

- GENERAL NOTES**
- The land included is zoned: RSC
  - All coordinates are based on the Maryland State Grid System.
  - All roads are public & existing.
  - Any damage to county owned rights of way shall be corrected at the Developer's expense.
  - Total area included: 4.351 Acres
  - Total number of Lots: 21

- LEGEND:**
- Contour Interval 2 FT
  - Existing Contour 350
  - Proposed Contour 350
  - Spot Elevation +50.5
  - Direction of Drainage
  - Existing Trees to be Saved
  - Walk Out Basement

NOTE: Stormwater Management provided for in Central Facility for Sewells Orchard, Section 3 Area 1, F-84 215.

**ADDRESS CHART**

LOT NO.	STREET ADDRESS
134	6806 June Apple Court
135	6802 " " "
138	6817 Sewells Orchard Drive
139	" " "
120	6705 " " "

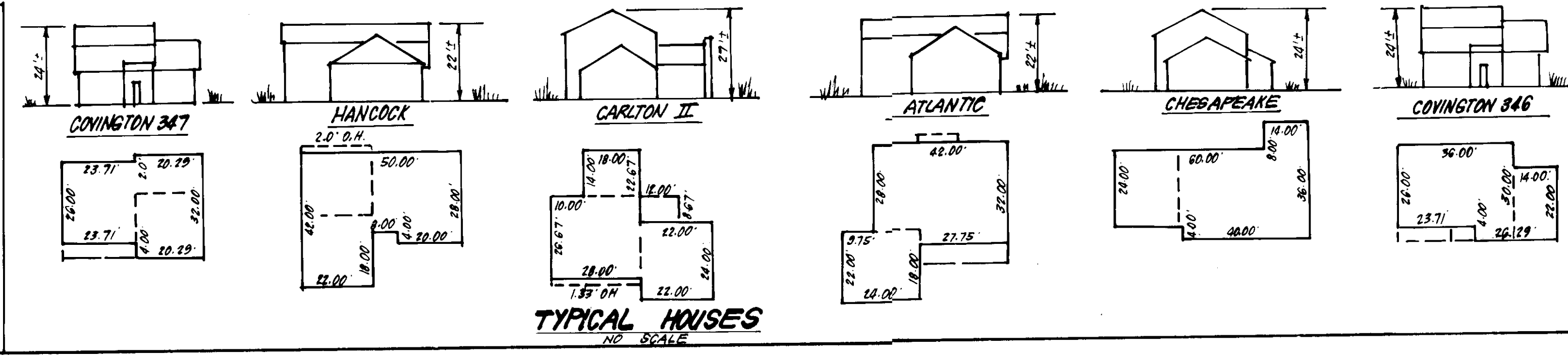
Owner/Developer: Orchard Associates PO Box 919 Columbia, Md. 21044	SUBDIVISION NAME SEWELLS ORCHARD	SECT./AREA 4 / 2	LOTS 104-112, 122-128, 134, 135, 138-140
PLAT NOS. 6261, 62, 63	BLOCK# 17	ZONE RSC	TAXIDONE MAP ELEC DIST 6TH
WATER CODE E04	SEWER CODE 5333400		

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.  
HOWARD COUNTY HEALTH DEPARTMENT  
DATE: 11-8-85

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING  
DATE: 10-12-85

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,  
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
DATE: 11-4-85

DIVISION OF LAND DEVELOPMENT  
DATE: 10-15-85



**CLARK · FINEFROCK & SACKETT**  
ENGINEERS · PLANNERS · SURVEYORS

11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593-3400

DESIGNED BY: BAF  
DRAWN BY: K/W  
CHECKED BY: J/MF, B/AF  
DATE: 9-9-85

**SITE DEVELOPMENT PLAN**  
LOTS 104-112, 122-128, 134, 135, AND 138-140

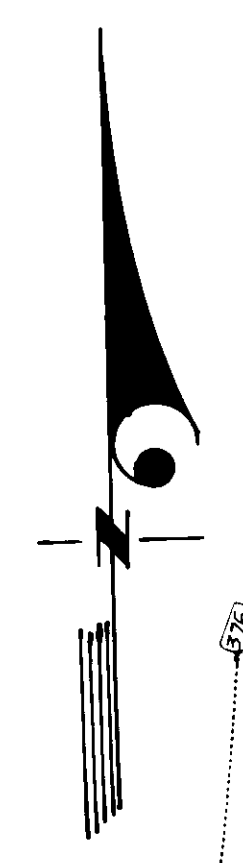
**SEWELLS ORCHARD**  
SECTION 4 AREA 2  
6TH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

FOR: DIVERSIFIED HOUSING CORP  
10015 Old Columbia Pike  
Columbia, Md. 21046

SCALE: 1"=30'  
DRAWING: 10F4  
JOB NO.: 85-088  
FILE NO.: 85-088-X

S.D.P. 86-63



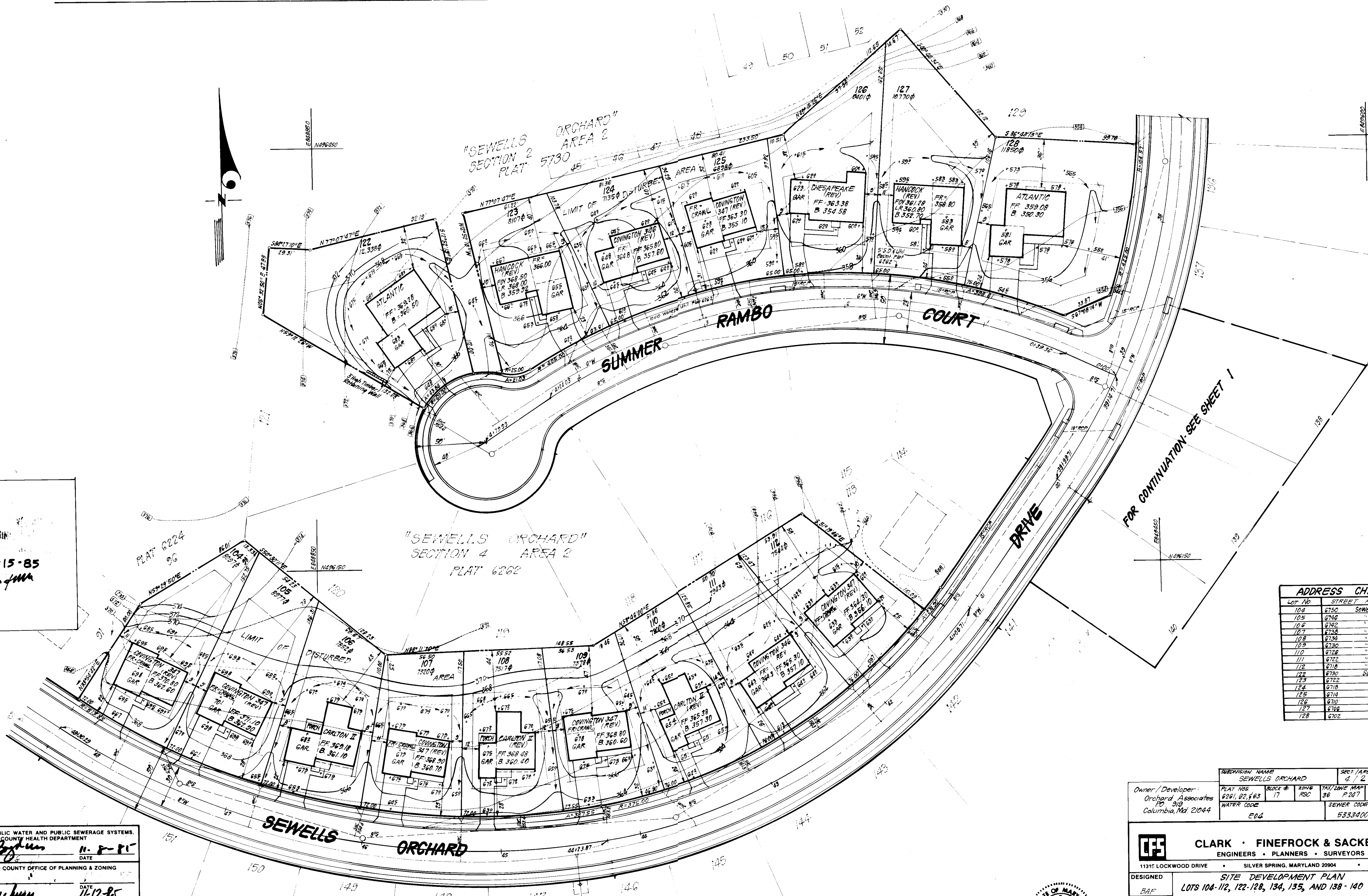


10-15-85  
*[Signature]*

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.  
 HOWARD COUNTY HEALTH DEPARTMENT  
*[Signature]* 11-8-85  
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING  
*[Signature]* 11-12-85  
 PLANNING DIRECTOR DATE  
 CHIEF DIVISION OF LAND DEVELOPMENT  
 AND ZONING ADMINISTRATION

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE  
 STORM DRAINAGE SYSTEMS AND PUBLIC ROADS  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 11-9-85  
 DIRECTOR DATE  
 CHIEF/BUREAU OF ENGINEERING



ADDRESS CHART	
LOT NO.	STREET ADDRESS
104	6750 Sewells Orchard Drive
105	6746 " " "
106	6742 " " "
107	6738 " " "
108	6734 " " "
109	6730 " " "
110	6726 " " "
111	6722 " " "
112	6718 " " "
113	6714 " " "
114	6710 " " "
115	6706 " " "
116	6702 " " "
117	6698 " " "
118	6694 " " "
119	6690 " " "
120	6686 " " "
121	6682 " " "
122	6678 " " "
123	6674 " " "
124	6670 " " "
125	6666 " " "
126	6662 " " "
127	6658 " " "
128	6654 " " "

OWNER/DEVELOPER: Orchard Associates PO, 919 Columbia, Md. 21044	SUBDIVISION NAME: SEWELLS ORCHARD	SECT./AREA: 2/2	LOTS: 104-112, 122-128 134, 135, 138-140
PLAT NOS. 8261, 82, 83	BLOCK # 17	ZONING R5C	TAX/DIST. MAP P-207
WATER CODE E04	SEWER CODE 5333400	ELEC. DIST. QTM	CENSUS TR. 6065.02

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

DESIGNED BY: BAF  
 DRAWN BY: KIW  
 CHECKED BY: BAF, JME  
 DATE: 9-9-85

**SITE DEVELOPMENT PLAN**  
 LOTS 104-112, 122-128, 134, 135, AND 138-140

**SCALE**  
 1" = 30'

**DRAWING**  
 20F4

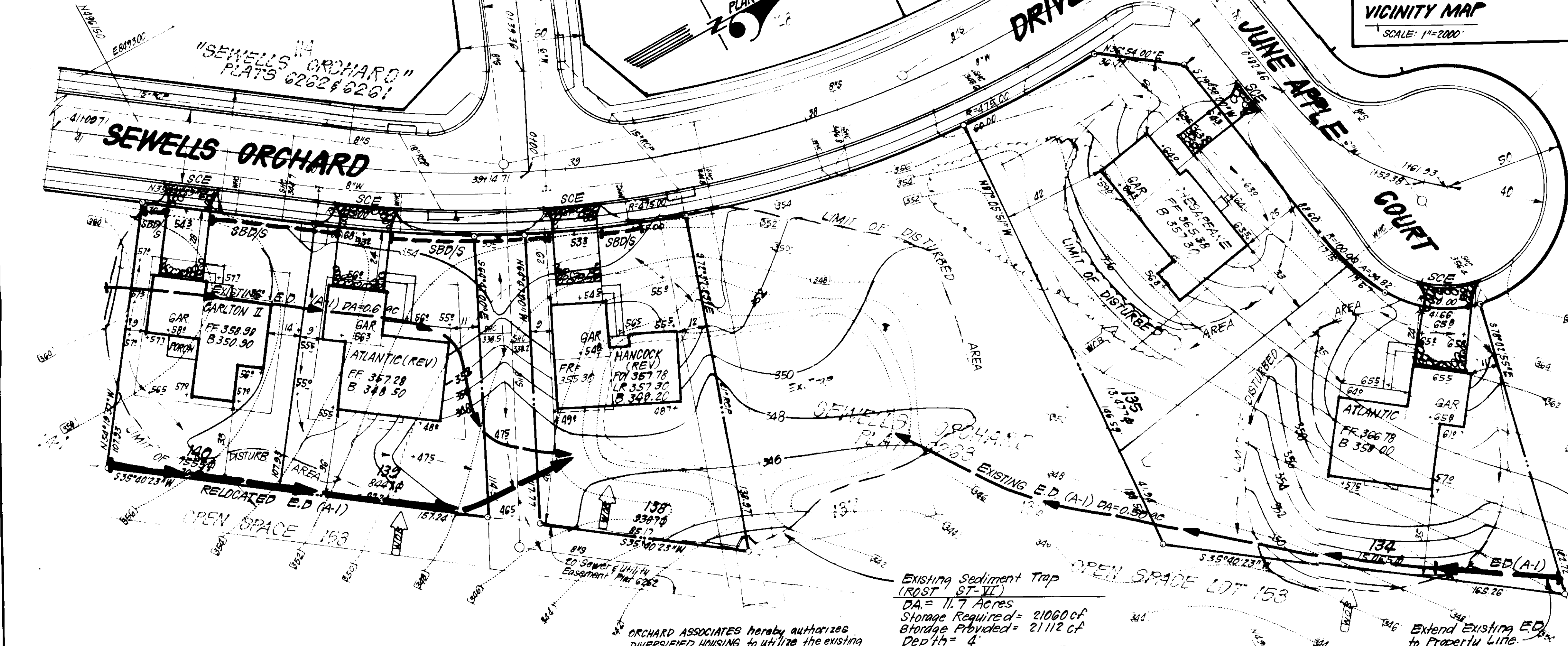
**SEWELLS ORCHARD**  
 SECTION 4 AREA 2  
 6TH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

JOB NO.: 85-088  
 FILE NO.: 85-088-X

FOR: DIVERSIFIED HOUSING CORP.  
 10015 Old Columbia Pike  
 Columbia, Md. 21046

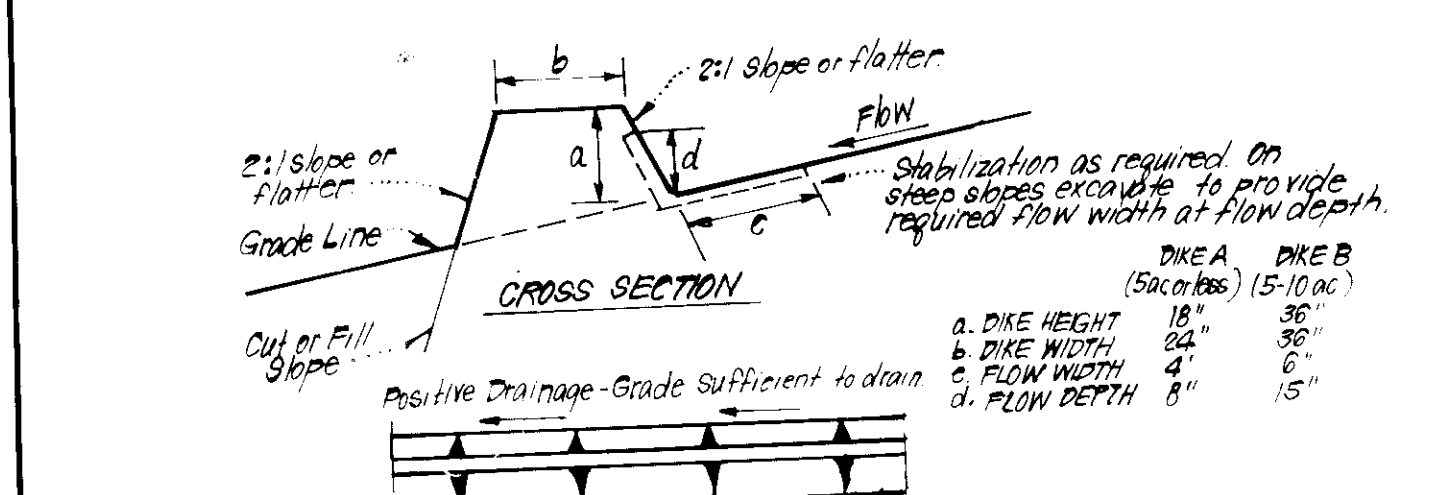


- LEGEND**
1. Contour Interval
  2. Existing Contour
  3. Proposed Contour
  4. Spot Elevation
  5. Direction of Drainage
  6. Earth Dike
  7. Straw Bale Dike or Silt Fence
  8. Stabilized Construction Entrance



- PERMANENT SEEDING NOTES**
1. A minimum of 72 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 to the standards and specifications of the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
  3. 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.
  4. 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.
  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 data 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: 0.358 Acres
    - Area Disturbed: 0.500 Acres
    - Area to be vegetatively stabilized: 0.450 Acres
    - Total Cut: 7230 Cu. yds
    - Total Fill: 7660 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 DPM 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 minimum, Single Lot Sediment Control as shown below shall be implemented. (See detail sht. 4)
  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 150 L.F.

- TEMPORARY SEEDING NOTES**
- Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.
- Seeded 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 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 ureaformal 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 15 thru February 28, protect site by: Option (1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.
- Mulching -** Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.
- Maintenance -** Inspect all seeded areas and make needed repairs, replacements and reseeding.

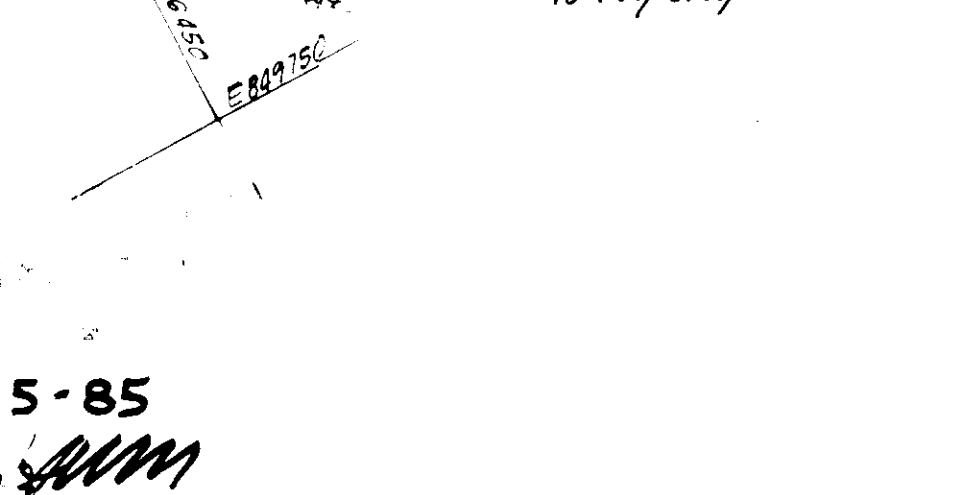


**EXISTING Sediment Trap (RUST ST-VI)**

DA = 11.7 Acres  
Storage Required = 21000 CF  
Storage Provided = 21112 CF  
Depth = 4'  
Stone Crest Elev. = 330.5  
Bottom Elevation = 334.5  
Top of Embankment = 343.5  
Bottom Dimensions = 97.5' x 48'

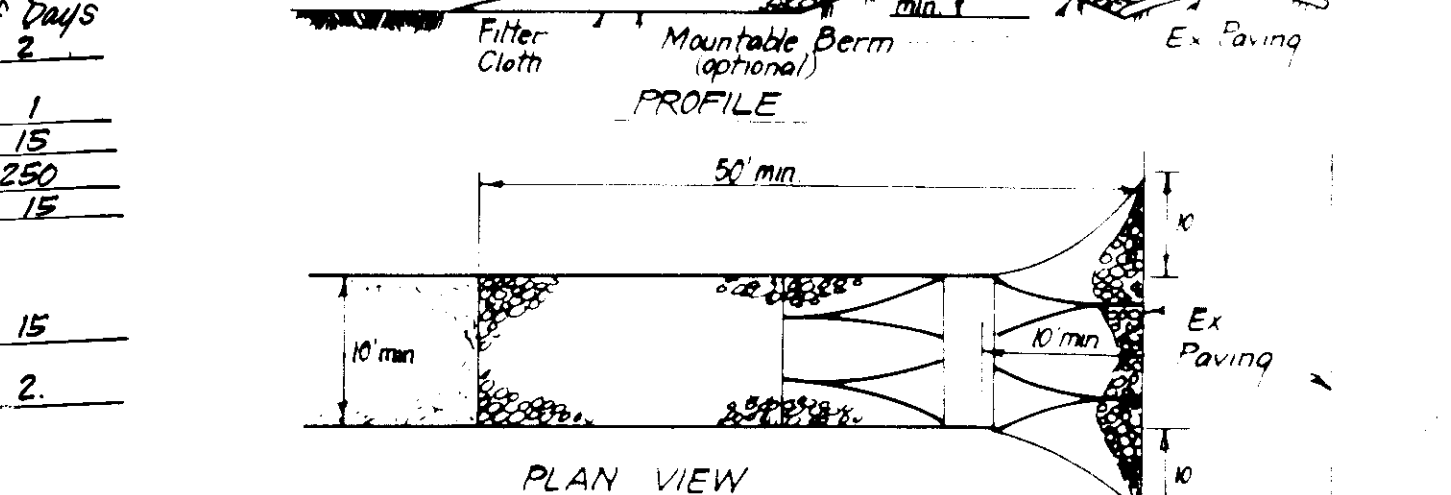
ORCHARD ASSOCIATES hereby authorizes DIVERSIFIED HOUSING to utilize the existing sediment control measures shown on plan P-85-71 for this project. If Orchard Associates remove the existing sediment erosion control measures prior to completion of SDP No. 63, then a revised site development plan will be required.

*L. Earl Aminger* 11-23-85  
Date



**CONSTRUCTION SEQUENCE:**

No. of Days	Description
1	Obtain Grading Permit.
2	Relocate existing E.D. (Lots 139 & 140) and extend E.D. to E on Lot 134. Size trap to dimensions shown on plan.
15	Clear, Grub & Rough Grade Site.
250	Construct Houses & Driveways, except on Lot 138.
15	Final Grade & Stabilize.
15	After all areas draining to Sediment Trap are stabilized and upon removal of sediment traps, construct House & Driveway on Lot 138, utilizing Single Lot Sediment Control. (See det. sht. 4).
2	Upon complete stabilization, remove all sediment control devices & stabilize any remaining disturbed area. *Utilize Single Lot Sediment Control. See det. sht. 2.

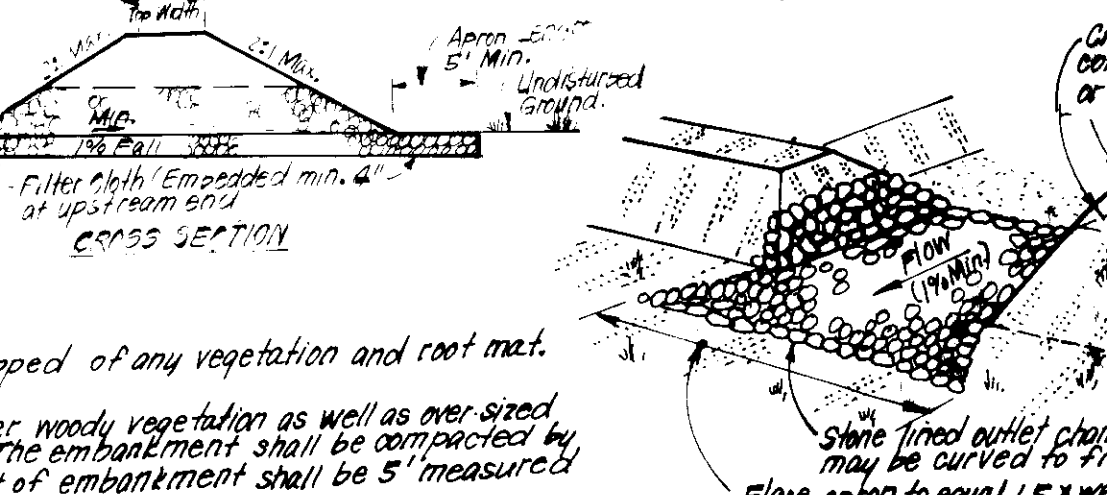
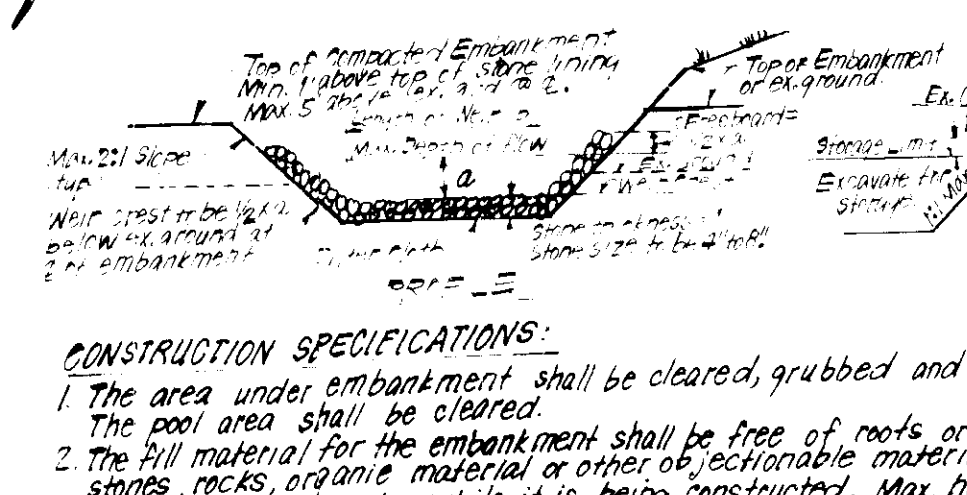


**CONSTRUCTION SPECIFICATIONS:**

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.

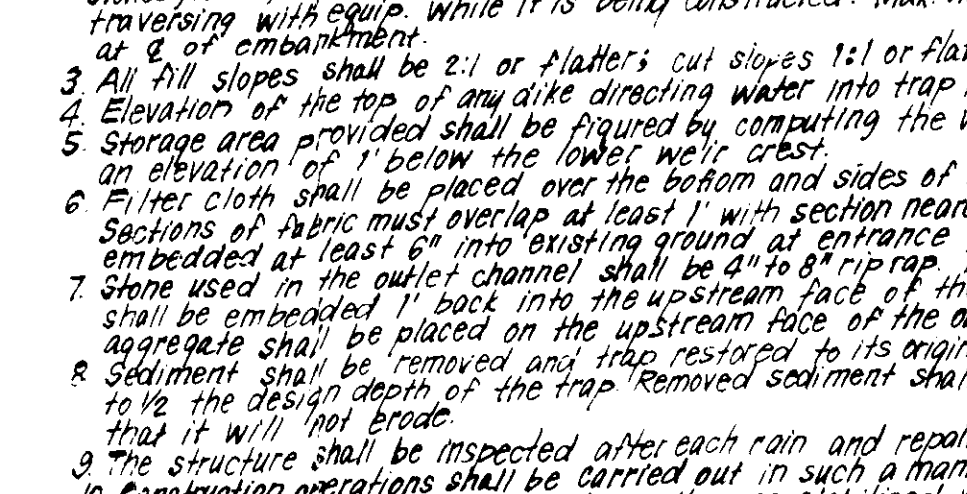
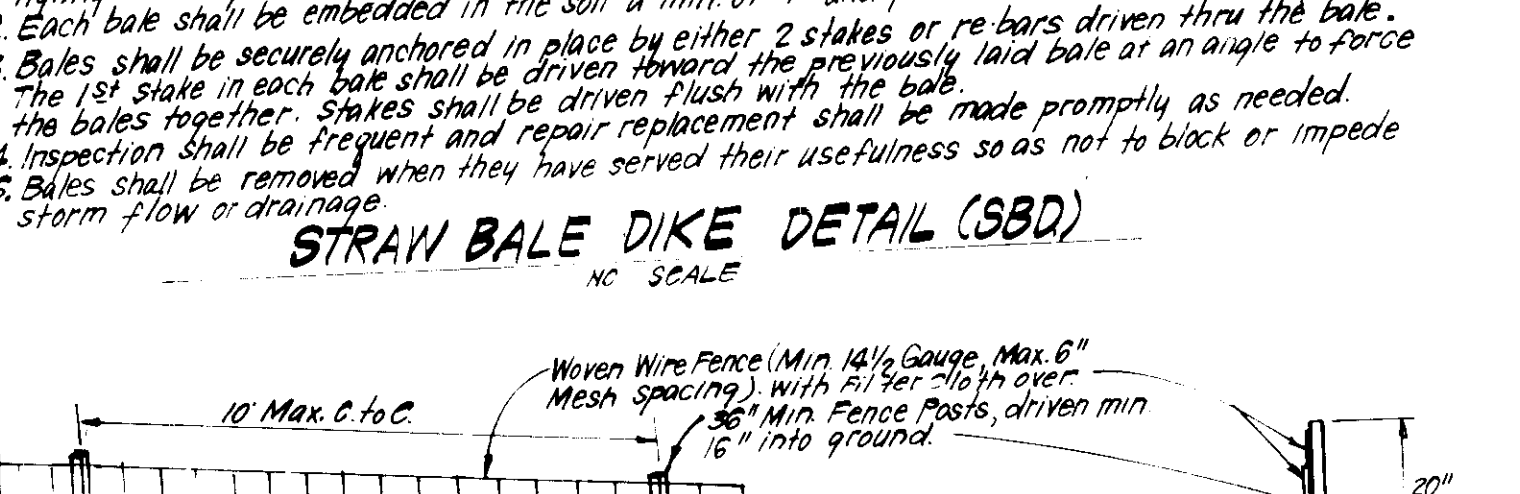
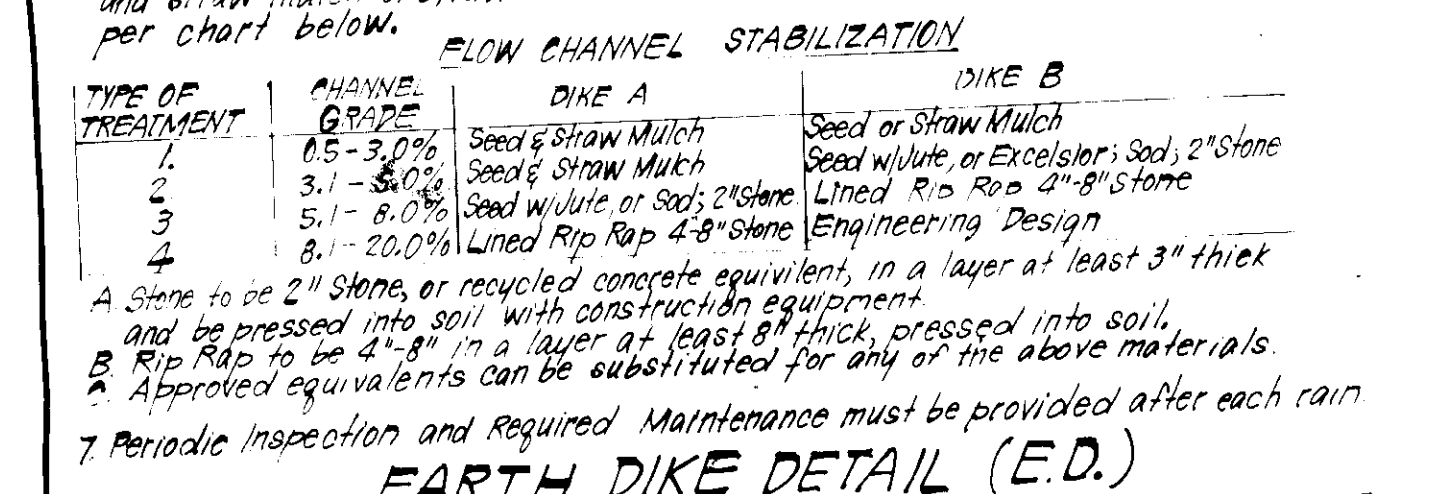
**CONSTRUCTION SPECIFICATIONS:**

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 in the soil a min. of 4" and placed so the bindings are horizontal.
2. Each bale shall be embedded in place by either 2 stakes or re-bars driven thru the bale.
3. Bales shall be securely anchored in place by either 2 stakes or re-bars driven thru the 1st stake in each side shall be driven toward the previously laid bale or an angle re-bar.
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.



**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 for 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 laying 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 riprap is installed, a mounding berm with 5' 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 construction demand and repair and/or cleanup 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.



**CONSTRUCTION SPECIFICATIONS:**

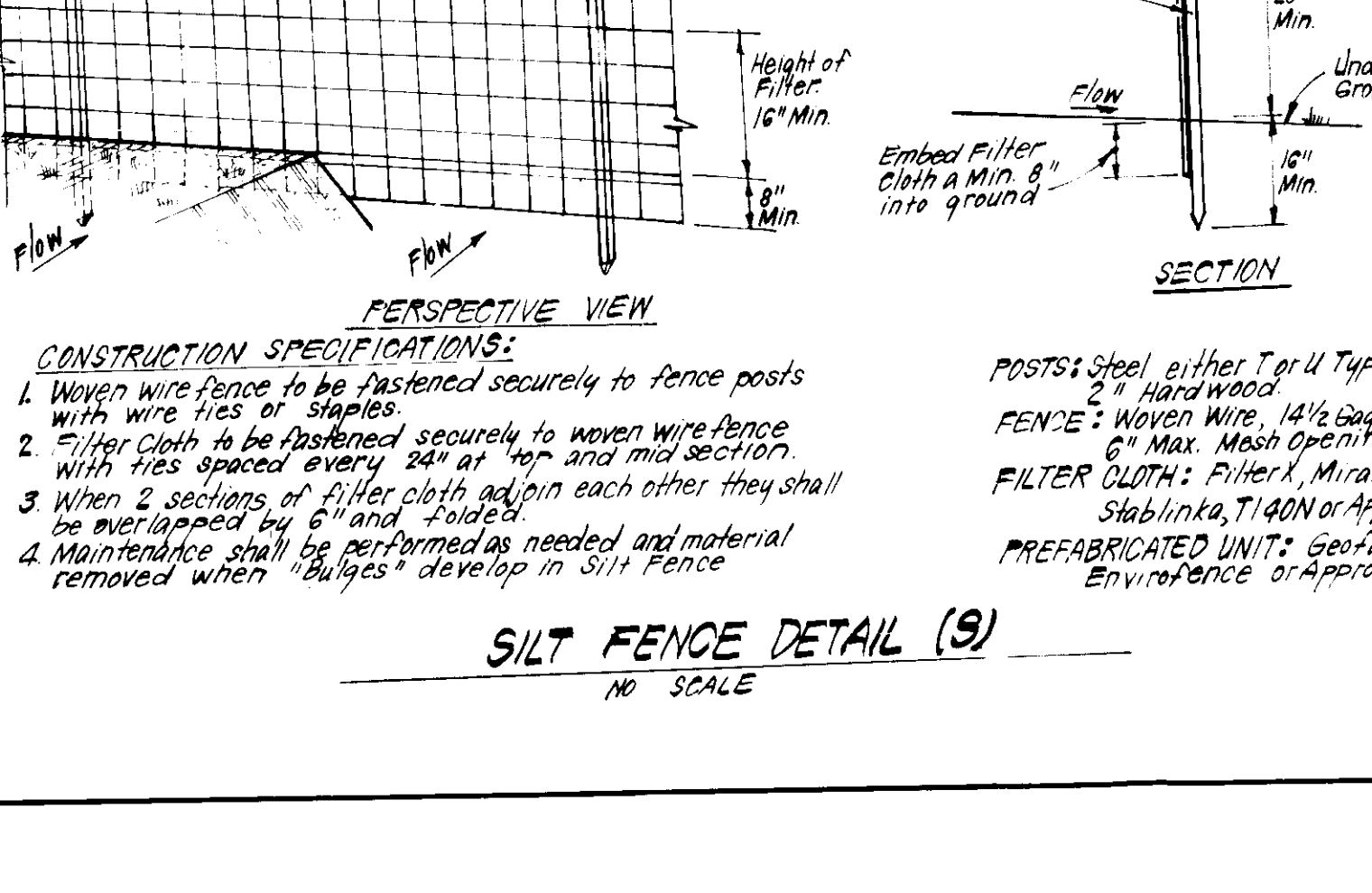
1. The area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat.
2. The soil area shall be cleared.
3. The fill material for the embankment shall be free of roots or other woody vegetation as well as over sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by treading with equipment, while it is being constructed. Max height of embankment shall be 5' measured from top of embankment.
4. All fill slopes shall be 2:1 or flatter if desired.
5. Elevation of the top of any dike directing water into trap must equal or exceed height of embankment.
6. Storage area provided shall be figured by computing the volume available behind the outlet channel up to an elevation of 1' below the lower water crest.
7. 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.
8. Filter cloth shall be placed over the bottom and sides of the outlet channel prior to placement of stone.
9. Filter cloth shall be placed on the upstream face of the outlet stone area. 1" thick layer of 2" or finer aggregate shall be placed on the upstream face of the outlet.
10. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 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.
11. The structure shall be inspected after each rain and repaired as needed.
12. Construction operations shall be carried out in such a manner that erosion and water pollution are minimized.
13. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.
14. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.
15. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.
16. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.
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19. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.
20. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

**STABILIZED CONSTRUCTION ENTRANCE (SCE)**

**APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS**  
HOWARD COUNTY HEALTH DEPARTMENT  
*J. Paul Montgomery* 11-8-85  
DATE

**APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS**  
HOWARD COUNTY OFFICE OF PLANNING & ZONING  
*J. Paul Montgomery* 11-12-85  
DATE

**APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS**  
STORM DRAINAGE SYSTEMS AND PUBLIC WORKS  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*J. Paul Montgomery* 11-14-85  
DATE



**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, 14 1/2 Gauge  
6" Max. Mesh Opening  
**FILTER CLOTH:** Filter 1, Min. 100% Stabilinks, T140N or Approved Equal  
PREFABRICATED UNIT: Geofab, Envirofence or Approved Equal

**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."

*B. Paul Montgomery* 9-9-85  
Signature of Developer/Builder Date

*G. Nelson Clark* 9-10-85  
Signature of Engineer Date

**CLARK • FINEFROCK & SACKETT**  
ENGINEERS • PLANNERS • SURVEYORS  
11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904

**DESIGNED** GLB  
**DRAWN** KIM  
**CHECKED** GLB  
**DATE** 9-9-85

**SCALE** 1"=30'  
**DRAWING** 30F4  
**JOB NO** 85-088  
**FILE NO** 85-088-5E

**SEDIMENT & EROSION CONTROL PLAN**  
LOTS 104-112, 122-128, 134, 135, AND 138-140

**SEWELLS ORCHARD**  
SECTION 4 AREA 2  
6TH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

FOR: DIVERSIFIED HOUSING CORP  
10015 Old Columbia Pike  
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**SDP-86-63**

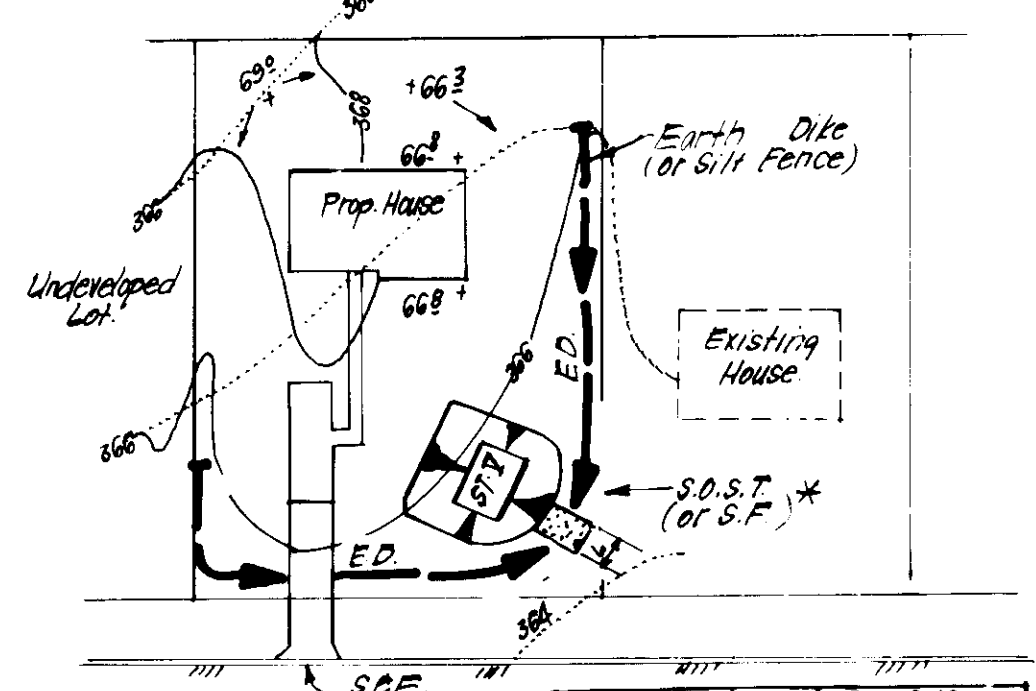
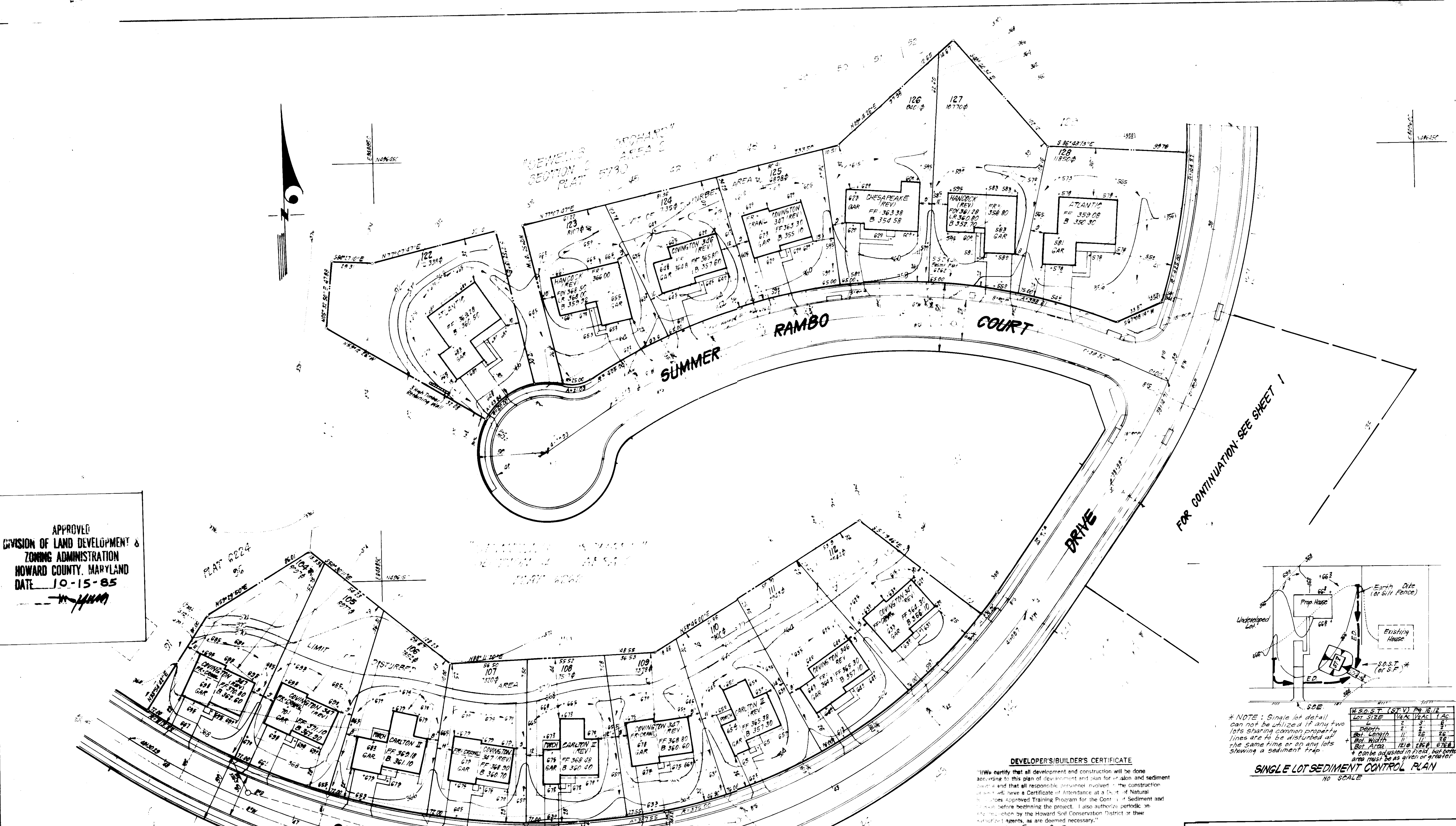


APPROVED  
 DIVISION OF LAND DEVELOPMENT &  
 ZONING ADMINISTRATION  
 HOWARD COUNTY, MARYLAND  
 DATE 10-15-85

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,  
 HOWARD COUNTY HEALTH DEPARTMENT  
 DATE 11-2-85

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING  
 DATE 11-13-85

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,  
 STORM DRAINAGE SYSTEMS AND PUBLIC ROADS  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 DATE 11-1-85



\* NOTE: Single lot detail can not be utilized if any two lots sharing common property lines are to be disturbed at the same time or on any lots showing a sediment trap.

NO.	DEPTH	LENGTH	WIDTH	AREA
1	2'	3'	8'	48
2	2'	26'	8'	416
3	1'	11'	8'	88
4	1'	11'	8'	88
5	1'	26'	8'	208
6	1'	26'	8'	208
7	1'	26'	8'	208
8	1'	26'	8'	208
9	1'	26'	8'	208
10	1'	26'	8'	208
11	1'	26'	8'	208
12	1'	26'	8'	208
13	1'	26'	8'	208
14	1'	26'	8'	208
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17	1'	26'	8'	208
18	1'	26'	8'	208
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25	1'	26'	8'	208
26	1'	26'	8'	208
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28	1'	26'	8'	208
29	1'	26'	8'	208
30	1'	26'	8'	208
31	1'	26'	8'	208
32	1'	26'	8'	208
33	1'	26'	8'	208
34	1'	26'	8'	208
35	1'	26'	8'	208
36	1'	26'	8'	208
37	1'	26'	8'	208
38	1'	26'	8'	208
39	1'	26'	8'	208
40	1'	26'	8'	208

**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 of this 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 inspections by the Howard Soil Conservation District or their authorized agents, as are deemed necessary.

Signature of Developer/Builder: *B. Paul Montgomery* Date: 9-9-85

**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: *G. Nelson Clark* Date: 9-10-85

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

**CLARK · FINEFROCK & SACKETT**  
 ENGINEERS · PLANNERS · SURVEYORS  
 1131E LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593-3400

DESIGNED: *GLB*  
 DRAWN: *GLB*  
 KI/W  
 CHECKED: *GLB*  
 DATE: 9-9-85

**SEDIMENT & EROSION CONTROL PLAN**  
 LOTS 104-112, 122-128, 134, 135, AND 138-140

**SEWELLS ORCHARD**  
 SECTION 2 AREA 2  
 6TH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 FOR: DIVERSIFIED HOUSING CORP  
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