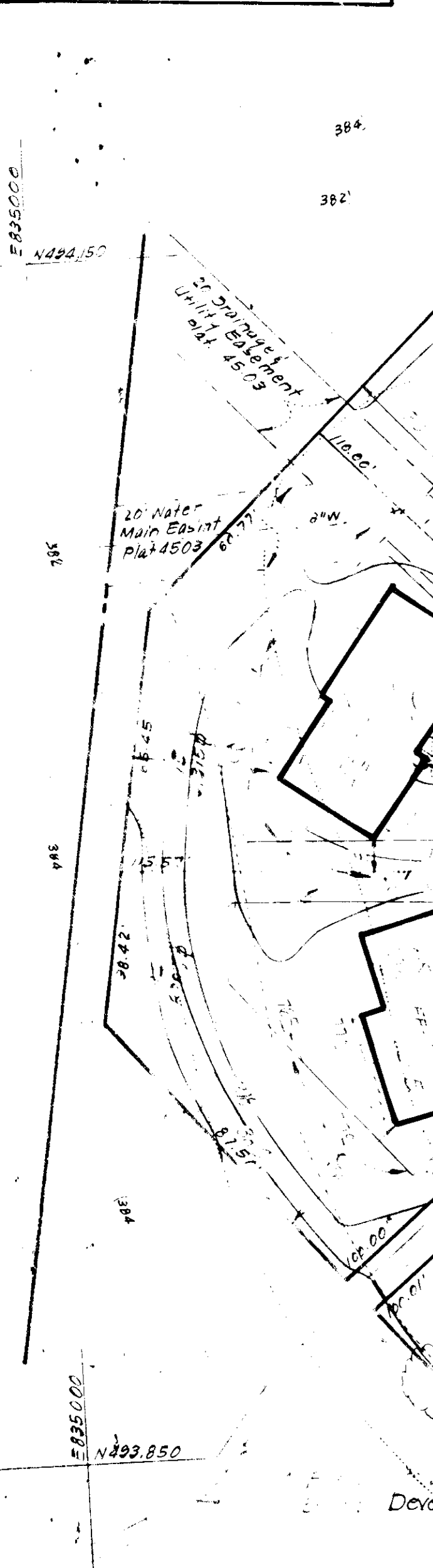
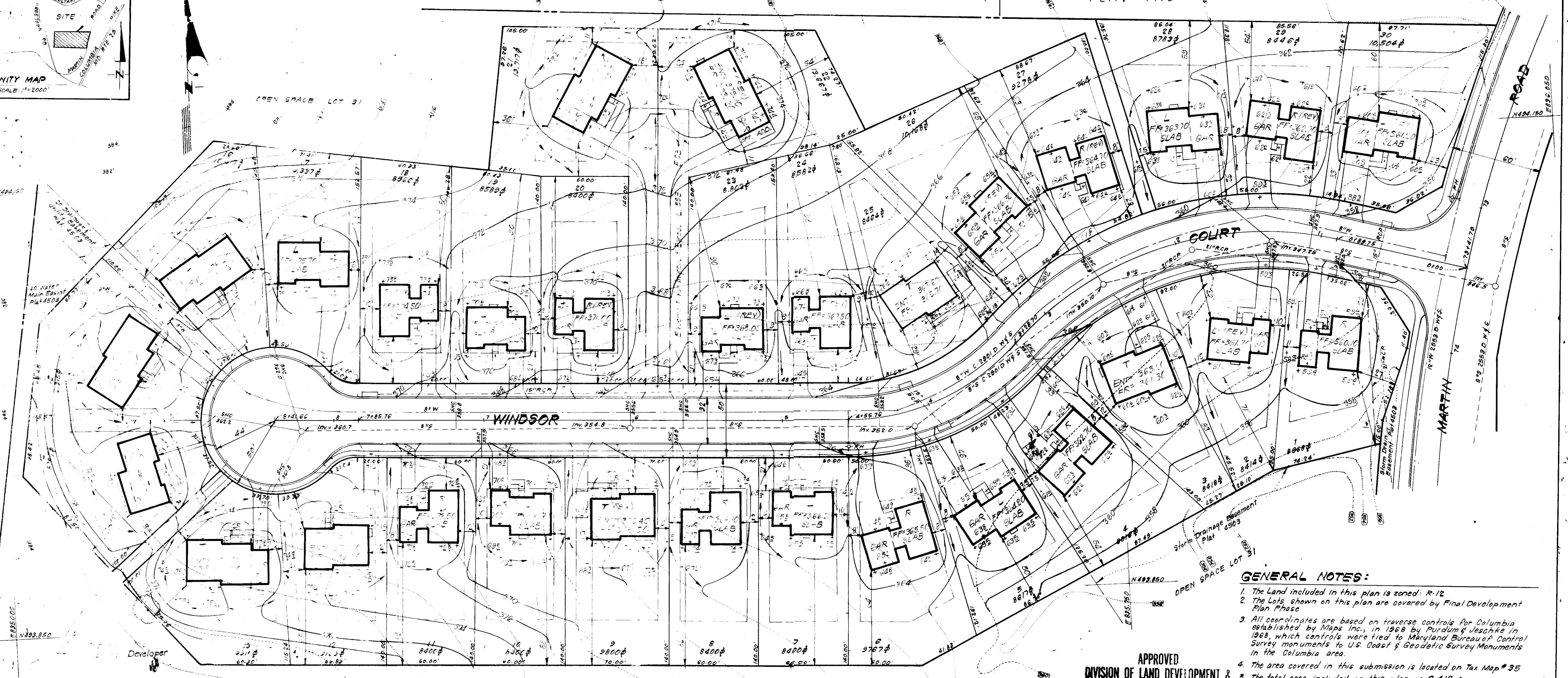


VICINITY MAP
SCALE 1"=2000'



V.O.H.R. SECTION 1 AREA 2
P.B. 25 F.S. 85

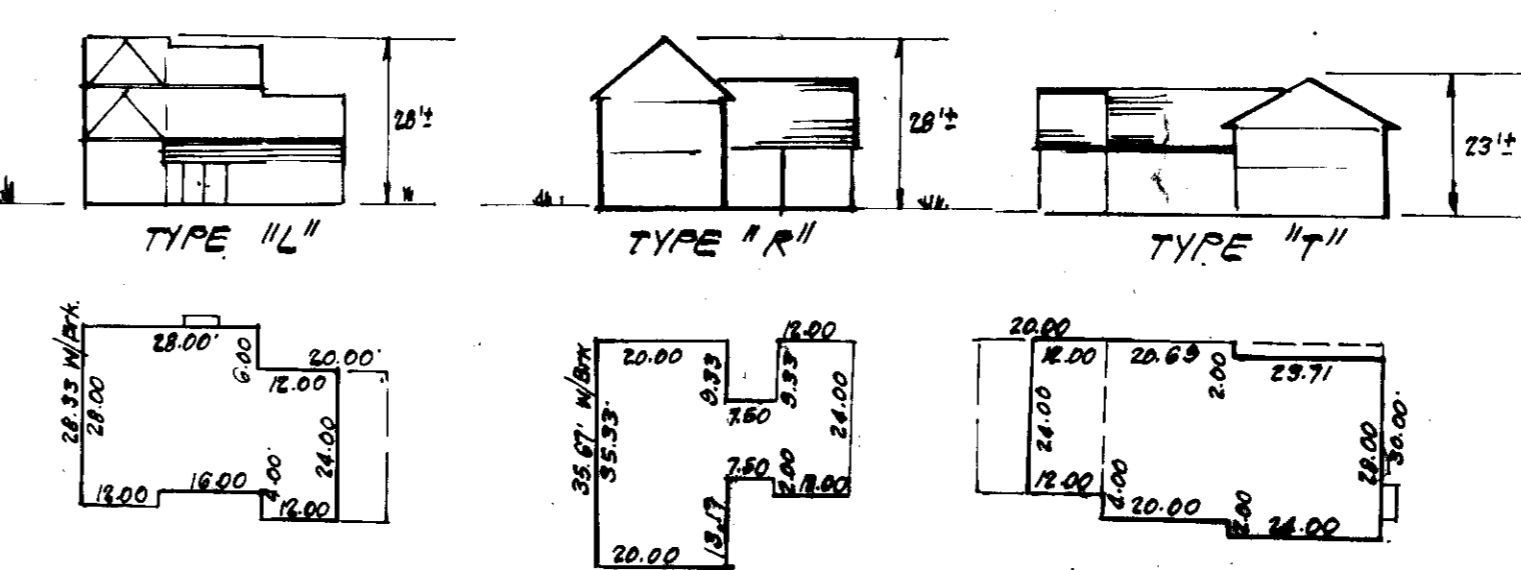
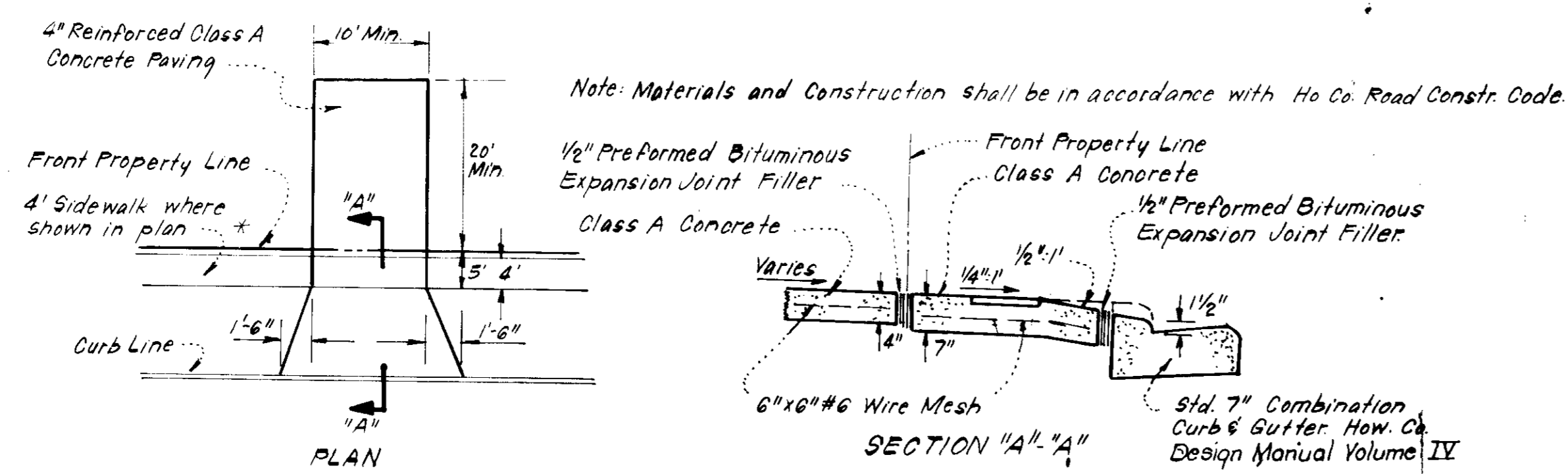
CLEMENS SQUARE
PLAT 4115



- GENERAL NOTES:**
1. The land included in this plan is zoned R-12
 2. The lots shown on this plan are covered by Final Development Plan Phase
 3. All coordinates are based on traverse controls for Columbia established by Maps Inc. in 1968 by Purdum & Jeschke in 1968, which controls were tied to Maryland Bureau of Control Survey monuments to U.S. Coast & Geodetic Survey Monuments in the Columbia area.
 4. The area covered in this submission is located on Tax Map # 35
 5. The total area included on this plan is 6.412 Acres.
 6. All roadways are public and existing.
 7. Any damage to county owned rights of way shall be corrected at the developer's expense.

APPROVED
DIVISION OF LAND DEVELOPMENT &
ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 9-28-81
J.M.M.

- LEGEND:**
1. Contour Interval 2 FT.
 2. Existing Contour 1370
 3. Proposed Contour 1370
 4. Spot Elevation +705
 5. Direction of Drainage →



Street Trees
Street trees shall be planted by the developer, K & M Development Corp., at a rate of at least one tree per 40' of Lot Frontage, and in accordance with Section 16.131 of the subdivision and land development regulations of Howard County.

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT
DATE 10-23-81
PLANNING DIRECTOR

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE,
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DATE 10-21-81
CHIEF BUREAU OF ENGINEERING

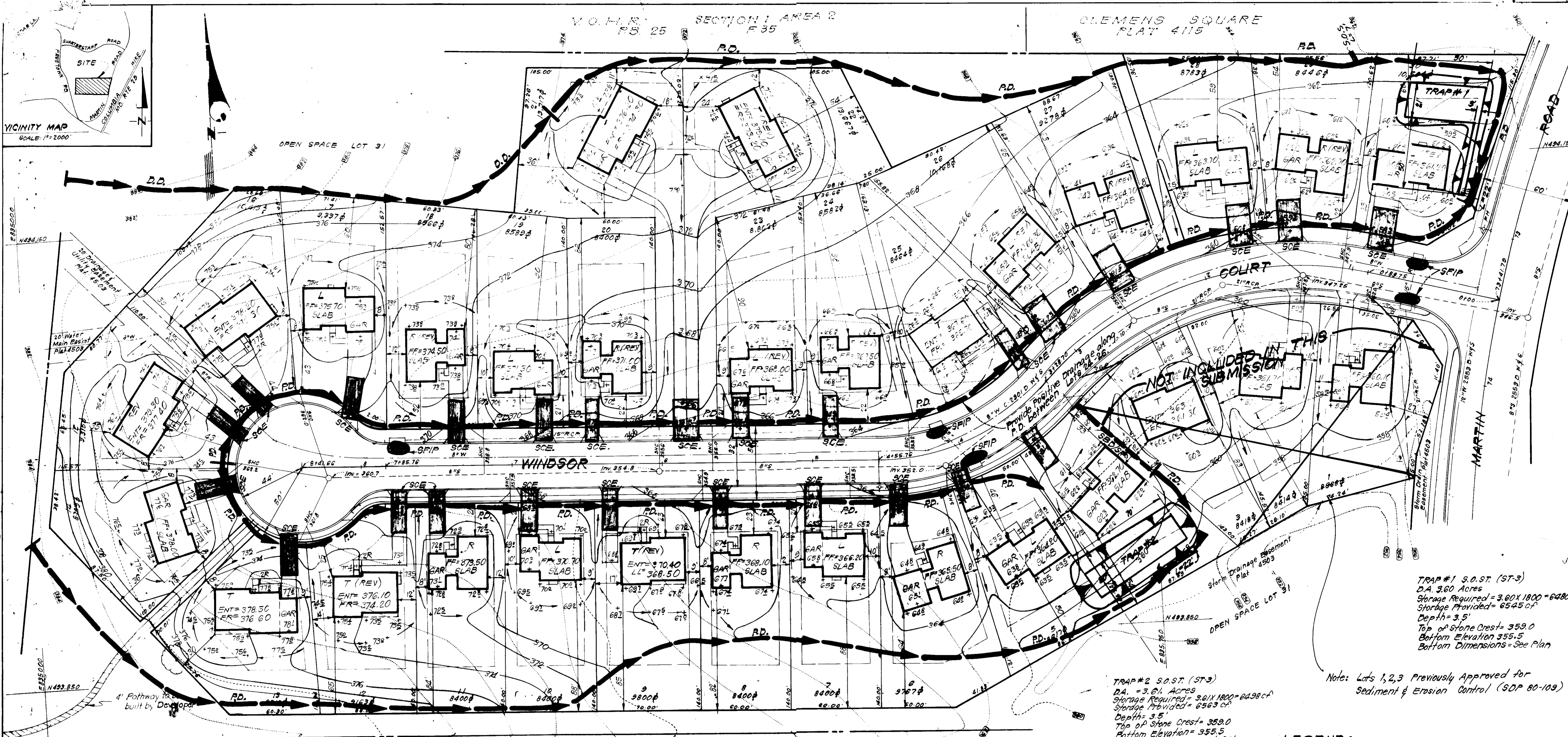
DRIVEWAY ABUTTING STANDARD 7" COMB CURB & GUTTER
* NOTE: Approved Road Construction Plans shall be used for installation of all public improvements.

Note: For Individual Bearings & Distances of Lot Lines, See Plat 4503.

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

DESIGNED	J.M.M.	SITE DEVELOPMENT PLAN LOTS 1 THRU 30	SCALE 1"=30'
DRAWN	J.M.M.		
CHECKED	J.M.M.	CAROLINE ESTATES SECTION 1 AREA 1 4th ELECTION DISTRICT HOWARD COUNTY, MARYLAND	DRAWING 1043
DATE	8-28-81		
FOR: COLUMBIA BUILDERS INC. 808 American City Bldg. Columbia, Md. 21044		JOB NO. 79-002	FILE NO. 80-018X
S.D.P. 82-28		S.D.P. 82-28	

VICINITY MAP
SCALE 1"=2000'



TRAP #1 S.O.ST. (ST-3)
D.A. 3.60 Acres
Storage Required = 3,60 X 1800 = 6480 CF
Storage Provided = 6545 CF
Depth = 3.5'
Top of Stone Crest = 359.0
Bottom Elevation 355.5
Bottom Dimensions = See Plan

TRAP #2 S.O.ST. (ST-3)
D.A. = 3.61 Acres
Storage Required = 3,61 X 1800 = 6498 CF
Storage Provided = 6563 CF
Depth = 3.5'
Top of Stone Crest = 359.0
Bottom Elevation = 355.5
Bottom Dimensions = 70' X 20'

Note: Lots 1,2,3 Previously Approved for Sediment & Erosion Control (SDP 80-109)

APPROVED
DIVISION OF LAND DEVELOPMENT &
ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 9-28-81
JMM



- LEGEND:**
- 1. Contour Interval 2.0'
 - 2. Existing Contour
 - 3. Proposed Contour
 - 4. Spot Elevation
 - 5. Direction of Drainage
 - 6. Perimeter Dike
 - 7. Diversion Dike
 - 8. Straw Bale Dike or Silt Fence
 - 9. Stone Filter Inlet Protection
 - 10. Stone Construction Entrance
 - 11. Stone Outlet Structure

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT
10-23-81
APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING
10-26-81
APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE,
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
10-21-81

Reviewed for...
Name
and meets Technical Requirements
Date
Signature
U.S. Soil Conservation Service
THIS DEVELOPMENT PLAN IS APPROVED
FOR SEDIMENTATION AND SEDIMENT
CONTROL BY THE HOWARD SOIL
CONSERVATION DISTRICT
Signature
Date

DEVELOPER'S/BUILDER'S CERTIFICATE
"I/we certify that all development and construction will be done according to the plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction of this plan 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 deemed necessary."
Signature
Date

ENGINEER'S CERTIFICATE
I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan and that it was prepared in accordance with the requirements of the Howard Soil Conservation District
Signature
Date

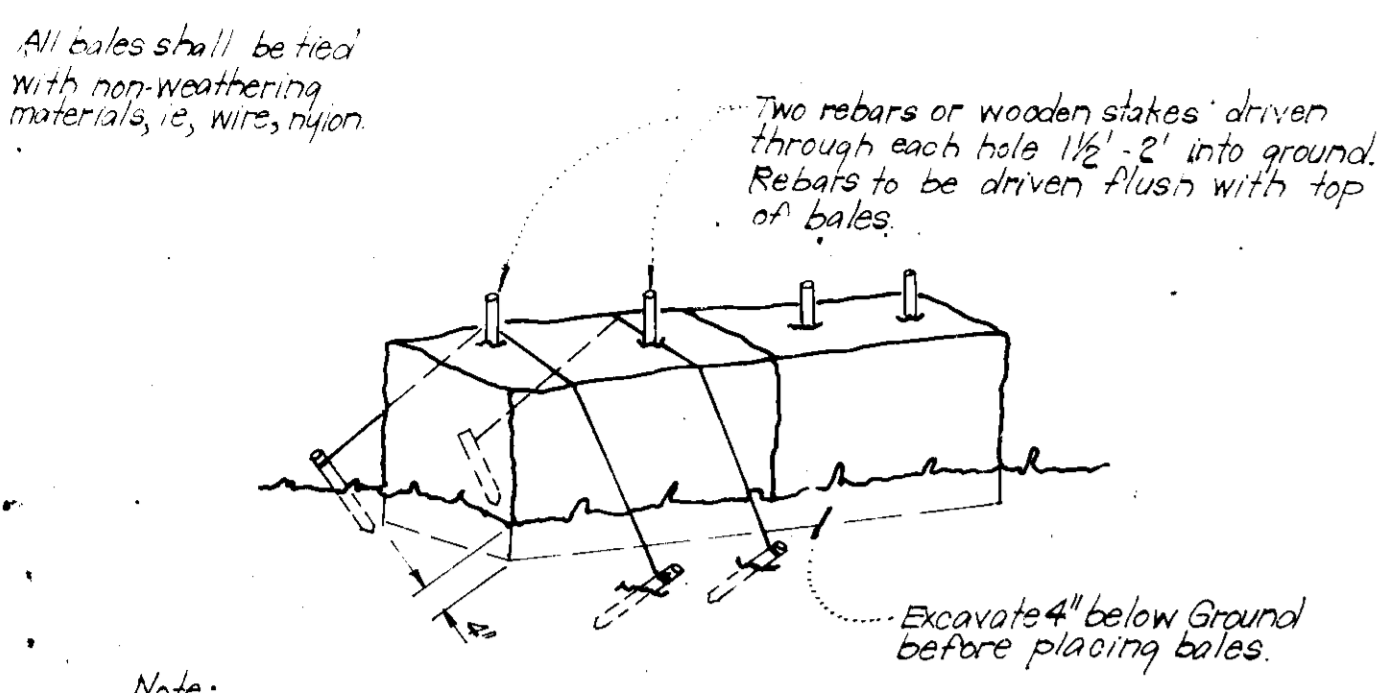
CLARK • FINEFROCK & SACKETT
ENGINEERS • PLANNERS • SURVEYORS
11315 LOCKWOOD DRIVE SILVER SPRING MARYLAND 20904 (301) 593 3400

DESIGNED B.P.	SEDIMENT & EROSION CONTROL PLAN LOTS 14 THRU 30	SCALE 1"=30'
DRAWN KLM	CAROLINE ESTATES	DRAWING 2 of 3
CHECKED B.P.	SECTION 1 AREA 1 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO. 80-018
DATE Aug 28, 1981	FOR: COLUMBIA BUILDERS, INC. 806 American City Bldg. Columbia, Md. 21024	DATE 80-018 SE

GENERAL NOTES

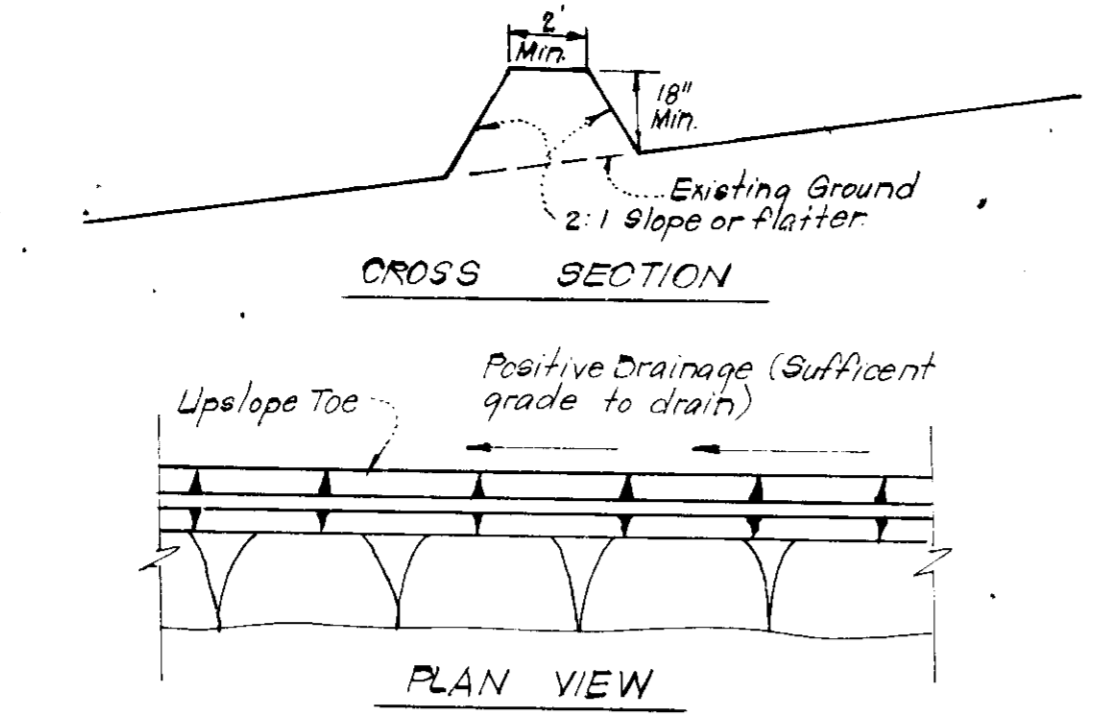
- Grading Permits shall be obtained prior to installation of Sediment Control & Grading.
- All Sediment and Erosion Control Measures will be installed and stabilized according to this plan prior to any other grading, clearing or disturbance of the existing surface of the site. See note #6 for stabilization except that the seed mixture will be annual rye applied at a rate of 1.4 lbs/1000 sq ft.
- Notify the Bureau of Inspections and Permits at least 24 hrs before starting any work.
- All Sediment Control Practices to conform to the "Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas" and shall be adjusted to meet actual field conditions.
- Stabilization of Disturbed ground to be done as soon after construction as possible.
- All disturbed area to be stabilized in accordance with the following Specifications:
 - Seed - certified 85% germination applied at the rate of 3 lbs/1000 sq ft. Mixture - 40% Kentucky Blue, 20% Chewy Fescue, 20% Kentucky 31 and 20% annual rye.
 - Fertilizer - 10-10-10 applied at a rate of 23 lbs/1000 sq ft. Ground Agricultural Lime or Dolomitic Lime applied at a rate of 30 lbs/1000 sq ft.
 - Mulch - Weed free grain straw applied at a rate of 70-90 lbs/1000 sq ft. Mulch shall be secured to the ground by any approved method i.e., asphalt tacks, chemical binder, etc.
 - All Sod used shall be Maryland State Certified.
- All Structural Sediment Control Measures are to remain in place until permission for their removal has been obtained from the Bureau of Inspections and Permits.
- On-Site Inspection and Maintenance of all Sediment Control Measures including clearing of Sediment Traps and dikes, and proper establishment of all planned vegetative measures will be the responsibility of the developer or his representative on the site, on a continuing day to day basis.
- It will be the developers responsibility to provide additional Sediment & Erosion Control Devices to protect stabilized areas during construction.
- The Contractor shall keep all public roads free of sediment deposits left from traffic leaving construction site.
- Stabilized Construction Entrances shall be placed at all construction entrances.
- If houses are to be constructed on an "As-Sold" basis at random, Single Lot Sediment Control, as shown on this sheet, shall be implemented.
- Total Amount of Straw Bales or Silt Fence shown = 70 LF
- SITE ANALYSIS:

A. Total Area:	5.82	Acres
B. Area to be Roofed:	0.75	Acres
C. Area to be Paved:	1.14	Acres
D. Area to be Seeded:	3.63	Acres
E. Area Undisturbed:	0.30	Acres
- CONSTRUCTION SEQUENCE:
 - Install Sediment & Erosion Control Devices and Stabilize Diversion Dikes
 - Excavate for Foundations and Rough Grade
 - Erect Structures, Driveways and Sidewalks
 - Final Grade and Stabilize in accordance with note #6.
- Approval of this plan is conditional upon the approval of Sediment Control Plan for the off-site waste or borrow area prior to the import of any borrow or export of waste to or from this site.

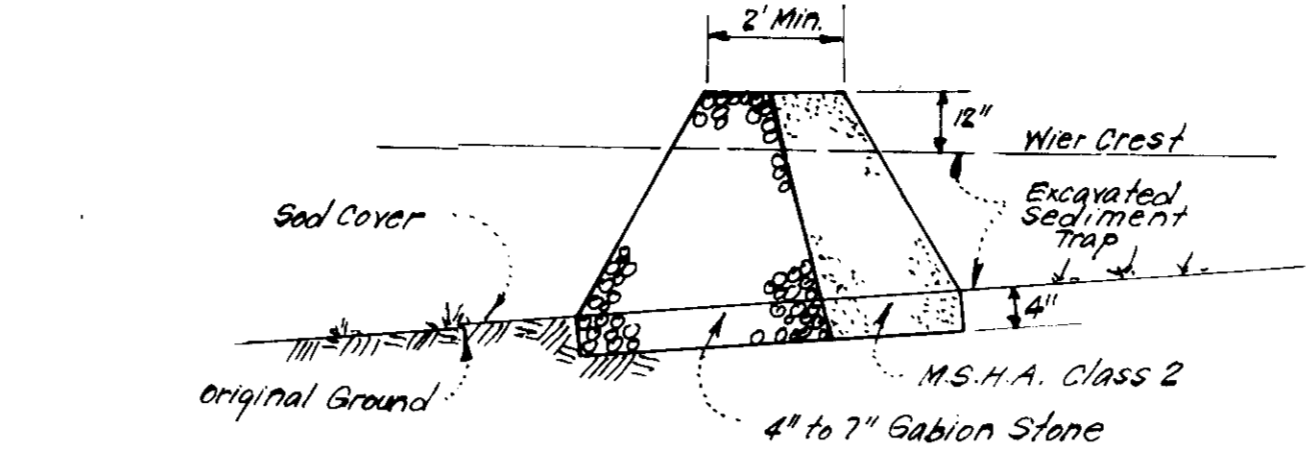


Note:
1. In lieu of the use of rebar each straw bale may be fastened to ground with pegs (4 per bale and wire or nylon as shown above.)

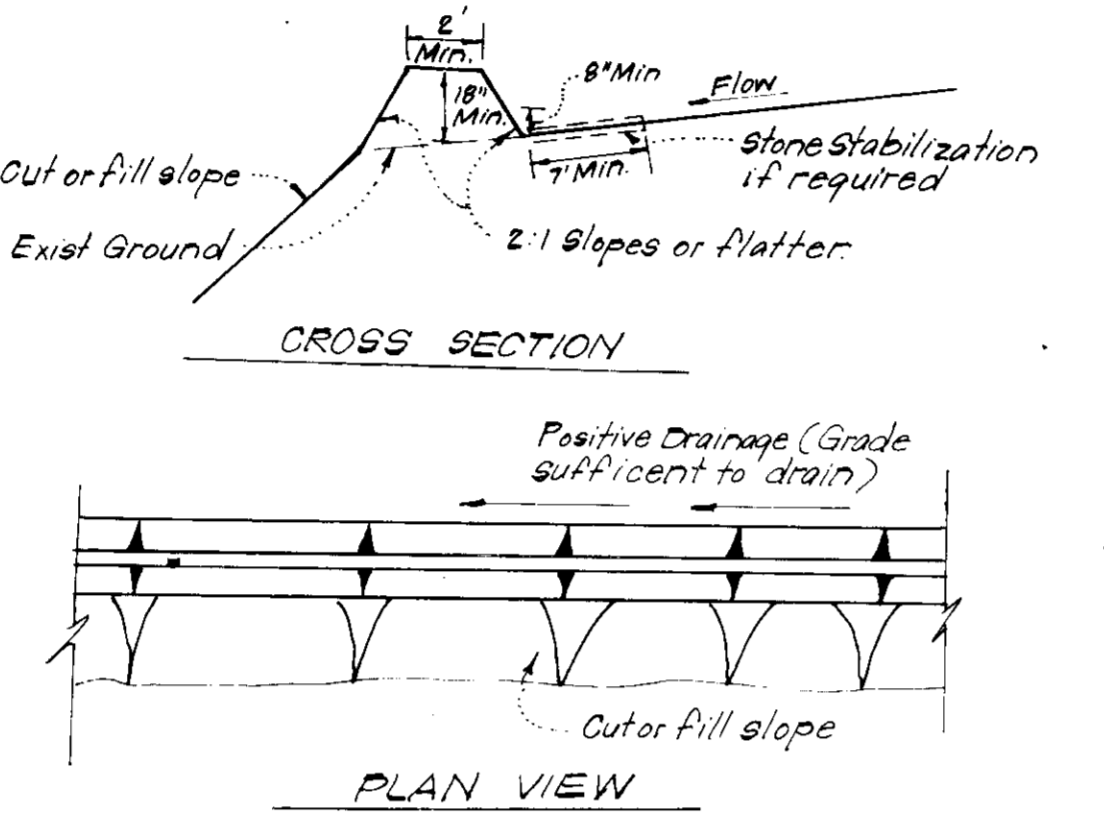
TYPICAL STRAW BALE DIKE DETAIL (S.B.D.)
No Scale



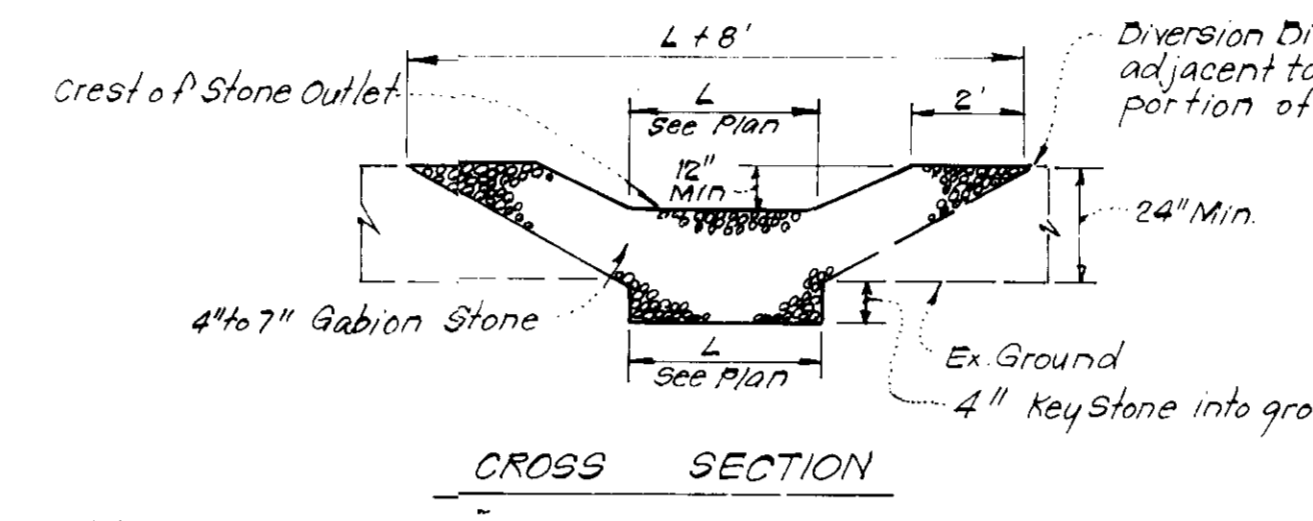
TYPICAL PERIMETER DIKE DETAIL (P.D.)
No Scale



DETAILS OF STONE FILTER OUTLET (FOR STONE OUTLET SEDIMENT TRAP)
No Scale

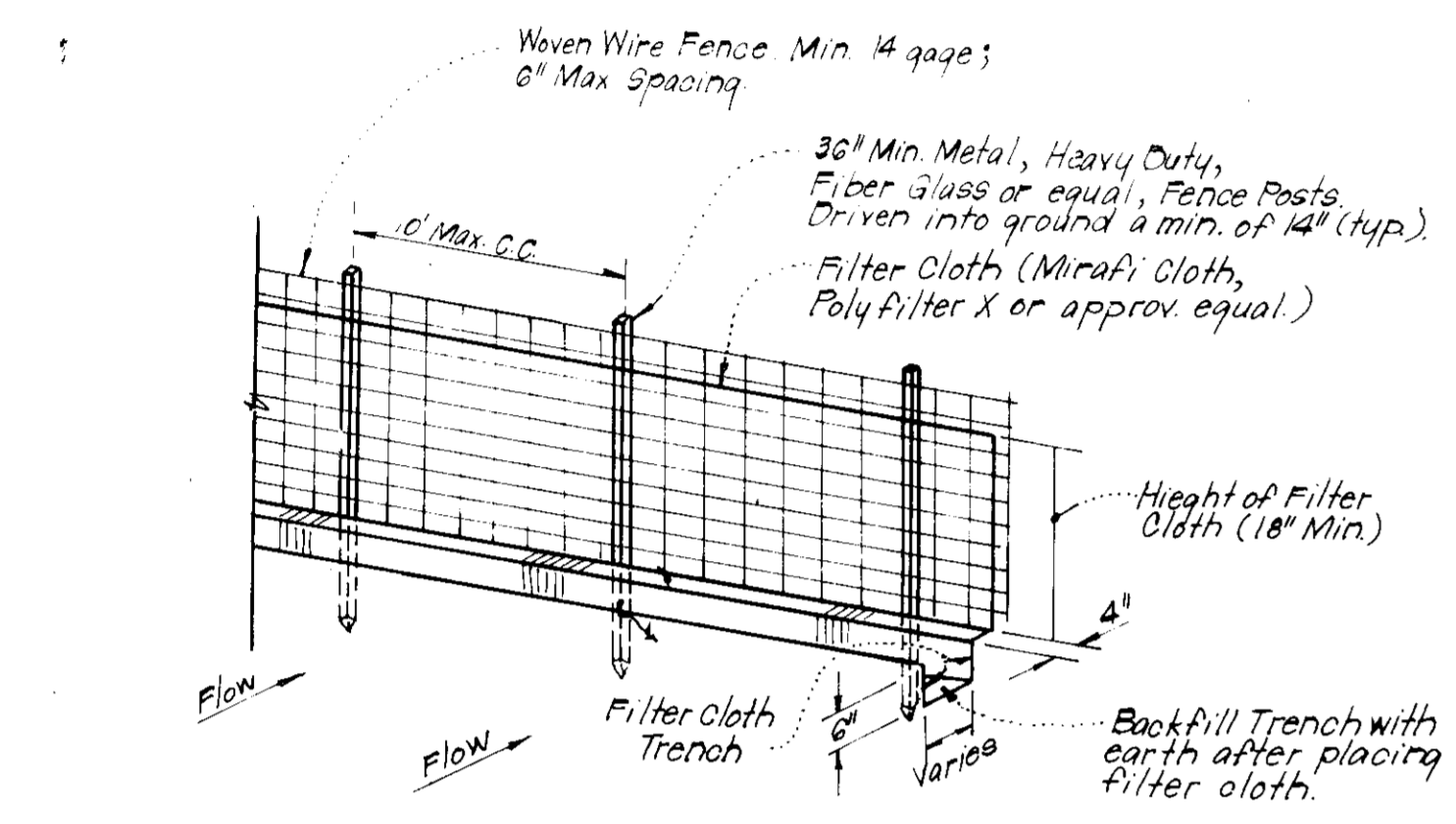


TYPICAL DIVERSION DIKE DETAIL (D.D.)
No Scale



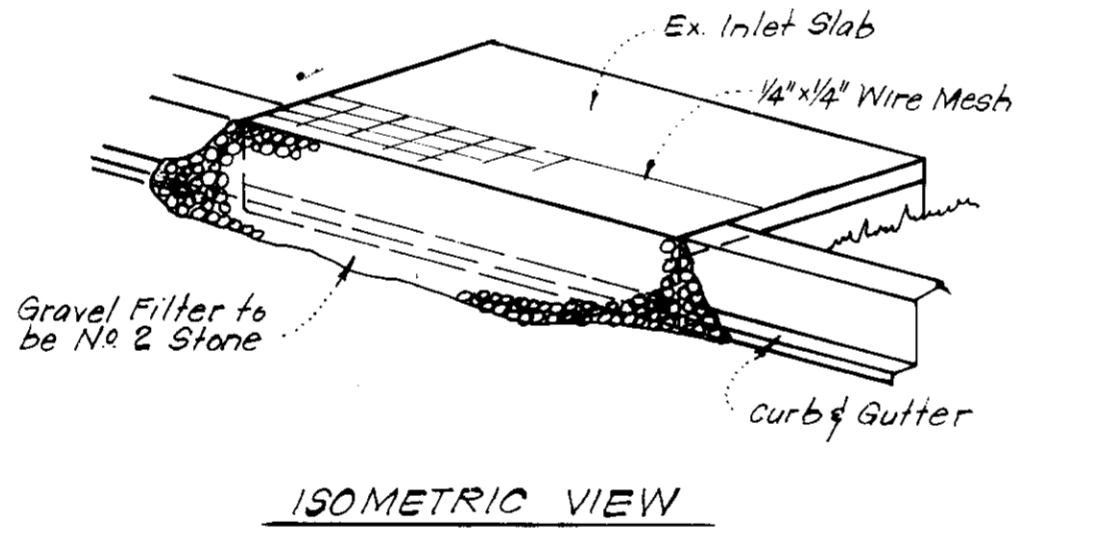
Notes:
1. Sediment Trap to be cleaned out when sediment reaches a level of 1 ft. below crest of stone outlet.
2. Bottom of Sediment Trap to be level and constructed to the dimensions shown on plan.
3. Stone outlet to be constructed through diversion dike adjacent to excavated portion of sediment trap.

DETAILS OF STONE FILTER OUTLET (FOR STONE OUTLET SEDIMENT TRAP)
No Scale

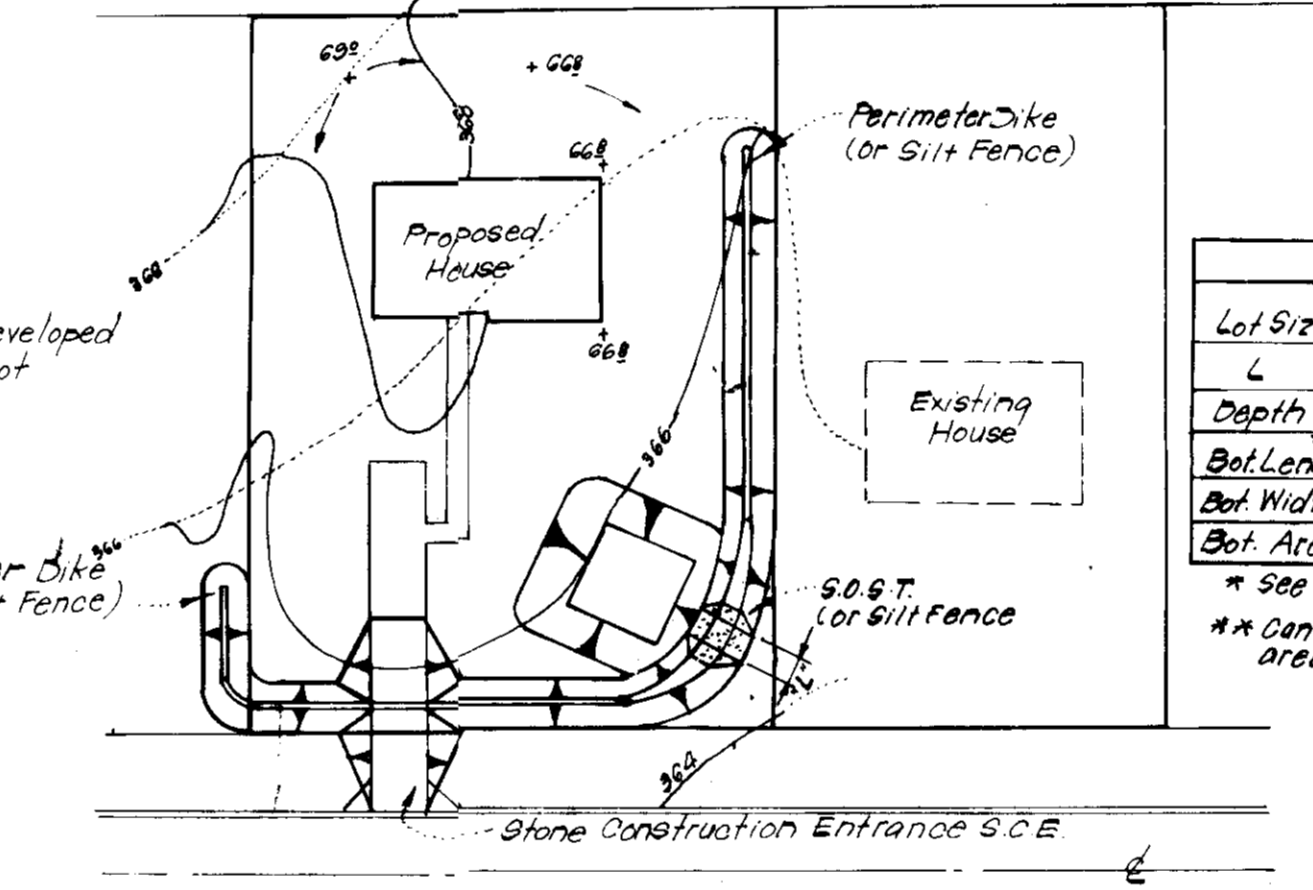


Notes:
1. Woven Wire Fence to be fastened securely to fence posts by use of wire ties.
2. Filter Cloth to be fastened securely to Woven Wire, by use of wire ties spaced every 24"x24"

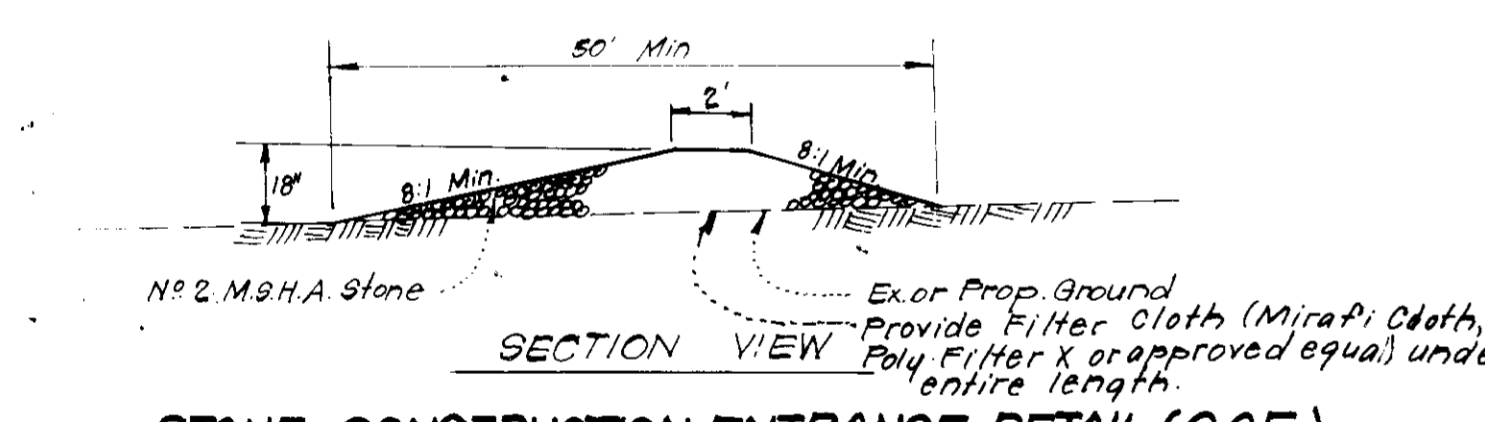
TYPICAL SILT FENCE DETAIL (S.F.)
No Scale



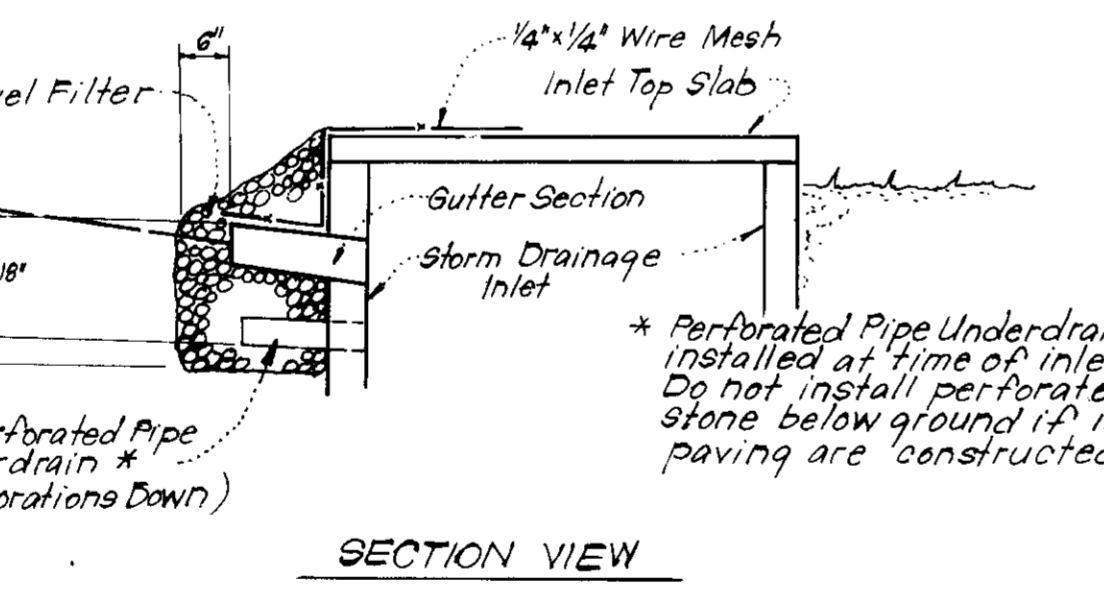
STONE CONSTRUCTION ENTRANCE DETAIL (S.C.E.)
No Scale



TYPICAL SINGLE LOT SEDIMENT CONTROL PLAN



STONE CONSTRUCTION ENTRANCE DETAIL (S.C.E.)
No Scale



STONE FILTER INLET PROTECTION (S.F.I.P.)
No Scale

APPROVED
DIVISION OF LAND DEVELOPMENT &
ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 9-28-81
JMM



APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT
DATE 10-23-81
APPROVED FOR HOWARD COUNTY OFFICE OF PLANNING & ZONING
DATE 10-26-81
APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE,
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DATE 10-21-81

Reviewed for HOWARD S.C.D.
and meets Technical Requirements
DATE 10-14-81
U.S. Soil Conservation Service
THIS DEVELOPMENT PLAN IS APPROVED
FOR SOIL EROSION AND SEDIMENT
CONTROL BY THE HOWARD SOIL
CONSERVATION DISTRICT
DATE 10-14-81

DEVELOPER/BUILDER'S CERTIFICATE
We certify that all development and construction will be done
in accordance with this plan of development and plan for erosion and sediment
control and that all responsible persons involved in the construction
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.
DATE 8-23-81

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 Conserva-
tion District.
DATE 8-28-81

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

DESIGNED B.P.
DRAWN K.W.
CHECKED B.P.
DATE Aug 28, 1981

SCALE As Shown
DRAWING SDP-3
JOB NO. 80-018
FILE NO. 80-018 SE

SECTION 1 AREA 1
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
FOR: COLUMBIA BUILDERS INC.
608 American City Bldg.
Columbia, Md. 21044

SDP-82-28