extend across the inlet top and be held in place by handbars or alternate weight.
- The assembly shall be placed to face the curb and have a minimum 1" leaving between the curb and the assembly.
- Form the wire mesh and filter cloth to the concrete gutter and against the face of curb on both sides of the inlet. Place clean 1" stone over the wire mesh and filter cloth in such a manner as to prevent water from entering the inlet under or around the filter cloth.
- This type of protection shall be installed (inlet) and the filter cloth and stone replaced when clogged with sediment.
- Assure that storm flow does not bypass inlet by installing temporary earth or repair dike extending from inlet.

STONE OUTLET SEDIMENT TRAP

CONSTRUCTION SPECIFICATIONS FOR STONE OUTLET SEDIMENT TRAP

- The trap shall be constructed of concrete or masonry and shall be placed on a firm, level subgrade.
- The trap shall be constructed to a minimum depth of 12 inches below the finished grade of the roadway.
- The trap shall be constructed to a minimum width of 12 inches.
- The trap shall be constructed to a minimum length of 12 inches.
- The trap shall be constructed to a minimum height of 12 inches.
- The trap shall be constructed to a minimum slope of 1:1.
- The trap shall be constructed to a minimum slope of 1:1.
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REVERSED CONC. CURB + GUTTER

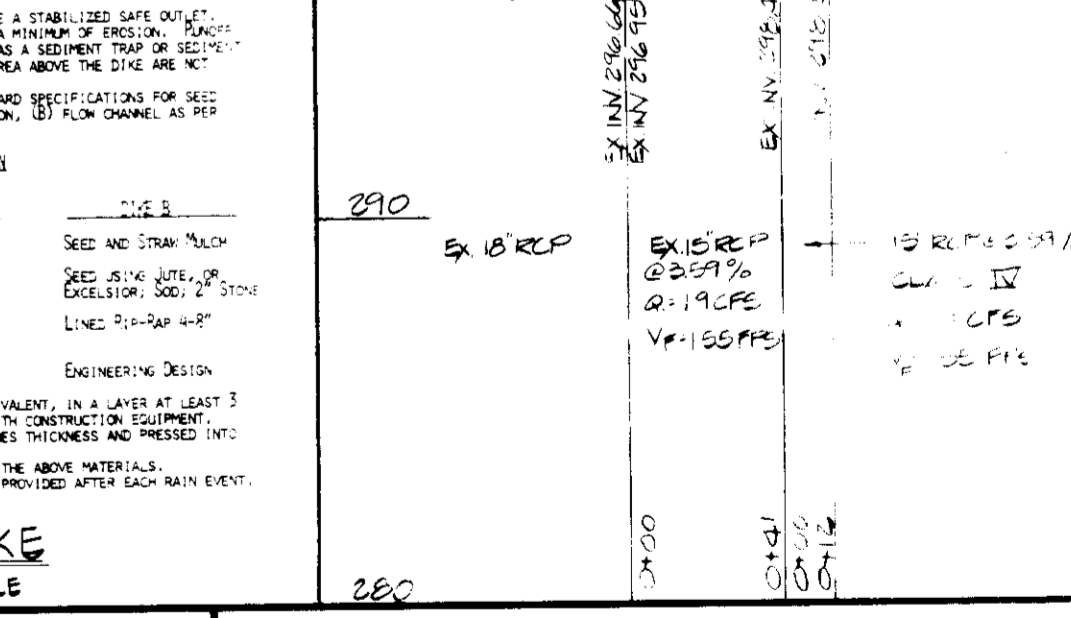
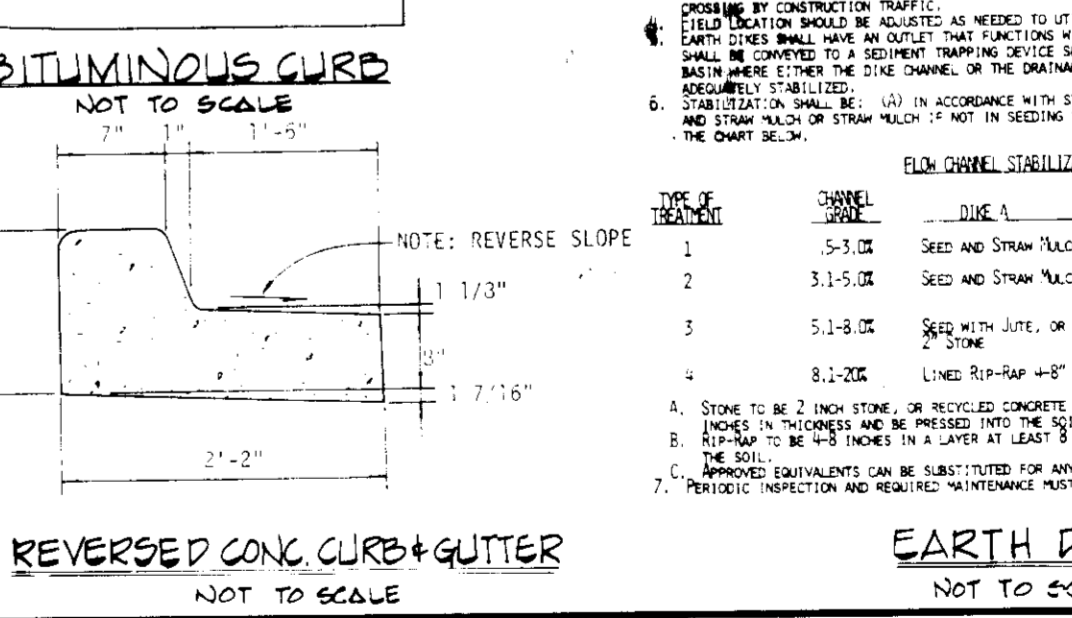
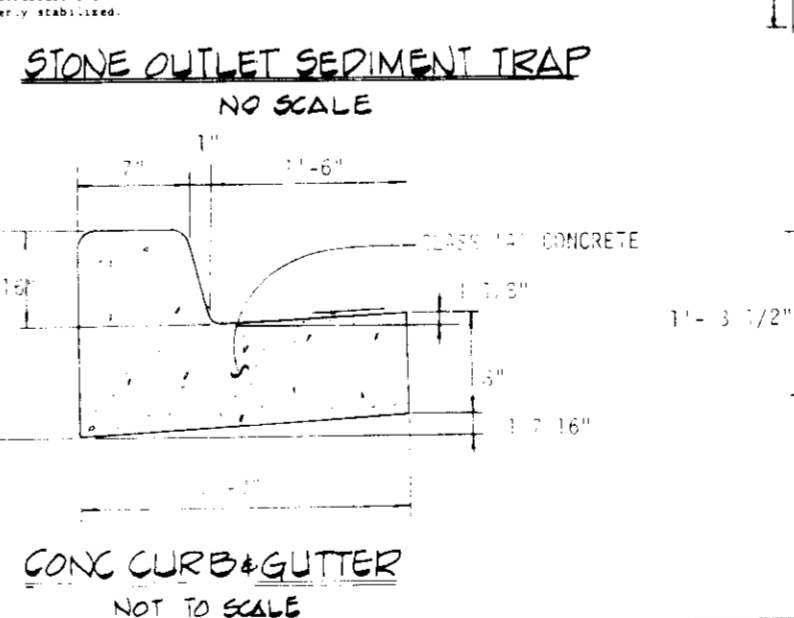
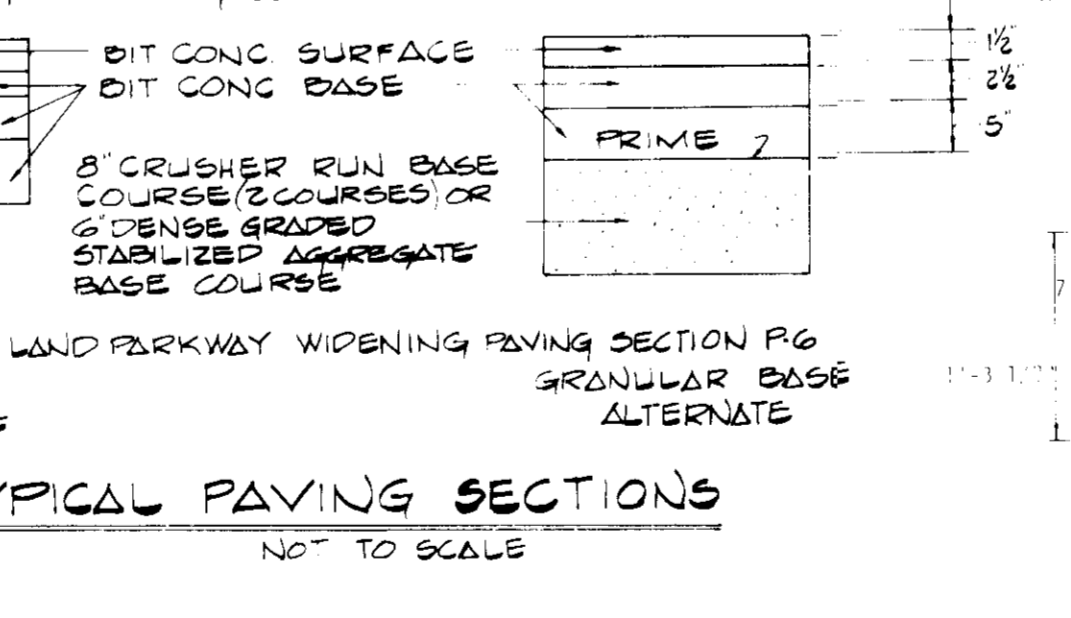
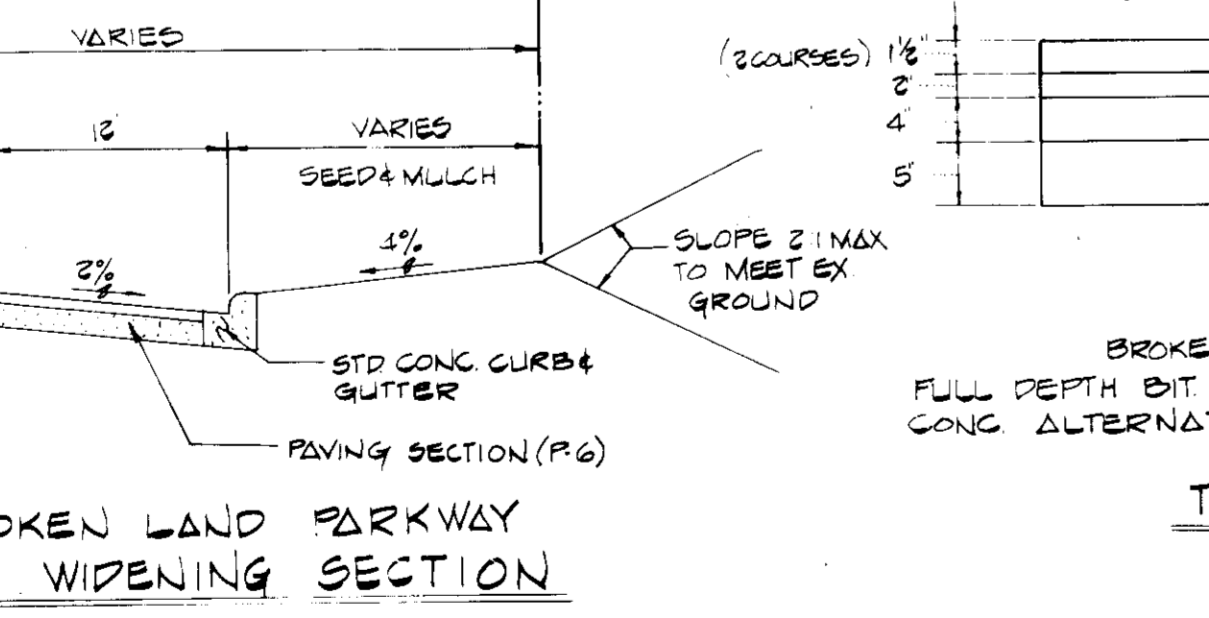
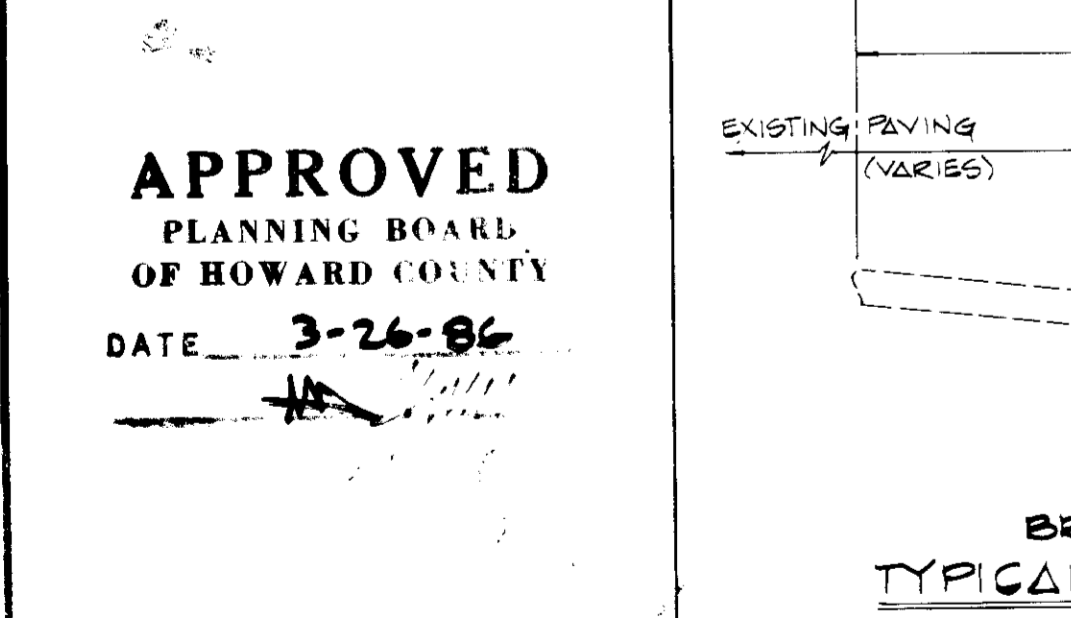
CONSTRUCTION SPECIFICATIONS FOR REVERSED CONC. CURB + GUTTER

- The curb and gutter shall be constructed of concrete and shall be placed on a firm, level subgrade.
- The curb and gutter shall be constructed to a minimum height of 12 inches.
- The curb and gutter shall be constructed to a minimum width of 12 inches.
- The curb and gutter shall be constructed to a minimum length of 12 inches.
- The curb and gutter shall be constructed to a minimum slope of 1:1.
- The curb and gutter shall be constructed to a minimum slope of 1:1.
- The curb and gutter shall be constructed to a minimum slope of 1:1.

EARTH DIKE

CONSTRUCTION SPECIFICATIONS FOR EARTH DIKE

- The dike shall be constructed of earth and shall be placed on a firm, level subgrade.
- The dike shall be constructed to a minimum height of 12 inches.
- The dike shall be constructed to a minimum width of 12 inches.
- The dike shall be constructed to a minimum length of 12 inches.
- The dike shall be constructed to a minimum slope of 1:1.
- The dike shall be constructed to a minimum slope of 1:1.
- The dike shall be constructed to a minimum slope of 1:1.



FISHER, COLLINS & CARTER, INC.

CIVIL ENGINEERS & LAND SURVEYORS

8388 COURT AVENUE

ELLCOTT CITY, MARYLAND 21043

(301) 461-2855

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 SOIL CONSERVATION DISTRICT.

Signature: *Charles Conrad*
DATE: 4/15/86

DEVELOPER'S CERTIFICATE

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Signature: *Jacqueline Dancy*
DATE: 4/15/86

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

Signature: *Stephen L. Hailer*
DATE: 4/17/86

APPROVED: OFFICE OF PLANNING AND ZONING

Signature: *John M. ...*
DATE: 4-24-86

APPROVED: DEPARTMENT OF PUBLIC WORKS FOR PUBLIC WATER & SEWER AND STORM DRAINAGE SYSTEMS AND ROADS.

Signature: *...*
DATE: 4-18-86

NOTES AND DETAILS

COLUMBIA

VILLAGE OF OWEN BROWN

SECTION 1 AREA 1 LOT 280

SECTION 2 AREA 1 LOT 1

SECTION 2 AREA 2 LOT 1

4th ELECTION DISTRICT HOWARD COUNTY, MD

SCALE AS SHOWN DATE OCTOBER 21, 1985

REVISED APRIL 8, 1986

SHEET 4 OF 5

