

SHEET INDEX	
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3	SITE DEVELOPMENT PLAN
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5	GRADING AND SEDIMENT CONTROL PLAN
6	DETAIL SHEET

# SITE DEVELOPMENT PLAN

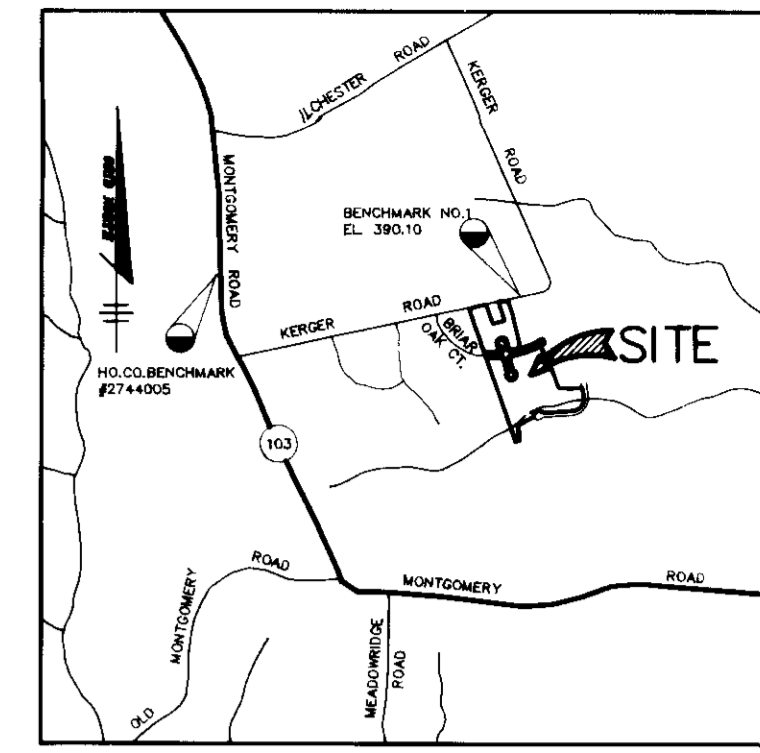
# SUNNY FIELD ESTATES

## SECTION 1

## LOTS 47 - 66

## HOWARD COUNTY, MARYLAND

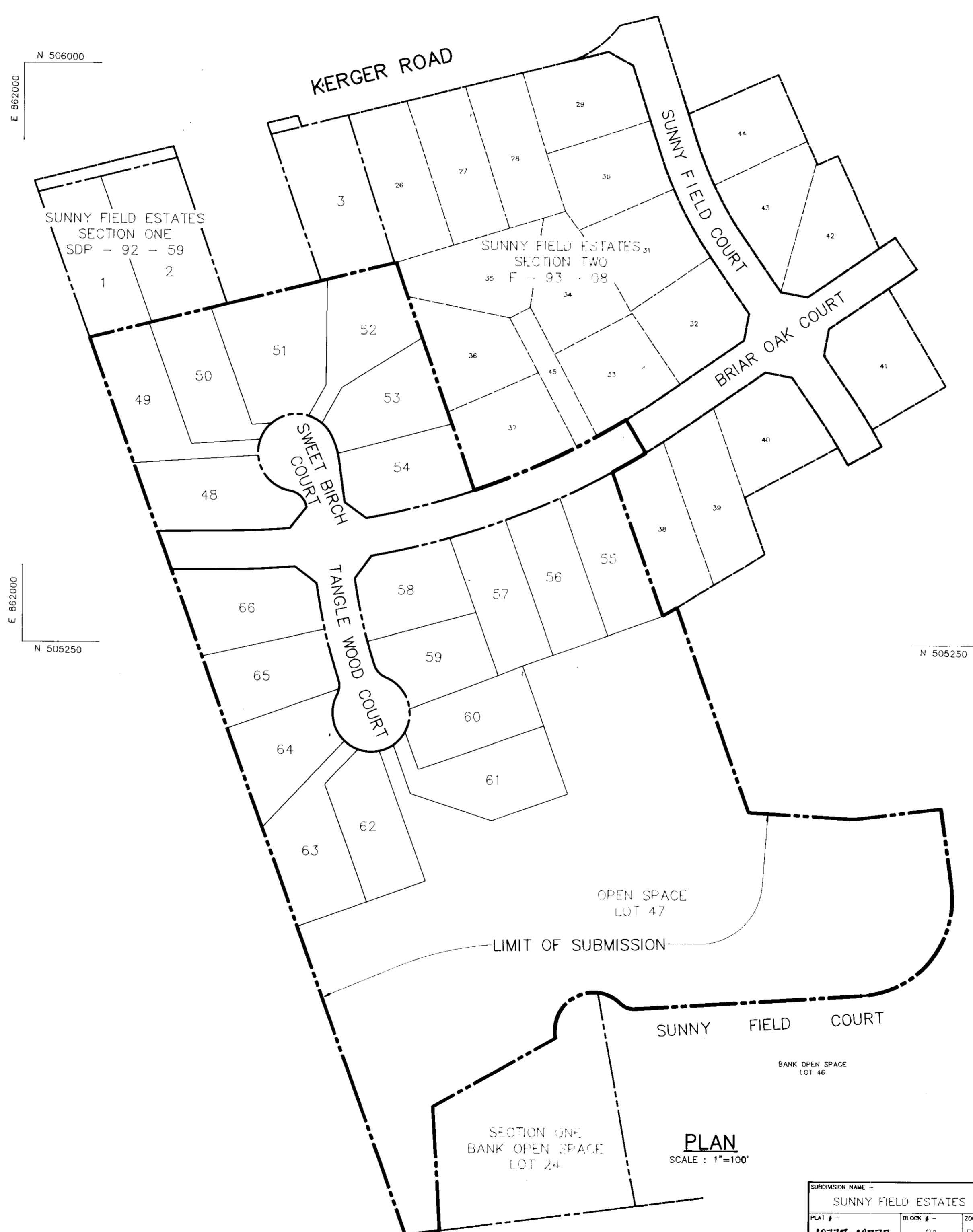
**BENCH MARK**  
 B.M. #1 LL. 390.10  
 TOP OF BONNET BOLT ON EXISTING FIRE HYDRANT, NORTH SIDE OF KERGER ROAD  
 C.L. STATION 3+24.



**VICINITY MAP**  
SCALE: 1"=2,000'

**GENERAL NOTES**

- THE WETLAND / STREAM BUFFERS SHOWN ON THESE PLANS DO NOT AFFECT THE INITIAL CONSTRUCTION OF A RESIDENTIAL UNIT ON ANY LOT. IT DOES PROHIBIT SUBSEQUENT CLEARING, GRADING OR CONSTRUCTION IN THE BUFFER AREA. MAINTENANCE OF RESIDENCES, LANDSCAPING AND UTILITIES IS PERMITTED.
- ALL WATER LINES SHALL BE CONSTRUCTED A MINIMUM OF 42" COVER BELOW FINISHED GRADE.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, 1-4, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, 1990 AMENDMENTS.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FROM BEST AVAILABLE INFORMATION. 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 AT LEAST (5) DAY BEFORE STARTING WORK SHOWN ON THESE DRAWINGS TO VERIFY THEIR LOCATION AND ELEVATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF LOCATION OF UTILITIES IS OTHER THAN SHOWN.
- CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS:  
 C&P TELEPHONE COMPANY 725-9976  
 HOWARD COUNTY BUREAU OF UTILITIES 313-4900  
 AT&T CABLE LOCATION DIVISION 393-3553  
 BALTIMORE GAS & ELECTRIC COMPANY 685-0123  
 STATE HIGHWAY ADMINISTRATION 531-5531  
 HOWARD COUNTY BUREAU OF CONSTRUCTION INSPECTION 345-1000  
 DIVISION (24 HOURS NOTICE PRIOR TO COMMENCEMENT OF WORK)
- THE CONTRACTOR TO NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- EX. TOPO IS PROPOSED GRADING TAKEN FROM F-89-232 PREPARED BY AMERICAN ENGINEERING, INC. AND IS AT 2 FOOT INTERVALS.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS AND/OR RIGHTS-OF-WAY THAT MAY BE REQUIRED FOR THE SEDIMENT AND EROSION CONTROL PRACTICES, STORM WATER MANAGEMENT PRACTICES AND THE DISCHARGE OF STORM WATER ONTO OR ADJACENT OR DOWNSTREAM PROPERTIES INCLUDED IN THIS PLAN. HE IS ALSO RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS AND/OR WORK ON ADJACENT PROPERTIES INCLUDED IN THIS PLAN.
- SEE DEPARTMENT OF PLANNING AND ZONING FILE No. 's WP-89-184, S-89-06, P-89-52, F-89-232, F-93-08, F-93-69, AND WP-91-153.
- F-89-232 WAS APPROVED BY THE HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING ON FEBRUARY 6, 1990.
- STORMWATER MANAGEMENT IS PROVIDED FOR THIS DEVELOPMENT UNDER F-89-232 AND IT IS A RETENTION FACILITY.
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- PUBLIC WATER AND SEWER FOR THESE LOTS IS PROVIDED UNDER CONTRACT DRAWINGS NO. 14-1975-D, WHICH WERE APPROVED ON MARCH, 1993.
- WP-89-184 IS A WAIVER FOR EXCEEDING THE ALLOWABLE 1200 FEET LENGTH FOR A CUL-DE-SAC STREET. THE WAIVER WAS APPROVED FOR SUNNY FIELD COURT.
- WP-91-153 IS A WAIVER TO EXTEND APPROVAL OF THE FINAL PLANS AND IT WAS APPROVED ON MAY 16, 1991.
- ALL FIREPLACE CHIMNEYS AND BAY WINDOWS NOT MORE THAN 10 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY REQUIRED YARD IN ACCORDANCE WITH SECTION 12B OF THE ZONING REGULATIONS.



ADDRESS CHART		
LOT NUMBER	STREET ADDRESS	
48	5301	SWEET BIRCH COURT
49	5305	SWEET BIRCH COURT
50	5309	SWEET BIRCH COURT
51	5312	SWEET BIRCH COURT
52	5308	SWEET BIRCH COURT
53	5304	SWEET BIRCH COURT
54	5300	SWEET BIRCH COURT
55	5316	BRIAR OAK COURT
56	5350	BRIAR OAK COURT
57	5354	BRIAR OAK COURT
58	5301	TANGLE WOOD COURT
59	5305	TANGLE WOOD COURT
60	5309	TANGLE WOOD COURT
61	5313	TANGLE WOOD COURT
62	5316	TANGLE WOOD COURT
63	5310	TANGLE WOOD COURT
64	5308	TANGLE WOOD COURT
65	5304	TANGLE WOOD COURT
66	5300	TANGLE WOOD COURT
47	NA	OPEN SPACE

SHC CHART		
LOT NO.	MCE	INV @ PL
48	368.10	363.40
49	371.13	364.20
50	369.52	364.20
51	368.04	363.44
52	369.00	363.40
53	367.75	363.20
54	357.23	353.60
55	360.41	355.20
56	360.05	354.80
57	359.52	354.50
58	356.81	352.50
59	355.58	351.30
60	352.30	347.90
61	354.13	347.90
62	352.60	347.40
63	351.40	350.34
64	350.34	346.64
65	357.23	352.10
66	357.69	352.89

**SITE ANALYSIS**

TOTAL AREA OF SECTION ONE	14.338 Ac.
EXISTING ZONING	R-20
PROPOSED USE	SINGLE FAMILY DETACHED HOMES
NO. OF DWELLING UNITS ALLOWED	70 (per 1,3,15)
NO. OF DWELLING UNITS PROPOSED	19 (per 1)
DENSITY PER ACRE	1.33 UNITS/AC.
LOT COVERAGE PERMITTED	30%
MAXIMUM LOT COVERAGE PROPOSED	25.6% (LOT 59)
OPEN SPACE PROVIDED	6.41 Ac. (LOT 47)
AREA OF TRACT WITHIN 100 YEAR FLOODPLAIN AND STEEP SLOPES	3.57 Ac.
AREA OF TRACT WITHIN WETLANDS AND STORMWATER MANAGEMENT	0.40 Ac.
NET AREA	32.17 Ac.
OPEN SPACE REQUIRED	6.31 Ac.
OPEN SPACE PROVIDED	7.22 Ac.
DRY GROUND RECREATION REQUIRED	3.15 Ac. (50%)
DRY GROUND RECREATION PROVIDED	3.25 Ac. (51.5%)

**MINIMUM LOT SIZE CHART**

LOT NO.	GROSS AREA	MINUS FLOODPLAIN/ 25% SLOPE AREA	MINUS PIPESTEM AREA	MINIMUM LOT AREA
49	15857	0	1720	14137
50	14454	0	315	14139
52	15005	0	923	14082
61	16024	0	918	15106
63	15613	0	1296	14317

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

*[Signature]* 4/20/93  
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

*[Signature]* 4/23/93  
 DIRECTOR DATE

*[Signature]* 4/22/93  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

*[Signature]* 4/15/93  
 DIRECTOR DATE

*[Signature]* 4-15-93  
 CHIEF, BUREAU OF ENGINEERING DATE

DATE	NO.	REVISION

**OWNER / DEVELOPER**  
 R.G.M. DEVELOPMENT CORPORATION  
 c/o KOREN DEVELOPMENT CORPORATION  
 8815 CENTRE PARK DRIVE  
 SUITE 304  
 COLUMBIA, MARYLAND 21045  
 410-740-1010

**PROJECT**  
**SUNNY FIELD ESTATES**  
 SECTION 1, LOTS 47 - 66

**AREA**  
 SECTION 1 ZONED R-20  
 TAX MAP NO. 31 PARCELS 58 & 757  
 1st ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

**TITLE**  
**TITLE SHEET**

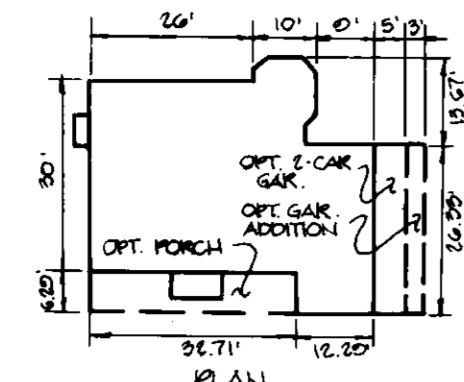
**RIEMER MUEGGE & ASSOCIATES, INC.**  
 PLANNING, ENGINEERING AND SURVEYING  
 8818 Centre Park Drive • Suite 200 • Columbia, Md 21045  
 410-997-8900 FAX: 410-997-9282

3-23-93  
 DATE

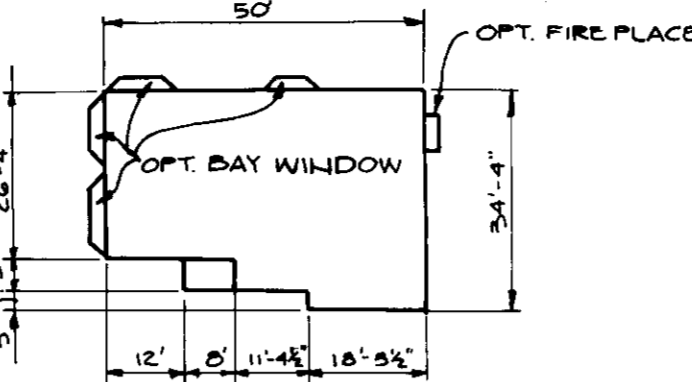
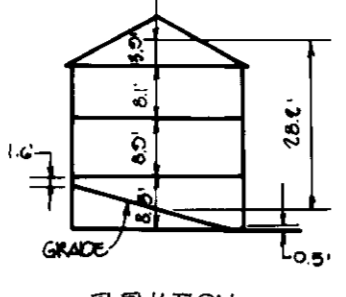
DESIGNED BY: W.C.W.  
 DRAWN BY: W.C.W.  
 PROJECT NO: 79707  
 DATE: MARCH 23, 1993  
 SCALE: AS SHOWN  
 DRAWING NO. 1 OF 6

*[Professional Engineer Seal]*  
 ARTHUR E. MUEGGE 18707

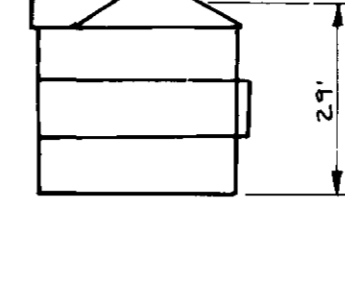
DIVISION NAME - SUNNY FIELD ESTATES		SECT./AREA - 1	PARCELS - LOTS 47 - 66
PART # - 10772-10777	BLOCK # - 21	ZONING - R-20	TAX MAP NO. - 31
ELECT. DIST. - FIRST		CENSUS TRACT - G011.01	
WATER CODE - D.03		SEWER CODE - 2155000	



HOUSE TYPE 'H' - JUSTIN GABRIEL  
NO SCALE



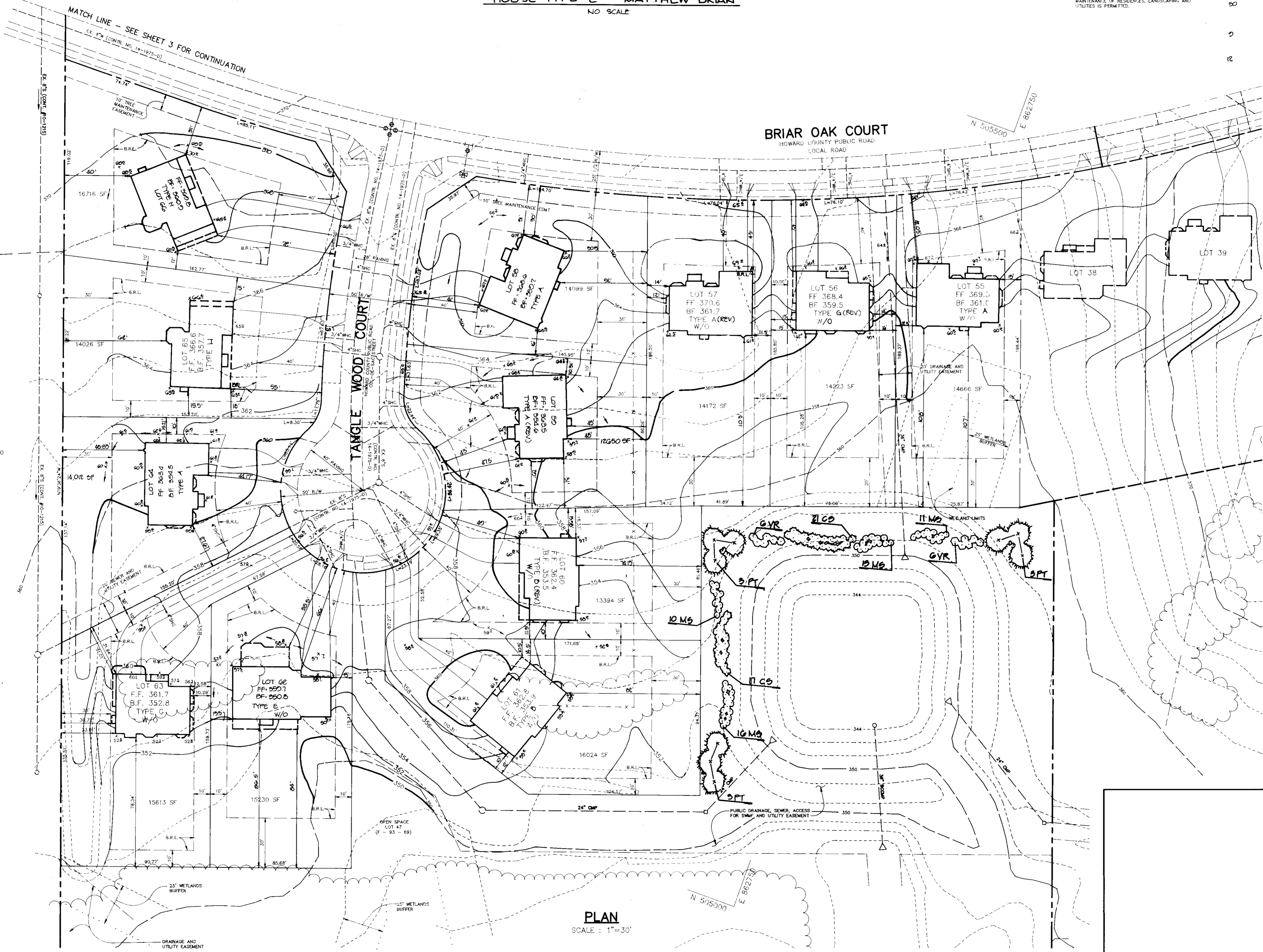
HOUSE TYPE 'L' - MATTHEW BRIAN  
NO SCALE



- NOTES:**
- B.R.L. - DENOTES BUILDING RESTRICTION LINE.
  - FOR HOUSE DIMENSIONS AND ELEVATIONS SEE SHEET 6.
  - W.O. - DENOTES WALK OUT.
  - THE WETLAND / STREAM BUFFER INDICATED ON THIS PLAN DOES NOT AFFECT THE INITIAL CONSTRUCTION OF A RESIDENTIAL UNIT ON ANY LOT. IT DOES PROHIBIT SUBSEQUENT CLEARING, GRADING OR CONSTRUCTION IN THE BUFFER AREA. MAINTENANCE OF RESIDUES, LANDSCAPING AND UTILITIES IS PERMITTED.

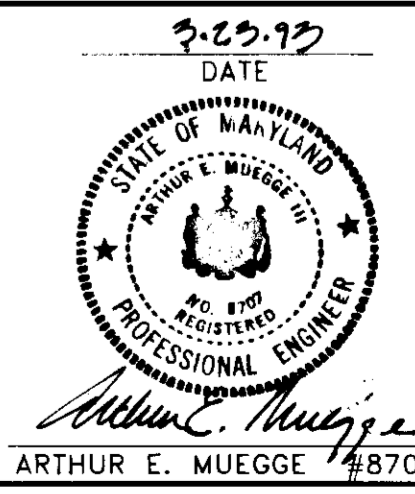
**PLANT LIST**

QUANTITY	KEY	NAME	SIZE	REMARKS
28	C5	CORNUS SCORICA REDDOWER COGWOOD	20'-30' HT.	CONT.
50	M5	MISCANTHUS SINENSIS "SILVER FEEDER"	9 GAL.	
9	PT	PNUS THUNDERGIANA JAPANESE BLACK PINE	5'-6' HT.	0 & D
12	VR	VIORNIUM RHYTHOPHYLLUM "WILLOWOOD"	20'-30' HT.	D & D OR CONT.
		LEATHERLEAF VIORNIUM		



PLAN  
SCALE: 1"=30'

4-10-94	G	REV. HOUSE TYPE LOT 50
1-25-94	B	REV. HOUSE TYPE LOT 66
11-25-93	A	REV. HOUSE TYPE FOR LOT 65
7-14-93	B	REV. HOUSE TYPES FOR LOTS 55, 59, 60 & 62
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.		
<i>Joyan Boyd</i>	4/20/93	DATE
COUNTY HEALTH OFFICER		
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.		
<i>Joseph Smith</i>	4/23/93	DATE
DIRECTOR		
<i>Emma Blomath</i>	4/23/93	DATE
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT -3A		
APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.		
<i>Thomas M. Shaw</i>	4/15/93	DATE
DIRECTOR		
<i>James E. Rose</i>	4-15-93	DATE
CHIEF, BUREAU OF ENGINEERING		
6-14-93	E	REV. HOUSE TYPES FOR LOTS 50 & 64
5-20-93	I	REV. HOUSE TYPES FOR LOTS 57 & 58
DATE NO.		REVISION
OWNER / DEVELOPER		
R.G.M. DEVELOPMENT CORPORATION c/o KOREN DEVELOPMENT CORPORATION 8815 CENTRE PARK DRIVE SUITE 304 COLUMBIA, MARYLAND 21045 410-740-1010		
PROJECT <b>SUNNY FIELD ESTATES</b> SECTION 1, LOTS 47 - 66		
AREA SECTION 1 ZONED R-20 TAX MAP NO. 31 PARCELS 58 & 75; 1st ELECTION DISTRICT, HOWARD COUNTY, MARYLAND		
TITLE <b>SITE DEVELOPMENT PLAN</b> LOTS 55 - 66		
RIEMER MUEGGE & ASSOCIATES, INC. PLANNING, ENGINEERING AND SURVEYING 8818 Centre Park Drive • Suite 200 • Columbia, Md 21045 410-997-8900 FAX: 410-997-9282		



3-23-93  
DATE

DESIGNED BY: W.C.W.  
DRAWN BY: W.C.W.  
PROJECT NO: 79707  
DATE: MARCH 23, 1993  
SCALE: 1"=30'  
DRAWING NO. 2 OF 6



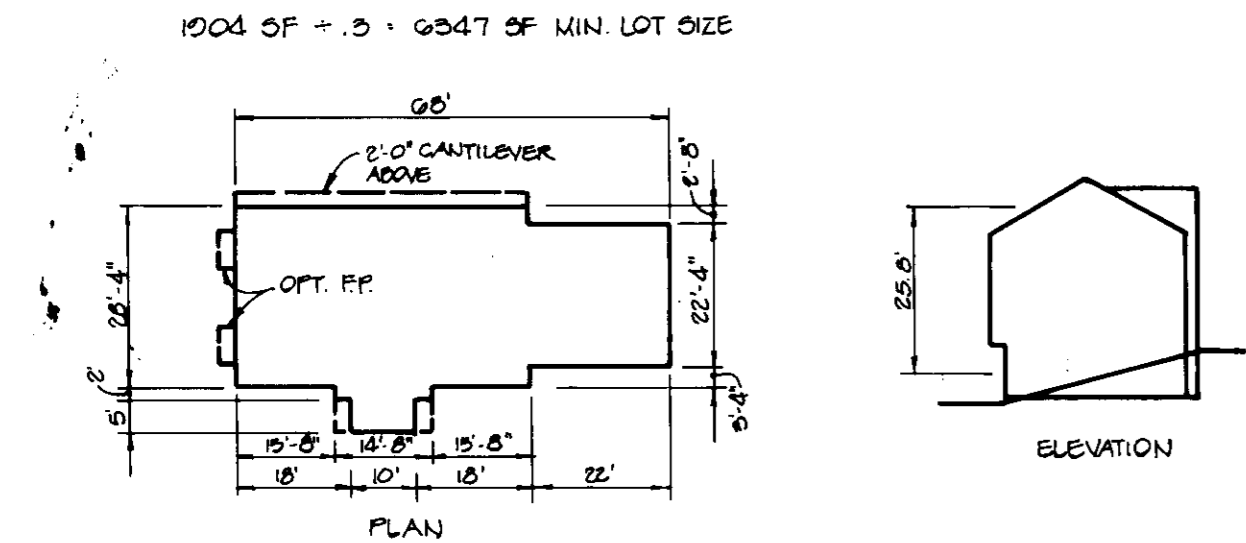
**KERGER ROAD**  
HOWARD COUNTY PUBLIC ROAD  
MINOR COLLECTOR

GRID NORTH

STRAWBERRY FIELDS  
SECTION ONE AREA ONE  
LOT 1 - 60  
PLAT NOS. 8909 - 8993

**BRIAR OAK COURT**  
HOWARD COUNTY PUBLIC ROAD  
LOCAL ROAD

MATCH LINE - SEE SHEET 2 FOR CONTINUATION



**HOUSE TYPE 'M' - ASHLEY PRESIDENTIAL SUITE**

**PLAN**  
SCALE: 1" = 30'

- NOTES:**
1. B.R.L. - DENOTES BUILDING RESTRICTION LINE.
  2. FOR HOUSE DIMENSIONS AND ELEVATIONS SEE SHEET 6.
  3. W.O. - DENOTES WALK OUT.
  4. THE WETLAND / STREAM BUFFER INDICATED ON THIS PLAN DOES NOT AFFECT THE INITIAL CONTRIBUTION OF A RESIDENTIAL UNIT ON ANY LOT. IT DOES PROHIBIT SUBSEQUENT CLEARING, GRADING OR CONSTRUCTION IN THE BUFFER AREA. MAINTENANCE OF RESIDENCES, LANDSCAPING AND UTILITIES IS PERMITTED.

4-19-04	5	REV. HOUSE TYPE LOT 50
5-23-04	4	REV. HOUSE TYPE LOT 54
1-11-04	3	REV. HOUSE TYPE LOT 52

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

*John Blau* 4-20-93  
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

*James Smith* 4/23/93  
DIRECTOR DATE  
*Shirley Holcomb* 4/23/93  
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

*James P. Law* 4-15-93  
DIRECTOR DATE  
*William S. Reay* 4-15-93  
CHIEF, BUREAU OF ENGINEERING DATE

0-4-93	2	REV. HOUSE TYPE FOR LOT 40
7-14-93	1	REV. HOUSE TYPE FOR LOT 51
DATE	NO.	REVISION

**OWNER / DEVELOPER**  
R.G.M. DEVELOPMENT CORPORATION  
c/o KOREN DEVELOPMENT CORPORATION  
8815 CENTRE PARK DRIVE  
SUITE 304  
COLUMBIA, MARYLAND 21045  
410-740-1010

**PROJECT**  
**SUNNY FIELD ESTATES**  
SECTION 1, LOTS 47 - 66

**AREA**  
SECTION 1 ZONED R-20  
TAX MAP NO. 31 PARCELS 58 & 757  
1st ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

**TITLE**  
**SITE DEVELOPMENT PLAN**  
LOTS 48 - 54

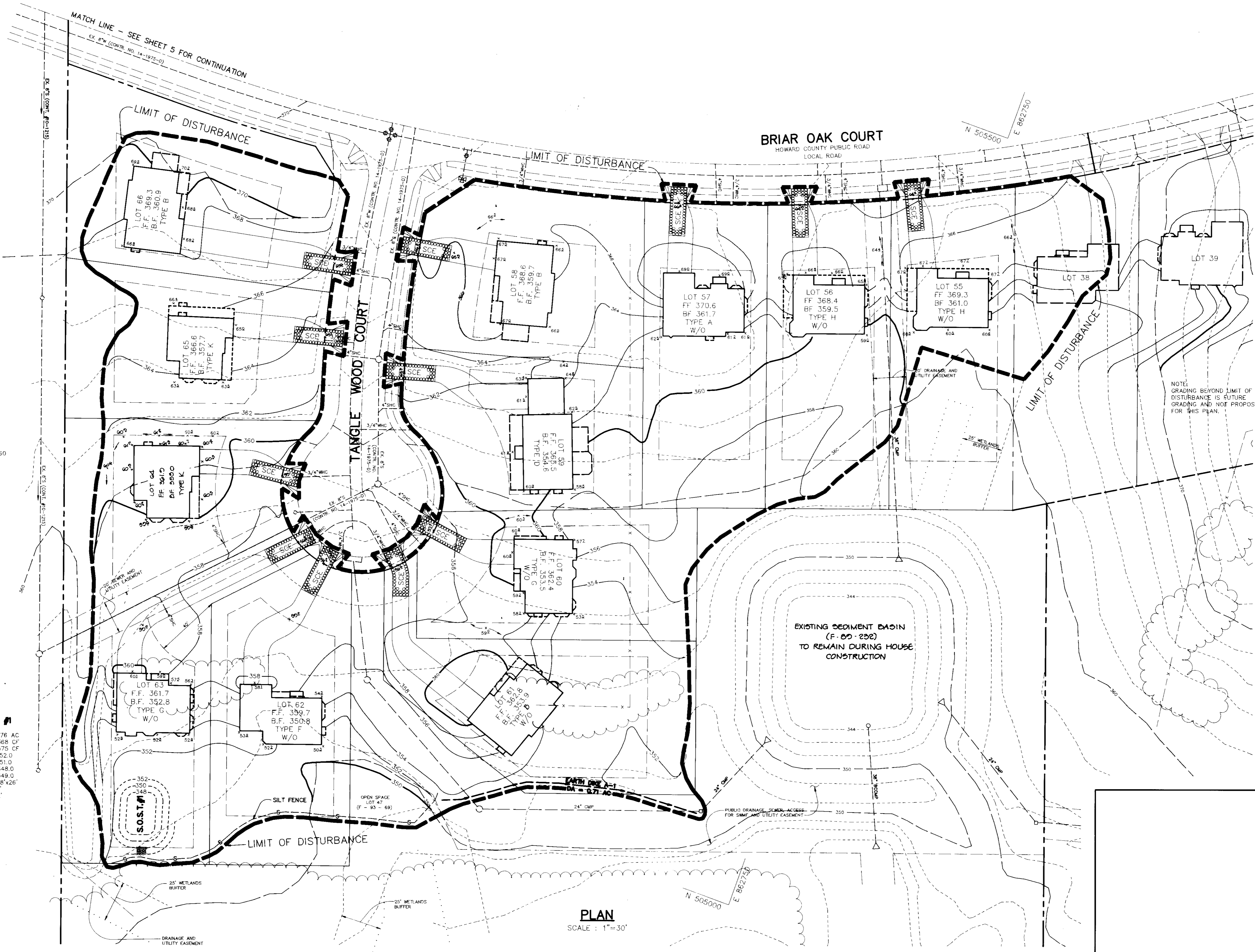
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410-997-8900 FAX: 410-997-9282

3-23-93  
DATE

DESIGNED BY: W.C.W.  
DRAWN BY: W.C.W.  
PROJECT NO: 79707  
DATE: MARCH 23, 1993  
SCALE: AS SHOWN  
DRAWING NO. 3 OF 6

*Arthur E. Muegge*  
ARTHUR E. MUEGGE 48707

HP 93-68



STRAWBERRY FIELDS  
SECTION ONE AREA ONE  
LOTS 1 - 60  
PLAT NOS. 8989 - 8993

OPEN SPACE LOT 60

**STONE OUTLET SEDIMENT TRAP #1**

DRAINAGE AREA	0.76 AC
STORAGE REQUIRED	1368 CF
STORAGE PROVIDED	1375 CF
TOP ELEVATION	352.0
CREST ELEVATION	351.0
BOTTOM ELEVATION	348.0
CLEANOUT ELEVATION	349.0
BOTTOM DIMENSIONS	18'x26'
CREST WIDTH	5'
DEPTH	2'

**PLAN**  
SCALE : 1"=30'

BY THE DEVELOPER :

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

*C. Wayne Cooper* 3/22/93  
DEVELOPER DATE

BY THE ENGINEER :

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

*Arthur E. Muegge* 3-23-93  
ENGINEER DATE

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

*James M. Helm* 4/2/93  
S.S. SOIL CONSERVATION SERVICE DATE

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

*John P. Robertson* 4/2/93  
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED : FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

*James B. Wood* 4-2-93  
COUNTY HEALTH OFFICER DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

*James R. Smith* 4/23/93  
DIRECTOR DATE

*Shirley A. Halonick* 4/22/93  
CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED : FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

*James R. Smith* 4-15-93  
DIRECTOR DATE

*William B. Ray* 4-15-93  
CHIEF, BUREAU OF ENGINEERING DATE

DATE	NO.	REVISION

OWNER / DEVELOPER  
R.G.M. DEVELOPMENT CORPORATION  
c/o KOREN DEVELOPMENT CORPORATION  
8815 CENTRE PARK DRIVE  
SUITE 304  
COLUMBIA, MARYLAND 21045  
410-740-1010

PROJECT **SUNNY FIELD ESTATES**  
SECTION 1, LOTS 47 - 66

AREA SECTION 1 ZONED R-20 PARCELS 58 & 757  
TAX MAP NO. 31 SUITE 304  
1st ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE **GRADING AND SEDIMENT CONTROL PLAN**  
LOTS 55 - 66

**RIEMER MUEGGE & ASSOCIATES, INC.**  
PLANNING, ENGINEERING AND SURVEYING  
8818 Centre Park Drive • Suite 200 • Columbia, Md 21045  
410-997-8900 FAX : 410-997-9282

3-23-93  
DATE

DESIGNED BY : W.C.W.  
DRAWN BY : W.C.W.  
PROJECT NO : 79707  
DATE : MARCH 23, 1993  
SCALE : AS SHOWN  
DRAWING NO. 4 OF 6

*Arthur E. Muegge* #8707

STR-93-168



**KERGER ROAD**  
HOWARD COUNTY PUBLIC ROAD  
MINOR COLLECTOR

BY THE DEVELOPER :  
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

*C. Wayne Cuyler* 3/22/93  
DEVELOPER DATE

BY THE ENGINEER :  
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

*Arthur E. Muegge* 3-23-93  
ENGINEER DATE

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

*James M. Helms* 4/2/93  
U.S. SOIL CONSERVATION SERVICE DATE

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

*John R. Robertson* 4/2/93  
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED : FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

*Joselyn Folie* 4-20-93  
COUNTY HEALTH OFFICER DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

*James Keith* 4/23/93  
DIRECTOR DATE

*Shirley Helonath* 4/22/93  
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED : FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

*James M. Helms* 4-15-93  
DIRECTOR DATE

*William E. Rine* 4-15-93  
CHIEF, BUREAU OF ENGINEERING DATE

DATE	NO.	REVISION

OWNER / DEVELOPER  
R.G.M. DEVELOPMENT CORPORATION  
c/o KOREN DEVELOPMENT CORPORATION  
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410-740-1010

PROJECT **SUNNY FIELD ESTATES**  
SECTION 1, LOTS 47 - 66

AREA SECTION 1 ZONED R-20  
TAX MAP NO. 31 PARCELS 58 & 75  
1st ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE **GRADING AND SEDIMENT CONTROL PLAN**  
LOTS 48 - 54

**RIEMER MUEGGE & ASSOCIATES, INC.**  
PLANNING, ENGINEERING AND SURVEYING  
8818 Centre Park Drive • Suite 200 • Columbia, Md 21045  
410-997-8900 FAX : 410-997-9282

3-23-93  
DATE

DESIGNED BY : W.C.W.  
DRAWN BY : W.C.W.  
PROJECT NO : 79707  
DATE : MARCH 23, 1993  
SCALE : AS SHOWN  
DRAWING NO. 5 OF 6

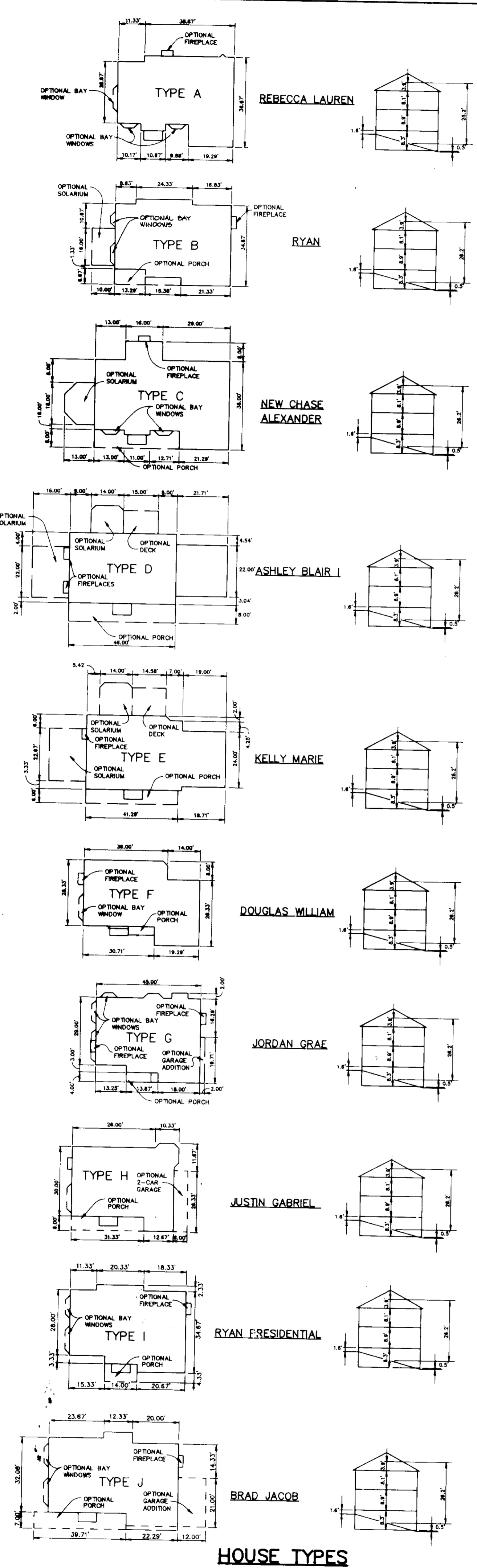
*Arthur E. Muegge*  
ARTHUR E. MUEGGE 18707

- SEQUENCE OF CONSTRUCTION**
- OBTAIN A GRADING PERMIT AND A LETTER OF PERMISSION TO GRADE INTO SECTION TWO.
  - INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE, EARTH DIKE, TREE PROTECTION FENCE, EARTH DIKE AND STONE OUTLET SEDIMENT TRAP #1. NOTE SEDIMENT BASIN WILL BE USED DURING HOUSE CONSTRUCTION. CONTRACTOR TO CLEAN OUT BASIN AS NECESSARY.
  - PERFORM ROUGH GRADING AND THEN STABILIZE DISTURBED AREAS IN ACCORDANCE WITH THE TEMPORARY SEEDING NOTES.
  - BEGIN HOUSE CONSTRUCTION AND FINE GRADING.
  - COMPLETE HOUSE CONSTRUCTION INCLUDING UTILITY INSTALLATION.
  - FINISH FINE GRADING AND STABILIZE DISTURBED AREAS IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES.
  - UPON APPROVAL OF THE HOWARD COUNTY DEPARTMENT OF LICENSES AND PERMITS SEDIMENT CONTROL INSPECTOR REMOVE ALL SEDIMENT CONTROL DEVICES AND STABILIZE IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES.

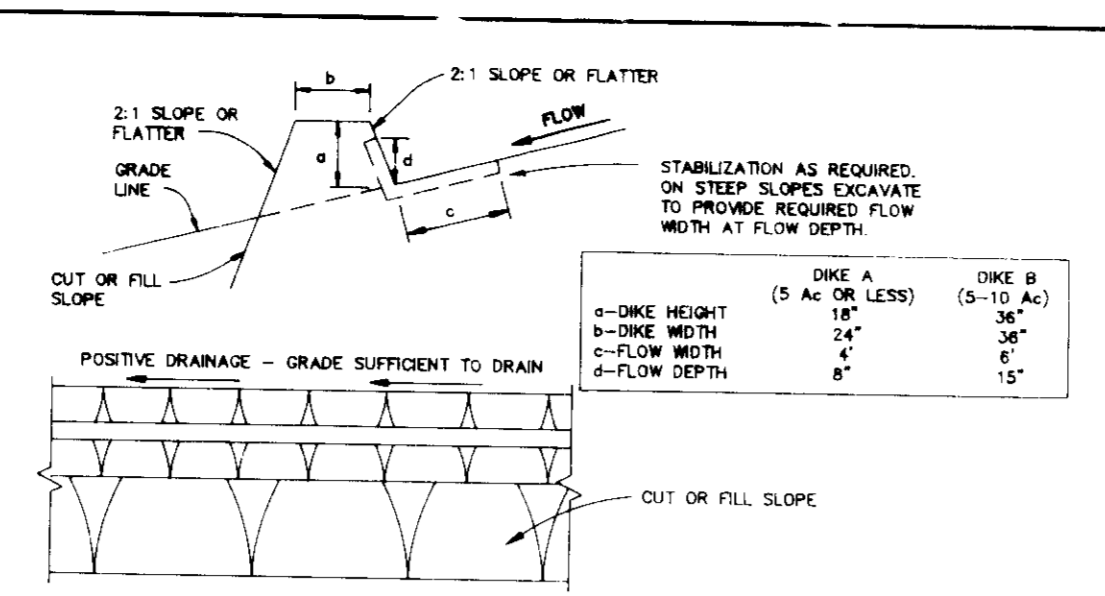
**BRIAR OAK COURT**  
HOWARD COUNTY PUBLIC ROAD  
LOCAL ROAD

**PLAN**  
SCALE : 1" = 30'

3129368



HOUSE TYPES  
SCALE: 1"=30'

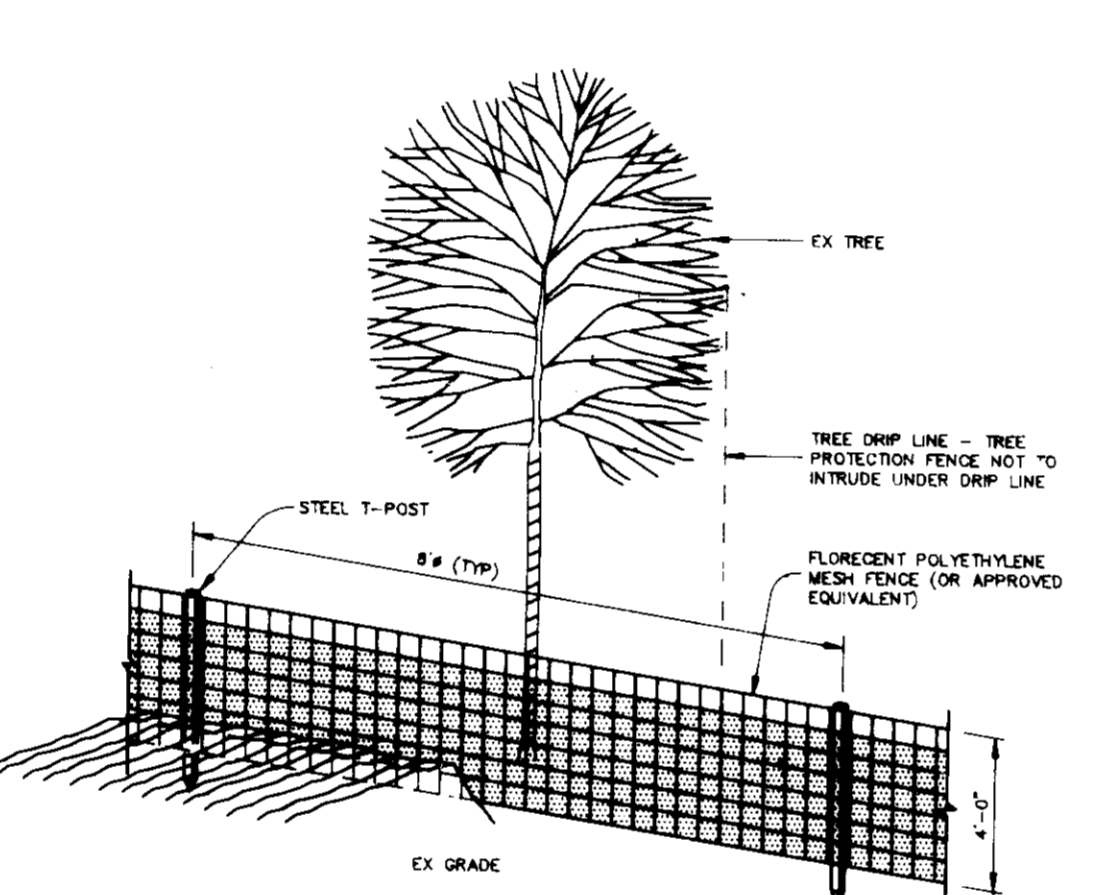


**CONSTRUCTION SPECIFICATIONS**

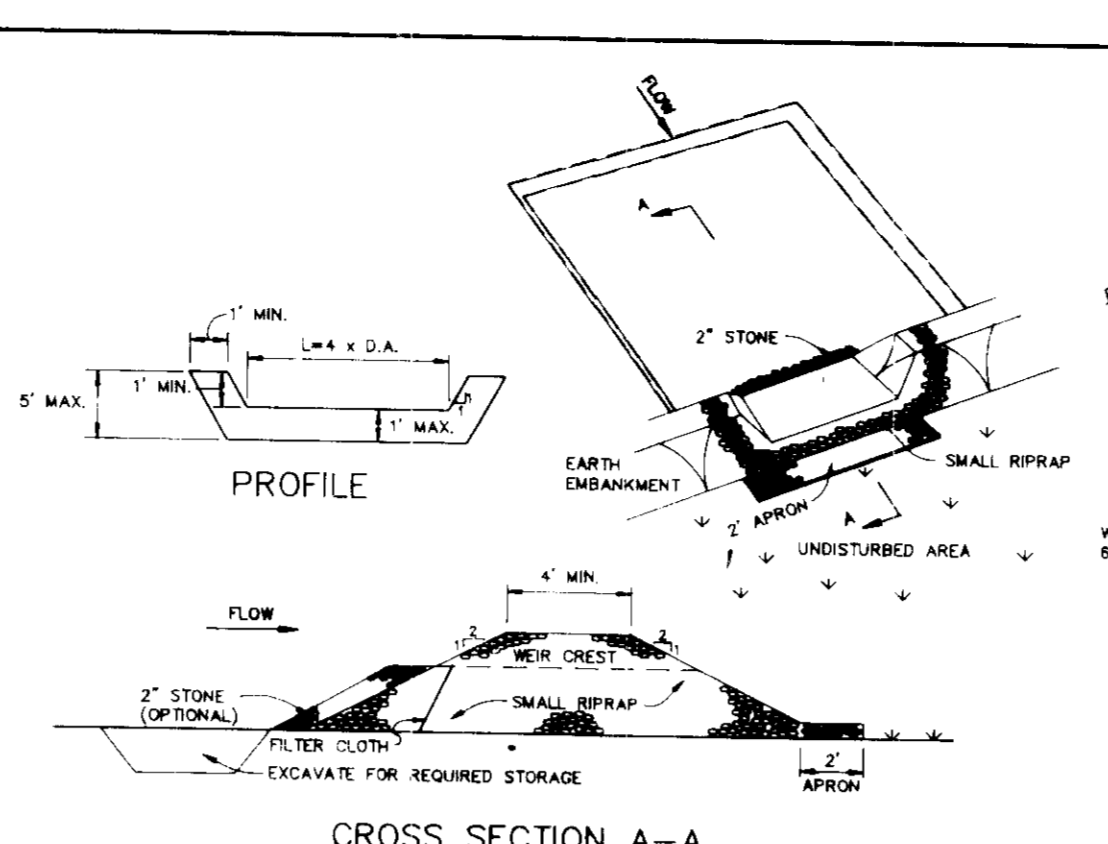
- ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
- ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
- TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
- FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
- 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.
- STABILIZATION SHALL BE (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF NOT IN SEEDING SCHEDULE (B) FLOW CHANNEL STABILIZATION AS PER THE CHART BELOW.

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	0.5-3.0%	SEED & STRAW MULCH	SEED & STRAW MULCH
2	3.1-5.0%	SEED & STRAW MULCH	SEED USING A/JT, OR EXCESSIVE SOO, 2" STONE
3	5.1-8.0%	SEED WITH A/JT, OR SOO, 2" STONE	LINED RIPRAP 4"-8"
4	8.1-20%	LINED RIPRAP 4"-8"	ENGINEERED DESIGN

**EARTH DIKE**  
NO SCALE



**PROTECTIVE TREE FENCING ELEVATION DETAIL**  
NO SCALE



**CROSS SECTION A-A**  
NO SCALE

**CONSTRUCTION SPECIFICATIONS**

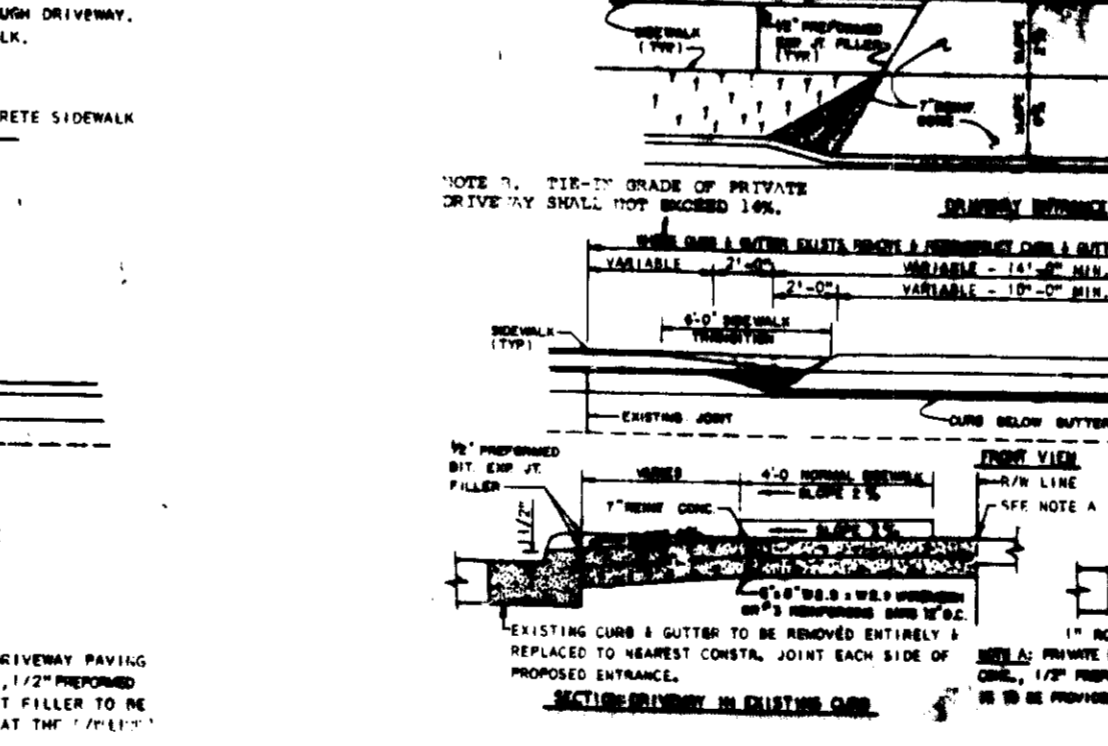
- AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
- THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS AND OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER UNDESIRABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVELING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
- ALL OUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER.
- THE STONE USED IN THE OUTLET SHALL BE SMALL RIPRAP 4"-8" ALONG WITH A 1" THICKNESS OF 1/2" AGGREGATE PLACED ON THE UP-GRADE SIDE ON THE SMALL RIPRAP OR EMBEDED FILTER CLOTH IN THE RIPRAP.
- SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHICH THE SEDIMENT HAS ACCUMULATED TO THE DESIGN DEPTH OF THE TRAP.
- THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
- CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION IS MINIMIZED.
- THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

**STONE OUTLET SEDIMENT TRAP**  
NO SCALE

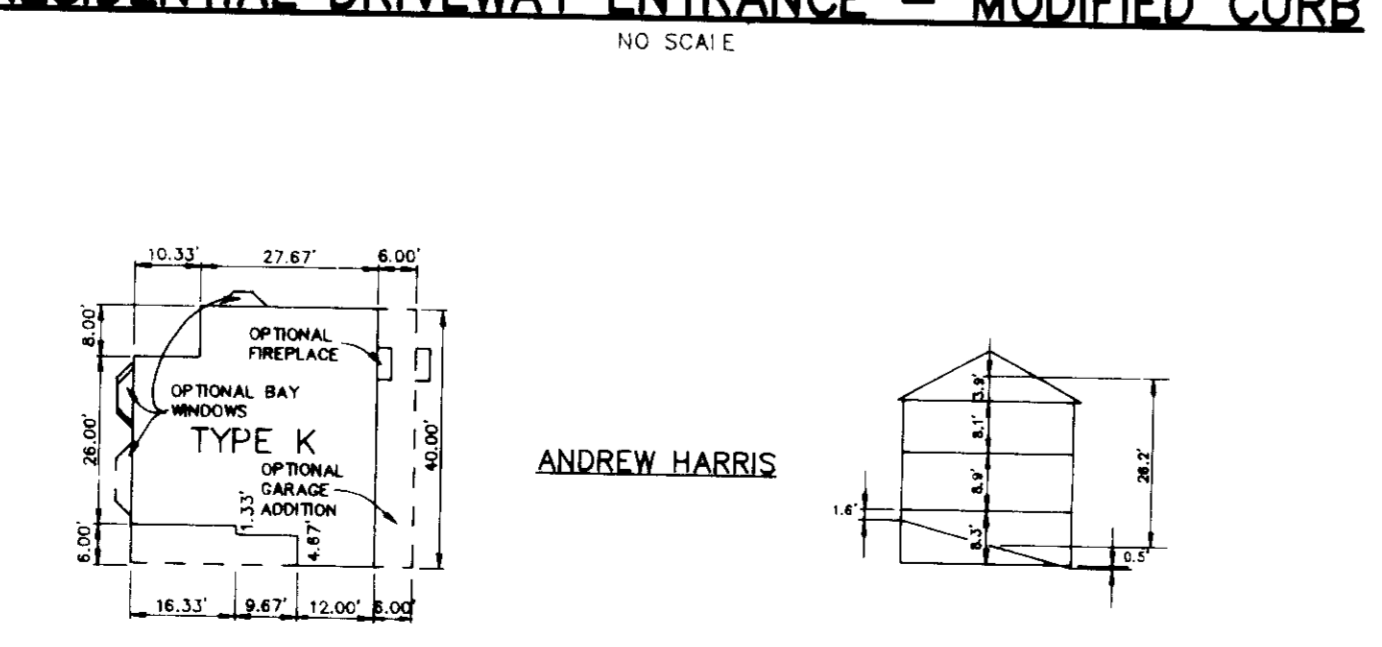
**TREE PRESERVATION PROCEDURES**

- THE EDGE OF WOODS TO BE PROTECTED WILL BE MARKED IN THE FIELD PER THE APPROVED SITE DEVELOPMENT PLAN PRIOR TO THE START OF CONSTRUCTION ACTIVITY.
- PROTECTIVE FENCING SHALL BE INSTALLED AT THE Drip LINE OF THE EDGE OF WOODS. ALL AREAS WITHIN PROTECTIVE FENCES ARE TO BE CONSIDERED OFF LIMITS FOR ANY CONSTRUCTION ACTIVITY.
- PROTECTIVE FENCING WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR WILL APPLY SIGNS TO THE FENCING INDICATING THAT THESE AREAS ARE TREE PRESERVATION AREAS. THE GENERAL CONTRACTOR SHALL TAKE UTMOST CARE TO PROTECT TREE ROOT SYSTEMS DURING THE CONSTRUCTION CYCLE. TREE ROOT SYSTEMS SHALL BE PROTECTED FROM SMOTHERING, FLOODING, EXCESSIVE HEATING FROM DE-WATERING OPERATIONS, OFF-SITE RISK OF SPILLAGE, AND DRAINAGE OF SOLUTIONS CONTAINING MATERIALS HAZARDOUS TO TREE ROOTS.
- REMOVAL OF TOPSOIL OR ROOT MAT WITHIN THE TREE PRESERVATION AREA SHALL BE PROHIBITED. THE GENERAL CONTRACTOR SHALL BE PROHIBITED FROM PARKING ANY CONSTRUCTION EQUIPMENT OR FROM STORING ANY BUILDING SUPPLIES OR EARTH STOCKPILES WITHIN THE TREE PRESERVATION AREAS.
- FOOT TRAFFIC, AS WELL AS VEHICULAR TRAFFIC, IN THE TREE PRESERVATION AREAS SHALL BE KEPT TO A MINIMUM. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE WHETHER CAUSED BY THE CONTRACTOR, HIS AGENTS, EMPLOYEES, SUB-CONTRACTORS OR LICENSEES.
- CONSTRUCTION ACTIVITIES EXPRESSLY RESTRICTED WITHIN THE TREE PRESERVATION AREAS: PLACING BACKFILL IN PROTECTED AREAS, FELLING TREES INTO PROTECTED AREAS, DRIVING CONSTRUCTION EQUIPMENT INTO OR THROUGH PROTECTED AREAS, BURNING IN OR IN CLOSE PROXIMITY TO PROTECTED AREAS, STACKING OR STORING SUPPLIES IN PROTECTED AREAS, CONDUCTING TRENCHING OPERATIONS IN PROTECTED AREAS, GRADING BEYOND THE LIMITS OF DISTURBANCE.
- THE GENERAL CONTRACTOR SHALL PROVIDE A WASH OUT AREA FOR CONCRETE TRUCKS ON SITE WHICH WILL NOT DRAIN TOWARDS A PROTECTED AREA.
- ALL TREES WHICH ARE NOT TO BE PRESERVED WITHIN FIFTY FEET OF ANY TREE PRESERVATION AREA ARE TO BE REMOVED IN A MANNER THAT WILL NOT DAMAGE THOSE TREES THAT ARE DESIGNATED FOR PRESERVATION. IT IS HIGHLY RECOMMENDED THAT TREE STUMPS WITHIN FIFTY FOOT AREA BE GROUND OUT WITH A STUMP GRINDER MACHINERY TO MINIMIZE DAMAGE.

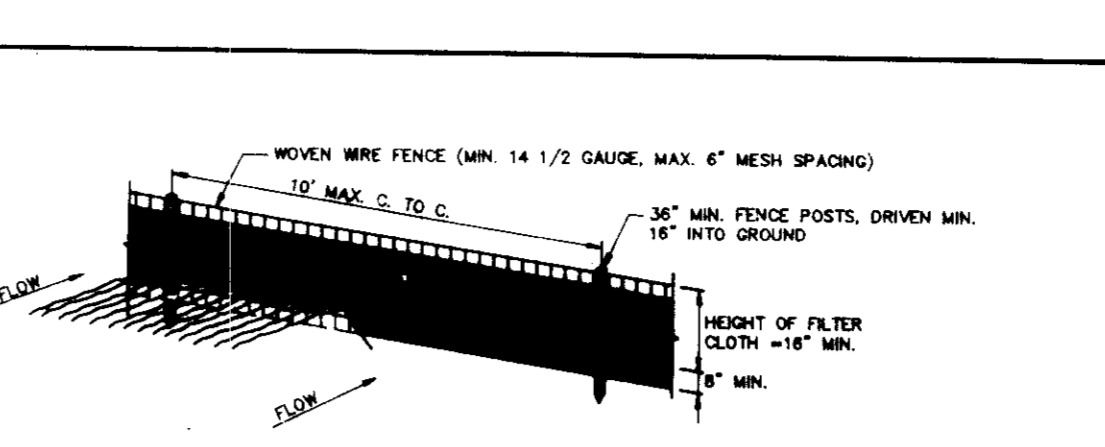
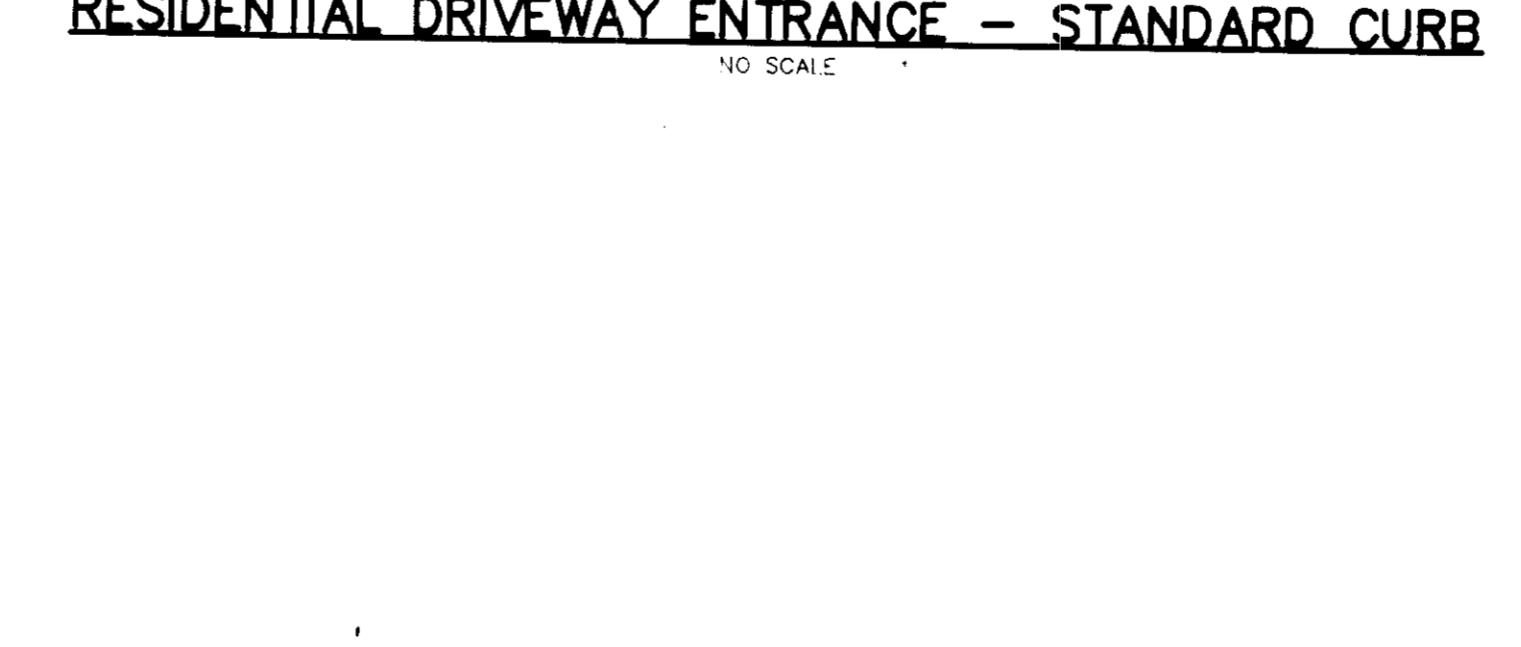
**STABILIZED CONSTRUCTION ENTRANCE**  
NO SCALE



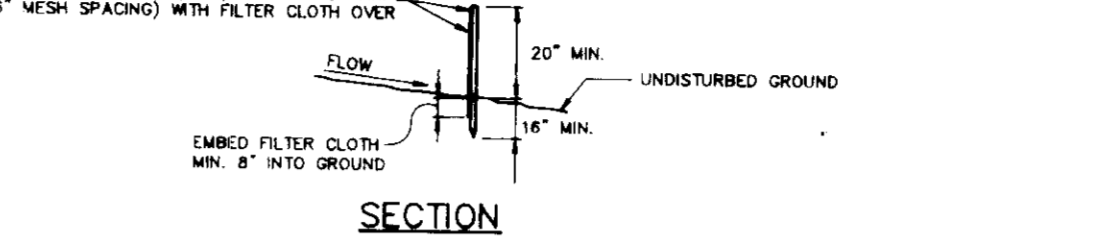
**RESIDENTIAL DRIVEWAY ENTRANCE - MODIFIED CURB**  
NO SCALE



**RESIDENTIAL DRIVEWAY ENTRANCE - STANDARD CURB**  
NO SCALE



**PERSPECTIVE VIEW**  
NO SCALE

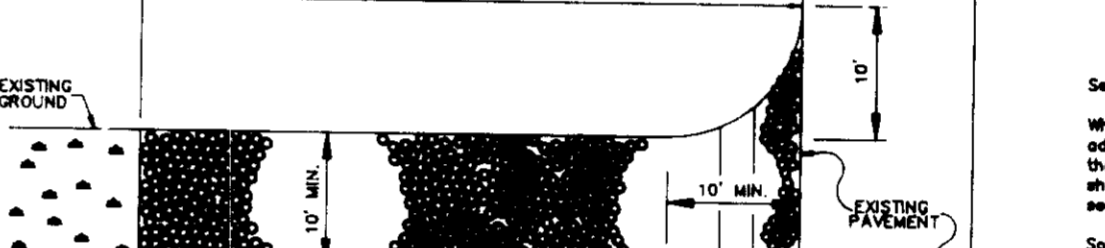


**SECTION**  
NO SCALE

**CONSTRUCTION NOTES FOR FABRICATED SILT FENCE**

- Woven wire fence to be fastened securely to fence posts with wire ties or staples. Every 24" of top rail section.
- When top sections of filter cloth overlap each other they shall be overlapped 6" inches and fastened.
- Maintenance shall be performed as needed and material removed when "bulges" develop in the all fabric.

**SILT FENCE DETAIL**  
NO SCALE



**PROFILE**  
NO SCALE

**PLAN VIEW**  
NO SCALE

**CONSTRUCTION SPECIFICATIONS**

- Stone Size - Use 2" stone, or rounded or recycled concrete equivalent.
- Length - As required but not less than 50 feet (except on a single residence lot where a 20 foot minimum shall apply).
- Thickness - Not less than six (6) inches.
- Width - Ten (10) feet minimum, but not less than the full width of points where ingress and egress occurs.
- Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter cloth will not be required on a single family residence lot.
- Surface Water - All surface water flowing or diverted toward construction entrance shall be placed across the entrance. If piping is provided, a mountable berm with 2" diameter shall be maintained.
- Maintenance - The entrance shall be maintained in a condition which will prevent tracking of flowing sediment onto public rights-of-way. This may require periodic log cleaning with additional stone as conditions demand and repair and/or placement of any measures used to trap sediment. All sediment applied, dropped washed or tracked onto public rights-of-way must be removed immediately.
- Warning - Warning shall be placed to remove sediment prior to entrance into public rights-of-way. When warning is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
- Periodic inspection and standard maintenance shall be provided after each rain.

**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 (892-2437).
- All vegetative and structural protection 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 AND EROSION CONTROL.
- Following initial soil disturbance or disturbance, permanent or temporary stabilization shall be completed within: (a) 7 calendar days for all areas of disturbance, and (b) 14 calendar days for all other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs posted around the 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 AND EROSION CONTROL, for permanent seedings (Sec. 31) and (Sec. 51), temporary seedings (Sec. 50) and mulching (Sec. 52). Temporary stabilization with mulch means can only be done when recommended quality data is not slow 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 permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- Site Analysis:  
Total Area of Site: 14.34 acres  
Area to be seeded or planted: 1.35 acres  
Area to be vegetatively stabilized: 4.81 acres  
Total F8: 8000 sq. yds.  
5000 cu. yds.  
Excuse to be stippled on F-93-08.
- 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 Department of Public Works Sediment Control Inspector.
- Site grading will begin only after all perimeter sediment control measures have been installed and are in a functioning condition.
- Sediment will be removed from traps when its depth reaches clean soil elevation shown on the plans.
- Cut and fill quantities provided under site analysis do not represent bid quantities. These quantities do not distinguish between topsoil, structural fill or embankment material, nor do they reflect consideration of undercutting or removal of unstable material. The contractor shall familiarize himself with site conditions which may affect the work.

**PERMANENT SEEDING**

Seedbed Preparation: Flat areas and slopes up to 3:1 slope shall be loose and rubble to a depth of at least 3 inches. The top layer of soil shall be loosened by raking, disking or other acceptable means before seeding. Slopes steeper than 3:1 shall have the top 1 to 3 inches of soil loose and rubble before seeding.

Soil Amendments: Use one of the following schedules.

Lime and fertilizer according to soil tests. Lime and fertilizer needs can be determined by a soil testing laboratory, such as the University of Maryland's Soil Testing Laboratory.

In lieu of soil test results, use one of the following schedules:

- Preferred - Apply 2 tons per acre dolomitic limestone (92 LBS/1000 SF) and 800 LBS per acre 10-10-10 fertilizer (14 LBS/1000 SF) before seeding. Harrow or disc into upper three inches of soil.
- Acceptable - Apply 2 tons per acre dolomitic limestone (92 LBS/1000 SF) and 1000 LBS per acre 10-10-10 fertilizer (33 LBS/1000 SF) before seeding. Harrow or disc into upper three inches of soil.

On slopes steeper than 3:1 slope, the lime and fertilizer shall be worked the best way possible. On sloping land, the final harrowing or disking operation should be on the contour wherever feasible. No attempt should be made to dry any diked area to make the soil surface smooth after disking.

Seeding:

For the periods March 1 thru April 30, and August 1 thru October 15. Seed with 80 LBS per acre (14 LBS/1000 SF) of Kentucky 31 Tall Fescue.

For the period May 1 thru July 31. Seed with 80 LBS Kentucky 31 Tall Fescue per acre and 2 LBS per acre (05 LBS/1000 SF) of creeping bluegrass.

For the period October 16 thru February 28, plant site by: Option (1) 2 tons per acre of well anchored straw mulch and seed as soon as possible. Option (2) Use seed.

Seed with 80 LBS/acre (14 LBS/1000 SF) Kentucky 31 Tall Fescue and 2 LBS per acre well-anchored straw.

Apply seed uniformly with a cyclone seeder, disk, outdragger seeder or hydroseeder (bury includes seed and fertilizer) on a firm, moist seedbed. Hydroseeding shall be used on slopes steeper than 3:1. All areas of seedbed must be moist and the seed and fertilizer be mixed, they shall be mixed on site and the seeding shall be immediate without interruption.

Mulching: See Mulching Specification.

Irrigation: If soil moisture is deficient, apply new seedlings with adequate water for plant growth until they are firmly established. If feasible, this is especially true when seedlings are made late in the planting season, in extremely dry or hot seasons, or on adverse sites.

Maintenance: Irrigation - If all moisture becomes deficient, irrigate to prevent loss of stand of protective vegetation, if feasible.

Repairs - Inspect all seeded areas for failure and make necessary repairs, replacements, and reseedings within the planting season.

- If stand is inadequate for erosion control, overseed and fertilize using half of the rates originally applied.
- If stand is over 80% complete, reseed, following original time, fertilizer, seedbed preparation and seeding recommendations.

**TEMPORARY SEEDING**

When the area to be seeded has been recently loosened to the extent that an adequate seedbed exists, no additional treatment is required. However, when the area to be seeded is parking, grading, or other areas, the top 1/2" layer of soil shall be loosened by disking, raking or other acceptable means before seeding.

Soil Amendments: For temporary seedings, fertilizer shall be applied at the rate of 800 LBS per acre (15 LBS/1000 SF), except 10-10-10 or equivalent. Side which are highly acid should be limed.

Seeding: For periods March 1 thru April 30 and August 1 thru November 15. Seed with 2 1/2 LBS per acre (0.5 LBS/1000 SF) of Kentucky 31 Tall Fescue.

For the period May 1 thru August 14. Seed with 3 LBS per acre (0.7 LBS/1000 SF) of Weeping Lovegrass.

For the period November 16 thru February 28, plant site by: Applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use seed.

Apply seed uniformly with a cyclone seeder, disk, outdragger seeder or hydroseeder (bury includes seed and fertilizer).

Mulching: See Mulching Specification.

BY THE DEVELOPER:  
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

*Calvin Cephus*  
DEVELOPER 3/22/93 DATE

BY THE ENGINEER:  
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

*Arthur E. Muegge*  
ENGINEER 3-23-93 DATE

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

*James D. Delmhorst*  
U.S. SOIL CONSERVATION SERVICE 4/2/93 DATE

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

*John P. Robertson*  
HOWARD SOIL CONSERVATION DISTRICT 4/2/93 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

*John P. Robertson*  
COUNTY HEALTH OFFICER 4-20-93 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

*James D. Delmhorst*  
DIRECTOR 4/23/93 DATE

*Emma J. Alonzo*  
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT 4/22/93 DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

*James D. Delmhorst*  
DIRECTOR 4-16-93 DATE

*James D. Delmhorst*  
CHIEF, BUREAU OF ENGINEERING 4-16-93 DATE

OWNER / DEVELOPER  
R.G.M. DEVELOPMENT CORPORATION  
c/o KOREN DEVELOPMENT CORPORATION  
8815 CENTRE PARK DRIVE  
SUITE 304  
COLUMBIA, MARYLAND 21045  
410-740-1010

PROJECT  
SUNNY FIELD ESTATES  
SECTION 1, LOTS 47 - 66

AREA  
SECTION 1 ZONED R-20  
TAX MAP NO. 31 PARCELS 57 & 757  
1st ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE  
DETAIL SHEET

RIEMER MUEGGE & ASSOCIATES, INC.  
PLANNING, ENGINEERING AND SURVEYING  
5818 Centre Park Drive • Suite 200 • Columbia, Md 21045  
410-997-8900 FAX: 410-997-9282

3-23-93 DATE  
DESIGNED BY: W.C.W.  
DRAWN BY: W.C.W.  
PROJECT NO: 79707  
DATE: MARCH 20, 1993  
SCALE: AS SHOWN  
DRAWING NO. 6 OF 6

