NOTE: Blend Surface Overlay to meet Existing Paving.

TRAP#4 (SWALE SED. TRAP) (ST-IV)
DA= 2.0 Acres
Storage Req'd= 2.0(1800)= 3600 cf
Storage Prov.= 3600 cf
Depth= 3.75'
Dimensions= 10'x 96'
Outlet Elev.= 397.0
Clean Out Elev.= 395.13
Bottom Elev.= 393.25

TRAP#5 (SWALE SED. TRAP) (ST-IV)
DA= 1.5 Ac
Storage Req'd= 1.5(1800)= 2700 cf
Storage Provided= 2700 cf
Depth= 3'
Dimensions= 10'X 90'
Outlet Elev.= 412.5
Clean Out Elev.= 411.0
Bottom Elev.= 409.5

TRAP#6 SDST (ST-V)
DA= 1.0 AC
Storage Required= 1.0(1800)= 1800 cf
Storage Provided= 1800 cf
Depth= 4'
Top of Stone Crest= 399.0
Bottom Elev.= 395.0
Clean Out Elev.= 397.0
Bottom Dimensions= 21'x 11'

TRAP#8 SDST (ST-V)
DA= 0.2 Ac.
Storage Req'd= 0.2(1800)= 720 cf
Storage Provided= 720 cf
Depth= 3'
Top of Stone Crest= 391.0
Bottom Elev.= 388.0
Clean Out Elev.= 388.5
Bottom Dimensions= 10'x 9'

CURVE DATA
P.C. 23+73.95 to P.T. 26+43.19
R= 1200.00'
Δ= 126°51'18"
L= 269.24
T= 136.19'
CHD.= N60°48'58"W- 268.65'

CURVE DATA
P.C. 17+53.07 to P.T. 22+31.24
R= 1200.00'
Δ= 229°49'51"
L= 478.17'
T= 248.30'
CHD.= N55°43'42"W- 475.01'

CURVE DATA
P.C. 41+33.35 to P.T. 43+66.30
R= 795.00'
Δ= 45°14'17"
T= 122.93'
L= 232.95
CHD.= N 45°22'41"E 226.94'

Delay Installation of rip rap until disturbed areas are stabilized.

CONCRETE MONUMENT
El= 408.98

Provide 4"-7" surge stone to meet rip rap outfall Temp. divert flow into Sediment Trap.

Provide Temp. Access Culvert See det sht. 5

Provide Temp. Earth Dikes (A-2) along stream banks during initial grading.

Provide 4"-7" surge stone to meet rip rap inlet. Stabilize slopes immediately.

40 LF. Ungrouted R/R See profile/ detail sht. 3

30 LF. Ungrouted R/R See Profile & Detail sht. 3

Stabilize Slope Immediately

Safety Fence

Drainage & Utility Easement

Future Driveway

See Sht. 2 for Profile along edge of Paving

100 Yr. Flood Plain, Drainage & Utility Easement

Temp. Divert Flow into Sediment Trap #3

Reviewed for Howard S.C.D
Name
and meets Technical Requirements
Signature Date 12-10-85
U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Approved 12/10/85 Date

SEDIMENT CONTROL LEGEND *

1. Straw Bale Dike or SBD/S
   Silt Fence
2. Stabilized Construction Entrance SCE
3. Existing Contour 410
4. Proposed Contour 410
5. Earth Dikes E.D
* See Sediment & Erosion Control Detail Sht. 5.

PLAN
SCALE: 1"= 50'

DONALD B. SAKET
NO. 6050

VICINITY MAP
SCALE: 1"= 2000'

HOWENGEO ROAD, CLARKSVILLE PIKE, MANOR LANE, CEDAR LANE, WATKINS FARM ROAD

GENERAL NOTES

1. All storm drainage & paving shall be in accordance with the latest details and specs. for Howard County & M.D.S.H.A.
2. Types of storm drain structures refer to the standard Details of Ho. Co. & MD.S.H.A.
3. Trench compaction for storm drains within Road or Street Rights- of- Way limits shall be in accordance with Ho. Co Design Manual Vol IV., (Class "C" Trench Bedding to be used for all storm drain unless otherwise noted.
4. Information concerning underground utilities was obtained from available records; but, the Contractor must determine the exact location and elevation of the mains by digging test pits, by hand, at all utility crossings, well in advance of construction.
5. All utility Companies shall be notified 24 hrs. in advance of construction.
6. All traffic control services, parking, and signing to be done in accordance with the "Manual of Uniform Traffic Control Devices," 1978 Edition.
7. Sag & Crest Vertical Curves were designed in accordance with "Howard County Design Manual, Vol. III.
8. Design Speed: See det sht. 3. Zoning: R (Rural)
9. The Contractor or developer shall contact the Construction Inspection / Survey Division 24 hrs. in advance of commencement of work @ 792-7272.

NO	REVISION	DATE
4	Removed 18" CMP @ entrance to Lot 2.	10-16-87
3	Added 18" CMP at entrance to Lot 2.	6-13-86
2	Revised street grade on McGee Way.	3-11-86
1	Added note regarding Homewood Road on plan; revised title box.	2-4-86

APPROVED: DEPARTMENT OF PUBLIC WORKS
Chief, Bureau of Engineering — Date 12-4-85

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
Chief, Division of Land Development & Zoning Administration — Date 12-7-85

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."

Robert Woodrich — Signature of Developer/Builder — 9-25-85 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 — 9-25-85 Date

STATE OF MARYLAND G. NELSON CLARK No. 7139 REGISTERED PROFESSIONAL ENGINEER

CFS — CLARK · FINEFROCK & SACKETT
ENGINEERS · PLANNERS · SURVEYORS
1115 LOCKWOOD DRIVE · SILVER SPRING MARYLAND 20904 · (301) 593-3400

DESIGNED GLB	ROAD CONSTRUCTION PLANS McGEE WAY AND WIDENING ALONG HOMEWOOD ROAD POINT OF HOMEWOOD 3RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DRAWN KW	
CHECKED GLB	
DATE 9-25-85	FOR: R.C. GOODIER BUILDERS, INC. (OWNER) 233 Deep Dale Drive Timonium, Md. 21093

SCALE: As Shown
DRAWING: 1 OF 5
JOB NO.: 85-027
FILE NO.: 85-027-D

PROFILE SCALE HOR. 1"=50' VERT. 1"=5'

PROFILE LEGEND:
Proposed Grade Line
Existing ℄
B.R.L. Lt.
B.R.L. Rt.

McGEE WAY

230' VC SSD = 200.48' e= 2.30'

230' VC SSD = 225.55 e= 2.15'

B.R.L. (Rt)

Ex. ℄

4.00%

B.R.L. (Lt)

2.87%

HOMEWOOD ROAD

Existing ℄

TIE SKETCH MONUMENT 12 = NO SCALE

MATCH LINE: SEE SHEET 2

MATCH LINE: FOR CONTINUATION SEE SHEET 2

#1163

F-86-54 AS-BUILT 11-9-87

Reviewed for	Howard	S.C.D.
and meets Technical Requirements		
Signature		12-10-85 Date
U.S. Soil Conservation Service		

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

Approved 12/10/85 Date

PLAN
SCALE: 1" = 50'

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 — 9-25-85 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 — 9-25-85 Date

STATE OF MARYLAND · G. NELSON CLARK · NO. 7138 · REGISTERED PROFESSIONAL ENGINEER

APPROVED: DEPARTMENT OF PUBLIC WORKS
Chief, Bureau of Engineering — 12-16-85 Date

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
Chief, Division of Land Development & Zoning Administration — 12-11-85 Date

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

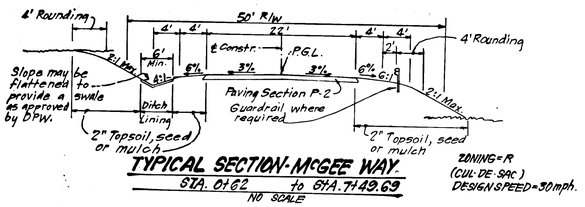
DESIGNED GLB	ROAD CONSTRUCTION PLANS WIDENING ALONG HOMEWOOD ROAD POINT OF **HOMEWOOD** 3RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE As Shown
DRAWN KIW		DRAWING 2 OF 5
CHECKED GLB		JOB NO. 85-027
DATE 9-25-85	FOR: R.C. GOODIER BUILDERS, INC. (OWNER) 233 Deep Dale Drive Timonium, Md. 21093	FILE NO. 85-027-D

No.	REVISION	DATE
3	Revised ex. swale at Sta. 6+80± to meet prop. ditch.	4-13-87
2	Revised edge of paving profile for McGee Way.	3-11-86
1	Added note regarding Homewood Rd. & revised title box.	2-4-86

#1163

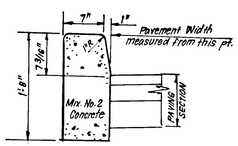
F-86-54

AS BUILT 11-9-87

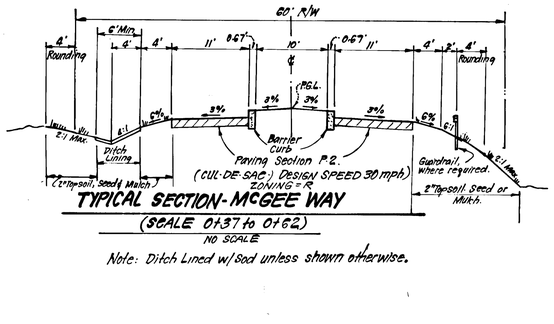


TYPICAL SECTION-McGEE WAY
STA. 0+62 to STA. 7+49.69
NO SCALE

ZONING=R
(CUL-DE-SAC)
DESIGN SPEED=30 mph.

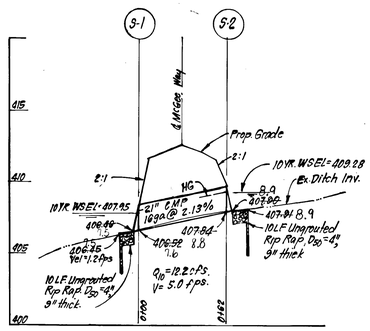


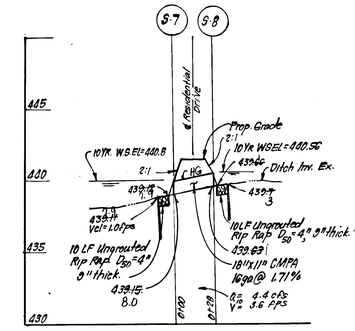
BARRIER CURB
NO SCALE

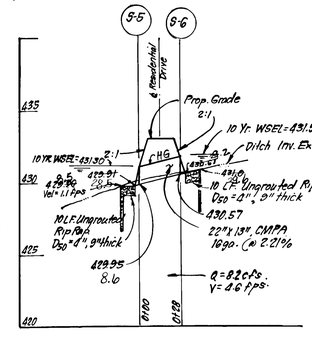


TYPICAL SECTION-McGEE WAY
(SCALE 0+37 to 0+62)
NO SCALE

Note: Ditch Lined w/sod unless shown otherwise.







STORM DRAIN PROFILES
SCALE: HORIZ. 1"=50'
VERT. 1"=5'

PIPE SCHEDULE

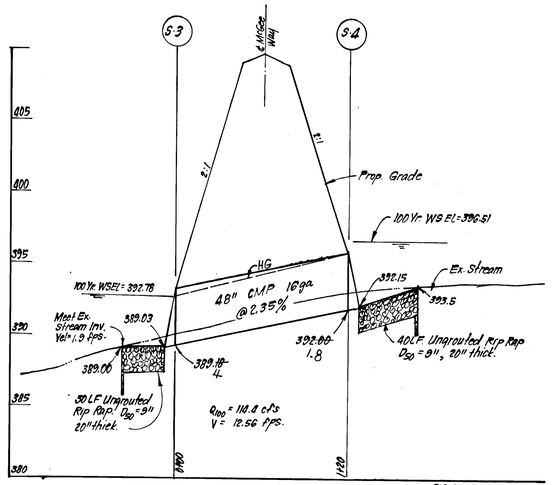
	SIZE	TYPE	LENGTH
#	4.9"	CMP 16ga	120 LF
*	21"	CMP 16ga	62 LF
*	22"x13"	CMPA 16ga	28 LF
*	18"x11"	CMPA 16ga	28 LF

5"x1" Corrugations
* 2½"x½" Corrugations

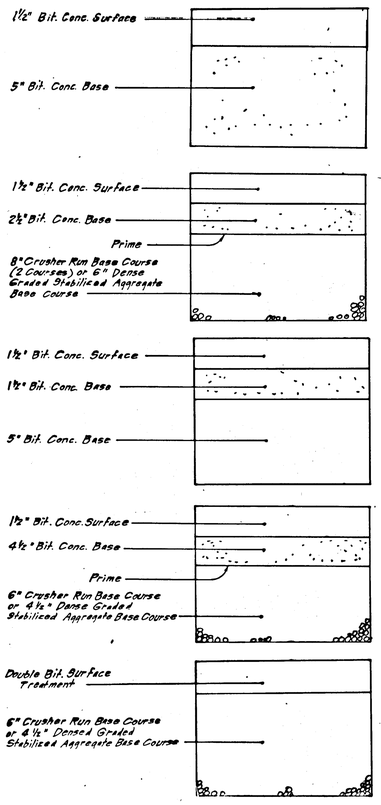
STRUCTURE SCHEDULE

No	TYPE	INV. IN	INV. OUT	TOP ELEVATION UPPER	TOP ELEVATION LOWER	REMARKS	LOCATION
S-1	Metal End Section	406.52	406.46	—		Ho. Co. Std. # 5.61	4 Sta 0+27 McGee Wy. 31' Lt.
S-2	" " "	407.90	407.84	—		" "	4 Sta 0+27 McGee Wy 31' Rt.
S-3	" " "	389.18	389.03	—		" "	4 Sta 5+95 McGee Wy 60' Lt.
S-4	" " "	392.15	392.00	—		" "	4 Sta 6+21 McGee Wy 60' Rt.
S-5	" " "	429.95	429.91	—		Ho. Co. Std. # 5.63	4 Sta 17+62.07 Homewd Rd 27' Rt.
S-6	" " "	430.61	430.57	—		" "	4 Sta 17+34.07 Homewd Rd 27' Rt.
S-7	" " "	439.15	439.12	—		" "	4 Sta 12+31.79 Homewd Rd 27' Rt.
S-8	" " "	439.66	439.63	—		" "	4 Sta 12+03.79 Homewd Rd 27' Rt.

SEE PROFILES



STORM DRAIN PROFILE
SCALE
HORIZ. 1"=50'
VERT. 1"=5'



FULL DEPTH BIT. CONC. ALTERNATE
NO SCALE
SECTION P-2

Residential Zones: Local, Cul-de-sac, Alleys and Private Roads serving individual lots.

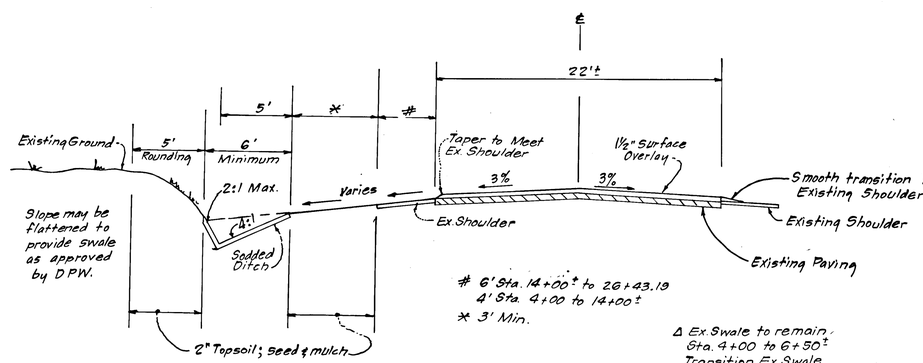
GRANULAR BASE ALTERNATE
NO SCALE
SECTION P-2

FULL DEPTH BIT. CONC. ALTERNATE
NO SCALE
SECTION P-3

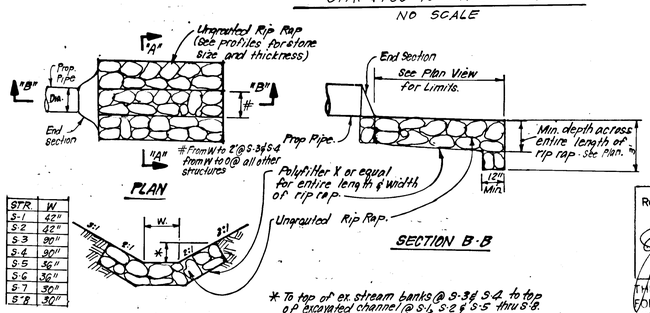
Residential Zones: Minor and Major Collectors, Commercial, Industrial Zones Local and Cul-de-sac Streets & Alleys.

GRANULAR BASE ALTERNATE
NO SCALE
SECTION P-3

GRANULAR BASE ALTERNATE
NO SCALE
NOTE: Stabilized Shoulder for all zones and road classifications.
SECTION P-7



TYPICAL SECTION ~ HOMEWOOD ROAD Δ
STA. 4+00 to STA. 26+43.19
NO SCALE



STR	W
S-1	42"
S-2	42"
S-3	90"
S-4	90"
S-5	36"
S-6	36"
S-7	30"
S-8	30"

* To top of ex. stream banks @ S-3 & S-4, to top of excavated channel @ S-1, S-2 & S-5 thru S-8.

UNGROUTED RIPRAP PAVING DETAILS
NO SCALE

Reviewed for ....Howard.... Soil Conservation District
and meets Technical Requirements
Signature ..... Date 12/9/85
U.S. Soil Conservation Service

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

Approved 12/10/85 Date

No	REVISION	DATE
Δ	Removed profile of 18" culvert beneath Lot 2 driveway	10-16-87
3	Added note to Typ. Section ~ Homewood Road	4-13-87
2	Added profile of 18" Culvert beneath Lot 2 driveway	6-13-86
No.	REVISION	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 of Developer/Builder 9-25-85 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 9-25-85 Date

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

No	REVISION	DATE
2	Revised Typ. Section for Homewood Road.	12-30-86
1	Revised typical section for Homewood Road; revised title box.	2-4-86

APPROVED: DEPARTMENT OF PUBLIC WORKS

Chief, Bureau of Engineering 12-12-85 Date

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

Chief, Division of Land Development & Zoning Administration 12-11-85 Date

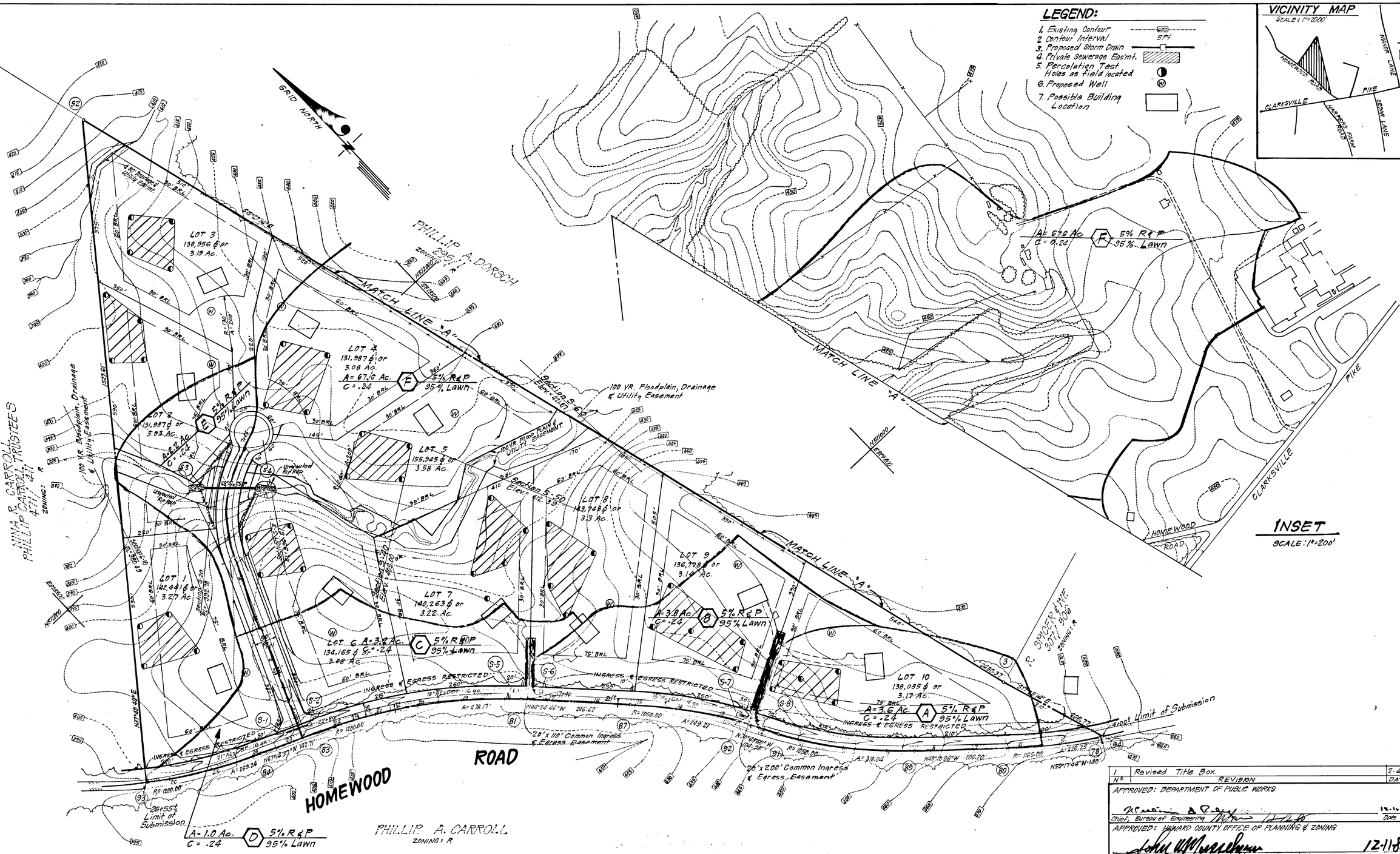
CLARK · FINEFROCK & SACKETT
ENGINEERS · PLANNERS · SURVEYORS
11315 LOCKWOOD DRIVE · SILVER SPRING MARYLAND 20904 · (301) 593-3400

DESIGNED GLB	ROAD CONSTRUCTION PLANS STORM DRAIN AND PAVING DETAILS POINT OF HOMEWOOD 3RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DRAWN KW	
CHECKED GLB	
DATE 9-25-85	FOR: R.C. GOODIER BUILDERS, INC. (OWNER) 233 Deep Dale Drive Timonium, Md. 21093
SCALE	As Shown
DRAWING	3 OF 5
JOB NO.	85-027
FILE NO.	85-027-D

#1163

F-86-54

AS BUILT 11-9-87



COORDINATE TABLE		
NO.	NORTH	EAST
3	510402.97	828857.33
52	512793.67	828196.40
78	510155.15	826934.06
80	510288.79	828751.93
81	511134.06	828081.71
83	511400.86	827625.71
84	511456.06	827494.10
87	510957.89	828191.30
89	510426.31	828598.29
91	510670.81	828396.81
92	510760.54	828343.05
93	511587.07	827738.53
94	510154.23	828935.61

Reviewed for ..... Howard Co. ..... S.C.D.
Name
and meets Technical Requirements
Signature — Date 12/10/85
U.S. Soil Conservation Service
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Robert W. Zellman 12/10/85
(Approved) Date

DEVELOPER'S/BUILDER'S CERTIFICATE

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Robert C Goodier 9-25-85
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. Nelson Clark 9-25-85
G. Nelson Clark Date

STATE OF MARYLAND — G. NELSON CLARK — No. 7199 — REGISTERED PROFESSIONAL ENGINEER

No.	REVISION	DATE
1	Revised Title Box.	2-4-86

APPROVED: DEPARTMENT OF PUBLIC WORKS
Chief, Bureau of Engineering — Date 12-10-85

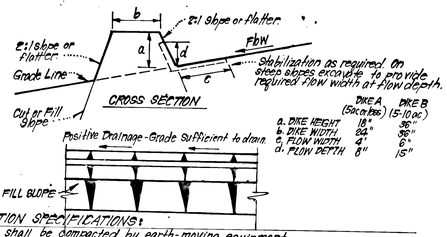
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
Chief, Division of Land Development & Zoning Administration — Date 12-11-85

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

DESIGNED GLB	ROAD CONSTRUCTION PLANS DRAINAGE AREA MAP
DRAWN KW	POINT OF HOMEWOOD
CHECKED GLB	3RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DATE 9-25-85	FOR: R.C. GOODIER BUILDERS, INC. (OWNER) 233 Deep Dale Drive Timonium, Maryland 21093.
SCALE	1"=100'
DRAWING	4 OF 5
JOB NO.	85-027
FILE NO.	85-027D

F-86-54 AS-BUILT 11-9-87

#11163



	DIKE A (Slopes)	DIKE B (5-10 ac.)
a. DIKE HEIGHT	18"	36"
b. DIKE WIDTH	84"	96"
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. 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.
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

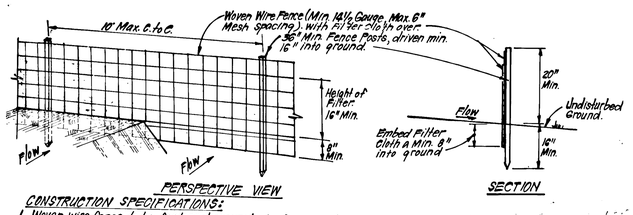
TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1.	0.5 - 3.0%	Seed & Straw Mulch	Seed or Straw Mulch
2.	3.1 - 5.0%	Seed & Straw Mulch	Seed w/Jute, or Excelsior; Sod, 2"Stone
3	5.1 - 8.0%	Seed w/Jute, or Sod; 2"Stone	Lined Rip Rap 4"-8"Stone
4	8.1 - 20.0%	Lined Rip Rap 4-8"Stone	Engineering Design

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



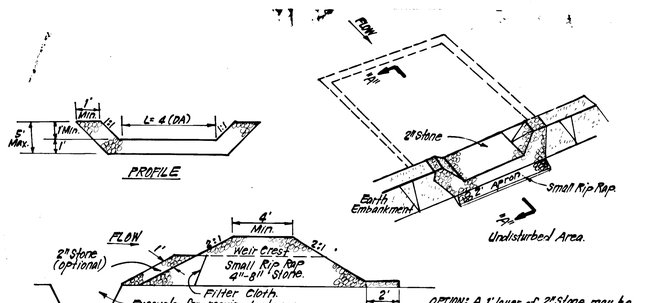
CONSTRUCTION SPECIFICATIONS:

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 Gauge 6" Max. Mesh Opening
FILTER CLOTH: Filter X, Mirafi 100X, Stabilinka, T140N or Approv. equal.
PREFABRICATED UNIT: GeoFab, Enviro fence, or Approv. equal.

SILT FENCE DETAIL (S)

NO SCALE



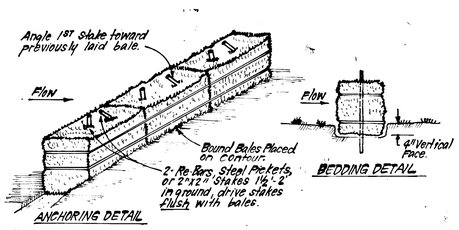
OPTION: A 1' layer of 2" Stone may be placed on the upstream side of the rip rap in place of embedded filter cloth.

CONSTRUCTION SPECIFICATIONS:

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The fill areas 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" stone 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 original 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 that 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.S.T.) ST.V.

NO SCALE

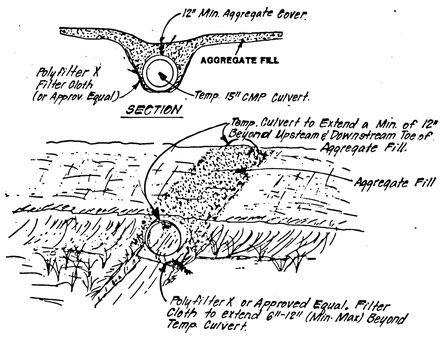


CONSTRUCTION SPECIFICATIONS:

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

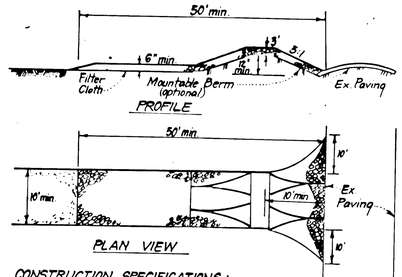


TEMPORARY ACCESS CULVERT DETAIL

No SCALE

Temporary Access Culvert Notes:

1. Provide 15" dia. CMP. Invert elevation of culvert shall be installed on natural stream bed grade.
2. Length of culvert adjustable, but in no case shall exceed 40'.
3. Filter cloth shall be placed on stream bed & stream banks prior to placement of culvert and aggregate.
4. Temporary access culvert shall conform to the 1983 Maryland Standards & Specifications for Soil Erosion and Sediment Control, Section 19.



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

Reviewed for ..... Howard ..... S.C.D.
Name
and meets Technical Requirements
Signature ..... 12-10-85 Date
U.S. Soil Conservation Service

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

Approved ..... 12/10/85 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 of Developer/Builder ..... 9-25-85 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

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 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 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 flac 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.

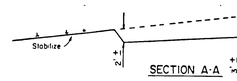
Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.

Soil Amendments: Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft)

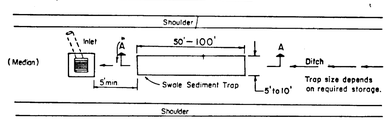
Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2½ bushel per acre of annual rye (3.2 lbs/1000 sq ft). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.07 lbs/1000 sq ft). For the period November 16 thru February 28, protect 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.



SWALE SEDIMENT TRAP



* To Remain Stabilized Or Covered With A 6" Lining Of 2" Stone

CONSTRUCTION SPECIFICATION FOR ST-IV

1. The swale sediment trap shall be constructed in accordance with the dimensions provided on the design drawings or sized to provide the minimum storage necessary 1800 cubic feet of storage for each acre of drainage area.
2. 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.
3. The structure shall be inspected after each rain and repairs made as needed.
4. Construction operations shall be carried out in such a manner that erosion and water pollution shall be minimized.
5. The sediment trap shall be removed and area stabilized when the contributory drainage area has been properly stabilized.
6. The swale sediment trap will be properly backfilled and the swale or ditch reconstructed.

Maximum Drainage Area: 2 Acres

SWALE SEDIMENT TRAP (ST-IV)

NO SCALE

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 ..... 11-6-85 Date

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	33.140 Acres
Area Disturbed	2.105 Acres
Area to be roofed or paved	0.319 Acres
Area to be vegetatively stabilized	0.684 Acres
Total Cut	7972 Cu. yds
Total Fill	7496 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. N/A
12) All pipes to be blocked at the end of each day (see detail below). N/A
13) The total amount of straw bale dikes/silt fence equals 205 L.F.

CONSTRUCTION SEQUENCE	#DAYS
1. Obtain Grading Permit	2
2. Clear & grub for installation of sediment control	1
3. Install temporary access culvert	1/2
4. Install SCE, sediment traps, temporary earth dikes and SBD/s	5
5. Clear, rough grade & temporarily Stabilize	15
6. Install storm drainage	10
7. Remove temporary access culvert	1/2
8. * Fine grade & construct paving	30
9. Stabilize all disturbed areas on site in accordance w/ Stds. & Specs.	2
10. Upon approval of HSCD & Sediment Control Inspector, remove Sediment & Erosion Control measures & stabilize	5

* Immediately stabilize fill slope on McGee Way

No.	REVISION	DATE
1	Revised title box.	2-4-86

APPROVED: DEPARTMENT OF PUBLIC WORKS

Chief, Bureau of Engineering ..... 12-10-85 Date

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING.

Chief, Division of Land Development & Zoning Administration ..... 12/11/85 Date

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

DESIGNED GLB	ROAD CONSTRUCTION PLANS SEDIMENT & EROSION CONTROL DETAILS POINT OF HOMEWOOD 3RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE As Shown
DRAWN KW		DRAWING 5 OF 5
CHECKED GLB		JOB NO. 85027
DATE 9-25-85	PREPARED FOR: R.C. GOMMER BUILDERS, INC. (OWNER) 233 Deep Dale Drive Timonium, Md. 21093	FILE NO. 85027 D

#1163

F-86-54 ASPHALT

11-9-89