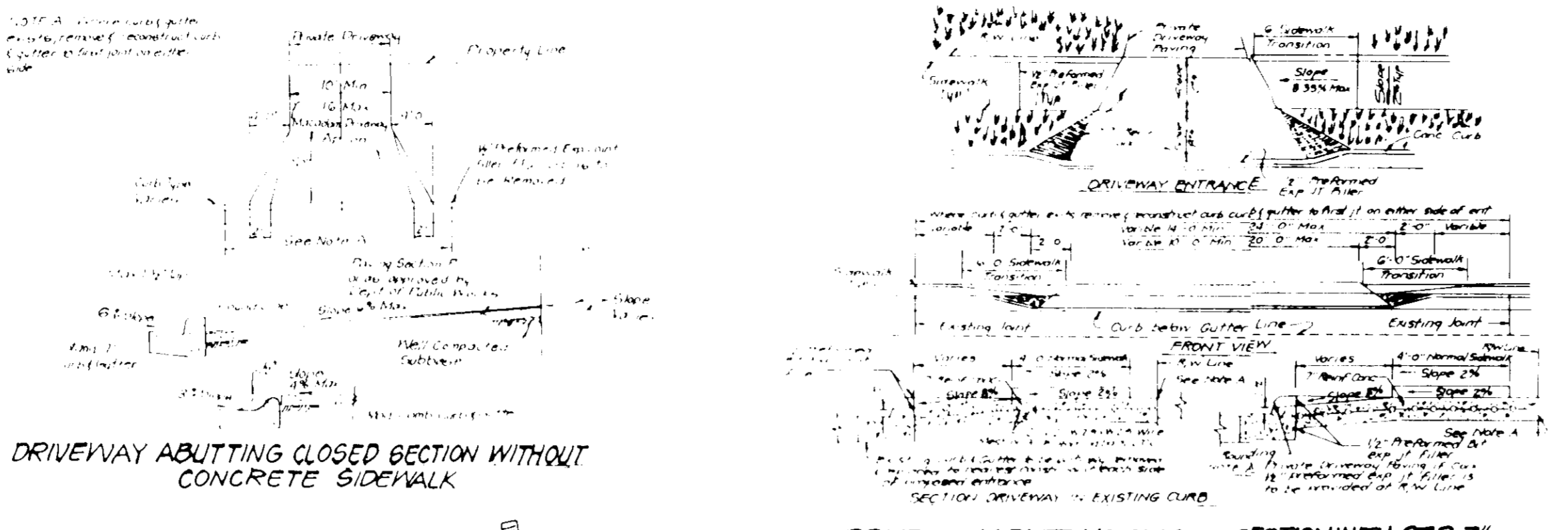


**DRIVEWAY ABUTTING CLOSED SECTION WITH MODIFIED COMB CURB & GUTTER & SIDEWALK**

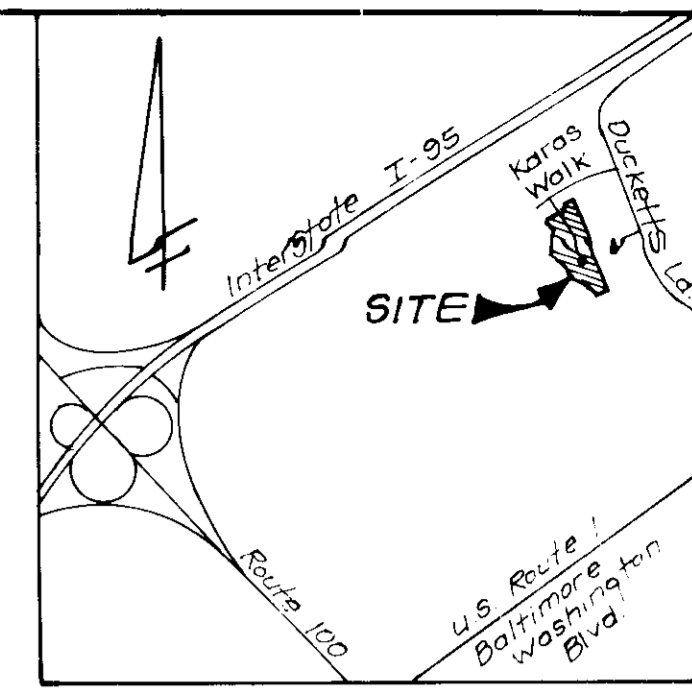


**DRIVEWAY ABUTTING CLOSED SECTION WITHOUT CONCRETE SIDEWALK**

**DRIVEWAY ABUTTING CLOSED SECTION WITH STD 7\"/>**

**GENERAL NOTES**

1. Subject property zoned R-1205 per B 2 85 Comprehensive Zoning Plan
2. The coordinates shown herein are based on The Maryland State Grid System and derived from the following Howard County Control Stations 2546001, 2545001 and 2646008
3. All roadways are public and existing
4. Total area included in this submission 6.42 Ac.
5. Total number of lots 25
6. Any damage to utility-owned right-of-ways shall be corrected at the Developer's expense
7. Maximum lot coverage is 30%
8. Reference plans S-87-43, S-88-21, P-86-33, WP-88-30 and F-88-289
9. The Contractor or Developer shall contact the Construction Department, 24 hours in advance of commencement of work at 792 2630
10. The existing topographic shown was taken from previously approved road construction/rough grading plan, F-88-289
11. Improvements to property: Single Lot Density Units
12. Waiver Petition 89-30, Howard County Subdivision and Land Development Regulations Section 16.113-C10 to allow a cul-de-sac street extension of an existing public right-of-way, Kara's Walk from the 1200 foot length requirement to a total length of 1600 feet
13. SWM provided under previously approved plans F-88-289
14. A 10-foot Tree Maintenance Easement on all road frontages.



**VICINITY MAP**  
Scale 1" = 2000'

**LEGEND**

- Contour Interval 2 FT
- Existing Contour 10'
- Proposed Contour 410'
- Spot Elevation +10'
- Direction of Drainage
- Walk out Basement
- Ex Trees to be saved
- Flood Plain Elev. 152.0'

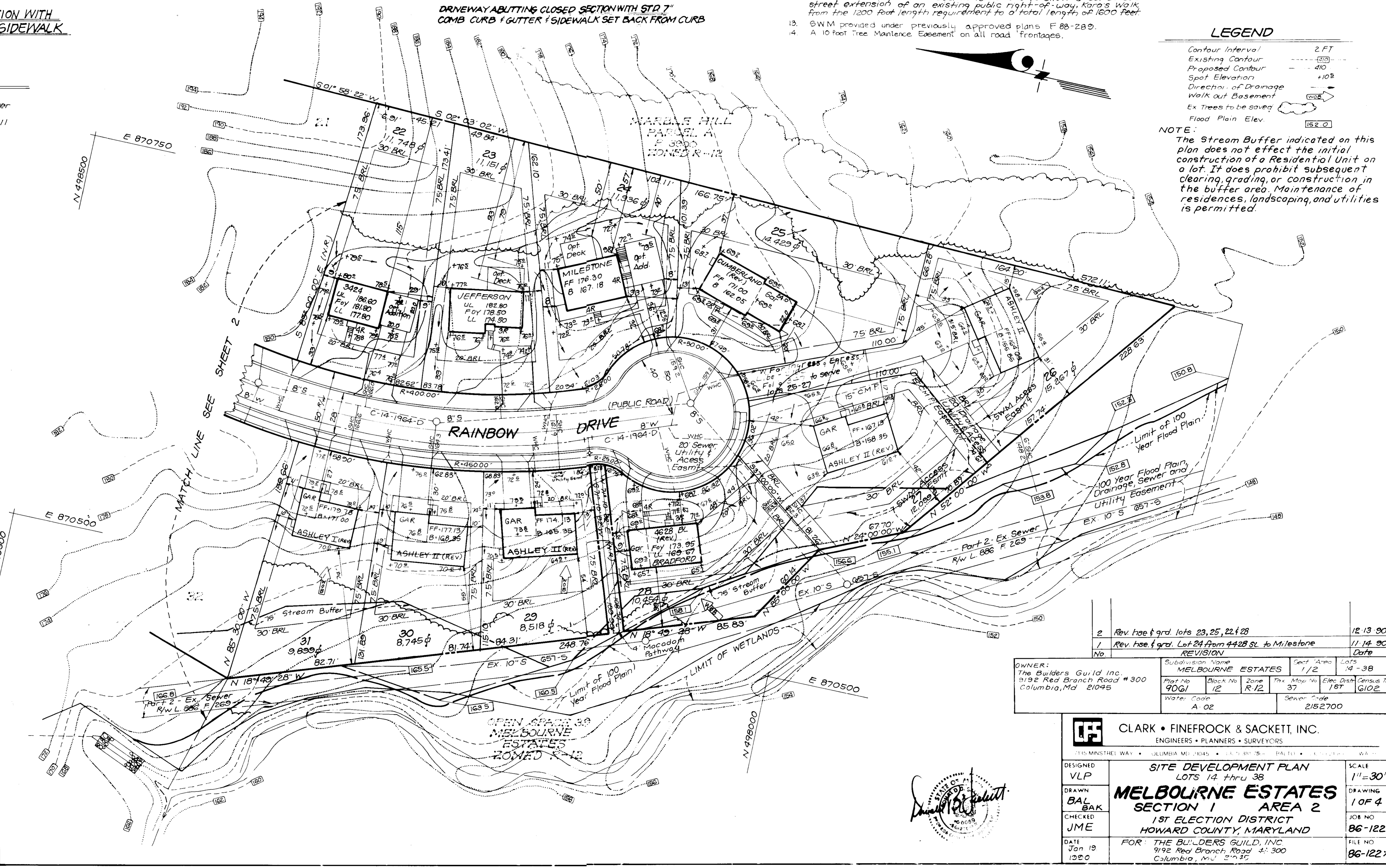
**NOTE:**  
The Stream Buffer indicated on this plan does not effect the initial construction of a Residential Unit on a lot. It does prohibit subsequent clearing, grading, or construction in the buffer area. Maintenance of residences, landscaping, and utilities is permitted.

**SPECIAL NOTES**

1. All road construction, storm drainage facilities and public water and sewer are shown for reference only. Use approved Howard County plans for all phases of construction.

**ADDRESS CHART**

LOT	STREET ADDRESS
14	G107 RAINBOW DRIVE
15	G111
16	G115
17	G119
18	G123
19	G127
20	G131
21	G135
22	G139
23	G143
24	G147
25	G151
26	G155
27	G159
28	G163
29	G167
30	G171
31	G175
32	G179
33	G183
34	G187
35	G191
36	G195
37	G199
38	G203 RAINBOW DRIVE



**APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT**

*James J. ...* 6-5-90  
DATE

**APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING**

*...* 6-8-90  
DATE

**APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS**

*...* 5-21-90  
DATE

No.	REVISION	Date
2	Rev. hse & grd. lots 23, 25, 22 & 28	12-13-90
1	Rev. hse & grd. Lot 24 from 4428 SL to Milestone	11-14-90

**OWNER:**  
The Builders Guild Inc.  
9192 Red Branch Road #300  
Columbia, Md 21045

**Subdivision Name:** MELBOURNE ESTATES  
**Plot No:** 9061  
**Block No:** 12  
**Zone:** R-12  
**Tax Map No:** 37  
**Elec Dist:** 187  
**Census Tr:** G102

**Water Code:** A-02  
**Sewer Code:** 2152700

**CLARK • FINEFROCK & SACKETT, INC.**  
ENGINEERS • PLANNERS • SURVEYORS

7355 MINISTREY WAY • COLUMBIA, MD 21045 • TEL: 791-7500 • FAX: 791-7501 • WWW: WWW.CFSI.COM

**DESIGNED:** VLP  
**DRAWN:** BAL  
**CHECKED:** JME  
**DATE:** Jan 19 1990

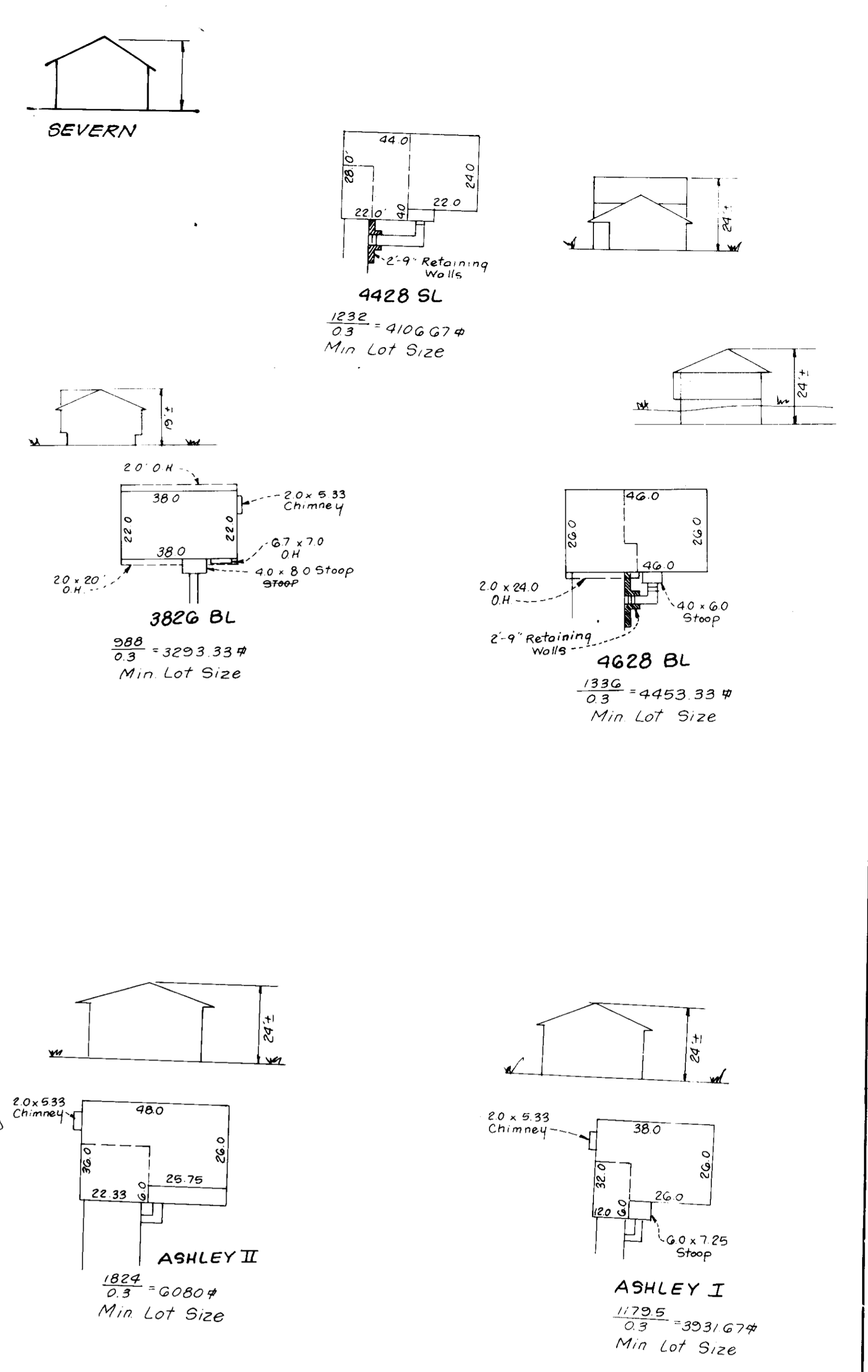
**SITE DEVELOPMENT PLAN**  
LOTS 14 thru 38  
**MELBOURNE ESTATES**  
SECTION 1 AREA 2  
1ST ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

**FOR: THE BUILDERS GUILD, INC.**  
9192 Red Branch Road #300  
Columbia, Md 21045

**SCALE:** 1" = 30'  
**DRAWING:** 1 OF 4  
**JOB NO:** 86-122  
**FILE NO:** 86-122 X

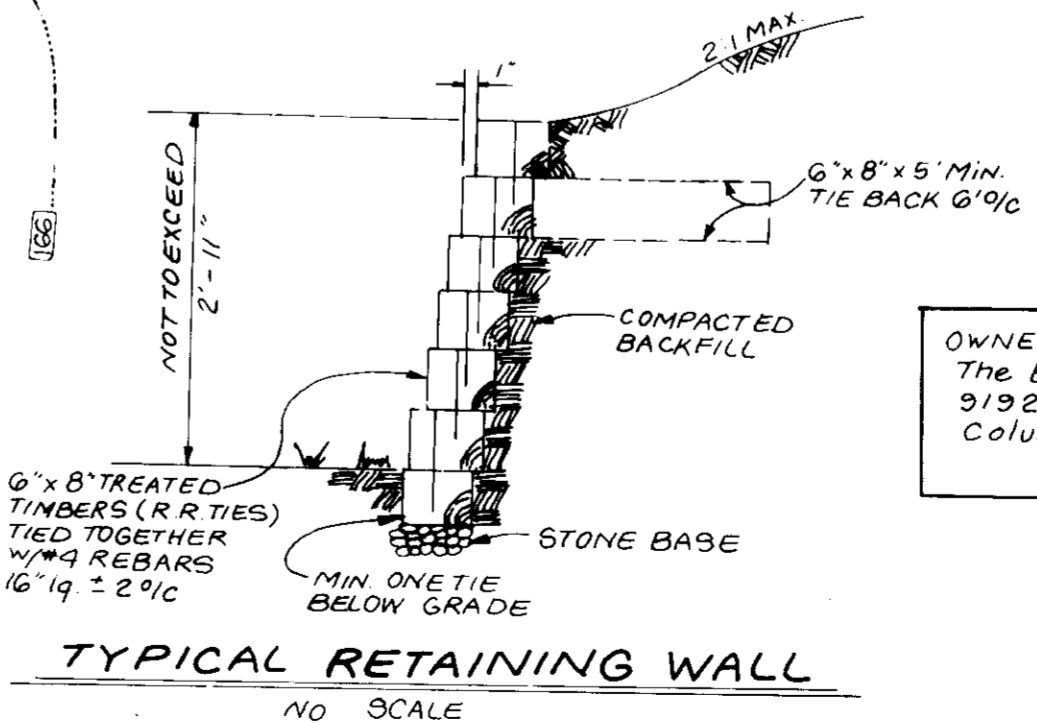
**3-D.P. 90-132**





**TYPICAL HOUSES**  
Scale: 1" = 30'  
NOTE: All units have 1' roof eaves, front & rear.

LOT	GROSS AREA	MINUS FLOOD PLAIN	MINUS PIPE STEM	Ex. Steep Slope Area to remain undisturbed	NET LOT AREA	CREATED Steep Slope	Plus up to 10% of allowable Min Lot Size Credit for Created Steep Slope	Min Lot Size
28	10,454 #	2,001 #	0	0	8,393 #	0	10,454 #	10,454 #



**TYPICAL RETAINING WALL**  
NO SCALE

No.	REVISION	Date
1	Shift house revise grade lot 33, Revise hse typical	5-18-94
2	Rev. hse. & grd. lot 33, Add hse. typical	4-18-94
3	Rev. hse. and grd. lot 38 from Ashley II to Cumberland.	6-27-91
4	Rev. hse. and grd. lot 15	12-13-90

**APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS**  
HOWARD COUNTY HEALTH DEPARTMENT

*James P. Borker* 6-5-90  
COUNTY HEALTH OFFICER DATE

**APPROVED BY HOWARD COUNTY DEPT. OF PLANNING & ZONING**

*Mark J. Taylor* 6-18-90  
DIRECTOR DATE

**APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS**  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

*James P. Borker* 6-18-90  
DIRECTOR DATE

*William E. Ray* 5-31-90  
CHIEF BUREAU OF ENGINEERING DATE

OWNER  
The Builders Guild, Inc.  
9192 Red Branch Road # 300  
Columbia, Md 21045

**CLARK • FINEFROCK & SACKETT, INC.**  
ENGINEERS • PLANNERS • SURVEYORS  
7135 MINISTREL WAY • COLUMBIA MD 21045 • (410) 481-7500 • BALTO. • (301) 621-8100 • WA

**SITE DEVELOPMENT PLAN**  
LOTS 14 thru 38  
**MELBOURNE ESTATES**  
SECTION 1 AREA 2  
1ST ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

FOR THE BUILDERS GUILD, INC.  
9192 Red Branch Road, #300  
Columbia, Maryland 21045

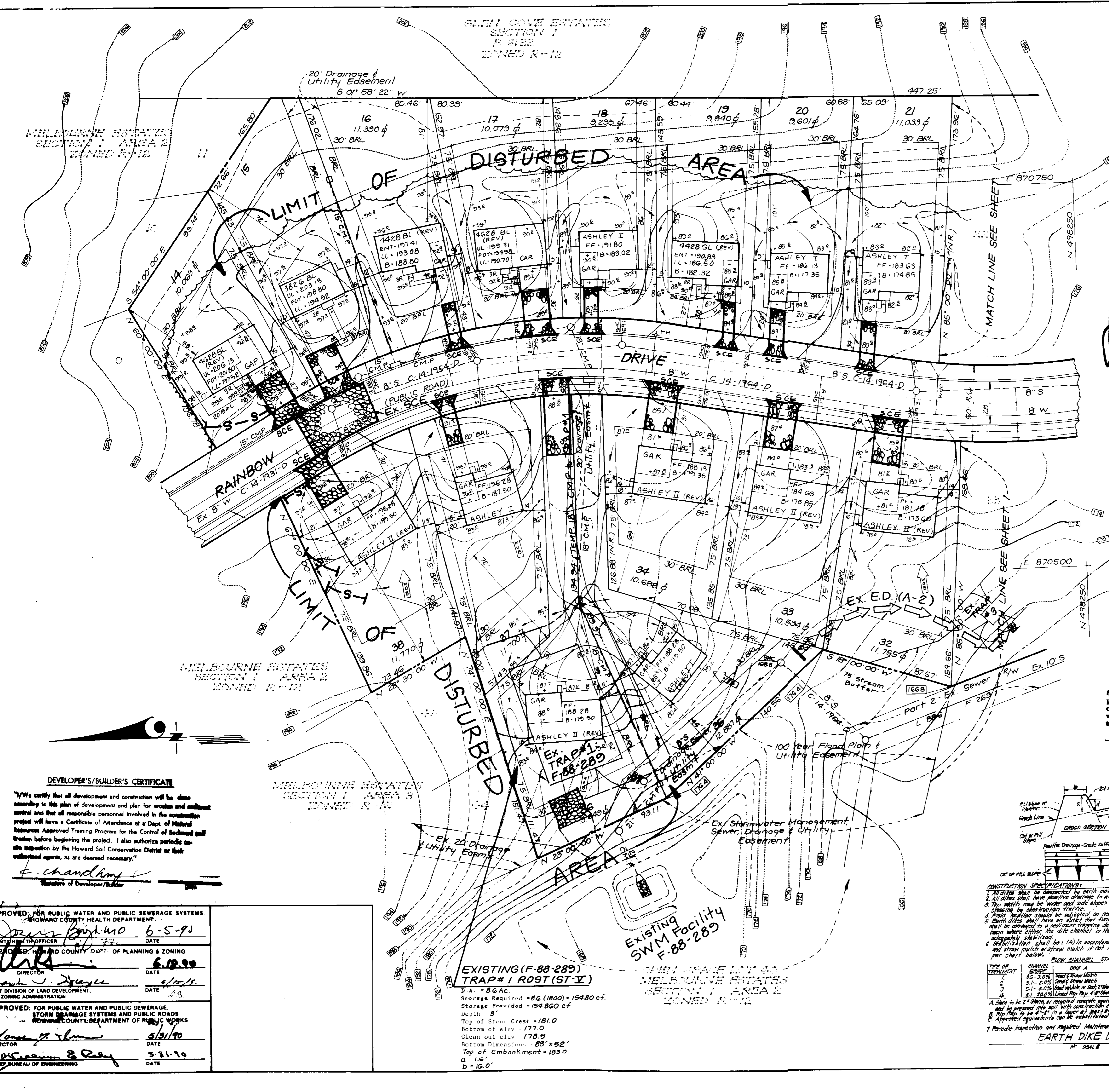
DESIGNED VLP  
DRAWN BAL  
CHECKED JME  
DATE (15th) 1990

SCALE 1" = 30'  
DRAWING 2 OF 4  
JOB NO 86-122  
FILE NO 86-122 X









**PERMANENT SEEDING NOTES**

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

**Seeding Preparation:** Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

**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 urea-form 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 mod. 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 reseedings.

**TEMPORARY SEEDING NOTES**

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

**Seeding Preparation:** Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

**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 25 bushel per acre of annual ryegrass (2.2 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 15 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

**Mulching:** Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons 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.

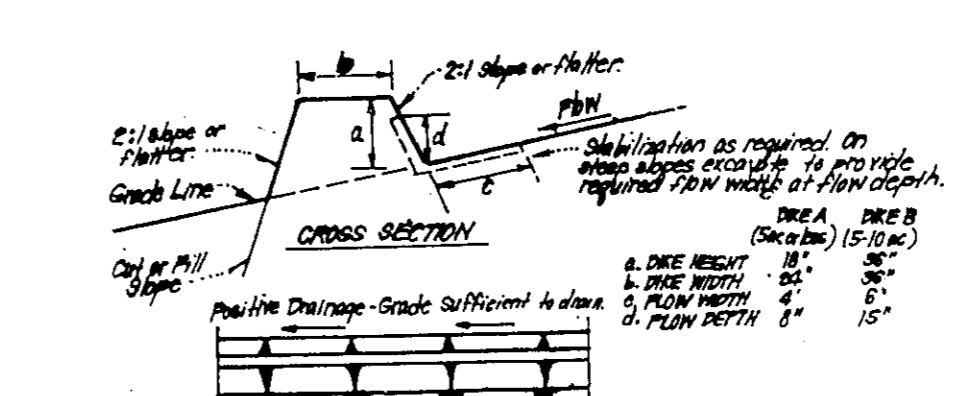
Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

Reviewed for HOWARD S.C.D.  
Name  
John Nelson Clark  
Signature  
U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
John Nelson Clark 5/24/90  
Approved Date



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.  
John Nelson Clark 1-17-90  
G. NELSON CLARK Date



**CONSTRUCTION SPECIFICATIONS**

1. All ditches shall be constructed by earth-moving equipment.
2. All ditches shall have adequate drainage to an outlet.
3. Top width may be wider and side slopes may be flatter if desired to facilitate cleaning by maintenance equipment.
4. Ditch bottom shall be graded on a minimum of 1% slope.
5. Earth dikes shall have an outlet that functions with a minimum of 12" clearance above the ditch bottom. The outlet shall be a positive trapping device such as a sediment trap or sediment basin where either the ditch channel or the drainage area above the dike are not adequately stabilized.
6. Sediment traps 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.

**FLUX CHANNEL STABILIZATION**

TYPE OF PROTECTIVE	CHANNEL GRADE	DIKE A	DIKE B
1	0.5-3.0%	Seed or Straw Mulch	Seed or Straw Mulch
2	3.1-5.0%	Seed or Straw Mulch	Seed or Straw Mulch
3	5.1-10.0%	Seed or Straw Mulch	Seed or Straw Mulch
4	10.1-20.0%	Seed or Straw Mulch	Seed or Straw Mulch

A dike to be 2' Stone, or recycled concrete equivalent, in a layer at least 3" thick. All protective soil shall be covered with equipment. All approved equipment 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.)**

- 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. (192-2437)
  - 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 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 11, 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. 33) and (Sec. 34), temporary seedings (Sec. 30) and mulching (Sec. 32). 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	6428 Acres
Area Disturbed	611 Acres
Area to be roofed or paved	184 Acres
Area to be vegetatively stabilized	427 Acres
Total Cut	4427 Cu. yds
Total Fill	4232 Cu. yds
Offsite waste/borrow area location	
  - 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-Built" 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 118 L.F.
- CONSTRUCTION SEQUENCE**
- A) Obtain grading permit, repair or necessary existing sediment and erosion control devices, and install additional controls as shown. 5
  - B) Excavate for foundations, rough grade and temporarily stabilize. 30
  - C) Construct structures, sidewalks, and driveways. 200
  - D) Final grade and stabilize in accordance w/ stds. and specs. 30
  - E) Upon approval of the sediment control inspector, remove sediment and erosion controls and stabilize. 5
- \*Delay Construction of Houses on Lots 35 and 36 until area draining existing TRAP #1 (F-88-289) has been stabilized.
- NOTE: Individual Stabilized Construction Entrance will be provided if the base course paving has been completed and the S.C.E. at the entrance has been removed.

**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."

J. Chandhoke  
Signature of Developer/Builder

**APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS**  
HOWARD COUNTY HEALTH DEPARTMENT.  
James Boyd 6-5-90  
COUNTY HEALTH OFFICER DATE

**APPROVED FOR LAND AND COUNTY DEPT. OF PLANNING & ZONING**  
John Nelson Clark 6-12-90  
DIRECTOR DATE

**APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS**  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
John Nelson Clark 5/31/90  
DIRECTOR DATE

**APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS**  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
John Nelson Clark 5-31-90  
DIRECTOR DATE

**EXISTING (F-88-289) TRAP #1 ROST (ST-I)**

D.I. = 8' G.A.C.  
Storage Required = 82 (1800) - 15480 cf.  
Storage Provided = 15480 cf.  
Depth = 8'  
Top of Stone Crest = 181.0  
Bottom of elev = 177.0  
Clean out elev = 178.5  
Bottom Dimensions = 8' x 5'  
Top of Embankment = 185.0  
Q = 1.6'  
D = 16.0'

**CLARK • FINEFROCK & SACKETT, INC.**  
ENGINEERS • PLANNERS • SURVEYORS

7114 MINISTREL WAY • COLUMBIA MD 21046 • (410) 871-7500 • BALTO • (410) 481-1800 • WASH

DESIGNED KIWM	SEDIMENT & EROSION CONTROL PLAN LOTS 14 thru 38	SCALE 1" = 30'
DRAWN BAK	MELBOURNE ESTATES	DRAWING 4 of 4
CHECKED KIWM	SECTION 1 AREA 2 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO 86-122
DATE JAN. 1990	FOR THE BUILDERS GUILD, INC 9192 Red Branch Road # 300 Columbia, Maryland 21045	FILE NO 86-122SE

S.U.P. 90-132