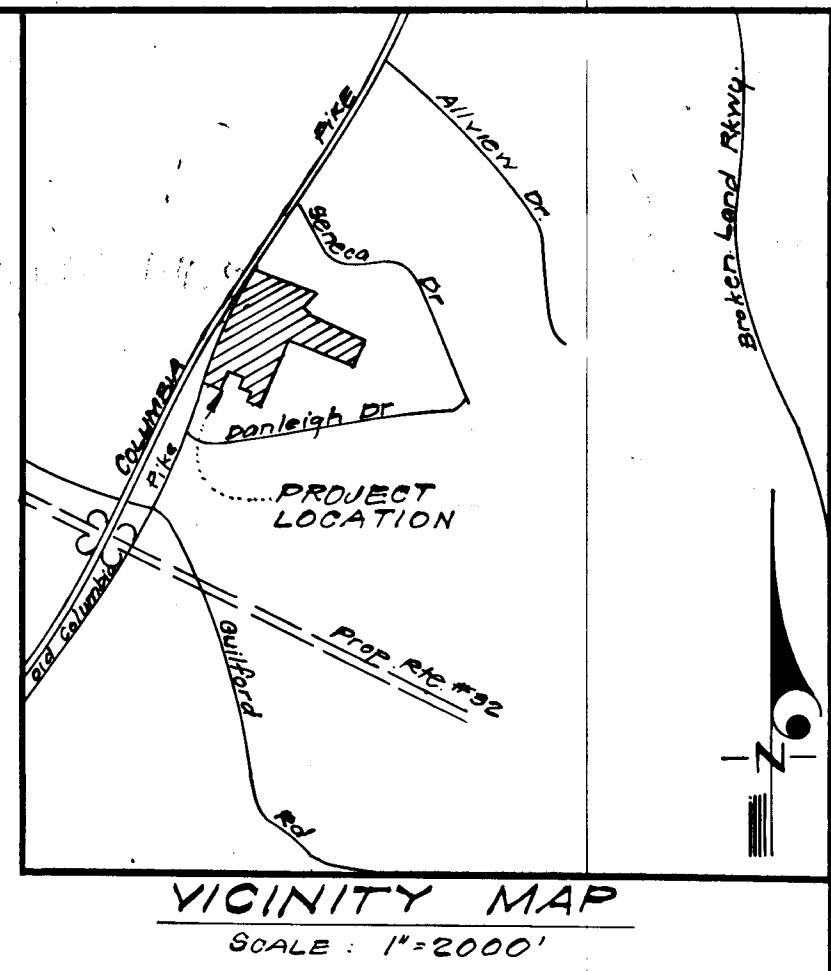


- ### GENERAL NOTES
- All Storm Drain & Paving shall be constructed in accordance with the latest details and specifications of Howard Co. & Md. S.H.A.
 - Types of Storm Drain Structures refer to the Standard Details of Howard County & Maryland State Highway Administration.
 - Trench Compaction for Storm Drains within Road or Street Right of Way limits shall be in accordance with the latest Howard Co. Road Code.
 - 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.
 - All utility companies shall be notified 24 hrs. in advance of construction.
 - All traffic control services, parking, and signing to be done in accordance with the Manual of Uniform Traffic Control Devices, 1971 Edition.
 - Sag and Crest Vertical Curves were designed in accordance with "A Policy on Geometric Design of Rural Highways", 1965, by A.A.S.H.O.
 - Provide Concrete Sidewalk Ramps in curbs. see det. sht 4 of 7. (Max. 12:1 Slope; 4ft. wide) where shown in plan.



Reviewed for HOWARD S.C.D.
Name
and meets Technical Requirements
C. Wayne Kay 9-21-78
Signature Date
U.S. Soil Conservation Service

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

AS-BUILT SURVEY: 3/21/80
BENCHMARKS 1 NAIL IN OAK LOCATION AS SHOWN ON SHEET 1219-D
2 TOP GUARDRAIL LOCATION STATION 325.82
3 NAIL IN 10" MAPLE, LOCATION SHTS. 2 & 3 348.46

Approved 9-21-78
Date
RES EAD
DEVELOPER'S CERTIFICATE

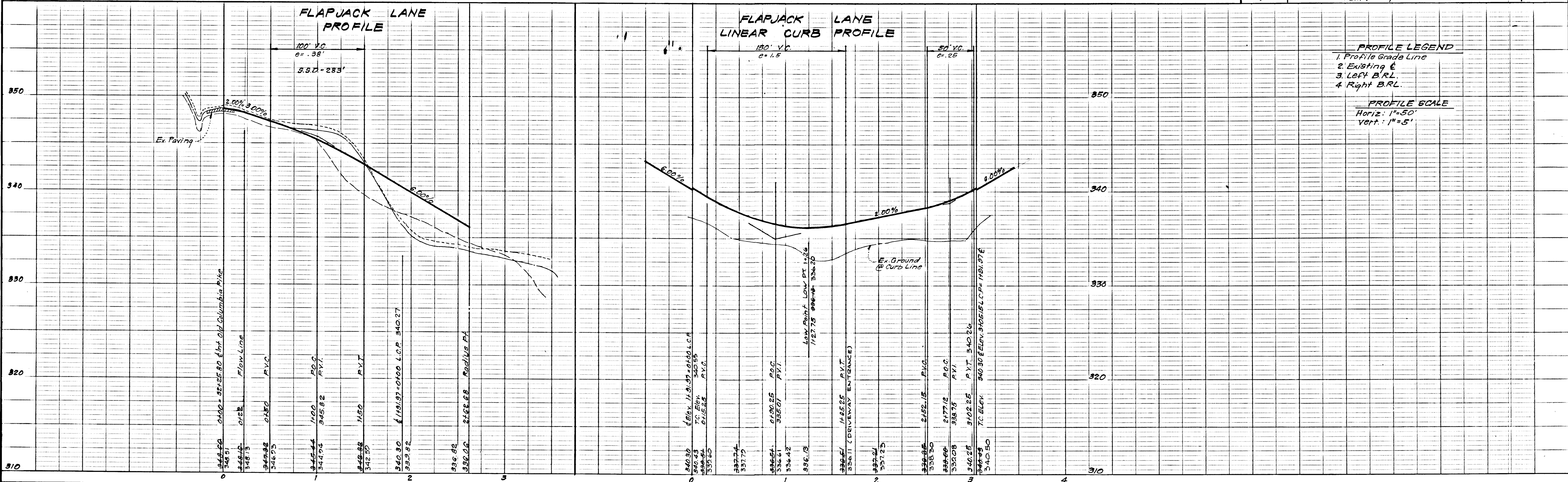
I certify that all development and/or construction will be done according to this plan of development and plan for Erosion and Sediment Control, and I authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents as are deemed necessary. Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District.

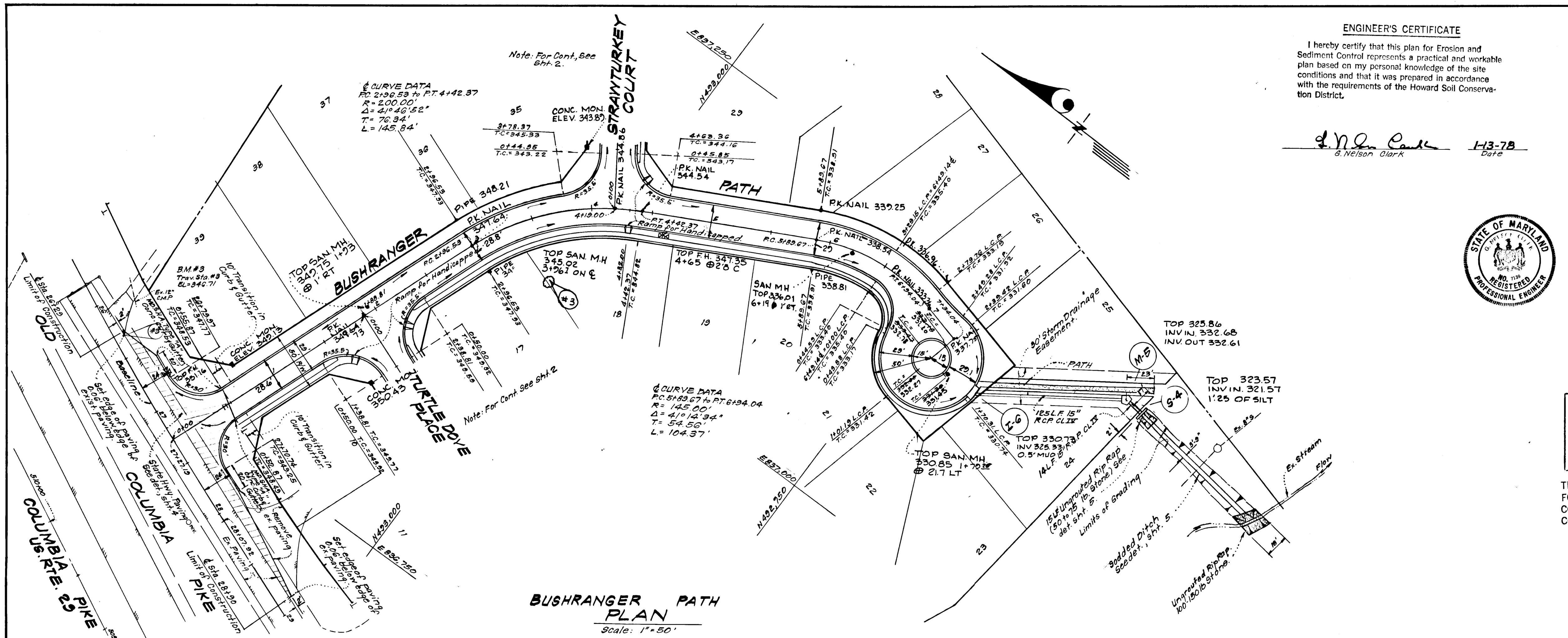
ENGINEER'S CERTIFICATE
I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Signature 1-18-78 Date
Date E. Adams

Signature 1-13-78 Date
G. Nelson Clark

APPROVED: DEPARTMENT OF PUBLIC WORKS		8-10-78
W. O. Pelted CHIEF, BUREAU OF ENGINEERING		DATE
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING		5-18-78
John W. Mullen CHIEF, DIVISION OF LAND DEVELOPMENT		DATE
CLARK • FINEFROCK & SACKETT ENGINEERS • PLANNERS • SURVEYORS 11515 LOCKWOOD DRIVE • SILVER SPRING, MARYLAND 20904 • (301) 593-3400		
DESIGNED D.A.B.	ROAD CONSTRUCTION PLANS FLAPJACK LANE COLUMBIA VILLAGE OF KINGS CONTRIVANCE SECTION 1 AREA 3 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND FOR: HOWARD RESEARCH & DEVELOPMENT CORP. The Rouse Company Building Columbia, Maryland 21044	SCALE As Shown
DRAWN K.I.W.		DRAWING 1 of 7
CHECKED U.L.S.		FILE NO. 1219-D
DATE Jan, 1978		





ENGINEER'S CERTIFICATE

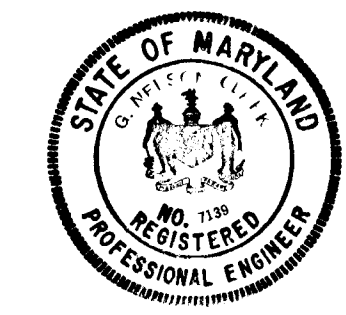
I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

d.N. Clark
d.N. Clark
1-13-78
Date

APPROVED: DEPARTMENT OF PUBLIC WORKS
W.D. Albert
 CHIEF, BUREAU OF ENGINEERING
 DATE: 8-10-78

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
W.M. Middleman
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 8-10-78

CLARK • FINEFROCK & SACKETT ENGINEERS • PLANNERS • SURVEYORS 11315 LOCKWOOD DRIVE • SILVER SPRING, MARYLAND 20904 • (301) 593-3400		
DESIGNED D.A.B.	ROAD CONSTRUCTION PLANS BUSHRANGER PATH	SCALE As Shown
DRAWN K.I.W.	COLUMBIA	DRAWING 2 of 7
CHECKED J.L.S.	VILLAGE OF KINGS CONTRIVANCE SECTION 1 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND	FILE NO. 1210-D
DATE Jan, 1978	FOR: HOWARD RESEARCH & DEVELOPMENT CORP. The Rouse Company Building Columbia, Maryland 21044	

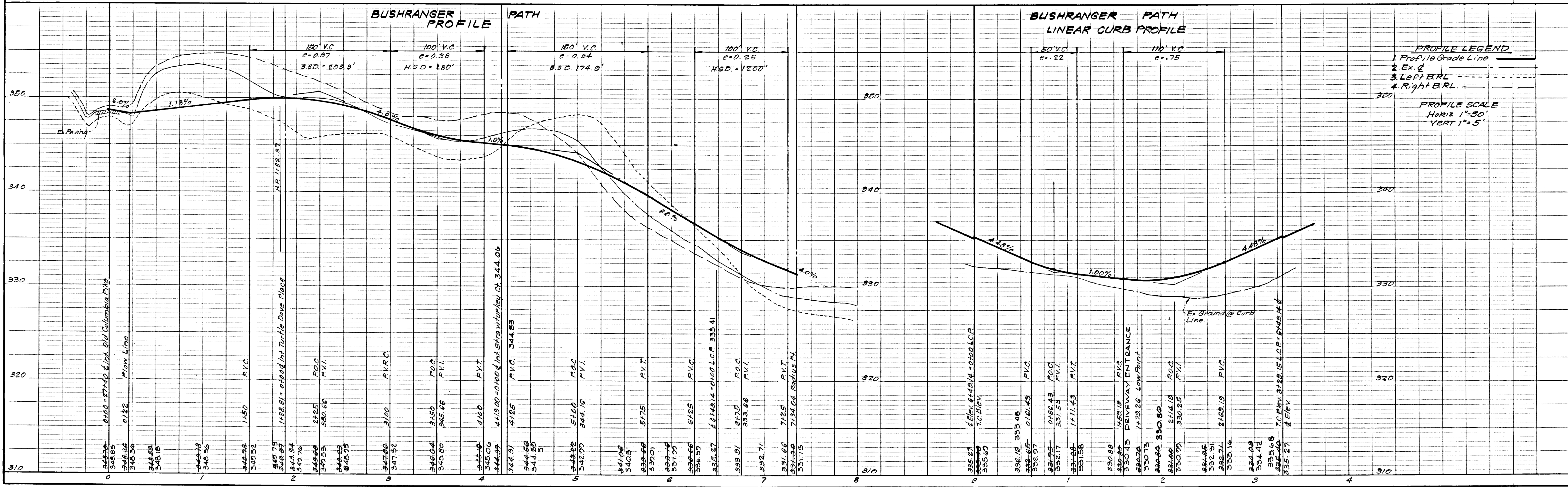


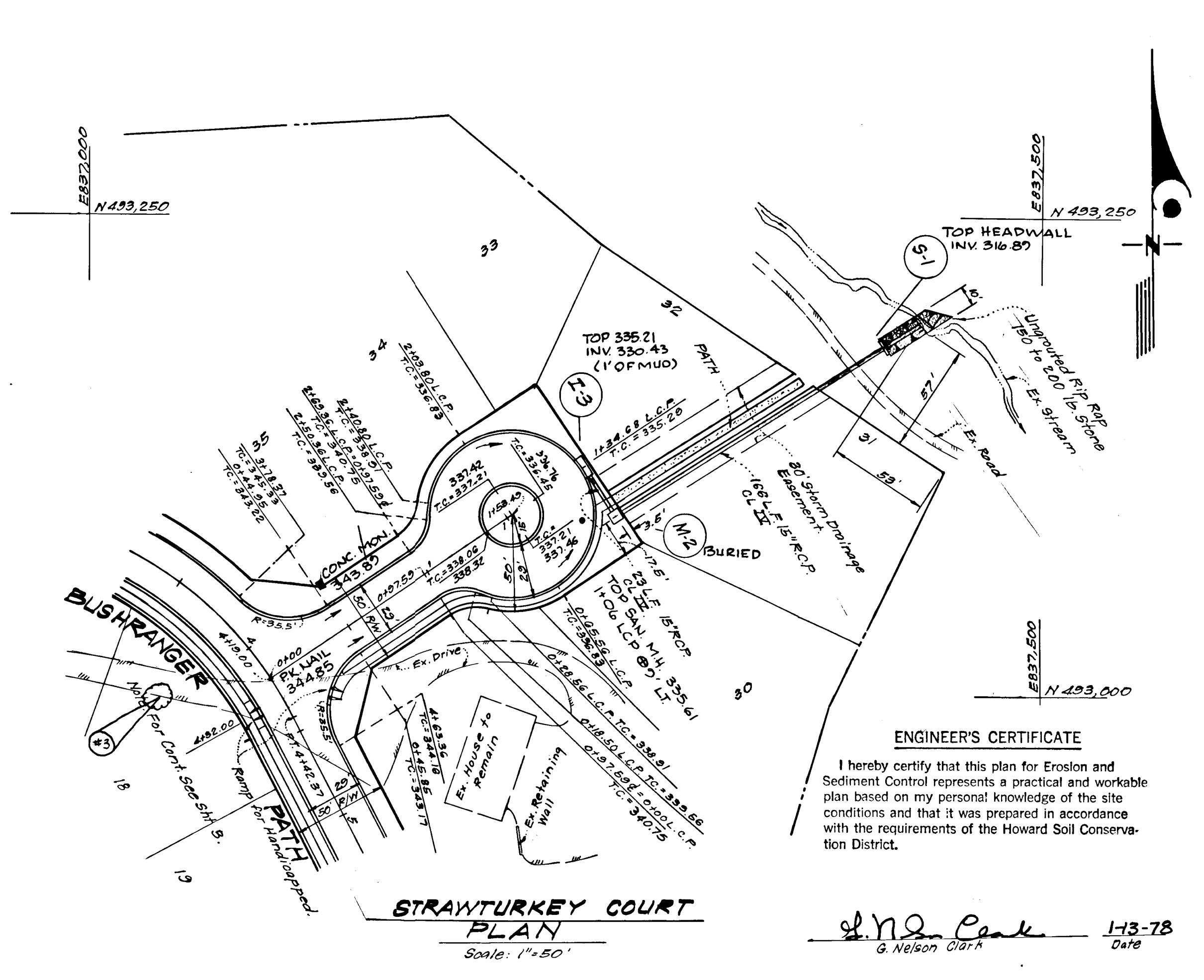
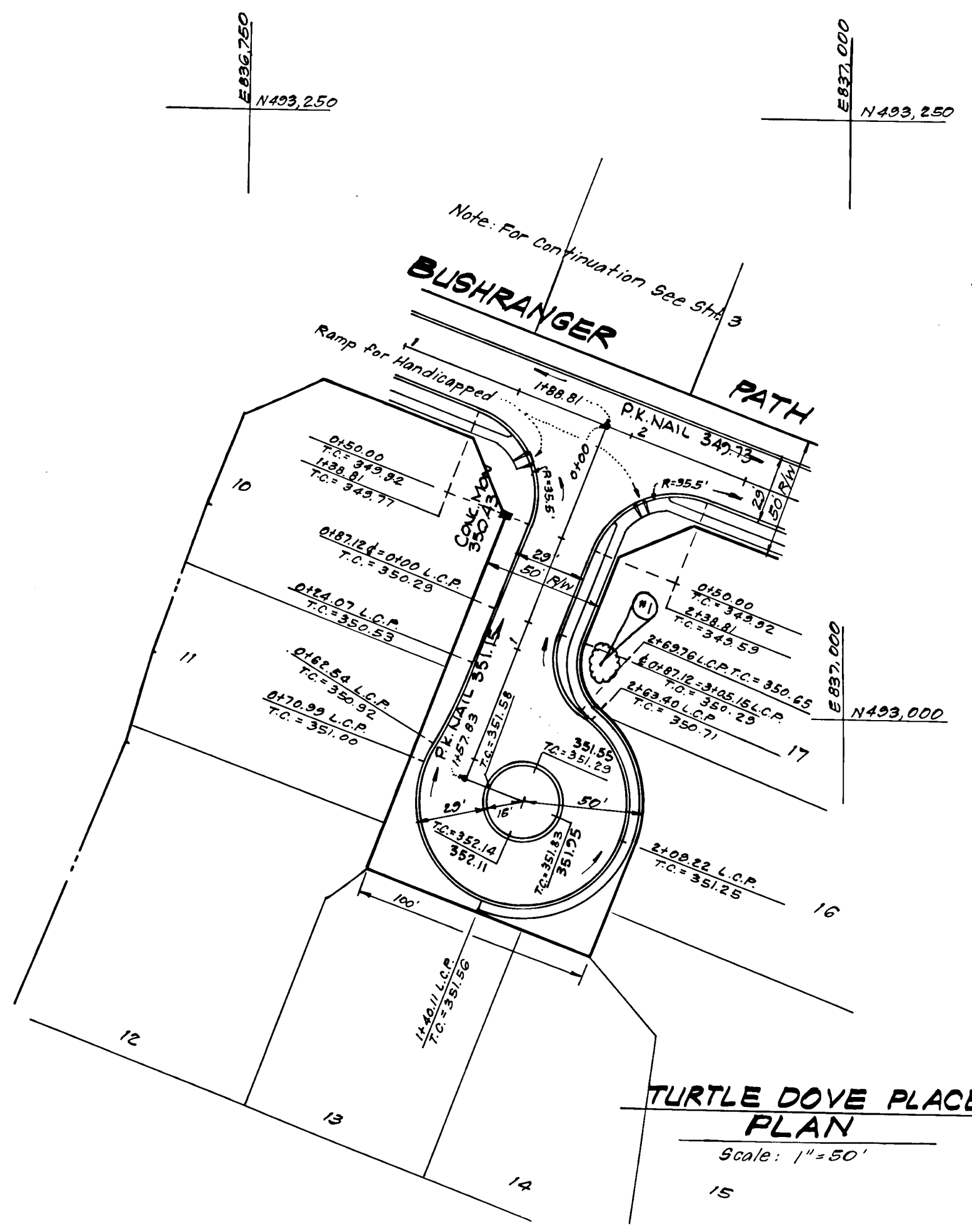
Reviewed for... *Howard* S.C.D.
 Name
 and meets Technical Requirements
W. M. Middleman 9-21-78
 Signature Date
 U.S. Soil Conservation Service

DEVELOPER'S CERTIFICATE

I certify that all development and/or construction will be done according to this plan of development and plan for Erosion and Sediment Control, and I authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents as are deemed necessary. Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District.

W.E. Fick Approved 9-21-78 Date
W.M. Middleman Signature 1-18-78 Date





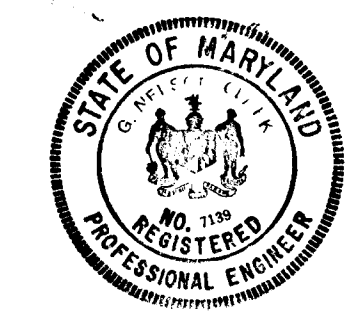
Reviewed for HOWARD S.C.D.
Name
and meets Technical Requirements
[Signature] Date
Signature Date
U.S. Soil Conservation Service

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

Approved [Signature] 2-21-78 Date
[Signature] 1-18-78 Date
8-1-78
4-26-78

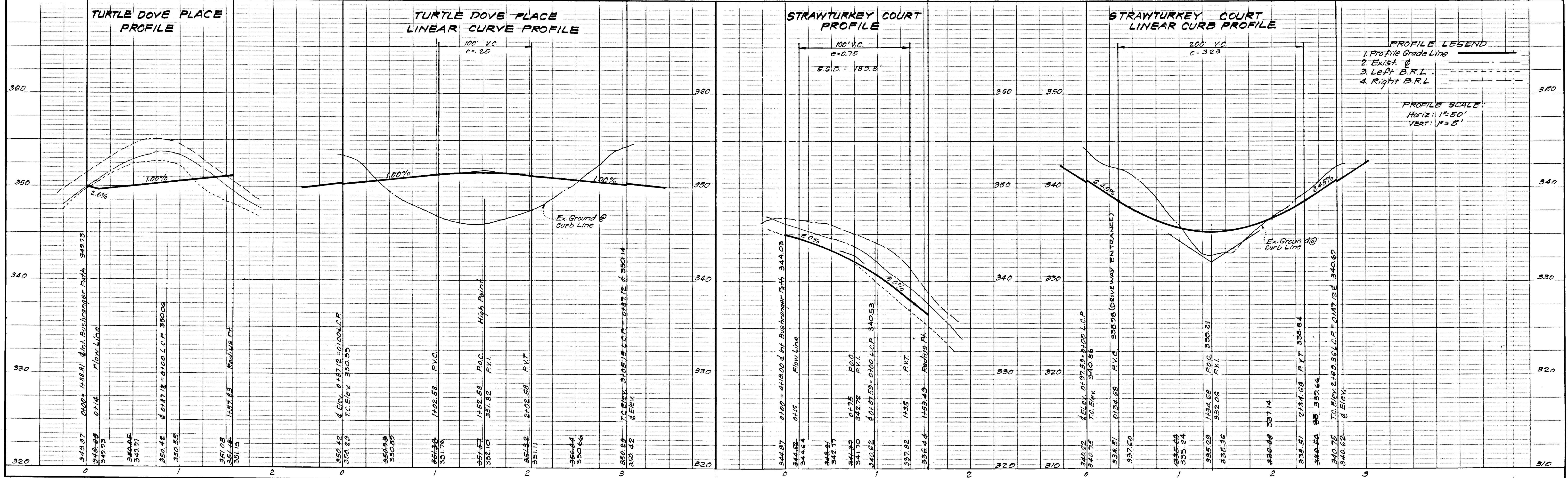
APPROVED: DEPARTMENT OF PUBLIC WORKS
[Signature] 8-10-78 DATE
CHIEF, BUREAU OF ENGINEERING
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
[Signature] 8-10-78 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT



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.

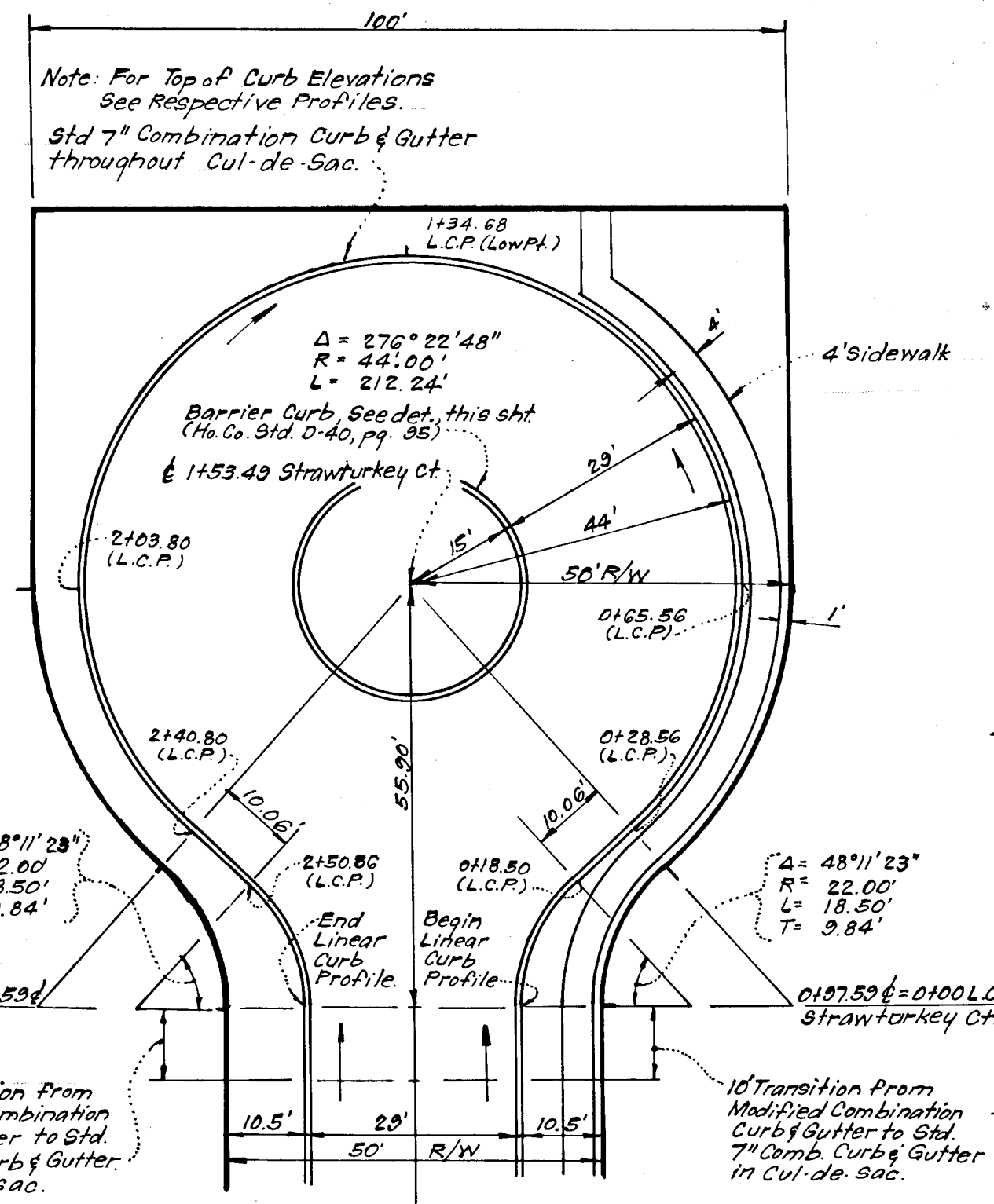
[Signature] 1-13-78 Date
G. Nelson Clerk

CLARK • FINEFROCK & SACKETT ENGINEERS • PLANNERS • SURVEYORS		SCALE As Shown
11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593-3400		DRAWING 3 of 7
DESIGNED D.A.B.	ROAD CONSTRUCTION PLANS TURTLE DOVE PLACE STRAWTURKEY COURT COLUMBIA	
DRAWN K.I.W.	VILLAGE OF KINGS CONTRIVANCE SECTION 1 AREA 3 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
CHECKED J.L.S.		
DATE Jan, 1978	FOR: HOWARD RESEARCH & DEVELOPMENT CORP. The Rouse Company, Building Columbia, Maryland 21044	FILE NO. 1219-D

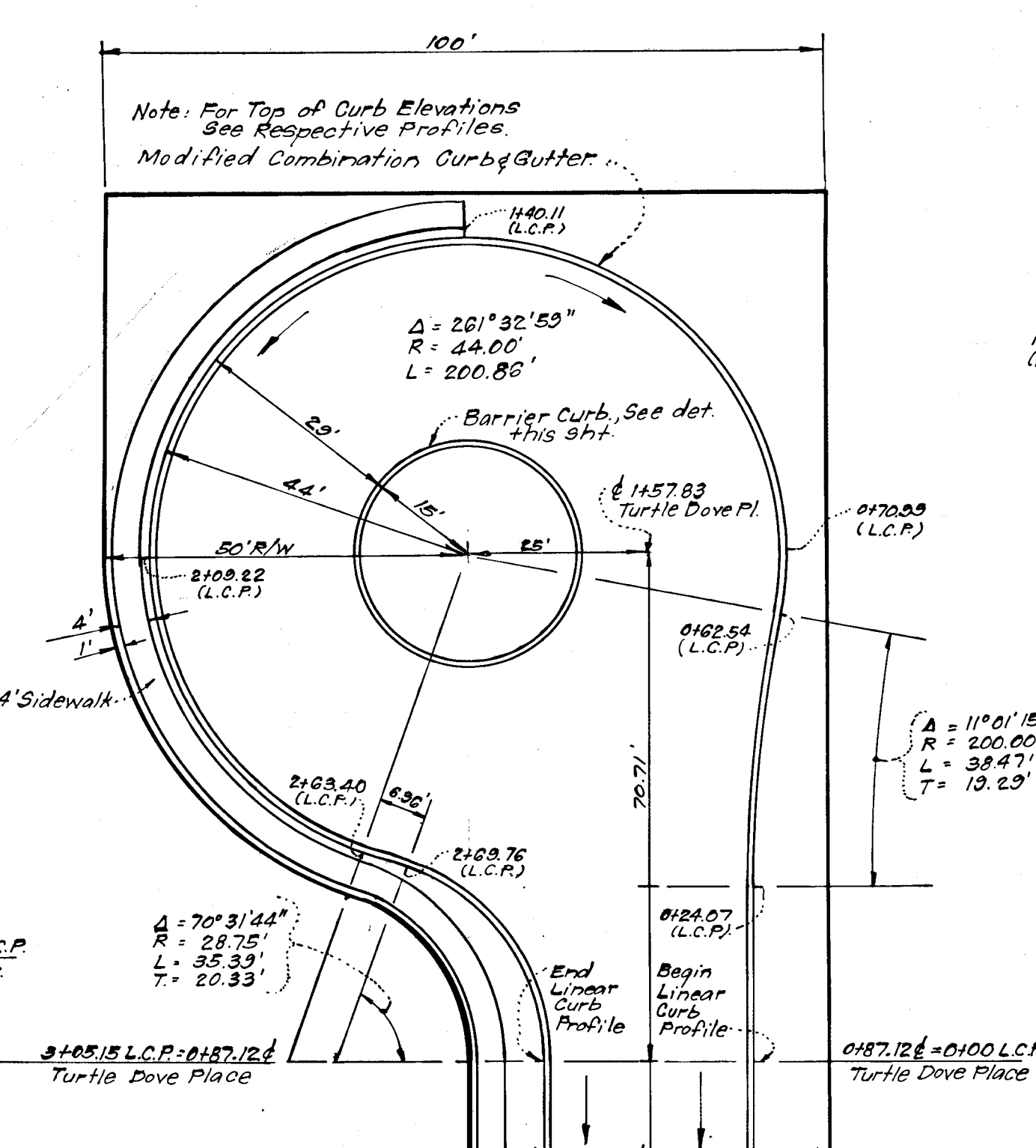


H-445
Spec. K&E 48-70245
93

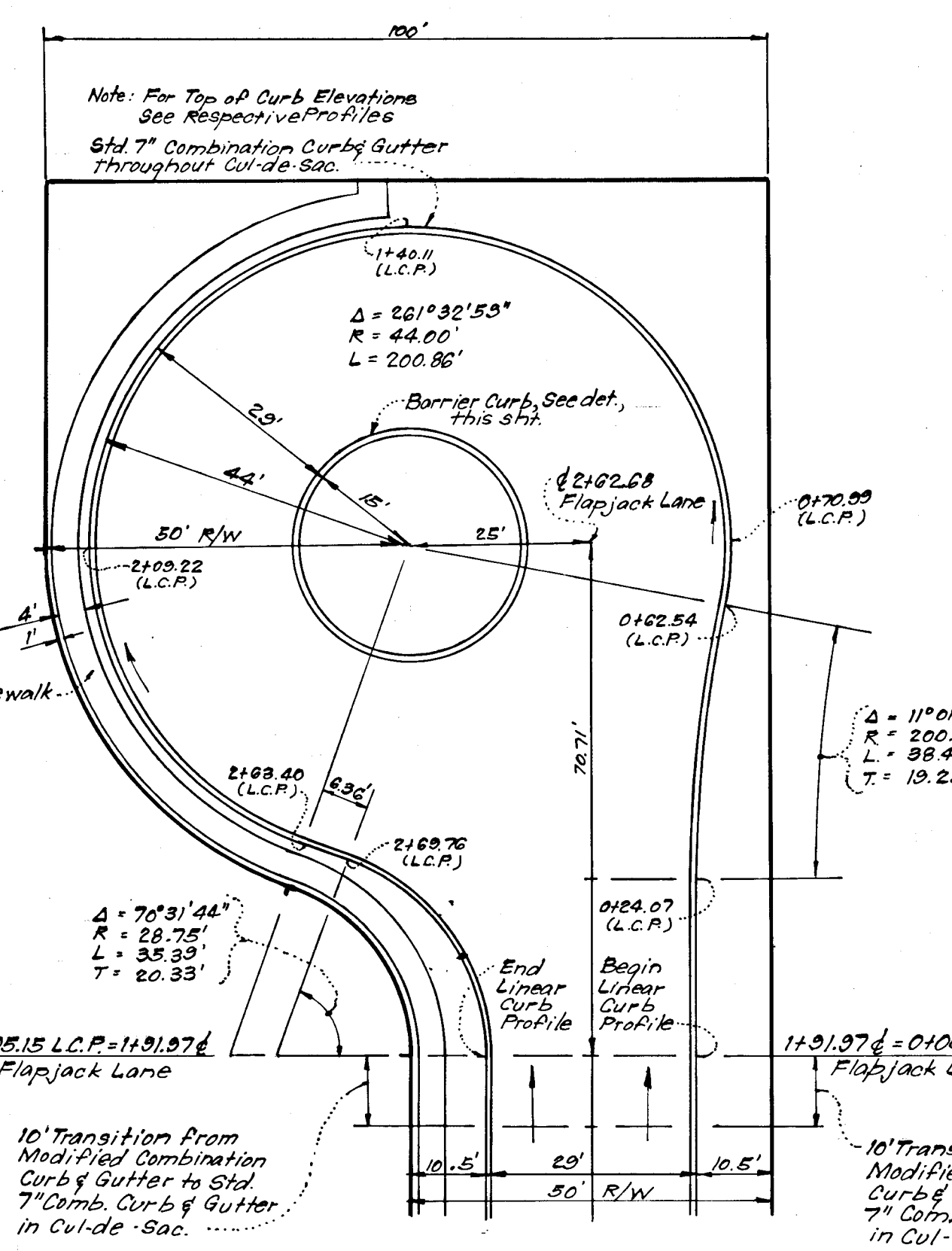
F-78-131e 1219-D
30/7



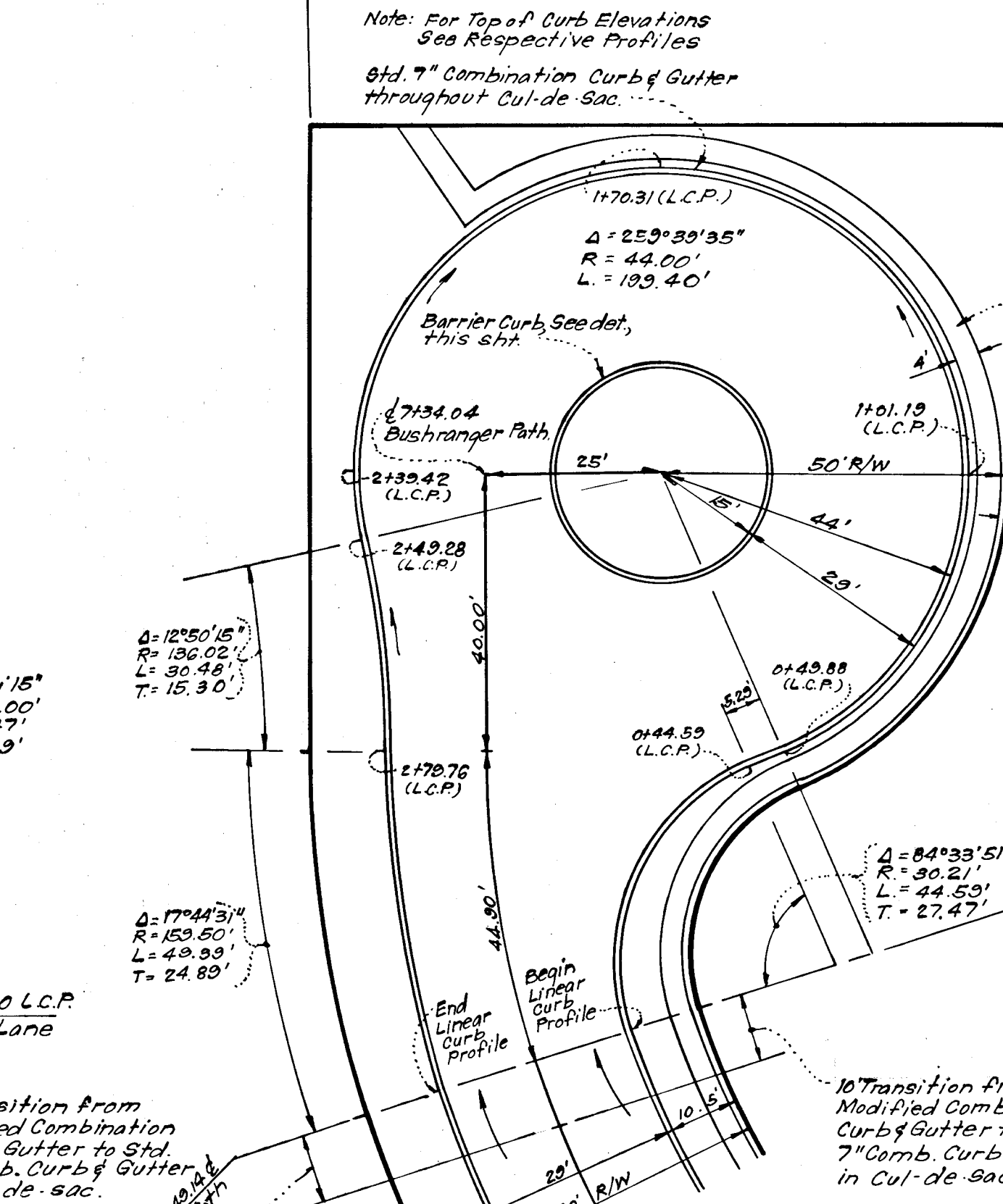
**CUL-DE-SAC DETAIL
STRAWTURKEY COURT**
SCALE: 1"=20'



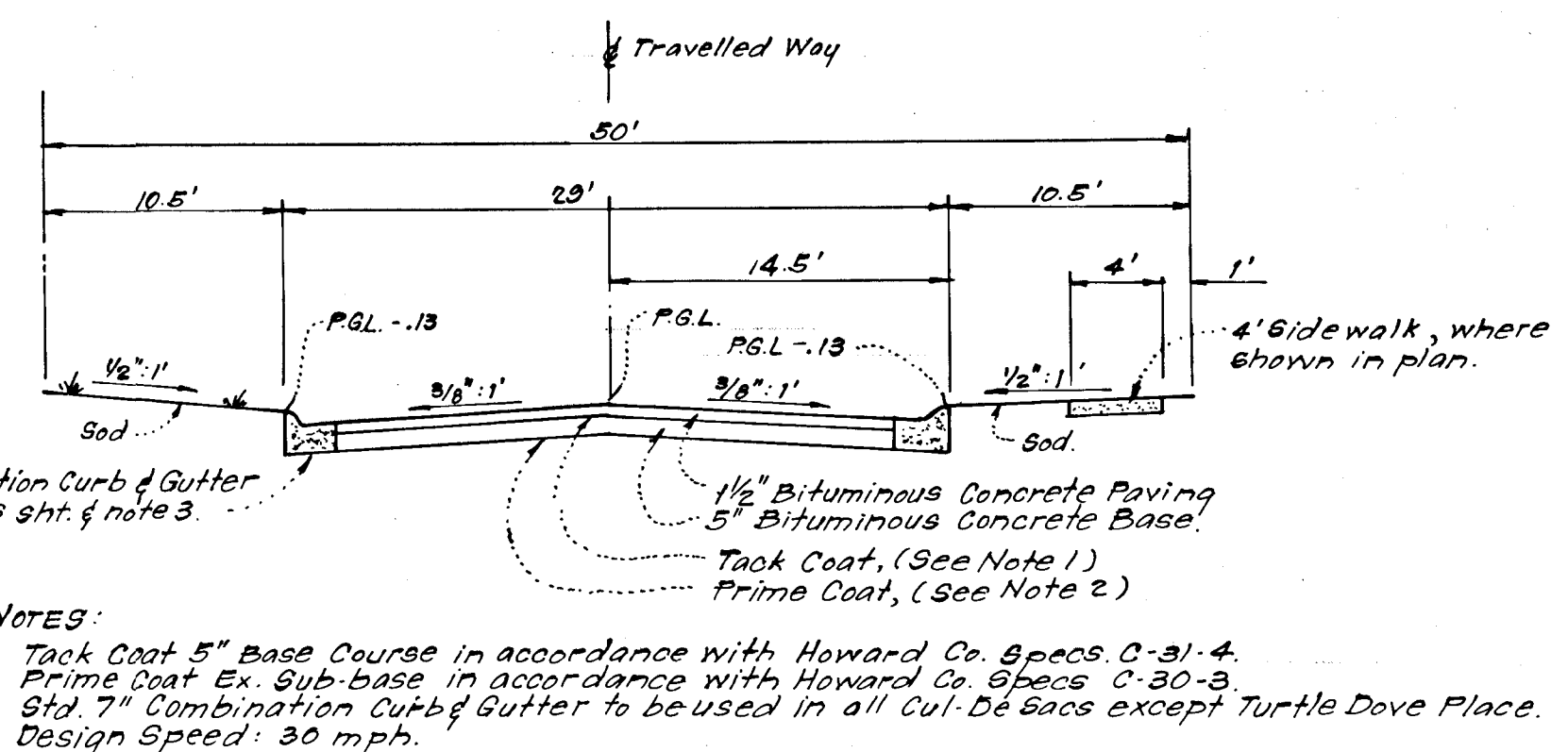
**CUL-DE-SAC DETAIL
TURTLE DOVE PLACE**
SCALE: 1"=20'



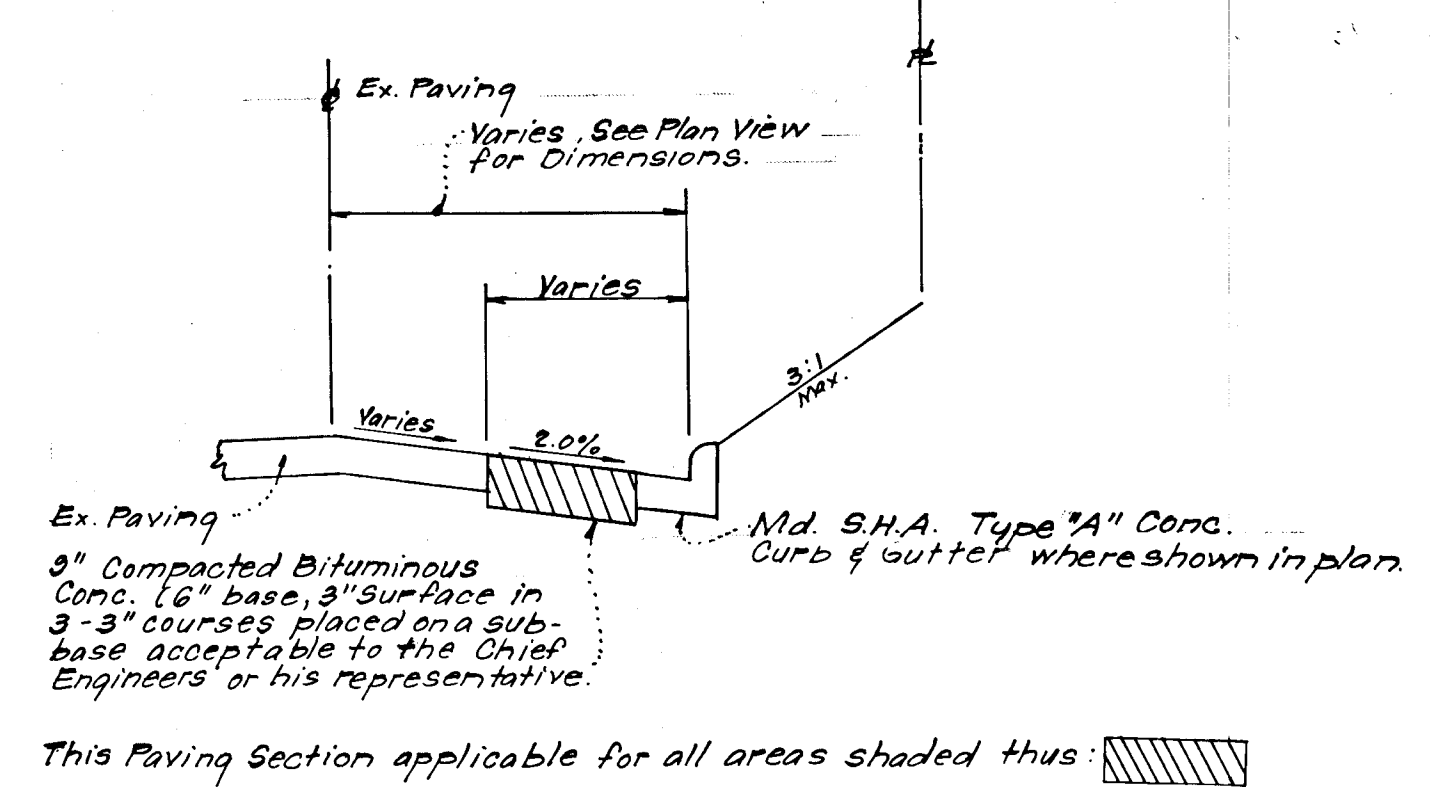
**CUL-DE-SAC DETAIL
FLAPJACK LANE**
SCALE: 1"=20'



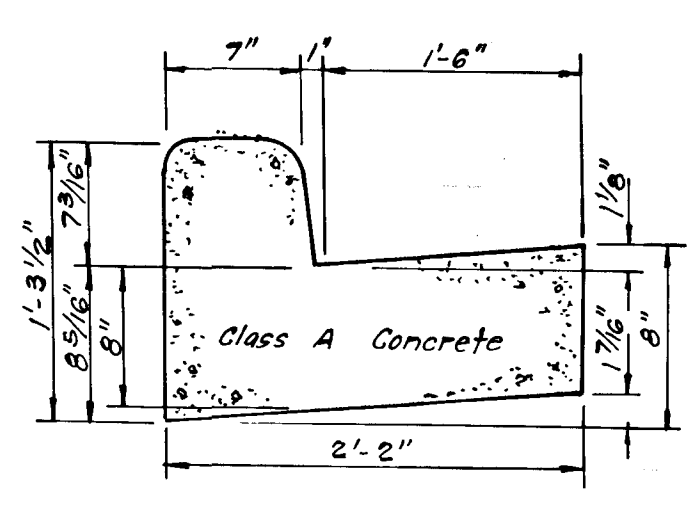
**CUL-DE-SAC DETAIL
BUSHRANGER PATH**
SCALE: 1"=20'



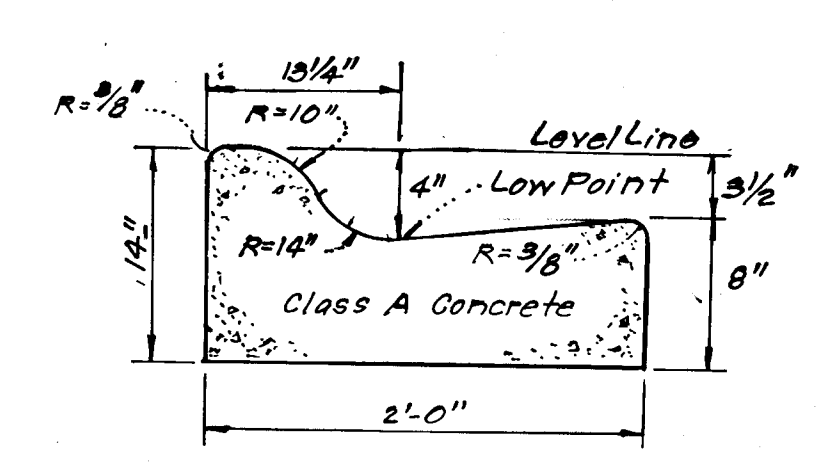
TYPICAL PAVING SECTION
STRAWTURKEY COURT (0+00 to 1+53.43)
TURTLE DOVE PLACE (0+00 to 1+57.83)
BUSHRANGER PATH (0+00 to 1+34.04)
FLAPJACK LANE (0+00 to 2+02.68)
NO SCALE



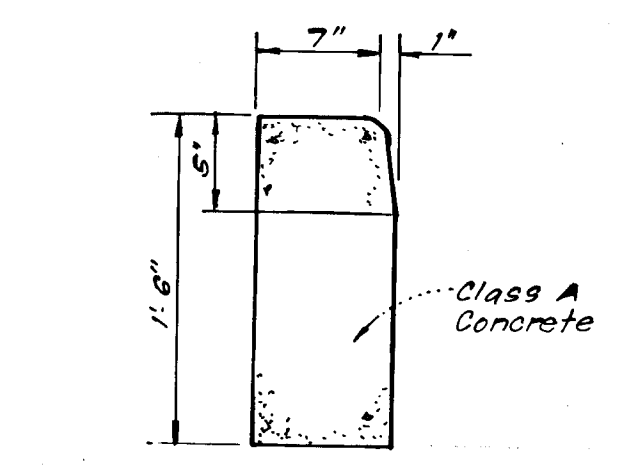
**DETAIL OF SPECIAL PAVING SECTION
OLD COLUMBIA PIKE**
NO SCALE



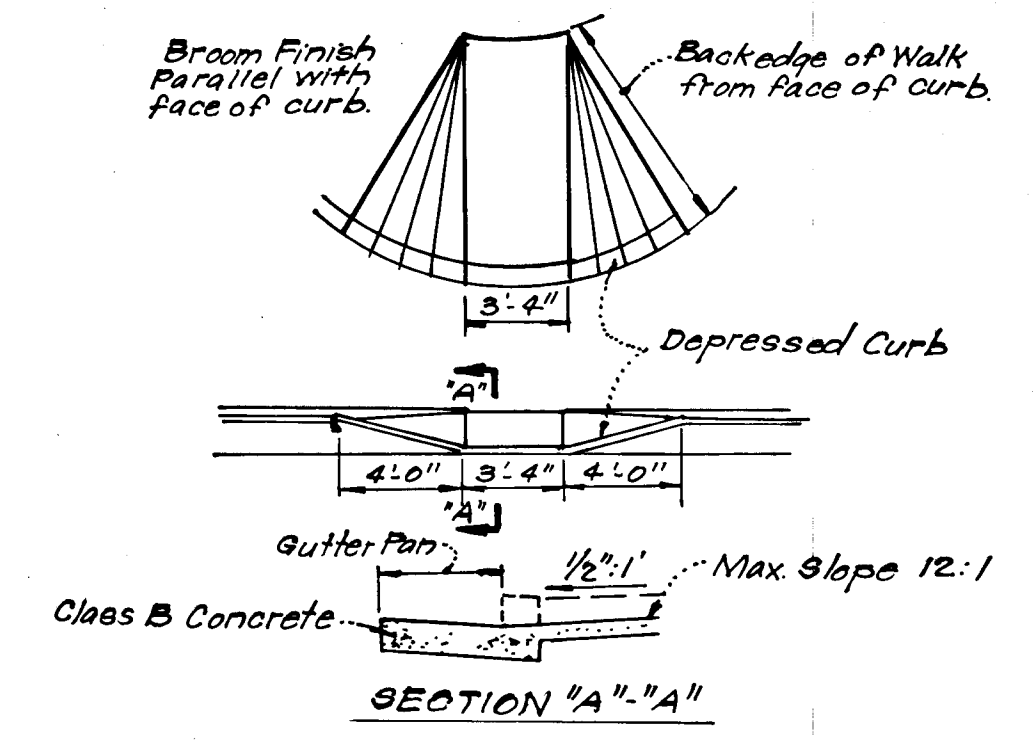
STD. 7" COMBINATION CURB & GUTTER
NO SCALE



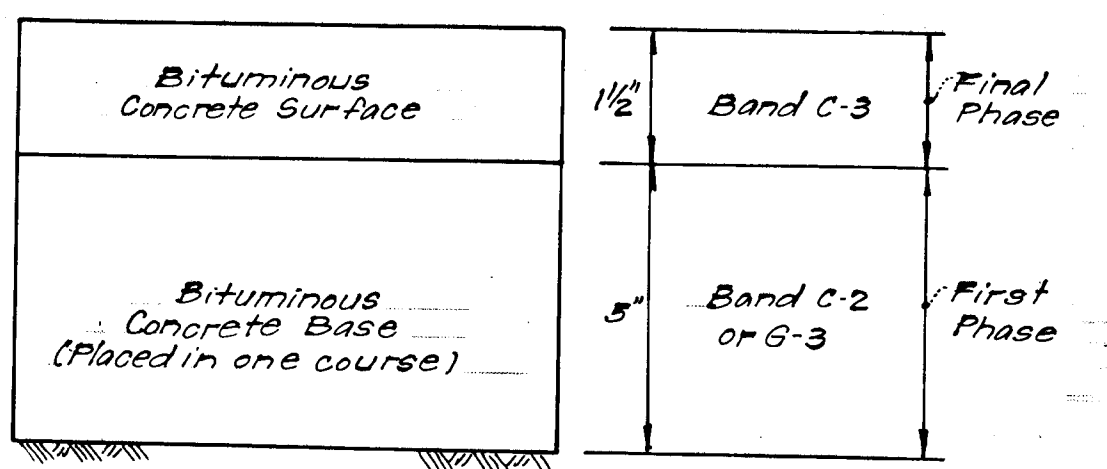
MODIFIED COMBINATION CURB & GUTTER
NO SCALE



BARRIER CURB DETAIL
NO SCALE

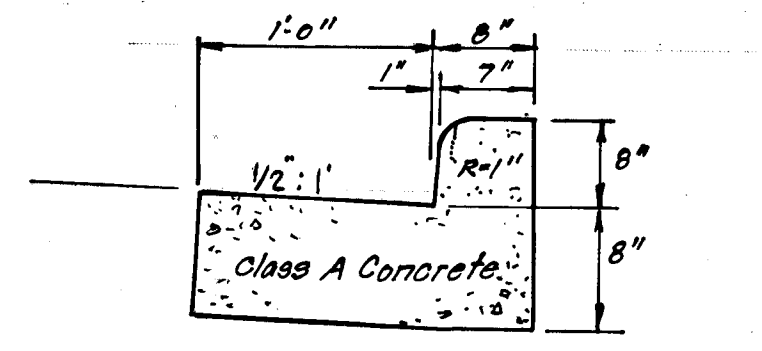


SIDEWALK RAMP DETAILS
NO SCALE



To be Constructed in accordance with Howard Co. Road Construction Code and Specifications.

PAVING SECTION



**MD. S.H.A. TYPE 'A'
COMBINATION CURB & GUTTER**
NO SCALE

Reviewed for... Howard Co. S.C.D.
 Name
 and meets Technical Requirements
 C. W. Muehlman 9-21-78
 Signature Date
 U.S. Soil Conservation Service

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

WES EARP Approved 9-21-78 Date

DEVELOPER'S CERTIFICATE

I certify that all development and/or construction will be done according to this plan of development and plan for Erosion and Sediment Control, and I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents as are deemed necessary. Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District.

Wes Earp 1-18-78
 Signature Date

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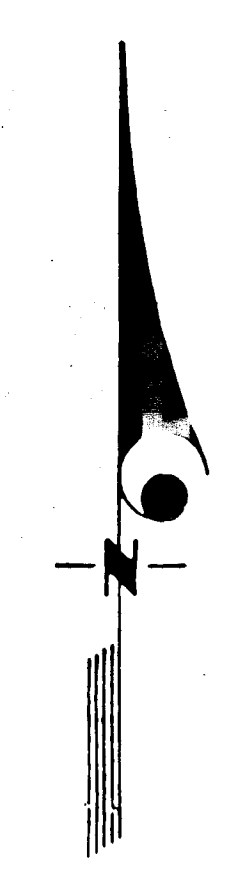
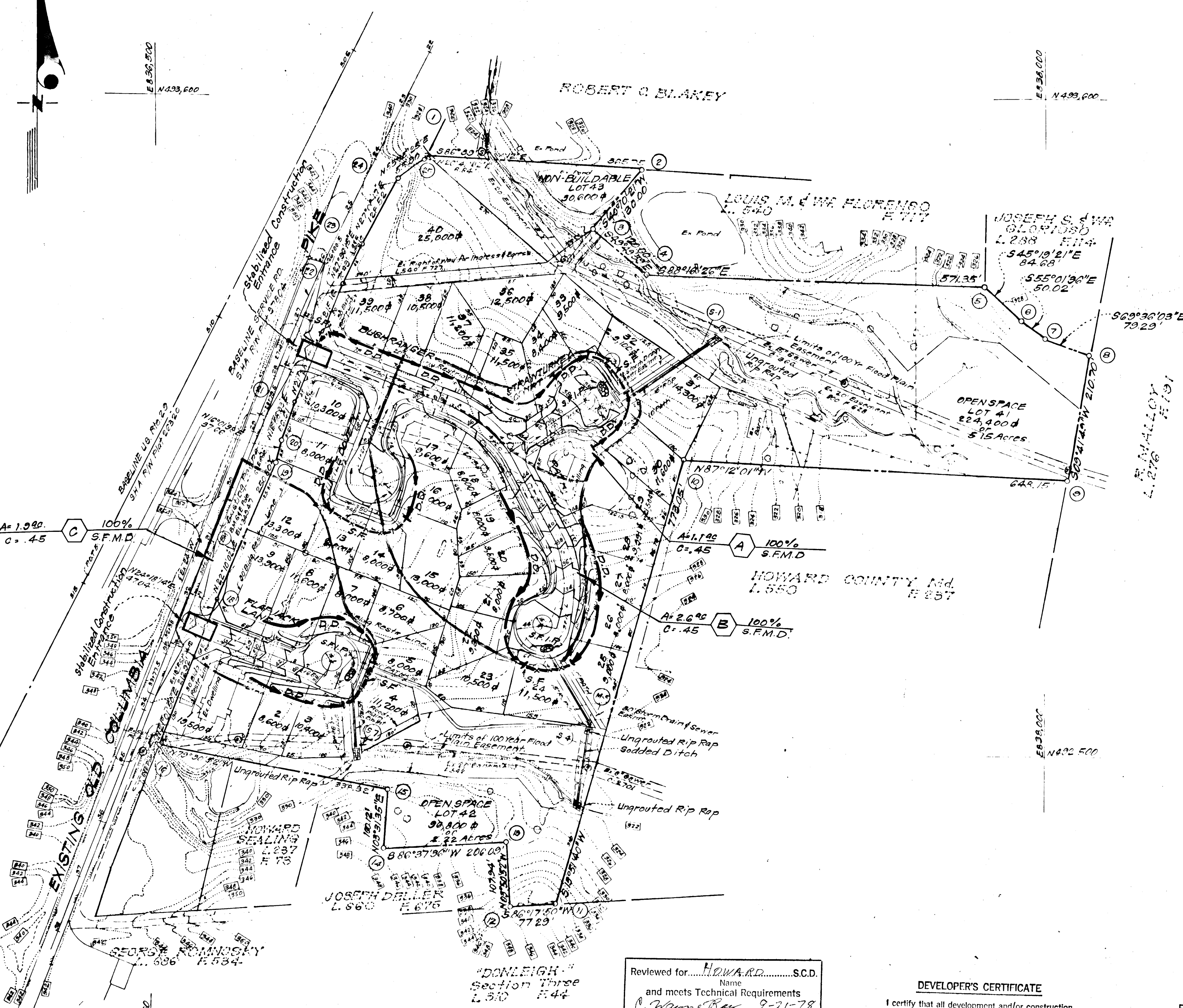
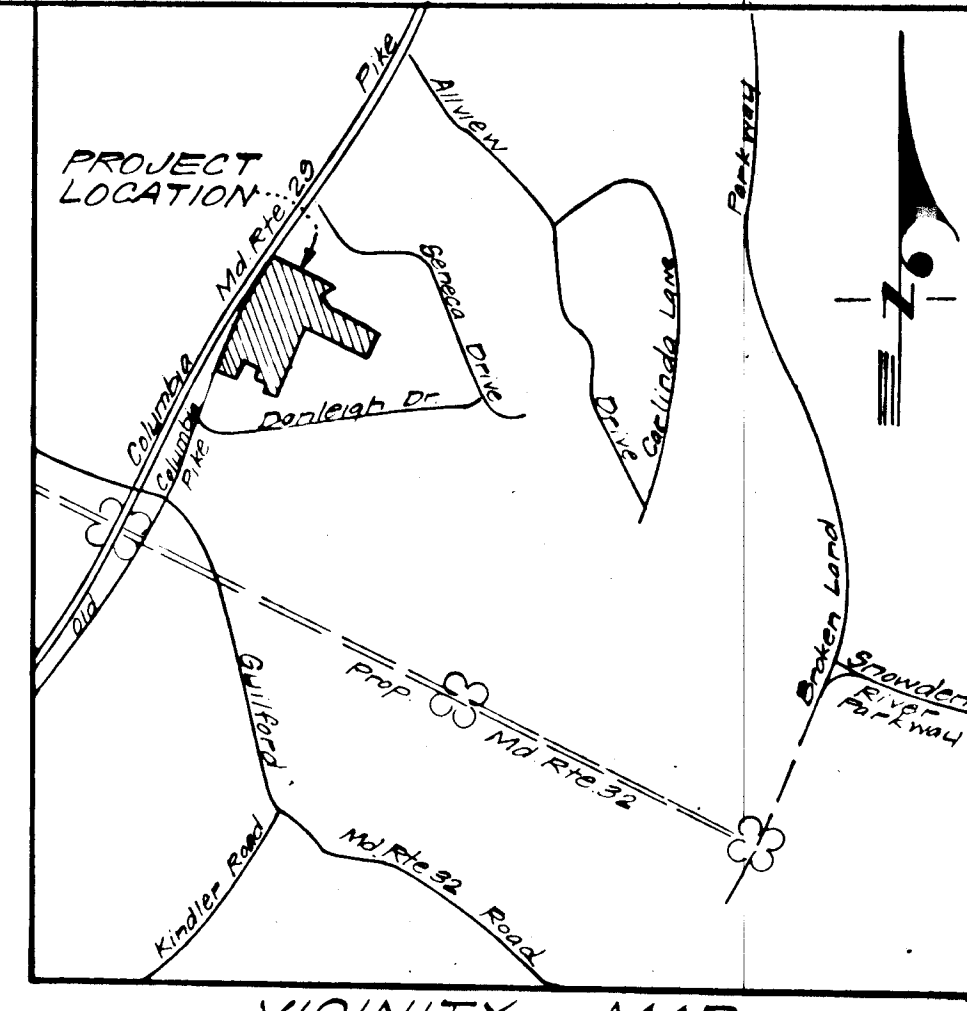
G. Nelson Clark 1-13-78
 Signature Date



APPROVED: DEPARTMENT OF PUBLIC WORKS		
W. O. Libbert CHIEF, BUREAU OF ENGINEERING		8-10-78 DATE
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING		
John W. Muehlman CHIEF, DIVISION OF LAND DEVELOPMENT		9-10-78 DATE
CLARK • FINEFROCK & SACKETT ENGINEERS • PLANNERS • SURVEYORS 11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593-3400		
DESIGNED D.A.B.	ROAD CONSTRUCTION PLANS PAVING DETAILS	SCALE As Shown
DRAWN K.I.W.	COLUMBIA	DRAWING 4 of 7
CHECKED J.L.S.	VILLAGE OF KINGS CONTRIVANCE SECTION 1 AREA 3 6th ELECTION DISTRICT	JOB NO.
DATE Jan., 1978	FOR: Howard Research & Development Corp. The Rouse Company Bldg. Columbia, Maryland 21044	FILE NO. 1219-D

LEGEND

- 1 Contour Interval 2 FT
- 2 Existing Contour
- 3 Existing Sewer Line
- 4 Existing Water Line
- 5 Proposed Storm Drainage
- 6 Proposed Contour
- 7 Diversion Dike
- 8 Silt Fence
- 9 Stone Filter Inlet Protection
- 10 Stabilized Construction Entrance



Reviewed for HOWARD S.C.D.
Name
and meets Technical Requirements
Robert Key 8-26-78
Signature Date
U.S. Soil Conservation Service

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

DEVELOPER'S CERTIFICATE

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W. S. F. A. D. Approved 8-27-78 Date

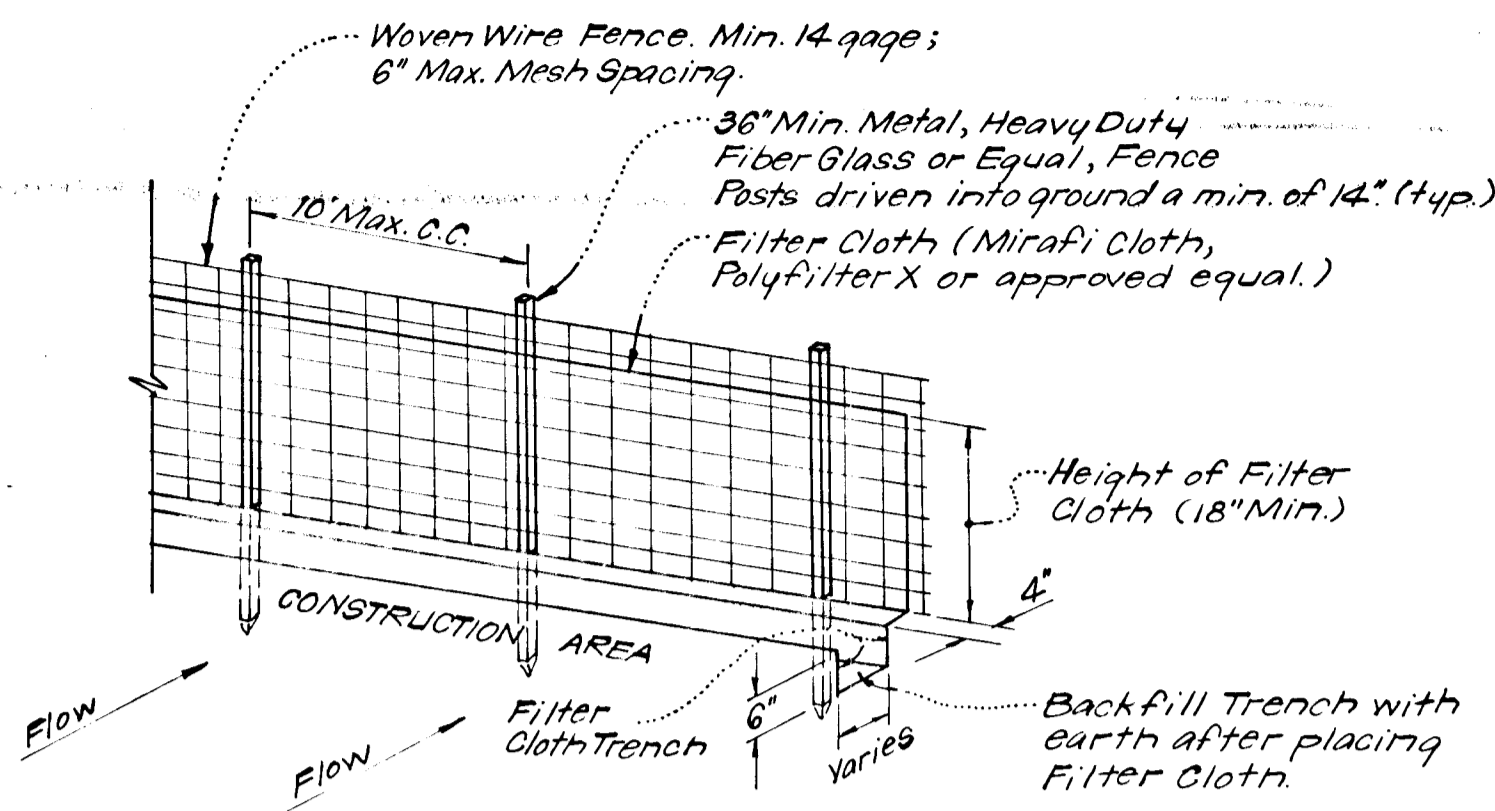
Robert Key Signature 8-26-78 Date

G. Nelson Clark Signature 8-13-78 Date

APPROVED: DEPARTMENT OF PUBLIC WORKS
W. O. T. Hunt 8-10-78
CHIEF, BUREAU OF ENGINEERING DATE
APPROVED: HOWARD COUNTY OF PLANNING & ZONING
W. W. M. M. M. 8-10-78
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

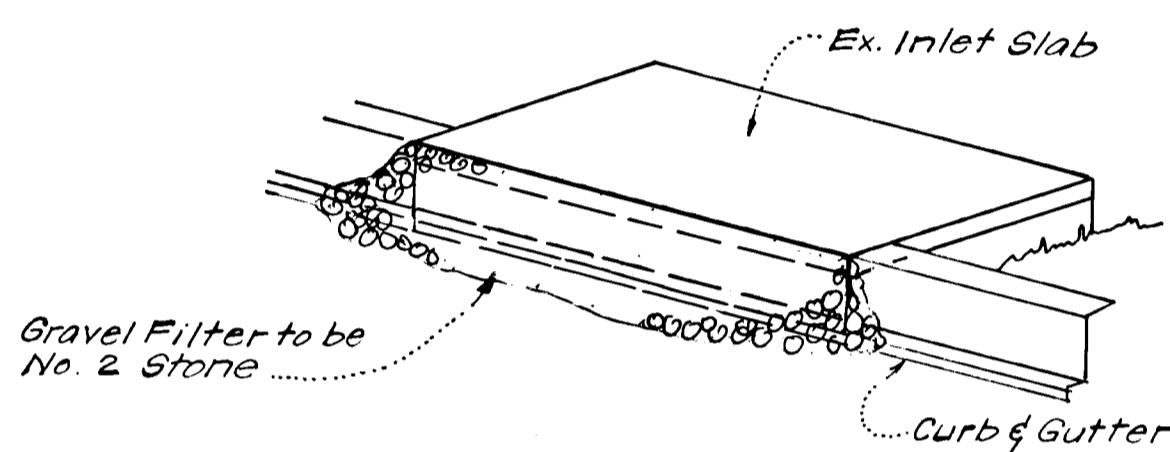
CLARK • FINEFROCK & SACKETT ENGINEERS • PLANNERS • SURVEYORS 1315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593-8400		
DESIGNED D.A.B.	ROAD CONSTRUCTION PLANS SEDIMENT & EROSION CONTROL PLAN & DRAINAGE AREA MAP COLUMBIA VILLAGE OF KINGS CONTRIVANCE SECTION 1 AREA 3 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND FOR: HOWARD RESEARCH & DEVELOPMENT CORP. The Rouse Company Building Columbia, Maryland 21044	SCALE 1"=100'
DRAWN K.I.W.		DRAWING 6 of 7
CHECKED D.A.B.		FILE NO. 1219-D
DATE Jan, 1978		

GENERAL NOTES

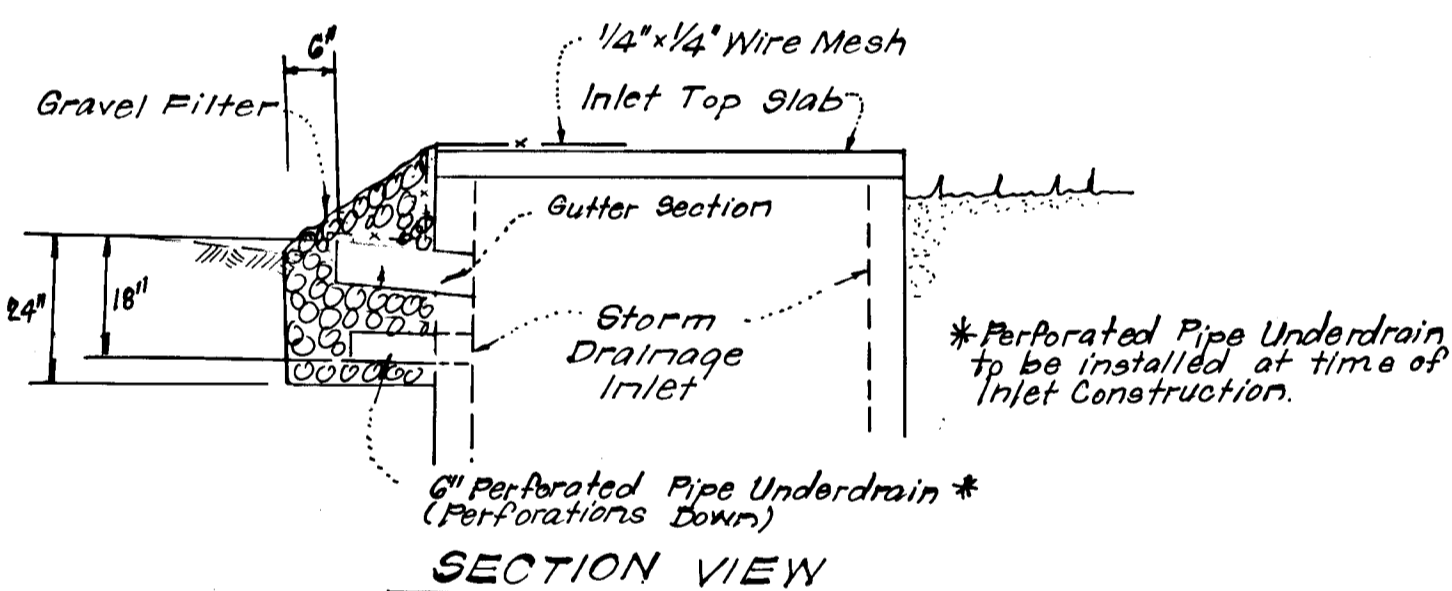


- NOTES:**
1. Woven Wire Fence to be fastened securely to fence posts by use of wire ties.
 2. Filter Cloth to be fastened securely to woven wire fence by use of wire ties spaced every 24" x 24".

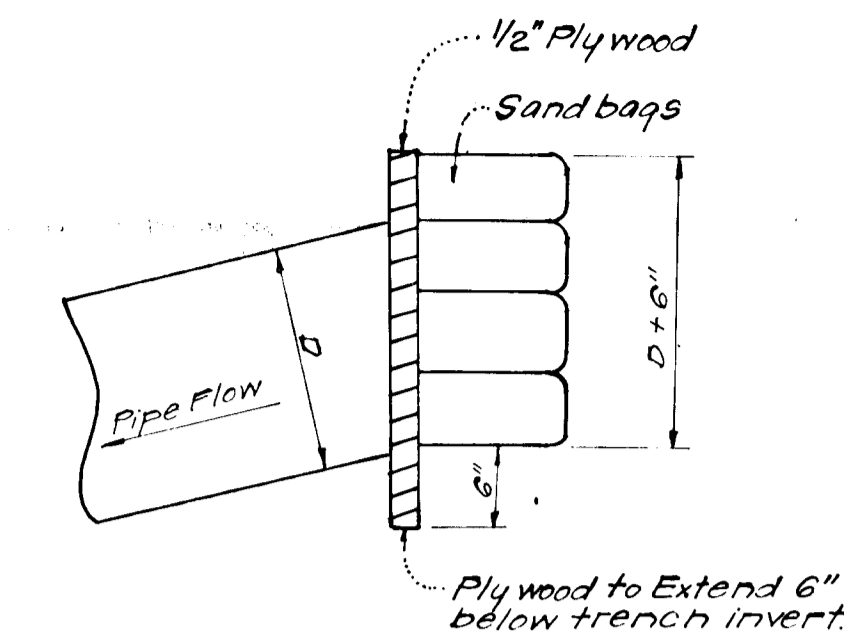
SILT FENCE DETAIL (S.F.)
NO SCALE



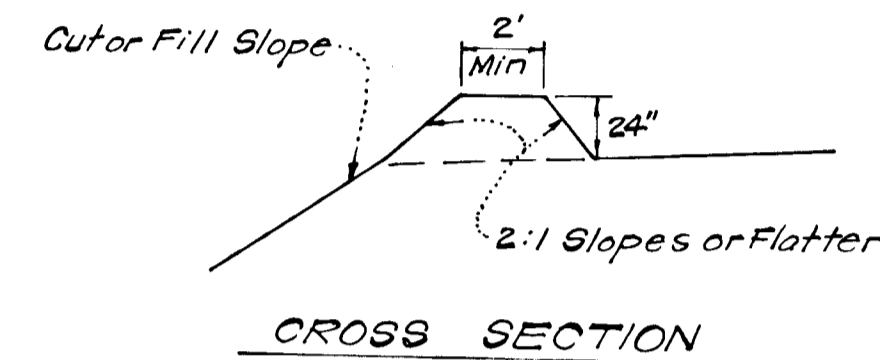
ISOMETRIC VIEW



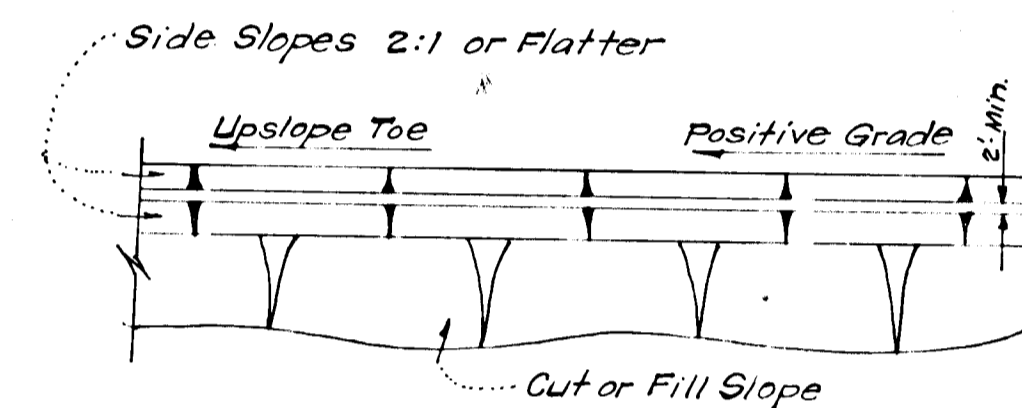
STONE FILTER INLET PROTECTION DETAIL (S.F.I.P.)
NO SCALE



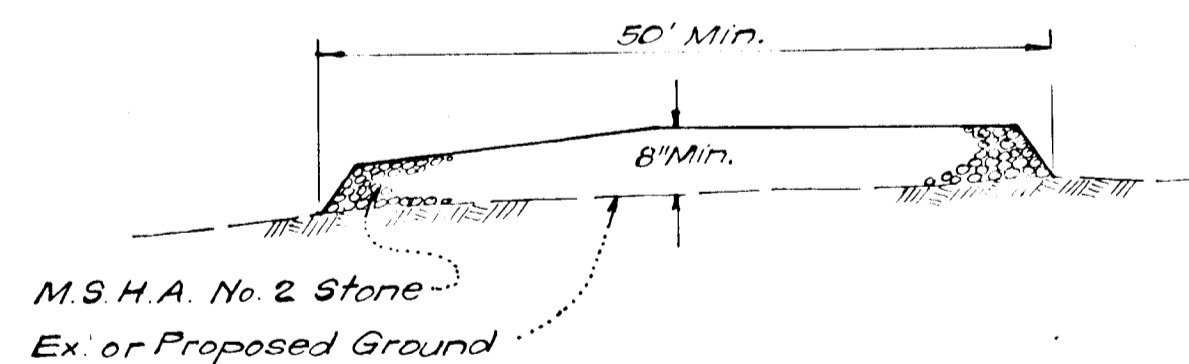
PIPE BLOCKING DETAIL
NO SCALE



CROSS SECTION



PLAN VIEW DIVERSION DIKE (D.D.)
NO SCALE



SECTION VIEW STABILIZED CONSTRUCTION ENTRANCE
NO SCALE

Reviewed for HOWARD Name S.C.D.
and meets Technical Requirements
C. Wayne Day Signature 9-21-78 Date
U.S. Soil Conservation Service

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

WES EARP Approved 9-21-78 Date

DEVELOPER'S CERTIFICATE

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Walter Woodruff Signature 1-18-78 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.

W. Nelson Clark Signature 1-13-78 Date



1. 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 # 5 for stabilization except that the seed mixture will be annual rye applied at a rate of 1.4 lbs/1000 s.f.
2. Notify the Bureau of Inspections and Permits at least 24 hours before starting any work. (PA 302-2435)
3. 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.
4. Stabilization of Disturbed Ground to be done as soon after construction as possible.
5. All Grading shall be treated in accordance with the following Specifications:
 - a. Seed - certified 85% germination applied at the rate of 3 lbs/1000 s.f. mixture - 40% Kentucky Blue, 20% Chewing Fescue, 20% Kentucky 31, and 20% annual rye.
 - b. Fertilizer - 10-10-10 applied at the rate of 23 lbs/1000 sq. ft. Ground Agricultural Lime or Dolomitic Lime applied at the rate of 46 lbs/1000 s.f.
 - c. Mulch - Weed Free straw applied at the rate of 70 lbs/1000 s.f. Mulch shall be secured to the ground by any approved method i.e. asphalt tacks, chemical binder, wood chips, etc.
6. 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.
7. On Site Inspection and Maintenance of all Sediment Control Measures including clean out 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.
8. Protection of stabilized area from sediment runoff shall be provided by the use of an approved Sediment Control Device, i.e. straw bale, diversion dike, etc.
9. The Contractor shall keep all public roads free of sediment deposits left from traffic leaving construction site.
10. Stabilized Construction Entrances shall be constructed at all construction entrances.
11. **SITE ANALYSIS:**
 - a. Total Area of site = 20.46
 - b. Disturbed Area = 2.30
 - c. Area to be Paved = 1.50
 - d. Area to be Stabilized = 1.40
12. A complete site grading plan must be developed and approved before building permits can be issued.
13. Upstream ends of all Storm Drainage Pipes shall be blocked at the end of each working day. See detail, this sheet.
14. **CONSTRUCTION SEQUENCE:**
 - a. Grading Permit shall be obtained prior to installation of Sediment Control or grading.
 - b. Install all Sediment Control Practices.
 - c. Rough Grade, Street and install Storm Drainage. Block Curb openings of all inlets with stone or boards.
 - d. Construct Streets.
 - e. Stabilize all Disturbed Areas.
 - f. Remove Sediment & Erosion Control (with permission of Howard Soil Conservation District).

APPROVED: DEPARTMENT OF PUBLIC WORKS		
<u>W. Nelson Clark</u> Signature	8-10-78	DATE
APPROVED: HOWARD COUNTY OF PLANNING & ZONING		
<u>Walter Woodruff</u> Signature	8-10-78	DATE
CLARK • FINEFROCK & SACKETT ENGINEERS • PLANNERS • SURVEYORS 11315 LUCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593 3400		
DESIGNED D.A.B.	ROAD CONSTRUCTION PLANS SEDIMENT & EROSION CONTROL PLAN	SCALE As Shown
DRAWN K.I.W.	COLUMBIA	DRAWING 7 of 7
CHECKED D.A.B.	VILLAGE OF KINGS CONTRIVANCE SECTION 1 AREA 3 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO.
DATE Jan, 1978	FOR: HOWARD RESEARCH & DEVELOPMENT CORP. The Rouse Company Building Columbia, Md 21044	FILE NO. 1219-D

F-78-131c