SHEET INDEX	
NO.	DESCRIPTION
1	TITLE SHEET
2	PLAN OF AUTUMN HARVEST AND SPRING HARVEST COURT
3	PROFILES
4	DETAILS, PROFILES AND DRAINAGE AREA MAP
5	GRADING AND SEDIMENT CONTROL PLAN
6	SEDIMENT CONTROL NOTES AND DETAILS
7	STREET TREE PLAN

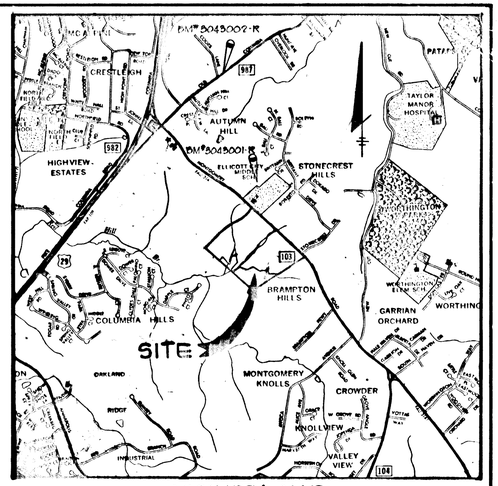
STORM DRAIN AND ROADWAY

LONG GATE

SECTION 1, AREA 3

2ND ELECTION DISTRICT

HOWARD COUNTY, MARYLAND



VICINITY MAP

SCALE: 1" = 2000'

BM# 3043001-R ELEV. 497.919
CONCRETE MONUMENT AT ℄ IN TRANSMISSION LINES BACK OF SCHOOL

BM# 3043002-R ELEV. 377.581
CONCRETE MONUMENT 0.5' BELOW SURFACE 14'± NW ℄ OLD COLUMBIA PIKE 175'± NE ℄ OF COOKS LANE

GENERAL NOTES

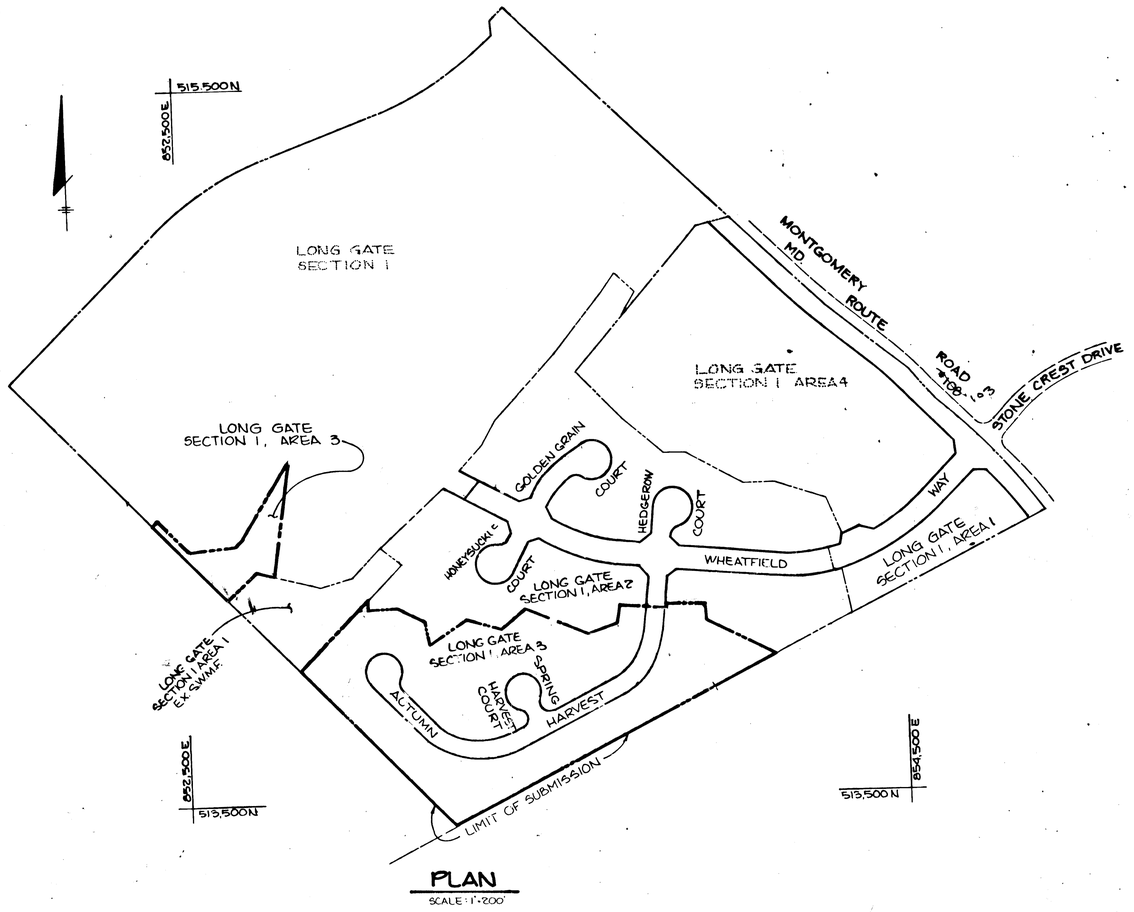
1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV. STANDARD SPECIFICATIONS AND DETAILS FOR ROAD CONSTRUCTION.
2. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
3. THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES WHERE DIRECTED BY THE ENGINEER. A MINIMUM OF TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS.
4. CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES AT LEAST THREE DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.

BELL TELEPHONE SYSTEM	393-3649
LONG DISTANCE CABLE DIVISION	393-3553 OR 3554
BALTIMORE GAS AND ELECTRIC	539-8000 EXT. 691
HOWARD COUNTY BUREAU OF UTILITIES	992-2366
HOWARD COUNTY CONSTRUCTION INSPECTION SURVEY DIVISION	992-2417/2418

5. ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.

   ALL STREET CURB RETURNS SHALL HAVE 20.0' RADII UNLESS OTHERWISE NOTED.
6. STORM DRAIN TRENCHES WITHIN ROAD RIGHT OF WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY ROAD CODE.
7. INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES 1978 EDITION.
8. PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
9. DESIGNED TRAFFIC SPEED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIAL STANDARDS:

   CUL-DE-SAC DESIGNED FOR 30 M.P.H., LOCAL STREETS DESIGNED FOR 30 M.P.H.,
10. ALL ELEVATIONS SHOWN ARE BASED ON U.S.C. AND G.S. MEAN SEA LEVEL DATUM 1929.
11. ALL FILL AREAS WITHIN ROADWAYS AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM 95% OF MAXIMUM OBTAINABLE DENSITY DETERMINED BY MARSHALL PROCTOR.
12. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
13. PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
14. SUBJECT PROPERTY ZONED R-SC AS PER 8-2-85 COMPREHENSIVE ZONING PLAN
15. TOPO TAKEN FROM FIELD RUN SURVEY BY PURDUM AND JESCHKE, INC., DATED JANUARY, 1984.



PLAN

SCALE: 1"=200'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

John W. Moosehauer — 7-11-86

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Kneeman & Ruby — 7-18-86

CHIEF, BUREAU OF ENGINEERING — DATE

NO	DATE	REVISION

TRACY, SCHULTE & ASSOCIATES INC.
planning • architecture • engineering
8450 Baltimore National Pike • Suite 34 • Ellicott City, Maryland 21043 • (301) 465-6105

STATE OF MARYLAND — JAMES KENNETH TRACY — NO. 9566 — REGISTERED PROFESSIONAL ENGINEER

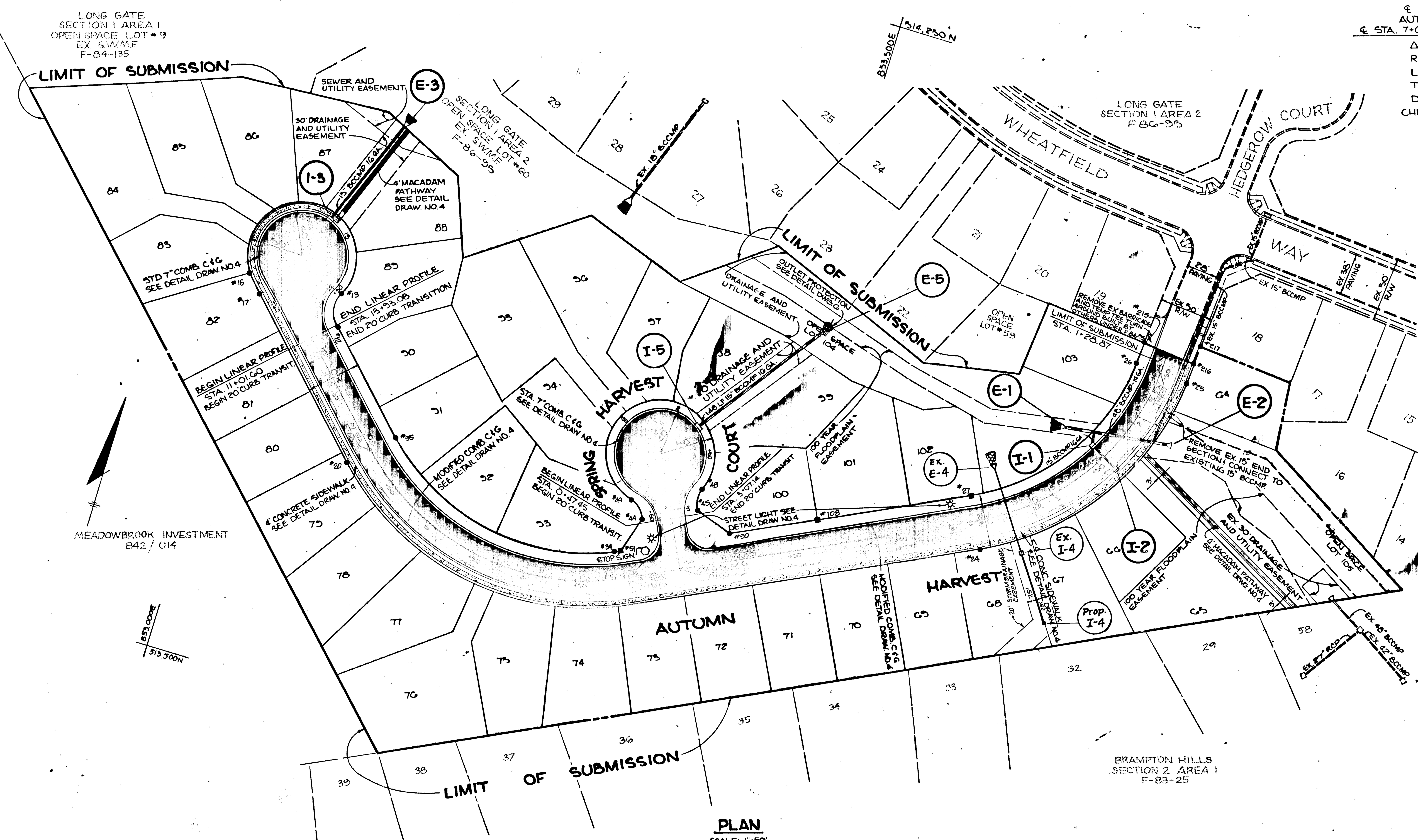
James K. Tracy

OWNER	SECURITY DEVELOPMENT CORP. P.O. BOX 417 ELLICOTT CITY, MD. 21043
DEVELOPER	SECURITY DEVELOPMENT CORP. PO BOX 417 ELLICOTT CITY, MD. 21043
PROJECT	LONG GATE SECTION 1 AREA 3 LOTS G4 LOTS 106
LOCATION	2ND ELECTION DISTRICT HOWARD COUNTY, MD TAX MAP NOS. 30 & 31 ZONING MAP NOS. 30 & 31 PARCEL 18
TITLE	TITLE SHEET
DATE	DEC. 30, 1985
PROJECT NO.	85341 R&D
DES.	JKT/JRS
DRN.	L.R.C.
SCALE	1"=200'
DRAWING	1 OF 7

AS-BUILT 9-16-88 1-86-120

APRIL 30, 1986

11162



PLAN
SCALE: 1"=50'

℄ CURVE DATA
AUTUMN HARVEST
℄ STA. 7+07.51 TO ℄ STA. 9+88.03
Δ= 71° 26' 00"
R= 225.00'
L= 280.52'
T= 161.78'
D= 25° 46' 48"
CHD= N 80° 13' 40" W, 262.70

℄ CURVE DATA
AUTUMN HARVEST
℄ STA. 1+48.57 TO ℄ STA. 3+79.54
Δ= 58° 48' 59"
R= 225.00'
L= 230.97'
T= 126.82'
D= 25° 46' 48"
CHD= S 34° 38' 51" W, 220.96

No.	TYPE	LOCATION	INV. IN	INV. OUT	TOP ELEV.	REMARKS
I-4	D	106' Lt. of STA 3+43 Autumn Harvest	←	396.10	400.15 ~~400.23~~	HC STD SD 4.11
E-4	15" Metal End Section	44' Rt. of STA 3+43 Autumn Harvest	~~394.00~~ 394.97	~~394.58~~ 394.95	—	HC STD. SD 5.61

STRUCTURE SCHEDULE

NO.	Type	Location	Inv.In.	Inv.Out	Top Elev.	Remarks
I-1	A-5	15.92' Rt. of E. STA 2+43.94 Autumn Harvest	~~393.81~~ 393.18	~~389.81~~ 390.50	~~390.06~~ 400.08	HC STD SD 4.01
I-2	A-5	15.92' Rt. of E STA 2+43.94 Autumn Harvest	-----	396.75 396.57	400.05 ~~399.96~~	HC STD SD 4.01
I-3	A-5	1.84' LT of LP STA 12+81.98 Autumn Harvest	-----	388.42 ~~386.30~~	393.87 ~~389.46~~	HC STD SD 4.01
E-1	48" Metal End Section	44.63' Rt. of E STA 2+52.54 Autumn Harvest	386.18 ~~386.10~~	385.96 ~~385.77~~	-----	HC STD SD 5.61
E-2	48" Metal End Section	36.04' Lt. of E STA 2+00.98 Autumn Harvest	392.89 ~~391.83~~	391.53 ~~391.50~~	-----	HC STD SD 5.61
E-3	15" Metal End Section	114.78' Lt. of LP STA 12+81.98 Autumn Harvest	375.00	374.64 ~~374.78~~	-----	HC STD SD 5.61
I-5	A-5	@ LP STA 2+23.20 Spring Harvest Court	-----	397.72 ~~398.30~~	405.42 ~~405.07~~	HC STD. SD 4.01
E-5	15" Metal End Section	148' Rt. of LP STA. 2+18.03 Spring Harvest Court	381.55	~~381.30~~ 381.29	-----	HC STD. SD 5.61

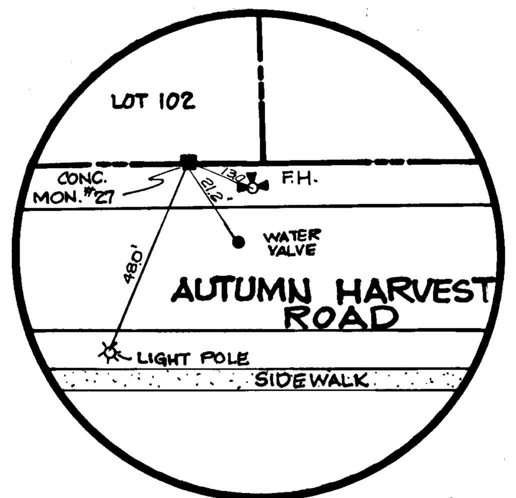
NOTE: All Storm Drain Pipe bedding shall be class "C" unless othrwise noted.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF ENGINEERING — 7-1-86 — DATE

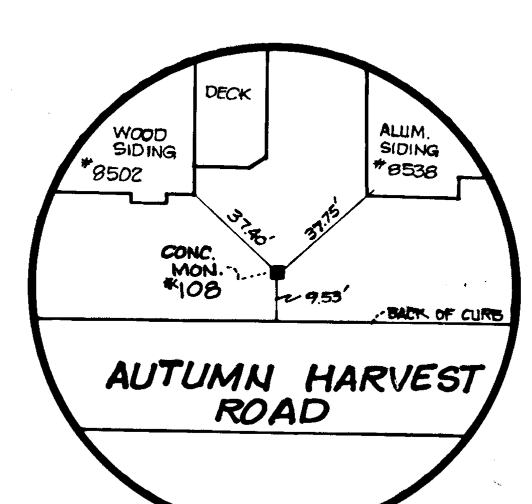
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — 7-11-86 — DATE

NO	DATE	REVISION

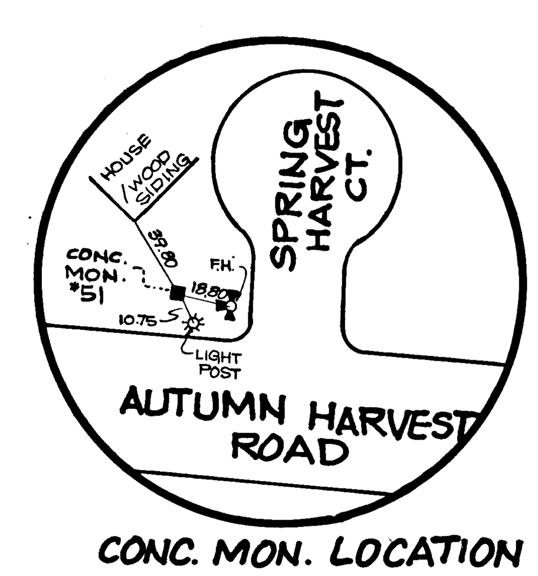
PT.	DESCRIPTION	ELEV.
215	PIN W/CAP	402.26
26	"+" CUT	401.10
27	CONCRETE MONUMENT	403.15
108	" "	408.82
50	PIN W/CAP	409.37
45	" "	408.56
48	"+" CUT	408.75
49	PIN W/CAP	407.55
44	" "	408.61
51	CONCRETE MONUMENT	408.91
34	PIN W/CAP	408.94
35	" "	397.39
12	" "	395.44
13	" "	394.76
16	" "	395.27
17	" "	395.49
20	" "	397.54
23	" "	409.33
24	"+" CUT	403.15
25	PIN W/CAP	402.02
216	" "	402.35
217	" "	403.28



CONC. MON. LOCATION
No. 27



CONC. MON. LOCATION
No. 108



CONC. MON. LOCATION
No. 51

AS-BUILT SURVEY CERTIFIED
BY WILLIAM G. RASCH II, MD.
P.E. No. 4575, ON 9-16-88

TRACY, SCHULTE & ASSOCIATES INC.
planning • architecture • engineering
8450 Baltimore National Pike • Suite 34 • Ellicott City, Maryland 21043 • (301) 465-6105

STATE OF MARYLAND — JAMES KENNETH TRACY — NO. 9566 — REGISTERED PROFESSIONAL ENGINEER

OWNER
SECURITY DEVELOPMENT CORP.
P.O. BOX 417
ELLICOTT CITY, MD. 21043

DEVELOPER
SECURITY DEVELOPMENT CORP.
P.O. BOX 417
ELLICOTT CITY, MD 21043

PROJECT
LONG GATE
SECTION 1 AREA 3
LOTS 64 THRU 106

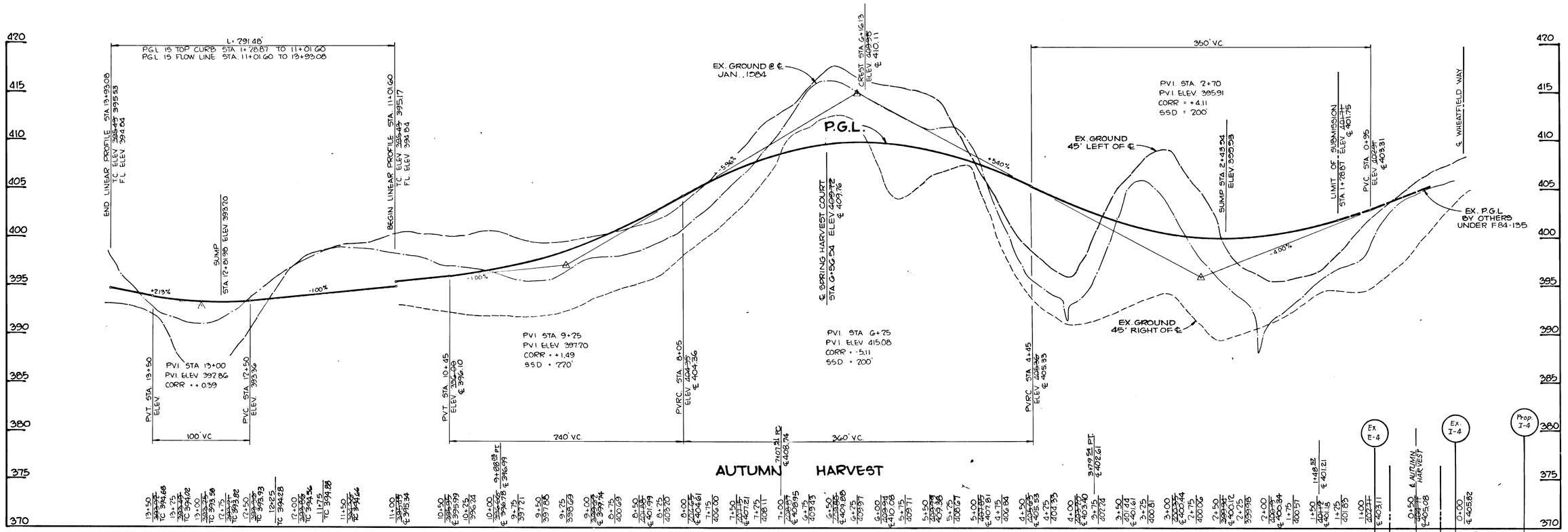
LOCATION
2ND ELECTION DISTRICT HOWARD COUNTY, MD.
TAX MAP NOS. 30 & 31 ZONING MAP NOS. 30 & 31
PARCEL 18

TITLE
PLAN OF AUTUMN HARVEST AND SPRING HARVEST COURT

DATE: DEC. 30, 1985 | PROJECT NO: 8534 RSD
DES: RJW | DRN: CDT/LRC | SCALE: 1"=50' | DRAWING 2 OF 7

AS-BUILT 9-16-88 F-86-120 APRIL 30, 1986

1162



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

CHIEF, BUREAU OF ENGINEERING — DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 7-11-86

NO	DATE	REVISION

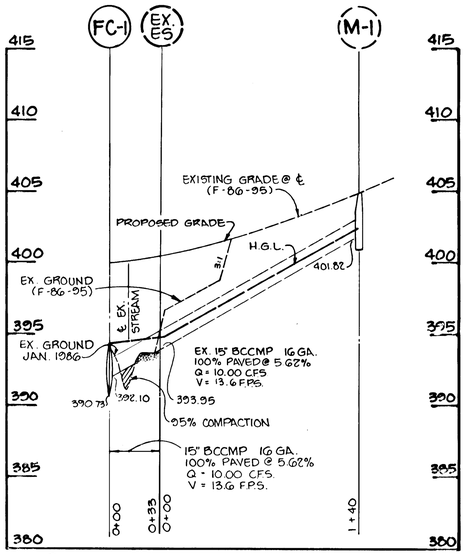
TRACY, SCHULTE & ASSOCIATES INC.
planning • architecture • engineering
8450 Baltimore National Pike • Suite 34 • Ellicott City, Maryland 21043 • (301) 465-6105

STATE OF MARYLAND — JAMES K. TRACY — NO. 4575 — REGISTERED PROFESSIONAL ENGINEER

OWNER: SECURITY DEVELOPMENT CORP. P.O. BOX 417 ELLICOTT CITY, MD. 21043	PROJECT: LONG GATE SECTION 1 AREA 3 LOTS 64 THRU 106
DEVELOPER: SECURITY DEVELOPMENT CORP PO BOX 417 ELLICOTT CITY, MD. 21043	LOCATION: 2ND ELECTION DISTRICT HOWARD COUNTY, MD TAX MAP NOS 30 & 31 ZONING MAP NOS 30 & 31 PARCEL 18
	TITLE: PROFILES
DES. RJW / DRN. KAM	DATE DEC. 30, 1985 / PROJECT NO 85-34 R&D
	SCALE H:1"=50' V:1"=5' / DRAWING 3 OF 7

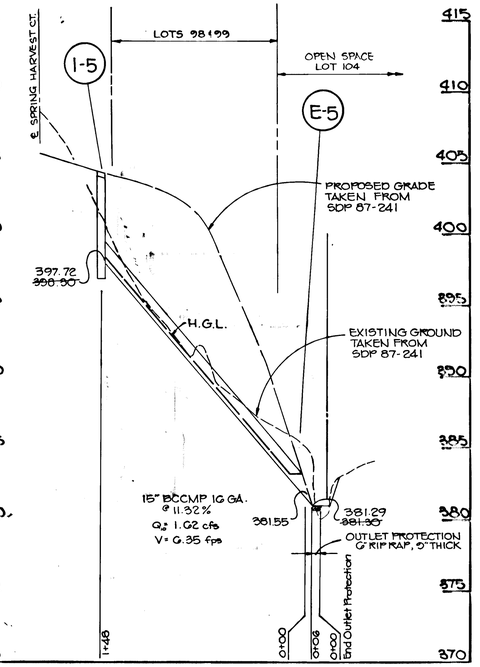
AS-BUILT 9-16-88 F 86-120 APRIL 30, 1986

1142



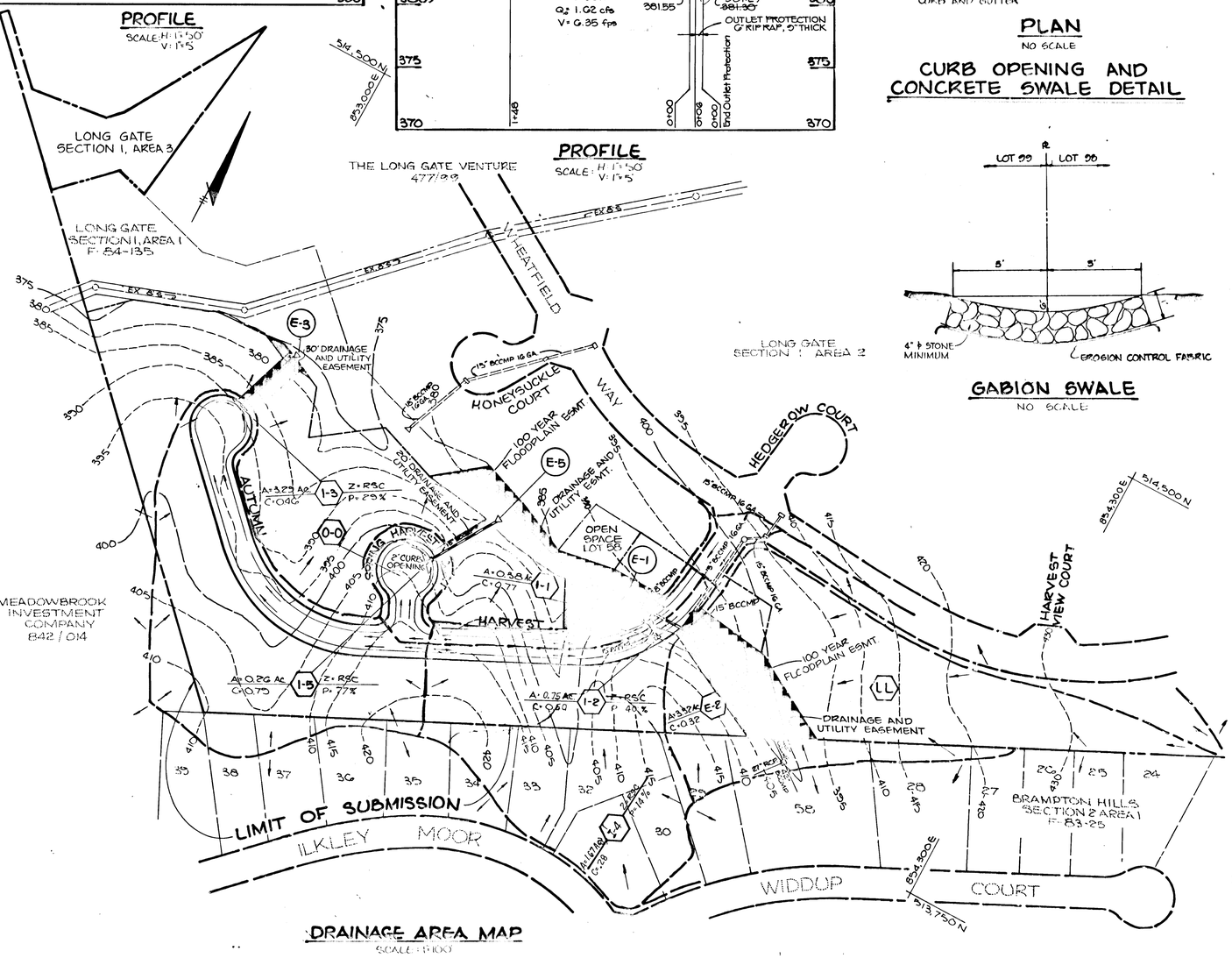
PROFILE

SCALE: H: 1"=50' V: 1"=5



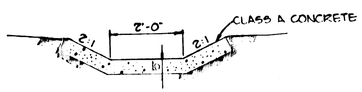
PROFILE

SCALE: H: 1"=50' V: 1"=5



DRAINAGE AREA MAP

SCALE: 1"=100'

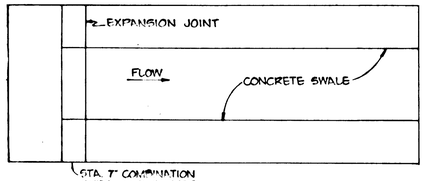


CONCRETE SWALE SECTION

NO SCALE

ELEVATION

NO SCALE



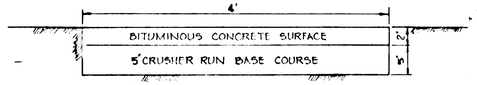
PLAN

NO SCALE

CURB OPENING AND CONCRETE SWALE DETAIL

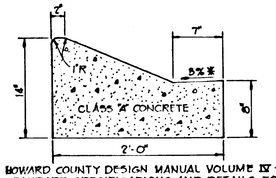
GABION SWALE

NO SCALE



MACADAM PATHWAY DETAIL

NO SCALE

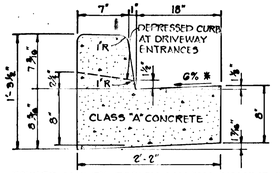


HOWARD COUNTY DESIGN MANUAL VOLUME IV - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-3.01)

* GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ATERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AS THE PAVEMENT.

MODIFIED COMBINATION CURB AND GUTTER

No Scale

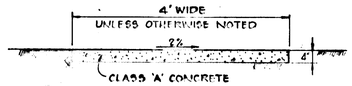


HOWARD COUNTY DESIGN MANUAL VOLUME IV STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-3.01)

* GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AS THE PAVEMENT.

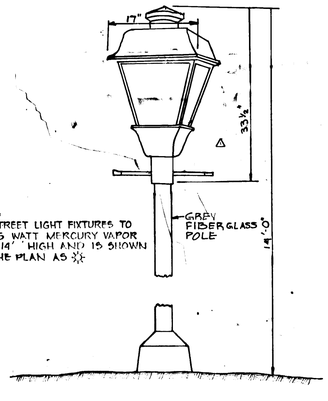
STANDARD 7" COMBINATION CURB AND GUTTER

NO SCALE



SIDEWALK DETAIL

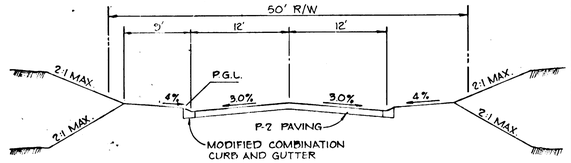
NO SCALE



NOTE: ALL STREET LIGHT FIXTURES TO BE 175 WATT MERCURY VAPOR TYPE 14' HIGH AND 15 SHOWN ON THE PLAN AS ✳

DETAIL - LIGHTING FIXTURE

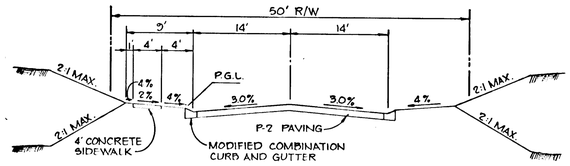
NO SCALE



SPRING HARVEST COURT STA. 0+84.00 TO STA. 0+47.95
CLASSIFICATION: CUL-DE-SAC
DESIGN SPEED: 30 MPH

TYPICAL SECTION

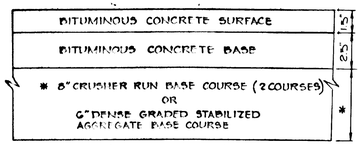
NO SCALE



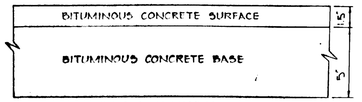
AUTUMN HARVEST STA. 1+28.87 TO STA. 11+01.60
CLASSIFICATION: CUL-DE-SAC
DESIGN SPEED: 30 MPH

TYPICAL SECTION

NO SCALE



(ALTERNATE)



HOWARD COUNTY DESIGN MANUAL VOLUME IV STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-3.01)

6½" PAVING, P-2

NO SCALE
AUTUMN HARVEST
SPRING HARVEST COURT

AS-BUILT SURVEY CERTIFIED BY WILLIAM G. RASCH II, MD. R.E. No 4575 ON 9-16-88

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 7-11-86

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

CHIEF, BUREAU OF ENGINEERING — DATE 7-18-86

NO	DATE	REVISION
△	10/21/86	CHANGED LIGHTING DETAIL TO COLONIAL MODEL

TRACY, SCHULTE & ASSOCIATES INC.
planning • architecture • engineering
8450 Baltimore National Pike • Suite 34 • Ellicott City, Maryland 21043 • (301) 465-6105

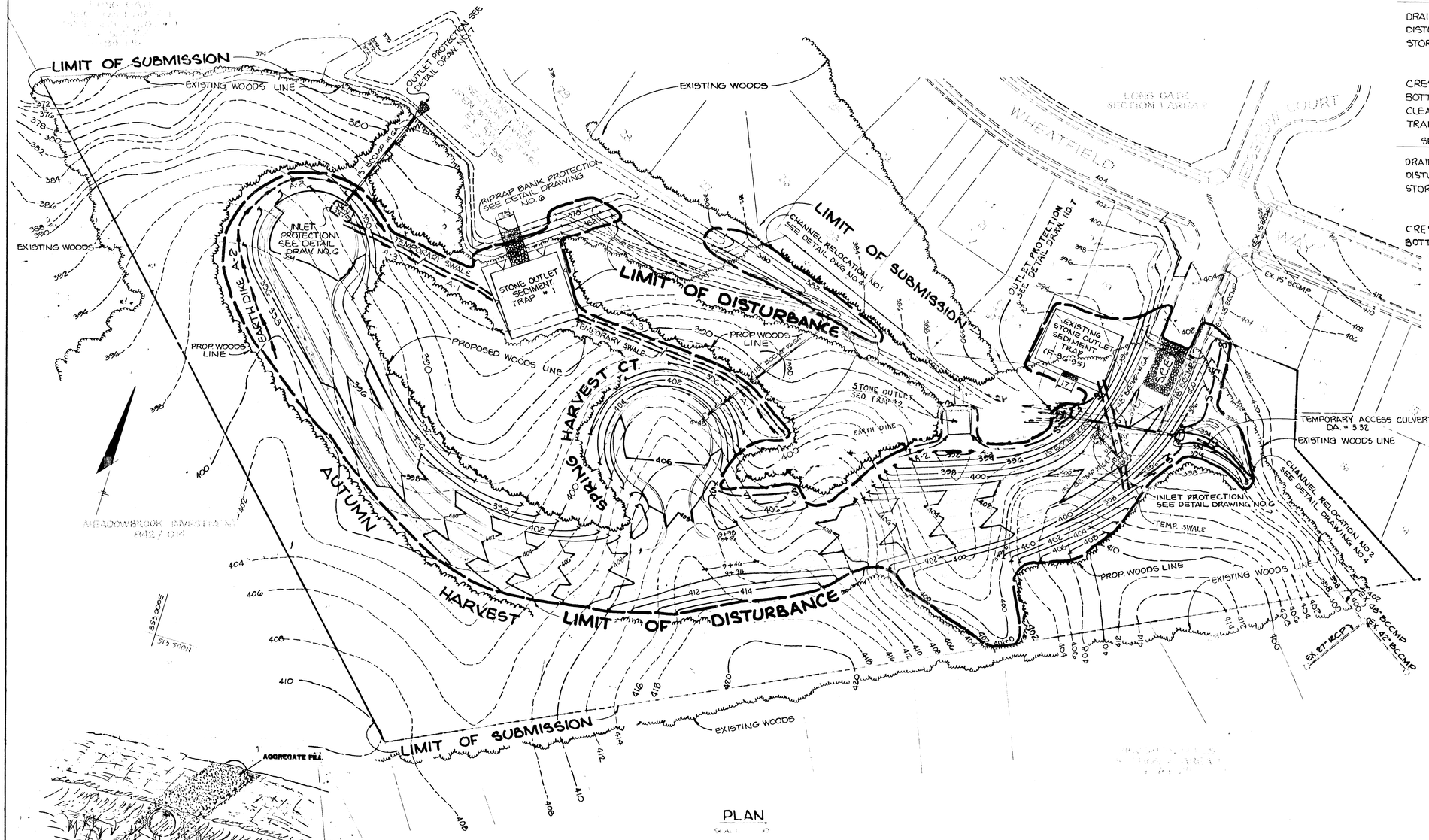
STATE OF MARYLAND — JAMES K. LARSEN — No. 10,788 — REGISTERED PROFESSIONAL ENGINEER

OWNER: SECURITY DEVELOPMENT CORP. P.O. BOX 417 ELLICOTT CITY, MD. 21043	PROJECT: LONG GATE SECTION ONE AREA THREE LOTS 99 THRU 106
DEVELOPER: SECURITY DEVELOPMENT CORP P.O. BOX 417 ELLICOTT CITY, MD. 21043	LOCATION: TAX MAP NOS. 30 & 31 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
	TITLE: DETAILS, PROFILES AND DRAINAGE AREA MAP
DES: RJW DRN: LRC	DATE: DEC. 30, 1985 PROJECT NO: 85314 R&D
	SCALE: AS SHOWN DRAWING: 4 OF 7

AS-BUILT 9-16-88 | 80-190

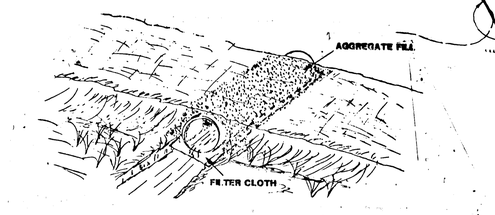
APRIL 30, 1986

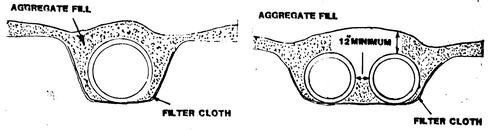
11 & 2



PLAN

NO SCALE





Construction Specifications

a. **Restrictions** - No construction or removal of a temporary access culvert will be permitted between October 1 through April 30 for all Class III and Class IV Trout Waters or between March 15 through June 15 for non-trout waterways.

b. **Culvert Strength** - All culverts shall be strong enough to support their cross sectional area under maximum expected loads.

c. **Culvert Size** - The size of the culvert pipe shall be the largest pipe diameter that will fit into the existing channel without major excavation of the waterway channel or without major approach fills. If a channel width exceeds 3 feet, additional pipes may be used until the cross sectional area of the pipes is greater than 60 percent of the cross sectional area of the existing channel. The minimum size culvert that may be used is a 12" diameter pipe.

d. **Culvert Length** - The culvert(s) shall extend a minimum of one foot beyond the upstream and downstream toe of the aggregate placed around the culvert. In no case shall the culvert exceed 40 feet in length.

e. **Filter Cloth** - Filter cloth shall be placed on the streambed and streambanks prior to placement of the pipe culvert(s) and aggregate. The filter cloth shall cover the streambed and extend a minimum six inches and a maximum one foot beyond the end of the culvert and bedding material. Filter cloth reduces settlement and improves crossing stability.

f. **Culvert Placement** - The invert elevation of the culvert shall be installed on the natural streambed grade to minimize interference with fish migration (free passage of fish).

g. **Culvert Protection** - The culvert(s) shall be covered with a minimum of one foot of aggregate. If multiple culverts are used they shall be separated by at least 12" of compacted aggregate fill. As a minimum, the bedding and fill material used in the construction of the temporary access culvert crossings shall conform with the aggregate requirements cited in Section I.M. 1. above.

h. **Stabilization** - All areas disturbed during culvert installation shall be stabilized within 14 calendar days of the disturbance in accordance with the Standard for "Critical Area Stabilization With Permanent Seeding."

Culvert Maintenance Requirements

a. **Inspection** - Periodic inspection shall be performed to ensure that the culverts, streambed, and streambanks are not damaged, and that sediment is not entering the stream or blocking fish passage or migration.

b. **Maintenance** - Maintenance shall be performed, as needed in a timely manner to ensure that structures are in compliance with this standard and specification. This shall include removal and disposal of any trapped sediment or debris. Sediment shall be disposed of and stabilized outside the waterway flood plain.

Culvert Removal and Clean-Up Requirements

a. **Removal** - When the crossing has served its purpose, all structures including culverts, bedding and filter cloth materials shall be removed within 14 calendar days. In all cases, the culvert materials shall be removed within one year of installation. No structure shall be removed during the spawning season (March 15 through June 15).

b. **Final Clean-up** - Final clean-up shall consist of removal of the temporary structure from the waterway, removal of all construction materials, restoration of original stream channel cross section, and protection of the stream banks from erosion. Removed material shall be stored outside of the waterway flood plain.

c. **Method** - Removal of the structure and clean up of the area shall be accomplished without construction equipment working in the waterway channel.

d. **Final Stabilization** - All areas disturbed during removal shall be stabilized within 14 calendar days of that disturbance in accordance with the Standards for "Critical Area Stabilization With Permanent Seeding."

g. **Aggregate** used in ford construction shall meet the minimum requirements of Section I.M. 1.

h. All fords shall be constructed to minimize the blockage of stream flow and shall allow free flow over the ford. The placing of any material in the waterway bed will cause some upstream ponding. The depth of this ponding will be equivalent to the depth of the material placed within the stream and therefore should be kept to a minimum height. However, in no case will the bedding material be placed deeper than 12 inches or one-half (½) the height of the existing banks whichever is smaller.

i. **Stabilization** - All areas disturbed during ford installation shall be stabilized within 14-calendar days of that disturbance in accordance with the Standards for "Critical Area Stabilization With Permanent Seeding."

Ford Removal and Clean-Up Requirements

b. **Removal** - When the temporary structure has served its purpose, excess material used for this structure need not be removed. Care should be taken so that any aggregate left does not create an impoundment or restrict fish passage.

b. **Final Clean-Up** - Final clean-up shall consist of removal of excess temporary ford materials from the waterway. All materials shall be stored outside the waterway flood plain.

c. **Method** - Clean up shall be accomplished without construction equipment working in the stream channel.

d. **Approach Disposition** - The approach slopes of the cut banks shall not be backfilled.

e. **Final Stabilization** - All areas disturbed during ford removal shall be stabilized within 14-calendar days of that disturbance in accordance with the Standard for "Critical Area Stabilization With Permanent Seeding."

Any temporary access crossing shall conform to the technical requirements of this Standard and Specifications as well as any specific requirements imposed by the Water Resources Administration's Watershed Permits Division (269-2265) Annapolis, Maryland.

TEMPORARY ACCESS CULVERT

NO SCALE

SEDIMENT TRAP NO. 1	
DRAINAGE AREA	4.34 Ac.
DISTURBED AREA	1.72 Ac.
STORAGE VOLUME	
REQUIRED	7,812 C.F.
PROVIDED	8,450 C.F.
CREST ELEVATION	383.0
BOTTOM ELEVATION	381.0
CLEANOUT ELEVATION	382.0
TRAP DIMENSIONS	65'x65'x2'

SEDIMENT TRAP NO. 2	
DRAINAGE AREA	0.149 Ac.
DISTURBED AREA	0.149 Ac.
STORAGE VOLUME	
REQUIRED	269 C.F.
PROVIDED	300 C.F.
CREST ELEVATION	389.0
BOTTOM ELEVATION	387.25
CLEANOUT ELEVATION	388.13
TRAP DIMENSIONS	20'x20'x.75'

EXISTING SEDIMENT TRAP (F-86-95)	
DRAINAGE AREA	3.70 Ac.
DISTURBED AREA	0.98 Ac.
STORAGE VOLUME	
REQUIRED	6,661 C.F.
PROVIDED	7,000 C.F.
CREST ELEVATION	294.0
BOTTOM ELEVATION	291.0
CLEANOUT ELEVATION	292.0
TRAP DIMENSIONS	50'x70'x2'

BY THE ENGINEER:

"I 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."

James K. Tracy — 7-3-86
JAMES K. TRACY, P.E. — DATE

BY THE DEVELOPER:

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT."

James R. McKay Jr. — 7.3.86
DEVELOPER — DATE

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

Stephen [illegible] — 7-10-86
BOARD S.C.D. — DATE

REVIEWED FOR _____ S.C.D.

AND MEETS TECHNICAL REQUIREMENTS

[illegible] — 7-10-86
U.S. SOIL CONSERVATION SERVICE — DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[illegible] — 7-18-86
CHIEF, BUREAU OF ENGINEERING — DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

[illegible] — 7-11-86
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

NO.	DATE	REVISION

TRACY, SCHUETT & ASSOCIATES INC.
planning • architecture • engineering
[illegible]

STATE OF MARYLAND — JAMES K. TRACY — No. 6890 — REGISTERED PROFESSIONAL ENGINEER

James K. Tracy

OWNER
SECURITY DEVELOPMENT CORP
P.O. BOX 417
ELLICOTT CITY, MD. 21043

DEVELOPER
SECURITY DEVELOPMENT CORP
P.O. BOX 417
ELLICOTT CITY, MD. 21043

PROJECT
LONG GATE
[illegible] G4 [illegible] 106

LOCATION
[illegible]

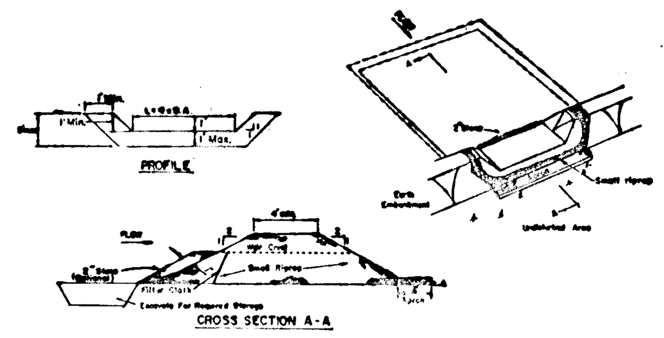
TITLE
GRADING AND SEDIMENT CONTROL PLAN

DATE	SHEET	OF
DEC. 30	4	7

J.R.C.	1"=50'	5

AS-BUILT 916-80 F-86-120 APRIL 30, 1986

STORM WATER MANAGEMENT FOR LONG GATE 1/3 IS PROVIDED UNDER F-86-95



OPTION: A one foot layer of 2" stone may be placed on the upstream side of the riprap in place of the embedded filter cloth.

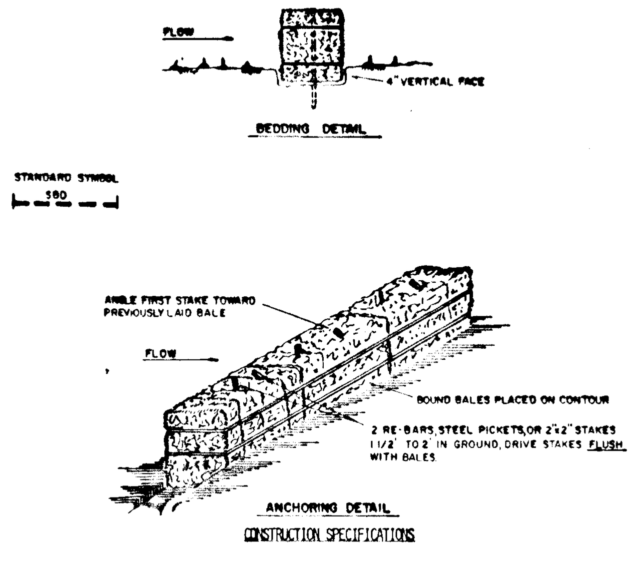
CONSTRUCTION SPECIFICATIONS FOR ST-V

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area 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 riprap 4"-8" along with a 1' thickness of 2" aggregate placed on the up-grade side on the small riprap on embedded filter cloth in the riprap.
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.

Maximum Drainage Area: 5 Acres

STONE OUTLET SEDIMENT TRAP

NO SCALE

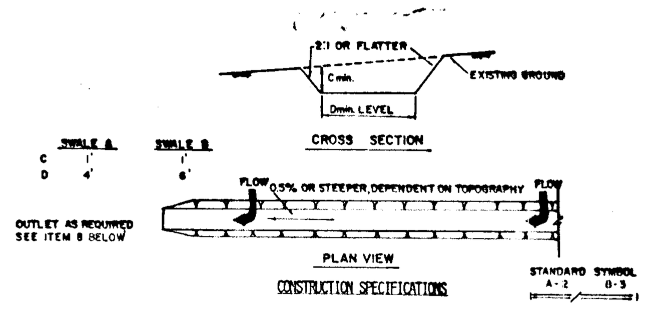


CONSTRUCTION SPECIFICATIONS

1. Bales shall be placed at the toe 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 minimum of (4) inches, and placed so the bindings are horizontal.
3. Bales shall be securely anchored in place by either two stakes or re-bars driven through the bale. The first 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

NO SCALE



CONSTRUCTION SPECIFICATIONS

1. All temporary swales shall have uninterrupted positive grade to an outlet.
2. Diverted runoff from a disturbed area shall be conveyed to a sediment trapping device.
3. Diverted runoff from an undisturbed area shall outlet directly into an undisturbed stabilized area at non-erosive velocity.
4. All trees, brush, stumps, obstructions, and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of the swale.
5. The swale shall be excavated or shaped to line, grade, and cross section as required to meet the criteria specified herein and be free of bank projections or other irregularities which will impede normal flow.
6. Fills shall be compacted by earth moving equipment.
7. All earth removed and not needed on construction shall be placed so that it will not interfere with the functioning of the swale.
8. Stabilization shall be as per the chart below:

FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	A (5 AC OR LESS)	B (5 AC - 10 AC)
1	0.5-3.0%	Seed and Straw Mulch	Seed and Straw Mulch
2	3.1-5.0%	Seed and Straw Mulch	Seed using Jute or Excelsior
3	5.1-8.0%	Seed with Jute or Excelsior; Sod	Lined Rip-Rap 4-8" Recycled Concrete Equivalent
4	8.1-20%	Lined 4-8" Rip-Rap	Engineered Design

9. Periodic inspection and required maintenance must be provided after each rain event.

TEMPORARY SWALE

NO SCALE

SEDIMENT CONTROL NOTES

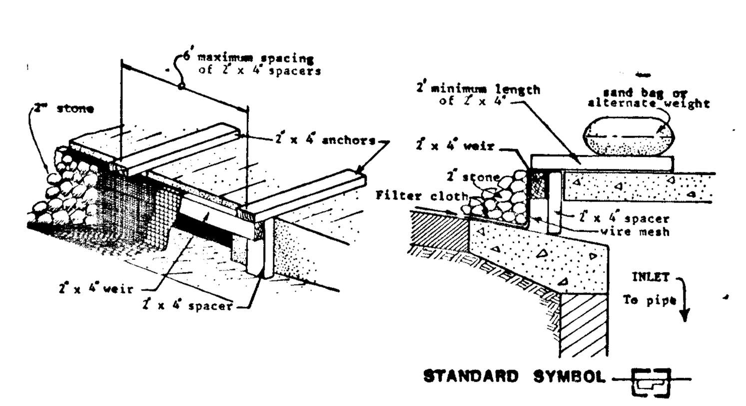
1) A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTIONS AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION (992-2437).
2) ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1983 MARYLAND 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, 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 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 MOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
7) SITE ANALYSIS:

TOTAL AREA OF SITE	10.226 ACRES
AREA DISTURBED	2.650 ACRES
AREA TO BE ROOFED OR PAVED	2.771 ACRES
AREA TO BE VEGETATIVELY STABILIZED	1.080 ACRES
TOTAL CUT	3454 CU.YDS.
TOTAL FILL	8865 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 CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DPW SEDIMENT CONTROL INSPECTOR.
10) ALL SEDIMENT TRAPS 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.

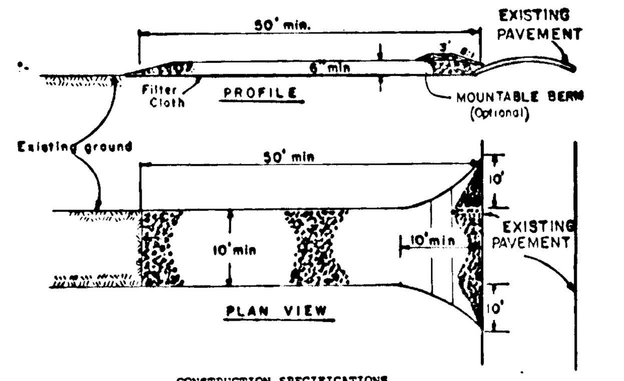
SEQUENCE OF CONSTRUCTION

DAY 1.	1. OBTAIN A GRADING PERMIT.
DAY 2-3	2. CLEAR AND GRUB AREA FOR AND INSTALL STABILIZED CONSTRUCTION ENTRANCE (SCE)
DAY 3-7	3. CLEAR AND GRUB REMAINING AREAS FOR SEDIMENT CONTROL DEVICE INSTALLATION.
DAY 7-9	4. INSTALL SEDIMENT TRAPS 1 AND 2 AND STABILIZE IN ACCORDANCE WITH TEMPORARY SEEDING NOTES.
DAY 9-13	5. INSTALL REMAINDER OF SEDIMENT CONTROL DEVICES AND STABILIZE IN ACCORDANCE WITH TEMPORARY SEEDING NOTES.
DAY 13-22	6. CLEAR AND GRUB REMAINDER OF SITE.
DAY 22-29	7. INSTALL TEMPORARY ACCESS CULVERT ON UPSTREAM SIDE OF CONSTRUCTION AREA AND INSTALL 48" BCCMP.
DAY 29-49	8. GRADE SITE.
DAY 49-84	9. INSTALL UTILITIES (WATER, SEWER, AND STORM DRAINS) BLOCKING ALL INLETS AS PER INLET PROTECTION DETAIL.
DAY 84-87	10. STABILIZE ALL SLOPES IN ACCORDANCE WITH PERMANENT SEEDING NOTES.
DAY 87-108	11. COMPLETE ALL ROADWAY CONSTRUCTION AND STABILIZE ALL DISTURBED AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES.
DAY 108-117	12. UPON APPROVAL OF SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVISES AND STABILIZE IN ACCORDANCE WITH PERMANENT SEEDING NOTES.



INLET PROTECTION DETAIL

NO SCALE

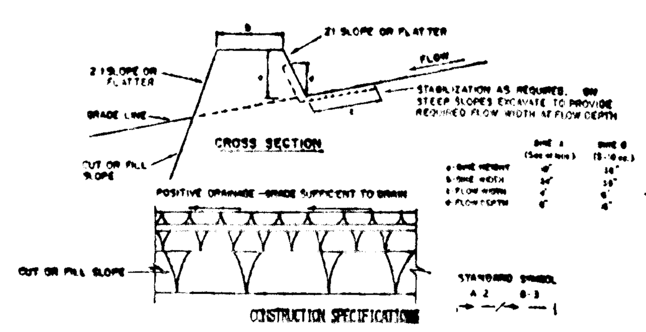


CONSTRUCTION SPECIFICATIONS

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

NO SCALE



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 the chart below.

FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	.5-3.0%	Seed and Straw Mulch	Seed and Straw Mulch
2	3.1-5.0%	Seed and Straw Mulch	Seed using Jute, or Excelsior; Sod; 2" Stone
3	5.1-8.0%	Seed with Jute, or Sod; 2" Stone	Lined Rip-Rap 4-8"
4	8.1-20%	Lined Rip-Rap 4-8"	Engineering Design

A. Stone to be 2 inch stone, or recycled concrete equivalent, in a layer at least 3 inches in thickness and be pressed into the soil with construction equipment.
B. Rip-Rap to be 4-8 inches in a layer at least 8 inches thickness and pressed into the 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 event.

EARTH DIKE

NO SCALE

PERMANENT SEEDING NOTES

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 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 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 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.

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.

BY THE ENGINEER:

"I 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."

James K. Tracy — 7·3·86
JAMES K. TRACY, P.E. 9566 — DATE

BY THE DEVELOPER:

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT."

James R. Moxley — 7·3·86
DEVELOPER: JAMES R. MOXLEY, SECURITY DEVELOPMENT CORP. PRES. — DATE

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

Stephen L. Kuhn — 7/10/86
HOWARD S.C.D. — DATE

REVIEWED FOR HOWARD S.C.D.

AND MEETS TECHNICAL REQUIREMENTS

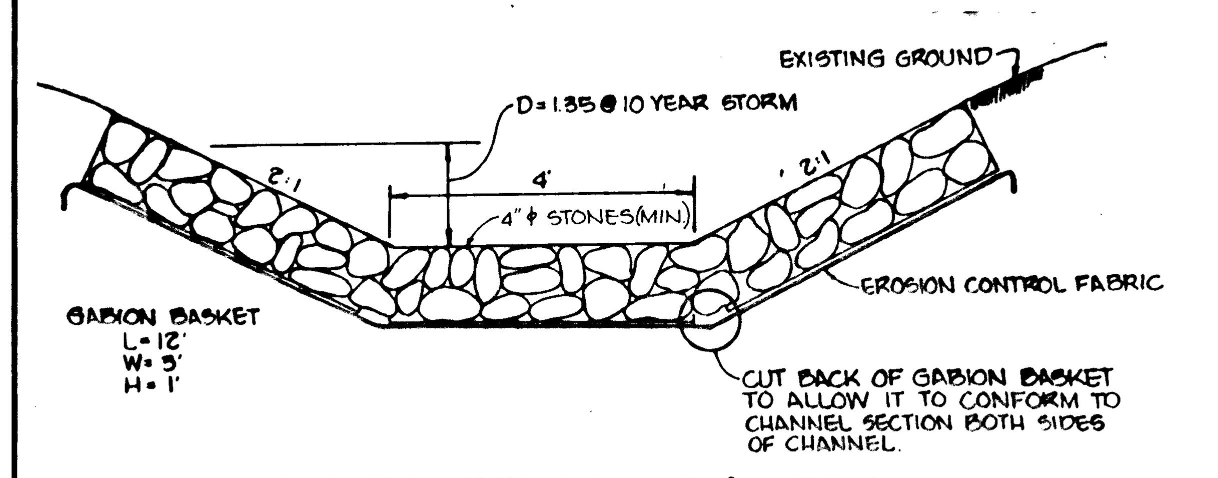
7-10-86
U.S. SOIL CONSERVATION SERVICE — DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

7-18-86
CHIEF, BUREAU OF ENGINEERING — DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

7-11-86
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

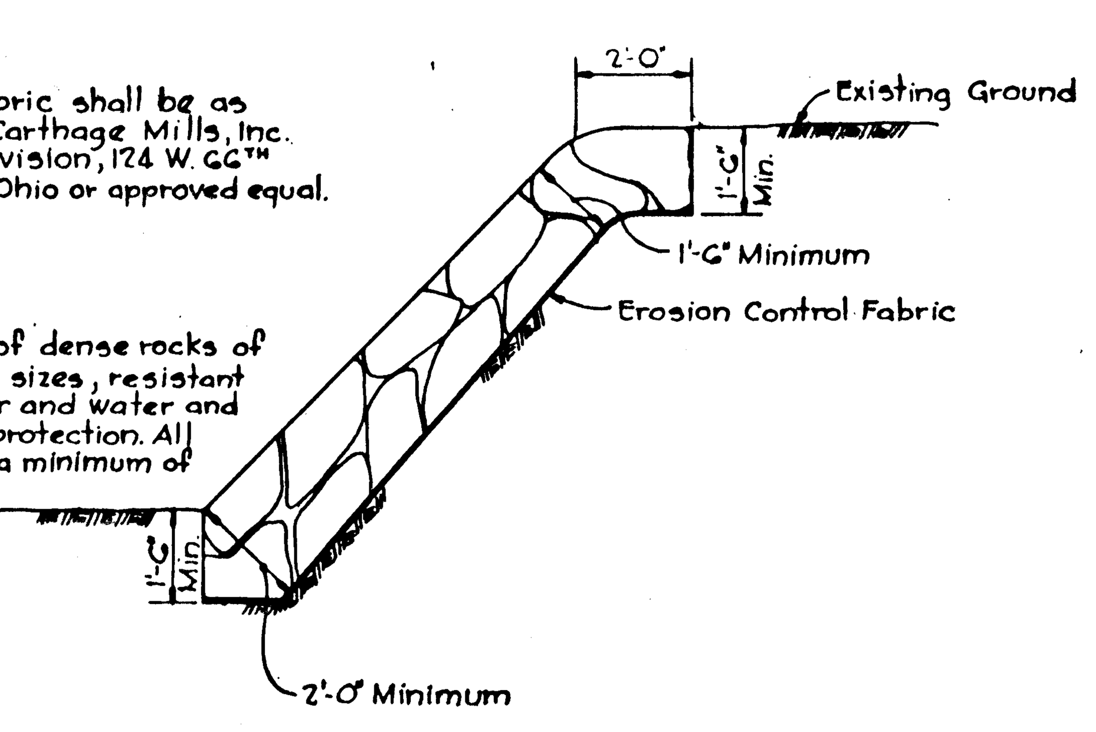


CHANNEL RELOCATION DETAIL

NO SCALE

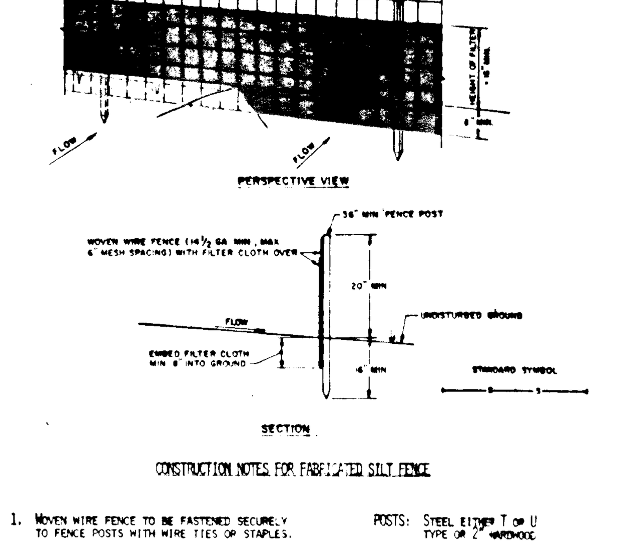
Note:
Erosion Control Fabric shall be as manufactured by Carthage Mills, Inc. Erosion Control Division, 124 W. 66TH Street Cincinnati, Ohio or approved equal.

Rip Rap to consist of dense rocks of random shapes and sizes, resistant to the action of air and water and suitable for bank protection. All rocks shall weigh a minimum of 150 pounds.



RIPRAP BANK PROTECTION

NO SCALE



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

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 two sections of filter cloth adjoin each other they shall be overlapped by six inches and folded.
4. Maintenance shall be performed as needed and material removed when "bulges" develop in the silt fence.

POSTS: Steel either T or U type or 2" hardwood.

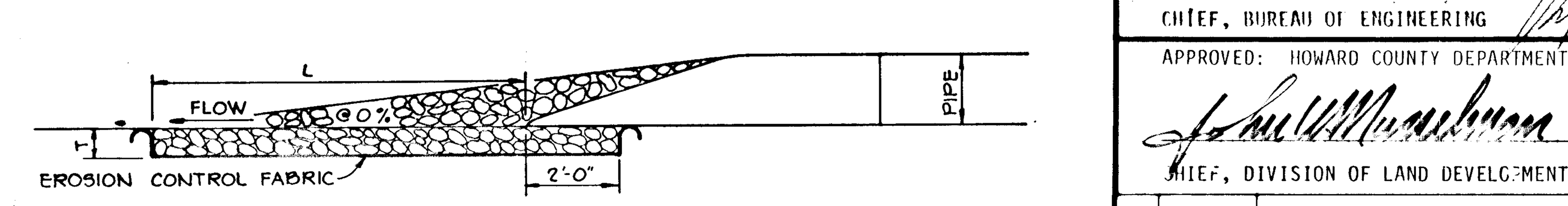
FENCE: Woven wire, 14 Ga. 6" Max. Mesh Opening

FILTER CLOTH: Filter X, Mirafi 100X, Stabilinka T140N or Approved Equal.

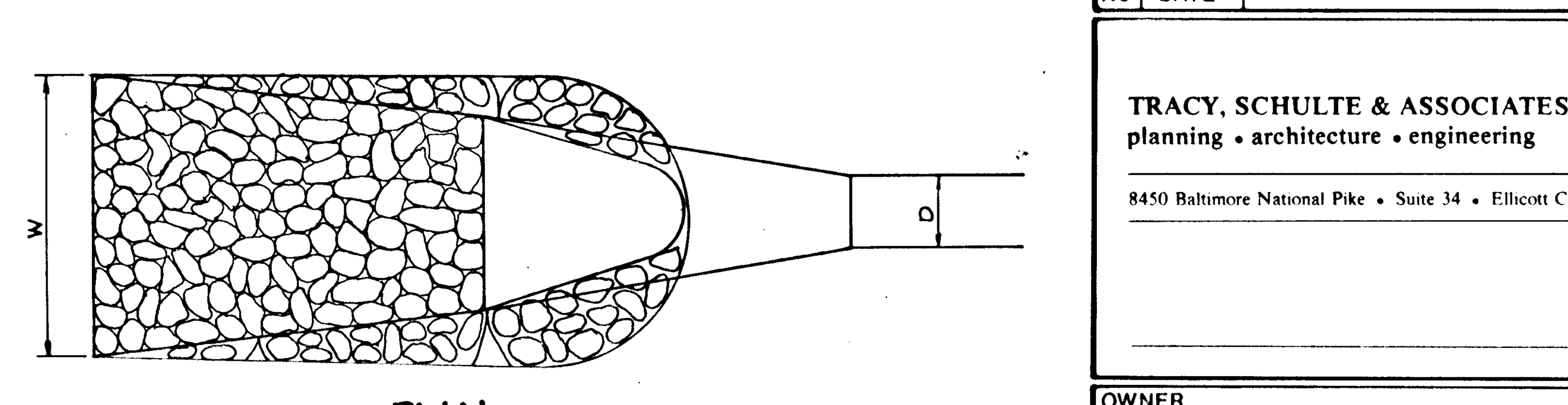
PREFABRICATED UNIT: Geofab, Envirofence, or Approved Equal.

SILT FENCE

NO SCALE



SECTION



PLAN

STRUCTURE	MEDIUM STONE DIA.	LENGTH (L)	WIDTH (W)	THICKNESS (T)
E-1	6"	12'	10'	9"
E-3	6"	11'	12.5'	9"
E-5	6"	6'	7.5'	9"

OUTLET PROTECTION DETAIL

NO SCALE

NO	DATE	REVISION

TRACY, SCHULTE & ASSOCIATES INC.
planning • architecture • engineering

8450 Baltimore National Pike • Suite 34 • Ellicott City, Maryland 21043 • (301) 465-6105

OWNER: SECURITY DEVELOPMENT CORP. P.O. BOX 417 ELLICOTT CITY, MD. 21043	PROJECT: LONG GATE SECTION 1, AREA 3 LOTS 64 THRU 106
	LOCATION: TAX MAP NOS. 30 & 31 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DEVELOPER: SECURITY DEVELOPMENT CORP. P.O. BOX 417 ELLICOTT CITY, MD. 21043	TITLE: SEDIMENT CONTROL NOTES AND DETAILS
	DATE: DEC. 30, 1985 / PROJECT NO: 8534 RSD
DES. RJW / DRN. LRC	SCALE: AS SHOWN / DRAWING 6 OF 7

AS-BUILT 9-16-88 F-86-120 APRIL 30, 1986

LONG GATE
SECTION 1 AREA 1
OPEN SPACE LOT #9
EX. SWMF
F-84-135

LONG GATE
SECTION 1 AREA 2
OPEN SPACE LOT #60
EX. SWMF
F-84-135

LONG GATE
SECTION 1 AREA 2

WHEATFIELD

EX. STREET TREES BY OTHERS UNDER F-84-135

HEDGEROW COURT

WAY

OPEN SPACE LOT #59

HARVEST

SPRING

COURT

AUTUMN

HARVEST

MEADOWBROOK INVESTMENT
842 / 014

853 000E
513 300N

BRAMPTON HILLS
SECTION 2 AREA 1
F-83-25

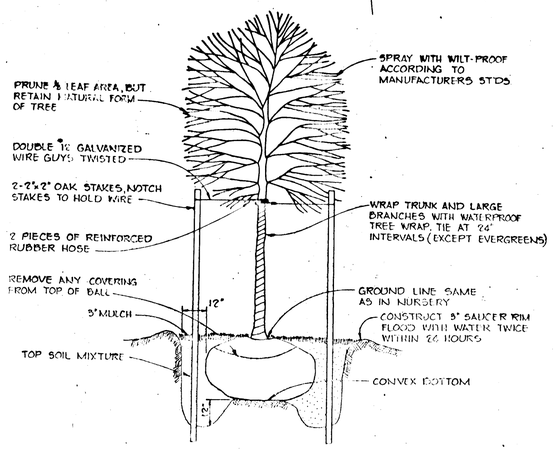
513 500N
854 000E

PLAN
SCALE 1"=50'

PLANT LIST			
SYMBOL	QUANTITY	NAME	REMARKS
⊙	23	ACER RUBRUM Red Maple	2½ Min Cal. B & B Full Head
	7	QUERCUS PALUSTRIS Pin Oak	
	3	GLEDISTA TRIACANTHOS INERMIS Honey Locust	
TOTAL	33		

℄ LENGTH OF PROPOSED ROADS = 1007 LF ÷ 40 = 25.2
LENGTH OF LINEAR PROFILES = 551 ÷ 80 = 6.9

TOTAL REQUIRED	32.1
TOTAL PROVIDED	33



TREE PLANTING DETAIL
NOT TO SCALE

FEB. 22, 1988	1-BLOCK	AS PER ENGINEERING COMMENTS FEBRUARY 5, 1988
REV. DATE	REV. NO.	REVISION DESCRIPTION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

CHIEF, BUREAU OF ENGINEERING — DATE 7-18-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 7-11-86

NO	DATE	REVISION

TRACY, SCHULTE & ASSOCIATES INC.
planning • architecture • engineering
8450 Baltimore National Pike • Suite 34 • Ellicott City, Maryland 21043 • (301) 465 6105

STATE OF MARYLAND — JAMES KENNETH TRACY — No. 10158 — REGISTERED PROFESSIONAL ENGINEER

James K. Tracy

OWNER
SECURITY DEVELOPMENT CORP.
P.O. BOX 417
ELLICOTT CITY, MD. 21043

DEVELOPER
SECURITY DEVELOPMENT CORP.
P.O. BOX 417
ELLICOTT CITY, MD. 21043

PROJECT
LONG GATE
SECTION 1 AREA 3
LOTS 64 THRU 106

LOCATION
2ND ELECTION DISTRICT HOWARD COUNTY, MD.
TAX MAP NOS 30 & 31 ZONING MAP NOS 30 & 31
PARCEL 18

TITLE
STREET TREE PLAN

DES. RJW | DRN. CDT | DATE DEC. 30, 1985 | PROJECT NO 85334 RSD | SCALE 1"=50' | DRAWING 7 OF 7

1162

AS-BUILT 9-16-88 F-86-120 APRIL 30, 1986