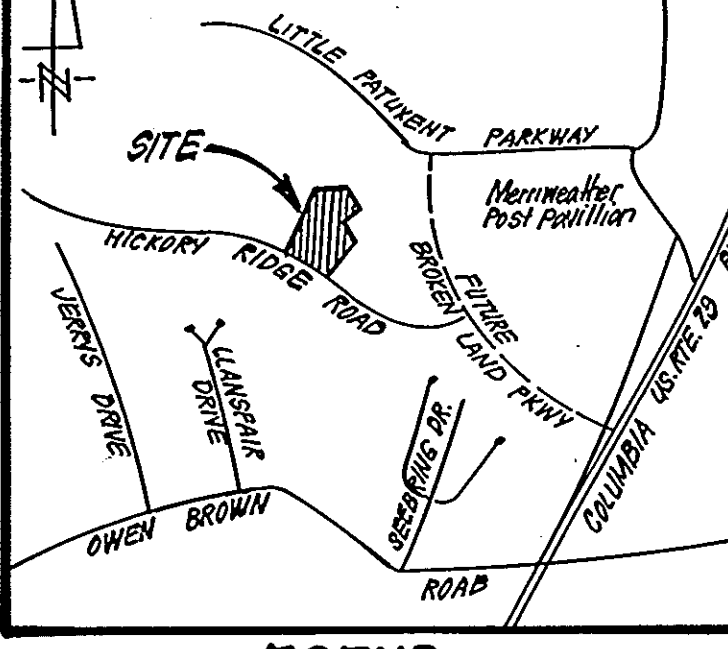


VICINITY MAP
SCALE: 1"=200'



LEGEND:
Contour Interval
Existing Contour
Proposed Contour
Spot Elevation
Direction of Drainage
Trees to be Saved
Proposed Storm Drain
Proposed Sewer
Proposed Water
Handicap Route

GENERAL NOTES

- All materials and construction to be in accordance with Howard County Road Construction Code and Specifications.
- This plan is covered by Final Development Plan Phase 190.
- Any damage to county owned rights-of-way to be corrected at the developer's expense.
- Installation of Traffic Control Devices shall be in accordance with the latest edition of the "Manual of Uniform Traffic Control."
- Topography was compiled from actual field survey.
- The area shown is located on Tax Map 36, Parcel 81.
- All drive ways and parking to be privately owned and maintained.
- All coordinates are based on Howard County Geodetic Control Survey traverse which is based on the Maryland State Plane Coordinate System.
- Class 4" Trench bedding shall be used under all storm drainage, unless shown otherwise.
- Information concerning underground utilities was obtained from available records, but the contractor must determine the exact location by digging test pits, by hand, at all utility crossings, well in advance of construction.
- The contractor or developer shall contact the Construction Inspection, Survey Division 24 hrs in advance of work. 992-2417 or 792-7272.
- All downspout drains shall be handled by one of these methods:
A. Downspout to splash blocks and discharged to ground having good percolation.
B. Downspout in front of units piped to curb.
C. Downspout connected to storm drain.
- The developer agrees to work with the Dept. of Licenses & Inspection to resolve any problems caused by roof water discharge.
- Handicap Parking Details shall be in accordance with the Maryland Building Code for the Handicapped, Sect. 5.01-7.05 and details shd. 2.
- All setbacks requirements and criteria as shown in C.P.P. 190.
- Storm Water Management Provided in Central Facility in Village of Hickory Ridge Section 5, P. 25-25.
- PARKING GRACES CAN ONLY BE USED FOR 13 PARKING VEHICLES. THEY CANNOT BE USED FOR STORAGE TO THE EXTENT THAT THE BAYS ARE UNSUITABLE FOR PARKING.

SITE ANALYSIS

- ZONING: NewTown Apartments (P.D.P. Phase 190)
- AREA OF SITE: 10.00 Acres.
- % OF RESIDENTIAL UNITS PERMITTED: 176 3 PROVIDED: 258 510.
- PARKING SPACES REQUIRED: 261 3 PROVIDED: 364 5 SPACES
- BUILDING COVERAGE: 1.56 Acres ± (15.4%) 267 TOTAL

BLDG #	BLDG TYPE	UNIT TYPES					STREET ADDRESS
		A-1	A-3	B-1	B-3	C-1	
1	BATH HOUSE						10000 Hickory Ridge Rd.
2	3-STORY	1114A		6	6	24	10310
3	3-STORY	1114B				24	10312
4	3-STORY	14	14			28	10344
5	3-STORY	10				20	10338
6	3-STORY	12				24	10356
7	3-STORY	14			14	28	10322
8	3-STORY	14		12		26	10322
TOTAL		88	80	12	54	234	1764

REV. BY	DATE	COMMENTS
2	1/1/85	APPROVAL OF GARAGE RAMP

OWNER: THE HOWARD RESEARCH & DEVELOPMENT CORPORATION
10732 Little Potomac Pkwy. Columbia, Md. 21044

SUBDIVISION NAME: COLUMBIA Village of Hickory Ridge
FLAT # OF THIS BLOCK: 7
ZONE: 36
TAX/ZONE MAP ELEM. DIST. NO.: 6053.02
WATER CODE: 5TH
SEWER CODE: 6053.02

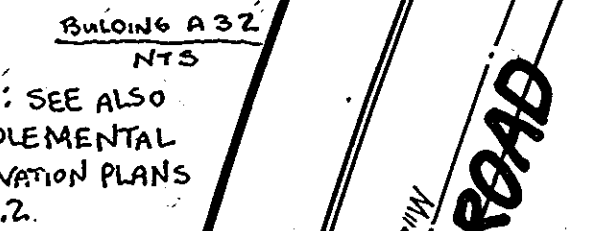
CLARK • FINEFROCK & SACKETT
ENGINEERS • PLANNERS • SURVEYORS
11315 LOCKWOOD DRIVE • SILVER SPRING, MARYLAND 20904 (301) 593-3400

SITE DEVELOPMENT PLAN
PARCEL C
COLUMBIA
VILLAGE OF HICKORY RIDGE
SECTION 5
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

DESIGNED: WHT
DRAWN: K/W
CHECKED: WHT
DATE: JUNE 85

SCALE: 1"=30'
DRAWING: 10F5
JOB NO.: 85-021
FILE NO.: 85-021-X

FOR: CROW, TERWILLIGER & MICHANX, INC.
5550 SHIFFLET PLACE #200
COLUMBIA, MARYLAND 21044



NOTE: SEE ALSO SUPPLEMENTAL ELEVATION PLANS A.3.2.

LIMITS OF OBTAINING ELEVATIONS:
LOD 1: 1894 SF
LOD 2: 250 SF
LOD 3: 1566 SF
TOTAL: 3710 SF

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE: 7-24-85

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER: [Signature] DATE: 9-24-85

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING
PLANNING DIRECTOR: [Signature] DATE: 9-25-85

CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION
DIRECTOR: [Signature] DATE: 9-25-85

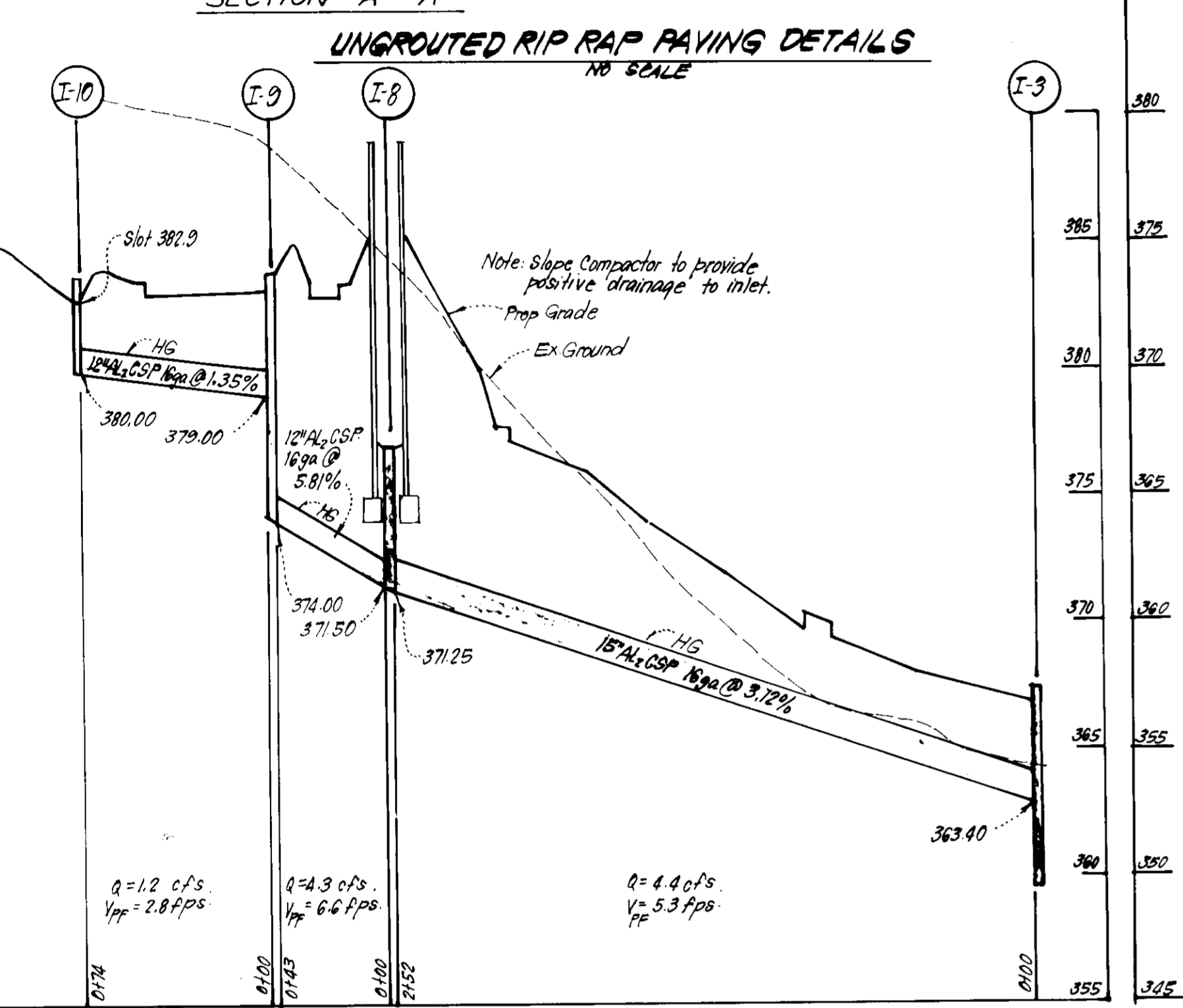
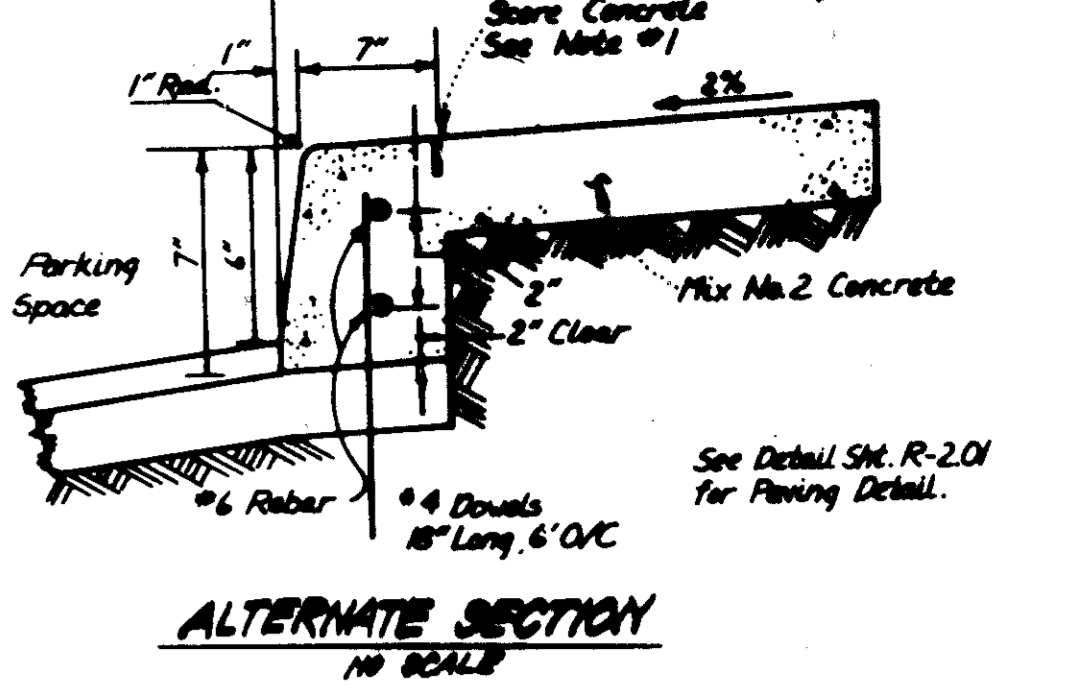
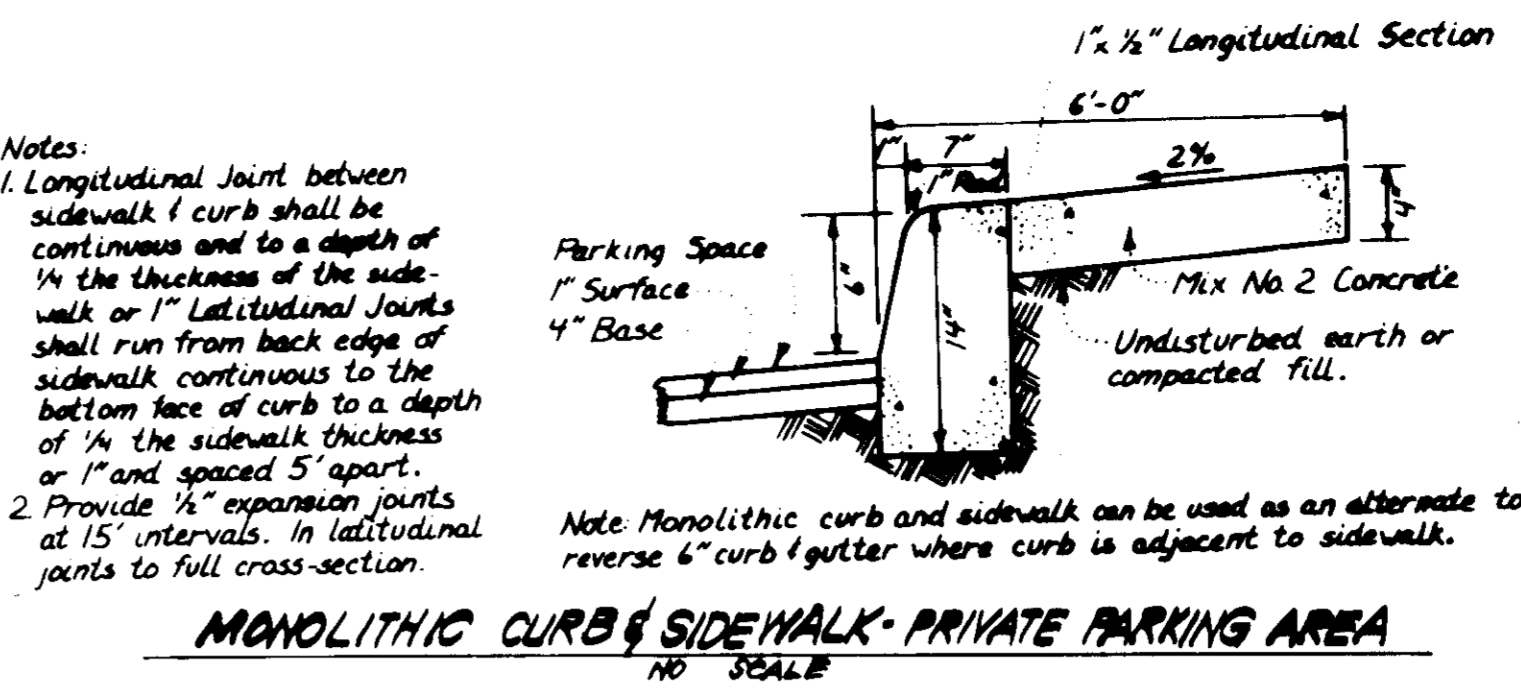
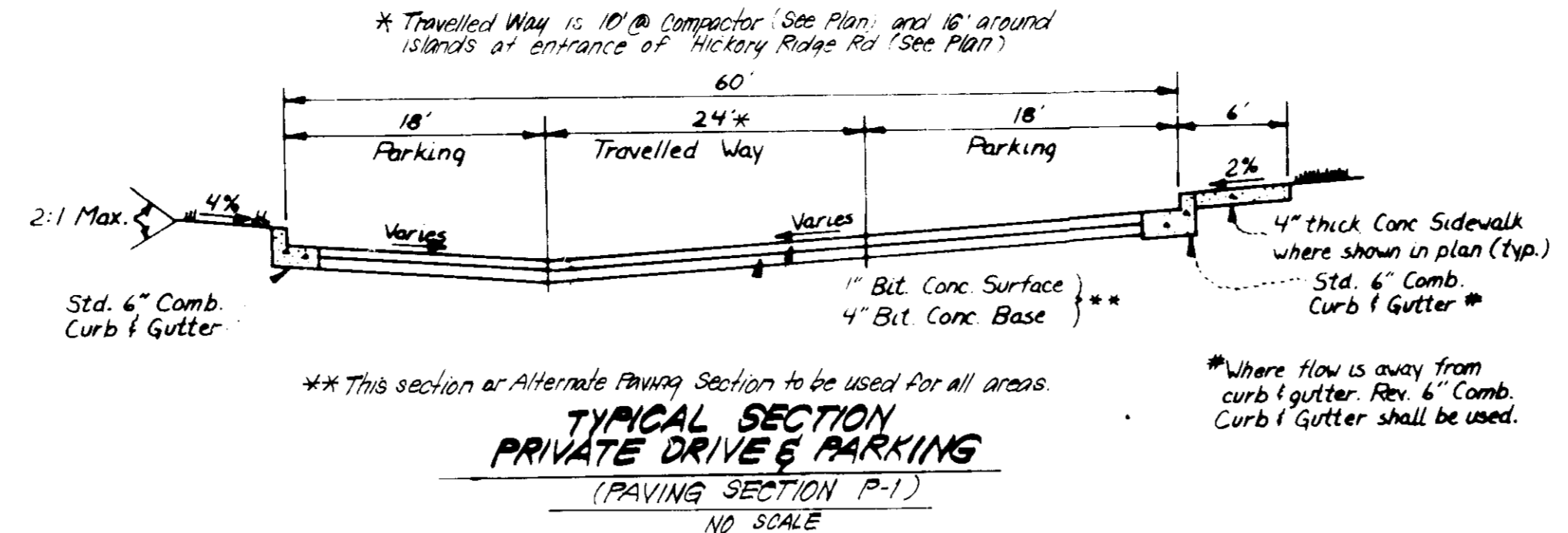
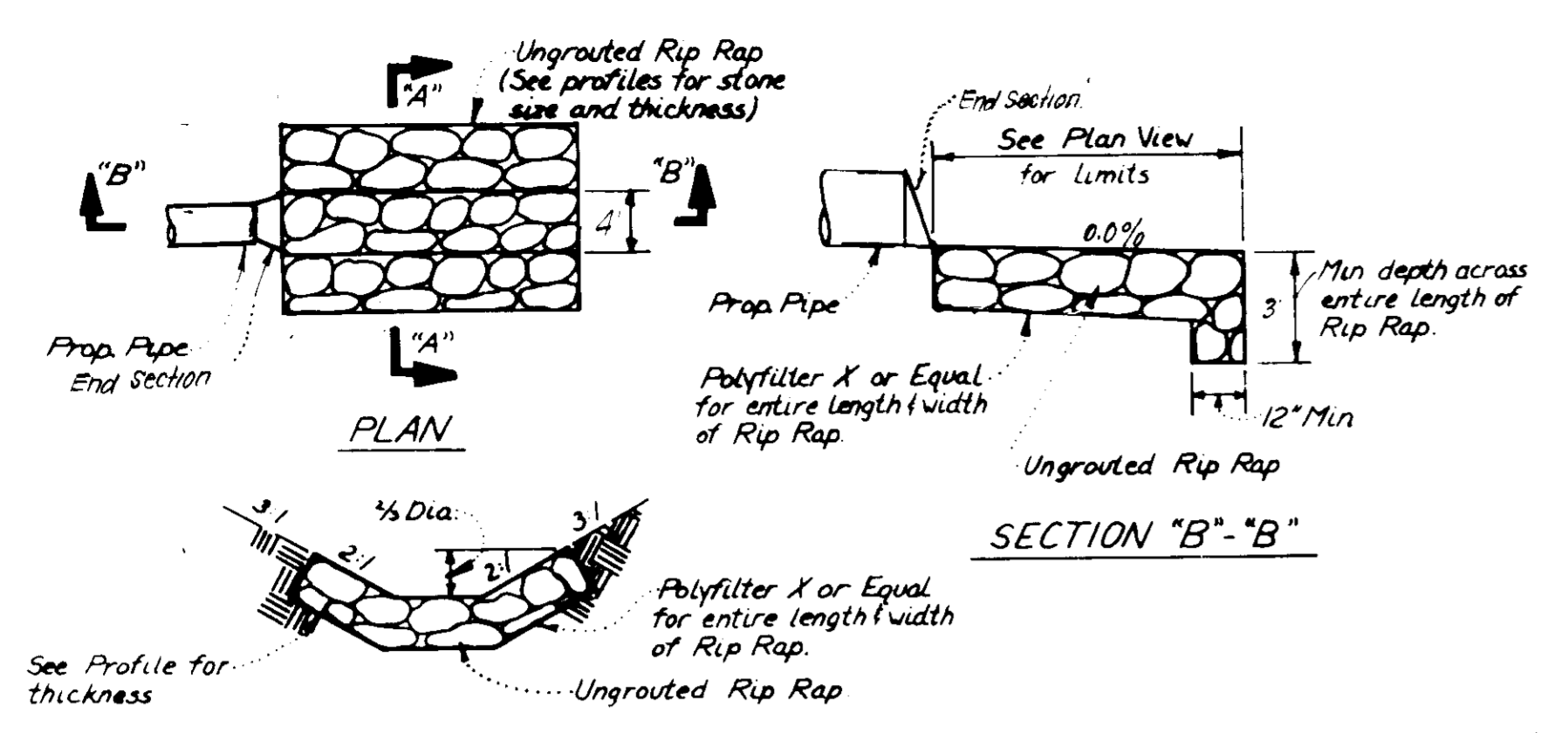
APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR: [Signature] DATE: 9-20-85

CHIEF BUREAU OF ENGINEERING
DATE: 9-20-85

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 Natural Resources 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 of Developer/Builder: [Signature] DATE: 8-28-85

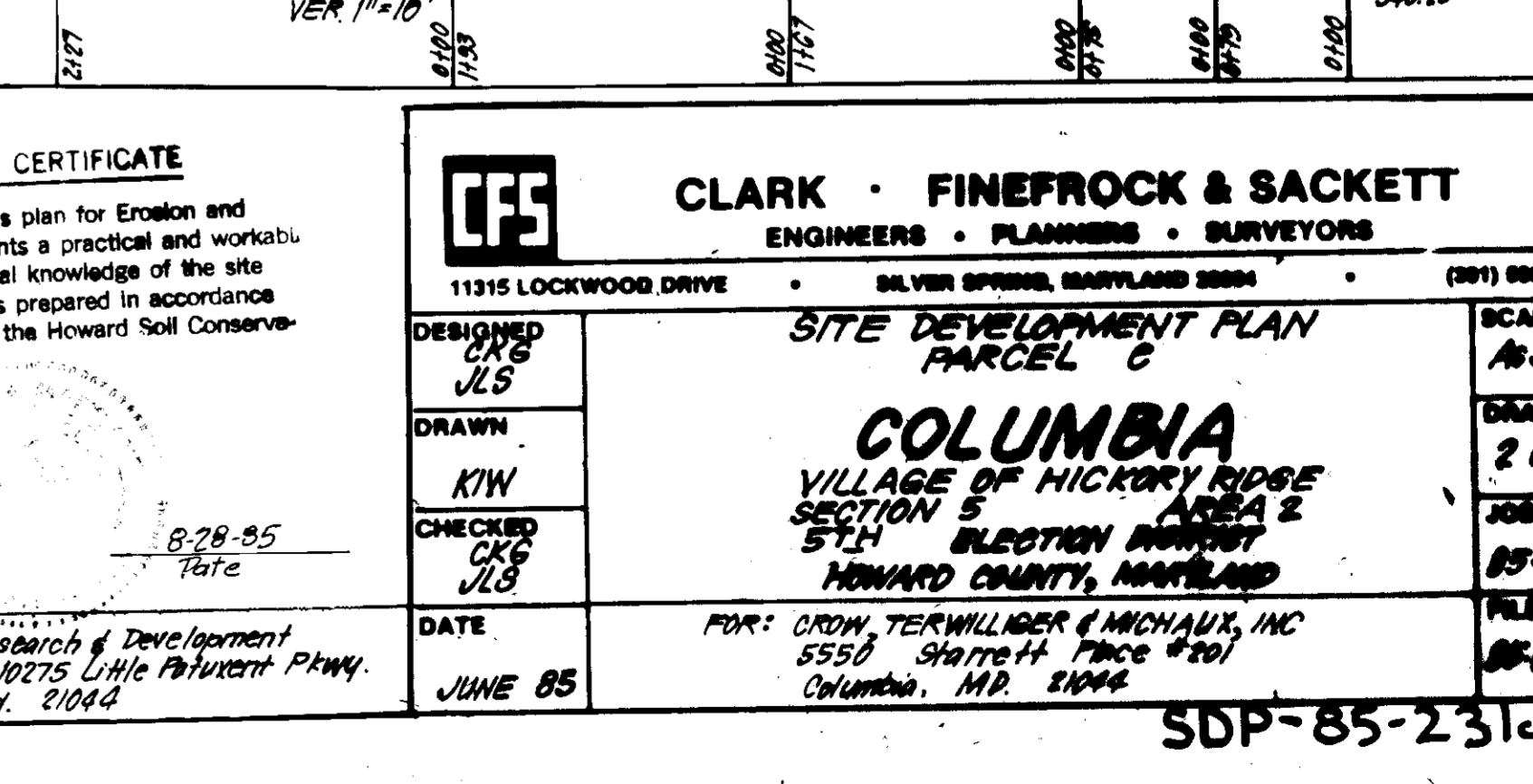
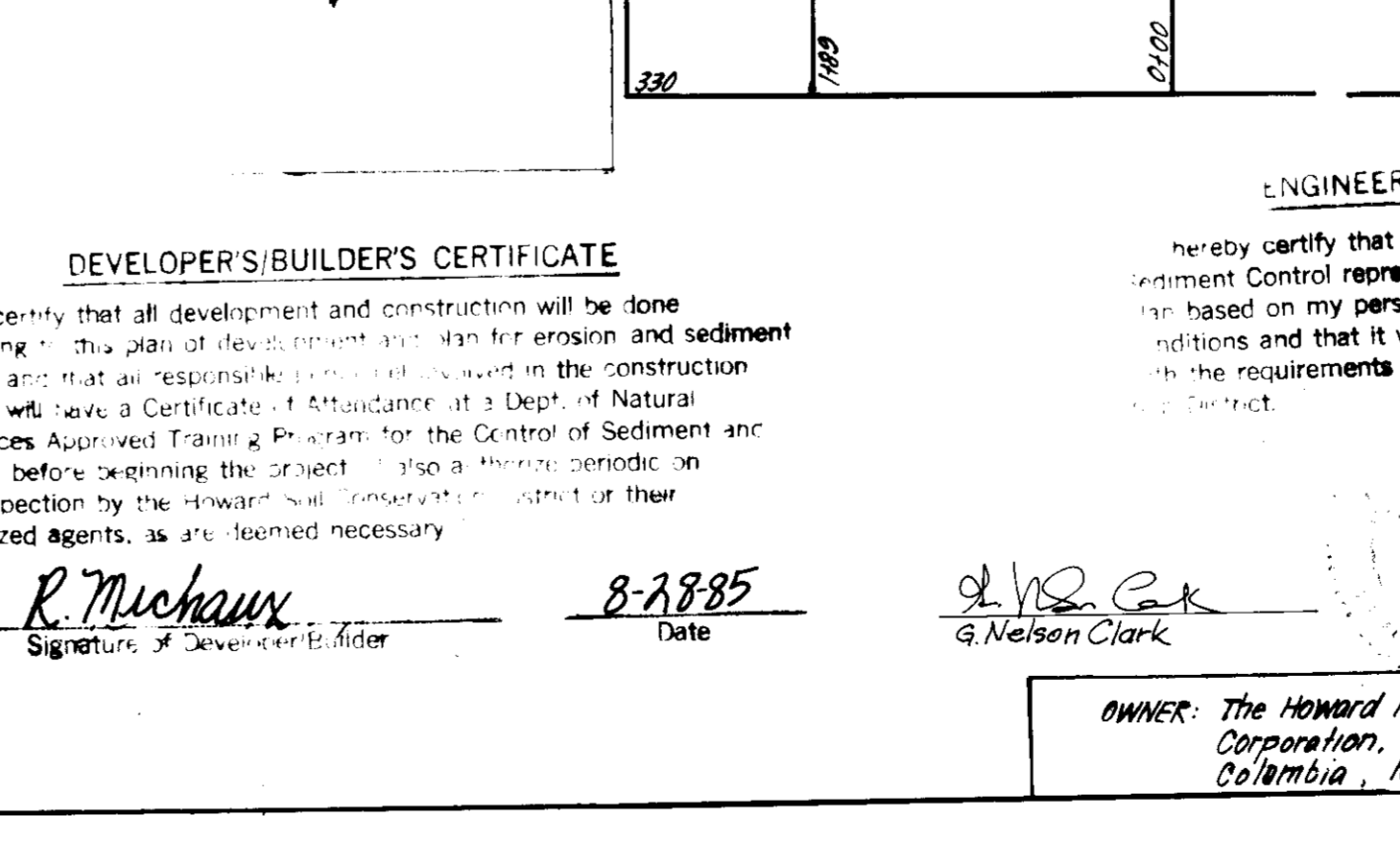
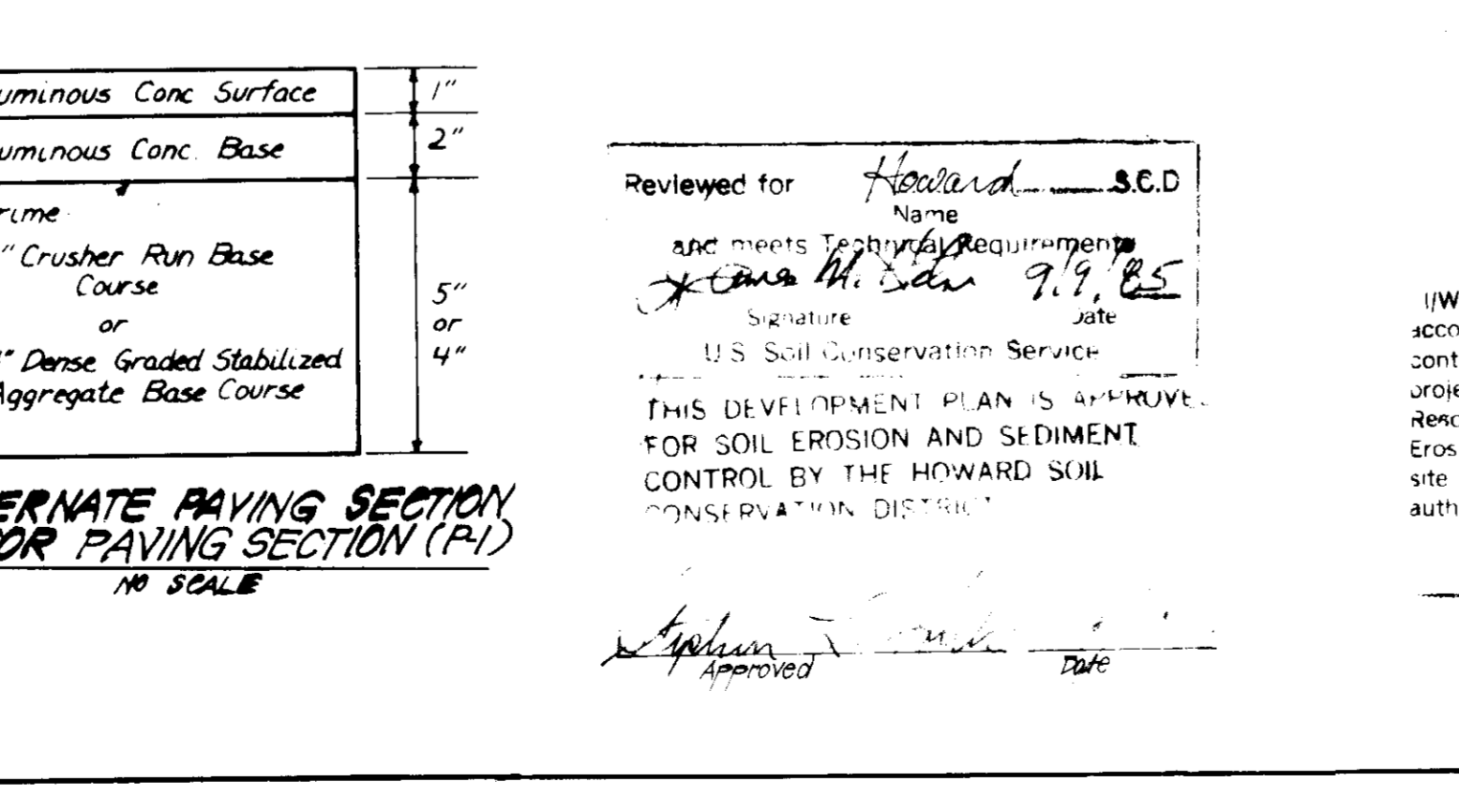
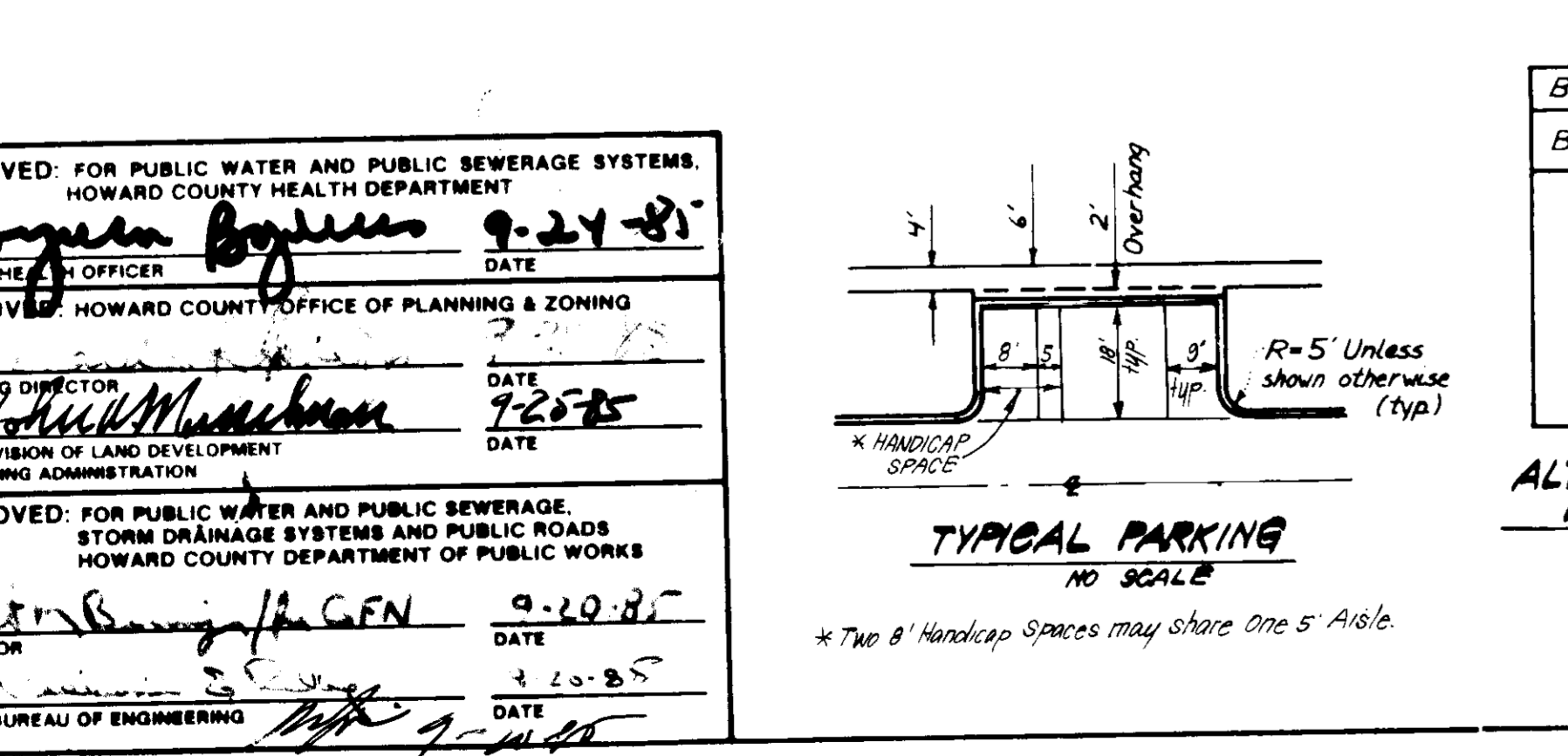
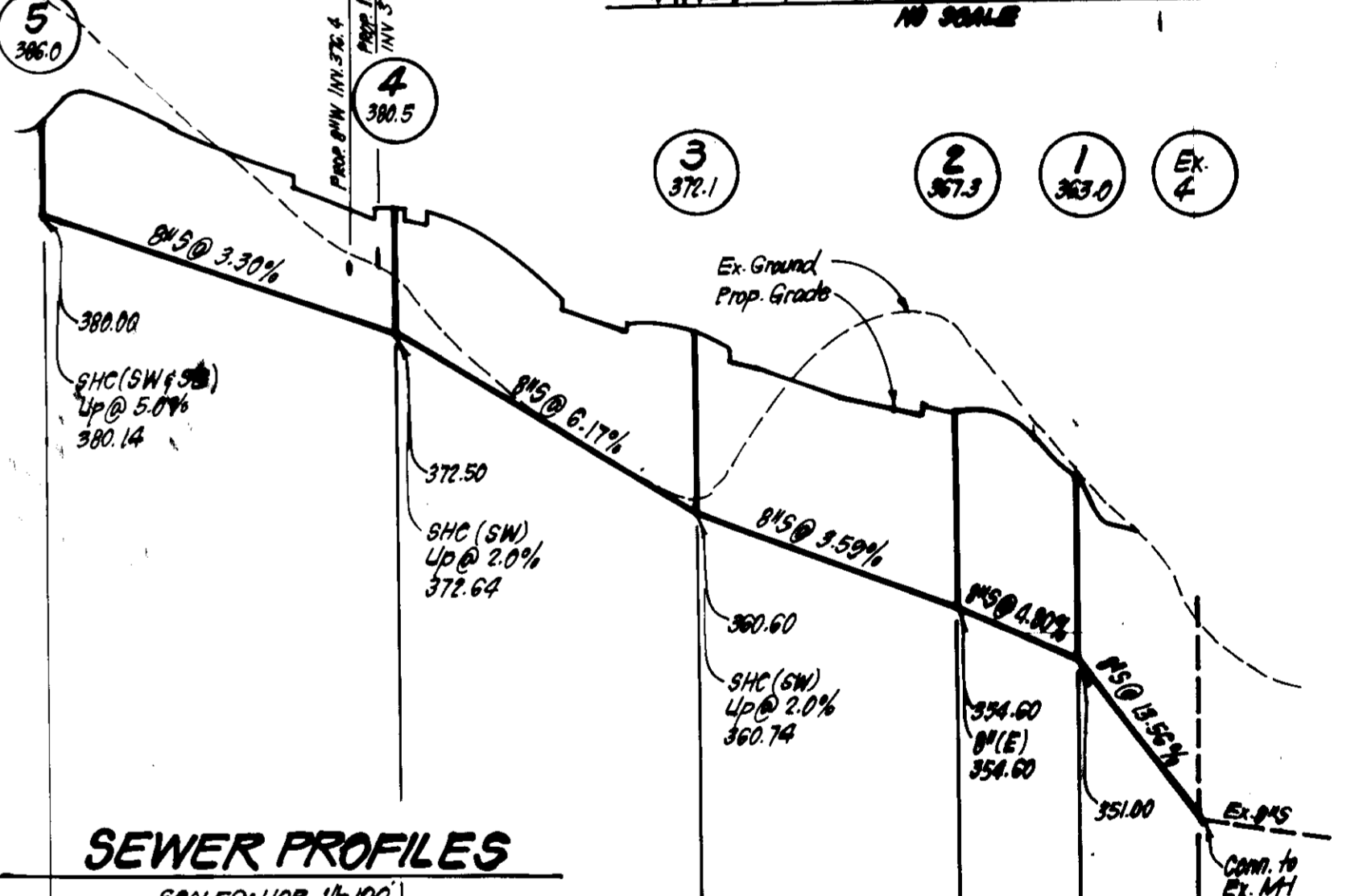
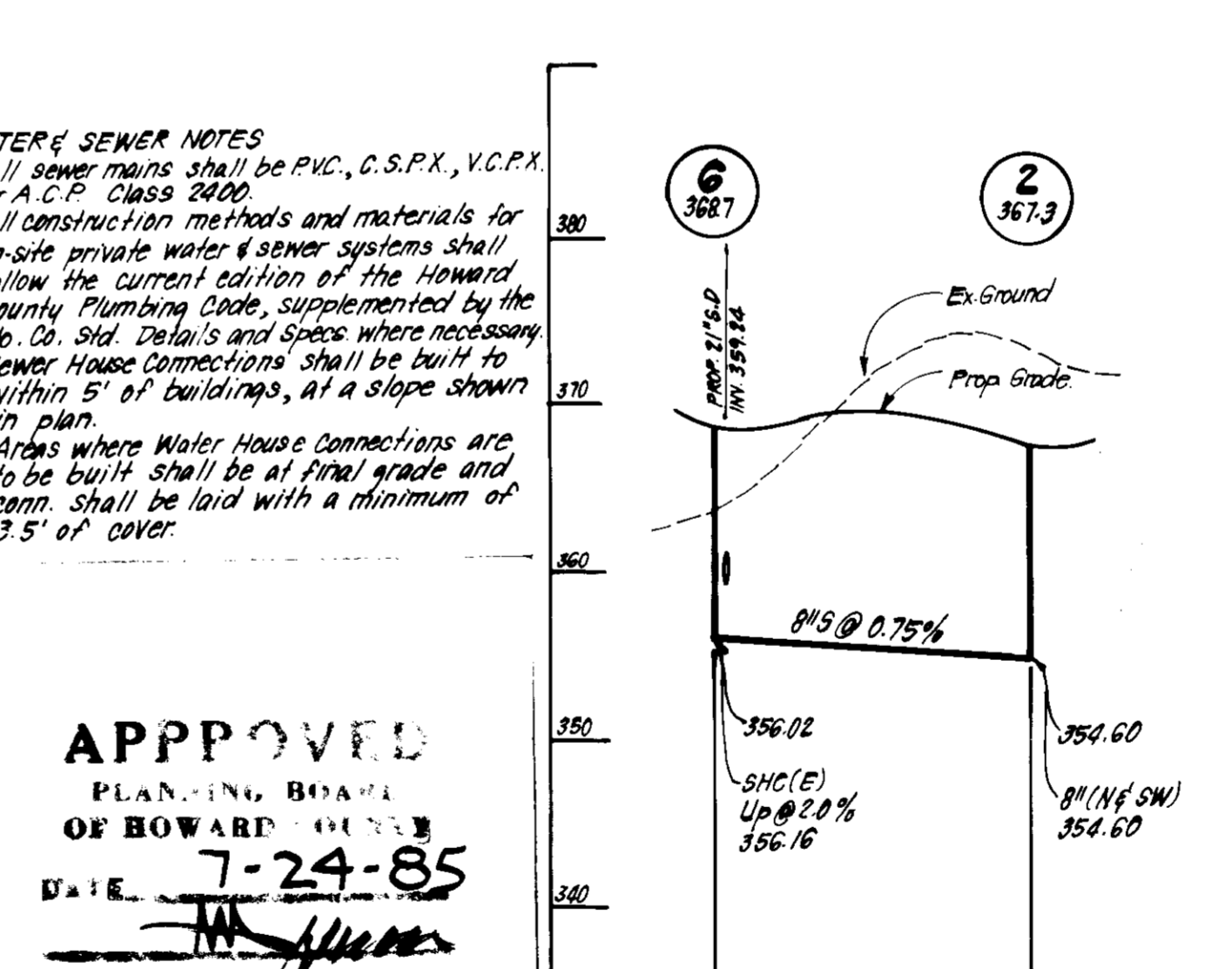
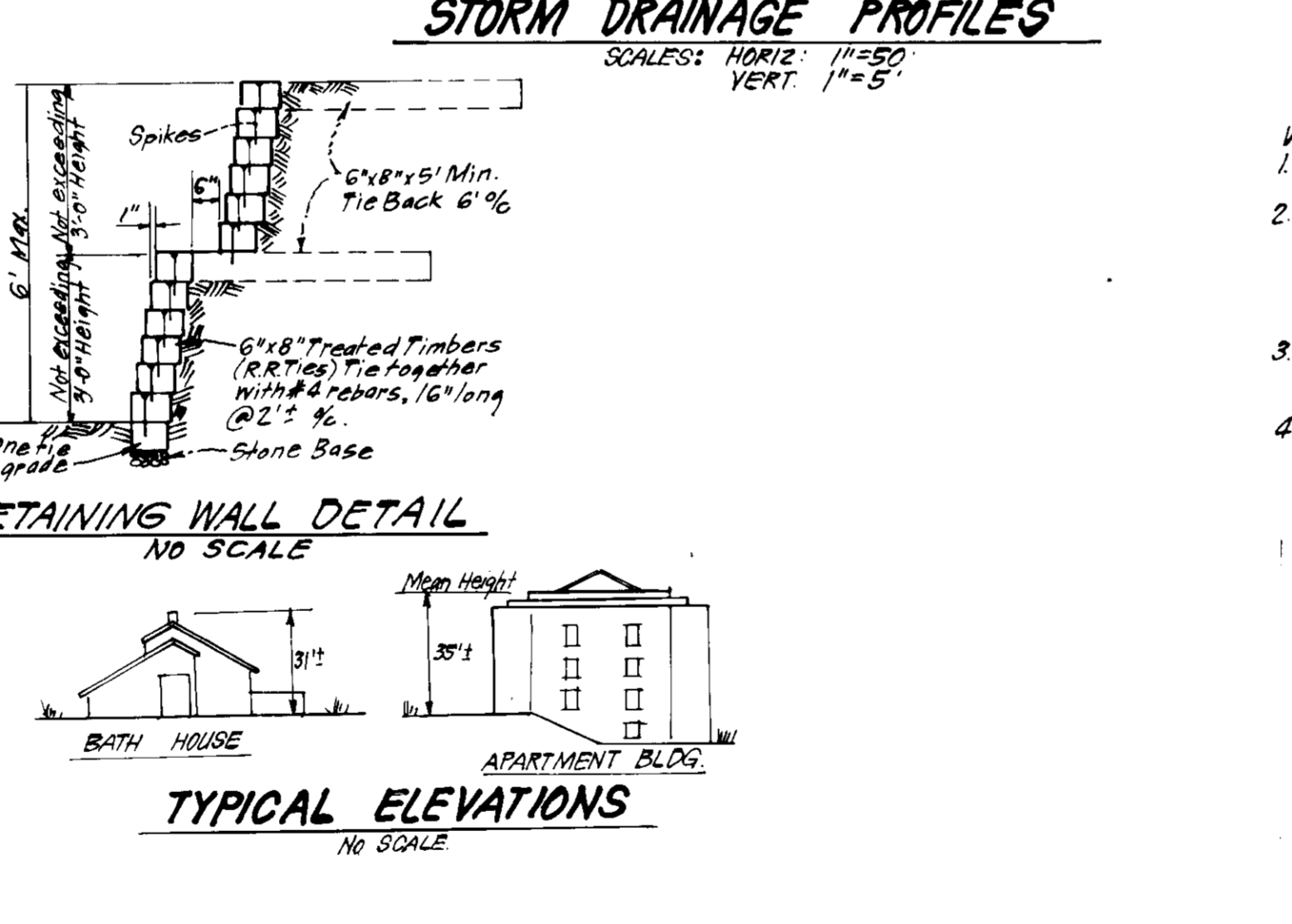
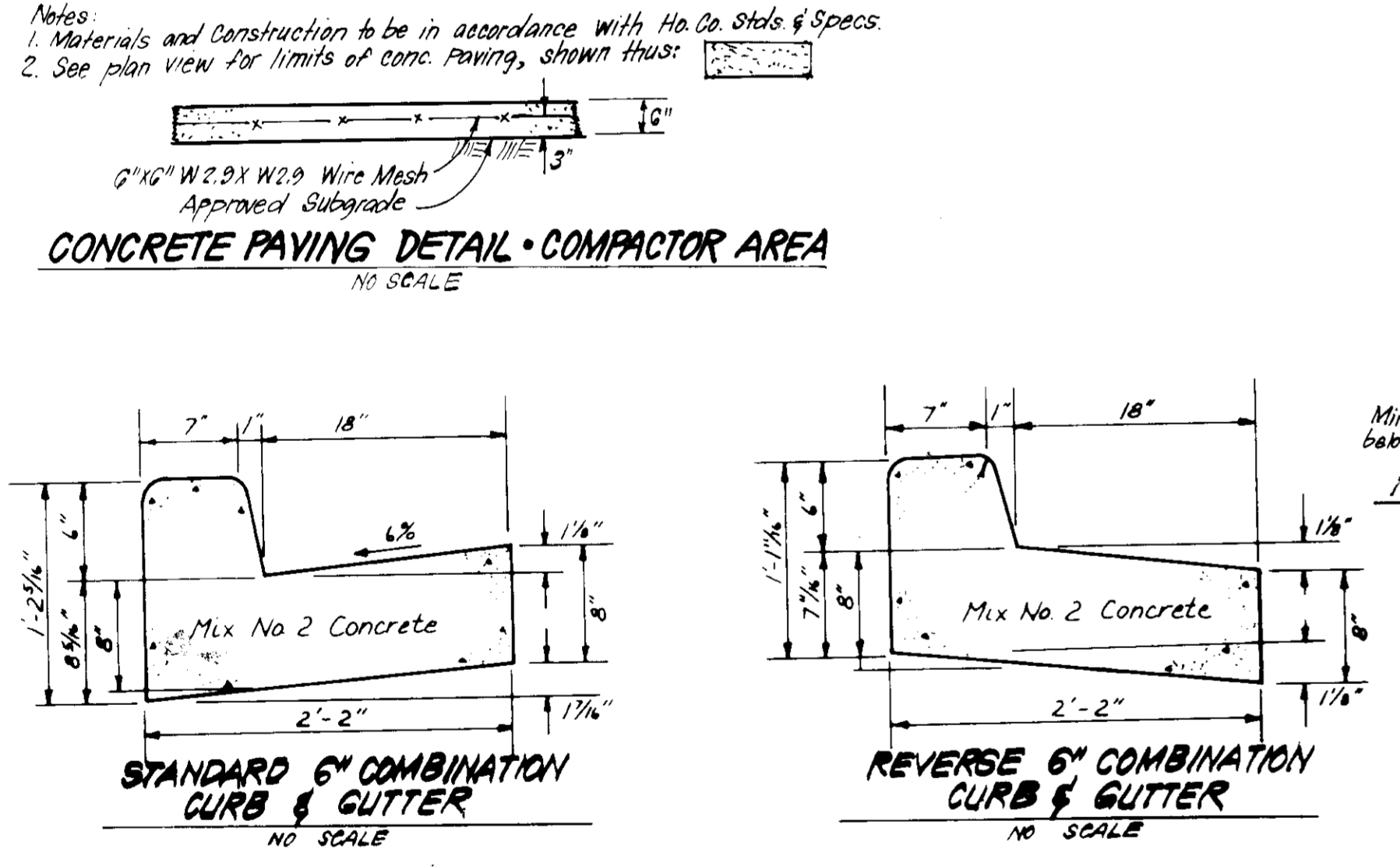
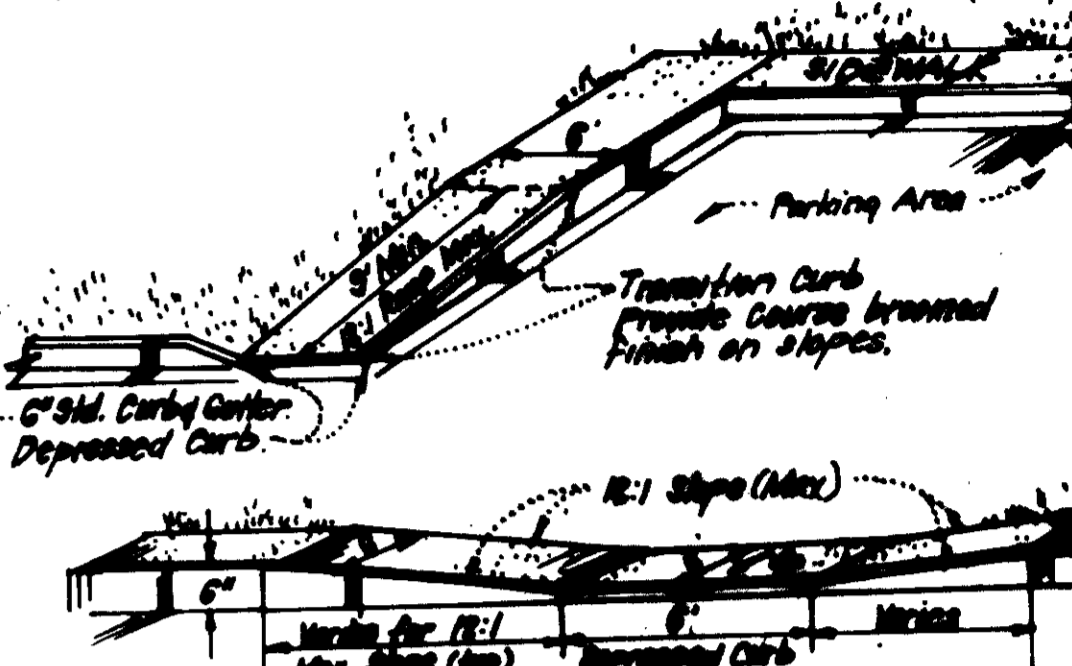
Reviewed for... [Signature] S.E.D.
Name: [Signature]
Signature: [Signature] DATE: 9/19/85
U.S. Soil Conservation Service
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
Signature of District: [Signature] DATE: 9/19/85

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 of Engineer: [Signature] DATE: 8-28-85



PIPE SCHEDULE		
SIZE	TYPE	LENGTH
12"	ALCSP 16.992	237 LF
15"	ALCSP 16.992	012 LF
15"	RCP CL III	102 LF
21"	RCP CL III	281 LF
24"	ALCSP 16.992	43 LF

STRUCTURE SCHEDULE							
No.	TYPE	INV. IN		TOP ELEVATION		REMARKS	LOCATION
		UPPER	LOWER	UPPER	LOWER		
S-1	Metal End Section	354.13	364.00	-	-	No. Co. Sid. SP 5.61	24" W
M-1A	Shallow Brick Manhole	356.00	355.75	360.00	360.00	" " G 5.05	48" Dia
M-1B	Brick Manhole	358.70	358.00	362.00	362.00	" " G 5.01	48" Dia
M-2	A-10 Inlet	363.4	363.67	367.00	367.00	" " SD 4.02	W-3'6"
M-3	A-10 Inlet	362.50	361.85	367.00	367.00	" " SD 4.02	W-3'6"
M-5	Shallow Brick Manhole	365.00	364.90	369.20	369.20	" " G 5.05	48" Dia
M-6	A-10 Inlet	374.50	373.85	378.30	378.30	" " SD 4.02	W-2'6"
M-7	A-10 Inlet	379.00	378.25	384.00	384.00	" " SD 4.02	W-2'6"
M-8	Precast Single W/R Inlet	371.50	371.25	372.00	372.00	SHA. Sid. MD 3.4.22 2'1/4" x 1' x 1'8"	" "
M-9	A-10 Inlet W/Deflectors	373.00	374.00	384.00	385.57	Ho. Co. Sid. SD 4.02	W-2'6"
M-10	A-10 Inlet	-	-	380.00	383.73	Ho. Co. Sid. SD 4.11	2'6" Dia

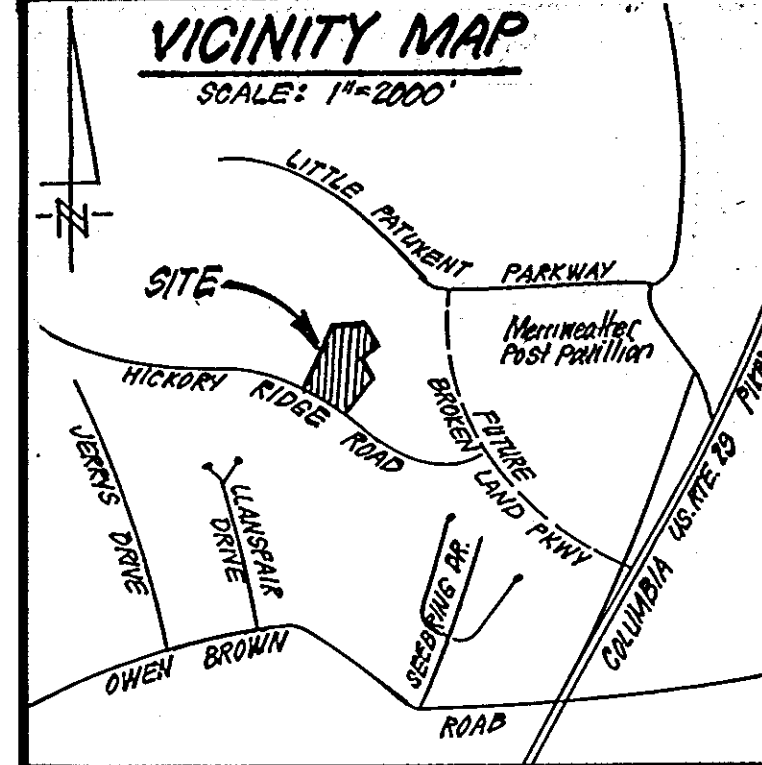


APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 9-24-81
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 7-20-85
 APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC WORKS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 9-20-85
 1-20-85

Reviewed for Howard S.C.D. and meets Technical Requirements
 Signature: [Signature]
 Date: 9-9-85
 U.S. Soil Conservation Service
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT

APPROVED PLANNING BOARD OF HOWARD COUNTY
 DATE: 7-24-85
 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]
 Date: 8-28-85

CLARK · FINEFROCK & SACKETT
 ENGINEERS · PLANNERS · SURVEYORS
 11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 588-3400
 SCALE: AS SHOWN
 DRAWN: KTW
 CHECKED: JLS
 DATE: JUNE 85
 OWNER: The Howard Research & Development Corporation, 10275 Little Patuxent Pkwy, Columbia, Md. 21044
 SDP-85-231c



LEGEND:

Contour Interval	2 FT
Existing Contour	---
Proposed Contour	- - - -
Spot Elevation	○
Provision of Drainage	○
Best Treatement	○
Proposed Storm Drain	—
Proposed Sewer	—
Proposed Water	—
Earth Dike	—
Shaw Bale Dike or Silt Fence	—
Stabilized Construction Entrance	—
Curb Inlet Protection	□

CONSTRUCTION SEQUENCE:

No.	Description	No. of Days
1.	Obtain Grading Permit.	2
2.	Install Sediment & Erosion Control Measures.	12
3.	Clear & Rough Grade Site*	30
4.	Construct Storm Drainage except M-1A to S-1 and install Temp. 2" CMP and brick shut 2" ROP, leaving Str. M-2	14
5.	Construct Utilities.	30
6.	After site has been graded so that drainage areas to the inlets are approx. as shown on plan, remove temp. trap #2 and temp. E.D.'s upon approval of HSCD and the sediment control inspector. Install SBD/S across area of temp. trap #2 so there are no gaps in control.	7
7.	Grade slopes behind Blags 4 & 5 and stabilize immediately.	7
8.	Final grade and construct paving and buildings except Blag #8 and stabilize disturbed areas.	180
9.	Upon approval of HSCD and the sediment control inspector remove sediment & erosion control measures and construct remainder of storm drainage & stabilize.	14
10.	Construct Blag #8 and install SBD/S as necessary and stabilize.	60

* Temporarily grade site as shown in plan view until Temp. Trap #2 and earth dikes are removed. No grading to be done between temp. E.D.'s and SBD/S behind Blags #4 & 5 at this time.

** SILT FENCE HAY BALES OR EQUIVALENT shall be installed in the PAVEMENT AROUND THE LIMIT OF DISTURBANCE AS DIRECTED BY THE SEDIMENT CONTROL INSPECTOR.

R.O.S.T. (ST IV) TRAP #1
 D.A. = 7.8 Acres
 Storage Required = 1,811,000 = 1,000 cu ft
 Storage Provided = 1,000 cu ft
 Top of Slope Crest = 356.0
 Bottom Elevation = 353.0
 Depth = 4'
 Bottom Dimensions = 74' x 41'
 Clean Out Elev. = 355.0
 Top Berm Elev. = 362.0
 4' x 2'
 6' x 10'

Reviewed for: Howard S.C.D. Name
 and meets Technical Requirements
 Signature: [Signature] Date
 U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

[Signature] Approved Date
 OWNER: The Howard Research & Development Corp.
 10715 Little Patuxent Pkwy.
 Columbia, Md. 21044

REV	DATE	COMMENTS
1	6/20/85	ADD. OF GARAGE & HC RAMP

CLARK · FINEFROCK & SACKETT
 ENGINEERS · PLANNERS · SURVEYORS
 11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593-3400

SEDIMENT & EROSION CONTROL PLAN AND DRAINAGE AREA MAP
 PARCEL: **COLUMBIA**
 VILLAGE OF HICKORY RIDGE AREA 2
 SECTION 5 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

FOR: **CROW, TERWILLIGER & MICHALKO, INC.**
 5550 Starkey Road, #200
 Columbia, Maryland 21044

DESIGNED: VLS WHT
 DRAWN: KIW
 CHECKED: VLS WHT
 DATE: JUNE 85

SCALE: 1" = 30'
 DRAWING: 3 OF 5
 JOB NO.: 85-021
 FILE NO.: 85-021-SE

DATE: JUNE 85

ENGINEER'S CERTIFICATE
 I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable design 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] Date: 6-20-85
 G. Nelson, Chief
 PROFESSIONAL ENGINEER

DEVELOPER'S/BUILDER'S CERTIFICATE
 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 Natural Resources 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 its authorized agents, as are deemed necessary.

[Signature] Date: 6-20-85
 Signature of Developer/Builder

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE: 7-24-85
[Signature]

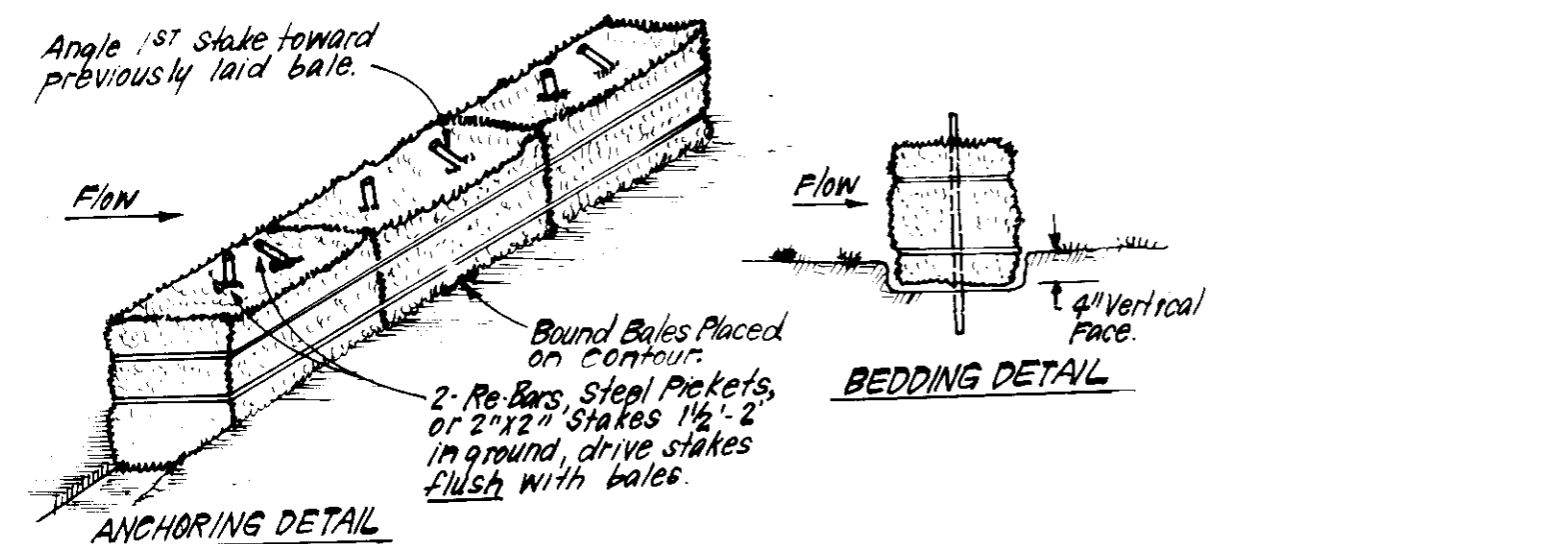
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
 HOWARD COUNTY HEALTH DEPARTMENT
[Signature] 9-24-85
 COUNTY HEALTH OFFICER

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
[Signature] 9-25-85
 PLANNING DIRECTOR

CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION
[Signature] 9-25-85

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[Signature] 9-20-85
 DIRECTOR

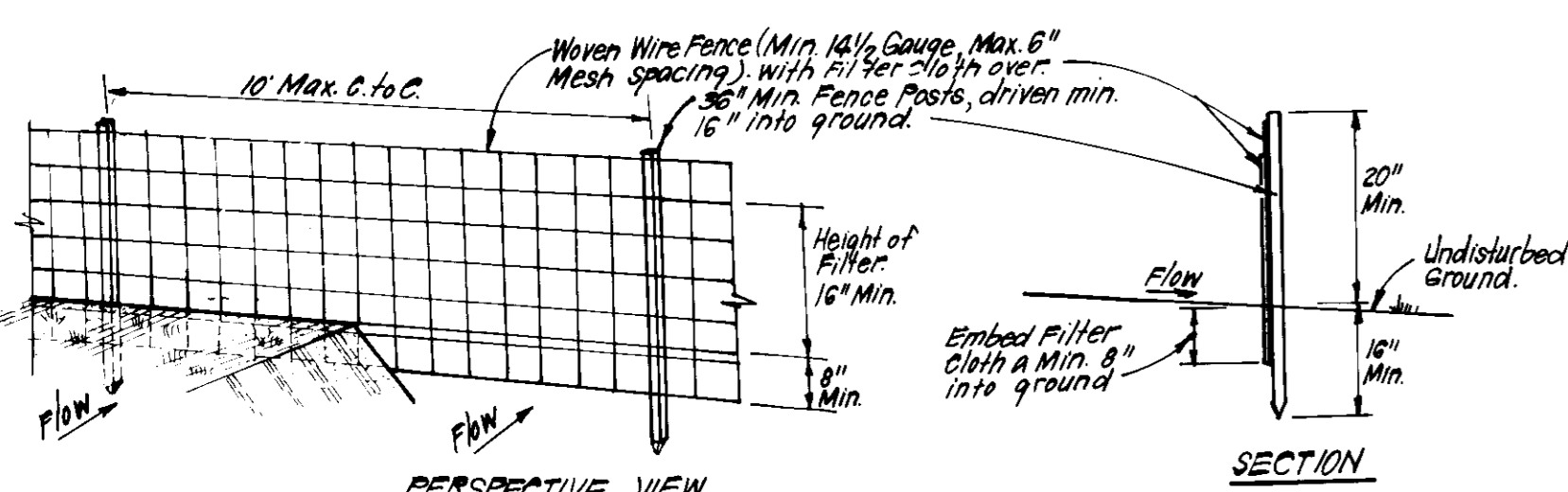
CHIEF BUREAU OF ENGINEERING
[Signature] 9-20-85



CONSTRUCTION SPECIFICATIONS:

- Bales shall be placed at the top 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 min. of 4" and placed so the bindings are horizontal.
- Bales shall be securely anchored in place by either 2 stakes or re-bars driven thru the bale. The 1st stake in each row 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 or impede storm flow or drainage.

STRAW BALE DIKE DETAIL (SBD)
NO SCALE

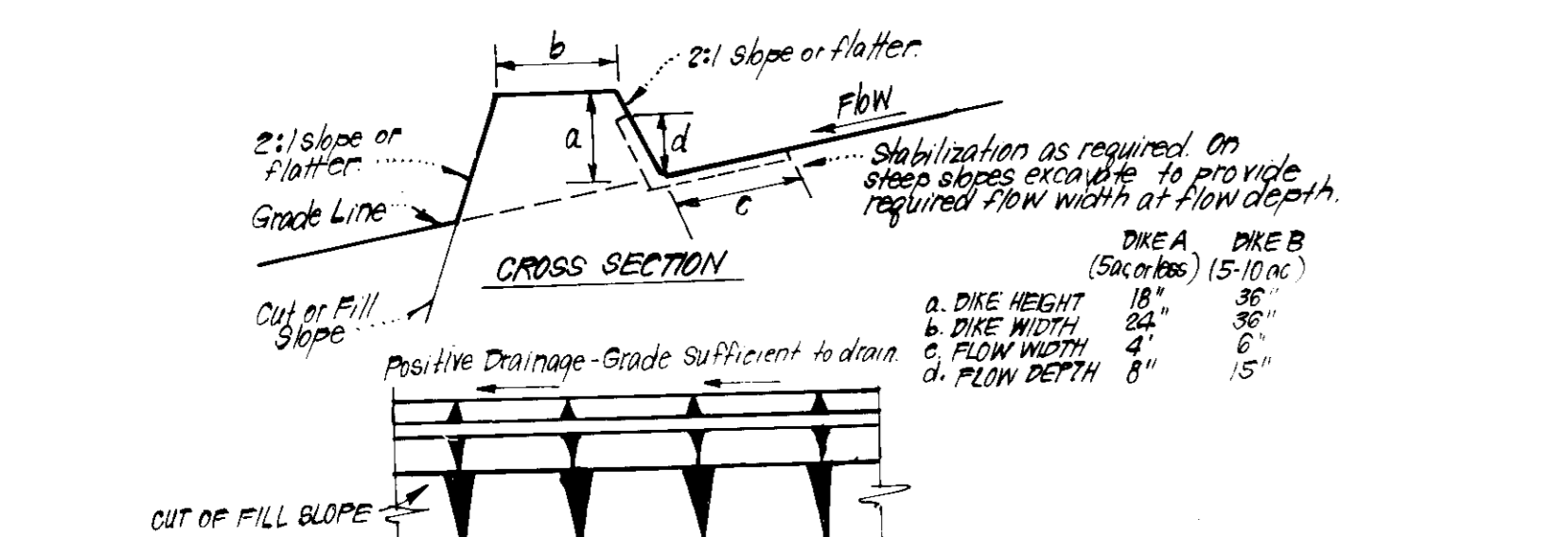


CONSTRUCTION SPECIFICATIONS:

- Woven wire fence to be fastened securely to fence posts with wire ties or staples.
- Filter cloth to be fastened securely to woven wire fence with ties spaced every 24" at top and mid section.
- When 2 sections of filter cloth adjoin each other they shall be overlapped by 6" and folded.
- Maintenance shall be performed as needed and material removed when "bridges" develop in silt fence.

POSTS: Steel either T or U Type or Hardwood
FENCE: Woven Wire, 1 1/2" Gauge, 6" Max. Mesh Opening
FILTER CLOTH: Filter Cloth, Miraflex 100X, Stablinter, T140N or Approx. equal
PREFABRICATED UNIT: Geofab, EnviroFence, or Approx. equal

SILT FENCE DETAIL (S)
NO SCALE



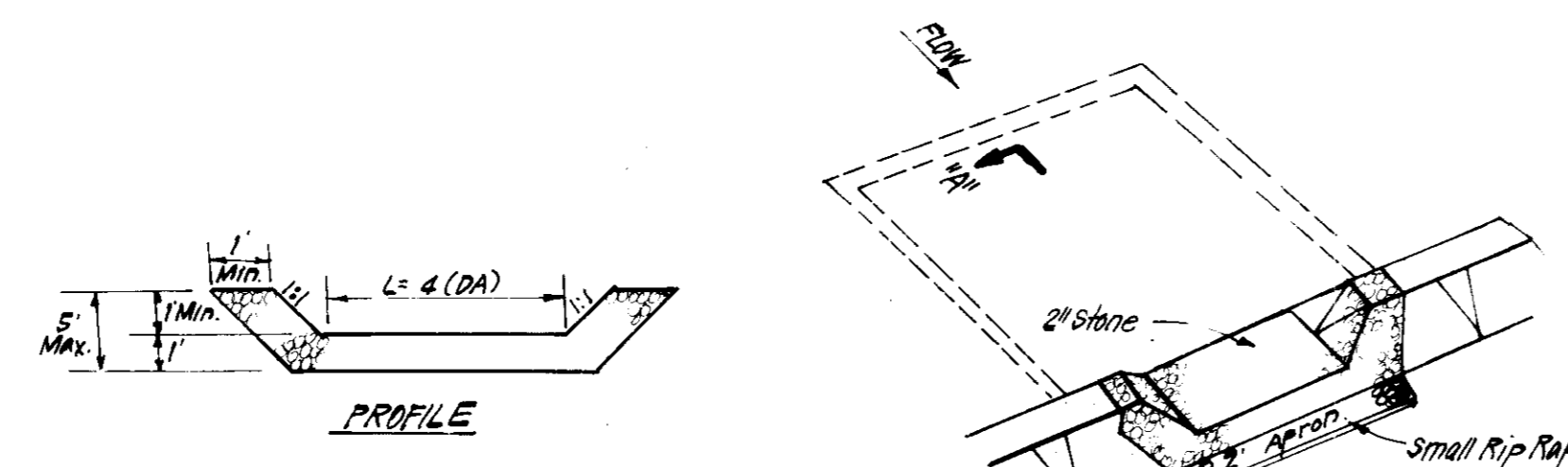
CONSTRUCTION SPECIFICATIONS:

- 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 chart below.

FLOW CHANNEL STABILIZATION

EARTH DIKE DETAIL (E.D.)
NO SCALE

A Stone to be 2" Stone, or recycled concrete equivalent, in a layer at least 3" thick and be pressed into soil with construction equipment.
 B Rip Rap to be 4"-8" in a layer at least 8" thick, pressed into soil.
 C Approped equivalents can be substituted for any of the above materials.
 7. Periodic inspection and Required Maintenance must be provided after each rain.



CONSTRUCTION SPECIFICATIONS:

- Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
- The fill material for the embankment shall be free of roots and other woody vegetation as well as over sized 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"-9" along 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.ST.) ST.V.
NO SCALE

OPTION: A 1" layer of 2" Stone may be placed on the upstream side of the rip rap in place of embedded filter cloth.

RIPRAP OUTLET SEDIMENT TRAP - ST-II.
NO SCALE

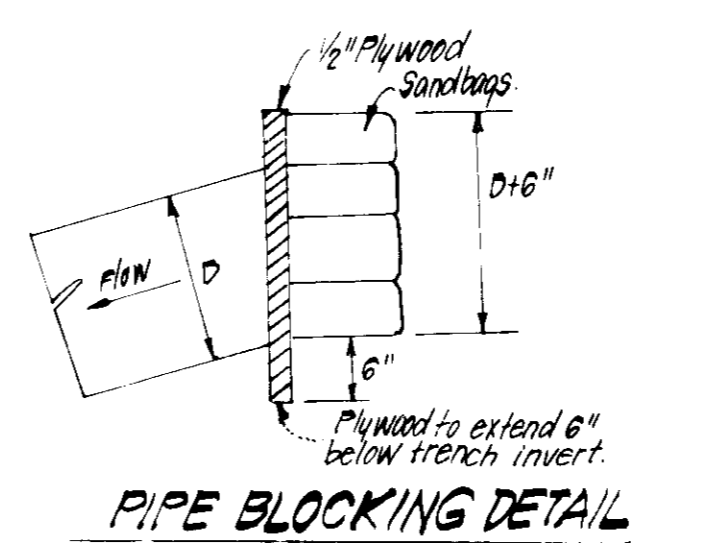
CONSTRUCTION SPECIFICATIONS:

- The area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
- The fill material for the embankment shall be free of roots or other woody vegetation as well as over sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed. Max. height of embankment shall be 5' measured at 4' of embankment.
- All fill slopes shall be 2:1 or flatter, cut slopes 1:1 or flatter.
- Elevation of the top of any dike directing water into trap must equal or exceed height of embankment.
- Storage area provided shall be figured by computing the volume available behind the outlet channel up to an elevation of 1' below the lower weir crest.
- Filter cloth shall be placed over the bottom and sides of the outlet channel prior to placement of stone. Sections of fabric must overlap at least 1" with section nearest the entrance placed on top. Fabric shall be embedded at least 6" into existing ground at entrance of outlet channel.
- Stone used in the outlet channel shall be 4" to 8" rip rap to provide a filtering effect. A layer of filter cloth shall be embedded 1' back into the upstream face of the outlet stone or a 1" thick layer of 2" or finer aggregate shall be placed on the upstream face of the outlet.
- 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. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
- The structure shall be inspected after each rain and repaired as needed.
- Construction operations shall be carried out in such a manner that erosion and water pollution are minimized.
- The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.
- Drainage area for this practice is limited to 15 acres or less.

SEDIMENT CONTROL NOTES

- A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (992-2437)
- 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 redistribution, 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 SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (Sec. 50) and (Sec. 51) sod (Sec. 54), temporary seeding (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	10,000 Acres
Area Disturbed	8,900 Acres
Area to be roofed or paved	4,240 Acres
Area to be vegetatively stabilized	2,660 Acres
Total Cut	42180 Cu. yds
Total Fill	25220 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 DEP 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, 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 810 L.F.



PIPE BLOCKING DETAIL
NO SCALE

Channel side formed by compacted embankment or excavation into existing ground.
 Stone lined outlet channel as per ST-VI (Channel may be curved to fit existing topography. Plate apron to equal 1.5 x weir length (b) at end.

DEVELOPER'S/BUILDER'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 Dept. of Natural Resources 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."

S. McDaniel
 Signature of Developer/Builder
 6-20-85
 Date

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

Seedbed Preparation: Loosen upper three inches of soil by raking, discing 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 sq 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 (9 lbs/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.

Inspection - Inspect all seeded areas and make needed repairs, replacements and reseeds.

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.

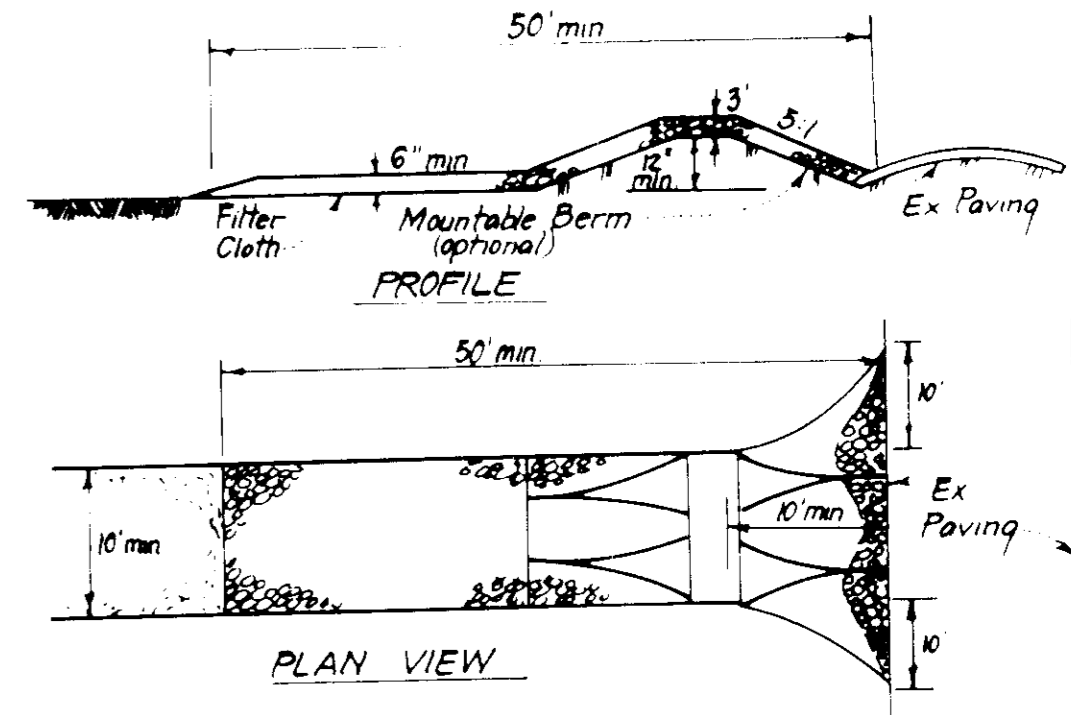
Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.

Soil Amendments: Apply 600 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 bushel per acre of annual rye (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 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.



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 of 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 mountable berm with 5:1 slopes 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 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.

STABILIZED CONSTRUCTION ENTRANCE (SCE)
NO SCALE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
Joyce M. Rogers 9-24-85
 COUNTY HEALTH OFFICER DATE

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING
John M. Muesel 7-25-85
 PLANNING DIRECTOR DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Ruth B. King 9-20-85
 DIRECTOR DATE

APPROVED PLANNING BOARD OF HOWARD COUNTY
 DATE 7-24-85
[Signature]

Reviewed for Howard County
 Name: *Howard County*
 and meets Technical Requirements
Hanna M. [Signature] 7/9/85
 Date

DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
[Signature] 7/9/85
 Date

OWNER: The Howard Research & Development Corporation 10275 Little Patuxent Pkwy, Columbia, Md 21044

DATE JUNE 05

CLARK • FINEFROCK & SACKETT
 ENGINEERS • PLANNERS • SURVEYORS
 13135 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593-3400

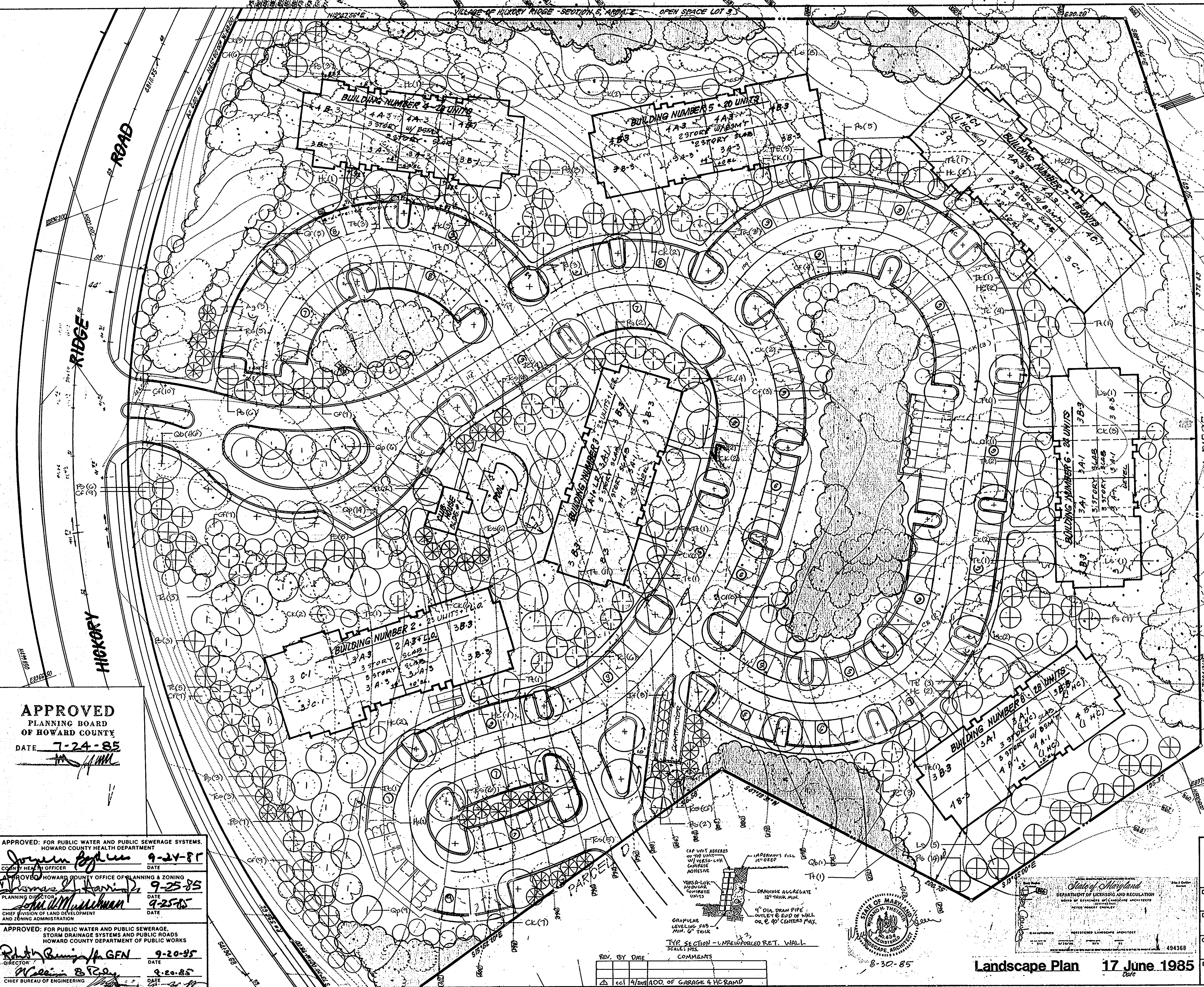
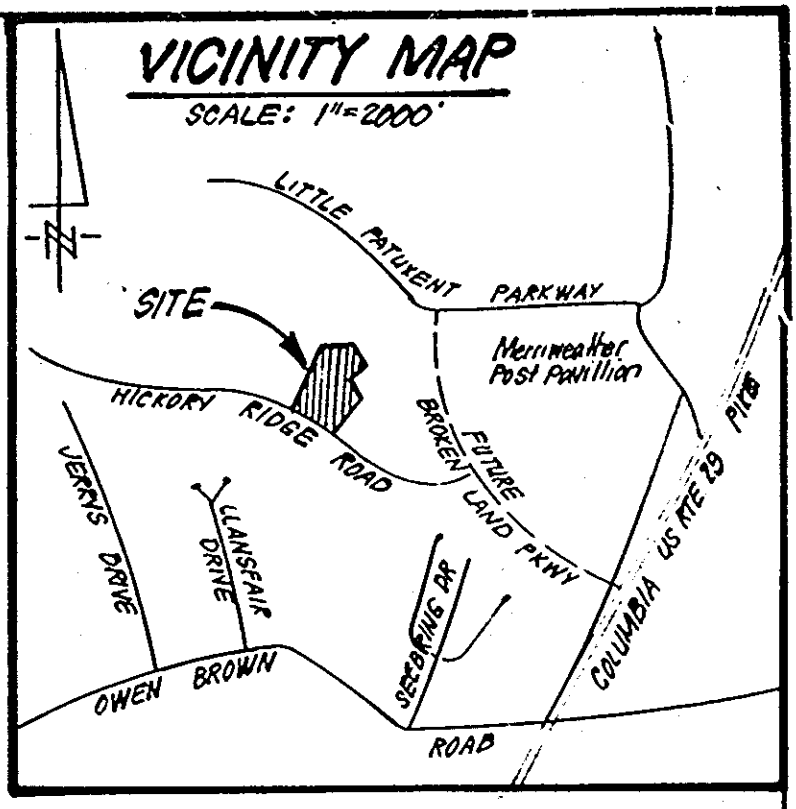
DESIGNED: JLS
 DRAWN: KIW
 CHECKED: JLS
 DATE: JUNE 05

SCALE: 1"=30'
 DRAWING: 4:5
 JOB NO.: 85-021
 FILE NO.: 85-021 SE

SEDIMENT & EROSION CONTROL PLAN
 PARCEL C
 COLUMBIA
 VILLAGE OF HICKORY RIDGE
 SECTION 5 AREA 2
 5TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

FOR: CROW, TERWILLIGER & MICHAUX, INC.
 5550 Sharrett Place #201
 Columbia, Maryland 21044

SDP-85-231



Legend

LANDSCAPE DATA

Number of Units: 176
 Shade Trees Required for Semi-Wooded Site: 1.5/Unit
 Total Shade Trees Required: 264

Tree Type	Quantity	Value as Shade Tree	Total
Shade	132	1.0	132
Evergreen	146	0.5	73.0
Ornamental	147	0.5	73.5
Total Shade Trees Provided			278.5

— TPF — TREE PROTECTION FENCE

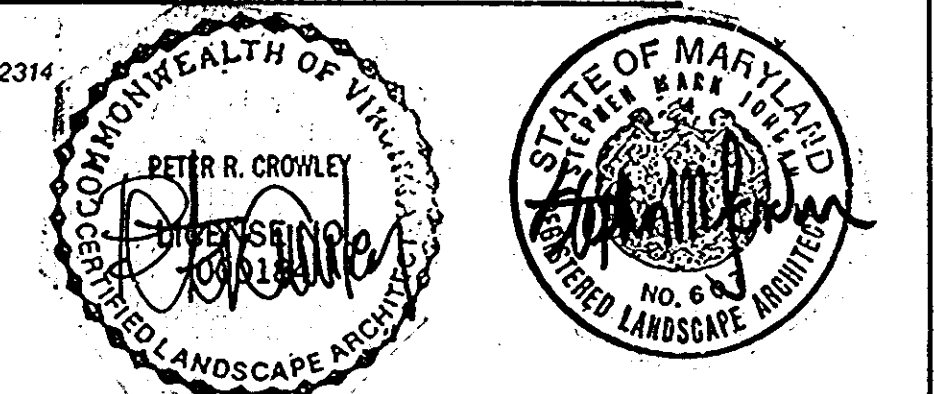
Qty	Quantity	Botanical Name	Common Name	HT.	CAL. / CORN.	Remarks
18	18	Liquidambar styraciflua	Sweet Gum	13-15'	2-3'	
39	39	Tilia tomentosa	Silver Linden	14-16'	3-3.5'	Alt: Tilia cordata 'Greenspire'
46	46	Quercus borealis	Northern Red Oak	16-18'	4-4.5'	
29	29	Quercus velutina	Pin Oak	14-16'	3-3.5'	
EVERGREEN TREES						
5	5	Ilex 'Fosteri'	Fosters Holly	5-6'		
71	71	Pinus strobus	White Pine	10-12'		
35	35	Tsuga canadensis	Canadian Hemlock	8-10'		
35	35	Tsuga canadensis	Canadian Hemlock	5-6'		
ORNAMENTAL TREES						
3	3	Aesculus glabra	Ohio Buckeye	6-8'	15-2'	
40	40	Cornus kousa	Kousa Dogwood	8-10'	2-2.5'	Full; Dense
85	85	Cornus florida	Flowering Dogwood	8-10'	2-2.5'	Full; Dense
19	19	Prunus subhirtella	Nigan Cherry	8-10'	2-2.5'	Full; Dense

NOTE: ALL TREES REMOVED AS A RESULT OF THE PROPOSED IMPROVEMENTS WILL BE REPLACED IN KIND ON SITE AND SATISFY THE MINIMUM PLANTING SPECIFICATIONS OF THE APPROVED HOWARD COUNTY LANDSCAPE MANUAL.

Peter R. Crowley
Land Design
 Landscape Architecture Land Planning

1216 Prince Street
 Alexandria, Virginia 22314
 (703) 549-7784

#84239



SUBDIVISION NAME	COLUMBIA	SECT./AREA	5/2	LOT/PARCEL #	PARCEL C
VILLAGE OF HICKORY RIDGE					
PLAT # OF L/F	BLDG #	ZONE	TAX/DIST. MAP/LED. DIST.	CENSUS TR.	
		36	5TH		
WATER CODE				SEWER CODE	

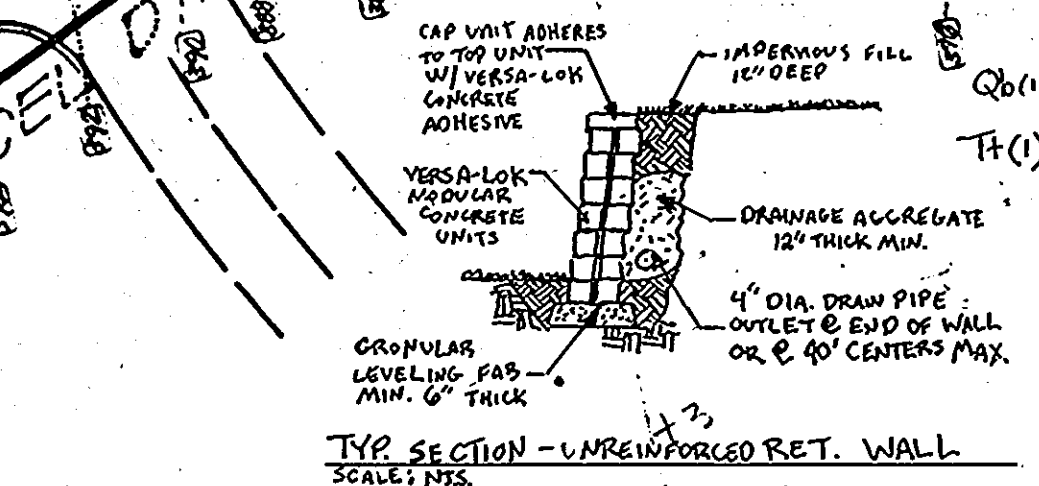
APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 7-24-85

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
 HOWARD COUNTY HEALTH DEPARTMENT
Joyce M. Pappas 9-24-85
 COUNTY HEALTH OFFICER DATE

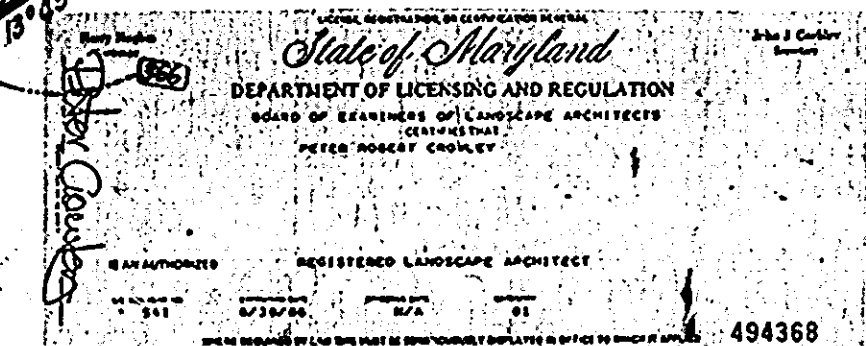
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
Thomas J. Harris 9-25-85
 PLANNING DIRECTOR DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,
 STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Ruth R. Genn 9-20-85
 DIRECTOR DATE

W. C. ... 9-20-85
 CHIEF BUREAU OF ENGINEERING DATE



REV.	BY	DATE	COMMENTS
1	cl	14/08	ADD. OF GARAGE 4 HC RAMP



Landscape Plan 17 June 1985

CLARK · FINEFROCK & SACKETT
 ENGINEERS · PLANNERS · SURVEYORS

1131E LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593-3400

DESIGNED: LANDSCAPE PLAN PARCEL C SCALE: 1" = 30'

DRAWN: 5 OF 5

K/W: COLUMBIA VILLAGE OF HICKORY RIDGE SECTION 5

CHECKED: 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND JOB NO. 85-021

DATE: FOR: CROWN TERRILLIGERE MICHAUX, INC. 5500 Sharrett Place # 201 COLUMBIA, MARYLAND 21044 FILE NO. 85-021-LS

SDP-85-231c