SHEET INDEX	
NO	DESCRIPTION
1	TITLE SHEET
2	PLAN OF PIRATES COVE, HIDDEN COVE AND PRIVATE DRIVE
3	PROFILES OF PIRATES COVE, HIDDEN COVE, AND PRIVATE DRIVE
4	PROFILES OF OAKLAND MILLS RD AND PRIVATE DRIVE
5	DETAILS
6	DRAINAGE AREA MAP AND DETAILS
7	GRADING AND SEDIMENT CONTROL PLAN
8	SEDIMENT CONTROL NOTES AND DETAILS
9	STORM WATER MANAGEMENT SPECIFICATIONS AND DETAILS
10	STREET TREE PLAN

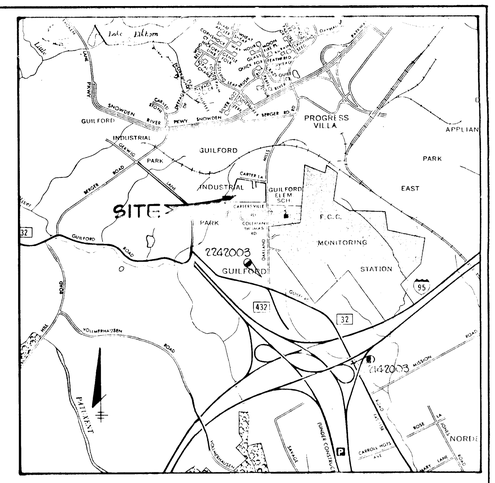
ROADWAY, STORM DRAIN & STORM WATER MANAGEMENT

CARTER'S COVE

SECTION 1, AREA 1

6TH ELECTION DISTRICT

HOWARD COUNTY, MARYLAND



VICINITY MAP

SCALE 1"=2000'

BENCH MARK DESCRIPTIONS

BM #2242003 ELEV 374.228

CONCRETE MONUMENT SET FLUSH WITH GROUND AT NORTHWEST CORNER OF INTERSECTION OF OAKLAND MILLS ROAD OLD ROUTE #32.

BM #2142003 ELEV. 338.746

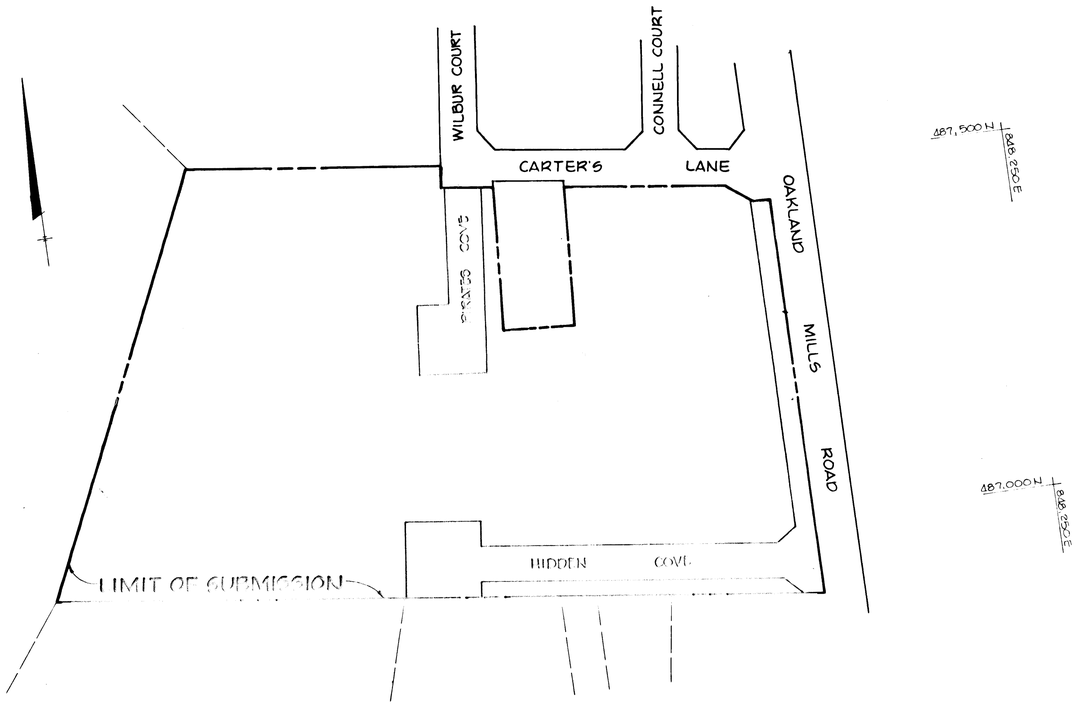
CONCRETE MONUMENT 6'± EAST OF END CONCRETE CURB OF ROUTE #95 NORTHBOUND LANE 0.1' BELOW SURFACE.

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 ACCORANCE WITH HOWARD COUNTY STANDARDS.
6. ALL STREET CURB RETURNS SHALL HAVE 20.0' RADII UNLESS OTHERWISE NOTED.
7. STORM DRAIN TRENCHES WITHIN ROAD RIGHT OF WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY ROAD CODE.
8. INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES 1978 EDITION.
9. 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.
10. DESIGNED TRAFFIC SPEED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIAL STANDARDS:
    ALL CUL-DE-SAC DESIGNED FOR 30 M.P.H., ALL LOCAL STREETS DESIGNED FOR 30 M.P.H.
11. ALL ELEVATIONS SHOWN ARE BASED ON U.S.C. AND G.S. MEAN SEA LEVEL DATUM 1929.
12. ALL FILL AREAS WITHIN ROADWAYS AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM 95% OF MAXIMUM OBTAINABLE DENSITY DETERMINED BY MARSHALL PROCTOR.
13. ALL PIPE ELEVATIONS SHOWN ARE INVERT (P)—ELEVATIONS.
14. PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
15. SUBJECT PROPERTY ZONED R-SA PER 8-7-85 COMPREHENSIVE ZONING PLAN.
16. TOPO TAKEN FROM FIELD RUN SURVEY BY TRACY, SCHULTE & ASSOC. DATED JUNE, 1986.



PLAN

SCALE 1"=100'

* VERTICAL CONTROL USED FOR AS-BUILT IS BASED ON HOWARD COUNTY CONTROL MONUMENT (PATTERSON Z A 7) #2242003 ELEV. = 374.228'

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 2-13-87

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

CHIEF, BUREAU OF ENGINEERING — DATE 2.12.87

NO	DATE	REVISION

TRACY, SCHULTE & ASSOCIATES INC.
planning • architecture • engineering
8480 Baltimore National Pike • Ellicott City, Maryland 21043 • (301) 465-6105

STATE OF MARYLAND — JAMES K. TRACY — REGISTERED PROFESSIONAL ENGINEER

OWNER: SECURITY DEVELOPMENT CORP 8480 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MARYLAND 21043	PROJECT: CARTER'S COVE SECTION 1, AREA 1 LOTS 1 THRU 100
	LOCATION: TAX MAP NO. 42 PARCEL NOS 37 & 253 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DEVELOPER: SECURITY DEVELOPMENT CORP 8480 BALTIMORE NATIONAL PIKE ELLICOTT CITY MARYLAND 21043	TITLE: TITLE SHEET
	DATE FEB. 6, 1987 — PROJECT NO 8529
DES DAM — DRN CDT	SCALE AS SHOWN — DRAWING 1 OF 10

F-87-75

℄ CURVE DATA - DRIVEWAY TO GUILFORD PLACE

℄ STA. 0+51.49 TO 1+08.39

Δ 32° 36' 11"
R 100.00'
L 56.90'
T 29.24'
D 57° 29' 58"

℄ CURVE DATA - PRIVATE DRIVE 'A'

℄ STA. 1+67.62 TO ℄ STA. 3+25.43

Δ 90° 25' 03"
R 100.00'
L 157.81'
T 100.73'
D 57° 29' 58"

No.	DATE	REVISION
3	11-24-98	ADD 3 PARKING SPACES TO HIDDEN COVE; REMOVE ISLAND AND ADD 4 PARKING SPACES TO PIRATES COVE; ADD ENTRANCE TO PIRATES COVE.

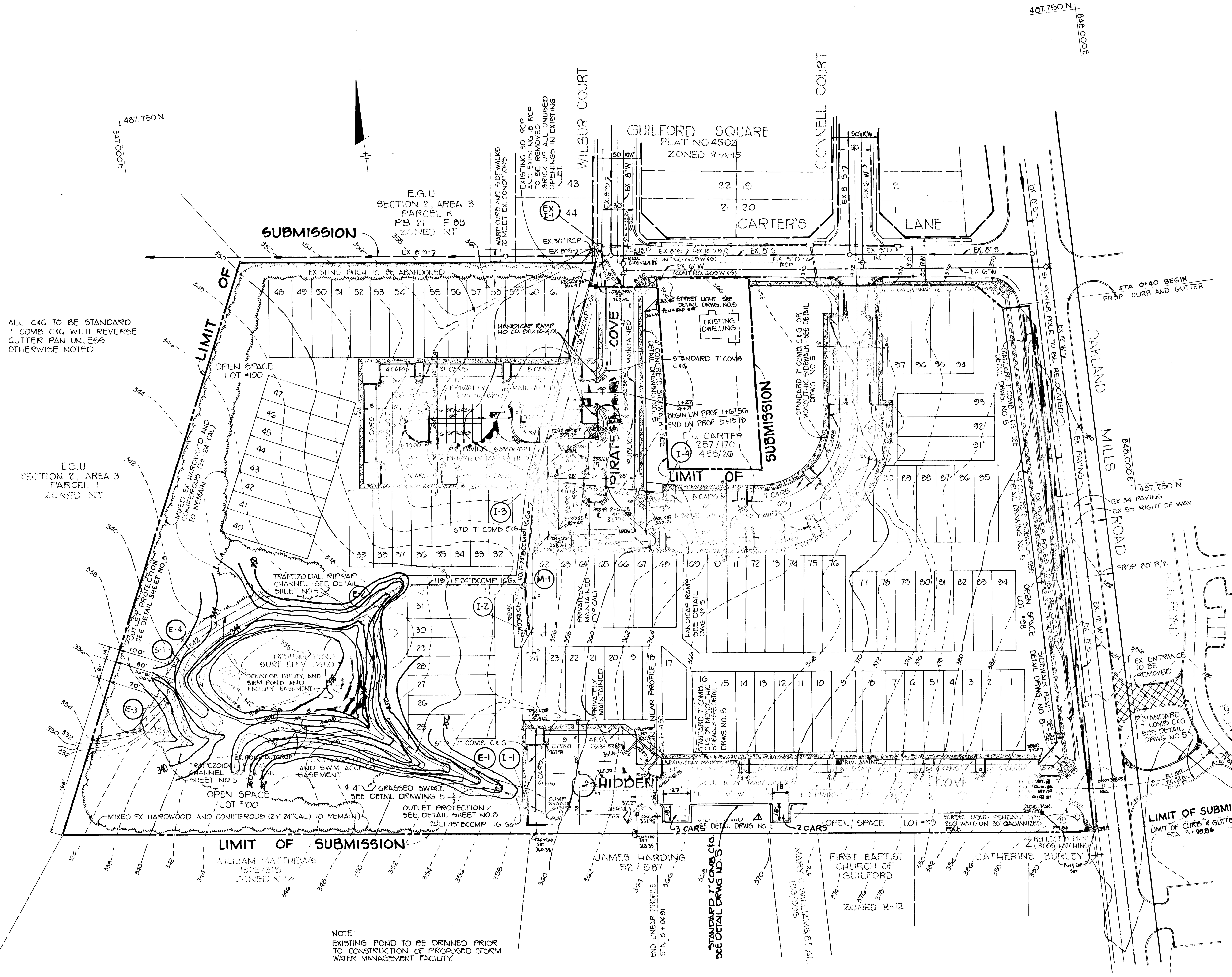
STRUCTURE SCHEDULE

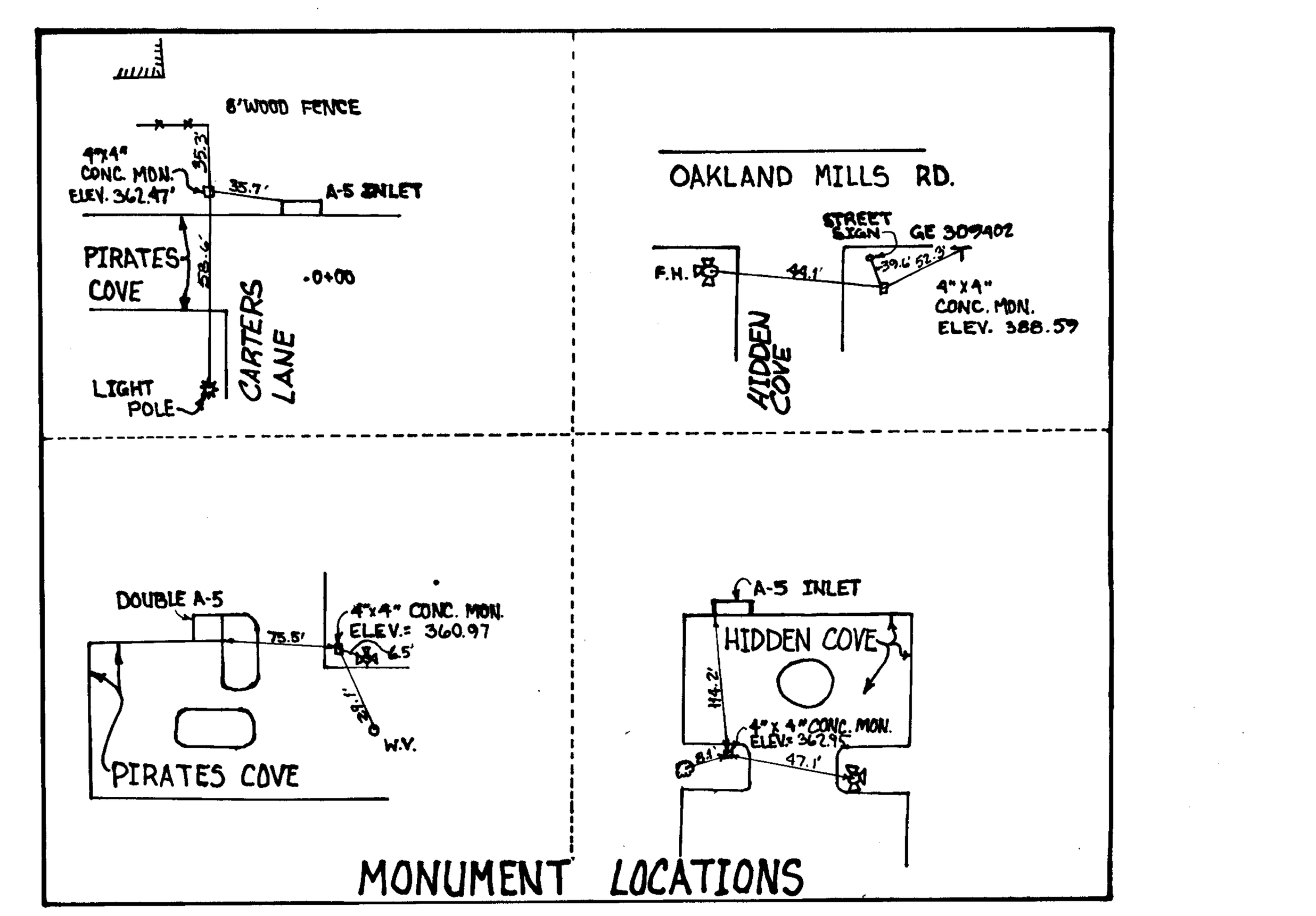
NO.	TYPE	LOCATION	INV IN	INV OUT	TOP ELEV	DESCRIPTION
I-1	A-5	21.50' RT LP STA 6+60.40 HIDDEN COVE	---	353.83	356.40	HO CO STD SD 4.01
I-2	'D' INLET OPEN ON ONE SIDE	SEE PLAN	---	350.13	353.73	HO CO STD SD 4.11
I-3	A-5 W/ 2 OPENINGS	21.7' LEFT OF L.P. STA. 4+11 SEE PLAN PIRATES COVE	15"D 352.09 21"D 351.84	351.84	357.37 WEST 357.14 EAST	HO CO STD SD 4.01
I-4	A-5	33.3' LEFT OF L.P. STA. 2+40.2 SEE PLAN PIRATES COVE	---	356.41 ~~357.12~~	361.17 ~~360.66~~	HO CO STD SD 4.01
M-1	STD 4'-0" DIA MANHOLE	SEE PLAN	15"D 349.49 24"D ~~348.84~~ 349.07	346.85	355.49	HO CO STD G 5.12
E-1	15" METAL END SECTION	SEE PLAN	353.41	353.26	---	HO CO STD SD 5.61
E-2	24" METAL END SECTION	SEE PLAN	345.43	345.77	---	HO CO STD SD 5.61
E-3	36" METAL END SECTION	SEE PLAN	335.60	335.46	---	HO CO STD SD 5.61
E-4	42" METAL END SECTION	SEE PLAN	336.68	336.26	---	HO CO STD SD 5.61
S-1	MODIFIED MANHOLE	SEE PLAN	335.91	335.78	345.08	SEE DETAIL DRWG. 9

ALL STORM DRAIN PIPE BEDDING SHALL BE CLASS 'C'.

NOTES:

1. ALL CURB AND GUTTER TO BE STANDARD 7" COMBINATION CURB AND GUTTER WITH REVERSE GUTTER PAN UNLESS OTHERWISE NOTED





AS-BUILT SURVEY CERTIFIED BY WILLIAM G. RASCH, II, MD. L.S./P.E. NO. 4575, ON 11-18-88.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[illegible] 2-18-87

CHIEF, BUREAU OF ENGINEERING — DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

[illegible] 2-13-87

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

NO	DATE	REVISION
1	10/21/87	REVISED PARKING IN HIDDEN COVE
2	7/28/88	REVISE GRADING IN STORMWATER MANAGEMENT FACILITY

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

8480 Baltimore National Pike • Ellicott City, Maryland 21043 • (301) 465 6105

STATE OF MARYLAND — JAMES KENNETH TRACY — NO. 9565 — REGISTERED PROFESSIONAL ENGINEER

[illegible]

OWNER: SECURITY DEVELOPMENT CORP. 8480 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MARYLAND 21043

PROJECT: **CARTER'S COVE** SECTION I, AREA I LOTS I THRU 100

LOCATION: TAX MAP NO. 42, PARCEL NOS. 37 & 253, 6TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

DEVELOPER: SECURITY DEVELOPMENT CORP. 8480 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MARYLAND 21043

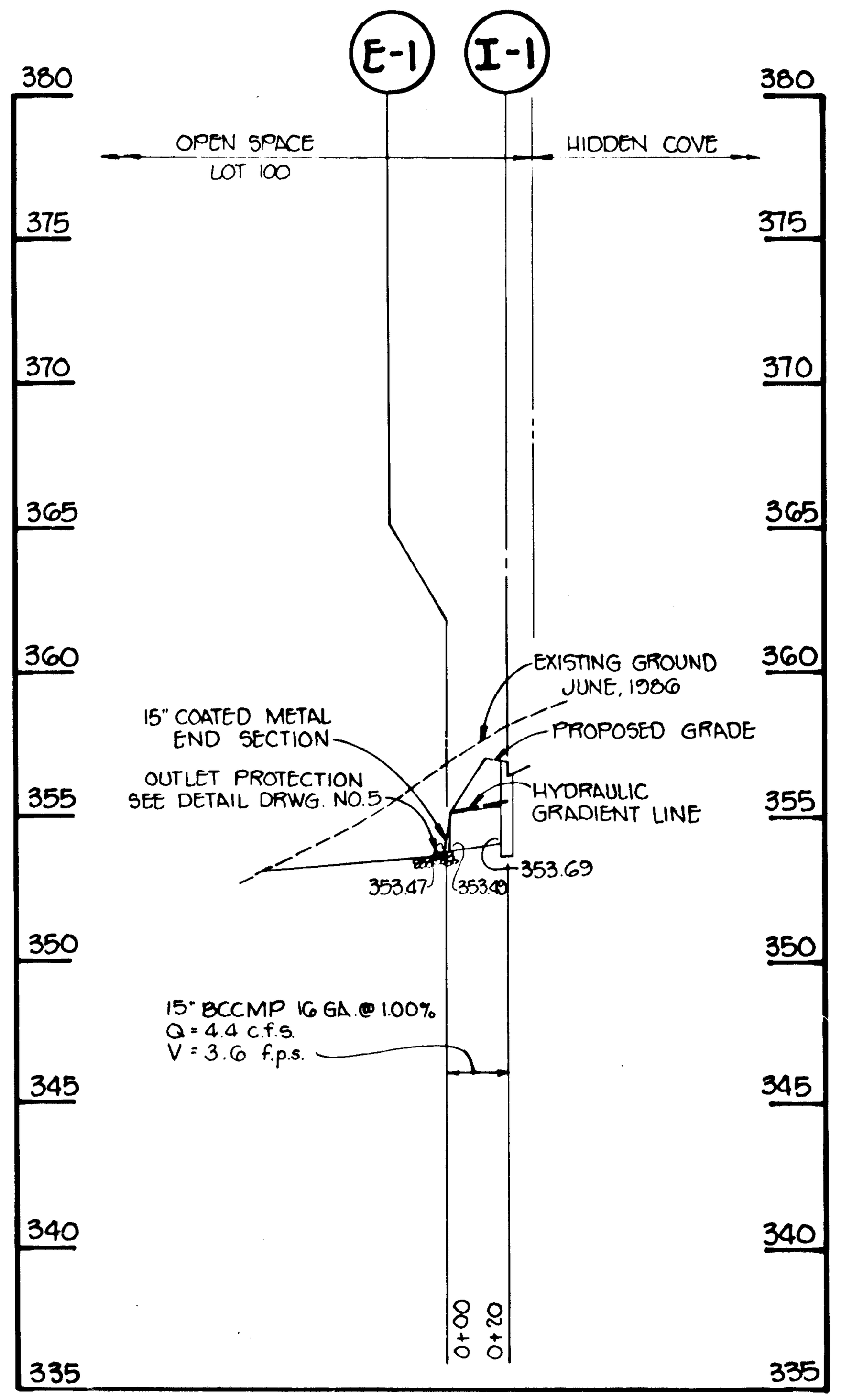
TITLE: PLAN OF PIRATE'S COVE, HIDDEN COVE AND PRIVATE DRIVES

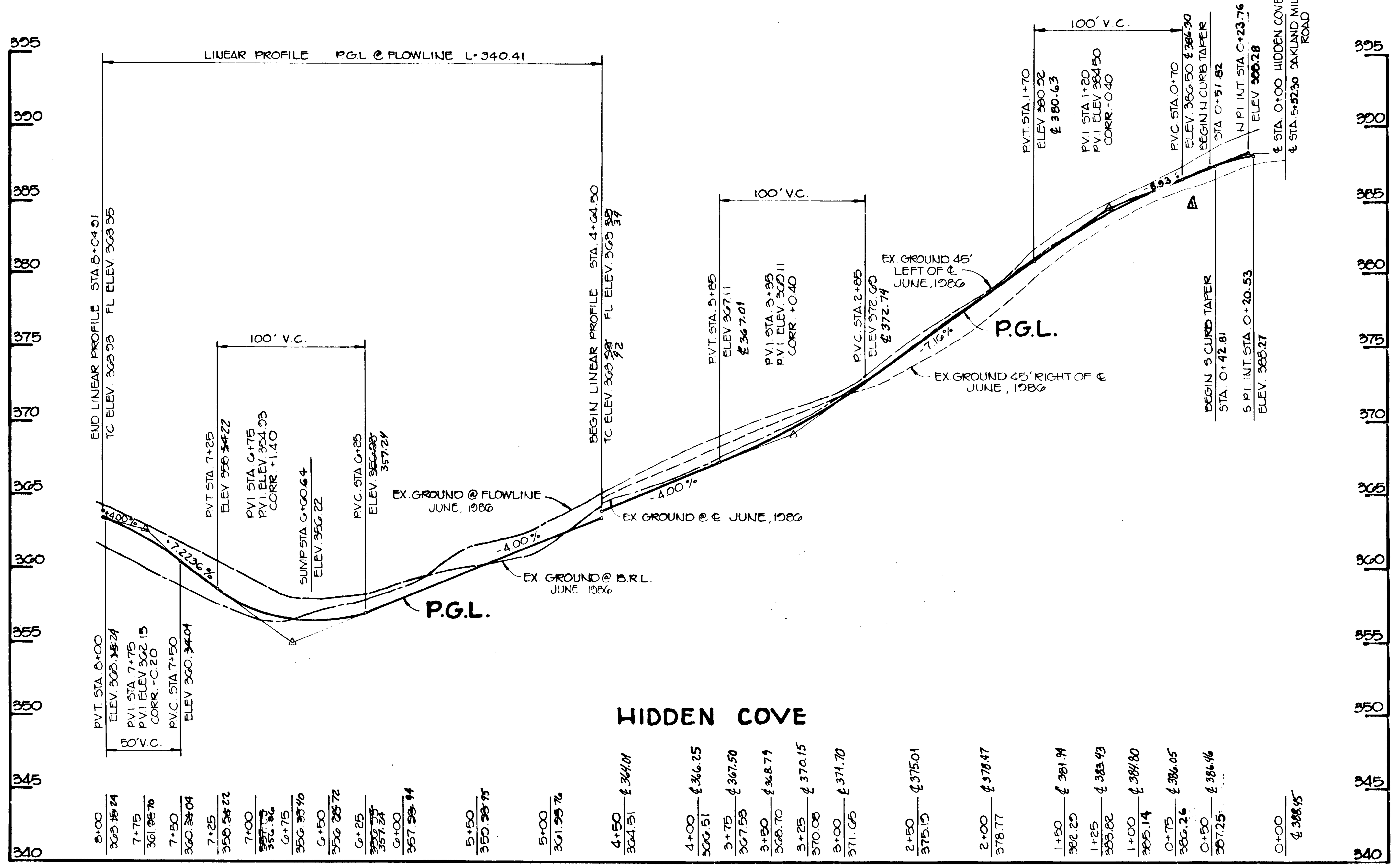
DATE FEB 6, 1987 | PROJECT NO 8529 RSD

DES. RJW | DRN KMN/CDT | SCALE 1" = 50' | DRAWING 2 OF 10

F-87-75 AS-BUILT 11-18-88

1250





As-BUILT SURVEY CERTIFIED BY
WILLIAM G. RASCH, II Md. P.E./L.S. No. 4575, ON 11-18-88.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[illegible] 2-18-87

CHIEF, BUREAU OF ENGINEERING [illegible] DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

[illegible] 2-13-87

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

NO	DATE	REVISION
△	10/21/87	REVISED HIDDEN COVE PROFILE

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8480 Baltimore National Pike • Ellicott City, Maryland 21043 • (301) 465-6105

STATE OF MARYLAND JAMES [illegible] TRACY NO. 9566 REGISTERED PROFESSIONAL ENGINEER

[illegible]

OWNER
SECURITY DEVELOPMENT CORP.
8480 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

DEVELOPER
SECURITY DEVELOPMENT CORP.
8480 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

PROJECT
CARTER'S COVE
SECTION 1, AREA 1 LOTS 1 THRU 100

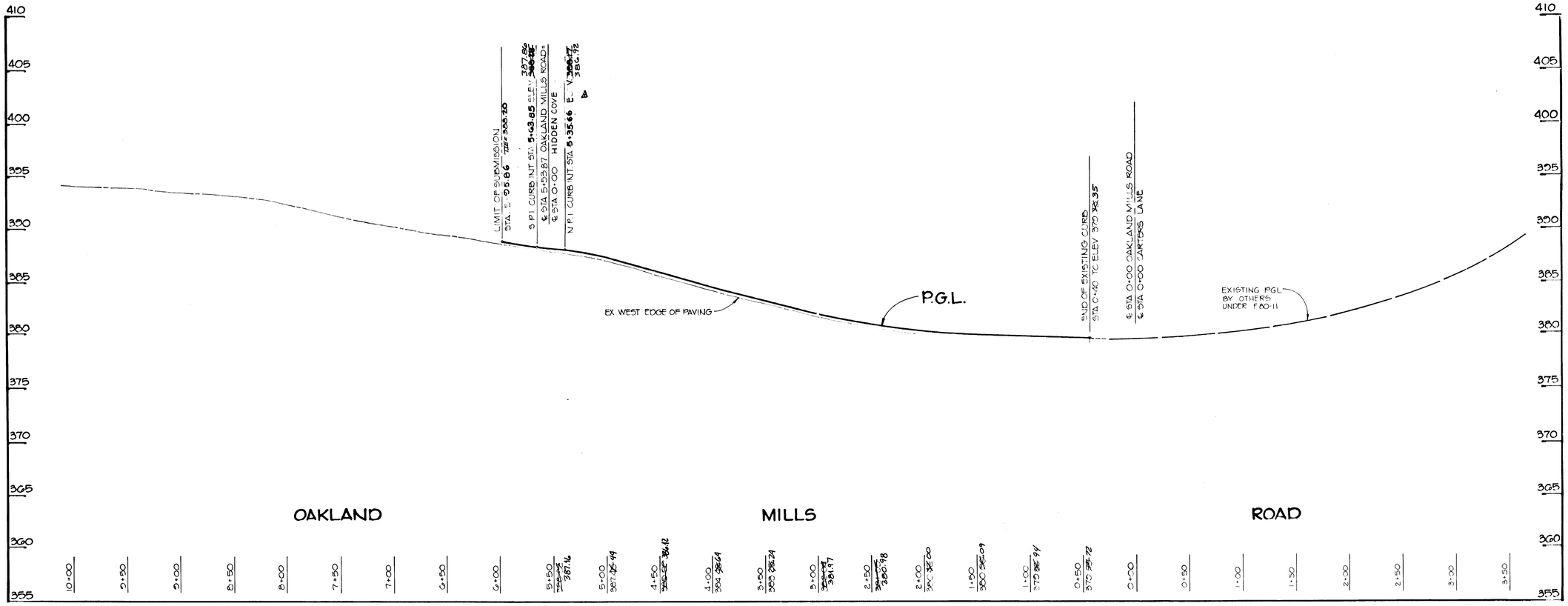
LOCATION
TAX MAP NO. 42
PARCEL NOS. 37 & 253
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

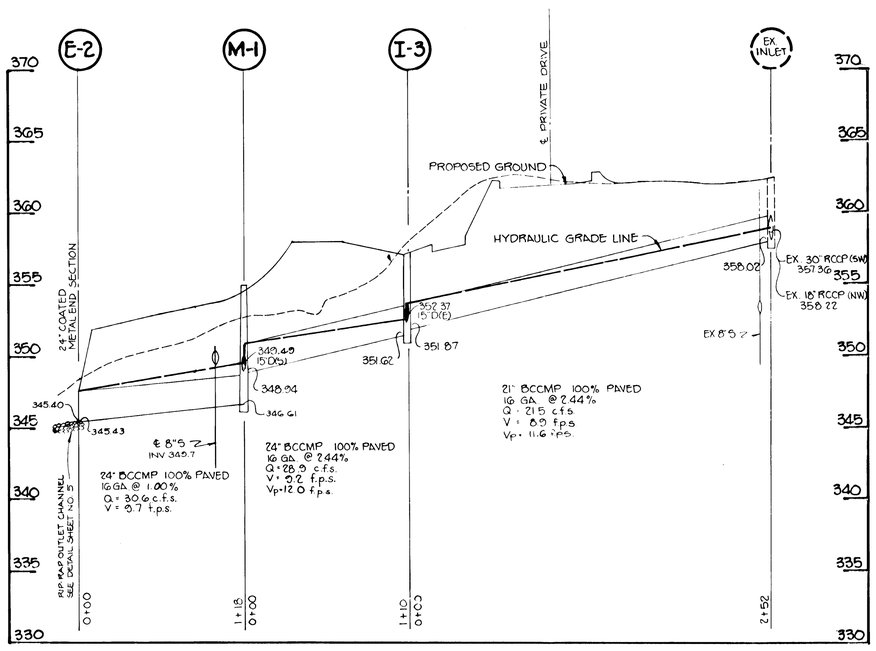
TITLE
PROFILES

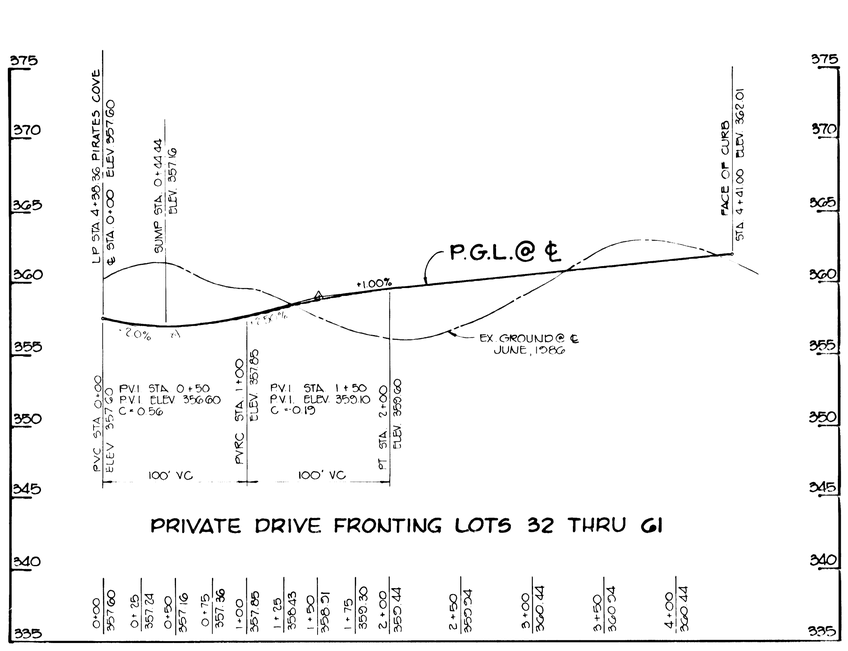
DATE FEB. 6, 1987 | PROJECT NO: 8529
DES: D.A.M. | DRN: J.L.B. | SCALE H: 1"=50' V: 1"=5' | DRAWING 3 OF 10

F-87-75 AS-BUILT 11-18-88

1250







As-built survey certified by William G. Rasch, III MD. PE/L.S. No. 4575 on 11-18-88.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

CHIEF, BUREAU OF ENGINEERING — DATE 2-18-87

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 2-13-87

NO	DATE	REVISION
A	10/21/87	REVISED OAKLAND MILLS ROAD PROFILE

TRACY, SCHULTE & ASSOCIATES INC.
planning • architecture • engineering
8480 Baltimore National Pike • Ellicott City, Maryland 21043 • (301) 465 6105

OWNER
SECURITY DEVELOPMENT CORP.
8480 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

DEVELOPER
SECURITY DEVELOPMENT CORP.
8480 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

PROJECT
CARTER'S COVE
SECTION 1, AREA 1 LOTS 1 THRU 100

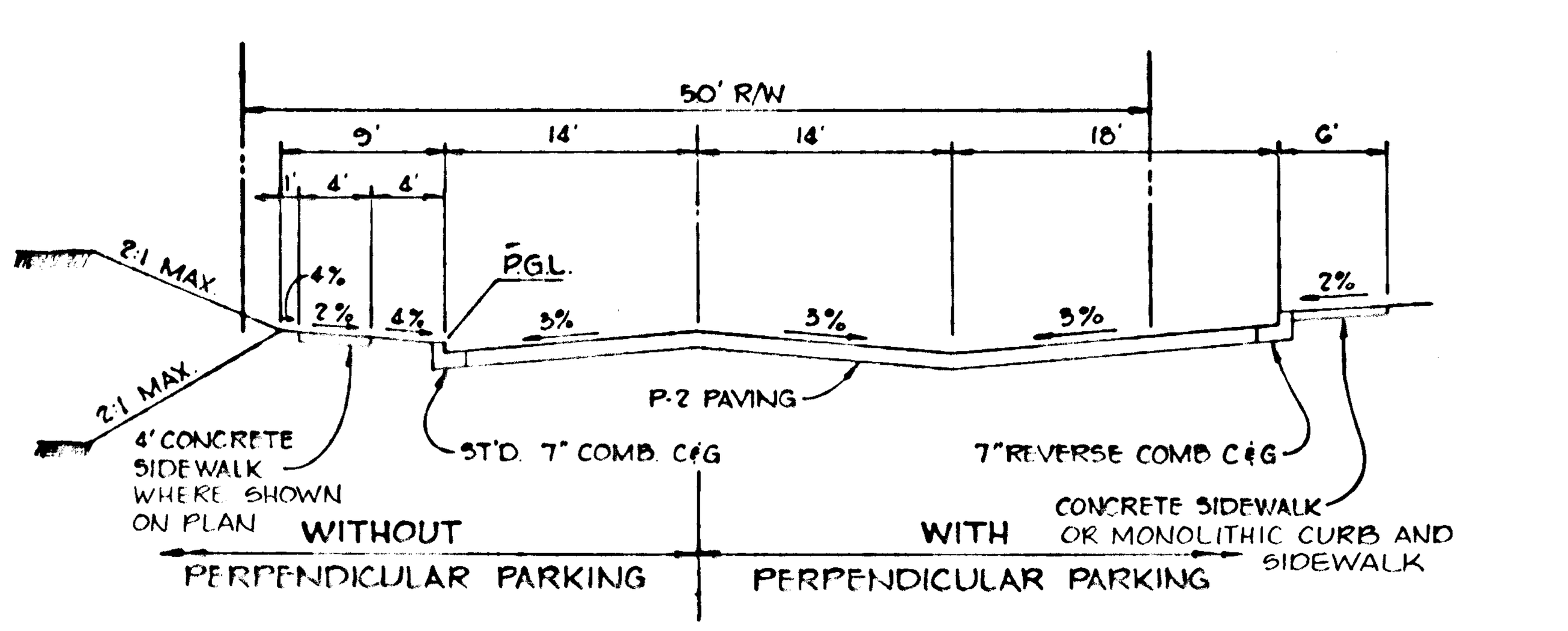
LOCATION
TAX MAP NO. 42
PARCEL NOS. 37 & 253
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE
PROFILES

DATE FEB. 6, 1987 — PROJECT NO. 6520

DES. D.A.M. — DRN. J.L.B. — SCALE H. 1"=50' V. 1"=5' — DRAWING 4 OF 10

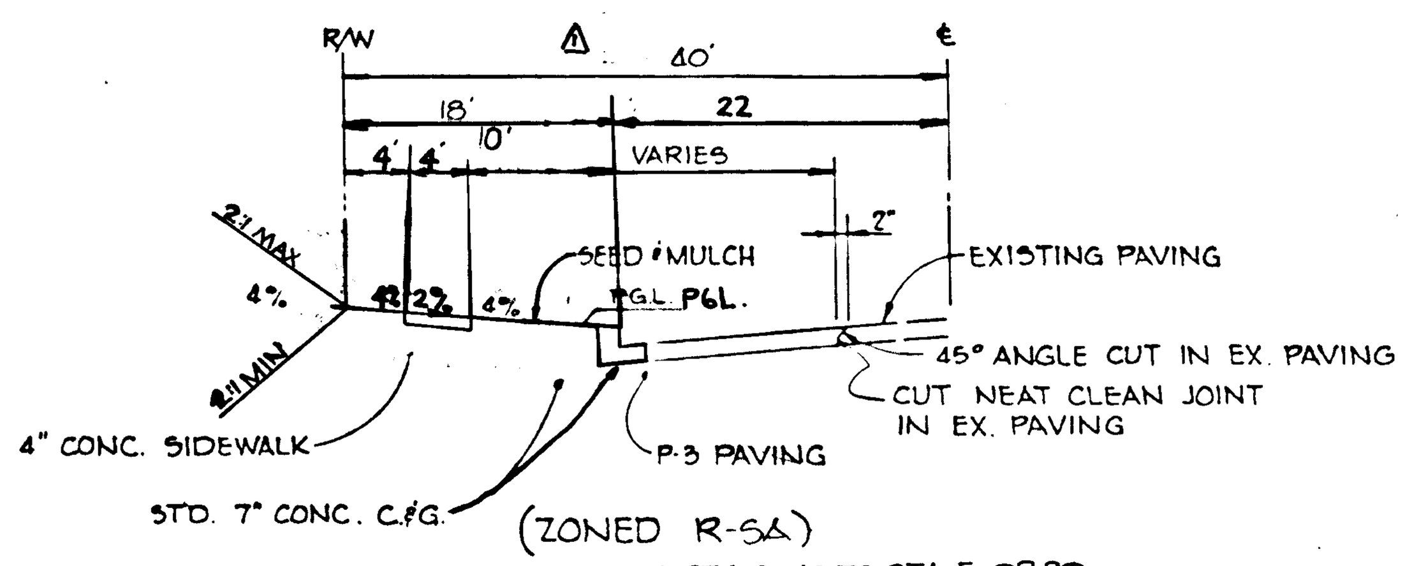
F-87-75 AS-BUILT 11-18-88



CLASSIFICATION- CUL-DE-SAC
(ZONED- R-5C)
DESIGN SPEED- 30 MPH
PIRATES COVE FROM STA 0+00 TO STA 1+67.56
HIDDEN COVE FROM STA 0+00 TO STA 4+64.50

TYPICAL SECTION

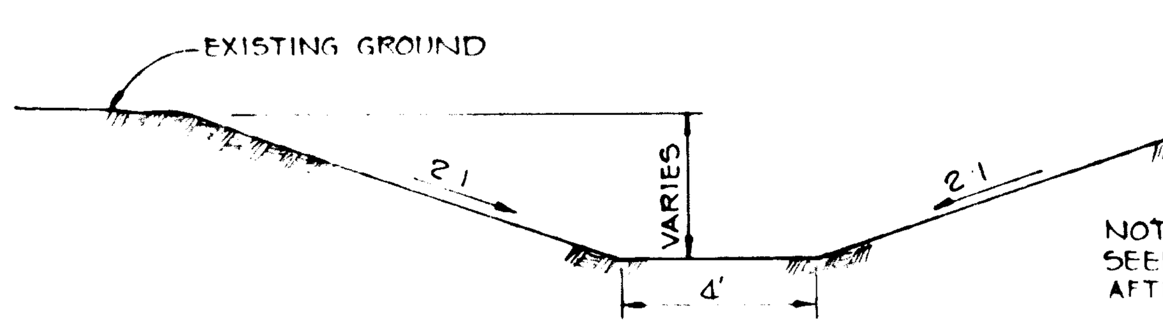
NO SCALE



(ZONED R-5A)
OAKLAND MILLS ROAD FROM STA 0+40 TO STA 5+57.30
CLASSIFICATION - MAJOR COLLECTOR

TYPICAL HALF SECTION

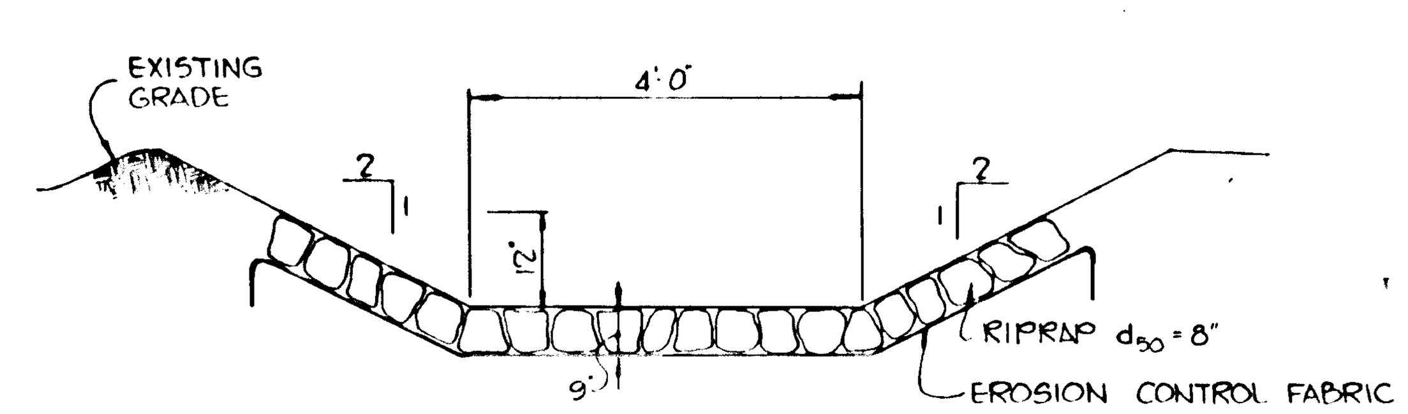
No Scale



NOTE:
SEED AND MULCH SWALE AFTER CONSTRUCTION

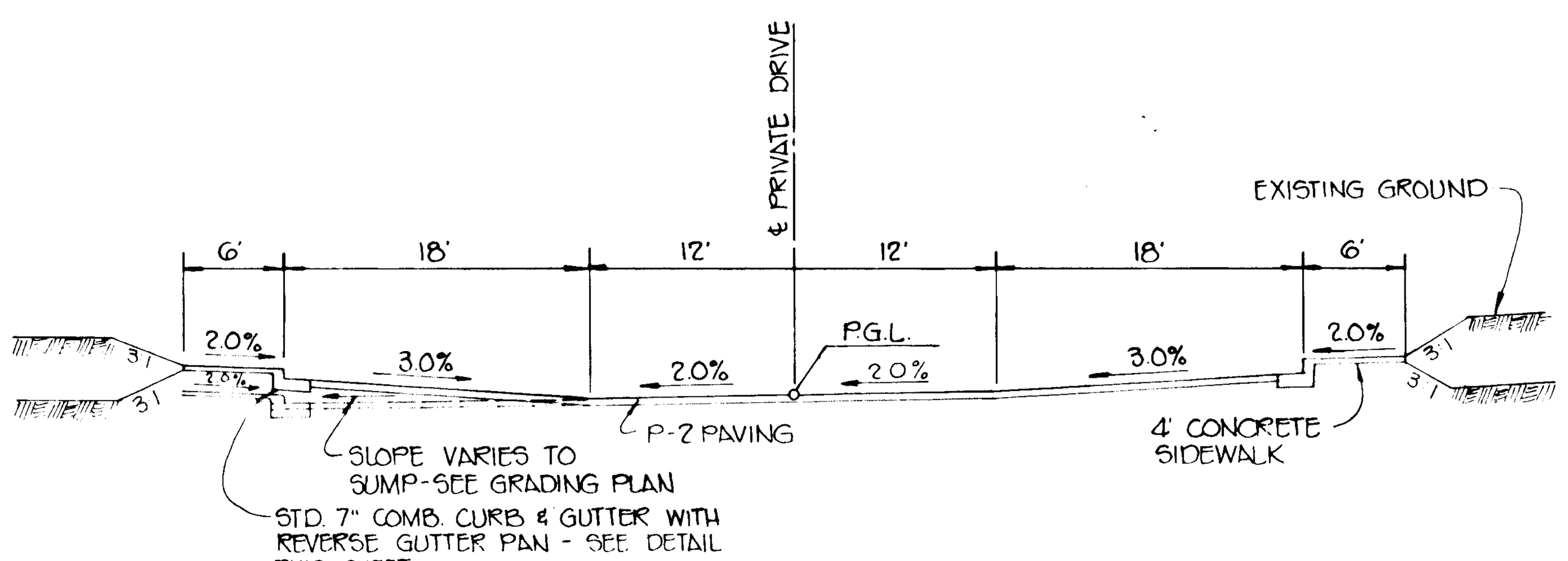
GRASSED SWALE

NO SCALE



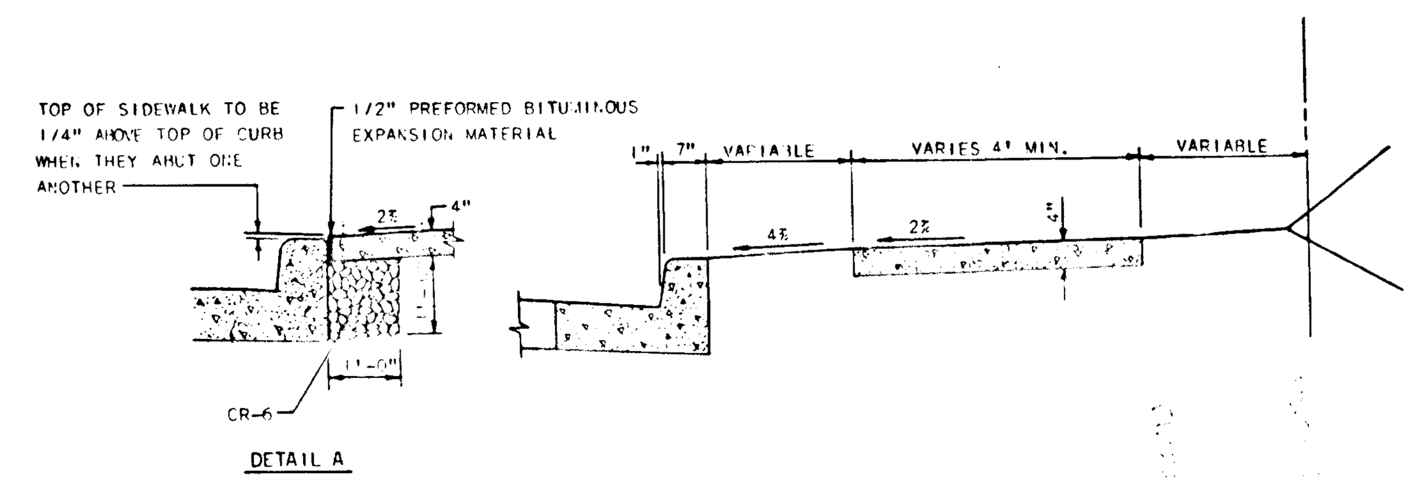
TRAPEZOIDAL RIP RAP CHANNEL
TYPICAL SECTION

NO SCALE



TYPICAL SECTION - PRIVATE DRIVES

NO SCALE

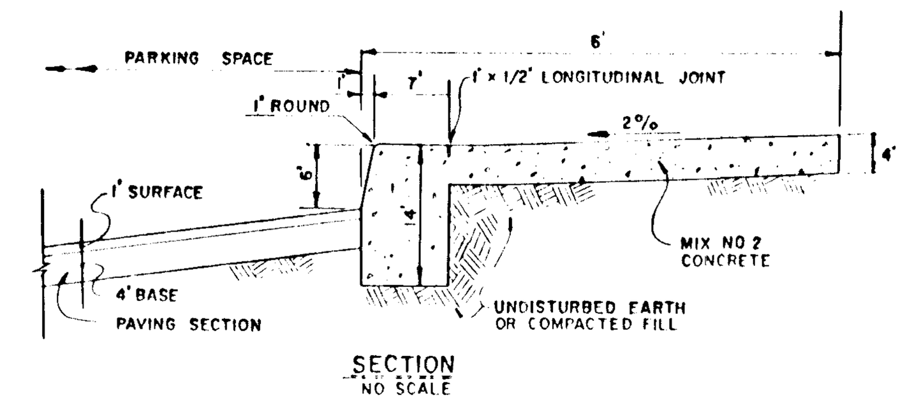


NOTES:
1. SIDEWALK TO BE SCRIBED IN 5' MAXIMUM SQUARES.
2. EXPANSION JOINTS ACROSS THE SIDEWALK NOT TO BE MORE THAN 15' APART.
3. 1/2" PREFORMED BITUMINOUS EXPANSION MATERIAL IN EXPANSION JOINTS TO BE KEPT 1/4" BELOW SURFACE OF SIDEWALK.
4. CONCRETE TO BE MIX NO.2.
5. WHEN SIDEWALK ABUTS CURB, WALK SHALL BE 1/4" ABOVE CURB WITH 1/2" PREFORMED BITUMINOUS EXPANSION MATERIAL BETWEEN SIDEWALK AND CURB AND RESTING ON A COMPACTED CRUSHED STONE BASE. SEE DETAIL A THIS SHEET.
6. ON LONGITUDINAL SIDEWALK GRADES OF 5% OR GREATER, A CONCRETE HEADER, 6" THICK AND 6" DEEP BELOW THE NORMAL 4" SIDEWALK THICKNESS SHALL BE CONSTRUCTED FOR THE FULL WIDTH OF THE SIDEWALK AT INTERVALS OF 48 FEET. THE HEADERS SHALL BE PLACED AT EXPANSION JOINT LOCATIONS AND SHALL BE MONOLITHIC WITH THE SIDEWALK.

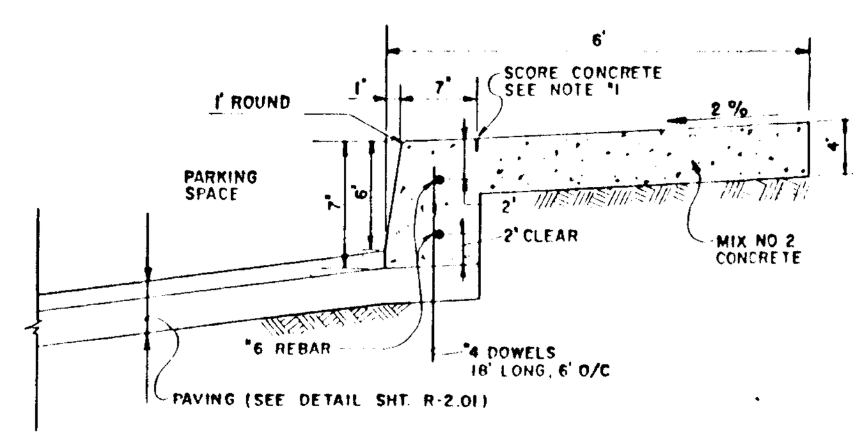
CONCRETE SIDEWALK

NO SCALE

NOTES
1. LONGITUDINAL JOINT BETWEEN SIDEWALK AND CURB SHALL BE CONTINUOUS AND TO A DEPTH OF 1/4 THE SIDEWALK THICKNESS OR 1"MAX. LATITUDINAL JOINTS SHALL RUN FROM BACK EDGE OF SIDEWALK, CONTINUOUS TO THE BOTTOM FACE OF CURB TO A DEPTH OF 1/4" AND SPACED 5' APART.
2. PROVIDE 1/2" EXPANSION JOINTS AT 15' INTERVALS. IN LATITUDINAL JOINTS TO FULL CROSS-SECTION.



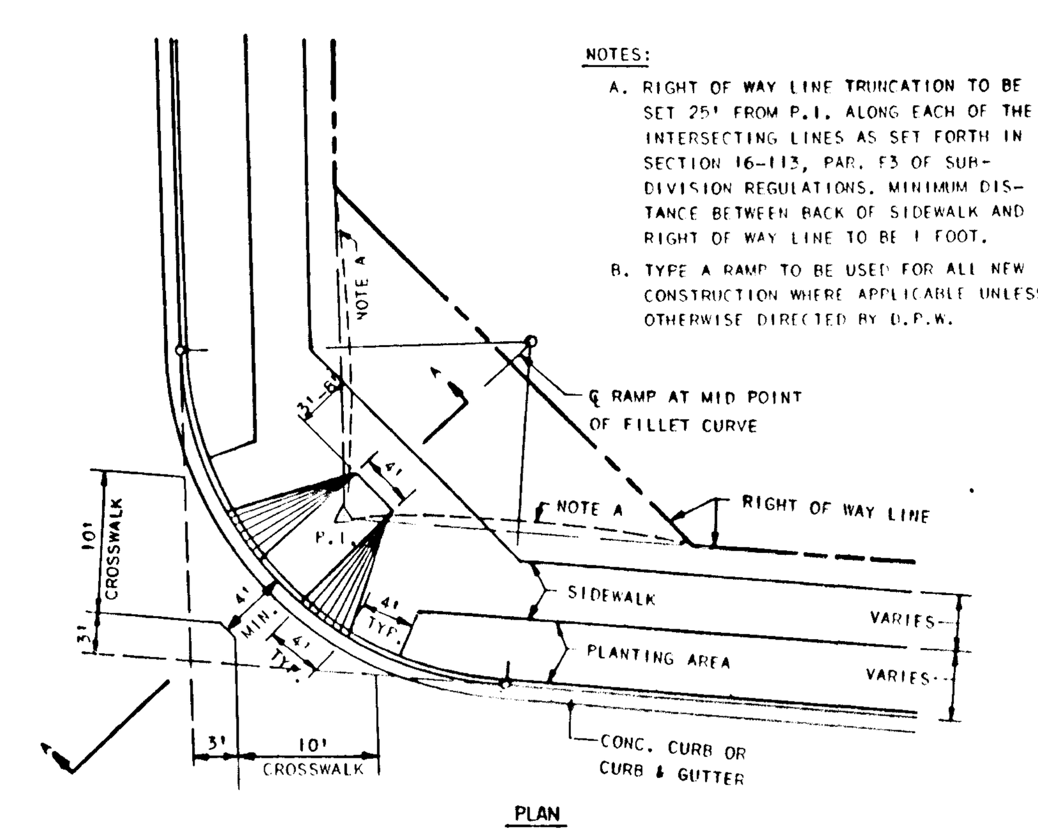
SECTION
NO SCALE



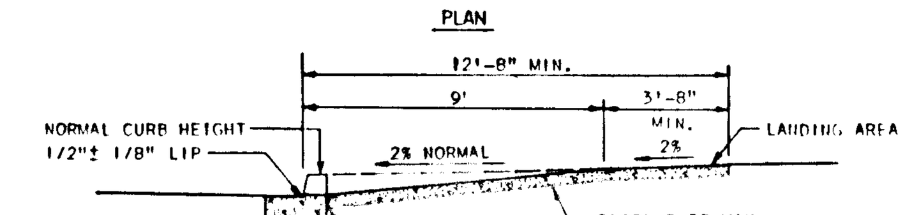
ALTERNATE SECTION
NO SCALE

MONOLITHIC CURB & SIDEWALK

NO SCALE



NOTES:
A. RIGHT OF WAY LINE TRUNCATION TO BE SET 25' FROM P.I. ALONG EACH OF THE INTERSECTING LINES AS SET FORTH IN SECTION 16-113, PAR. F3 OF SUBDIVISION REGULATIONS. MINIMUM DISTANCE BETWEEN BACK OF SIDEWALK AND RIGHT OF WAY LINE TO BE 1 FOOT.
B. TYPE A RAMP TO BE USED FOR ALL NEW CONSTRUCTION WHERE APPLICABLE UNLESS OTHERWISE DIRECTED BY D.P.W.

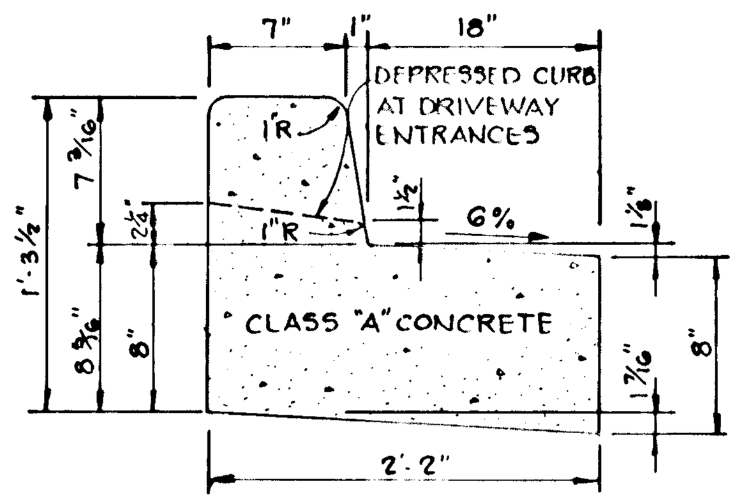


SURFACE TEXTURE OF CONCRETE RAMP SHALL BE COARSE BROOMING OR OTHER NON-SKID TYPE FINISH.
*STANDARD 7" COMBINATION CURB AND GUTTER IS SHOWN. DETAILS TO BE SIMILAR FOR MOD. CURB AND GUTTER AND BIT. CURB EXCEPT THAT FLOW LINE LIP IS TO BE OMITTED.

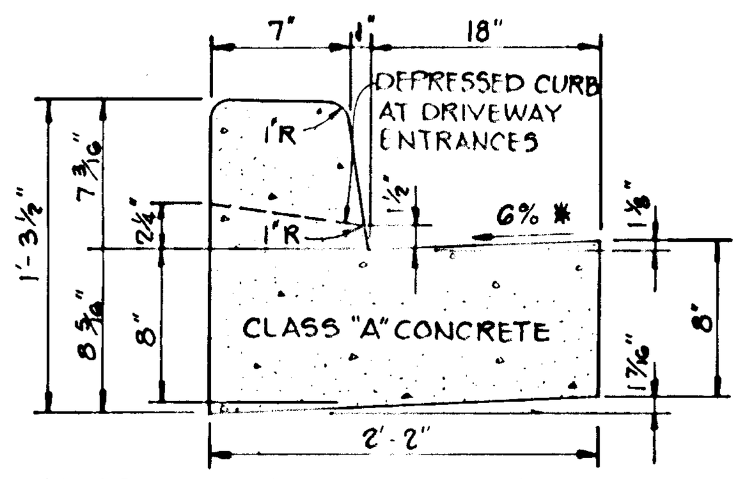
SECTION A-A

SIDEWALK RAMP

NO SCALE



REVERSE

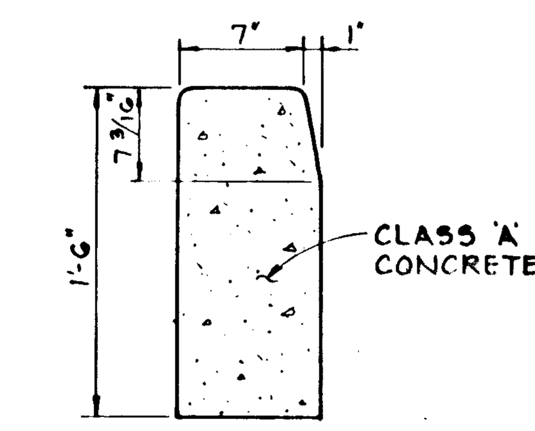


HOWARD COUNTY DESIGN MANUAL VOLUME IV STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-3.01)

* 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.

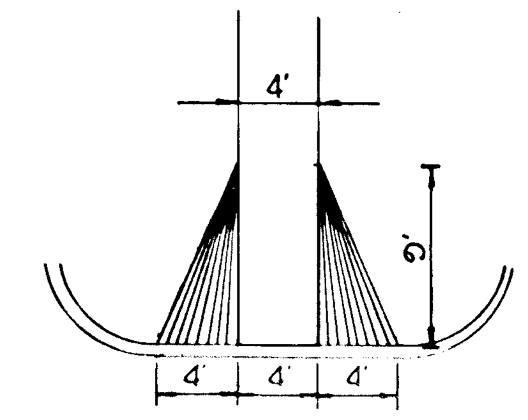
STANDARD 7" COMBINATION
CURB AND GUTTER

NO SCALE



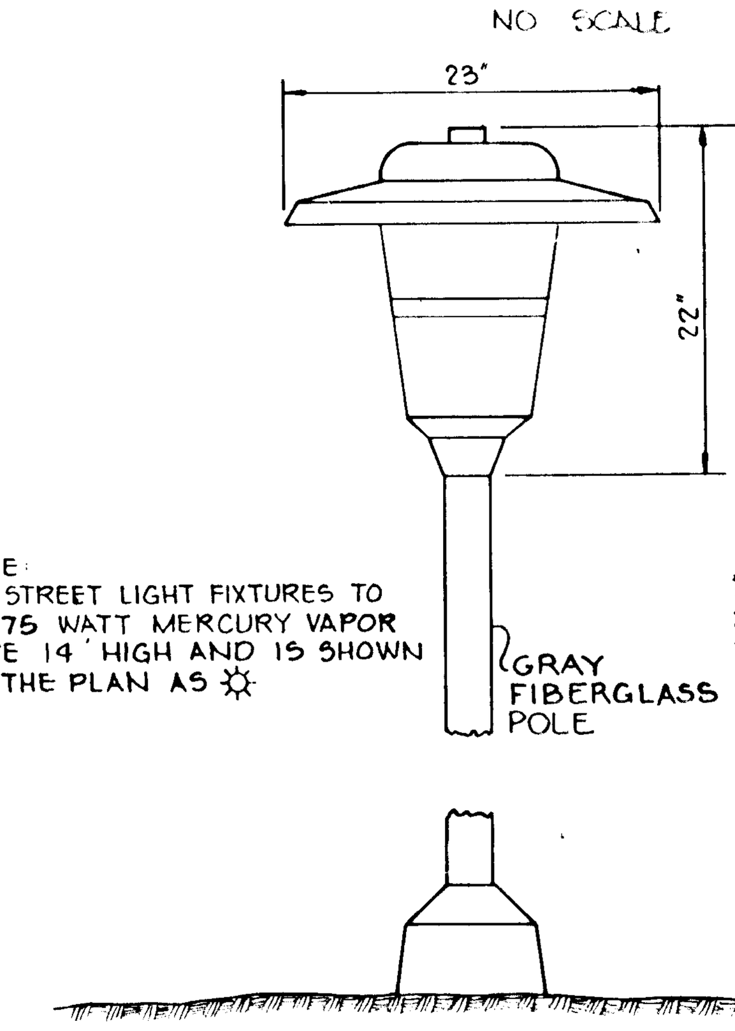
STANDARD
BARRIER CURB

NO SCALE



HANDICAP RAMP

NO SCALE

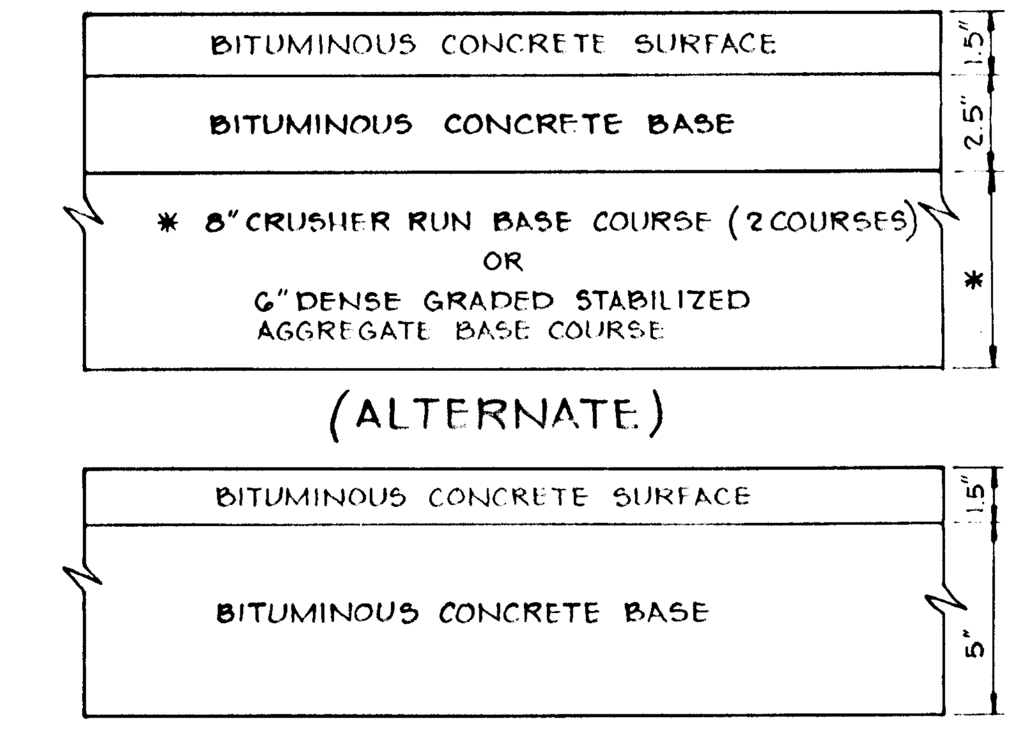


NOTE:
ALL STREET LIGHT FIXTURES TO BE 175 WATT MERCURY VAPOR TYPE 14' HIGH AND IS SHOWN ON THE PLAN AS ☼

DETAIL - LIGHTING FIXTURE

NO SCALE

NOTES
1. THIS LIGHT FIXTURE TO BE USED AT THE INTERSECTION OF CARTER'S LANE AND PIRATES COVE
2. THE LIGHT FIXTURE AT THE INTERSECTION OF OAKLAND MILLS ROAD AND HIDDEN COVE TO BE PENDANT TYPE 250 WATT ON 30' GALVANIZED POLE.

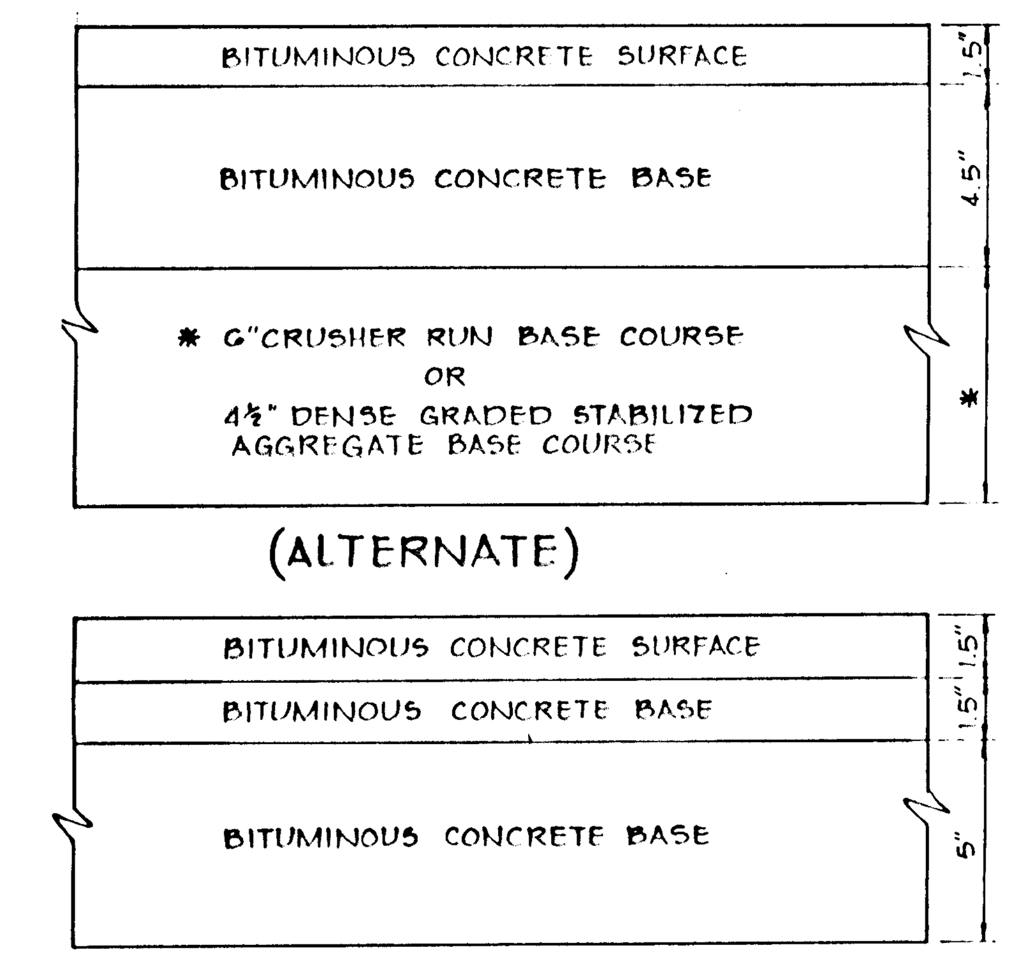


HOWARD COUNTY DESIGN MANUAL VOLUME IV STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R 2.01)

6½" PAVING, P-2

NO SCALE

PIRATES COVE
HIDDEN COVE
ALL PRIVATE DRIVES



HOWARD COUNTY DESIGN MANUAL VOLUME IV STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-2.01)

8" PAVING, P-3

NO SCALE

OAKLAND MILLS ROAD

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
[illegible]	2.18.87
CHIEF, BUREAU OF ENGINEERING	DATE
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING	
[illegible]	2-13-87
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION	DATE

NO	DATE	REVISION
Δ	10/21/87	REVISED OAKLAND MILLS ROAD - TYP. HALF SECTION

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[illegible]

OWNER: SECURITY DEVELOPMENT CORP 8480 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MARYLAND 21043	PROJECT: CARTER'S COVE SECTION I AREA I LOTS I THRU 100
	LOCATION: TAX MAP NO. 42 PARCEL NOS. 37 & 253 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DEVELOPER: SECURITY DEVELOPMENT CORP 8480 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MARYLAND 21043	TITLE: DETAILS
	DATE FEB. 6, 1987 / PROJECT NO 8529 RSD
DES. RJW / DRN CDT	SCALE AS SHOWN / DRAWING 5 OF 10

F-87-75 AS-BUILT 11-18-88

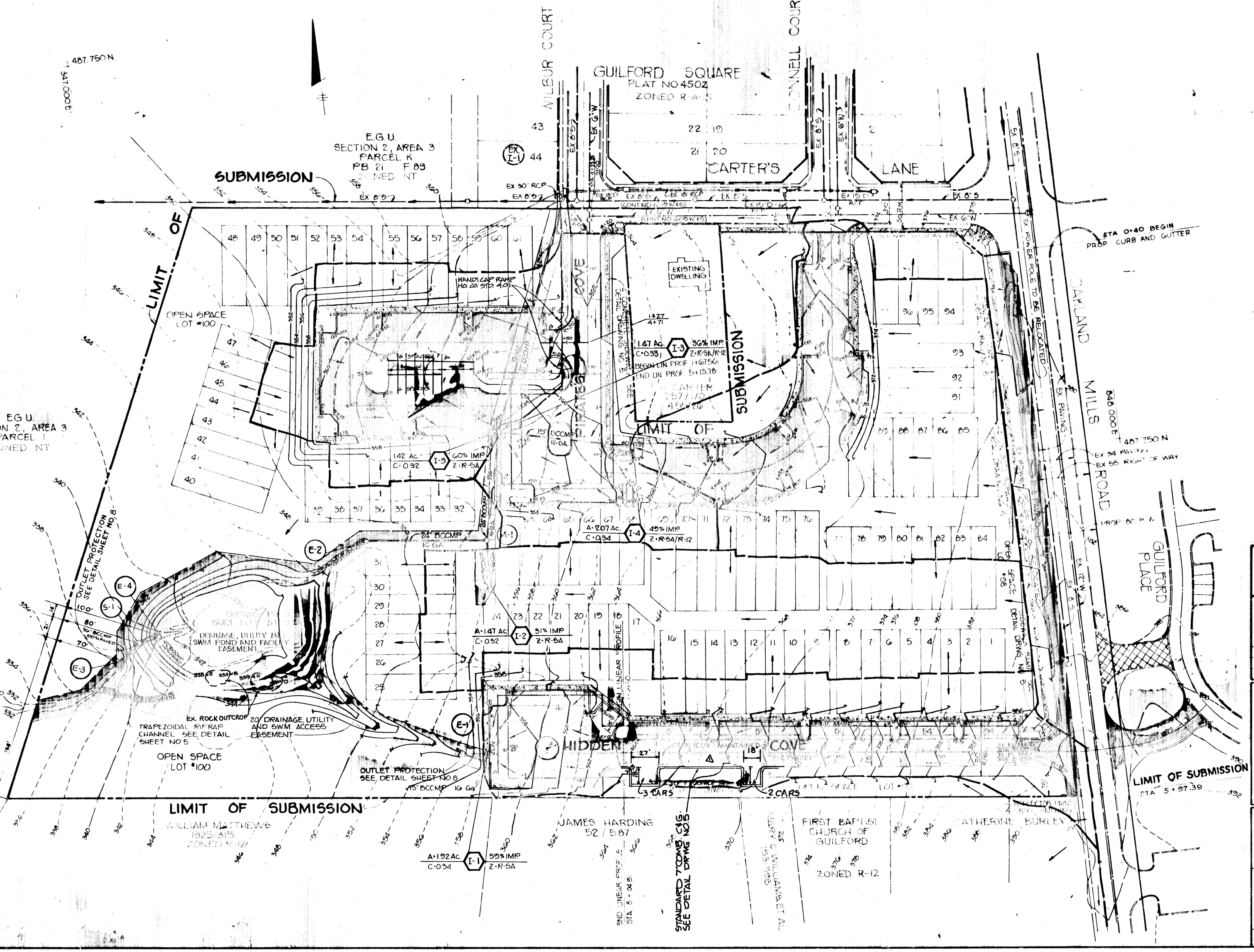
1250

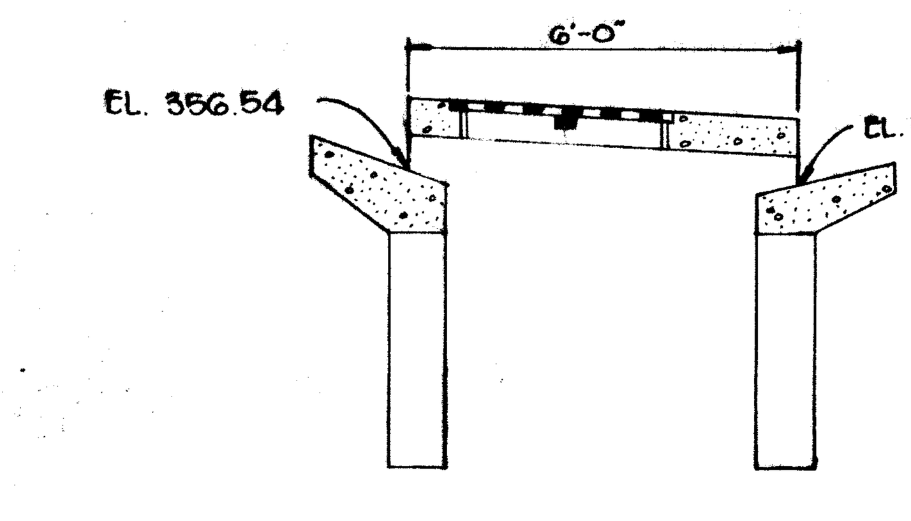
No.	DATE	REVISION
3	11-24-98	ADD 3 PARKING SPACES TO HIDDEN COVE; REMOVE ISLAND AND ADD 4 PARKING SPACES TO PIRATES COVE; ADD ENTRANCE TO PIRATES COVE.

℄ CURVE DATA - PRIVATE DRIVE 'A'

℄ STA 1+67.62 TO ℄ STA 3+25.43

Δ 90° 25' 03"
R 100.00'
L 157.81'
T 100.73'
D 57° 29' 58"





SPECIAL DOUBLE THROAT
INLET I-3
NO SCALE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

CHIEF, BUREAU OF ENGINEERING — DATE 2-18-87

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 2-13-87

NO	DATE	REVISION
Δ	10/21/87	REVISED PARKING - HIDDEN COVE
Δ	7/28/88	REVISE GRADING IN STORMWATER MANAGEMENT FACILITY

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

OWNER: SECURITY DEVELOPMENT CORP. 8480 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MARYLAND 21043	PROJECT: CARTER'S COVE — SECTION 1, AREA 1, LOTS 1 THRU 100
	LOCATION: TAX MAP NO. 42, PARCEL NOS. 37 & 253, 6TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
DEVELOPER: SECURITY DEVELOPMENT CORP. 8480 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MARYLAND 21043	TITLE: DRAINAGE AREA MAP AND DETAILS
	DATE: FEB 6, 1987 — PROJECT NO 8529 RSD
DES RJW — DRN KMN/CDT	SCALE 1" = 50' — DRAWING 6 OF 10

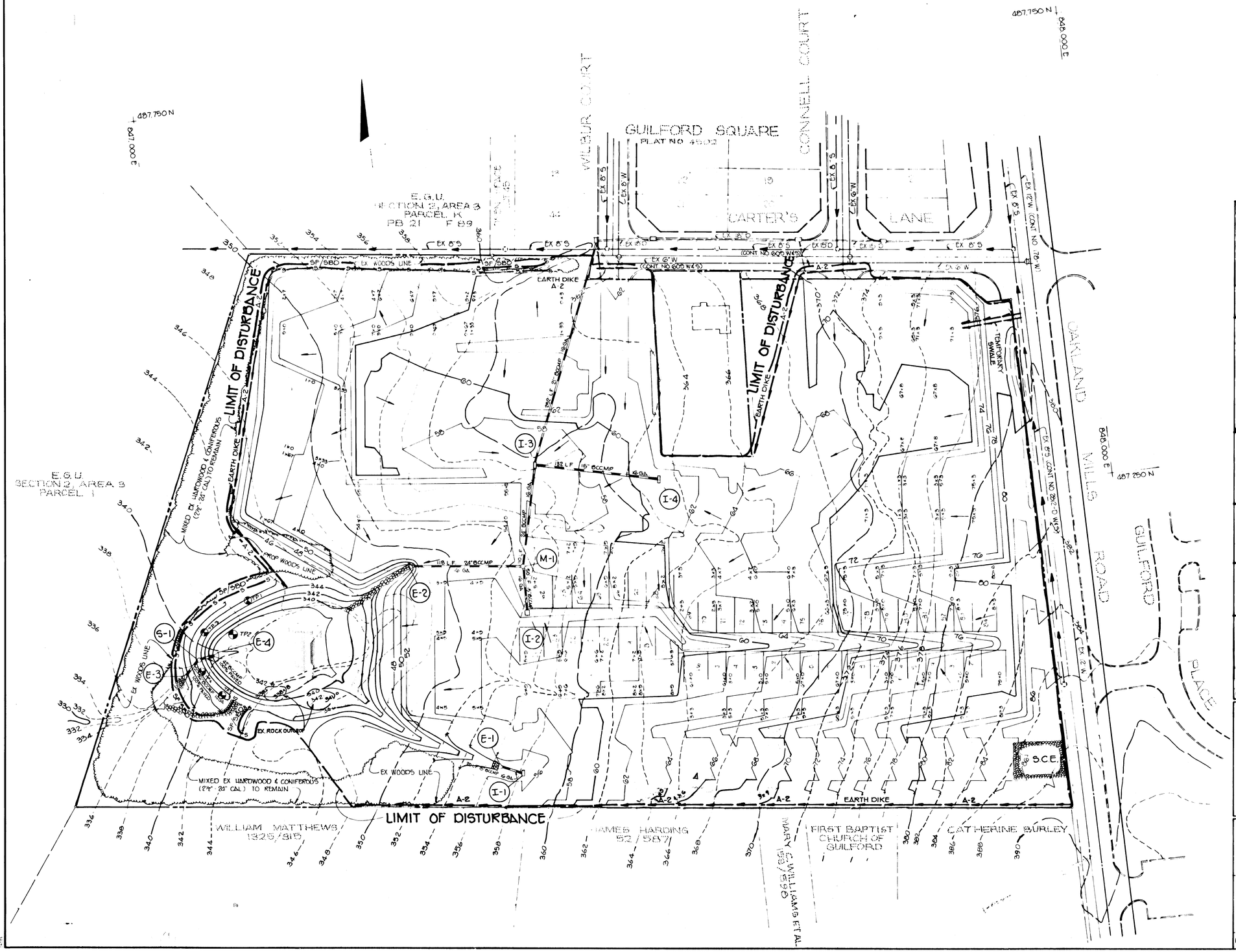
F-87-75

As-BUILT 11-18-88

1250

RIPRAP OUTLET SEDIMENT TRAP	NO. 1
DRAINAGE AREA	11.27 Ac.
DISTURBED AREA	10.60 Ac.
STORAGE VOLUME	
REQUIRED	20,286 c.f.
PROVIDED	60,500 c.f.
CREST ELEVATION	342.55
CLEANOUT ELEVATION	339.77
BOTTOM ELEVATION	337.00
DIMENSIONS	APPROX. 130' x 180'
WEIR LENGTH	14.0'

NOTE: ALL CONTOURS SHOWN WITHIN PAVED AREAS ARE TO SUBGRADE ONLY ALLOWING FOR 8" PAVING



BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

James K. Tracy — 12.10.86

ENGINEER: JAMES K. TRACY (#) 9566 — DATE

BY THE DEVELOPER:

"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, 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. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

James R. Morley Jr. — 12.10.86

DEVELOPER: JAMES R. MORLEY JR. PRESIDENT - SECURITY DEVELOPMENT CORP — DATE

THIS PLAN HAS BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AS MEETING TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

James M. Helm — 2-10-87

U. S. SOIL CONSERVATION SERVICE — DATE

THIS PLAN WAS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL AND MEETS THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED Robert W. Ziehm — 2-10-87

HOWARD S.C.D. — DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[signature] — 2-18-87

CHIEF, BUREAU OF ENGINEERING — DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

[signature] — 2-13-87

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

NO.	DATE	REVISION
1	10/21/87	REVISED GRADING HIDDEN COVE
2	7/28/88	REVISE GRADING IN STORMWATER MANAGEMENT FACILITY

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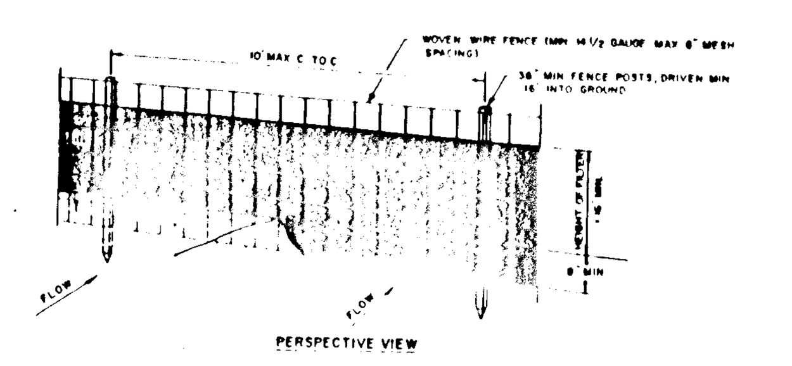
STATE OF MARYLAND — JAMES K. TRACY — No. 9566 — REGISTERED PROFESSIONAL ENGINEER

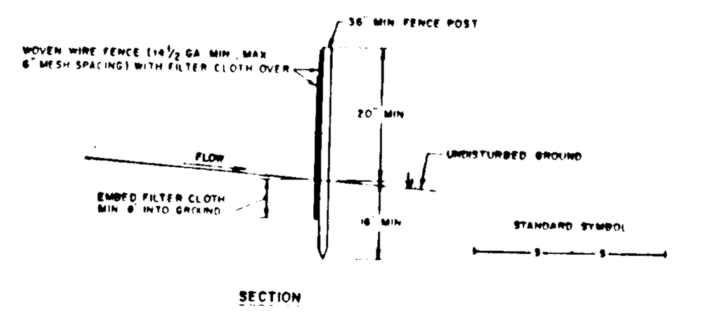
[signature]

OWNER	SECURITY DEVELOPMENT CORP 8480 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MARYLAND 21043
DEVELOPER	SECURITY DEVELOPMENT CORP 8480 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MARYLAND 21043
PROJECT	CARTER'S COVE SECTION 1 AREA 1 LOTS 1 THRU 100
LOCATION	TAX MAP NO 42 PARCEL NOS 31 & 259 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
TITLE	GRADING AND SEDIMENT CONTROL PLAN
DATE FEB 6, 1987	PROJECT NO 8529 R5D
DES RJW / DRN JH/JR	SCALE 1" = 50' / DRAWING 7 OF 10

1250

F-87-75 As-BUILT 11-18-88





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 over-lapped 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

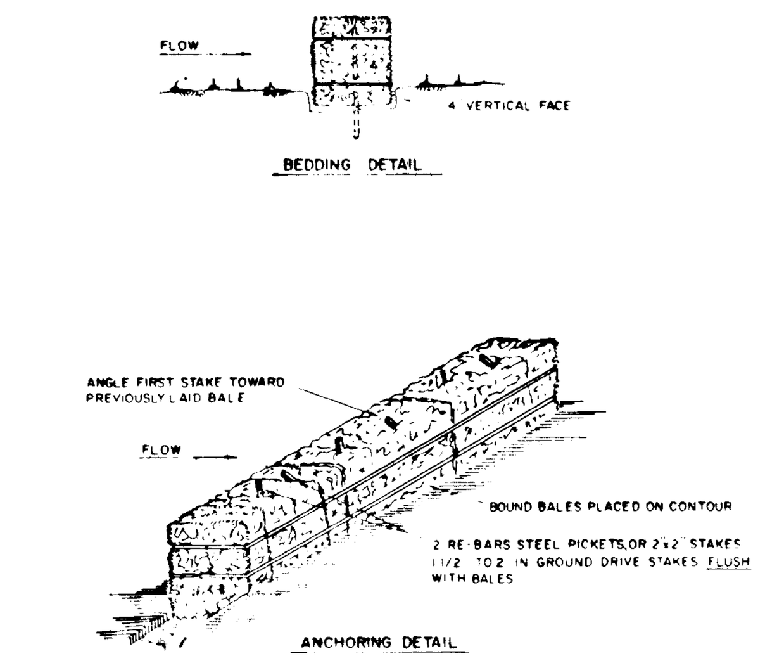
FENCE: Woven wire, 14 Ga. 6" Max. Mesh Opening

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

PREFABRICATED UNIT: Geofab, Envirofence, or Approved Equal

SILT FENCE

NO SCALE

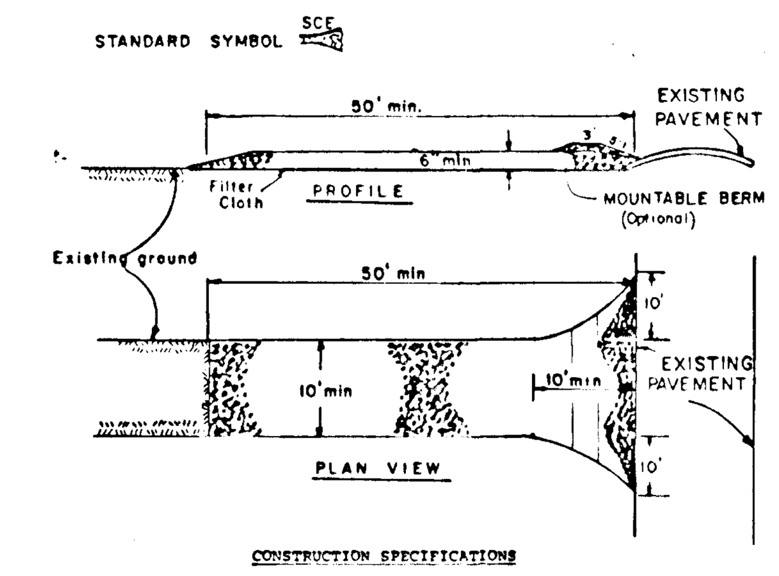


CONSTRUCTION SPECIFICATIONS

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. 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

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 REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

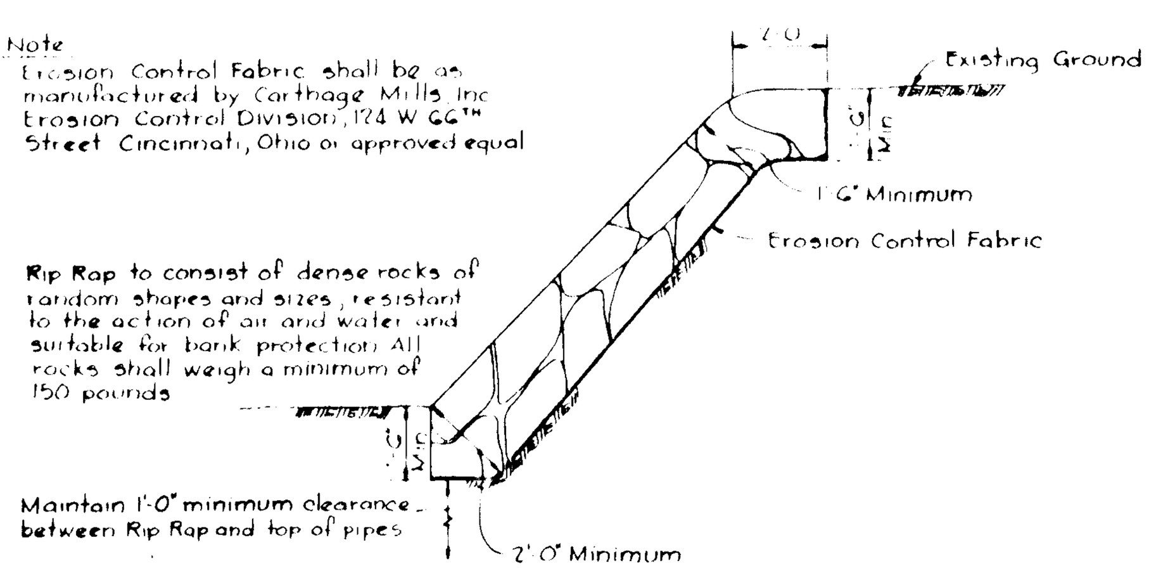
7) SITE ANALYSIS:

TOTAL AREA OF SITE	16 20	ACRES
AREA DISTURBED	6	ACRES
AREA TO BE ROOFED OR PAVED	2 1	ACRES
AREA TO BE VEGETATIVELY STABILIZED	4 5	ACRES
TOTAL CUT	27535	CU. YDS.
TOTAL FILL	27822	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.



RIPRAP DETAIL

NO SCALE

BY THE DEVELOPER:

"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, 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. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

James R. Moxley Jr. — 12·10·86

DEVELOPER: JAMES R MOXLEY JR. PRESIDENT SECURITY DEVELOPMENT CORP — DATE

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

James K Tracy — 12·10·86

ENGINEER: JAMES K TRACY #9566 — DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

[illegible] — 2-10-87

U. S. SOIL CONSERVATION SERVICE — DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: Robert W. Ziehm — 2-10-87

HOWARD S.C.D. — DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[illegible] — 2·18·87

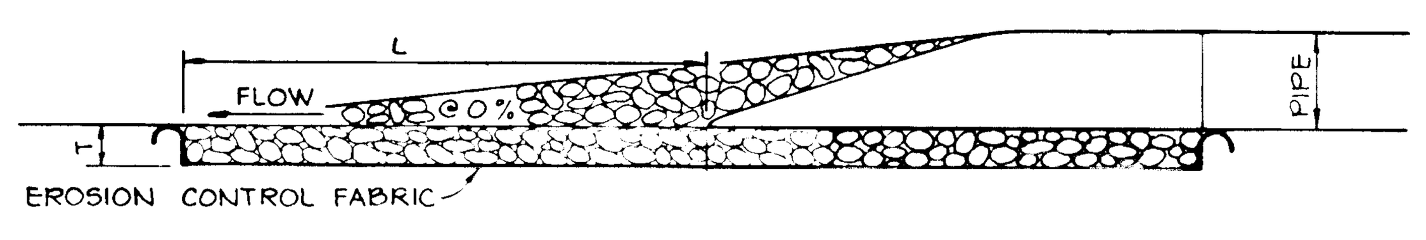
CHIEF, BUREAU OF ENGINEERING [illegible] 2-17-87 — DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

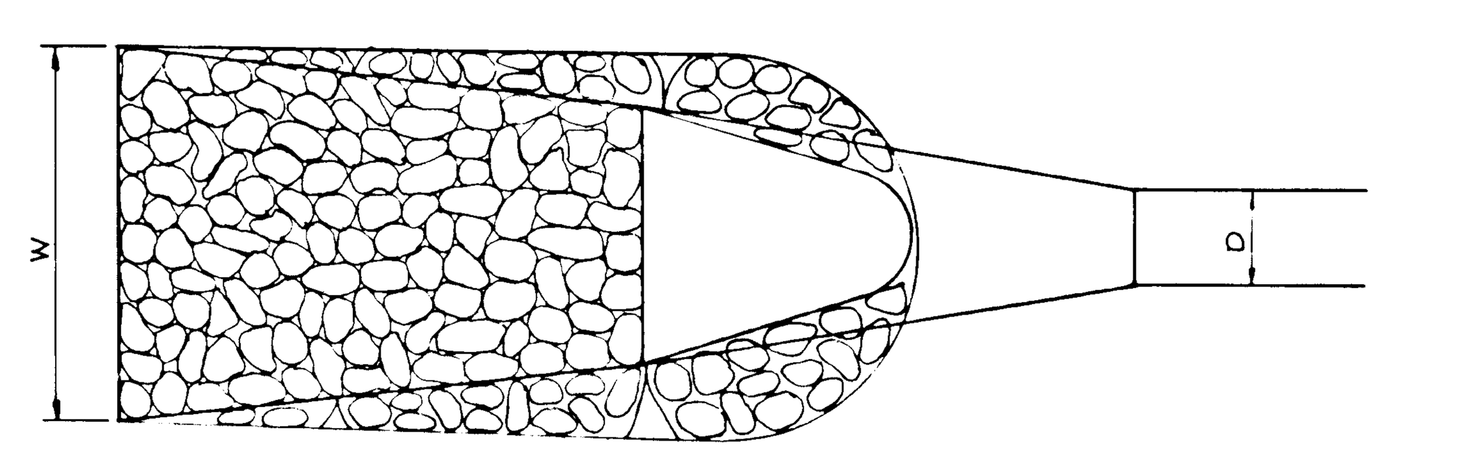
[illegible] — 2-13-87

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

NO	DATE	REVISION



SECTION

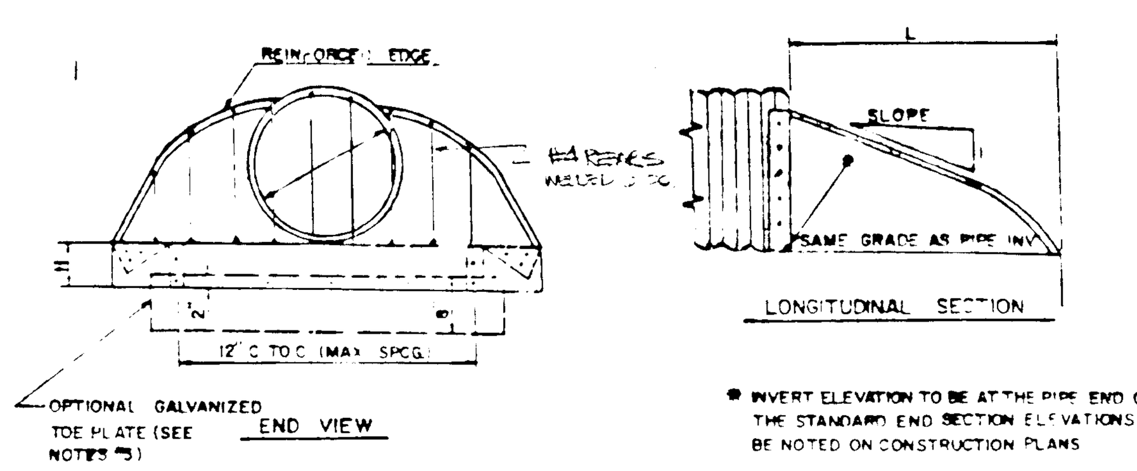


PLAN

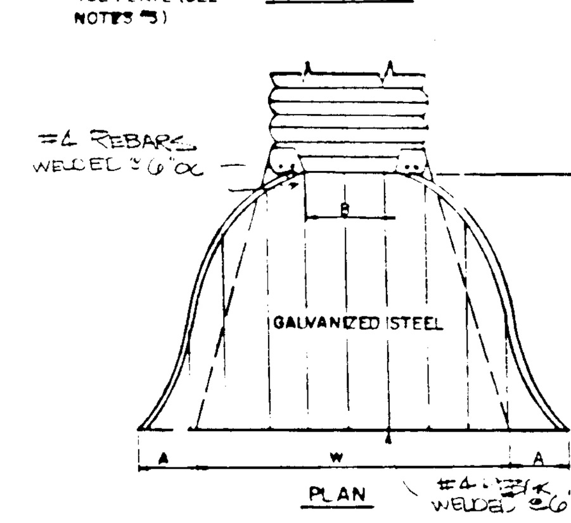
STRUCTURE	d50 STONE DIA	LENGTH (L)	WIDTH (W)	THICKNESS (T)
E-1	0.33'	6'	7.5'	0.75'
E-2	0.50'	16'	18'	0.75'
E-3	0.33	8'	10.5'	0.75'

OUTLET PROTECTION DETAIL

NO SCALE



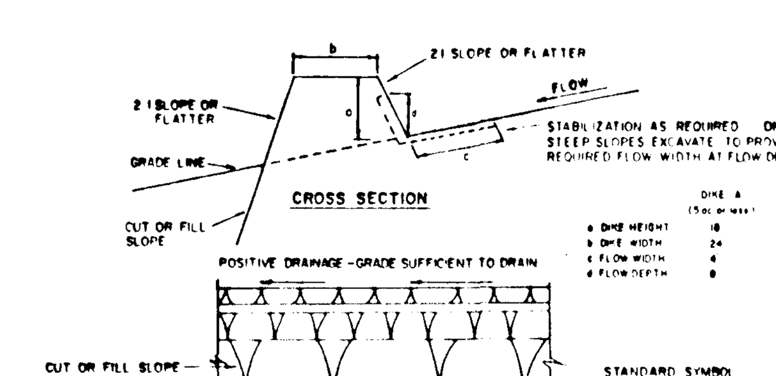
* INVERT ELEVATION TO BE AT THE PIPE END OF THE STANDARD END SECTION ELEVATIONS TO BE NOTED ON CONSTRUCTION PLANS



NOTE :- ON COATED METAL END SECTIONS REPLACE BITUMINOUS COATING ON FIELD WELDED AREAS

TRASH RACK DETAIL

NO SCALE



	DIKE A (5 ac or less)	DIKE B (5-10 ac)
a DIKE HEIGHT	18	36
b DIKE WIDTH	24	36
c FLOW WIDTH	4	6
d FLOW DEPTH	8	15

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.

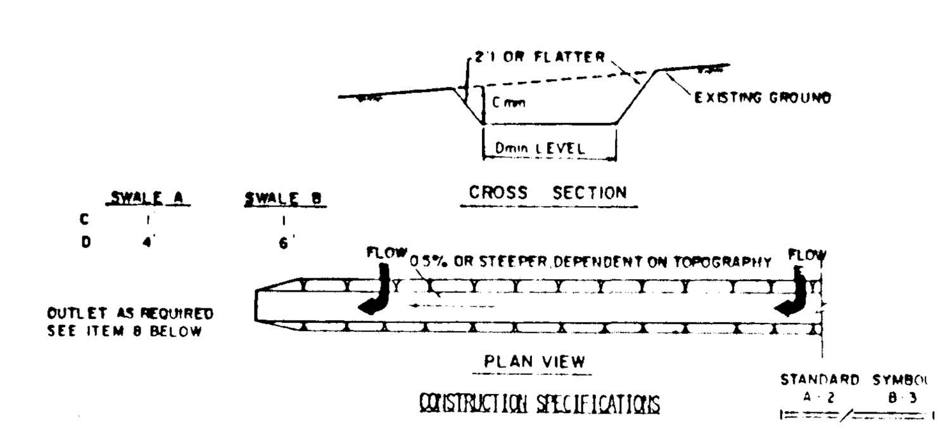
FLOW CHANNEL STABILIZATION

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



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

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.

SEQUENCE OF CONSTRUCTION FOR RELOCATION OF ENTRANCE TO GUILFORD GARDENS

DAY 1	1.	INSTALL EARTH DIKE ON SOUTH SIDE OF PROPOSED ENTRANCE ROAD AND STRAW BALE DIKE ON SOUTH SIDE OF EXISTING ENTRANCE ROAD, MAINTAINING INGRESS AND EGRESS IN EXISTING ENTRANCE ROAD.
DAY 1-3	2.	GRADE PROPOSED ENTRANCE ROAD, STORING ANY EXCESS MATERIAL WITHIN AREA BETWEEN ENTRANCE ROADS AND STABILIZE AS PER TEMP. SEEDING NOTES.
DAY 3-4	3.	AFTER PROP. ENTRANCE ROAD HAS BEEN BROUGHT TO SUB GRADE, REMOVE EXISTING CURB AND PAVE IMMEDIATELY.
DAY 4-6	4.	AFTER PROP. ENTRANCE IS COMPLETED AND ALL DISTURBED AREAS STABILIZED, ENTRANCE ROAD SHALL BE OPENED TO USE.
DAY 6-8	5.	CLOSE EXISTING ENTRANCE ROAD BY INSTALLING CURB AND GUTTER ACROSS EACH END OF ENTRANCE.
DAY 8-9	6.	REMOVE EX. CURB, GUTTER & PAVING AS SHOWN IN PLAN.
DAY 9-10	7.	GRADE DISTURBED AREA AS SHOWN ON PLAN AND STABILIZE AS PER PERMANENT SEEDING NOTES.
DAY 10-12	8.	UPON APPROVAL OF SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVICES AND STABILIZE IN ACCORDANCE WITH PERMANENT SEEDING NOTES.

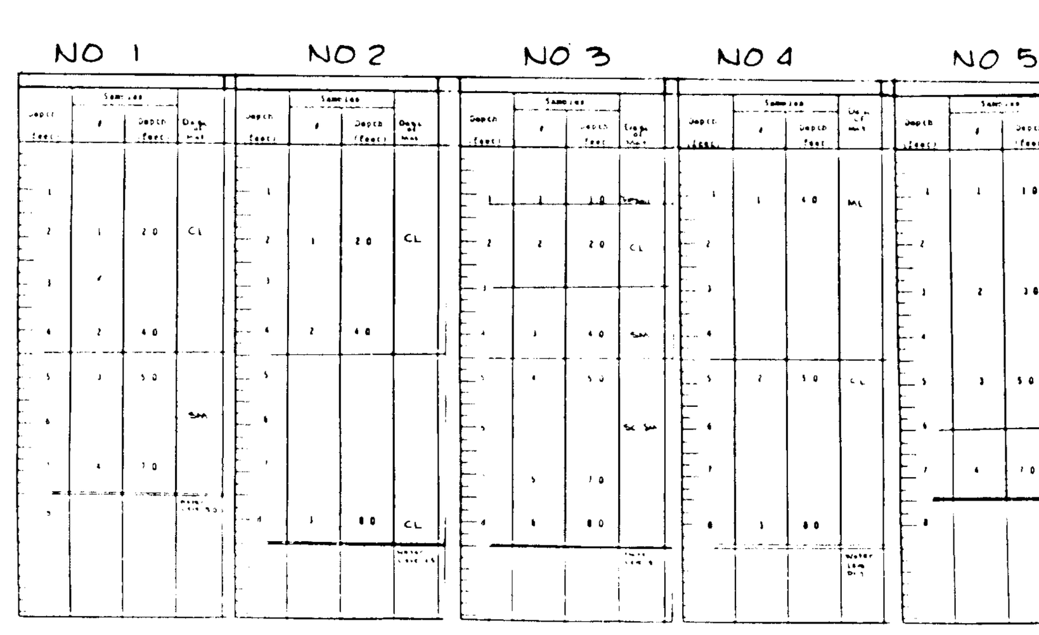
SEQUENCE OF CONSTRUCTION

DAY 1	1.	OBTAIN A GRADING PERMIT
DAY 2-3	2.	CLEAR AND GRUB AREA FOR AND INSTALL STABILIZED CONSTRUCTION ENTRANCE (SCE).
DAY 3-4	3.	CLEAR AND GRUB AREA FOR SEDIMENT CONTROL DEVICE INSTALLATION AROUND SWMF ONLY.
DAY 4-5	4.	INSTALL SEDIMENT CONTROL DEVICES FOR SWMF CONSTRUCTION ONLY.
DAY 5-6	5.	PUMP OUT EXISTING POND.
DAY 6-20	6.	CONSTRUCT SWMF INCLUDING STONE FILTER AT CONTROL STRUCTURE S-1.
DAY 20-22	7.	STABILIZE ALL DISTURBED AREAS.
DAY 22-32	8.	AFTER THE SWMF IS COMPLETE AND FUNCTIONAL, INSTALL REMAINDER OF SEDIMENT CONTROL DEVICES FOR REMAINDER OF SITE AND STABILIZE IN ACCORDANCE WITH TEMPORARY SEEDING NOTES.
DAY 32-46	9.	CLEAR AND GRUB REMAINDER OF SITE.
DAY 46-68	10.	GRADE SITE.
DAY 68-105	11.	INSTALL UTILITIES (WATER, SEWER AND STORM DRAINS) BLOCKING ALL INLETS AS PER INLET PROTECTION DETAIL.
DAY 105-109	12.	STABILIZE ALL SLOPES IN ACCORDANCE WITH PERMANENT SEEDING NOTES.
DAY 109-154	13.	COMPLETE ALL ROADWAY CONSTRUCTION AND STABILIZE ALL DISTURBED AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES.
DAY 154-160	14.	UPON APPROVAL OF SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVICES AND STABILIZE IN ACCORDANCE WITH PERMANENT SEEDING NOTES AND CONVERT SEDIMENT TRAP NO. 1 TO PERMANENT STORM WATER MANAGEMENT FACILITY AS FOLLOWS:

A. DEWATER BASIN BY PUMPING INTO A SEDIMENT TRAP OR WELL STABILIZED VEGETATED AREA AS DIRECTED BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

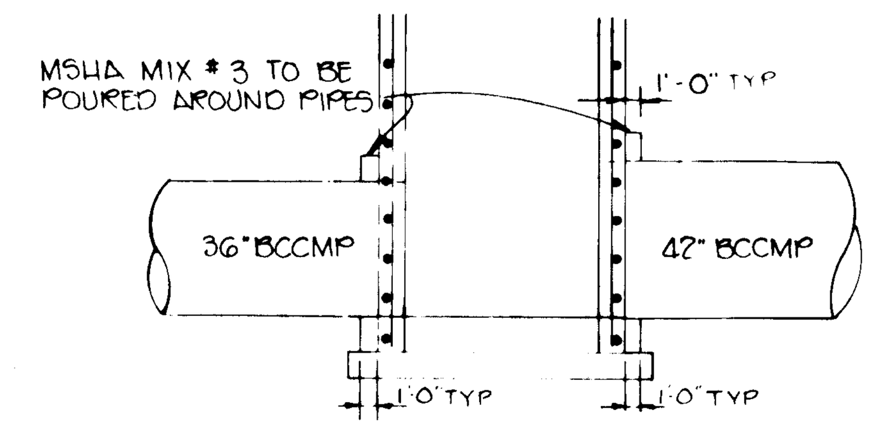
B. REMOVE SILT AND STONE FILTER AND RESTORE POND TO ORIGINAL DIMENSIONS. STABILIZE IN ACCORDANCE WITH PERMANENT SEEDING NOTES.

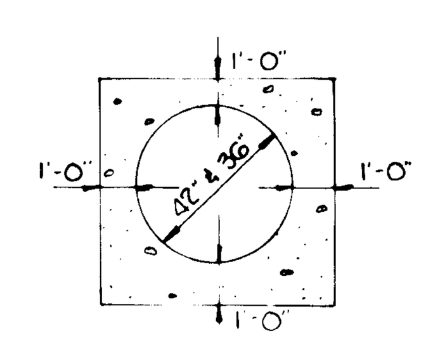
C. REMOVED SILT SHALL BE SPREAD ACROSS THE AREA TO THE REAR OF LOTS 25 THRU 31 AND SEEDED IN ACCORDANCE WITH PERMANENT SEEDING NOTES.



TEST PIT DATA

NO SCALE

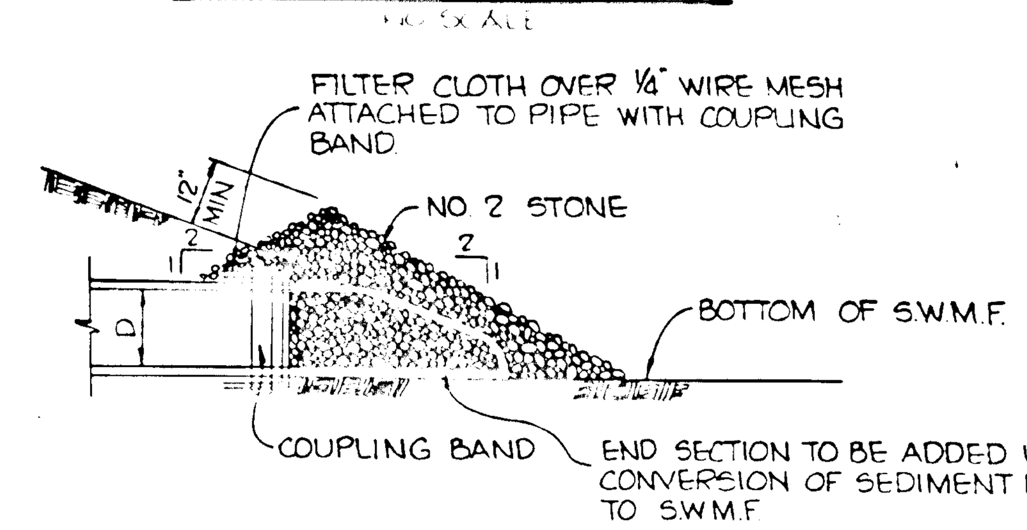




CONCRETE COLLAR DETAIL

(FOR STANDARD 5'-0" PRECAST MANHOLE)

NO SCALE



STONE FILTER @ E-4

NO SCALE

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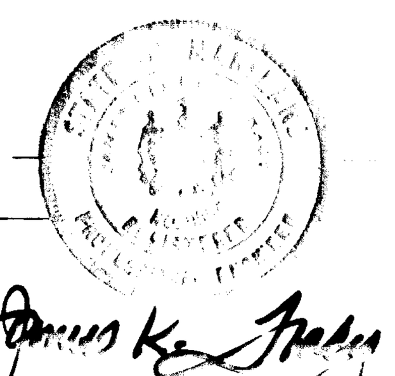


James K Tracy

OWNER: SECURITY DEVELOPMENT CORP 8480 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MARYLAND 21043	PROJECT: CARTER'S COVE SECTION 1 AREA 1 LOTS 1 THRU 100
	LOCATION: TAX MAP NO 42 PARCEL NOS 37 & 253 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DEVELOPER: SECURITY DEVELOPMENT CORP 8480 BALTIMORE NATIONAL PIKE ELLICOTT CITY MARYLAND 21043	TITLE: SEDIMENT CONTROL NOTES AND DETAILS
	DATE FEB. 6, 1987 / PROJECT NO 8529 RSD
DES RJW / DRN CDT	SCALE AS SHOWN / DRAWING 8 OF 10

F-87-75 AS-BUILT 11-18-88

1250

I. SITE PREPARATION

Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed. Channel banks and sharp breaks shall be sloped to no steeper than 1:1.

Areas to be covered by the pond or reservoir will be cleared of all trees, brush, logs, fences, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush and stumps shall be cut approximately level with the ground surface.

All cleared and grubbed material shall be disposed of outside and below the limits of the dam and reservoir as directed by the owner or his representative. When specified, a sufficient quantity of topsoil will be stockpiled in a suitable location for use on the embankment and other designated areas.

II. EARTH FILL

The fill material shall be taken from approved designated borrow area or areas. It shall be free of roots, stumps, wood, rubbish, oversize stones, frozen or other objectionable materials. The embankment shall be constructed to an elevation which provides for anticipated settlement to the design elevation. The fill height all along the length of the embankment shall be increased above the design elevation (including freeboard) as shown on the plans.

Placement

Areas on which fill to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in 8-inch maximum thickness (before compaction) layers which are to be continuous over the entire length of the fill. The most porous borrow material shall be placed in the downstream portions of the embankment.

Compaction

The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of the equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction can be obtained with the equipment used.

Where a minimum required density is specified, each layer of fill shall be compacted as necessary to obtain that density and is to be certified by the Engineer.

Cutoff Trench

Where specified, a cutoff trench shall be excavated along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be as shown on the drawings, with the minimum width being four feet. The depth shall be at least four feet or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill material for the cutoff trench shall be the most impervious material available and shall be compacted with equipment or rollers to assure maximum density and minimum permeability.

III. STRUCTURAL BACKFILL

Backfill material shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other compaction equipment. The material needs to fill the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe unless there is a compacted fill of twenty-four inches or greater over the structure or pipe.

IV. PIPE CONDUITS

All pipes shall be circular in cross section.

A. Corrugated Metal Pipe

1. Materials - (Steel Pipe) - This pipe and its appurtenances shall be galvanized and fully bituminous coated and shall conform to the requirements of AASHTO Specifications M-190 Type A with watertight coupling bands. Any bituminous coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound.

Steel pipes with polymeric coatings shall have a minimum coating thickness of 0.01 inch (10 mil) on both sides of the pipe. The following coatings are commercially available: Nexon, Plasti-Cote, Blac-Klad, and Beth-Cu-Loy. Coated corrugated steel pipe shall meet the requirements of AASHTO M-245 and M-246.

Materials - (Aluminized Steel Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-274-791 with watertight coupling bands or flanges.

Materials - (Aluminum Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-196 or M-211 with watertight coupling bands or flanges. Coupling bands, anti-seep collars, end sections, etc. must be composed of the same material as the pipe. Metals must be insulated from dissimilar materials with use of rubber or plastic insulating materials at least 24 mils in thickness. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer. Hot dip galvanized bolts may be used for connections. The pH of the surrounding soils shall be less than 9 and greater than 4.

2. Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe and riser are metal. Watertight coupling bands or flanges shall be used at all joints. Anti-seep collars shall be connected to the pipe in such a manner as to the completely watertight. Dimple bands are not considered to be watertight.

3. Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.

4. Laying pipe - The pipe shall be placed with inside circumferential laps pointing downstream and with the longitudinal laps at the sides.

5. Backfilling shall conform to structural backfill as shown above.

6. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

B. Reinforced Concrete Pipe

1. Materials - Reinforced concrete pipe shall have a rubber gasket joint and shall equal or exceed ASTM Specification C-361. An approved equivalent is AWWA Specification C-301.

2. Bedding - All reinforced conrete pipe conduits shall be laid in a concrete bedding for their entire length. This bedding shall consist of high slump concrete placed under the pipe and up the sides of the pipe at least 10% of its outside diameter with a minimum thickness of 3", or as shown on the drawings.

3. Laying pipe - Bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. After the joints are sealed for the entire line, the bedding shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and grade of the pipe.

4. Backfilling shall conform to structural backfill as shown above.

5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

C. For pipes of other materials, specific specifications shall be shown on the drawings.

V. CONCRETE

1. Materials

a. Cement - Normal Portland cement shall conform to the latest ASTM Specification C-150.

b. Water - The water used in concrete shall be clean, free from oil, acid, alkali, scales, organic matter or other objectionable substances.

c. Sand - The sand used in concrete shall be clean, hard, strong and durable, and shall be well graded with 100 percent passing a one-quarter inch sieve. Limestone sand shall not be used.

d. Coarse Aggregate - The coarse aggregate shall be clean, hard, strong and durable, and free from clay or dirt. It shall be well graded with a maximum size of one and one-half (1-½) inches.

e. Reinforcing Steel - The reinforcing steel shall be deformed bars of intermediate grade billet steel conforming to ASTM Specification A-615.

2. Design Mix - The concrete shall be mixed in the following proportions, measured by weight. The water-cement ratio shall be 5-½ to 6 U.S. Gallons of water per 94 pound bag of cement. The proportion of materials for the trial mix shall be 1:2:3-½. The combination of aggregates may be adjusted to produce a plastic and workable mix that will not produce harshness in placing or honeycombing in the structure.

3. Mixing - The concrete ingredients shall be mixed in batch mixers until the mixture is homogeneous and of uniform consistency. The mixing of each batch shall continue for not less than one and one-half minutes after all the ingredients, except the full amount of water, are in the mixer. The minimum mixing time is predicted on proper control of the speed of rotation of the mixer and of the introduction of the materials, including water, into the mixer. Water shall be added prior to, during, and following the mixer-charging operations. Excessive overmixing requiring the addition of water to preserve the required concrete consistency shall not be permitted. Truck mixing will be allowed provided that the use of this method shall cause no violation of any applicable provisions of the specifications given here.

4. Forms - The forms shall have sufficient strength and rigidity to hold the concrete and to withstand the necessary pressure, tamping, and vibration without deflection from the prescribed lines. They shall be mortar-tight and constructed so that they can be removed without hammering or prying against the concrete.

The inside of forms shall be oiled with a non-staining mineral oil or thoroughly wetted before concrete is placed.

Forms may be removed 24 hours after the placement of concrete. All wire ties and other devices used shall be recessed from the surface of the concrete.

5. Reinforcing Steel - All reinforcing material shall be free of dirt, rust, scale, oil, paint or any other coatings. The steel shall be accurately placed and securely tied and blocked into position so that no movement of the steel will occur during placement of concrete.

6. Consolidating - Concrete shall be consolidated with internal type mechanical vibrators. Vibration shall be suplemented by spading and hand tamping as necessary to insure smooth and dense concrete along form surfaces, in corners, and around embedded items.

7. Finishing - Defective concrete, honeycombed areas, voids left by the removal of tie rods, ridges on all concrete surfaces permanently exposed to view or exposed to water on the finished structure, shall be repaired immediately after the removal of forms. All voids shall be reamed and completely filled with dry-patching mortar.

8. Protection and Curing - Exposed surfaces of concrete shall be protected from the direct rays of the sun for at least the first three (3) days. All concrete shall be kept continuously moist for at least ten (10) days after being placed. Moisture may be applied by spraying or sprinkling as necessary to prevent the concrete from drying. Concrete shall not be exposed to freezing during the curing period. Curing compounds may also be used.

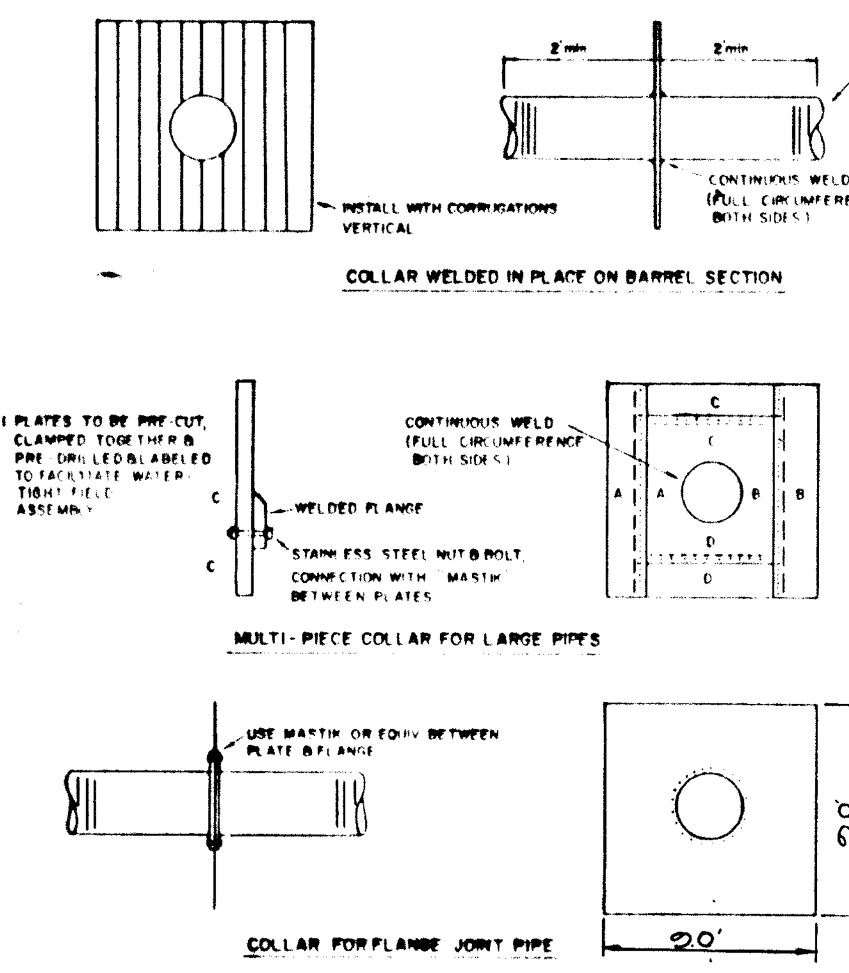
9. Placing Temperature - Concrete may not be placed at temperatures below 37°F with the temperature falling, or 34° with the temperature rising.

VI. STABILIZATION

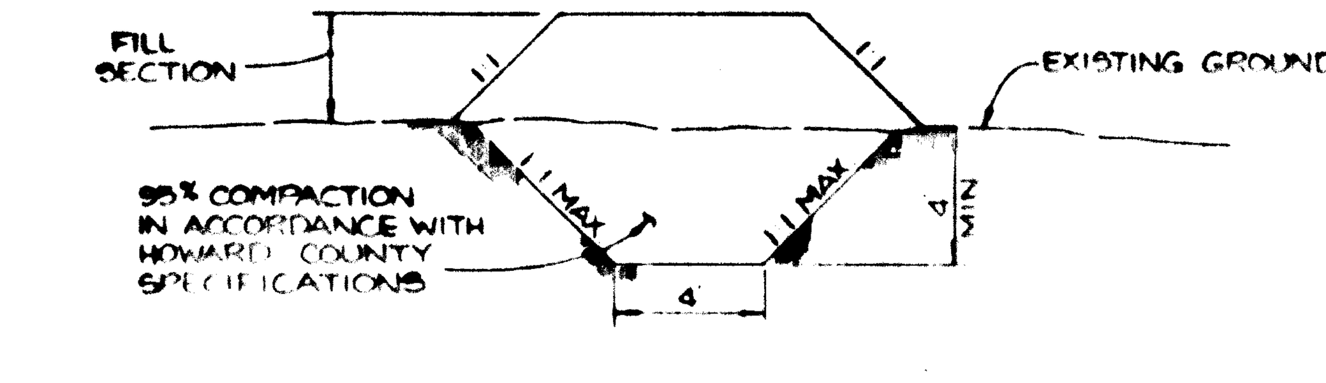
All borrow areas shall be graded to provide proper drainage and left in a sightly condition. All exposed surfaces of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized by seeding, liming, fertilizing and mulching (if required) in accordance with the vegetative treatment specifications or as shown on the accompanying drawings.

VII. EROSION AND SEDIMENT CONTROL

Construction operations will be carried out in such a manner that erosion will be controlled and water and air pollution minimized. State and local laws concerning pollution abatement will be followed. Construction plans shall detail erosion and sediment control measures to be employed during the construction process.



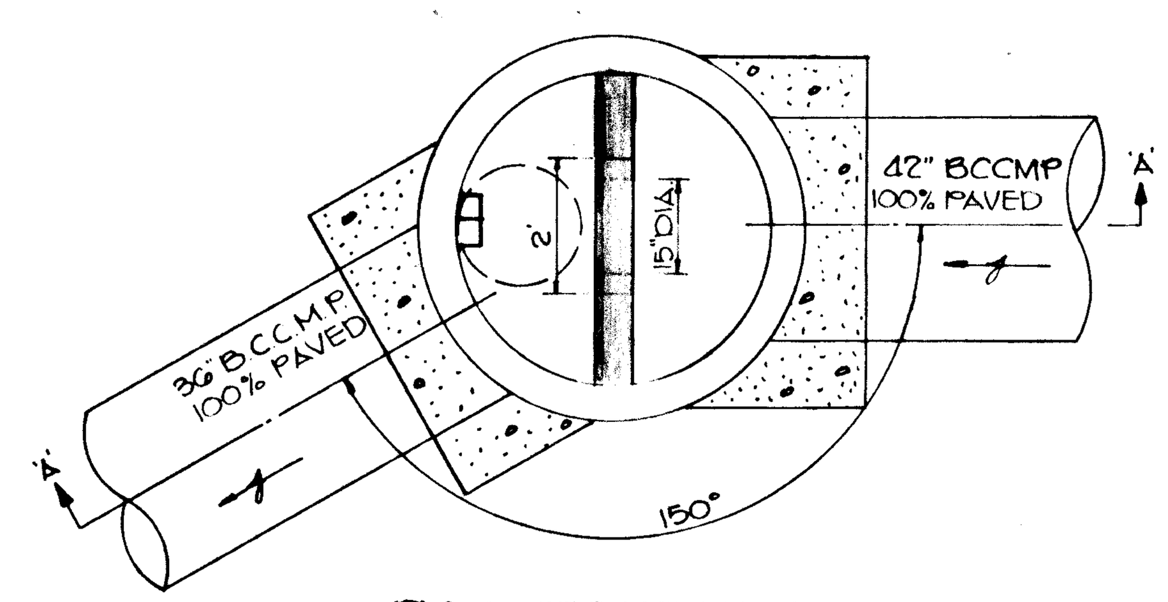
ANTI-SEEP COLLAR



CORE TRENCH SECTION

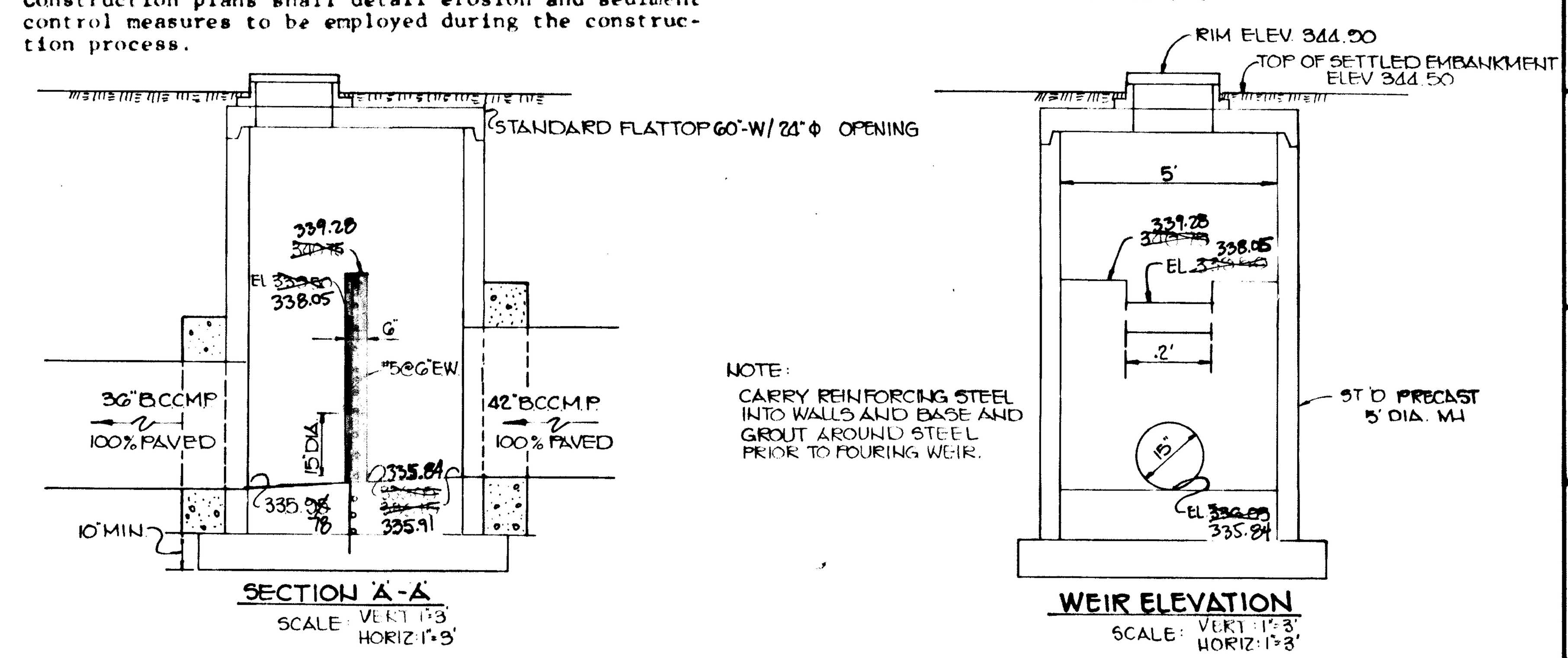
NO SCALE

AS-BUILT SURVEY CERTIFIED BY WILLIAM G. RASCH, II MD. PE/LS NO. 4575 ON 11-18-88.

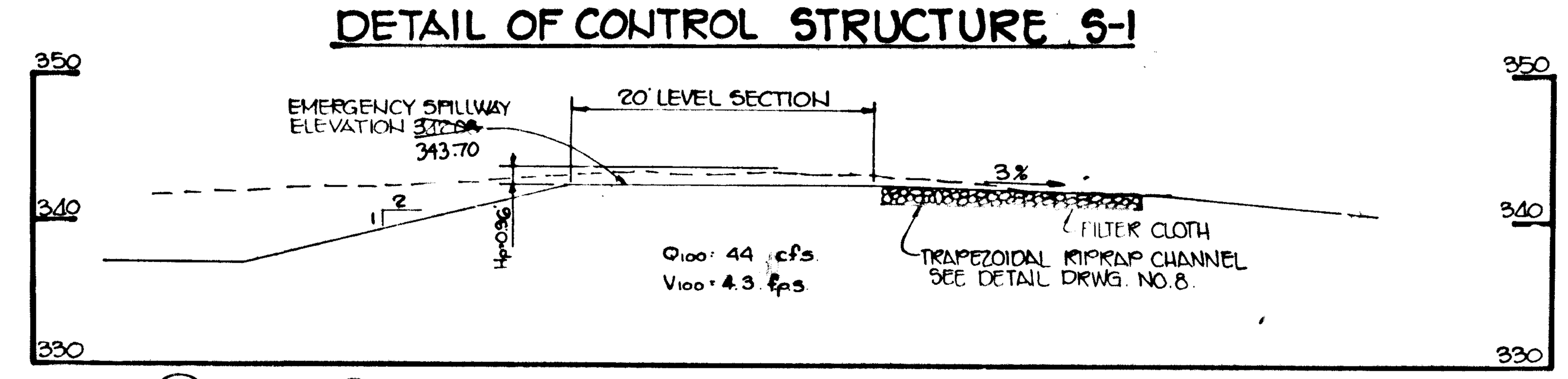


PLAN - STRUCTURE S-1

SCALE: 1"= 3'

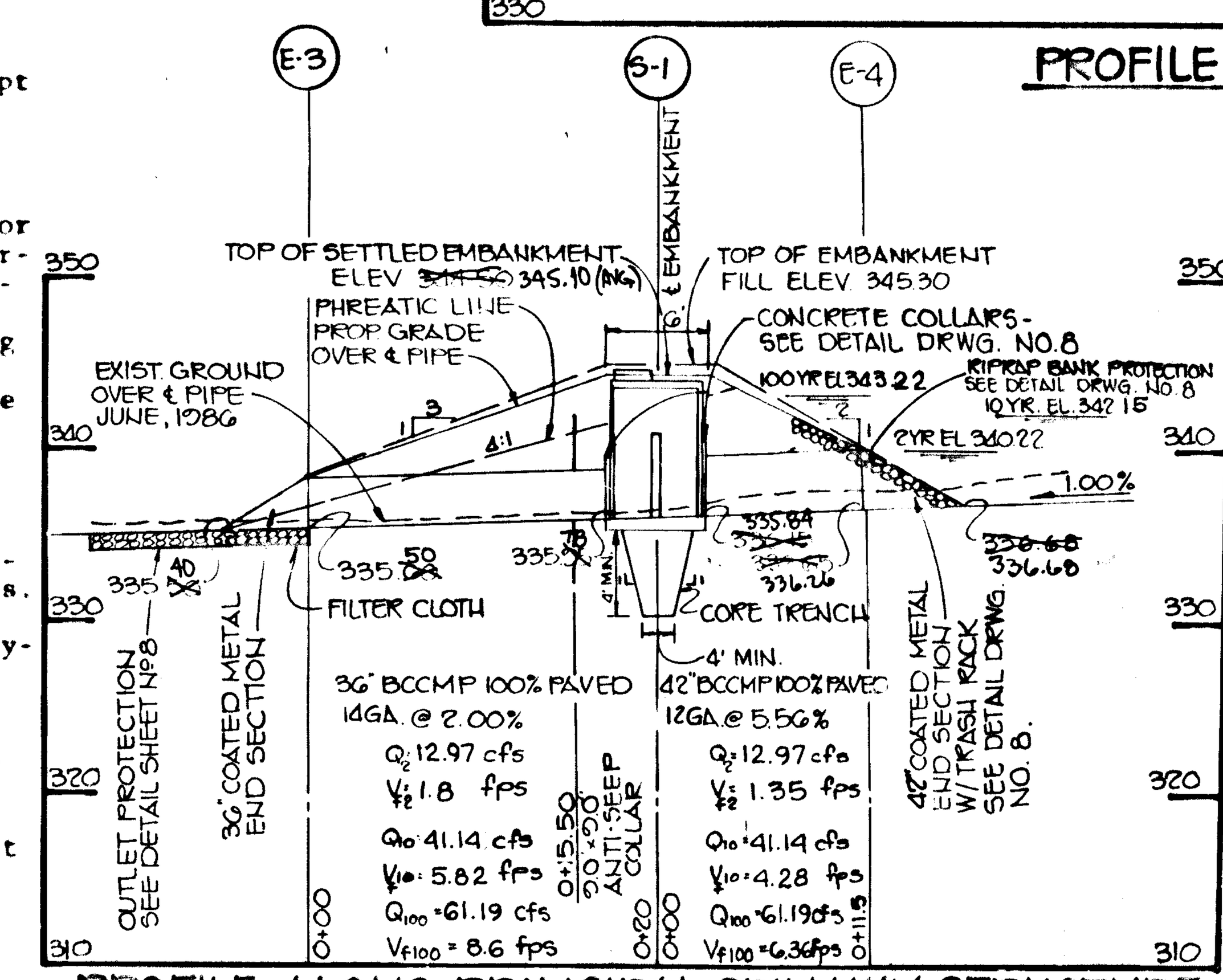


DETAIL OF CONTROL STRUCTURE S-1

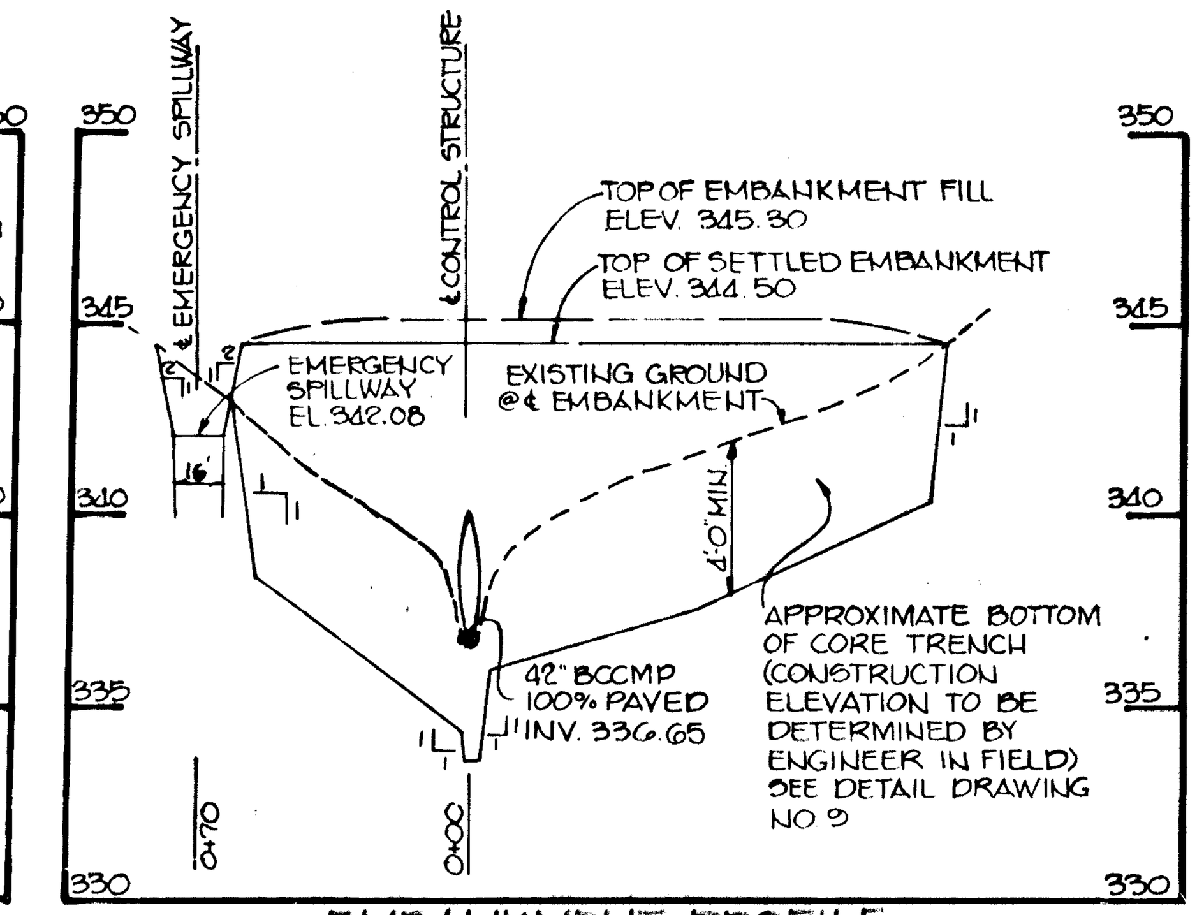


PROFILE THROUGH EMERGENCY SPILLWAY

SCALE HORIZ 1"=10' VERT 1"=10'



PROFILE ALONG PRINCIPAL SPILLWAY STRUCTURE



EMBANKMENT PROFILE

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

James K. Tracy — 12·10·86

ENGINEER: JAMES K. TRACY #9566 — DATE

BY THE DEVELOPER:

"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, 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. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION." I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

[illegible] — 12·10·86

SECURITY DEVELOPMENT CORPORATION PRESIDENT — DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

[illegible] — 2-10-87

U.S. SOIL CONSERVATION SERVICE — DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED Robert W. Ziehm — 2-10-87

HOWARD S.C.D. — DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

[illegible] — 2-13-87

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[illegible] — 2·12·87

CHIEF, BUREAU OF ENGINEERING [illegible] 2-17-87 — DATE

NO	DATE	REVISION
△	7/28/88	REVISE WATER SURFACE ELEVATIONS ON PROFILES

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

James K. Tracy

OWNER: SECURITY DEVELOPMENT CORP. 8480 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MARYLAND 21043	PROJECT: CARTER'S COVE SECTION I, AREA I LOTS I THRU 100
	LOCATION: TAX MAP NO 42 PARCEL NOS. 37 & 253 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DEVELOPER: SECURITY DEVELOPMENT CORP. 8480 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MARYLAND 21043	TITLE: STORM WATER MANAGEMENT SPECIFICATIONS AND DETAILS
	DATE FEB. 6, 1987 / PROJECT NO 8520 RSD
DES S.J.B. / DRN K A M	SCALE AS SHOWN / DRAWING 9 OF 10

F-87-75 AS-BUILT 11-18-88

1250

℄ CURVE DATA - PRIVATE DRIVE 'A'

℄ STA ~~2+23.34~~ 1+67.62 TO ℄ STA ~~2+90.53~~ 3+25.43

Δ 90° 25 03

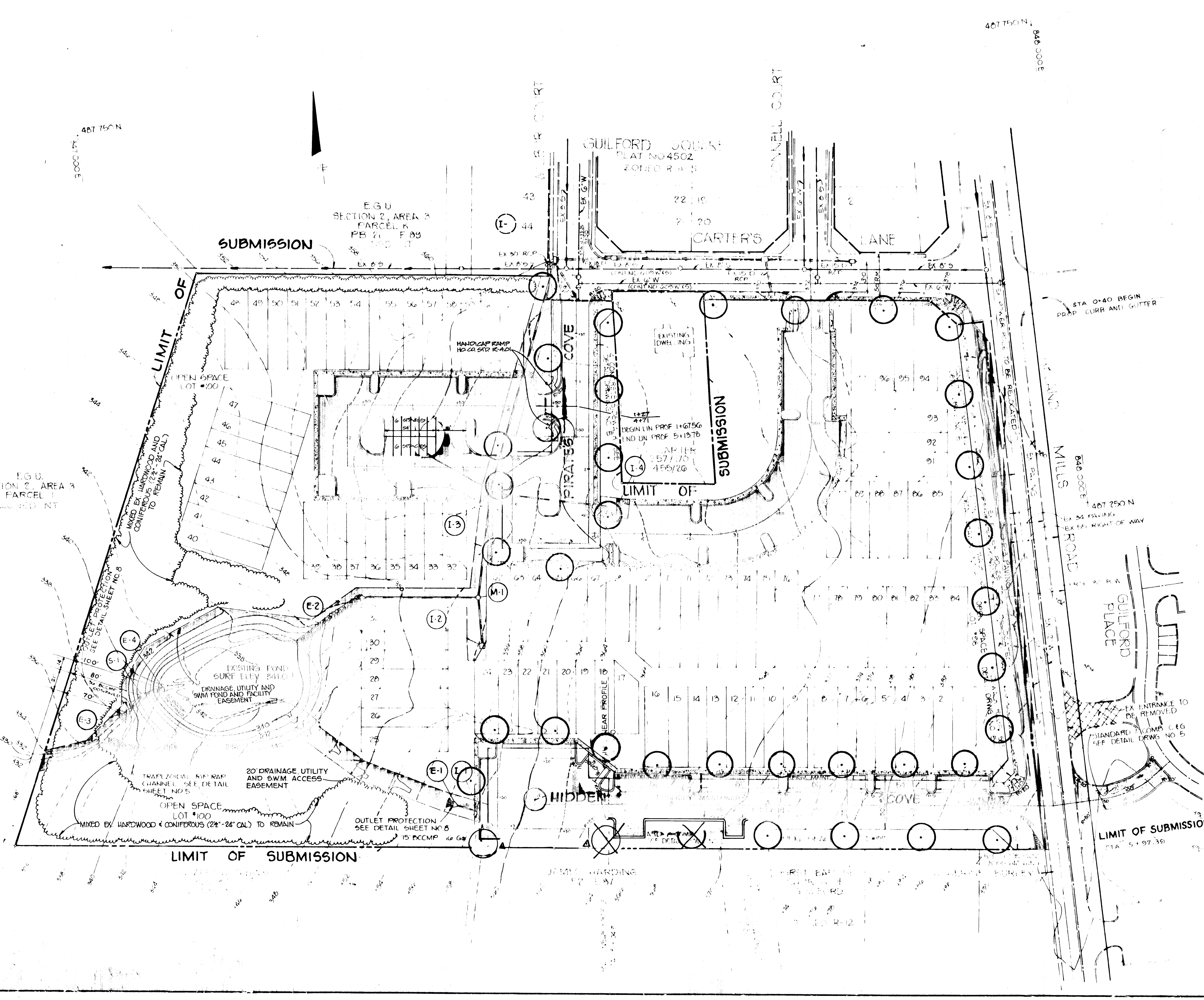
R 100.00

L 157.81

T 100.73

D 57° 29 58"

No.	DATE	REVISION
3	11-24-98	ADD 3 PARKING SPACES TO HIDDEN COVE AND REVISE TREE LOCATION; REMOVE ISLAND AND ADD 4 PARKING SPACES TO PIRATES COVE; ADD ENTRANCE TO PIRATES COVE.

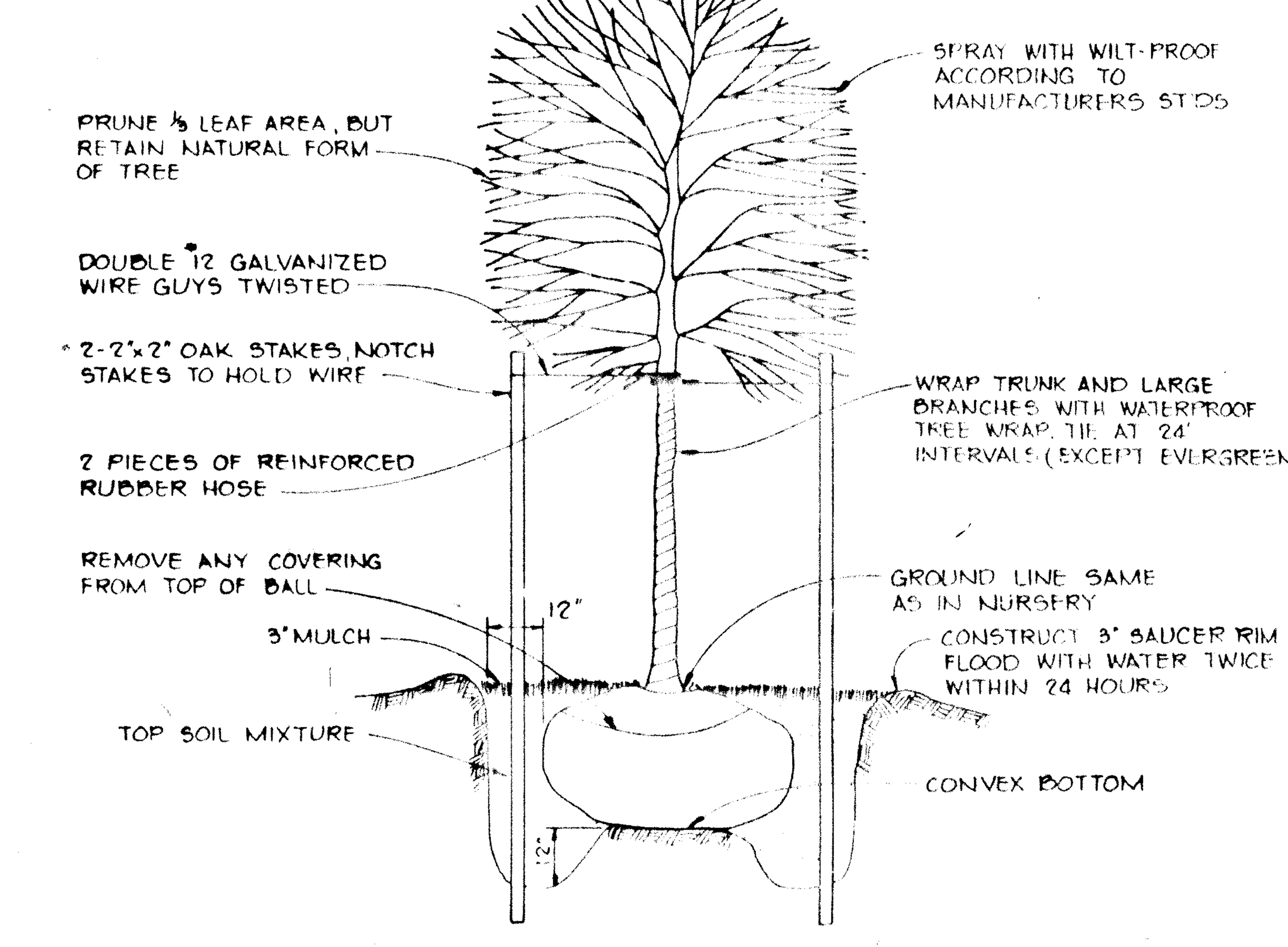


PLANT LIST

SYMBOL	QUANTITY	NAME	REMARKS
⊙	10	ACER RUBRUM Red Maple	2½ Min.Cal. B & B Full Head
	9	QUERCUS PALUSTRIS Pin Oak	
	10	QUERCUS BOREALIS Red Oak	
	9	PYRUS CALLERYANA Bradford Callery Pear	
TOTAL	~~38~~	44 TOTAL TREES PLANTED	

STREET TREE TABULATIONS

℄ LENGTH	OAKLAND MILLS ROAD	= 597.39 LF ÷ 80 = 7.47
℄ LENGTH	CARTER'S LANE	= 433.25 LF ÷ 80 = 5.42
℄ LENGTH	PIRATE'S COVE	= 167.56 LF ÷ 40 = 4.19
℄ LENGTH	HIDDEN COVE	= 464.50 LF ÷ 40 = 11.61
LINEAR PROFILE	PIRATE'S COVE	= 346.22 LF ÷ 80 = 4.33
LINEAR PROFILE	HIDDEN COVE	= 340.41 LF ÷ 80 = 4.26
	TOTAL REQUIRED	= 37.28
	TOTAL PROVIDED	= 38



TREE PLANTING DETAIL

NO SCALE

AS-BUILT SURVEY CERTIFIED BY WILLIAM G. RASCH, II Mo. P.E./L.S. NO. 4575, ON 11-18-88.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[illegible] 2-18-87

CHIEF, BUREAU OF ENGINEERING — DATE 2.18.87

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

[illegible]

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 2-13-87

NO	DATE	REVISION
△	10/21/87	MOVED TREES AND REVISED PARKING - HIDDEN COVE

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8480 Baltimore National Pike • Ellicott City, Maryland 21043 • (301) 465 6105

STATE OF MARYLAND — JAMES KENNETH TRACY — NO. 9565 — REGISTERED PROFESSIONAL ENGINEER

[illegible]

OWNER: SECURITY DEVELOPMENT CORP, 8480 BALTIMORE NATIONAL PIKE, ELLICOTT CITY, MARYLAND 21043

DEVELOPER: SECURITY DEVELOPMENT CORP, 8480 BALTIMORE NATIONAL PIKE, ELLICOTT CITY, MARYLAND 21043

PROJECT: **CARTER'S COVE** — SECTION 1 AREA 1 LOTS 1 THRU 100

LOCATION: TAX MAP NO 47, PARCEL NOS 37 & 253, 6TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE: STREET TREE PLAN

DATE: FEB. 6, 1987	PROJECT NO 8529 RSD
SCALE 1" = 50'	DRAWING 10 OF 10

DES RJW — DRN KMN/CDT

F-87-75 AS-BUILT 11-18-88

1250