

**SHEET INDEX**

NO	DESCRIPTION
1	TITLE SHEET
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3	PLAN AND PROFILE KING'S GRANT ROAD, IRON STONE COURT AND MANORWOOD ROAD
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6	SEDIMENT CONTROL NOTES AND DETAILS AND STORM DRAIN PROFILES
7	STORM WATER MANAGEMENT SPECIFICATIONS AND DETAILS
8	PLANTING PLAN

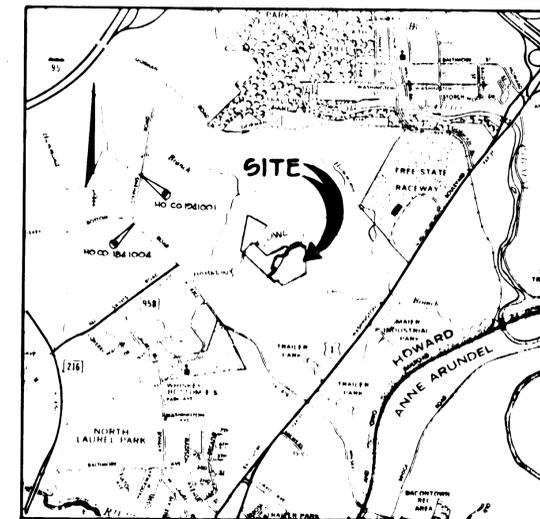
# ROADWAY, STORM DRAINS & STORM WATER MANAGEMENT

## KING'S WOODS

### SECTION 1, AREA 1

### 6TH ELECTION DISTRICT

### HOWARD COUNTY, MARYLAND



**VICINITY MAP**

SCALE: 1" = 200'

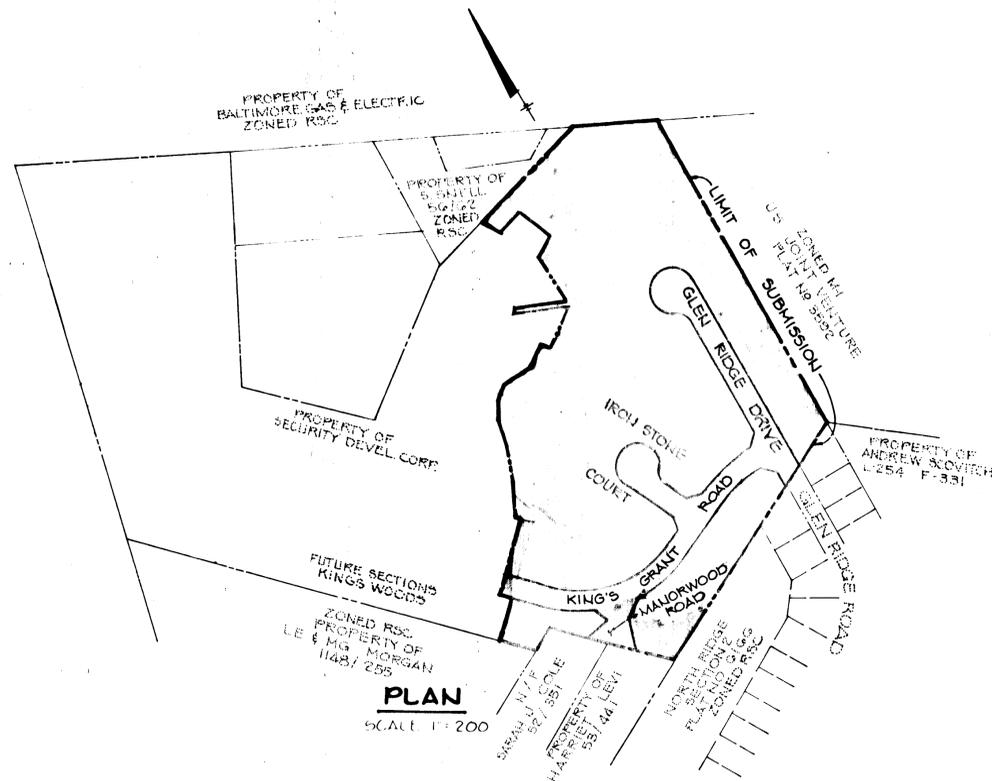
**BENCH MARKS**

- HO Co 1041004      ELEV 295.324  
REBAR 6" ± SOUTH OF SOUTH EDGE OF WHISKEY BOTTOM ROAD NEAR THE INTERSECTION OF STEPHENS ROAD  
N 471079.018    E 043657.070
- HO Co 1941001      ELEV 277.073  
REBAR 4" ± WEST OF WEST EDGE OF STEPHENS ROAD IN FRONT OF HOUSE No. 0820 0.3' BELOW SURFACE  
N 472223.199    E 043797.549

**GENERAL NOTES**

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR ROAD CONSTRUCTION.
- 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.
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES, WHERE DIRECTED BY THE ENGINEER, A MINIMUM OF TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS.
- 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 3544
BALTIMORE GAS AND ELECTRIC	539-8000 EXT. 691
HOWARD COUNTY BUREAU OF UTILITIES	997-2366
HOWARD COUNTY CONSTRUCTION INSPECTION SURVEY DIVISION	997-2416
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL STREET CURB RETURNS SHALL HAVE 20.0' RADII UNLESS OTHERWISE NOTED.
- STORM DRAIN TRENCHES WITHIN ROAD RIGHT OF WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY ROAD CODE.
- INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES 197 EDITION.
- 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.
- 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.
- ALL ELEVATIONS SHOWN ARE BASED ON U.S.C. AND U.S. MEAN SEA LEVEL DATUM 1929.
- ALL FILL AREAS WITHIN ROADWAYS AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM 95% OF MAXIMUM OBTAINABLE DENSITY DETERMINED BY MARSHALL PROCTOR.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT  $\odot$  ELEVATIONS.
- PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- SUBJECT PROPERTY ZONED R-SC PER HOWARD COMPREHENSIVE ZONING PLAN.
- TOPO TAKEN FROM HOWARD COUNTY AERIAL TOPO SUPPLEMENTED BY FIELD RUN TOPO.



**PLAN**  
SCALE: 1" = 200'

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING		12/28/87
<i>[Signature]</i>		DATE
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS		12-21-87
<i>[Signature]</i>		DATE
CHIEF, LAND DEVELOPMENT DIVISION		12/28/87
<i>[Signature]</i>		DATE
CHIEF, BUREAU OF HIGHWAYS		12-23-87
<i>[Signature]</i>		DATE
CHIEF, BUREAU OF ENGINEERING		DATE

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

8400 Baltimore National Pike • Ellicott City, Maryland 21041 • (410) 465-6100

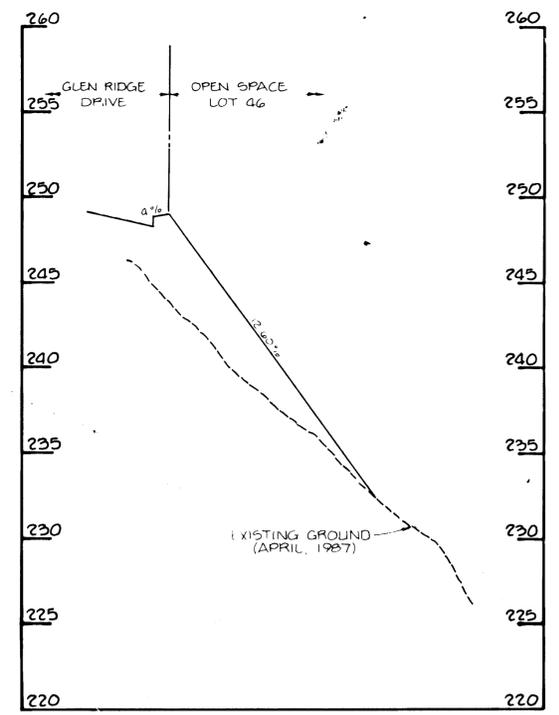
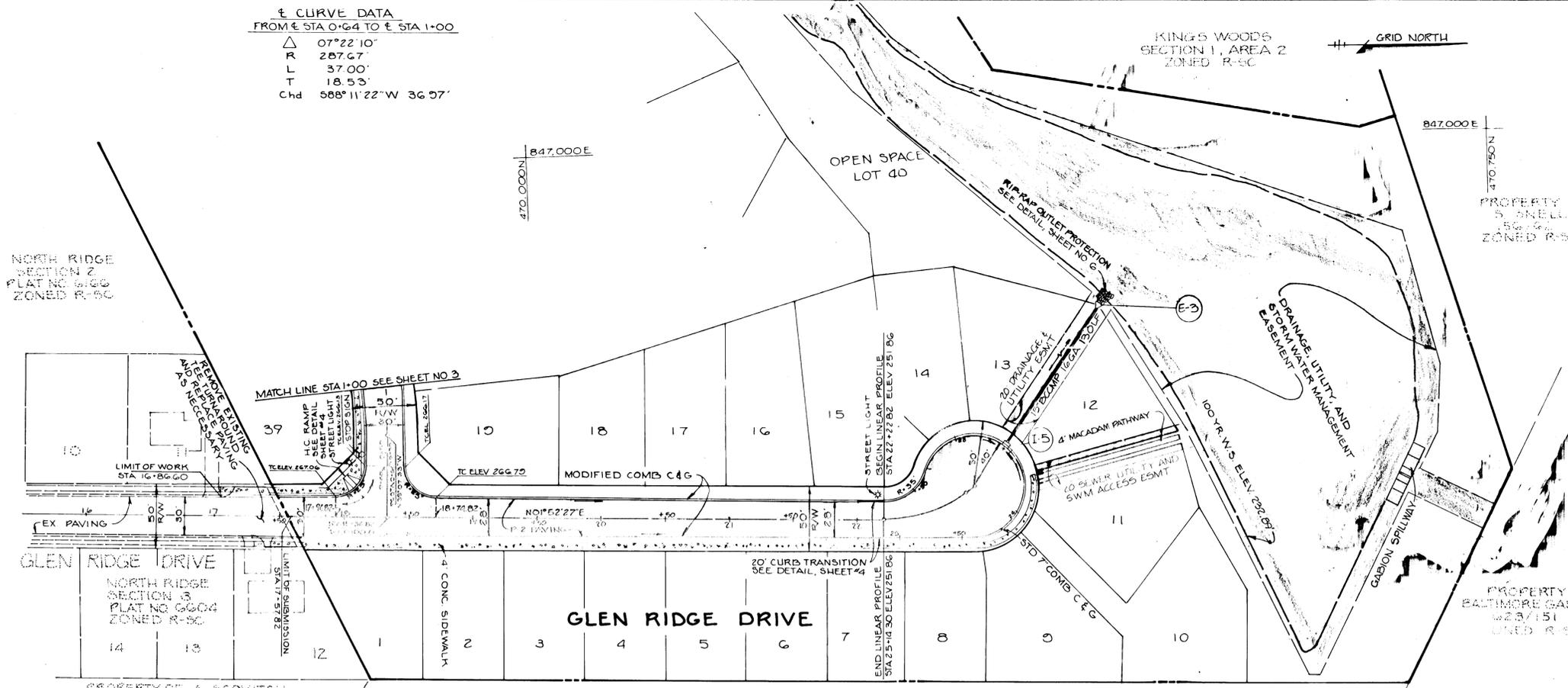
*[Signature]*

<p><b>OWNER</b></p> <p>SECURITY DEVELOPMENT CORP PO BOX 417 ELLICOTT CITY MD 21043</p> <p><b>DEVELOPER</b></p> <p>SECURITY DEVELOPMENT CORP PO BOX 417 ELLICOTT CITY MD 21043</p>	<p><b>PROJECT</b></p> <p><b>KING'S WOODS</b> SECTION 1 AREA 1</p> <p><b>LOCATION</b></p> <p>TAX MAP NO. 47 PARCEL NO. 756 6TH ELECTION DISTRICT HOWARD COUNTY MARYLAND</p> <p><b>TITLE</b></p> <p><b>TITLE SHEET</b></p> <p>DATE: MAY 20, 1987 DEC 9, 1987</p> <p>PROJECT NO 8724 RSD</p>
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F 87-207

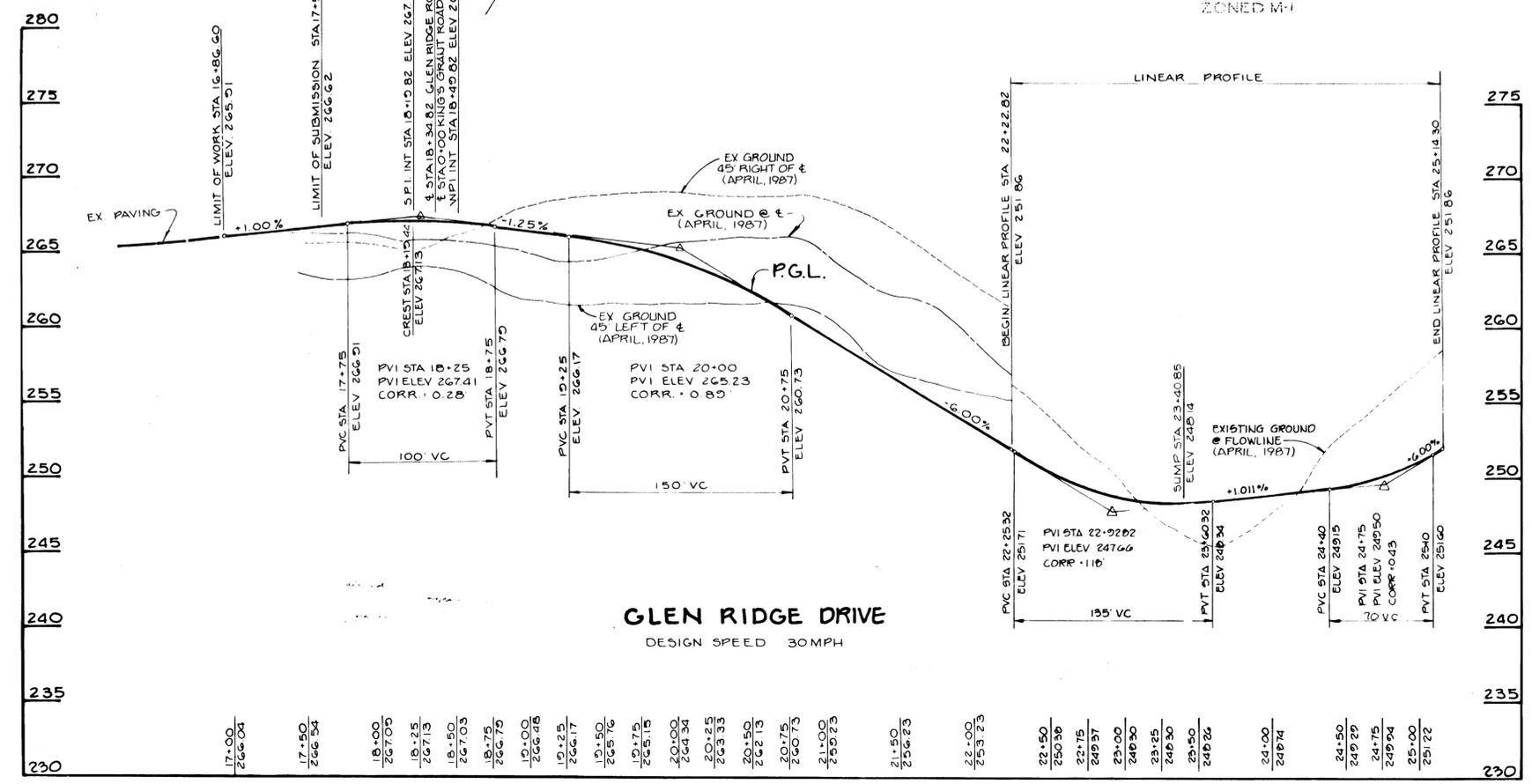
987

± CURVE DATA  
 FROM ± STA 0+04 TO ± STA 1+00  
 Δ 07°22'10"  
 R 207.67'  
 L 37.00'  
 T 18.53'  
 Chd 588°11'22"W 36.97'



**S.W.M. ACCESS PROFILE**  
 SCALE: VERT 1" = 5'

**PLAN**  
 SCALE 1" = 50'



**PROFILE**  
 SCALE H-1" = 50'  
 V-1" = 5'

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING		DATE
<i>Joseph Booth</i>		12/28/87
DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION		
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS		DATE
<i>Malcolm K. F.</i>		12/29/87
CHIEF, LAND DEVELOPMENT DIVISION		
<i>Granville W. Wehner</i>		12/28/87
CHIEF, BUREAU OF HIGHWAYS		
<i>William B. Kelly</i>		12-28-87
CHIEF, BUREAU OF ENGINEERING		

Δ 0120/88	REVISE SWM STRUCTURE
NO	DATE
	REVISION

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

OWNER	PROJECT
SECURITY DEVELOPMENT CORP PO BOX 417 ELLCOTT CITY, MARYLAND 21043	<b>KINGS WOODS</b> SECTION 1 AREA 1
DEVELOPER	LOCATION
SECURITY DEVELOPMENT CORP PO BOX 417 ELLCOTT CITY, MARYLAND 21043	TAX MAP NO 47 PARCEL 756 64th ELECTION DISTRICT HOWARD COUNTY, MARYLAND
TITLE	DATE
<b>PLAN AND PROFILE</b> <b>GLEN RIDGE DRIVE</b>	MAY 28, 1987 DEC 9, 1987
DES DAM	DRN S&B/JH
	SCALE AS SHOWN DRAWING 2 OF 8

987

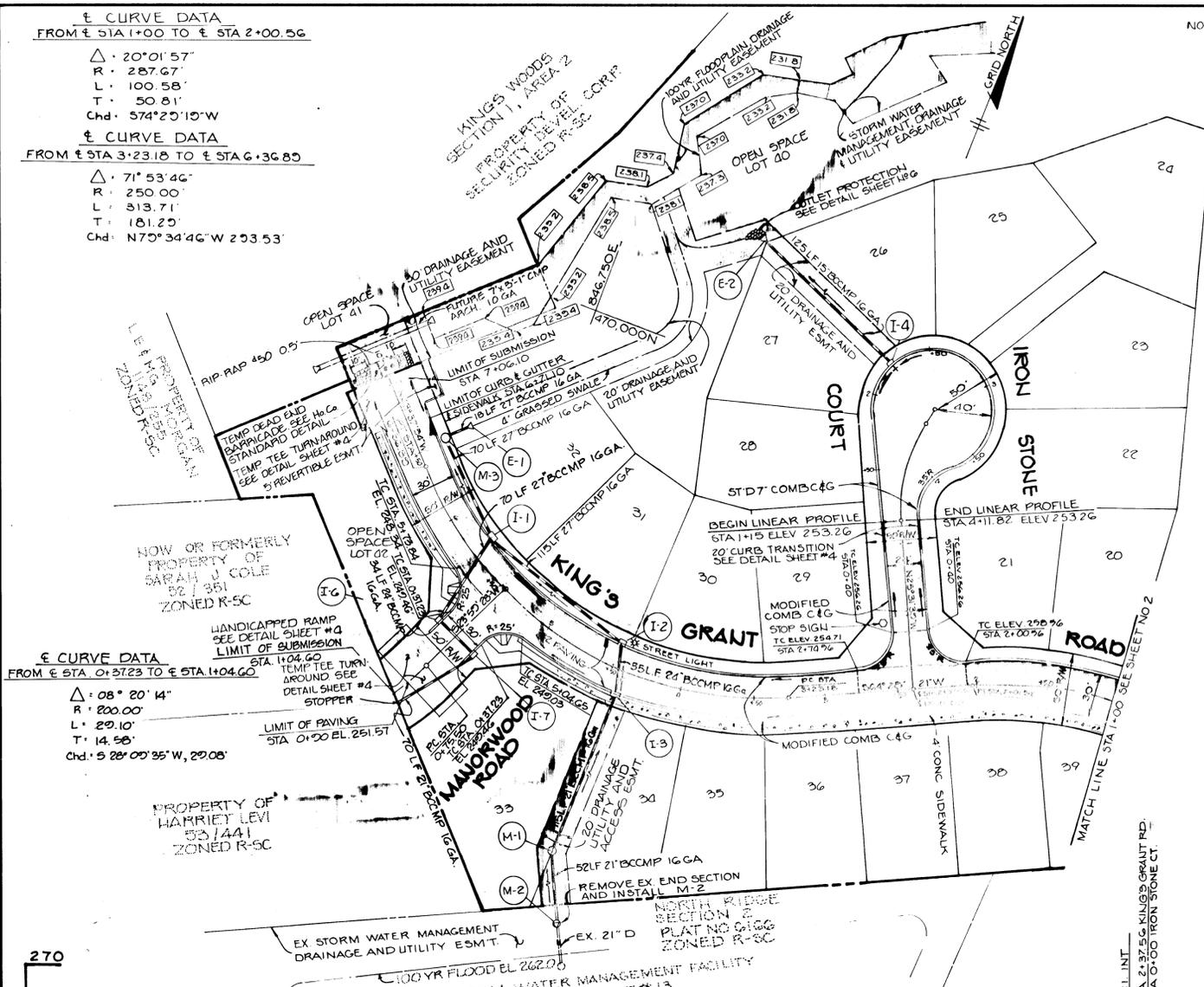
§ CURVE DATA  
FROM § STA 1+00 TO § STA 2+00.56

Δ: 20°01'57"  
R: 287.67'  
L: 100.58'  
T: 50.81'  
Chd: 574'20"15"W

§ CURVE DATA  
FROM § STA 3+23.18 TO § STA 6+36.85

Δ: 71°53'46"  
R: 250.00'  
L: 313.71'  
T: 181.20'  
Chd: N70°34'46"W 253.53'

NOTE: FF ELEVATIONS ON LOTS ADJACENT TO FLOODPLAIN MUST BE SET TWO FEET ABOVE THE FLOODPLAIN ELEVATION

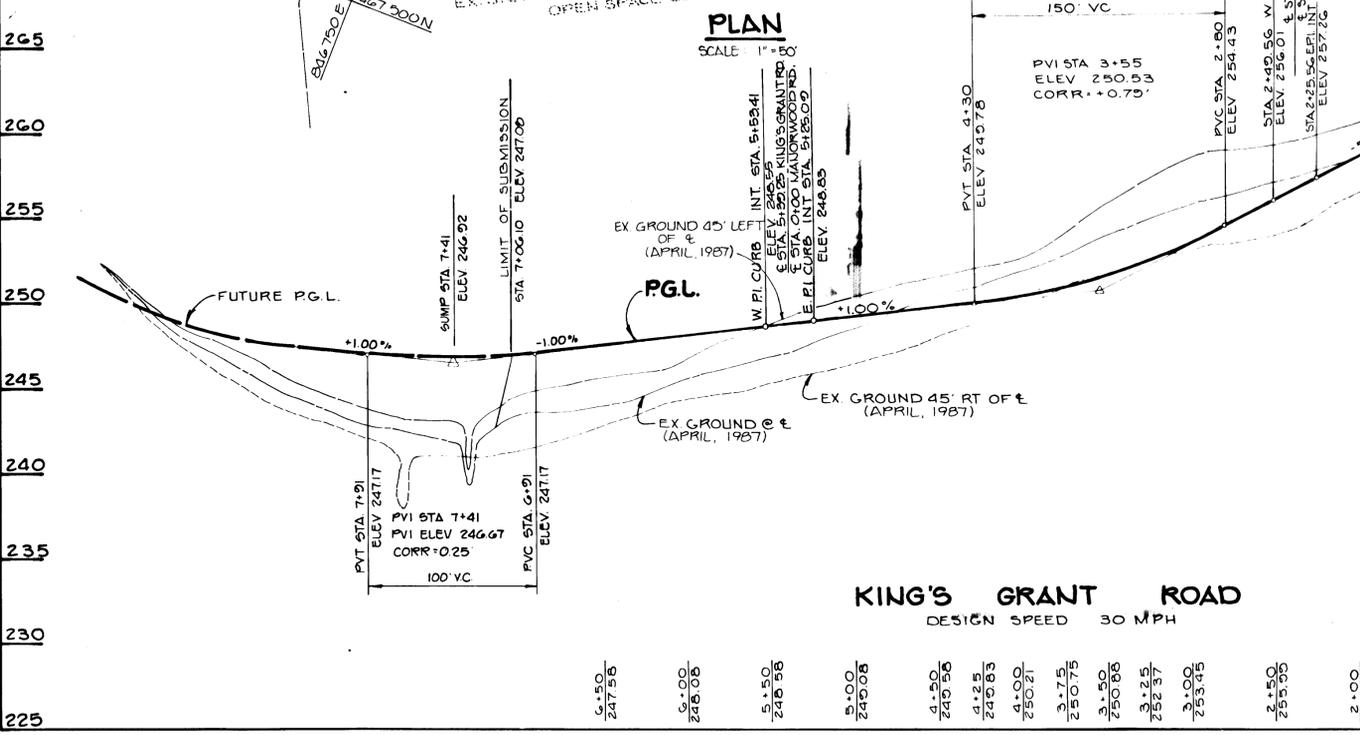


§ CURVE DATA  
FROM § STA 0+37.23 TO § STA 1+04.60

Δ: 08°20'14"  
R: 200.00'  
L: 29.10'  
T: 14.56'  
Chd: S 28°00'35"W 29.08'

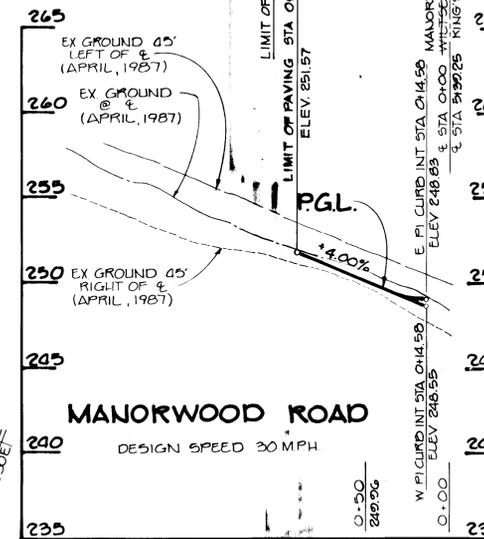
§ CURVE DATA  
FROM § STA 0+14.55 TO § STA 0+55.53

Δ: 108°00'00"  
R: 200.00'  
L: 29.10'  
T: 14.56'  
Chd: S 28°00'35"W 29.08'

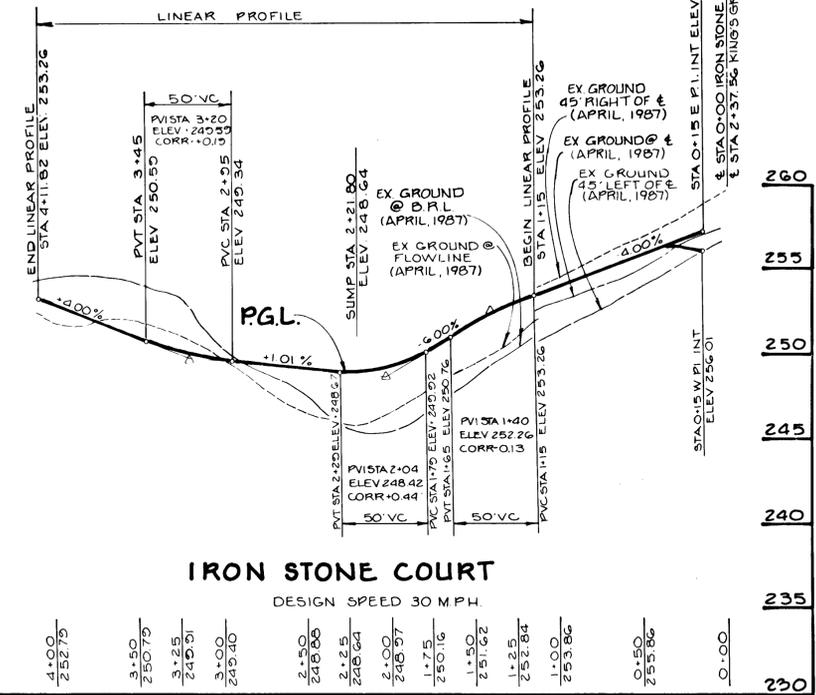


§ CURVE DATA  
FROM § STA 0+14.55 TO § STA 0+55.53

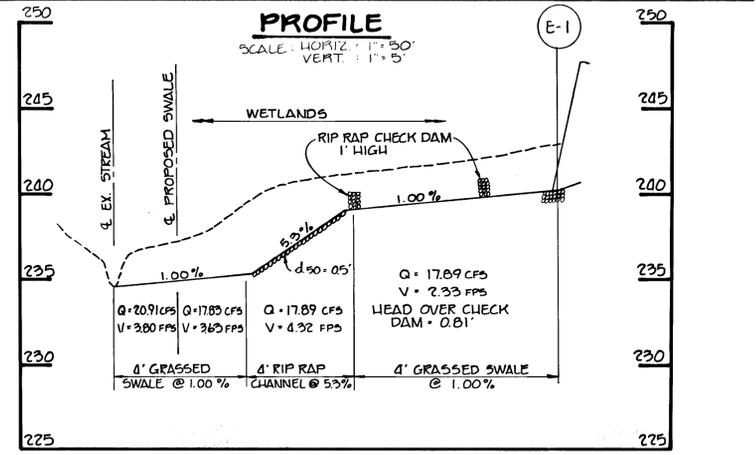
Δ: 108°00'00"  
R: 200.00'  
L: 29.10'  
T: 14.56'  
Chd: S 28°00'35"W 29.08'



PROFILE  
SCALE: HORIZ: 1"=50'  
VERT: 1"=5'



PROFILE  
SCALE: HORIZ: 1"=50'  
VERT: 1"=5'



PROFILE  
SCALE: HORIZ: 1"=50'  
VERT: 1"=5'

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING	12/28/87
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	12/23/87
APPROVED: HOWARD COUNTY BUREAU OF ENGINEERING	12/23/87
REVISION 1: 11/8/88 REVISED WILTSEDS WAY ALIGNMENT, ADD I-G AND I-7	
NO. DATE	REVISION

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

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

**PROJECT**  
**KINGS WOODS SECTION I AREA 1**  
LOCATION TAX MAP NO 47 PARCEL 75G  
6TH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

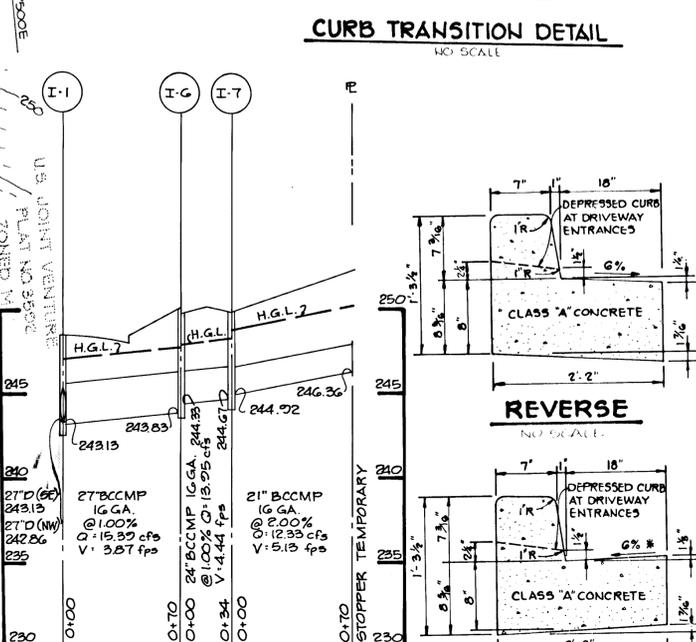
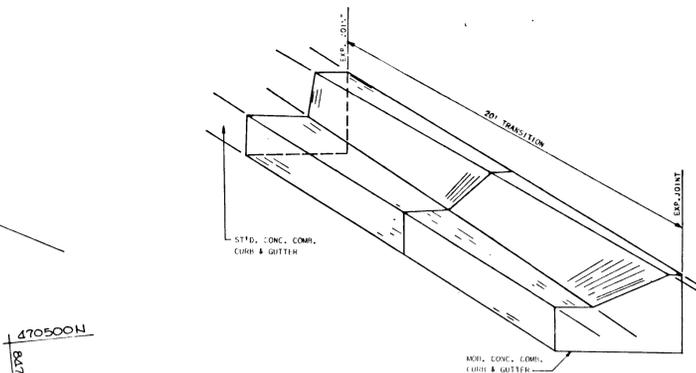
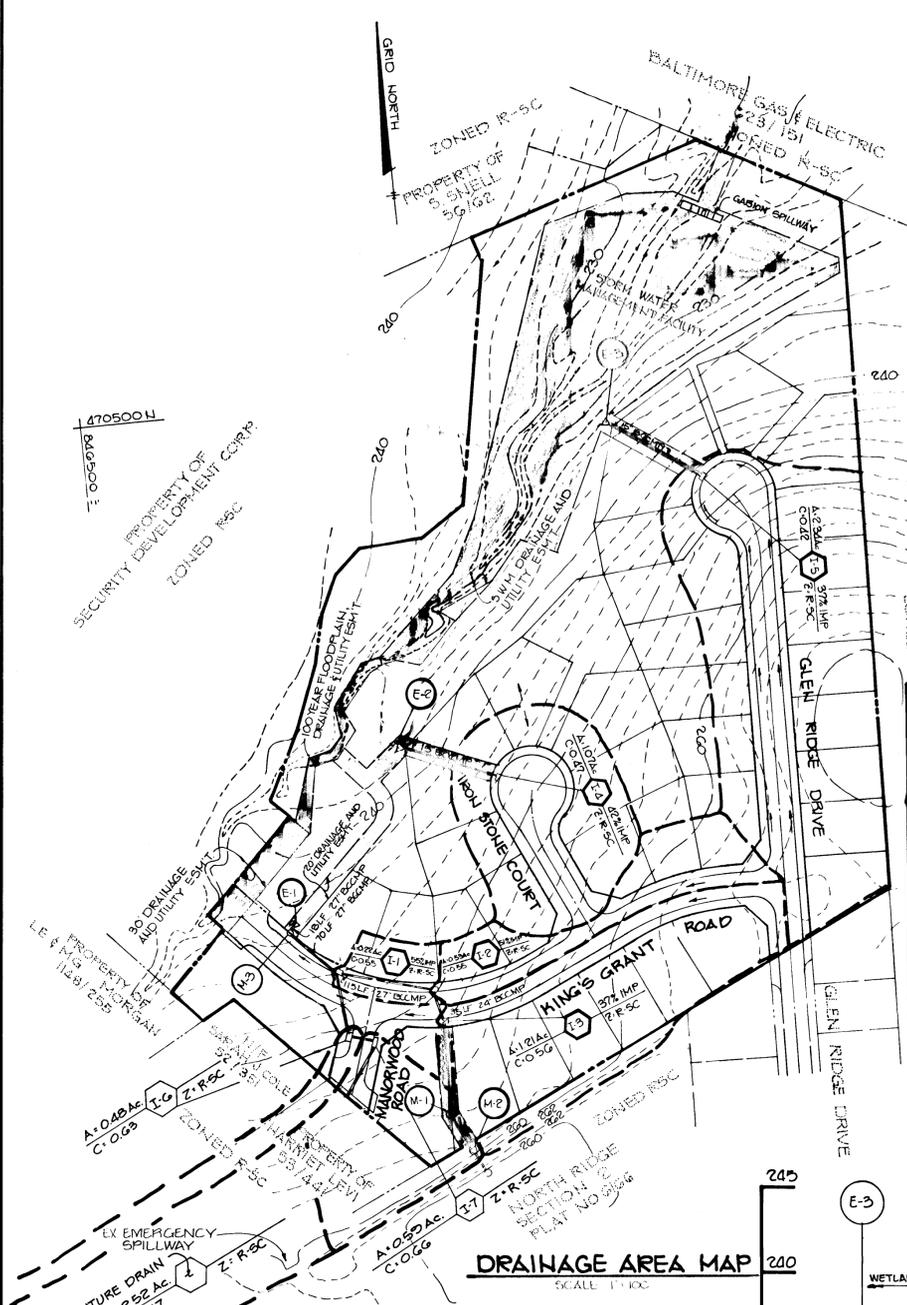
**DEVELOPER**  
SECURITY DEVELOPMENT CORP  
P.O. BOX 417  
ELLICOTT CITY, MARYLAND 21043

**TITLE PLAN AND PROFILE**  
DARDANIAN DRIVE, WILTSEDS WAY AND IRON STONE COURT  
DATE MAY 20, 1987  
DEC 9, 1987  
PROJECT NO 8724 RSD

**DES DAM** **DRN SAB** **SCALE AS SHOWN** **DRAWING 3 OF 8**

987

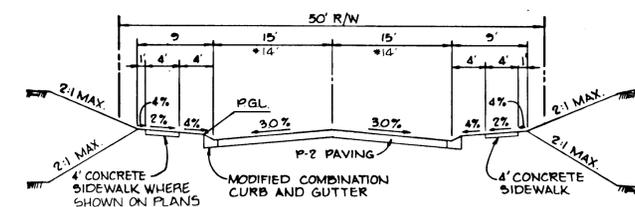
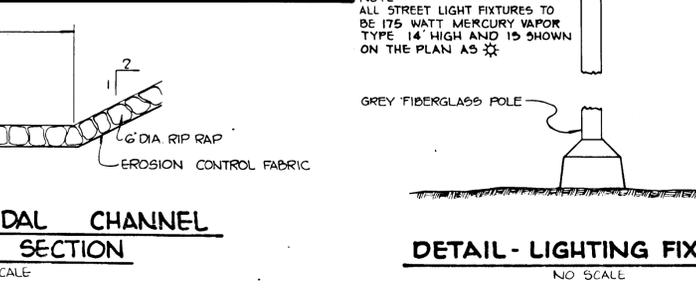
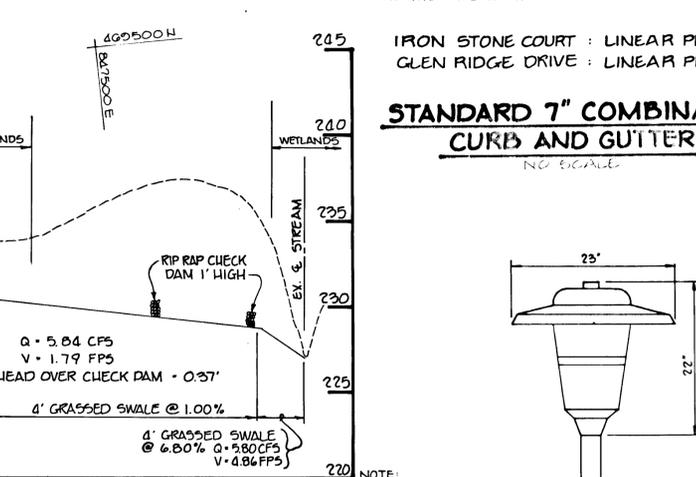
F-87-207



**PROFILE**  
SCALE: HOR. 1"=50'  
VERT. 1"=5'

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

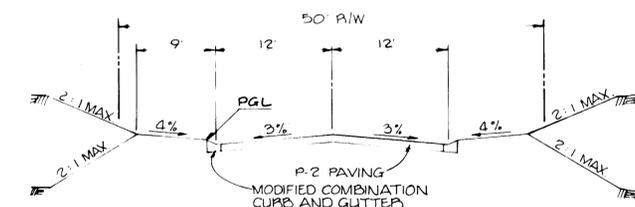
\* GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE  
ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED  
SECTIONS SHALL BE SLOPED AT THE SAME RATE  
AS THE PAVEMENT.



**TYPICAL SECTION**  
NO SCALE

KING'S GRANT ROAD : STA 0+40 TO STA 6+71.10  
GLEN RIDGE DRIVE : STA 16+8660 TO STA 18+20  
\* GLEN RIDGE DRIVE : STA 18+50 TO STA 22+22.82

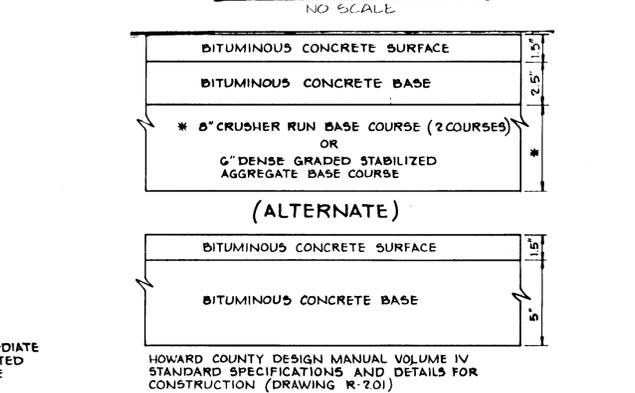
CLASSIFICATION : LOCAL ROAD  
DESIGN SPEED : 30 MPH  
ZONING : R5C



**TYPICAL SECTION**  
NO SCALE

IRON STONE COURT : STA 0+40 TO STA 1+15  
MANERWOOD ROAD : STA 0+00 TO STA 0+30

CLASSIFICATION : CUL DE SAC  
DESIGN SPEED : 30 MPH  
ZONING : R5C

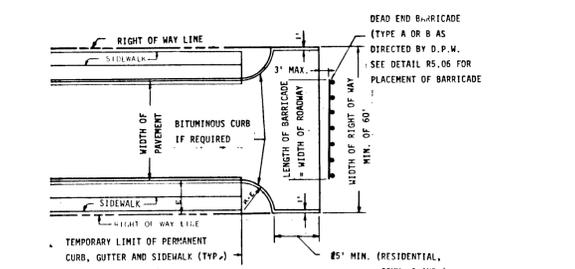
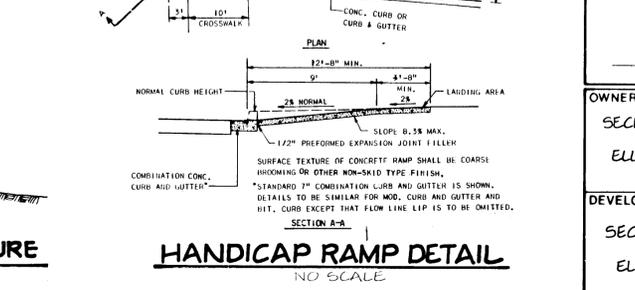
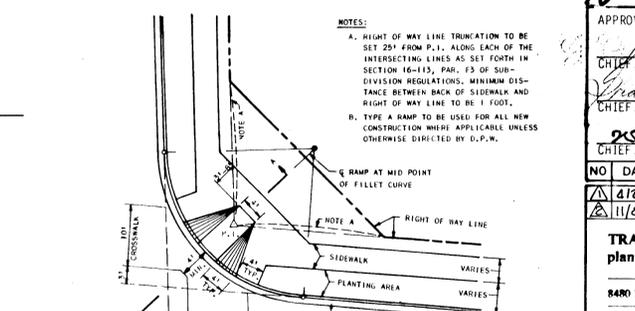


**MACADAM SIDEWALK DETAIL**  
NO SCALE

HOWARD COUNTY DESIGN MANUAL VOLUME IV  
STANDARD SPECIFICATIONS AND DETAILS FOR  
CONSTRUCTION (DRAWING R-7.01)

MANERWOOD ROAD  
KING'S GRANT ROAD  
IRON STONE COURT  
GLEN RIDGE DRIVE

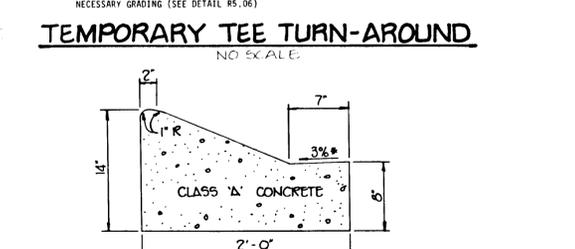
**6 1/2" PAVING, P-2**  
NO SCALE



**TEMPORARY TEE TURN-AROUND**  
NO SCALE

DEAD END BARRICADE  
(TYPE A OR B AS  
DIRECTED BY D.P.W.  
SEE DETAIL R5.06 FOR  
PLACEMENT OF BARRICADE

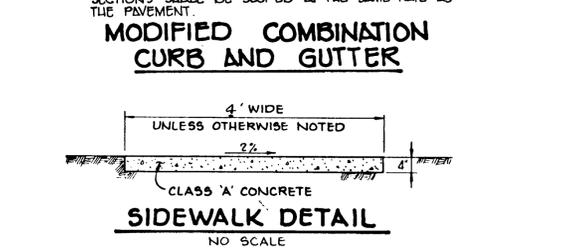
NOTES:  
1. A TEE TURN-AROUND SHALL BE USED IN LIEU OF A CUL-DE-SAC ONLY IF THE  
STREET IS TO BE EXTENDED IN THE FUTURE.  
2. BITUMINOUS CURB SHALL EXTEND AROUND THE TEE TURN-AROUND IF AND  
AS REQUIRED TO CONTROL CURB DRAINAGE FROM THE ROADWAY SECTION.  
3. REFER TO STANDARD R-5.06 FOR TYPICAL ROADWAY PROFILE OF TEMPORARY  
LIMIT OF PAVING.  
4. FOR LOCAL ROADS, PROVIDE 5' REVERTIBLE EASEMENT EACH END OF THE TEE.  
5. PROVIDE EASEMENTS AS REQUIRED FOR PLACEMENT OF BARRICADE AND ANY  
NECESSARY GRADING (SEE DETAIL R5.06)



**MODIFIED COMBINATION  
CURB AND GUTTER**

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 THE SUPERELEVATED  
SECTIONS SHALL BE SLOPED AT THE SAME RATE AS  
THE PAVEMENT.



**SIDEWALK DETAIL**  
NO SCALE

HOWARD COUNTY DESIGN MANUAL VOLUME IV  
STANDARD SPECIFICATIONS AND DETAILS FOR  
CONSTRUCTION (DRAWING R-7.01)

STRUCTURE SCHEDULE

NO.	TYPE	LOCATION	INV IN	INV OUT	TC ELEV	REMARKS
I-1	A-5	16.92' RT STA 5+73.22 KING'S GRANT ROAD	243.13	242.86	248.35	HO CO STD SD 4.01
I-2	A-5	16.92' RT STA 4+48.58 KING'S GRANT ROAD	244.53	244.28	249.59	HO CO STD SD 4.01
I-3	A-10	16.92' LT STA 4+35.21 KING'S GRANT ROAD	245.55	245.30	249.59	HO CO STD SD 4.02
I-4	A-5	1.92' LT LP STA 2+21.85 IRON STONE CT	--	242.80	248.64	HO CO STD SD 4.01
I-5	A-10	1.92' LT LP STA 23+41.15 GLEN RIDGE DRIVE	--	243.21	248.14	HO CO STD SD 4.02
M-1	4'-0" DIA MANHOLE	112' LT STA 4+48.58 KING'S GRANT ROAD SEE PLAN	252.48	252.27	*255.50	HO CO STD G 5.12
M-2	4'-0" DIA MANHOLE	38'00' RT @ STA 6+53 KING'S GRANT ROAD	--	240.30	--	HO CO STD SD 5.61
E-1	27" METAL END SECTION	126.92' LT LP STA 23+41.15 IRON STONE CT	--	235.68	--	HO CO STD SD 5.61
E-2	15" METAL END SECTION	131.92' LT LP STA 23+41.15 GLEN RIDGE DRIVE	--	230.92	--	HO CO STD SD 5.61
E-3	15" METAL END SECTION	20' RT @ STA 6+53 KING'S GRANT ROAD	240.98	240.78	*247.79	HO CO STD SD 5.13
I-G	A-10 W/DEFL	16.92' RT @ STA 0+40 MANERWOOD ROAD	244.33	243.83	250.17	HO CO STD SD 4.02
I-7	A-10 W/DEFL	16.92' LT @ STA 0+40 MANERWOOD ROAD	244.92	244.67	250.17	HO CO STD SD 4.02

\* ELEVATION AT RIM

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
*Howard County* 12/28/87 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Tracy Schulte* 12/23/87 DATE

CHIEF, LAND DEVELOPMENT DIVISION  
*Tracy Schulte* 12/23/87 DATE

CHIEF, BUREAU OF HIGHWAYS  
*Tracy Schulte* 12/23/87 DATE

CHIEF, BUREAU OF ENGINEERING  
*Tracy Schulte* 12/23/87 DATE

NO	DATE	REVISION
4/12/88		REVISED OUTLET @ E-1, ADDED GRASS SWALE
11/8/88		ADDED PROFILE I-1, I-G, I-7

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planning • architecture • engineering  
8480 Baltimore National Pike • Flicott City, Maryland 21043 • (301) 465-6105

OWNER: SECURITY DEVELOPMENT CORP.  
PO BOX 417  
ELICOTT CITY, MD 21043

DEVELOPER: SECURITY DEVELOPMENT CORP.  
PO BOX 417  
ELICOTT CITY, MD 21043

DES CDT: DPN JH

PROJECT: KING'S WOODS  
SECTION 1, AREA 1

LOCATION: TAX MAP NO. 47  
PARCEL NO. 756  
6TH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

TITLE: DRAINAGE AREA MAP  
AND DETAILS

DATE: MAY 28, 1987  
DEC 9, 1987

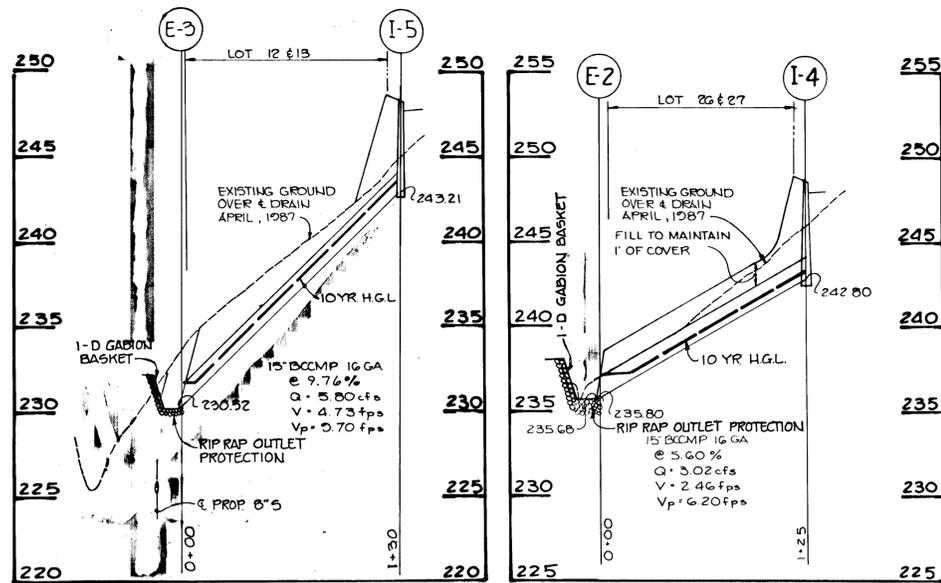
SCALE: AS SHOWN

PROJECT NO: 8724 RSD

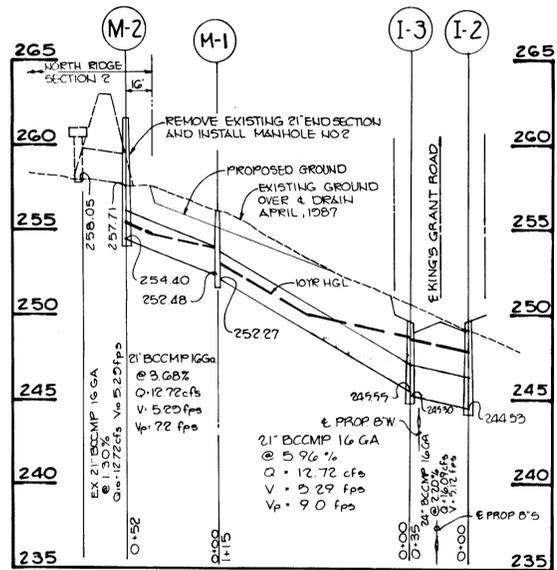
DRAWING: 4 OF 8

987

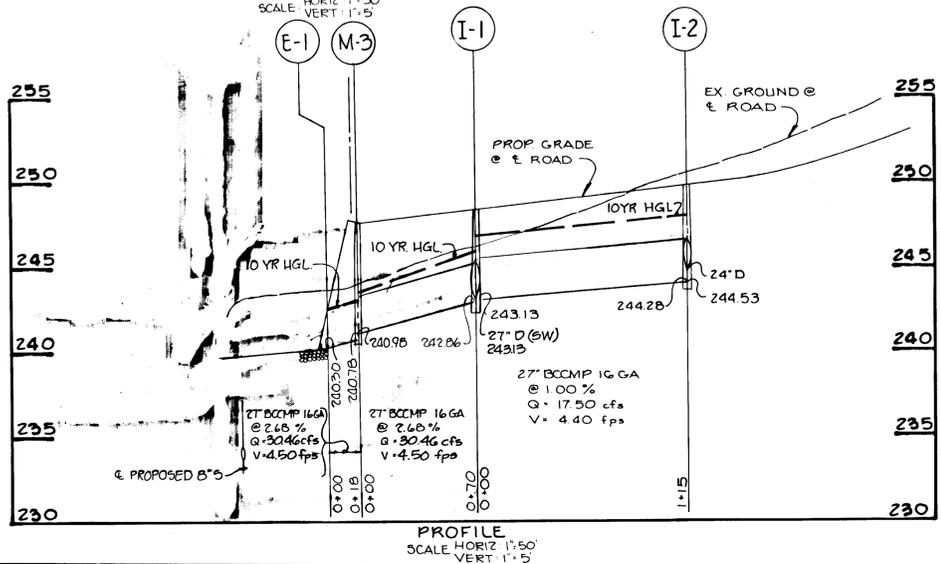




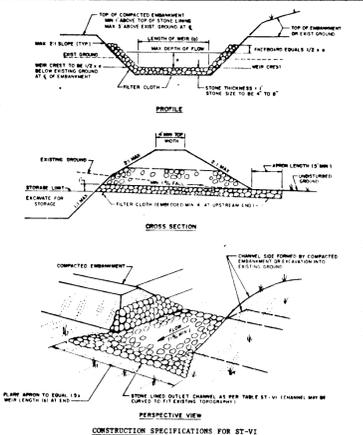
PROFILES  
SCALE HORIZ 1"=50'  
VERT 1"=5'



PROFILE  
SCALE HORIZ 1"=50'  
VERT 1"=5'



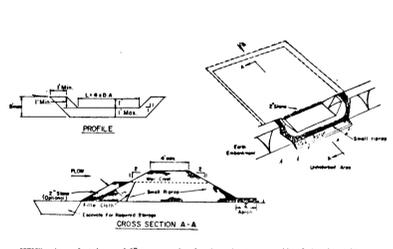
PROFILE  
SCALE HORIZ 1"=50'  
VERT 1"=5'



INLET PROTECTION DETAIL  
NO SCALE

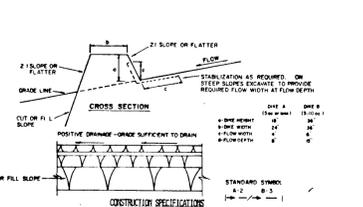
- SEDIMENT CONTROL NOTES**
- A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTIONS AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION (920-2437).
  - ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
  - FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DICES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, BY 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
  - 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.
  - 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 SEEDING (Sec. 33) SOIL (Sec. 34), TEMPORARY SEEDING (Sec. 35) AND MULCHING (Sec. 52). TEMPORARY STABILIZATION WITH MULCH ALONG CAN ONLY BE DONE WITH UNACCEPTED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
  - ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
  - SITE ANALYSIS:**  
TOTAL AREA OF SITE: 15.00 ACRES  
AREA DISTURBED: 6.00 ACRES  
AREA TO BE ROOFED OR PAVED: 1.00 ACRES  
AREA TO BE VEGETATIVELY STABILIZED: 2.00 ACRES  
TOTAL CUT: 6000 CU. YDS.  
TOTAL FILL: 1000 CU. YDS.  
OFFSITE WASTE/DRAINAGE AREA LOCATION: N/A
  - ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
  - ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
  - 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.
- PERMANENT SEEDING NOTES**
- SEEDING 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:
- PREFERRED - APPLY 2 TONS PER ACRE AGRICULTURAL LIMESTONE (92 1bw/1000 sq ft) AND 500 LBS PER ACRE 10-10-10 FERTILIZER (14 1bw/1000 sq ft) BEFORE SEEDING. BROADCAST OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 500 LBS PER ACRE 30-0-00 OSMOTIC FERTILIZER (14 1bw/1000 sq ft).
  - ACCEPTABLE - APPLY 2 TONS PER ACRE AGRICULTURAL LIMESTONE (92 1bw/1000 sq ft) AND 1000 LBS PER ACRE 10-10-10 FERTILIZER (23 1bw/1000 sq ft) BEFORE SEEDING. BROADCAST 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 1bw/1000 sq ft) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JUNE 31, SEED WITH 60 LBS PER ACRE (1.4 1bw/1000 sq ft) OF TALL FESCUE. FOR THE PERIOD FEBRUARY 16, SEED WITH 3 LBS PER ACRE OF WHEATING LOUPOSSAS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 15, PREPARE 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 SOIL. OPTION (3) SEED WITH 60 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.
- MULCHING - APPLY 15 TO 2 TONS PER ACRE (15 TO 30 1bw/1000 sq ft) OF UNROOTED SMALL DRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE (5 gal/1000 sq ft) OF IMPROVED ASPHALT OR FLAT AREAS. ON SLOPES, 8 FT OR GREATER, USE 360 GAL PER ACRE (9 gal/1000 sq ft) OF IMPROVED ASPHALT OR FLAT AREAS. ON SLOPES, 8 FT OR GREATER, USE 360 GAL PER ACRE (9 gal/1000 sq ft) OF IMPROVED ASPHALT OR FLAT AREAS.
- 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 UNDER A SHORT TERM VEGETATIVE COVER IS NEEDED.
- SEEDING 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 1bw/1000 sq ft).
- SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM NOVEMBER 15 THRU NOVEMBER 15, SEED WITH 75 LBS PER ACRE OF ANNUAL RYE (3.2 1bw/1000 sq ft). FOR THE PERIOD MAY 1 THRU AUGUST 15, SEED WITH 3 LBS PER ACRE OF WHEATING LOUPOSSAS (0.7 1bw/1000 sq ft). FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 15, PREPARE SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOIL.
- MULCHING - APPLY 15 TO 2 TONS PER ACRE (15 TO 30 1bw/1000 sq ft) OF UNROOTED SMALL DRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE (5 gal/1000 sq ft) OF IMPROVED ASPHALT OR FLAT AREAS. ON SLOPES, 8 FT OR GREATER, USE 360 GAL PER ACRE (9 gal/1000 sq ft) OF IMPROVED ASPHALT OR FLAT AREAS.
- REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PATH AND METHODS NOT LISTED.

RIPRAP OUTLET TRAP DETAIL  
NO SCALE



STABILIZED CONSTRUCTION ENTRANCE  
NO SCALE

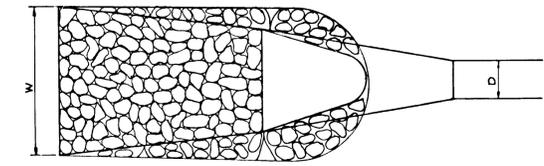
STONE OUTLET DETAIL  
NO SCALE



EARTH DIKE DETAIL  
NO SCALE

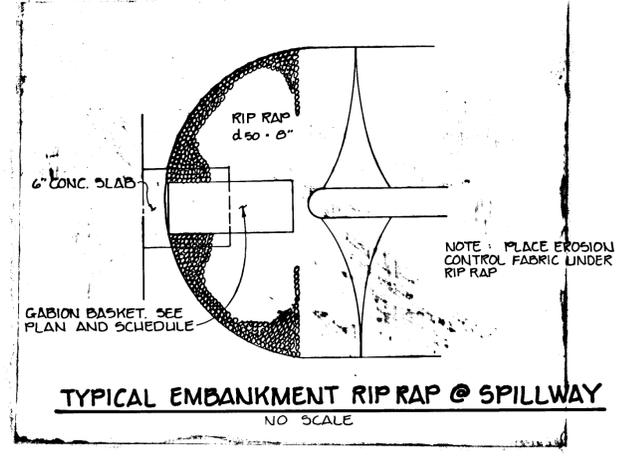


SECTION



STRUCTURE	d - 50	LENGTH (L)	WIDTH (W)	THICKNESS (T)
E-1	0.5	12	14	113
E-2	0.5	10	12	113
E-3	0.5	10	12	113

OUTLET PROTECTION DETAIL  
NO SCALE



TYPICAL EMBANKMENT RIPRAP @ SPILLWAY  
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. Moly* 12-15-87 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. Swaney* 12-15-87 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.  
*James M. Helm* 12-17-87 DATE  
U.S. SOIL CONSERVATION SERVICE

APPROVED: *Robert Ziehm* 12-17-87 DATE  
HOWARD COUNTY  
APPROVED: *Joseph R. Smith* 12/28/87 DATE  
DEPARTMENT OF PLANNING AND ZONING ADMINISTRATION

APPROVED: *Michael F. F.* 12-21-87 DATE  
CHIEF, LAND DEVELOPMENT DIVISION  
*William W. Hillcoat* 12/23/87 DATE  
CHIEF, BUREAU OF HIGHWAYS  
*William R. Ray* 12-23-87 DATE  
CHIEF, BUREAU OF ENGINEERING

NO	DATE	REVISION
4/20/88		REVISE STORMDRAIN PROFILE, ADDED TYPICAL EMBANKMENT PROFILE
11/8/88		REVISE Q'S E-1 TO I-1

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

OWNER: SECURITY DEVELOPMENT CORP. PO BOX 417, ELLICOTT CITY, MD 21043  
PROJECT: KING'S WOODS SECTION 1, AREA 1  
LOCATION: TAX MAP NO. 47 PARCEL NO. 756 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
DEVELOPER: SECURITY DEVELOPMENT CORP. PO BOX 417, ELLICOTT CITY, MD 21043  
TITLE: SEDIMENT CONTROL NOTES AND DETAILS AND STORM DRAIN PROFILES  
DATE: MAY 28, 1987 PROJECT NO 8724 RSD  
DEC. 9, 1987  
DES CDT: DRN JH/SAB SCALE AS SHOWN DRAWING G OF B



*James K. Swaney*

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 of the equipment or compaction shall be achieved by a minimum of four complete passes of a sheepfoot, 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, Plastri-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 ANWA Specification C-301.

2. Bedding - All reinforced concrete 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

- Cement - Normal Portland cement shall conform to the latest ASTM Specification C-150.
- Water - The water used in concrete shall be clean, free from oil, acid alkali, scales, organic matter or other objectionable substances.
- 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.
- 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 (1-1/2) inches.
- 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 by weight. The water-cement ratio shall be 5-4 to 6 U.S. Gallons of water per 94 pound bag of cement. The proportion of materials for the trial mix shall be 1:2:3-4. 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 supplemented 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.

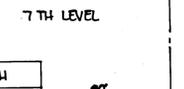
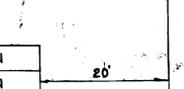
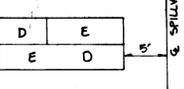
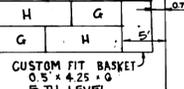
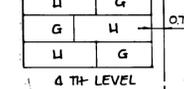
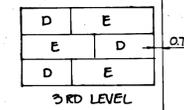
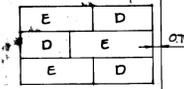
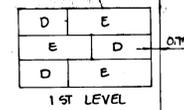
VI. STABILIZATION

All borrow areas shall be graded to provide proper drainage and left in a slightly 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

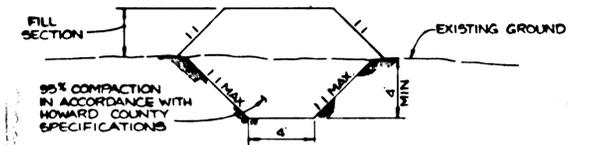
Construction operations will be carried out in such a manner that erosion will be controlled and water and air pollution minimized. State and local laws concerning pollution abatement will be followed. Construction plans shall detail erosion and sediment control measures to be employed during the construction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

TYPE	DIMENSION			QUANTITY
	WEIGHT	WIDTH	LENGTH	
D	1.5'	3'	6'	22
E	1.5'	3'	9'	22
G	1.0'	3'	6'	10
H	1.0'	3'	9'	18



GABION PLAN

SCALE 1" = 10'  
TYPICAL EACH SIDE OF E. SPILLWAY



CORE TRENCH SECTION  
NO SCALE

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  
ENGINEER: JAMES K. TRACY 12-15-87 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. M. Kelly, Jr.  
DEVELOPER: JAMES R. M. KELLY, JR. 12-15-87 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.

James M. Nelson  
U.S. SOIL CONSERVATION SERVICE 12-17-87 DATE

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

Robert W. Ziehm  
APPROVED: ROBERT W. ZIEHM 12-17-87 DATE  
HOWARD S.C.D.

Howard County Office of Planning and Zoning  
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING 12/20/87 DATE  
OFFICE OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

Howard County Department of Public Works  
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS 12-11-87 DATE  
CHIEF, LAND DEVELOPMENT DIVISION

Lawrence H. Williams  
APPROVED: LAWRENCE H. WILLIAMS 12/23/87 DATE  
CHIEF, BUREAU OF HIGHWAYS

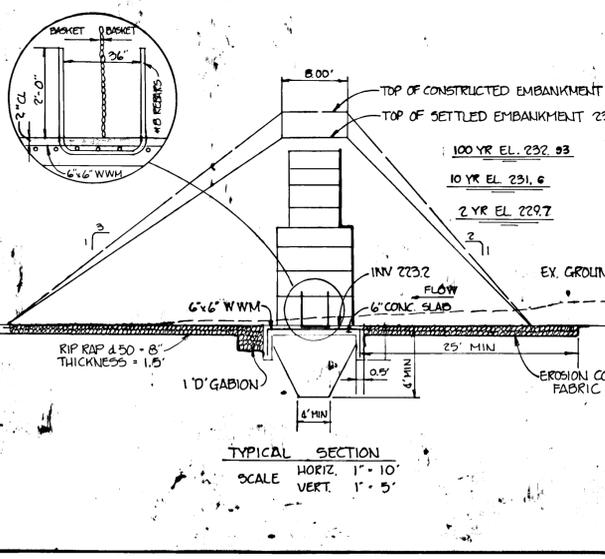
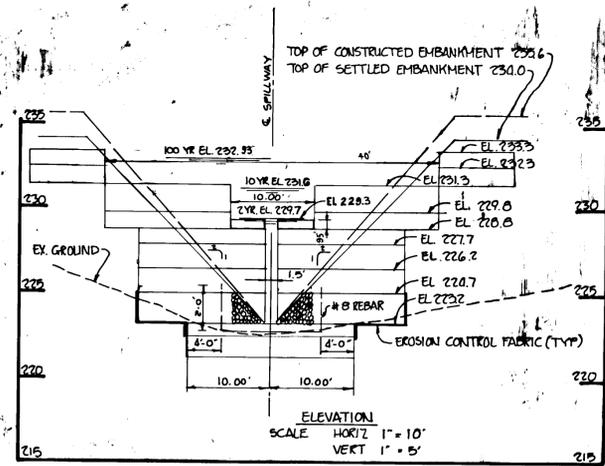
William J. Ray  
APPROVED: WILLIAM J. RAY 12-23-87 DATE  
CHIEF, BUREAU OF ENGINEERING

4/11/88	REVISE SWM STRUCTURE	
4/20/88	REVISE SWM STRUCTURE	
NO	DATE	REVISION

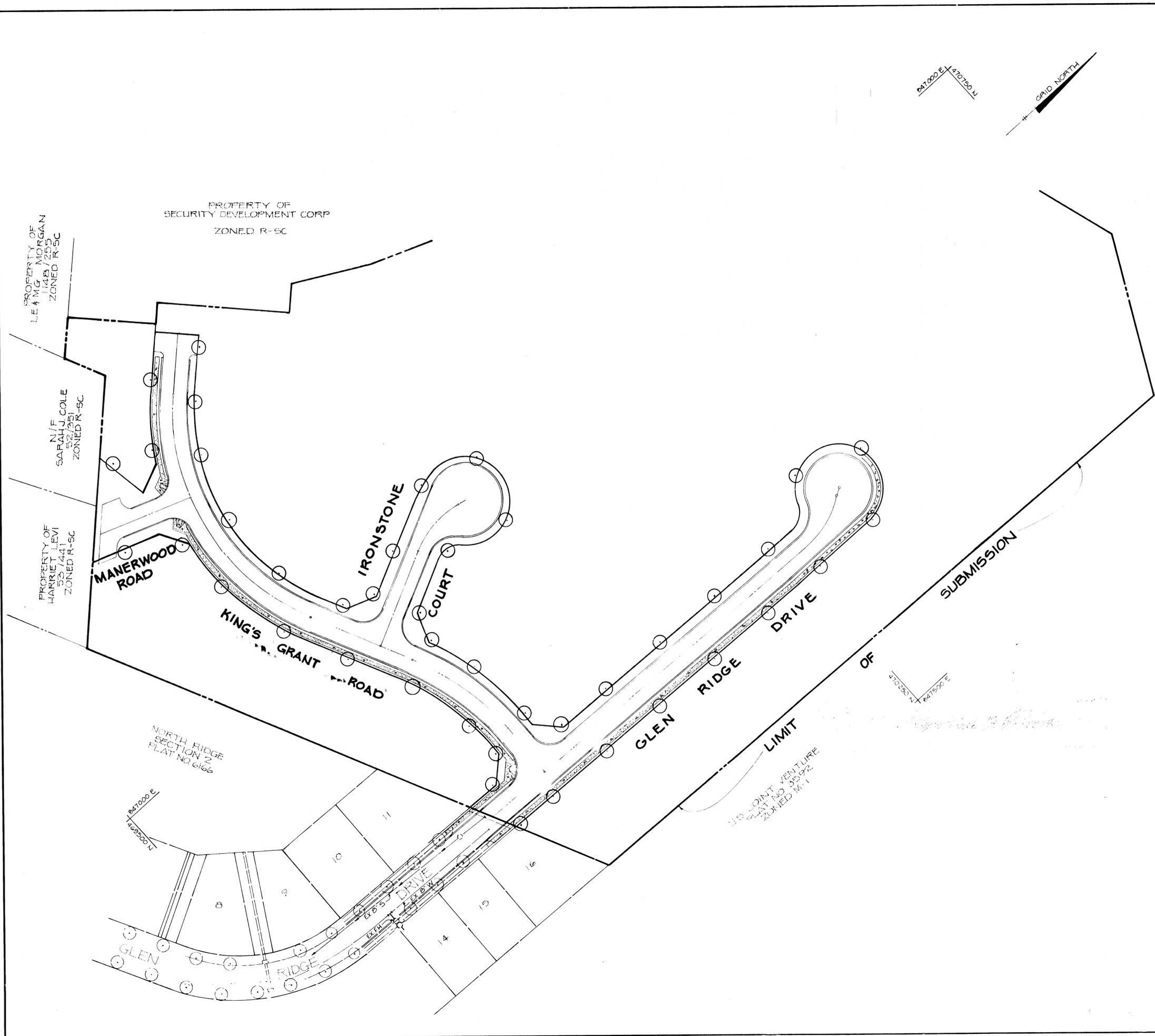
TRACY, SCHULTZ & ASSOCIATES INC.  
planning • architecture • engineering  
8050 BALTIMORE NATIONAL PIKE, SUITE 54 • ELICOTT CITY, MARYLAND 21045 (301) 465-6105



OWNER: SECURITY DEVELOPMENT CORP. PO BOX 417, ELLICOTT CITY, MD 21043  
PROJECT: KING'S WOODS SECTION 1, AREA 1  
LOCATION: TAX MAP NO. 47, PARCEL NO. 756, 6TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
DEVELOPER: SECURITY DEVELOPMENT CORP. PO BOX 417, ELLICOTT CITY, MD 21043  
TITLE: STORM WATER MANAGEMENT SPECIFICATIONS AND DETAILS  
DATE: MAY 28, 1987 / DEC. 9, 1987  
PROJECT NO: 8724 RSD  
DES: JKT ORN: SWS SCALE: AS SHOWN DRAWING: 7 OF 8



987

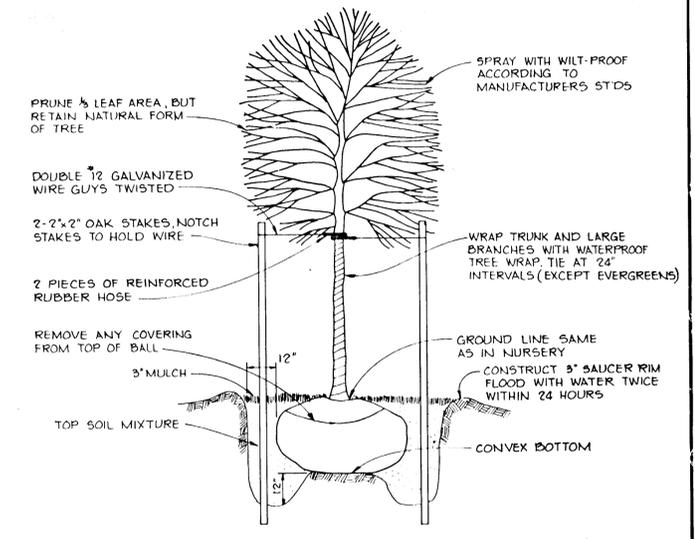


PLANT LIST			
SYMBOL	QUANTITY	NAME	REMARKS
○		ACER RUBRUM Red Maple	2 1/2 Min. Cal Ø 4 B FULL HEAD
○		GLEDITSIA TRIANCANTHOS INERMIS Thornless Honey Locust	
○		PLATANUS ACERIFOLIA London Planetree	
<b>TOTAL</b>	<b>43</b>		

EX STREET TREE INSTALLED UNDER F&G-50

LENGTH OF PROPOSED ROADS = 1396 + 40 + 2490'  
 LENGTH OF LINEAR PROFILES = 588 + 80 + 735'

TOTAL REQUIRED 4225  
 TOTAL PROVIDED 43



**TREE PLANTING DETAIL**  
NO SCALE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING <i>Joseph Rauten</i> 12/28/87	DATE
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS <i>Wendell K. F.</i> 12/11/87	DATE
CHIEF, LAND DEVELOPMENT DIVISION <i>Dravitch W. Johnson</i>	DATE
CHIEF, BUREAU OF HIGHWAYS <i>William B. Riley</i> 12-23-87	DATE
CHIEF, BUREAU OF ENGINEERING	DATE
NO. DATE	REVISION

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

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*Tracy Schulte*

OWNER SECURITY DEVELOPMENT CORP PO BOX 417 ELLICOTT CITY MD 21043	PROJECT <b>KING'S WOODS</b> SECTION 1 AREA 1
DEVELOPER SECURITY DEVELOPMENT CORP PO BOX 417 ELLICOTT CITY MD 21043	LOCATION TAX MAP NO. 47 PARCEL NO. 756 6 <sup>TH</sup> ELECTION DISTRICT HOWARD COUNTY MARYLAND
DES CDT DRN JH	TITLE <b>PLANTING PLAN</b>
DATE MAY 20, 1987 DEC. 9, 1987	PROJECT NO 8724 R0D
SCALE 1"=50'	DRAWING 8 OF 8

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