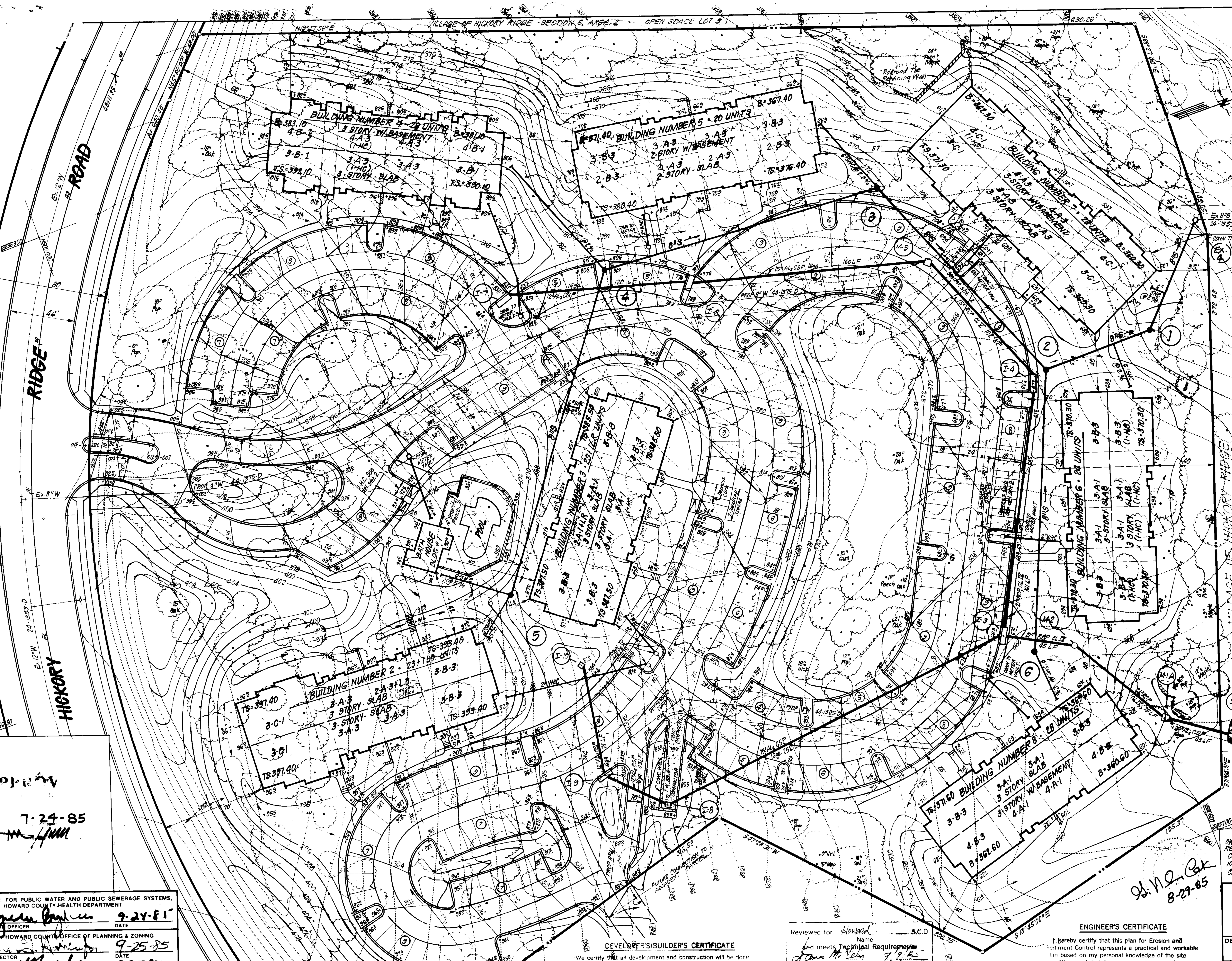
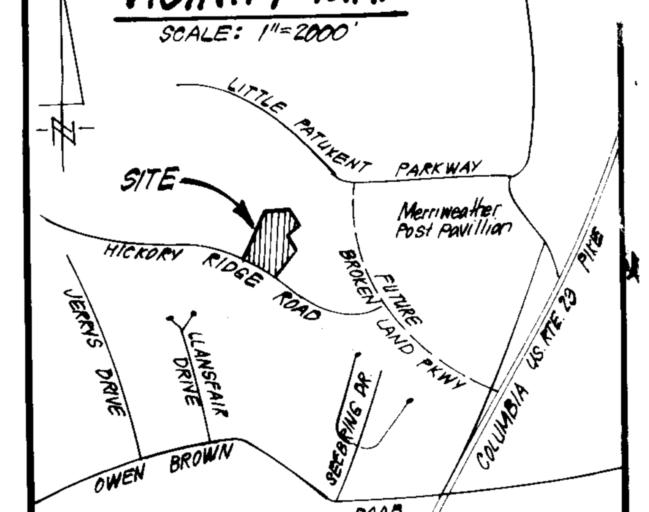


APPROV
7-24-85

VICINITY MAP

SCALE: 1" = 2000'



LEGEND:

Contour Interval	2 Ft.
Existing Contour	310
Proposed Contour	310
Spot Elevation	+105
Direction of Drainage	
Exist. Trees Saved	
Proposed Storm Drain	15" RCP
Proposed Sewer	8" S
Proposed Water	8" W

GENERAL NOTES

1. All materials and construction to be in accordance with Howard County Road Construction Code and Specifications.
2. This plan is covered by Final Development Plan Phase 190.
3. Any damage to county owned rights of way to be corrected at the developer's expense.
4. Installation of traffic Control Devices shall be in accordance with the latest edition of the "Manual of Uniform Traffic Control."
5. Topography was compiled from actual field survey.
6. The area shown is located on Tax Map 36, Parcel 81.
7. All driveways and parking to be privately owned and maintained.
8. All coordinates are based on Howard County Geodetic Control Survey traverse which is based on the Maryland State Plane Coordinate System.
9. Class "C" Trench bedding shall be used under all storm drainage, unless shown otherwise.
10. 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.
11. The contractor or developer shall contact the Construction Inspection, Survey Division 24 hrs. in advance of work. 992-2417 or 792-7272.
12. 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.
13. The developer agrees to work with the Dept. of Licenses & Inspection to resolve any problems caused by roof water discharge.
14. Handicap Parking Details shall be in accordance with the "Maryland Building Code for the Handicapped," Sect. 5.01-7.05 and details sht. 2.
15. All setbacks requirements and criteria as shown in F.D.P. 190.
16. Storm Water Management Provided in Central Facility in Village of Hickory Ridge Section 5 Area 1, F-85-131

SITE ANALYSIS

1. ZONING: NewTown Apartments (F.D.P. Phase 190)
2. AREA OF SITE: 10.00 Acres.
3. No. OF RESIDENTIAL UNITS PERMITTED: 176 ; PROPOSED: 174
4. PARKING SPACES REQUIRED 261 ; PROVIDED: 269
5. BUILDING COVERAGE: 1.49 Acres ± (14.9%)

BLDG. #	BLDG. TYPE	UNIT TYPES A-1	A-3	B-1	B-3	C-1	TOTAL	STREET ADDRESS
1	BATH HOUSE							10300 Hickory Ridge Rd.
2	3-STORY		11+LO*		6	6	24	10310 10312 "
3	3-STORY	11+L.R.*			12		24	10304 10306 "
4	3-STORY W/BSMT.		14	14			28	10344 10346 "
5	2 STORY W/BSMT.		10		10		20	10338 10340 "
6	3-STORY	12			12		24	10326 10328 "
7	3 STORY W/BSMT.		14			14	28	10332 10334 "
8	3-STORY W/BSMT.	14			14		28	10320 10322 "
TOTAL		38	50	14	54	20	176*	

* L.R. = Laundry Room (1 Provided)
L.O. = Leasing Office (1 Provided)

UNIT SQUARE FOOTAGE ANALYSIS	
UNIT TYPE	AREA (SF)
A-1 (1 Br.)	635 SF
A-3 (1 Br.)	780 SF
B-1 (1 Br.)	855 SF
B-3 (2 Br.)	1005 SF
C-1 (3 Br.)	1351 SF

OWNER: THE HOWARD RESEARCH & DEVELOPMENT CORPORATION
10275 Little Patuxent Pkwy.
Columbia, Md. 21044

SUBDIVISION NAME COLUMBIA Village of Hickory Ridge			SECT./AREA 5/2		LOT/PARCEL # PARCEL C
PLAT # or L/F 6324+6325	BLOCK # 7	ZONE N.T. APT	TAX/ZONE MAP 36	ELEC. DIST. 5TH	CENSUS TR. 6053.02
WATER CODE			SEWER CODE		

G. N. Clark 8-29-85

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

DESIGNED WHT	SITE DEVELOPMENT PLAN PARCEL C	SCALE 1" = 30'
DRAWN KIW	**COLUMBIA** VILLAGE OF HICKORY RIDGE SECTION 5 AREA 2 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	DRAWING 1 OF 5
CHECKED WHT		JOB NO. 85-021
DATE JUNE 85	FOR: CROW, TERWILLIGER & MICHAUX, INC. 5550 Starrett Place #201 Columbia, Maryland 21044	FILE NO. 85-021-X

SDP-85-231c

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.

G. Nelson Clark — 8-28-85 Date

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 their authorized agents, as are deemed necessary."

R. Michaux — Signature of Developer/Builder — 8-28-85 Date

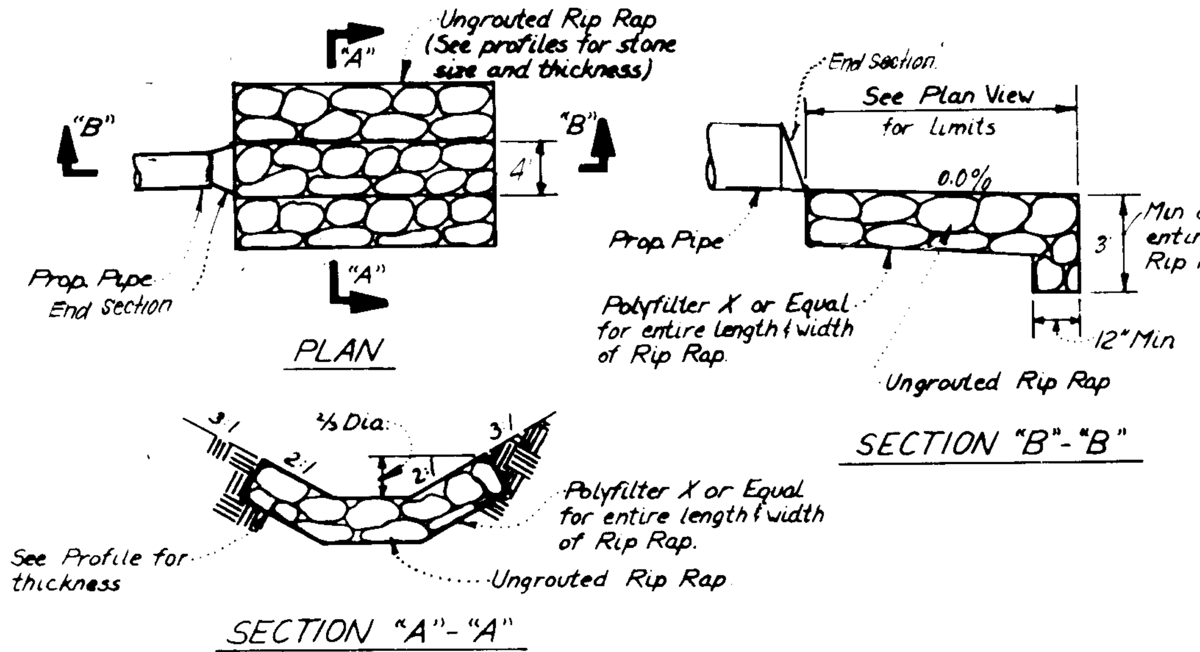
Reviewed for Howard S.C.D. and meets Technical Requirements
Signature — 7-9-85 Date
U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
Approved — 7/9/85 Date

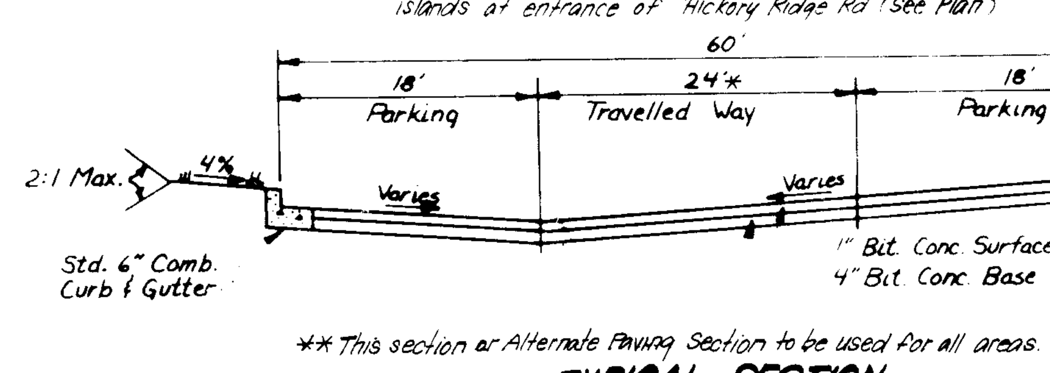
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE 9-24-85

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
PLANNING DIRECTOR — DATE 9-25-85
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 9-25-85

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE
CHIEF BUREAU OF ENGINEERING — DATE



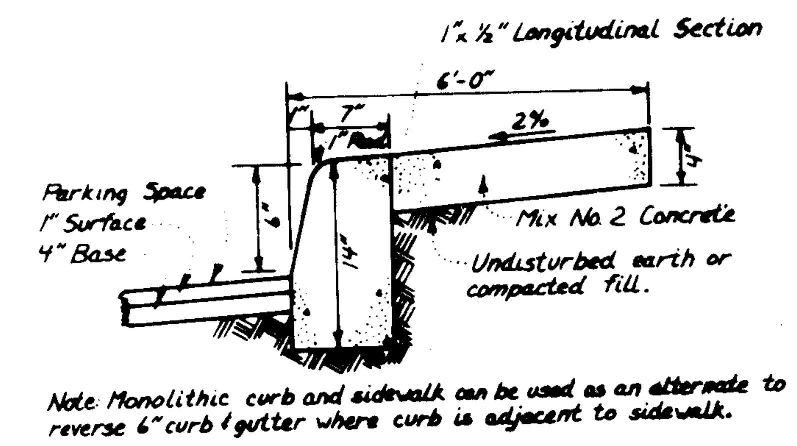
UNGROUTED RIP RAP PAVING DETAILS
NO SCALE



** This section or Alternate Paving Section to be used for all areas.

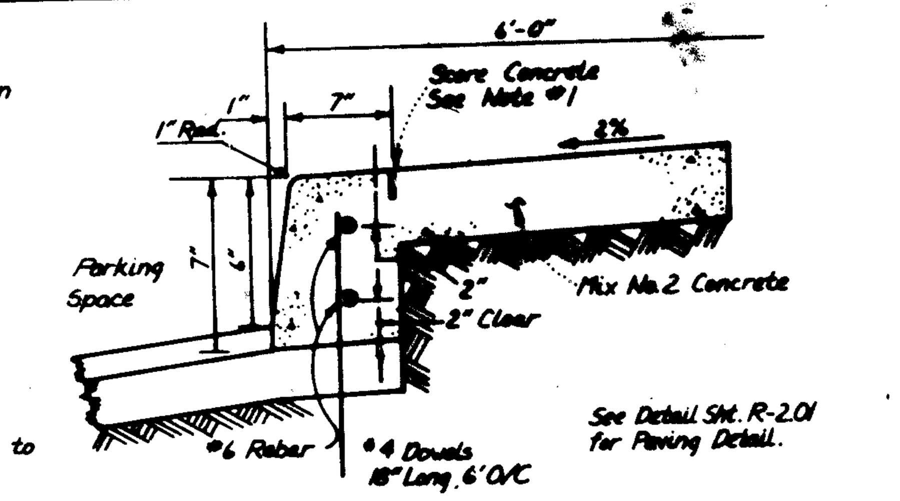
TYPICAL SECTION PRIVATE DRIVE & PARKING
(PAVING SECTION P-1)
NO SCALE

Notes:
1. Longitudinal Joint between sidewalk & curb shall be continuous and to a depth of ¼ the thickness of the sidewalk or 1" Latitudinal Joints shall run from back edge of sidewalk continuous to the bottom face of curb to a depth of ¼ the sidewalk thickness or 1" and spaced 5' apart.
2. Provide ½" expansion joints at 15' intervals. In latitudinal joints to full cross-section.



Note: Monolithic curb and sidewalk can be used as an alternate to reverse 6" curb & gutter where curb is adjacent to sidewalk.

MONOLITHIC CURB & SIDEWALK - PRIVATE PARKING AREA
NO SCALE



ALTERNATE SECTION
NO SCALE

PIPE SCHEDULE

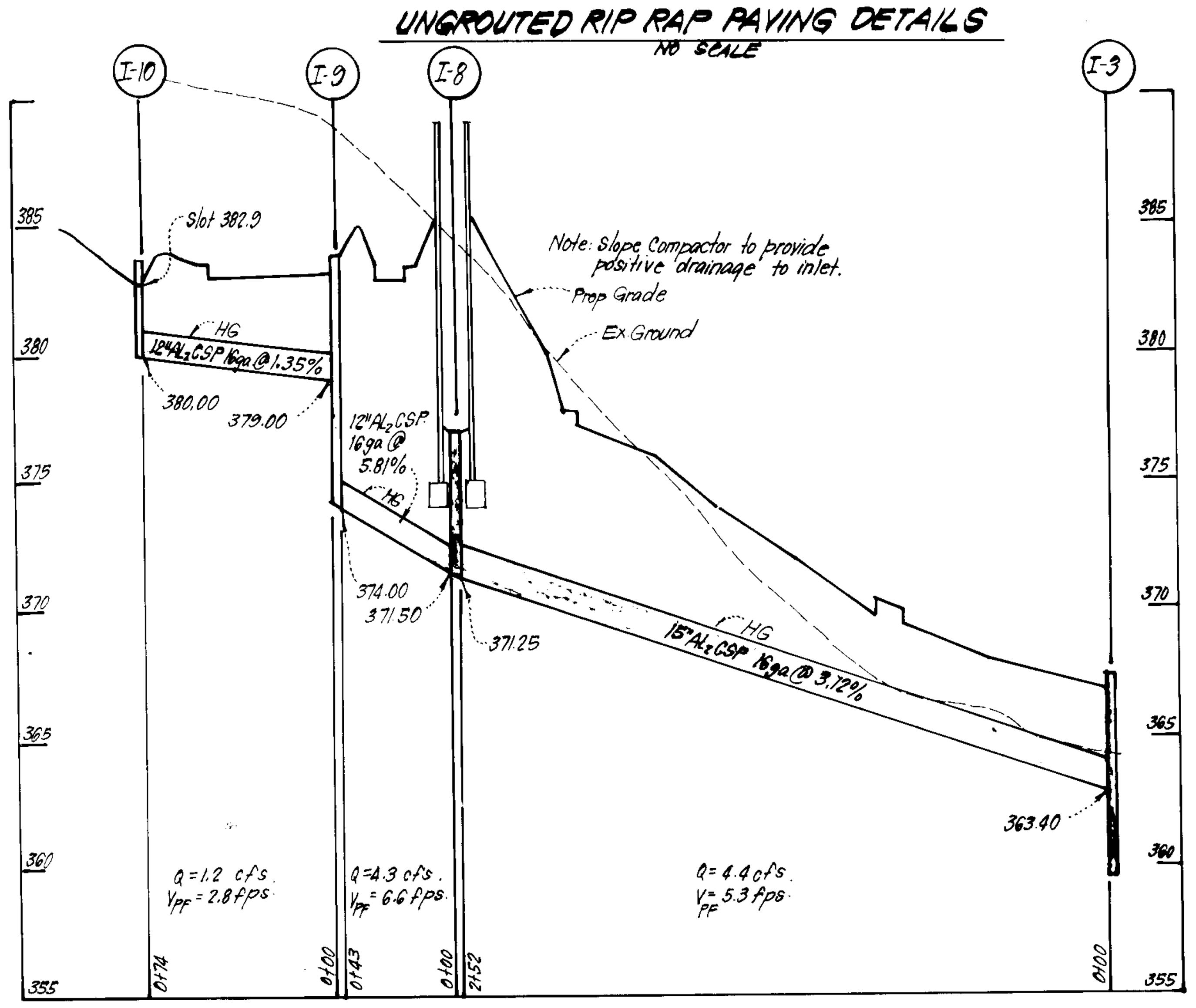
	SIZE	TYPE	LENGTH
*	12"	AL_2 CSP 16 gage	237 LF
*	15"	AL_2 CSP 16 gage	412 LF
	15"	RCP CL V	102 LF
	21"	RCP CL IV	281 LF
*	24"	AL_2 CSP 16 gage	43 LF

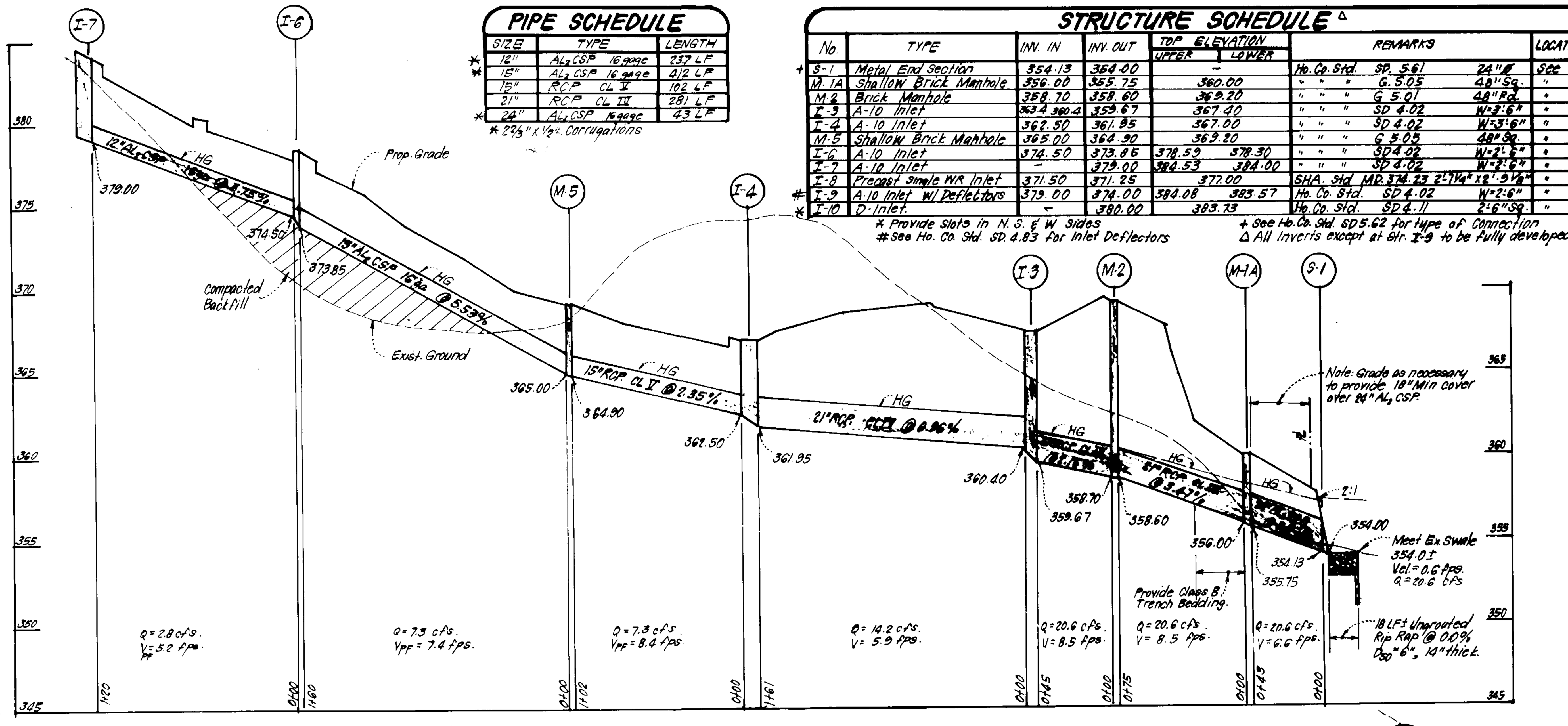
* 2⅔" x ½" Corrugations

STRUCTURE SCHEDULE △

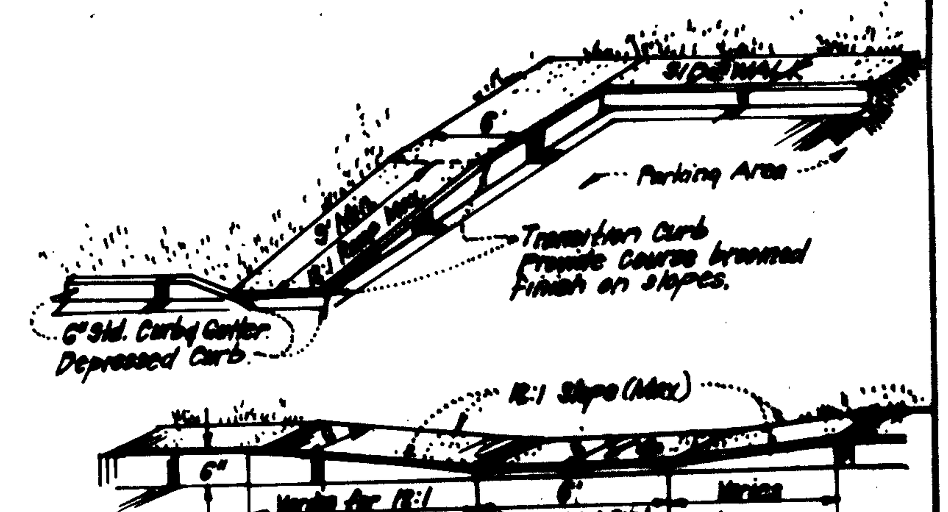
	No.	TYPE	INV. IN	INV. OUT	TOP ELEVATION UPPER	TOP ELEVATION LOWER	REMARKS		LOCATION
+	S-1	Metal End Section	354.13	354.00	–		Ho. Co. Std. SD 5.61	24"⌀	See Plan
	M-1A	Shallow Brick Manhole	356.00	355.75	360.00		" " G 5.05	48" Sq.	"
	M-2	Brick Manhole	358.70	358.60	369.20		" " G 5.01	48" Rd.	"
	I-3	A-10 Inlet	363.4 360.4	359.67	367.40		" " SD 4.02	W=3'-6"	"
	I-4	A-10 Inlet	362.50	361.95	367.00		" " SD 4.02	W=3'-6"	"
	M-5	Shallow Brick Manhole	365.00	364.90	369.20		" " G 5.05	48" Sq.	"
	I-6	A-10 Inlet	374.50	373.85	378.59	378.30	" " SD 4.02	W=2'-6"	"
	I-7	A-10 Inlet	–	379.00	384.53	384.00	" " SD 4.02	W=2'-6"	"
	I-8	Precast Single WR Inlet	371.50	371.25	377.00		SHA. Std MD 374.23	2'-7¼" x 2'-9⅛"	"
#	I-9	A-10 Inlet w/ Deflectors	379.00	374.00	384.08	383.57	Ho. Co. Std. SD 4.02	W=2'-6"	"
*	I-10	D-Inlet	–	380.00	383.73		Ho. Co. Std. SD 4.11	2'-6" Sq.	"

* Provide Slots in N. S. & W Sides
# See Ho. Co. Std. SD 4.83 for Inlet Deflectors
+ See Ho. Co. Std. SD 5.62 for type of Connection
△ All Inverts except at Str. I-9 to be fully developed.

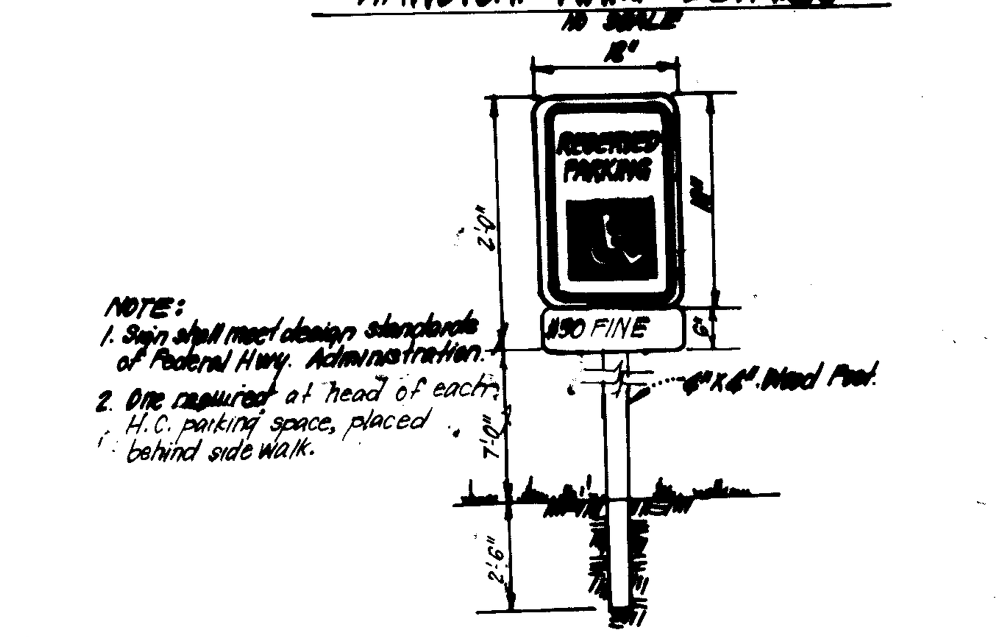




STORM DRAINAGE PROFILES
SCALES: HORIZ: 1" = 50'
VERT: 1" = 5'



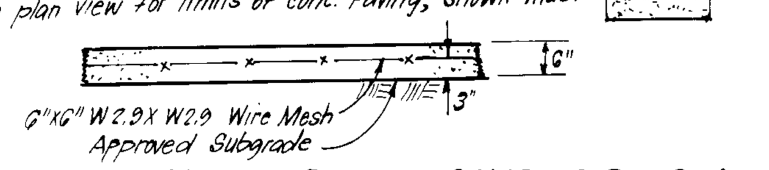
HANDICAP RAMP DETAILS
NO SCALE



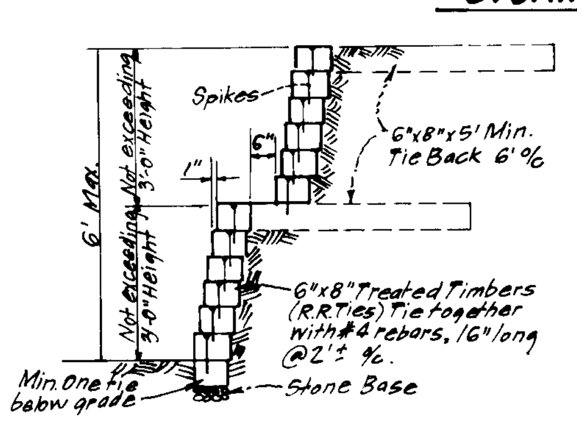
NOTE:
1. Sign shall meet design standards of Federal Hwy. Administration.
2. One required at head of each H.C. parking space, placed behind side walk.

HANDICAP PARKING SIGN DETAIL
NO SCALE

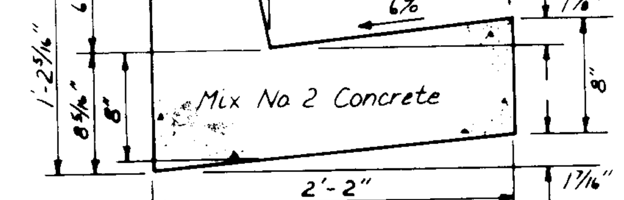
Notes:
1. Materials and Construction to be in accordance with Ho. Co. Stds. & Specs.
2. See plan view for limits of conc. Paving, shown thus:



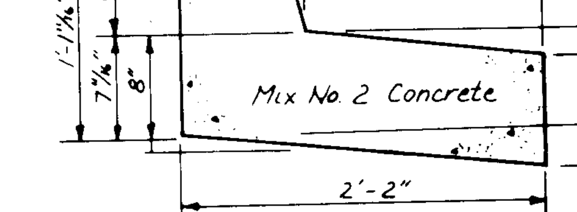
CONCRETE PAVING DETAIL • COMPACTOR AREA
NO SCALE



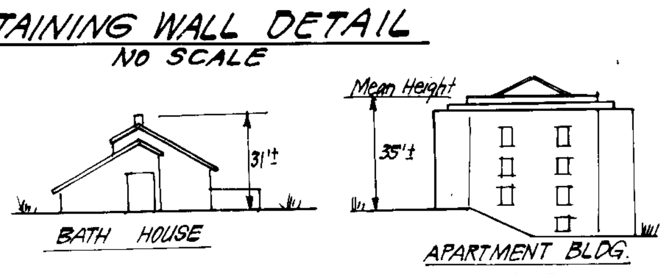
RETAINING WALL DETAIL
NO SCALE



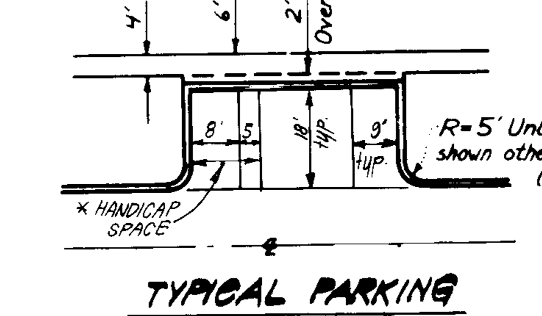
STANDARD 6" COMBINATION CURB & GUTTER
NO SCALE



REVERSE 6" COMBINATION CURB & GUTTER
NO SCALE



TYPICAL ELEVATIONS
NO SCALE



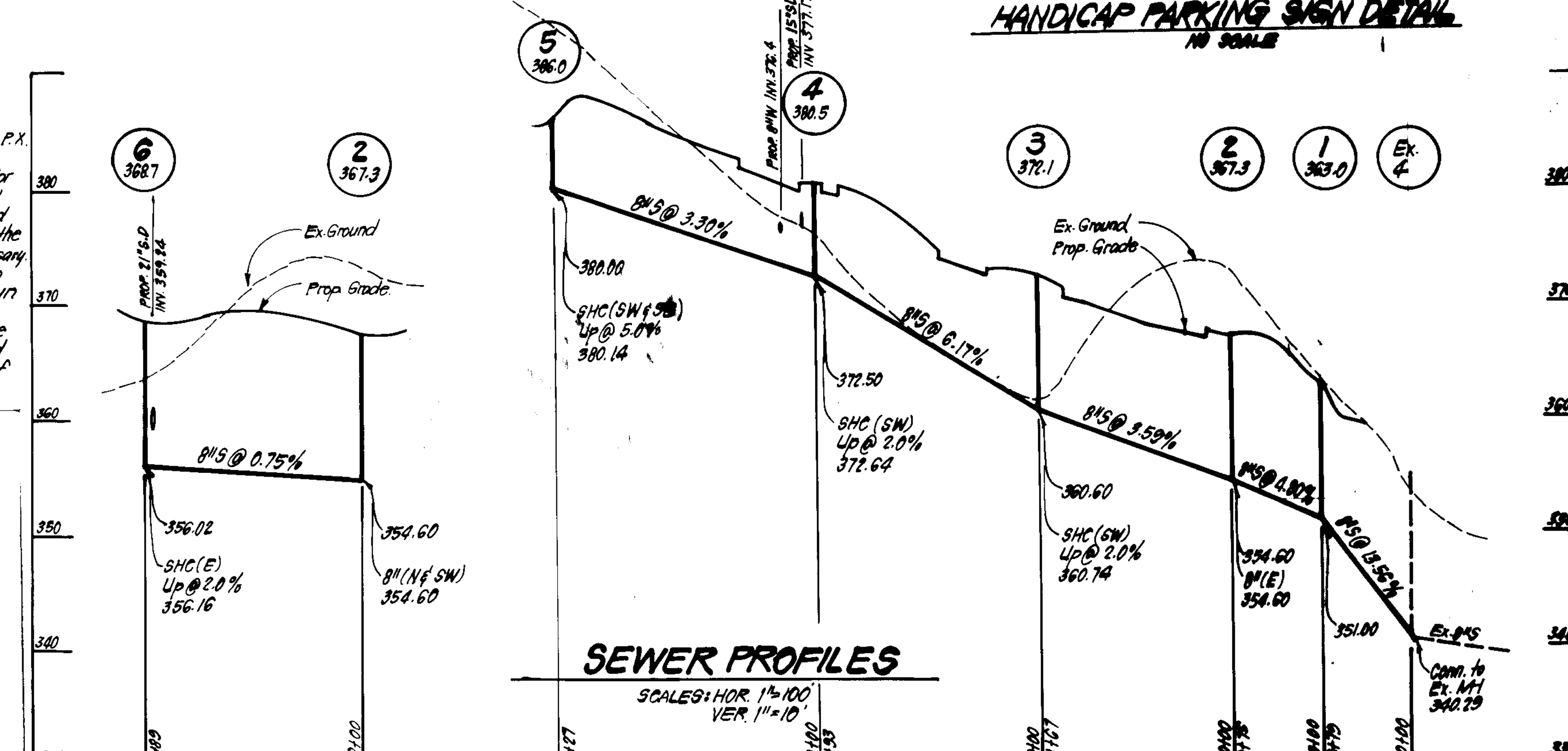
TYPICAL PARKING
NO SCALE

* Two 8' Handicap Spaces may share One 5' Aisle.

Bituminous Conc Surface	1"
Bituminous Conc. Base	2"
Prime 5" Crusher Run Base Course or 4" Dense Graded Stabilized Aggregate Base Course	5" or 4"

ALTERNATE PAVING SECTION FOR PAVING SECTION (P-1)
NO SCALE

WATER & SEWER NOTES
1. All sewer mains shall be P.V.C., C.S.P.X., V.C.P.X. or A.C.P. Class 2400.
2. All construction methods and materials for on-site private water & sewer systems shall follow the current edition of the Howard County Plumbing Code, supplemented by the Ho. Co. Std. Details and Specs. where necessary.
3. Sewer House Connections shall be built to within 5' of buildings, at a slope shown in plan.
4. Areas where Water House Connections are to be built shall be at final grade and conn. shall be laid with a minimum of 3.5' of cover.



SEWER PROFILES
SCALES: HOR. 1" = 100'
VER. 1" = 10'

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

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

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
PLANNING DIRECTOR — DATE
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 9-25-85

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 9-20-85
CHIEF BUREAU OF ENGINEERING — DATE 9-20-85

Reviewed for Howard S.C.D.
Name
and meets Technical Requirements
Signature 9.9.85 Date
U.S. Soil Conservation Service

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

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.

R. Michaux — Signature of Developer/Builder — 8-28-85 Date

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.

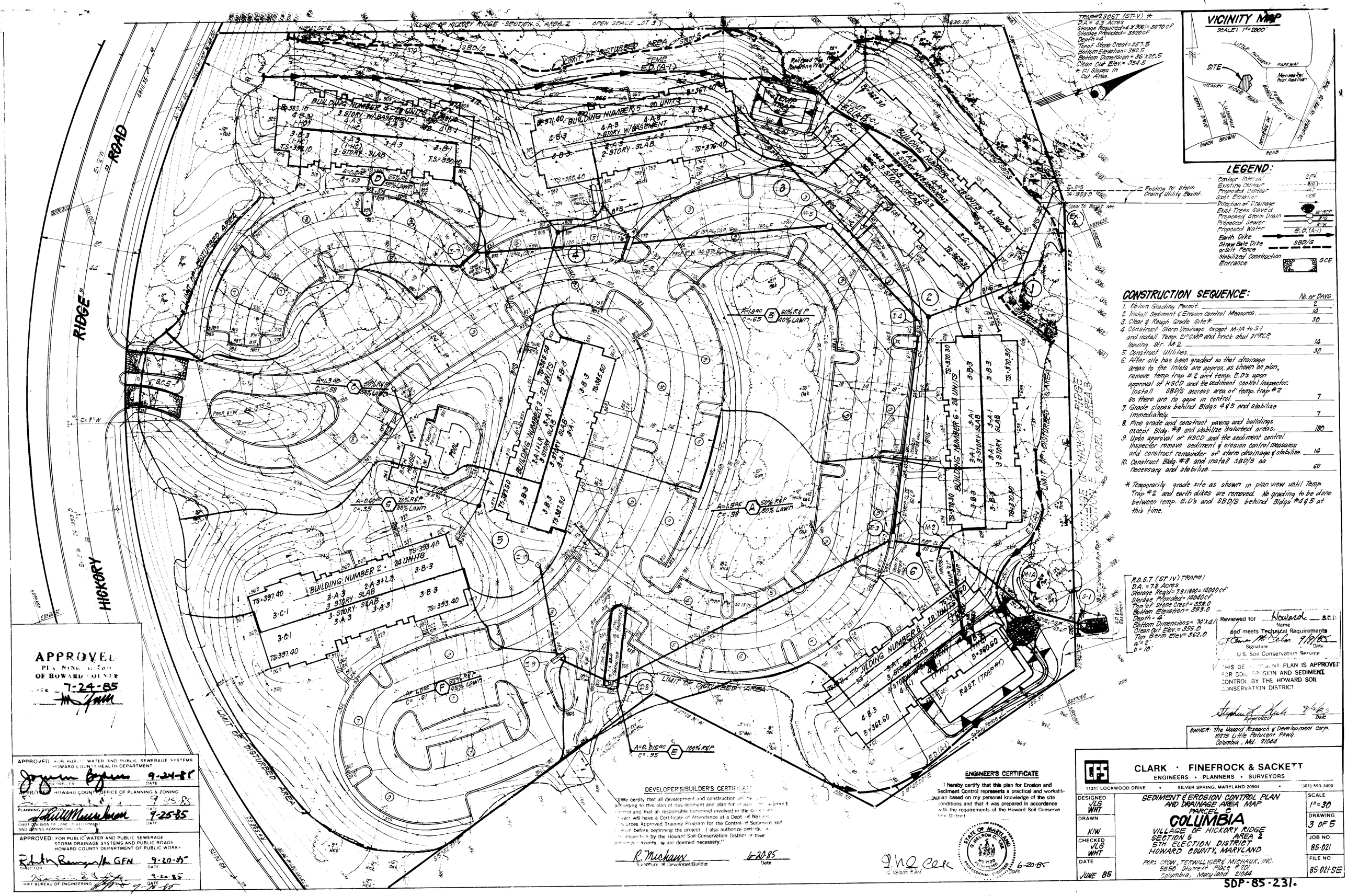
G. Nelson Clark — 8-28-85 Date

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

CFS — CLARK · FINEFROCK & SACKETT
ENGINEERS • PLANNERS • SURVEYORS
11315 LOCKWOOD DRIVE • SILVER SPRING, MARYLAND 20904 • (301) 681-3400

DESIGNED CKG JLS	SITE DEVELOPMENT PLAN PARCEL C	SCALE As Shown
DRAWN KIW	COLUMBIA VILLAGE OF HICKORY RIDGE SECTION 5 AREA 2 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	DRAWING 2 OF 5
CHECKED CKG JLS		JOB NO. 85-021
DATE JUNE 85	FOR: CROW, TERWILLIGER & MICHAUX, INC 5550 Sterrett Place #201 Columbia, MD. 21044	FILE NO. 85-021-X

SDP-85-231c



TRAP #2 SDST (ST-V) *
D.A. = 4.3 Acres
Storage Required = 4.3*900 = 3870 cf
Storage Provided = 3920 cf
Depth = 4'
Top of Stone Crest = 357.5
Bottom Elevation = 352.5
Bottom Dimension = 36' x 20.5'
Clean Out Elev. = 354.5
* 1:1 Slopes in Out Area.

R.D.S.T. (ST IV) TRAP #1
D.A. = 7.8 Acres
Storage Req'd = 7.8 x 1800 = 14040 cf
Storage Provided = 14040 cf
Top of Stone Crest = 358.0
Bottom Elevation = 353.0
Depth = 4'
Bottom Dimensions = 70' x 4'
Clean Out Elev. = 355.0
Top Berm Elev. = 362.0
a = 2'
b = 16'

VICINITY MAP
SCALE: 1" = 2000'

LEGEND:

Contour Interval	2 Ft.
Existing Contour	(810)
Proposed Contour	812
Spot Elevation	808
Direction of Drainage	
Exist. Trees Saved	SCE
Proposed Storm Drain	8" RCP
Proposed Sewer	8" S
Proposed Water	8" W
Earth Dike	E.D. (A-1)
Straw Bale Dike or Silt Fence	SBD/S
Stabilized Construction Entrance	SCE

CONSTRUCTION SEQUENCE:

	No. of DAYS
1. Obtain Grading Permit.	2
2. Install Sediment & Erosion Control Measures.	14
3. Clear & Rough Grade Site*	30
4. Construct Storm Drainage except M-1A to S-1 and install Temp. 21" CMP and brick shut 21" RCP, 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 Bldgs 4 & 5 and stabilize immediately.	7
8. Fine grade and construct paving and buildings except Bldg. #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 Bldg. #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 Bldgs' #4 & 5 at this time.

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

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
DIRECTOR — DATE 9-24-85

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
PLANNING DIRECTOR — DATE 9-25-85
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 9-25-85

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 9-20-85
CHIEF BUREAU OF ENGINEERING — DATE 9-20-85

Reviewed for Howard S.C.D.
Name
and meets Technical Requirements
Signature — Date 9/12/85
U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
Approved — Date 9/16/85

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

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 their authorized agents as are deemed necessary."

R. Michaux — Signature of Developer/Builder — 6-20-85 Date

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.

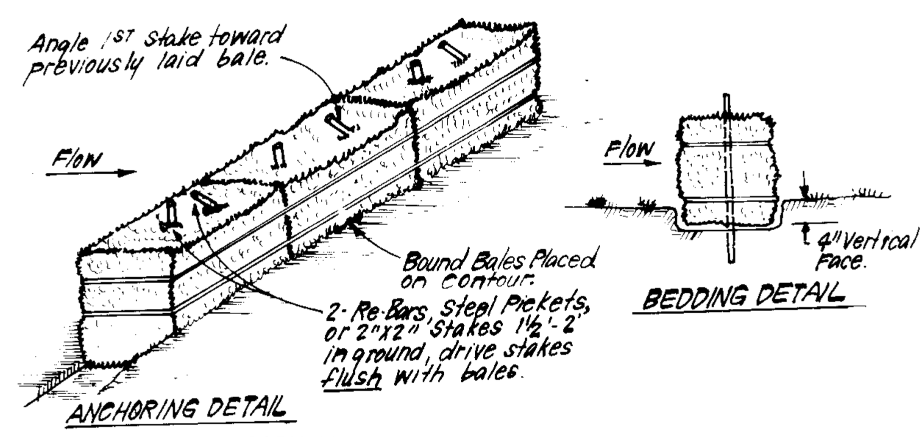
STATE OF MARYLAND — G. NELSON CLARK — NO. 7139 — REGISTERED PROFESSIONAL ENGINEER

G. Nelson Clark — 6-20-85 Date

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

DESIGNED VLG WHT	SEDIMENT & EROSION CONTROL PLAN AND DRAINAGE AREA MAP PARCEL C
DRAWN KIW	COLUMBIA
CHECKED VLG WHT	VILLAGE OF HICKORY RIDGE SECTION 5 AREA 2 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DATE JUNE 85	FOR: CROW, TERWILLIGER, MICHAUX, INC. 5550 Sturrett Place #201 Columbia, Maryland 21044
SCALE	1" = 30'
DRAWING	3 OF 5
JOB NO.	85-021
FILE NO.	85-021-SE

SDP-85-231

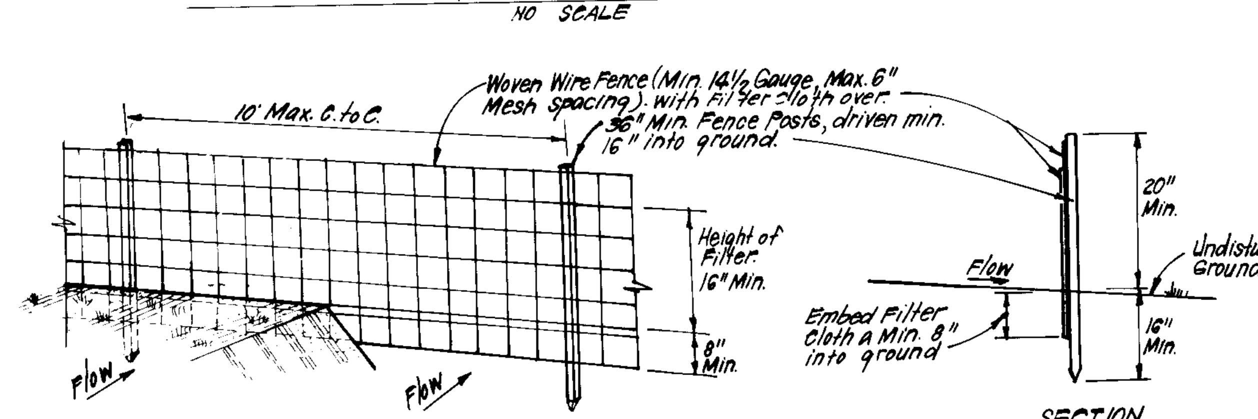


CONSTRUCTION SPECIFICATIONS:

1. 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.
2. Each bale shall be embedded in the soil a min. of 4" and placed so the bindings are horizontal.
3. Bales shall be securely anchored in place by either 2 stakes or re-bars driven thru the bale. The 1st 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.
4. Inspection shall be frequent and repair replacement shall be made promptly as needed.
5. 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



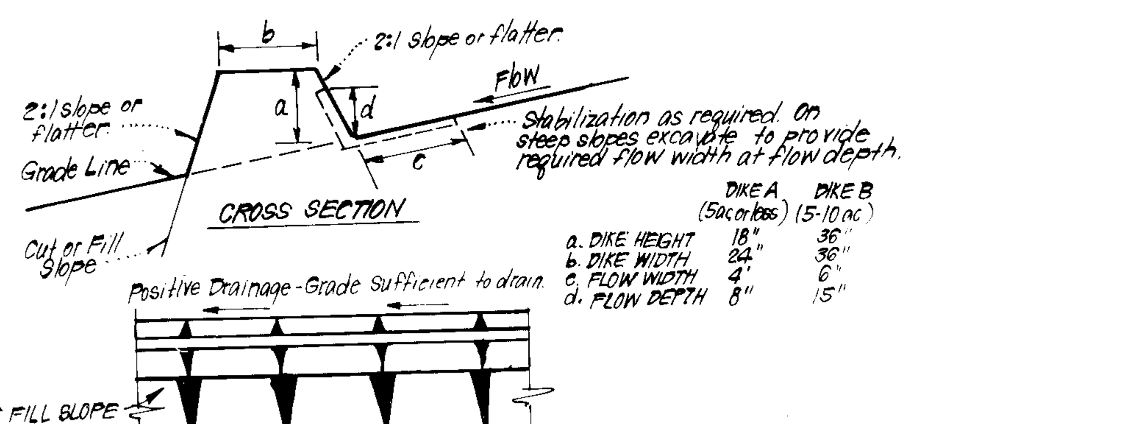
CONSTRUCTION SPECIFICATIONS:

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

POSTS: Steel either T or U Type or 2" Hardwood.
FENCE: Woven Wire, 14½ Gage 6" Max. Mesh Opening.
FILTER CLOTH: Filter X, Mirafi 100X, Stablinka, T140N or Approv. equal.
PREFABRICATED UNIT: Geofab, Envirofence, or Approv. equal.

SILT FENCE DETAIL (S)

NO SCALE



	DIKE A (5ac or less)	DIKE B (5-10 ac)
a. DIKE HEIGHT	18"	36"
b. DIKE WIDTH	24"	36"
c. FLOW WIDTH	4'	6'
d. FLOW DEPTH	8"	15"

CONSTRUCTION SPECIFICATIONS:

1. All dikes shall be compacted by earth-moving equipment.
2. All dikes shall have positive drainage to an outlet.
3. Top width may be wider and side slopes may be flatter if desired, to facilitate crossing by construction traffic.
4. Field location should be adjusted as needed to utilize a stabilized safe outlet.
5. 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.
6. 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

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1.	0.5-3.0%	Seed & Straw Mulch	Seed or Straw Mulch
2.	3.1-5.0%	Seed & Straw Mulch	Seed w/Jute, or Excelsior; Sod; 2" Stone
3	5.1-8.0%	Seed w/Jute, or Sod; 2" Stone	Lined Rip Rap 4"-8" Stone
4	8.1-20.0%	Lined Rip Rap 4-8" Stone	Engineering Design

A. Stone to be 2" Stone, or recycled concrete equivilent, 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. Approved equivalents can be substituted for any of the above materials.

7. Periodic Inspection and Required Maintenance must be provided after each rain.

EARTH DIKE DETAIL (E.D.)

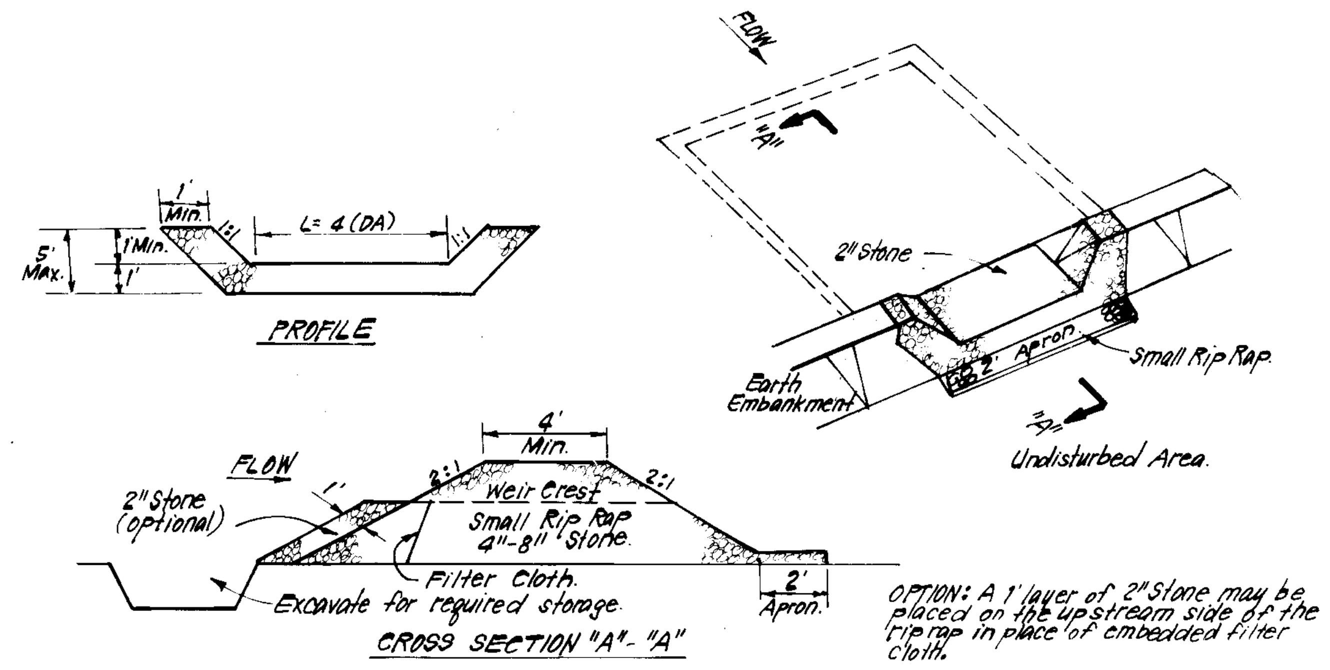
NO SCALE

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

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
[signature] 9-25-85
PLANNING DIRECTOR DATE
[signature] 9-25-85
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[signature] / GFN 9-20-85
DIRECTOR DATE
[signature] 9-20-85
CHIEF BUREAU OF ENGINEERING DATE

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



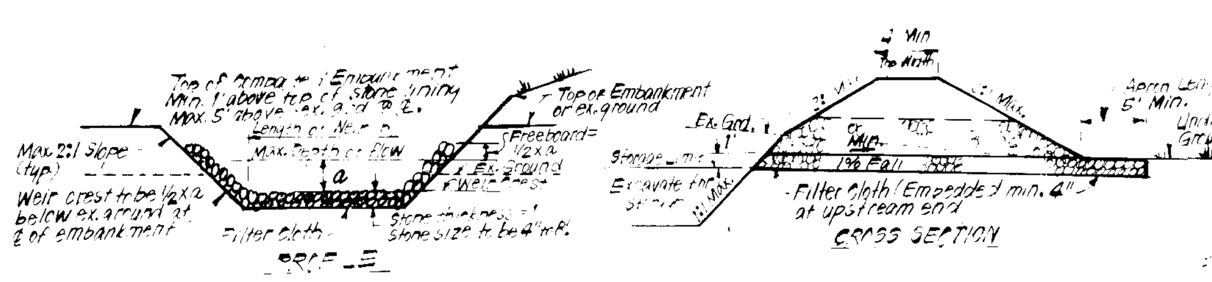
OPTION: A 1' layer of 2" Stone may be placed on the upstream side of the rip rap in place of embedded filter cloth.

CONSTRUCTION SPECIFICATIONS:

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
2. 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.
3. All cut and fill slopes shall be 2:1 or flatter.
4. The stone used in the outlet shall be small rip-rap 4"-8" 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.
5. Sediment shall be removed and trap restored to its orginal dimensions when the sediment has accumulated to ½ the design depth of the trap.
6. The structure shall be inspected after each rain and repairs made as needed.
7. Construction operations shall be carried out in such a manner than erosion and water pollution is minimized.
8. 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

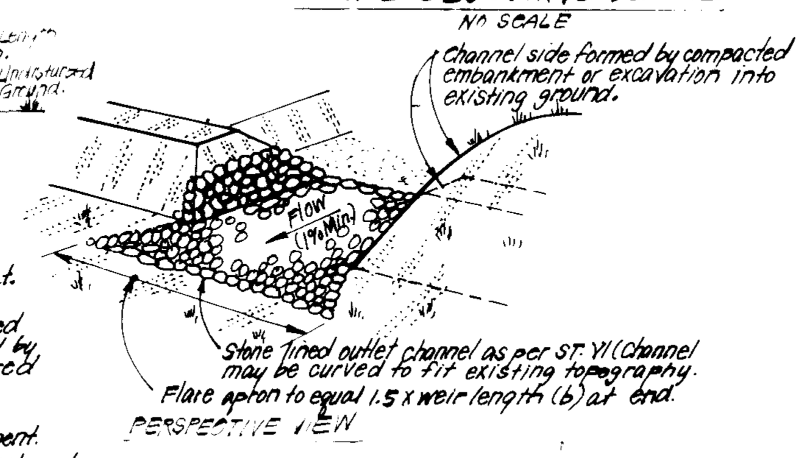


CONSTRUCTION SPECIFICATIONS:

1. The area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
2. 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 equip. while it is being constructed. Max. height of embankment shall be 5' measured at ℄ of embankment.
3. All fill slopes shall be 2:1 or flatter; cut slopes 1:1 or flatter.
4. Elevation of the top of any dike directing water into trap must equal or exceed height of embankment.
5. 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.
6. 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.
7. 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.
8. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to ½ 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.
9. The structure shall be inspected after each rain and repaired as needed.
10. Construction operations shall be carried out in such a manner that erosion and water pollution are minimized.
11. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.
12. Drainage area for this practice is limited to 15 acres or less.

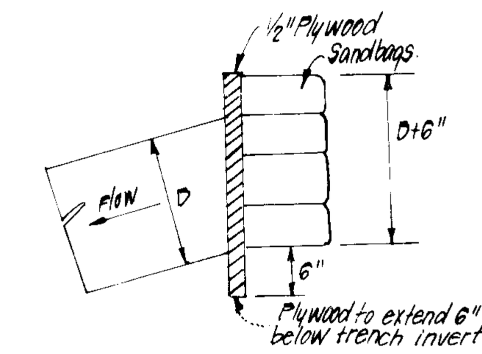
RIPRAP OUTLET SEDIMENT TRAP - ST-II.

NO SCALE



SEDIMENT CONTROL NOTES

1) 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)
2) 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.
3) 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.
4) All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chaper 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5) 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. 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.
6) 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
7) Site Analysis:
   - Total Area of Site 10.000 Acres
   - Area Disturbed 8.200 Acres
   - Area to be roofed or paved 4.240 Acres
   - Area to be vegetatively stabilized 4.660 Acres
   - Total Cut 42180 Cu. yds
   - Total Fill 25220 Cu. yds
   - Offsite waste/borrow area location N/A
8) Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9) Additional sediment control must be provided, if deemed necessary by the Howard County DPW sediment control inspector.
10) 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.
11) If houses are to be constructed on an "As-Sold" basis, at random, Single Lot Sediment Control as shown below shall be implemented.
12) All pipes to be blocked at the end of each day (see detail below).
13) The total amount of straw bale dikes/silt fence equals 810 L.F.



PIPE BLOCKING DETAIL

NO SCALE

Reviewed for Howard S.C.D.
Name
and meets Technical Requirements
[signature] 9/9/85
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] 9/9/85
Approved Date

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

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] 6-20-85
G. Nelson Clark Date

NO. 7138 REGISTERED PROFESSIONAL ENGINEER

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

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

1) 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 (9 lbs/1000 sq ft).
2) 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 thre 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 1½ 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 areas likely to be redisturbed where a short-term vegetative cover is needed.

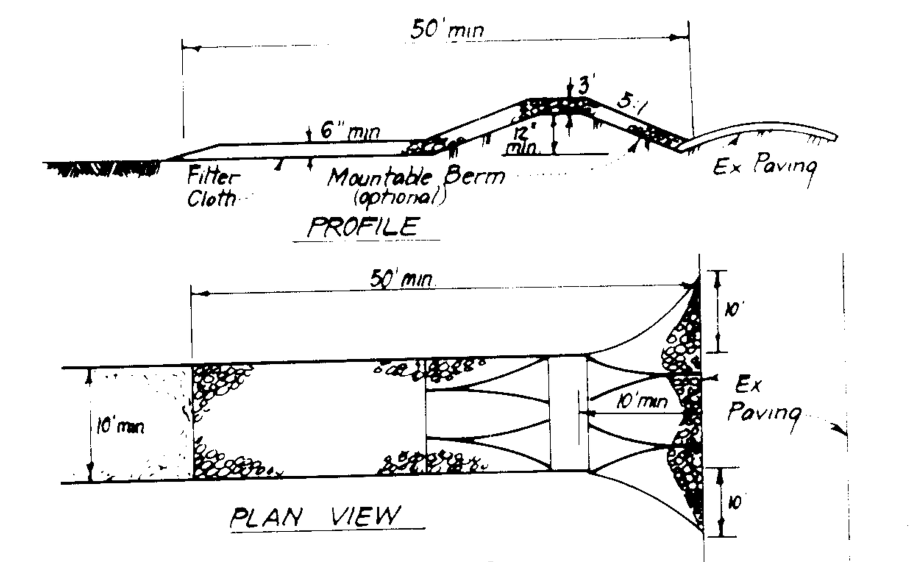
Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.

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 2½ 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 1½ 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:

1. Stone size - Use 2" stone, or reclaimed or recycled concrete equivalent.
2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply.
3. Thickness - Not less than six (6) inches.
4. Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
5. 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.
6. 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.
7. 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 cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
8. 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.
9. Periodic inspection and needed maintenance shall be provided after each rain.

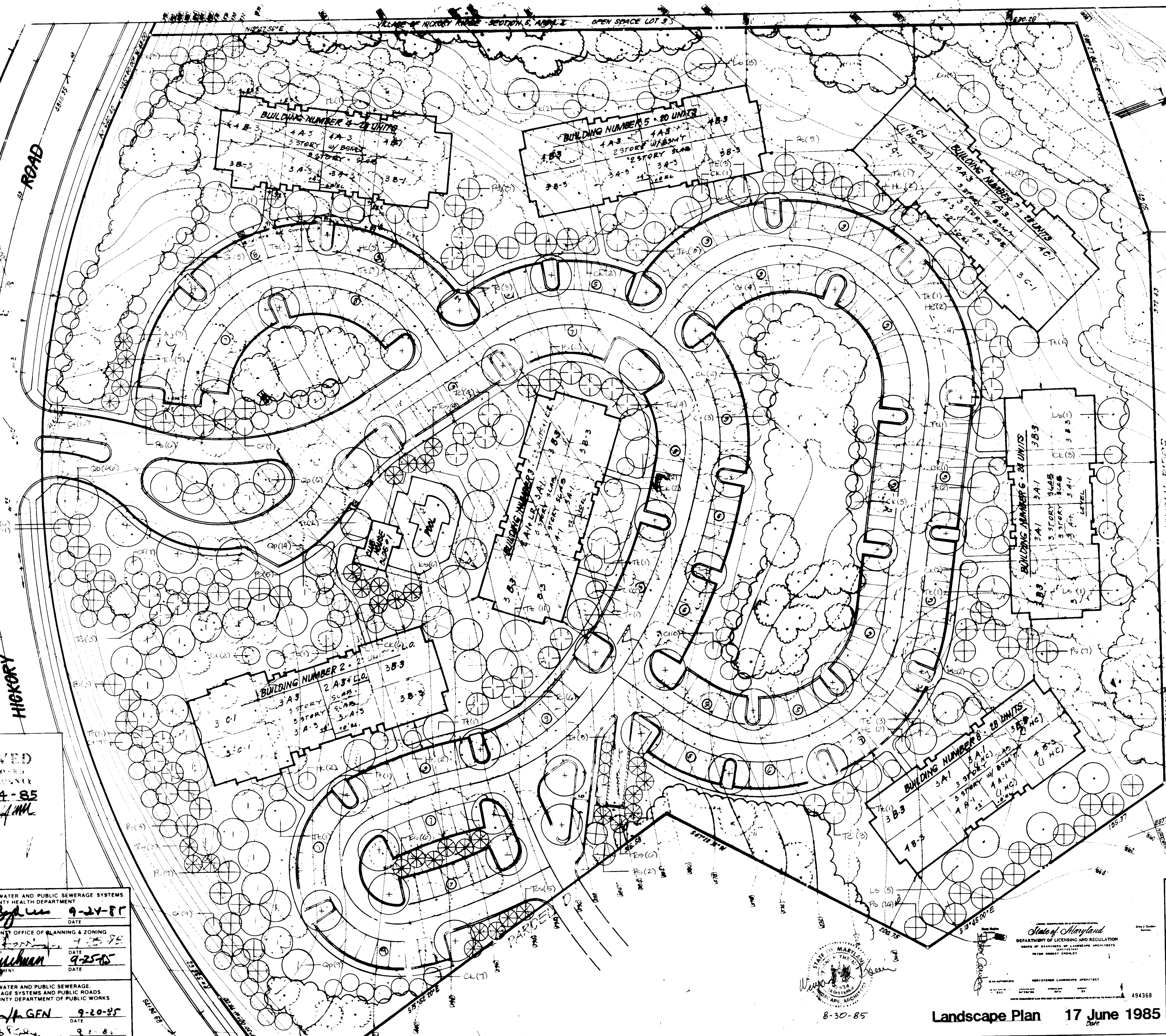
STABILIZED CONSTRUCTION ENTRANCE (SCE)

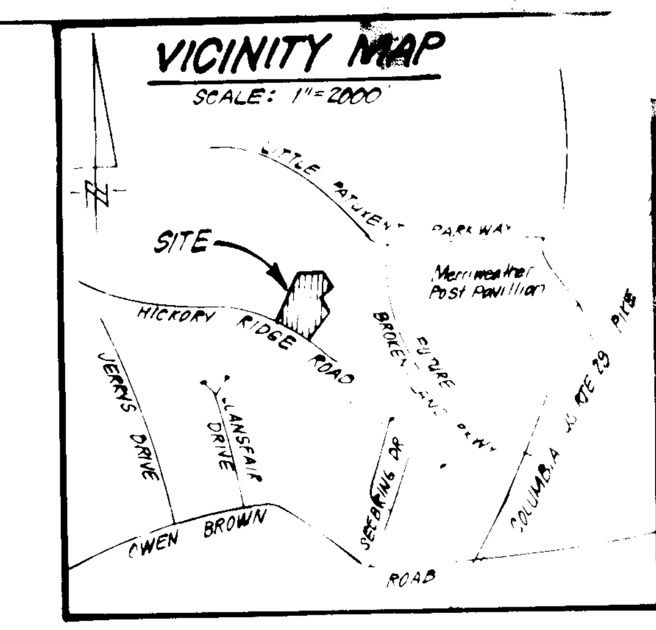
NO SCALE

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

DESIGNED JLS	SEDIMENT & EROSION CONTROL PLAN PARCEL C	SCALE 1" = 30'
DRAWN KIW	COLUMBIA VILLAGE OF HICKORY RIDGE SECTION 5 AREA 2	DRAWING 4 OF 5
CHECKED JLS	5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO. 85-021
DATE JUNE 85	FOR: CROW, TERWILLIGER & MICHAUX, INC. 5550 Sterrett Place #201 Columbia, Maryland 21044	FILE NO. 85-021 SE

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

Key	Quantity	Botanical Name	Common Name	HT.	CAL./SPRD.	Remarks
SHADE TREES						
Ls	18	Liquidambar styraciflua	Sweet Gum	13-15'	2½-3"	
Tt	39	Tilia tomentosa	Silver Linden	14-16'	3-3½"	Alt: Tilia cordata 'Greenspi[re]'
Qb	46	Quercus borealis	Northern Red Oak	16-18'	4-4½"	
Qp	29	Quercus palustris	Pin Oak	14-16'	3-3½"	
EVERGREEN TREES						
If	5	Ilex 'Fosteri'	Fosters Holly	5-6'		
Ps	71	Pinus strobus	White Pine	10-12'		
Tc	35	Tsuga canadensis	Canadian Hemlock	8-10'		
Tcs	35	Tsuga canadensis	Canadian Hemlock	6-8'		
ORNAMENTAL TREES						
Ag	3	Aesculus glabra	Ohio Buckeye	6-8'	1½-2"	
Ck	40	Cornus kousa	Kousa Dogwood	8-10'	2-2½"	Full; Dense
Cf	85	Cornus florida	Flowering Dogwood	8-10'	2-2½"	Full; Dense
Hc	19	Prunus subhirtella	Higan Cherry	8-10'	2-2½"	Full; Dense

Land Design

Landscape Architecture Land Planning

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

#84239

COMMONWEALTH OF VIRGINIA — PETER R. CROWLEY — CERTIFIED LANDSCAPE ARCHITECT

STATE OF MARYLAND — STEPHEN MARK JONES — NO. 6 — REGISTERED LANDSCAPE ARCHITECT

SUBDIVISION NAME COLUMBIA Village of Hickory Ridge	SECT. AREA 5 2	LOT PARCEL PARCEL C
PLAT # or L/F	BLOCK #	ZONE NT APT	TAX ZONE MAP 36	ELEC. DIST. 5TH	CENSUS
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
COUNTY HEALTH OFFICER — DATE 9-24-85

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING
PLANNING DIRECTOR — DATE 9-25-85
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 9-25-85

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 9-20-85
CHIEF BUREAU OF ENGINEERING — DATE

State of Maryland
DEPARTMENT OF LICENSING AND REGULATION
BOARD OF EXAMINERS OF LANDSCAPE ARCHITECTS
CERTIFIES THAT
PETER ROBERT CROWLEY
IS AN AUTHORIZED REGISTERED LANDSCAPE ARCHITECT
494368

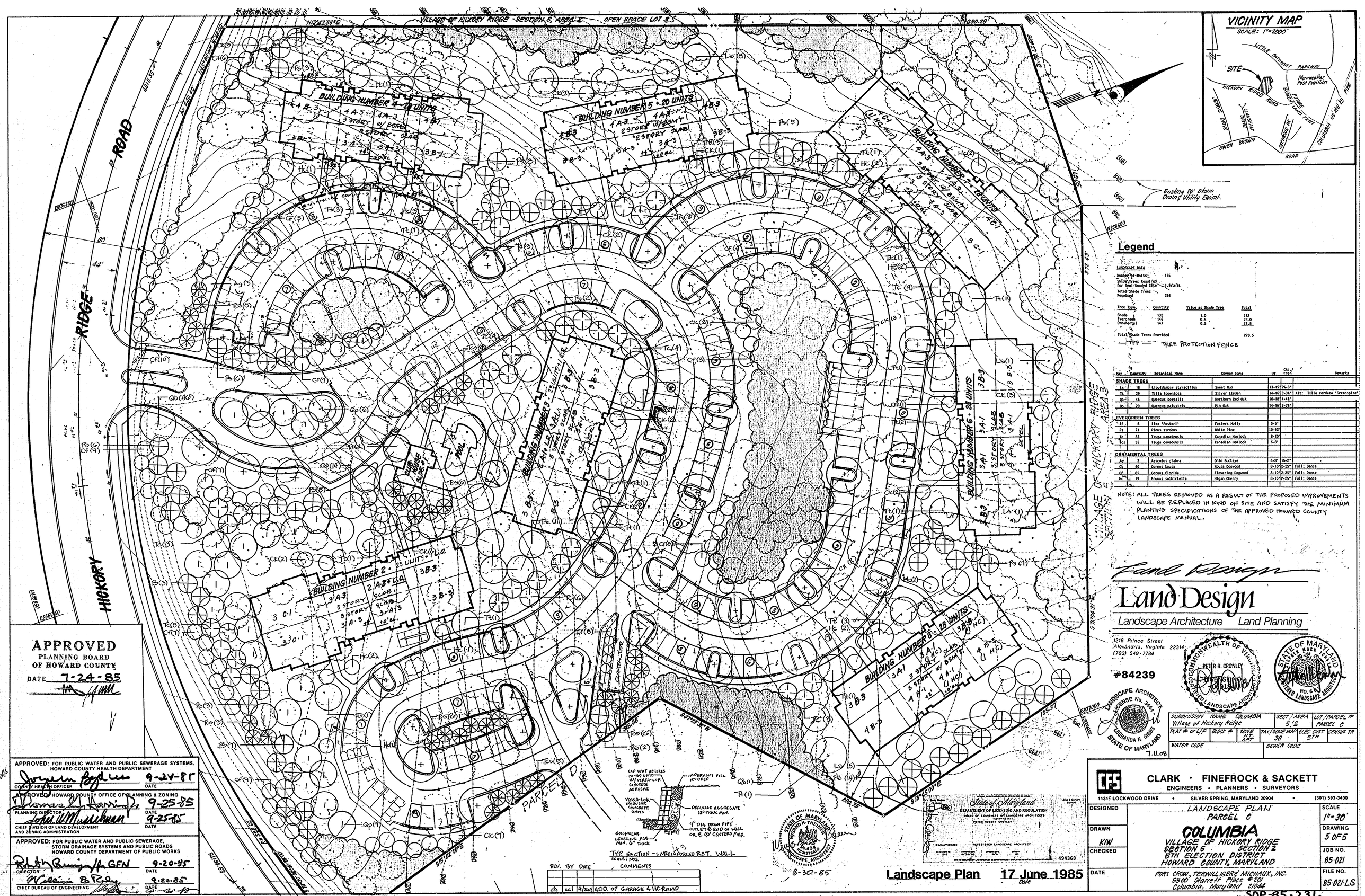
STATE OF MARYLAND — REGISTERED LANDSCAPE ARCHITECT — 8-30-85

Landscape Plan **17 June 1985**
Date

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

DESIGNED	LANDSCAPE PLAN PARCEL C **COLUMBIA** VILLAGE OF HICKORY RIDGE SECTION 5 SECTION 2 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND FOR: CROW, TERWILLIGER & MICHAUX, INC. 5500 Starrett Place #201 Columbia, Maryland 21044	SCALE 1"=30'
DRAWN KIW		DRAWING 5 OF 5
CHECKED		JOB NO 85 021
DATE		FILE NO 85 021-L

SDP-85-231c



Legend

LANDSCAPE DATA

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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	197	0.5	73.5

Total Shade Trees Provided: 278.5

TPF — TREE PROTECTION FENCE

Key	Quantity	Botanical Name	Common Name	HT.	CAL./ SPRD.	Remarks
SHADE TREES						
Ls	18	Liquidambar styraciflua	Sweet Gum	13-15'	2½-3"	
Tt	39	Tilia tomentosa	Silver Linden	14-16'	3-3½"	Alt: Tilia cordata 'Greenspire'
Qn	46	Quercus borealis	Northern Red Oak	14-16'	4-4½"	
Qp	29	Quercus palustris	Pin Oak	14-16'	3-3½"	
EVERGREEN TREES						
If	5	Ilex 'Fosteri'	Fosters Holly	5-6'		
Ps	71	Pinus strobus	White Pine	10-12'		
Tc	35	Tsuga canadensis	Canadian Hemlock	8-10'		
Tcs	35	Tsuga canadensis	Canadian Hemlock	6-8'		
ORNAMENTAL TREES						
Aa	3	Aesculus alabra	Ohio Buckeye	6-8'	1½-2"	
Ck	40	Cornus kousa	Kousa Dogwood	8-10'	2-2½"	Full; Dense
Cf	85	Cornus florida	Flowering Dogwood	8-10'	2-2½"	Full; Dense
Mc	19	Prunus subhirtella	Higan Cherry	8-10'	2-2½"	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.

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 — DATE 9-24-85

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
PLANNING DIRECTOR — DATE 9-25-85
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 9-25-85

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 9-20-85
CHIEF BUREAU OF ENGINEERING — DATE 9-20-85

REV.	BY	DATE	COMMENTS
1	ccl	4/2008	ADD. OF GARAGE & HC RAMP

Land Design
Landscape Architecture Land Planning

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

#84239

COMMONWEALTH OF VIRGINIA — PETER R. CROWLEY — LICENSED LANDSCAPE ARCHITECT

STATE OF MARYLAND — REGISTERED LANDSCAPE ARCHITECT — NO. 434

LANDSCAPE ARCHITECT — LICENSE NO. 3441 — LESHANDA N. GIBBS — STATE OF MARYLAND — 7.11.08

STATE OF MARYLAND — WILLIAM H. THERRIEN — NO. 434 — REGISTERED LANDSCAPE ARCHITECT — 8-30-85

State of Maryland — DEPARTMENT OF LICENSING AND REGULATION — BOARD OF LANDSCAPE ARCHITECTS — PETER ROBERT CROWLEY — REGISTERED LANDSCAPE ARCHITECT — 494368

SUBDIVISION NAME		SECT./AREA	LOT/PARCEL #
Village of Hickory Ridge		5,2	PARCEL C
PLAT # or L/F	BLOCK #	ZONE APT	TAX/ZONE MAP 36	ELEC. DIST 5TH	CENSUS TR
WATER CODE		SEWER CODE	

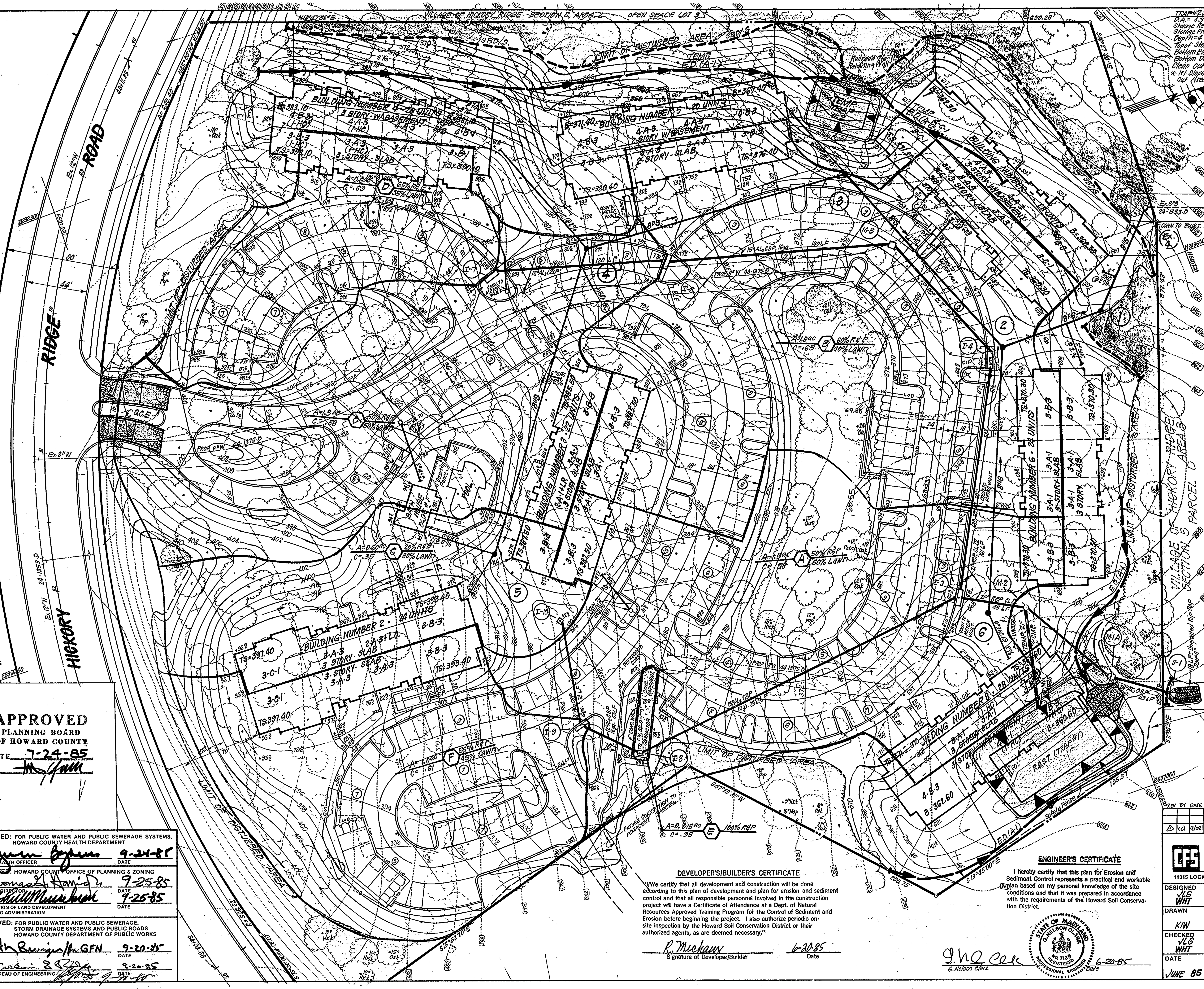
CLARK · FINEFROCK & SACKETT
ENGINEERS • PLANNERS • SURVEYORS
11315 LOCKWOOD DRIVE • SILVER SPRING, MARYLAND 20904 • (301) 593-3400

DESIGNED	LANDSCAPE PLAN PARCEL C
DRAWN KW	COLUMBIA VILLAGE OF HICKORY RIDGE SECTION 6 SECTION 2 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
CHECKED	FOR: CROW, TERWILLIGERE MICHAUX, INC. 5550 Sterrett Place #201 Columbia, Maryland 21044
DATE	

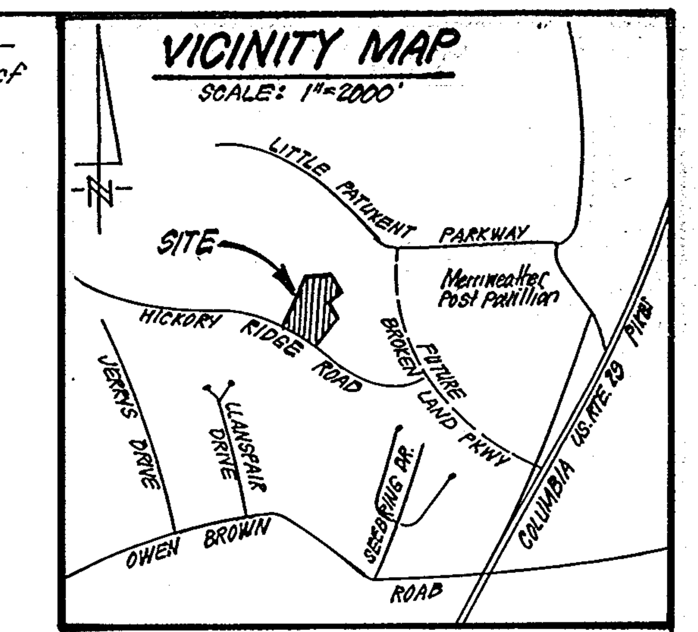
SCALE 1"=30'
DRAWING 5 OF 5
JOB NO. 85-021
FILE NO. 85-021-LS

Landscape Plan 17 June 1985
Date

SDP-85-231



TRAP #2 SOST (ST-V) *
D.A. = 4.3 Acres
Storage Required = 4.3(900) = 3870 cf
Storage Provided = 3920 cf.
Depth = 4'
Top of Stone Crest = 357.5
Bottom Elevation = 352.5
Bottom Dimension = 36' x 20.5
Clean Out Elev. = 354.5
* 1:1 Slopes In Cut Area.



LEGEND:

Contour Interval	2 Ft.
Existing Contour	310
Proposed Contour	310
Spot Elevation	+105
Direction of Drainage	→
Exist. Trees Saved	
Proposed Storm Drain	15" RCP
Proposed Sewer.	8" S
Proposed Water.	8" W
Earth Dike	E.D. (A-1)
Straw Bale Dike or Silt Fence	SBD/S
Stabilized Construction Entrance	SCE.
Curb Inlet Protection	CIP

STATE OF MARYLAND — JOHN M. HOUSEHOLDER — No. 29907 — PROFESSIONAL ENGINEER
2-11-08 FOR REVISION #1 ONLY

CONSTRUCTION SEQUENCE:

	No. of DAYS
1. Obtain Grading Permit.	2
2. Install Sediment & Erosion Control Measures.	14
3. Clear & Rough Grade Site*	30
4. Construct Storm Drainage except M-1A to S-1 and install Temp. 21" CMP and brick shut 21" RCP, 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 accross area of temp. trap #2 so there are no gaps in control.	7
7. Grade slopes behind Bldgs 4 & 5 and stabilize immediately.	7
8. Fine grade and construct paving and buildings except Bldg. #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 Bldg. #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 Bldgs #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 Req'd = 7.8 x 1800 = 14040 cf
Storage Provided = 14040 cf
Top of Stone Crest = 358.0
Bottom Elevation = 353.0
Depth = 4'
Bottom Dimensions = 74' x 41'
Clean Out Elev. = 355.0
Top Berm Elev = 362.0
a = 2'
b = 10'

Reviewed for Howard S.C.D.
Name
and meets Technical Requirements
[signature] 9/9/85
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] 9/9/85
Approved Date

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 — DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
[signature] 9-25-85
PLANNING DIRECTOR — DATE
[signature] 9-25-85
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Robert [signature] /for GFN 9-20-85
DIRECTOR — DATE
[signature] 9-20-85
CHIEF BUREAU OF ENGINEERING — DATE

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."

R. Michaux — 6-20-85
Signature of Developer/Builder — Date

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.

G. N. Clark — 6-20-85
G. Nelson Clark — Date

STATE OF MARYLAND — G. NELSON CLARK — NO. 7139 — REGISTERED PROFESSIONAL ENGINEER

REV	BY	DATE	COMMENTS
1	ccl	4/08	ADD. OF GARAGE & HC RAMP

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

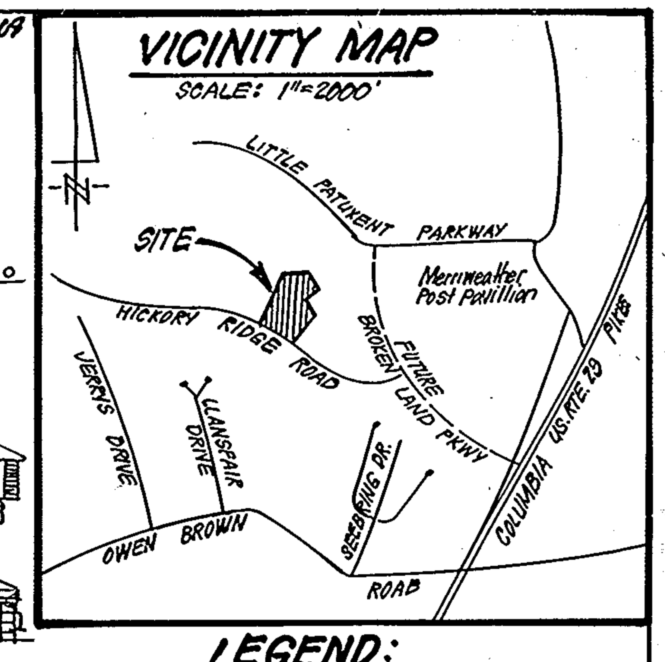
CLARK · FINEFROCK & SACKETT
ENGINEERS · PLANNERS · SURVEYORS
11315 LOCKWOOD DRIVE • SILVER SPRING, MARYLAND 20904 • (301) 593-3400

DESIGNED JLS WHT	SEDIMENT & EROSION CONTROL PLAN AND DRAINAGE AREA MAP PARCEL C **COLUMBIA** VILLAGE OF HICKORY RIDGE SECTION 5 AREA 2 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE 1" = 30'
DRAWN KIW		DRAWING 3 OF 5
CHECKED JLS WHT		JOB NO. 85-021
DATE JUNE 85	FOR: CROW, TERWILLIGER & MICHAUX, INC. 5550 Sterrett Place #201 Columbia, Maryland 21044	FILE NO. 85-021-SE

SDP-85-231.

LIMITS OF DISTURBANCE TABLE	
LOD 1	1894 SF
LOD 2	350 SF
LOD 3	1566 SF
TOTAL	3810 SF

VICINITY MAP



LEGEND:

Contour Interval	2 Ft.
Existing Contour	310
Proposed Contour	310
Spot Elevation	+10.5
Direction of Drainage	→
Exist. Trees Saved	
Proposed Storm Drain	15"RCP
Proposed Sewer.	8"S
Proposed Water.	8"W
HANDI CAP ROUTE	→ → →

GENERAL NOTES

1. All materials and construction to be in accordance with Howard County Road Construction Code and Specifications.
2. This plan is covered by Final Development Plan Phase 190.
3. Any damage to county owned rights-of-way to be corrected at the developer's expense.
4. Installation of traffic Control Devices shall be in accordance with the latest edition of the "Manual of Uniform Traffic Control."
5. Topography was compiled from actual field survey.
6. The area shown is located on Tax Map 36, Parcel 81.
7. All driveways and parking to be privately owned and maintained.
8. All coordinates are based on Howard County Geodetic Control Survey traverse which is based on the Maryland State Plane Coordinate System.
9. Class "C" Trench bedding shall be used under all storm drainage, unless shown otherwise.
10. 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.
11. The contractor or developer shall contact the Construction Inspection, Survey Division 24 hrs. in advance of work. 992-2417 or 792-7272.
12. 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.
13. The developer agrees to work with the Dept. of Licenses & Inspection to resolve any problems caused by roof water discharge.
14. Handicap Parking Details shall be in accordance with the "Maryland Building Code for the Handicapped", Sect. 5.01-7.05 and details sht. 2.
15. All setbacks requirements and criteria as shown in F.D.P. 190.
16. Storm Water Management Provided in Central Facility in Village of Hickory Ridge Section 5 Area 1, F-85-131
17. PARKING GARAGES CAN ONLY BE USED FOR PARKING VEHICLES. THEY CAN NOT BE USED FOR STORAGE TO THE EXTENT THAT THE BAYS ARE UNUSABLE FOR PARKING.

SITE ANALYSIS

1. ZONING: NewTown Apartments (F.D.P. Phase 190)
2. AREA OF SITE: 10.00 Acres.
3. No. OF RESIDENTIAL UNITS PERMITTED: 176 ; PROPOSED: 174.
4. PARKING SPACES REQUIRED 261 ; PROVIDED: 258 STD. 9 Garages 267 TOTAL.
5. BUILDING COVERAGE: 1.56 Acres ± (15.6%)

BLDG. #	BLDG. TYPE	UNIT TYPES A-1	A-3	B-1	B-3	C-1	TOTAL	STREET ADDRESS
1	BATH HOUSE							10300 Hickory Ridge Rd.
2	3-STORY		11+LO.*		6	6	24	10310 10312 " " "
3	3-STORY	11+LR.*			12		24	10304 10306 " " "
4	3-STORY W/BSMT.		14	14			28	10344 10346 " " "
5	2 STORY W/BSMT.		10		10		20	10338 10340 " " "
6	3-STORY	12			12		24	10326 10328 " " "
7	3 STORY W/BSMT.		14			14	28	10332 10334 " " "
8	3-STORY W/BSMT.	14			14		28	10320 10322 " " "
TOTAL		38	50	14	54	20	176*	

* L.R. = Laundry Room (1 Provided)
L.O. = Leasing Office (1 Provided)

UNIT SQUARE FOOTAGE ANALYSIS	
UNIT TYPE	AREA (SF)
A-1 (1Br.)	635 SF
A-3 (1Br.)	780 SF
B-1 (1-Br.)	855 SF
B-3 (2Br.)	1005 SF
C-1 (3Br.)	1351 SF

REV.	BY	DATE	COMMENTS
△	CCI	4/88	ADD. OF GARAGE & HC RAMP

OWNER: THE HOWARD RESEARCH & DEVELOPMENT CORPORATION
10275 Little Patuxent Pkwy.
Columbia, Md. 21044

SUBDIVISION NAME			COLUMBIA Village of Hickory Ridge	SECT./AREA 5/2	LOT/PARCEL # PARCEL C
PLAT # or L/F 6324+6325	BLOCK # 7	ZONE N.T. APT	TAX/ZONE MAP 36	ELEC. DIST. 5TH	CENSUS TR. 6053.02
WATER CODE			SEWER CODE		

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DESIGNED WHT	SITE DEVELOPMENT PLAN PARCEL C	SCALE 1"=30'
DRAWN KIW	**COLUMBIA** VILLAGE OF HICKORY RIDGE SECTION 5 AREA 2 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	DRAWING 1 OF 5
CHECKED WHT		JOB NO. 85-021
DATE JUNE 85	FOR: CROW, TERWILLIGER & MICHAUX, INC. 5550 Starrett Place #201 Columbia, Maryland 21044	FILE NO. 85-021-X

SDP-85-231c

STATE OF MARYLAND · W.M. HOUSEHOLDER · No. 29907 · PROFESSIONAL ENGINEER
7-11-89

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 — DATE 9-24-85

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
Thomas G. Harris for — PLANNING DIRECTOR — DATE 9-25-85
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 9-25-85

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Robert M. Beninger /for GFN — DIRECTOR — DATE 9-20-85
CHIEF BUREAU OF ENGINEERING — DATE 9-20-85

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R. Michaux — Signature of Developer/Builder — 8-28-85 Date

Reviewed for Howard S.C.D.
Name
and meets Technical Requirements
James McNelis — Signature — 9/9/85 Date
U.S. Soil Conservation Service

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

Stephen L. Fuhr — Approved — 9/9/85 Date

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G. Nelson Clark — 8-28-85 Date

STATE OF MARYLAND · G. NELSON CLARK · NO. 7139 · REGISTERED · PROFESSIONAL ENGINEER
8-29-85