SHEET INDEX

NO	DISCRIPTION
1.	TITLE SHEET
2	PLAN OF KERGER ROAD, BRIAR OAK COURT, AUTUMN FIELD COURT, AND JAMES AVENUE
3	PLAN OF AUTUMN FIELD COURT
4	ROADWAY PROFILES
5	ROADWAY PROFILES
6	DRAINAGE AREA MAP
7	DETAILS
8	GRADING AND SEDIMENT CONTROL PLAN
9	GRADING, SEDIMENT CONTROL PLAN
10	STORM DRAIN PROFILES
11	SEDIMENT CONTROL NOTES AND DETAILS
12	STREET TREE PLAN
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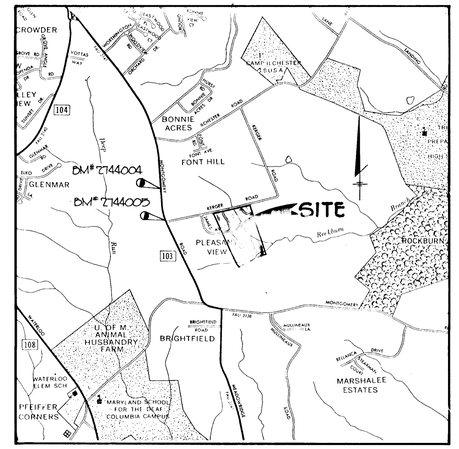
ROADWAY, STORM DRAINS & STORM WATER MANAGEMENT

STRAWBERRY FIELDS

SECTION 1, AREA 1

1ST ELECTION DISTRICT

HOWARD COUNTY, MARYLAND



VICINITY MAP
SCALE 1" = 2000'

BENCH MARK DESCRIPTION

HC BM # 2744005 ELEV 419.625
3/4" REBAR 0.6' BELOW SURFACE 10'± WEST EDGE OF ROUTE # 108 AND 80 NORTH OF ℄ OF KERGER ROAD

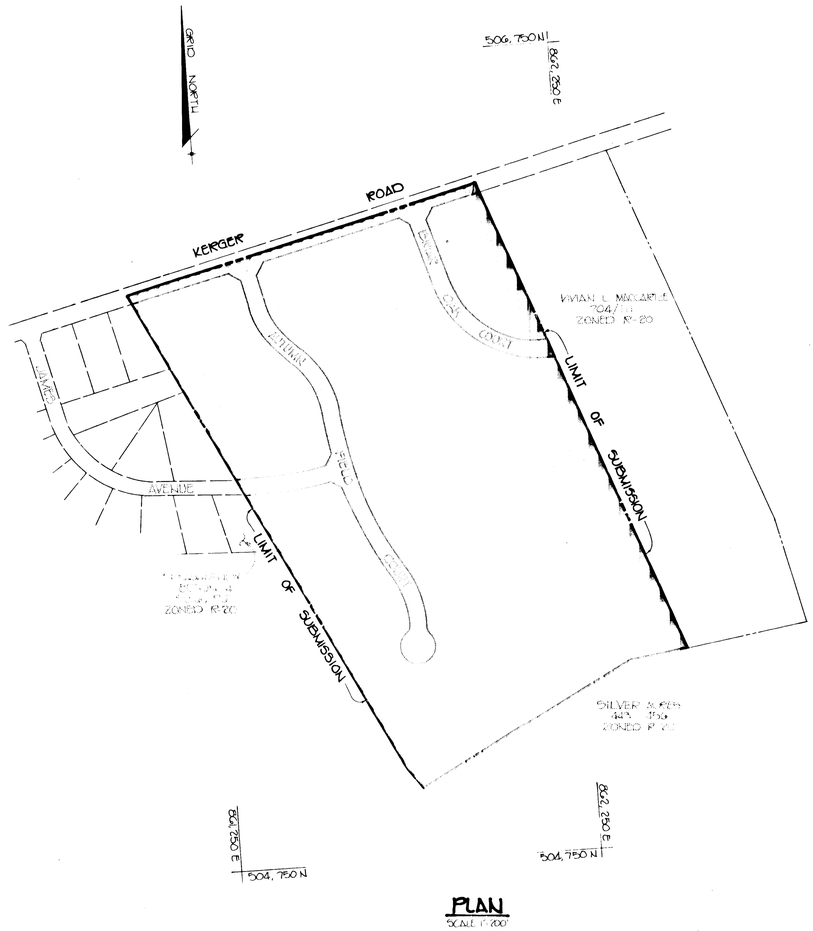
HC BM # 2744004 ELEV 415.367
3/4" REBAR 0.8 BELOW SURFACE 7'± WEST OF ROUTE # 108 AND 1400'± S OF INTERSECTION WITH ILCHESTER ROAD

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 1984 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.
    ALL MINOR COLLECTORS DESIGNED FOR 35 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 ℄ ELEVATIONS.
14. PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
15. SUBJECT PROPERTY ZONED R-20 PER 8-2-85 COMPREHENSIVE ZONING PLAN.
16. TOPO TAKEN FROM FIELD RUN SURVEY BY TRACY, SCHULTE & ASSOCIATES DATED SEPT., 1988.
17. EXISTING POND WAS DESIGNED AND APPROVED BY U.S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION DISTRICT, MAY 1983.



PLAN
SCALE 1" = 100'

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

CHIEF, LAND DEVELOPMENT DIVISION — DATE 8/3/89

CHIEF, BUREAU OF HIGHWAYS — DATE 8/18/89

CHIEF, BUREAU OF ENGINEERING — DATE 8-21-89

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 9/2/89

NO	DATE	REVISION

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

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

DES. RJW DRN CRS

PROJECT S-88-58 F-88-80 F-89-98
STRAWBERRY FIELDS
SECTION 1 AREA 1 LOTS 1 THRU 60

LOCATION TAX MAP № 31 PARCEL № 756
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE
TITLE SHEET
S-88-58 F-88-80 F-89-98

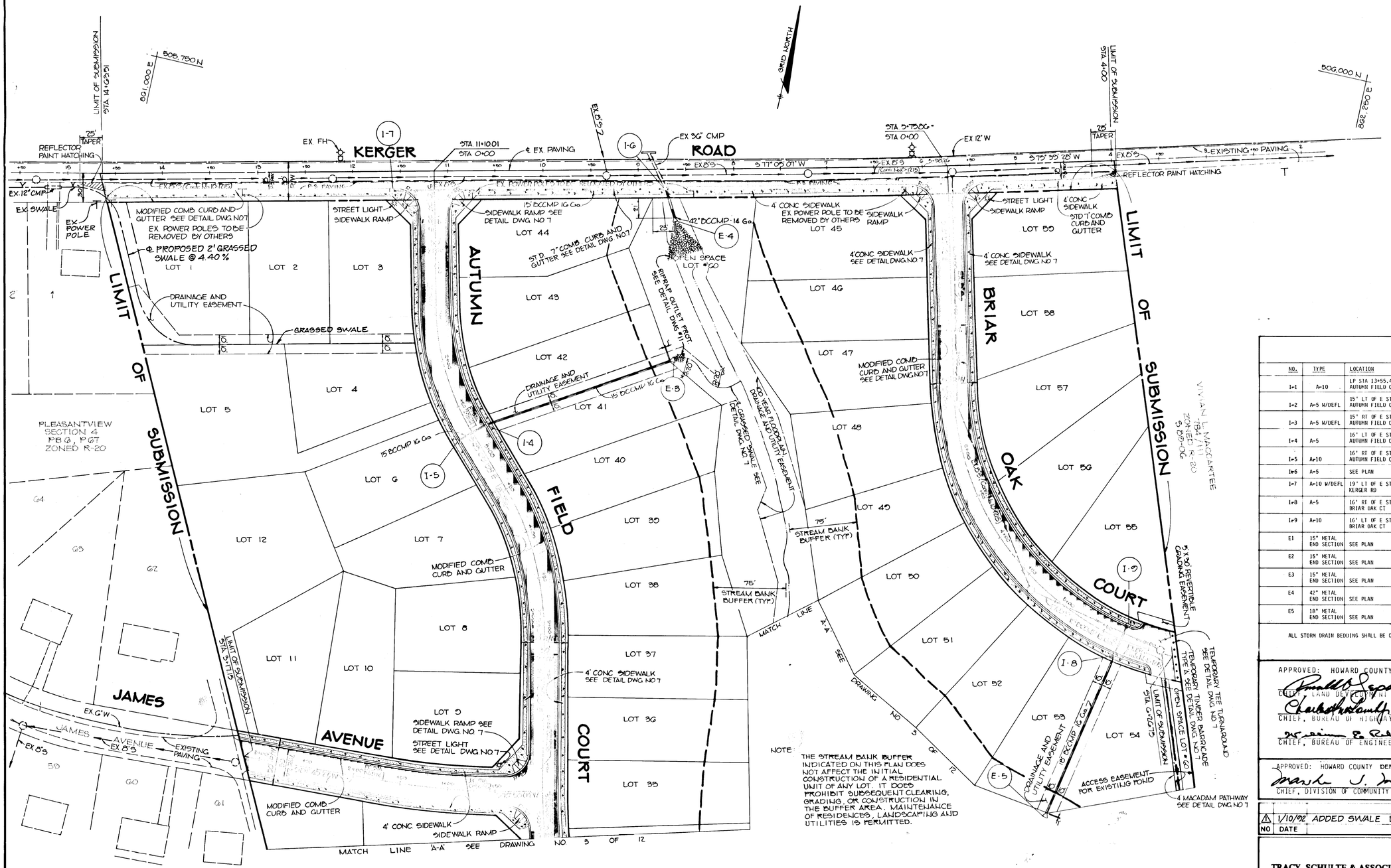
DATE DEC 1, 1988 / 7-19-89

PROJECT NO 0045 RSD

SCALE 1" = 200' DRAWING 1 OF 13

1469

F-89-98



℄ CURVE DATA
AUTUMN FIELD COURT
℄ STA. 1+49.62 TO ℄ STA. 2+75.61
Δ = 30° 15' 00"
R = 250.00'
L = 131.99'
T = 67.57'
D = 22° 55' 06"

℄ CURVE DATA
AUTUMN FIELD COURT
℄ STA. 3+42.07 TO ℄ STA. 5+09.61
Δ = 31° 59' 55"
R = 300.00'
L = 167.54'
T = 86.02'
D = 19° 05' 55"

℄ CURVE DATA
AUTUMN FIELD COURT
℄ STA. 6+46.85 TO STA. 9+12.38
Δ = 15° 13' 46"
R = 1150.00'
L = 265.53'
T = 133.36'
D = 04° 58' 36"

℄ CURVE DATA
JAMES AVENUE
℄ STA. 0+56.36 TO ℄ STA. 1+68.24
Δ = 10° 50' 23"
R = 625.00'
L = 118.24'
T = 59.30'
D = 09° 10' 02"

℄ CURVE DATA
BRIAR OAK COURT
℄ STA. 2+50.38 TO ℄ STA. 6+26.73
Δ = 76° 36' 42"
R = 295.00'
L = 394.17'
T = 234.42'
D = 19° 29' 20"

505,000 N
852,250 E

STRUCTURE SCHEDULE

NO.	TYPE	LOCATION	INV. IN	INV. OUT	IC ELEV.	REMARKS
I-1	A-10	LP STA 13+55.41 AUTUMN FIELD CT	---	361.02	369.24	H.C. STD DETAIL SD-4.02
I-2	A-5 W/DEFL	15' LT OF E STA 9+52 AUTUMN FIELD CT	377.22	377.02	382.16	H.C. STD DETAIL SD-4.01
I-3	A-5 W/DEFL	15' RT OF E STA 9+52 AUTUMN FIELD CT	---	377.92	382.16	H.C. STD DETAIL SD-4.01
I-4	A-5	16' LT OF E STA 2+81.50 AUTUMN FIELD CT	378.51	378.31	383.56	H.C. STD DETAIL SD-4.01
I-5	A-10	16' RT OF E STA 2+81.50 AUTUMN FIELD CT	---	379.06	383.56	H.C. STD DETAIL SD-4.02
I-6	A-5	SEE PLAN	374.97	372.52	381.70	H.C. STD DETAIL SD-4.01
I-7	A-10 W/DEFL	19' LT OF E STA 11 + 55 KERGER RD	---	384.19	389.15	H.C. STD DETAIL SD-4.02
I-8	A-5	16' RT OF E STA 5+71 BRIAR OAK CT	367.69	367.49	372.27	H.C. STD DETAIL SD-4.01
I-9	A-10	16' LT OF E STA 5+71 BRIAR OAK CT	---	368.16	372.27	H.C. STD DETAIL SD-4.02
E1	15" METAL END SECTION	SEE PLAN	---	352.24	---	H.C. STD DETAIL SD-5.61
E2	15" METAL END SECTION	SEE PLAN	---	367.03	---	H.C. STD DETAIL SD-5.61
E3	15" METAL END SECTION	SEE PLAN	---	368.93	---	H.C. STD DETAIL SD-5.61
E4	42" METAL END SECTION	SEE PLAN	---	370.83	---	H.C. STD DETAIL SD-5.61
E5	18" METAL END SECTION	SEE PLAN	---	364.80	---	H.C. STD DETAIL SD-5.61

ALL STORM DRAIN BEDDING SHALL BE CLASS 'C' UNLESS OTHERWISE NOTED.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

CHIEF, LAND DEVELOPMENT DIVISION — DATE 8/3/89

CHIEF, BUREAU OF HIGHWAYS — DATE 8/10/89

CHIEF, BUREAU OF ENGINEERING — DATE 8-21-89

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 9/21/89

NO	DATE	REVISION
1	1/10/90	ADDED SWALE LOT 1

TRACY, SCHULTE & ASSOCIATES INC.
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DEVELOPER
SECURITY DEVELOPMENT CORP.
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DES. RJW | DRN JLR/JLT

PROJECT S-88-58 F-88-80 F-89-08
STRAWBERRY FIELDS
SECTION 1, AREA 1 LOTS 1 THRU 60

LOCATION TAX MAP NO. 31 PARCEL 223
1ST. ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE PLAN OF KERGER ROAD, BRIAR OAK COURT, AUTUMN FIELD COURT AND JAMES AVENUE

DATE DEC 1 1988 7-19-89 | PROJECT NO 0045

SCALE 1" = 50' | DRAWING 2 OF 13

F-89-98

1469

GRID NORTH

℄ CURVE DATA
AUTUMN FIELD COURT
℄ STA. 10+79.68 TO ℄ STA. 12+46.05
Δ = 31° 35' 41"
R = 300.00'
L = 167.00'
T = 85.75'
D = 19° 05' 33"

609,250 N
651,200 E

MATCH LINE 'A-A' SEE DRAWING NO 2 OF 18

PLEASANTVIEW
SECTION 4
PBG. PG7

LOT 13 · LOT 14 · LOT 15 · LOT 16 · LOT 17 · LOT 18 · LOT 19 · LOT 20 · LOT 21 · LOT 22 · LOT 23 · LOT 24 · LOT 25 · LOT 26 · LOT 27 · LOT 28 · LOT 29 · LOT 30 · LOT 31 · LOT 32 · LOT 33 · LOT 34

AUTUMN FIELD COURT

50' R/W · 25' · P-2 PAV. · 4' CONC. SIDEWALK SEE DETAIL DRAWING NO. 4 · 75' STREAMBANK BUFFER (TYP.)

MODIFIED COMB. CURB AND GUTTER - SEE DETAIL DWG. NO. 7

RIPRAP OUTLET PROTECTION SEE DETAIL DRAW. NO. 11

4' MACADAM PATHWAY

15" BCCMP 16 Ga.

ACCESS EASEMENT FOR EXISTING POND

I-1 · I-2 · I-3 · E-1 · E-2

EX. STA. 5+00.00

5°24'23" W

STD. 7" COMB. CURB AND GUTTER - SEE DETAIL DWG. NO. 7

BEGIN LINEAR PROFILE STA. 11+00.08
BEGIN 20' CURB TRANSITION

END LINEAR PROFILE STA. 14+49.54
END 20' CURB TRANSITION

20' SEWER AND UTILITY EASEMENT

20' DRAINAGE AND UTILITY EASEMENT

4' MACADAM PATHWAY SEE DETAIL DWG. NO. 7

NOTE:
EXISTING POND WAS DESIGNED AND APPROVED BY U.S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, MAY 1983.

EX. POND
(W.E. 569.5±)
PROPOSED WATER ELEV. 569.25

MATCH LINE 'A-A' SEE DRAWING NO 2 OF 18

EX. 36" PIPE

R=25'

℄ GRASSED SWALE SEE DETAIL DWG. NO. 7

RIPRAP OUTLET PROTECTION SEE DETAIL DRAW. NO. 11

ACCESS EASEMENT FOR EXISTING POND

EX. 8" S (Contr. No. 10-1215)

PROP. RIPRAP SPILLWAY CHANNEL SEE DETAIL DRAWING NO. 11

OPEN SPACE LOT "GO"

100 YEAR FLOODPLAIN, DRAINAGE AND UTILITY EASEMENT

VIVIAN L. MACCARTEE
584/111

EX. 18"D

EX. 10"S

NOTE:
THE STREAMBANK 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 RESIDENCES, LANDSCAPING AND UTILITIES ARE PERMITTED.

SILVER ACRES
443/456

LIMIT OF SUBMISSION

604,250 N
651,200 E

EX. 10"S (Contr. No. 10-1215)

EX. 10"S

EX. 10"S

100 YEAR FLOODPLAIN, DRAINAGE AND UTILITY EASEMENT

OPEN SPACE
LOT "GO"

4' GRASSED SWALE - SEE DETAIL DRAWING NO. 7

PROP. WATER QUALITY DEVICE

RIP RAP OUTLET PROTECTION SEE DETAIL DWG. NO. 11

ROCKBURN BRANCH

SILVER ACRES
443/456

LIMIT OF SUBMISSION

604,750 N
652,500 E

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

CHIEF, LAND DEVELOPMENT DIVISION — DATE 8/3/89

CHIEF, BUREAU OF HIGHWAYS — DATE 7/18/89

CHIEF, BUREAU OF ENGINEERING — DATE 8.21.89

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT - DATE 7/24/89

NO	DATE	REVISION

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21043

DES. RJW · DRN. JLR/JLT

PROJECT S-88-58 F-88-80 F-80-58
STRAWBERRY FIELDS
SECTION 1 AREA 1 LOTS 1 THRU GO

LOCATION
TAX MAP NO 31 PARCEL 223
1ST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

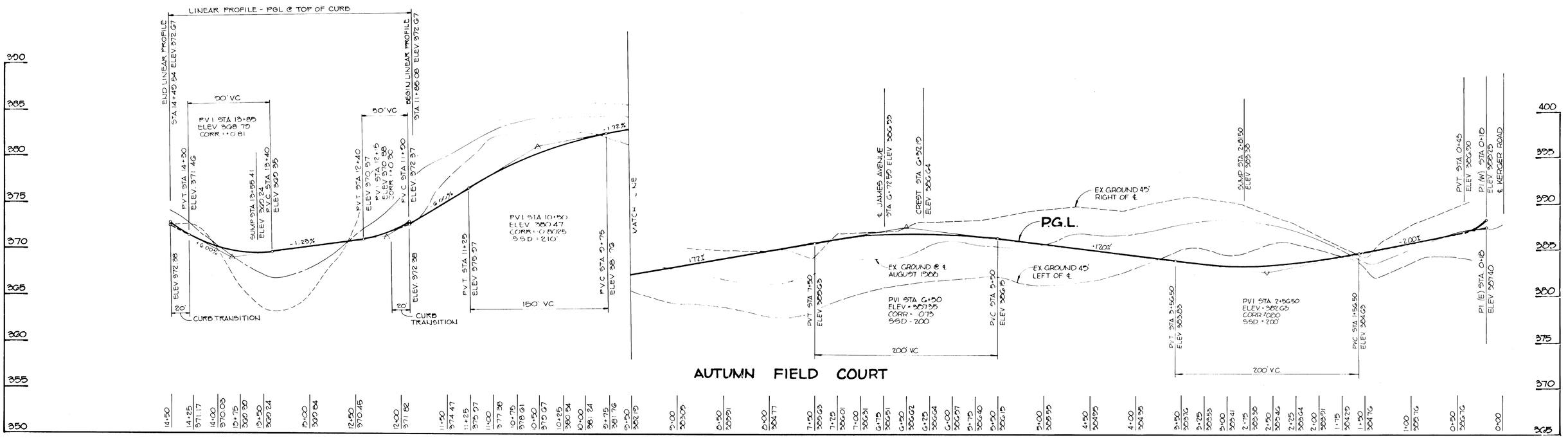
TITLE
PLAN OF AUTUMN FIELD COURT

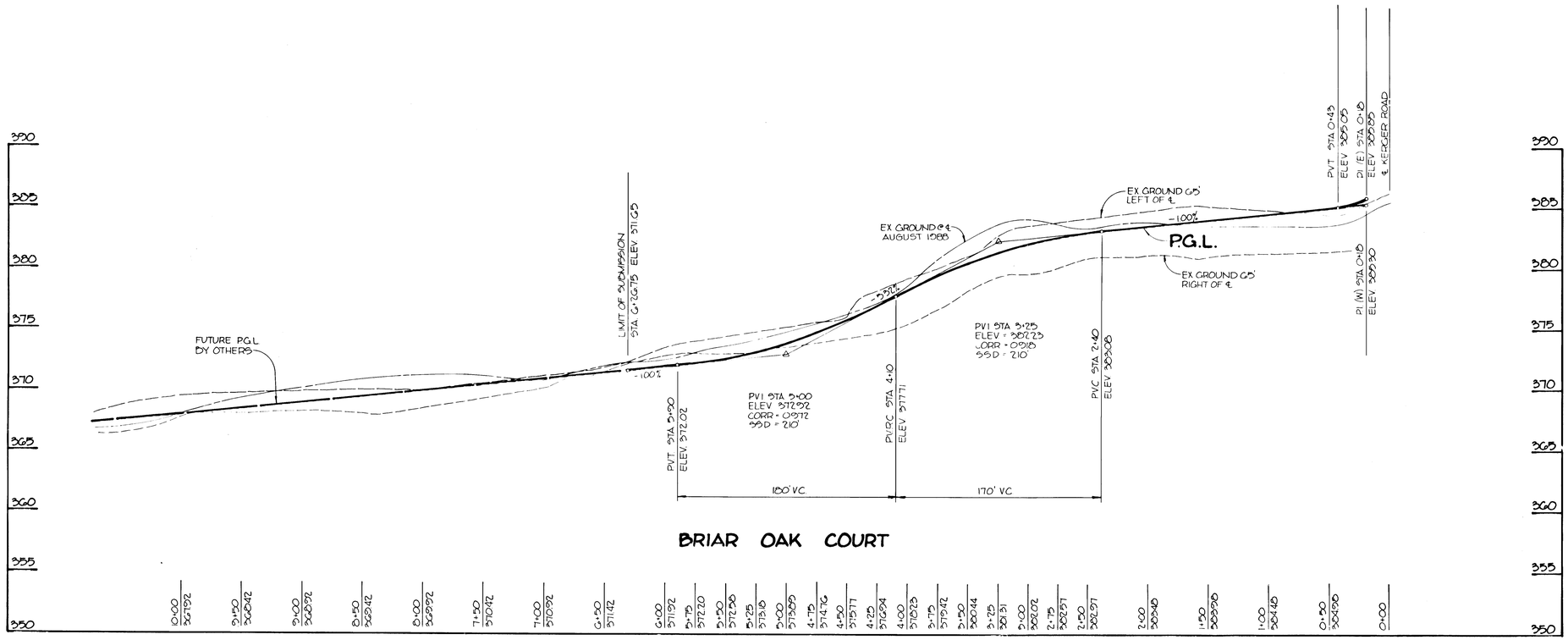
DATE DEC. 1, 1988 / 7-19-89 · PROJECT NO 0045

SCALE 1"=50' · DRAWING 3 OF 18

9469

F-89-98





APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

CHIEF, LAND DEVELOPMENT DIVISION — DATE 8/3/89

CHIEF, BUREAU OF HIGHWAYS — DATE 8/18/89

CHIEF, BUREAU OF ENGINEERING — DATE 8-21-89

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT - DATE 9/11/89

NO	DATE	REVISION

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ELLICOTT CITY, MARYLAND
21043

PROJECT S-88-58 / P-88-80 F-89-98
STRAWBERRY FIELDS
SECTION 1 AREA 1 LOTS 1 THRU 60

LOCATION
TAX MAP NO 31 PARCEL 223
1ST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

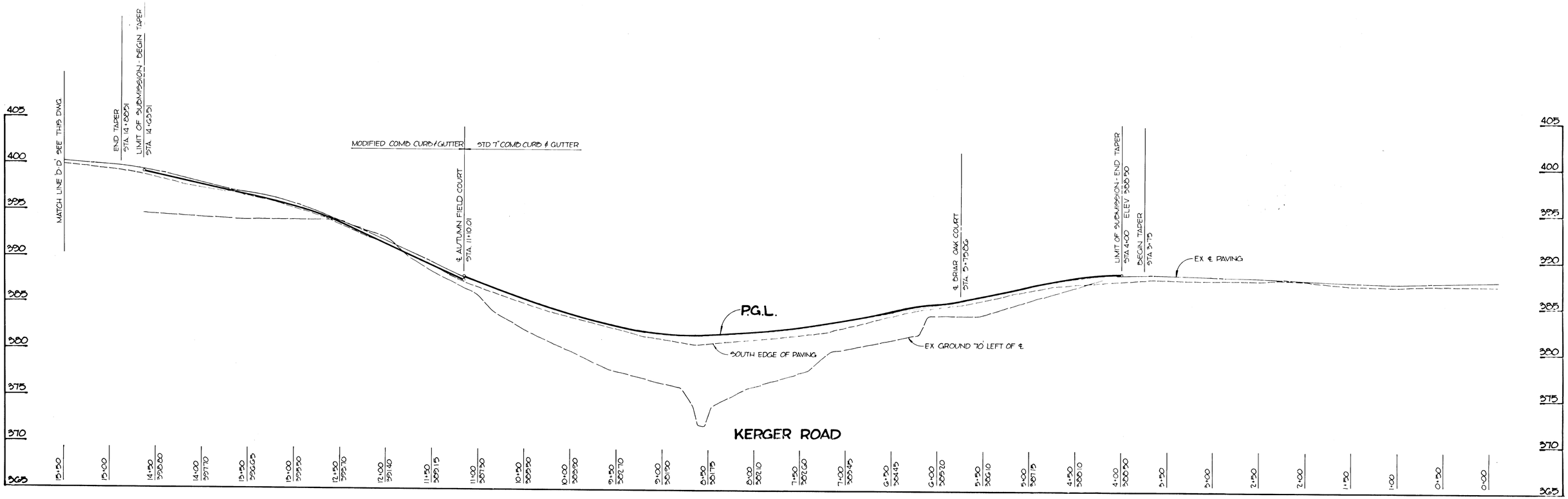
TITLE
ROADWAY PROFILES

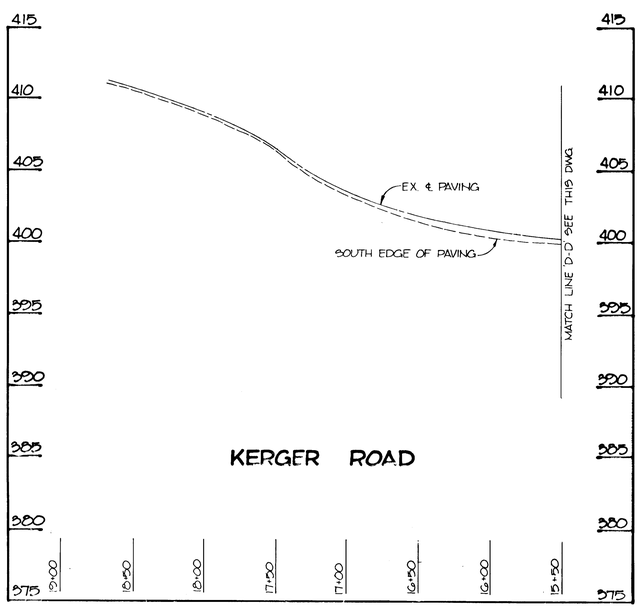
DATE DEC 1, 1988
7-19-89
PROJECT NO 0045

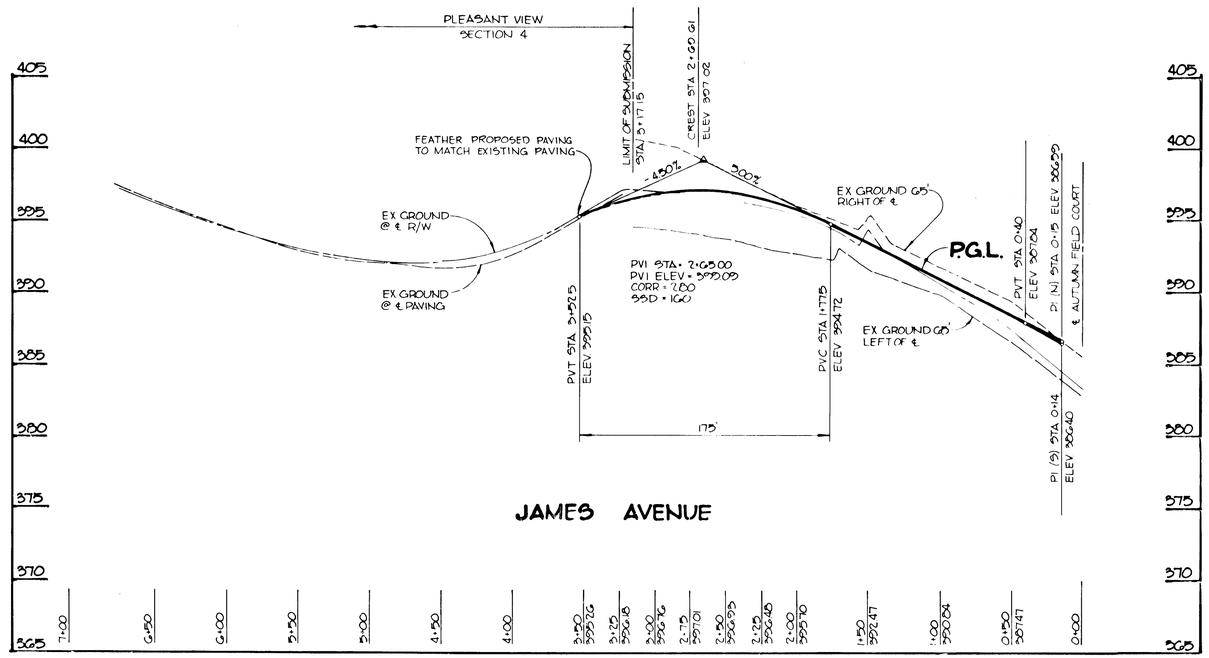
DES RJW DRN JLR/JLT SCALE H-1"=50' V-1"=5' DRAWING 4 OF 13

1469

F-89-98







APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

CHIEF, LAND DEVELOPMENT DIVISION — DATE 8/3/89

CHIEF, BUREAU OF HIGHWAYS — DATE 8/10/89

CHIEF, BUREAU OF ENGINEERING — DATE 8-21-89

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 8/21/89

NO	DATE	REVISION

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ELLICOTT CITY, MARYLAND
21043

DES RJW | DRN JLR / JLT

PROJECT S-88-58 P-88-80 F-89-98
STRAWBERRY FIELDS
SECTION 1, AREA 1 LOTS 1 THRU 60

LOCATION TAX MAP NO 31 PARCEL 223
1ST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

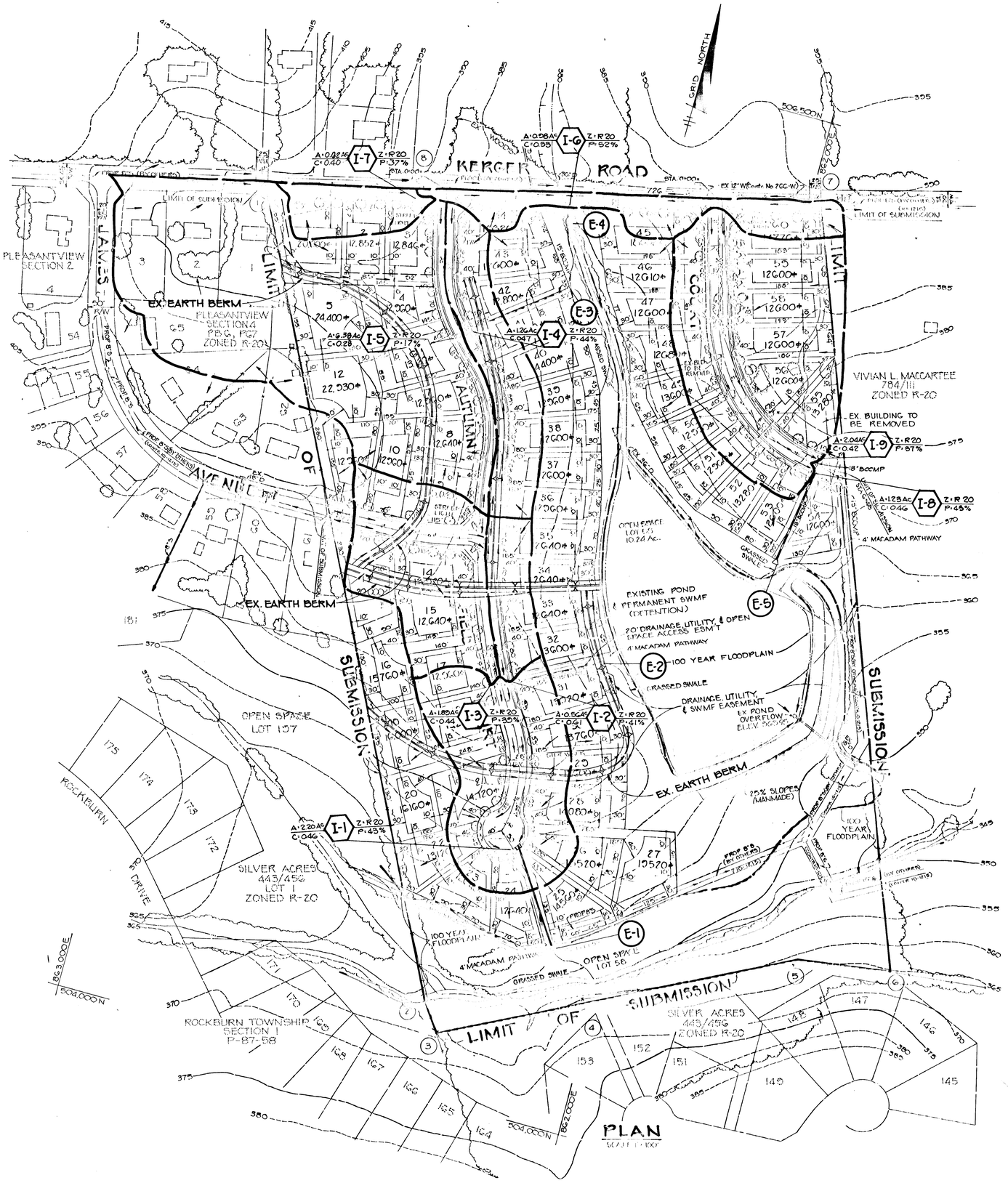
TITLE ROADWAY PROFILES

DATE DEC 1, 1988; 7-19-89 | PROJECT NO 0045

SCALE H: 1"=50' V: 1"=5' | DRAWING 5 OF 13

1469

F-89-98



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 8/3/89

CHIEF, BUREAU OF ENGINEERING — DATE 8/18/89

CHIEF, BUREAU OF ENGINEERING — DATE 8-21-89

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 8/24/89

NO	DATE	REVISION
1	1/10/92	REVISED D.A. I-5 AND I-7

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

PROJECT: S-88-58 P-88-80 F-89-98
STRAWBERRY FIELDS
SECTION 1, AREA 1 LOTS 1 THRU 60

LOCATION
TAX MAP NO. 31 PARCEL 223
1ST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

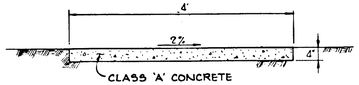
TITLE
DRAINAGE AREA MAP

DATE: DECEMBER 1, 1988; 7-19-89 — PROJECT NO. 00045

DES. RJW | DRN. SAP | SCALE 1"=100' | DRAWING 6 OF 15

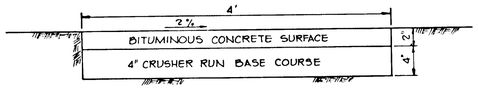
1469

F-89-98



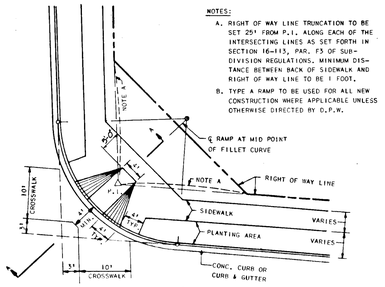
SIDEWALK DETAIL

NO SCALE



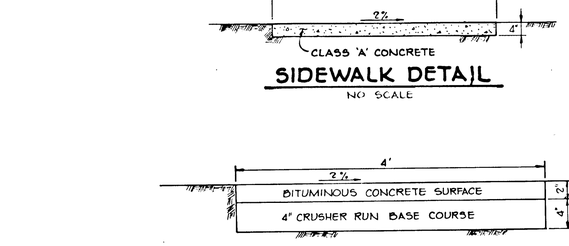
MACADAM PATHWAY DETAIL

NO SCALE



SIDEWALK RAMP

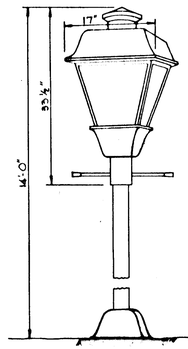
NO SCALE



NOTE:
SEED AND MULCH SWALE AFTER CONSTRUCTION

GRASSED SWALE

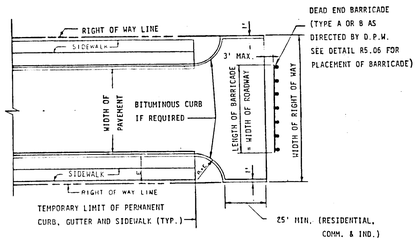
NO SCALE



DETAIL - LIGHTING FIXTURE

No Scale

NOTE:
ALL STREET LIGHT FIXTURES TO BE 100 WATT, HIGH PRESSURE SODIUM OR HIGH WITH GRAY FIBERGLASS POLE AND DIRECTED DOWNWARD LOCATIONS OF STREET LIGHT FIXTURES ARE ON THE PLAN AND ARE SHOWN THUS ☼

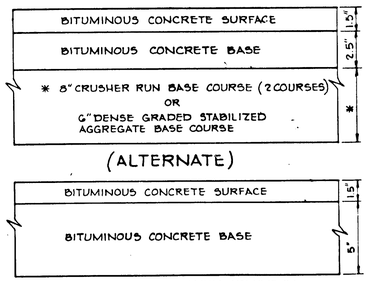


NOTES:

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)

TEMPORARY TEE TURN AROUND

NO SCALE

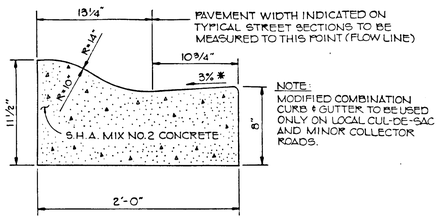


HOWARD COUNTY DESIGN MANUAL VOLUME IV STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-2.01)

P-2 PAVING

NO SCALE

BRIAR OAK COURT
JAMES AVENUE
AUTUMN FIELD COURT

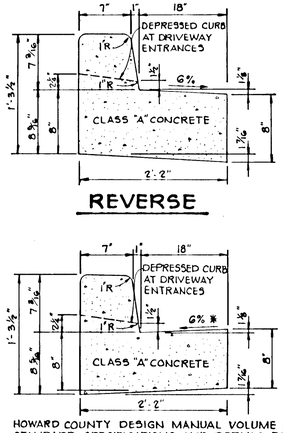


NOTE:
MODIFIED COMBINATION CURB & GUTTER TO BE USED ONLY ON LOCAL CUL-DE-SAC AND MINOR COLLECTOR ROADS.

* GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AND IN THE SAME DIRECTION AS THE PAVEMENT. MATCH PAVEMENT CROSS SLOPE WHEN CURB IS LOCATED ON LOW SIDE OF SUPERELEVATED SECTION AND THE RATE OF SUPERELEVATION IS GREATER THAN 3% FOR MODIFIED CURB AND GUTTER.

MODIFIED COMBINATION CURB AND GUTTER

NO SCALE



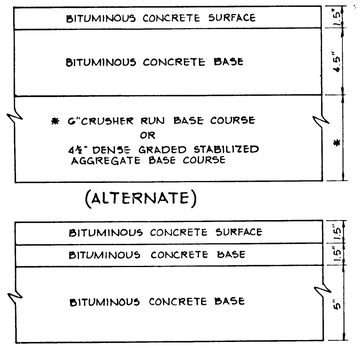
REVERSE

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

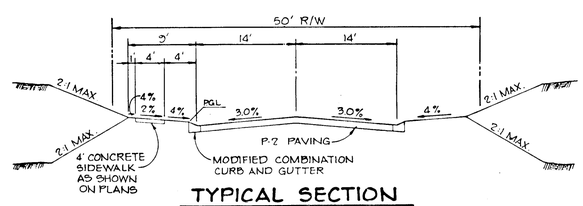
AUTUMN FIELD COURT - LINEAR PROFILE ONLY
KERGER ROAD - STA 4+00 TO STA 10+7001



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

8" PAVING, P-3

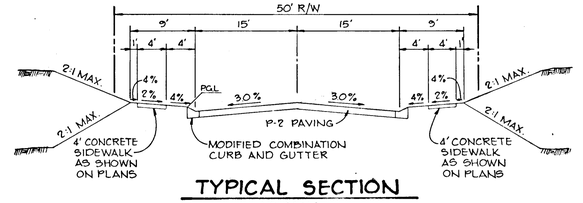
NO SCALE.
KERGER ROAD



TYPICAL SECTION

NO SCALE

AUTUMN FIELD COURT
STA. 7+12.50 TO STA. 11+85.08
DESIGN SPEED 30 M.P.H.
CLASSIFICATION - CUL-DE-SAC
ZONING R-20

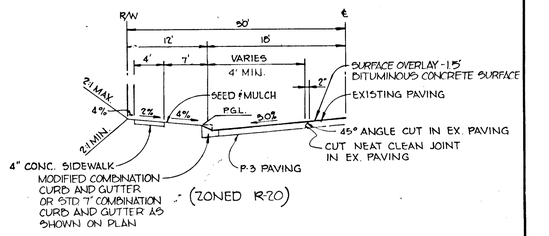


TYPICAL SECTION

NO SCALE

BRIAR OAK COURT STA. 0+00 TO STA. 6+26.73
AUTUMN FIELD COURT STA. 0+00 TO STA. 6+72.50
*JAMES AVENUE STA. 0+00 TO STA. 3+17.15
DESIGN SPEED 30 M.P.H.
CLASSIFICATION - LOCAL STREET
ZONING R-20

* DESIGN SPEED 25 M.P.H. (WAIVER APPROVED)



TYPICAL HALF SECTION

No Scale

KERGER ROAD
STA. 4+00 TO STA. 14+68.51
DESIGN SPEED 35 MPH
CLASSIFICATION - MINOR COLLECTOR
ZONING R-20

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

CHIEF, LAND DEVELOPMENT DIVISION — DATE 8/8/89

CHIEF, BUREAU OF HIGHWAYS — DATE 8/10/89

CHIEF, BUREAU OF ENGINEERING — DATE 8-21-89

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 9/6/89

NO	DATE	REVISION

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

OWNER
ELEANOR E. NICOLAI, ET AL.
9377 KERGER ROAD
ELLICOTT CITY, MARYLAND 21043

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

PROJECT S-88-50, P-88-80, F-89-98
STRAWBERRY FIELDS
SECTION 1, AREA 1 LOTS 1 THRU 60

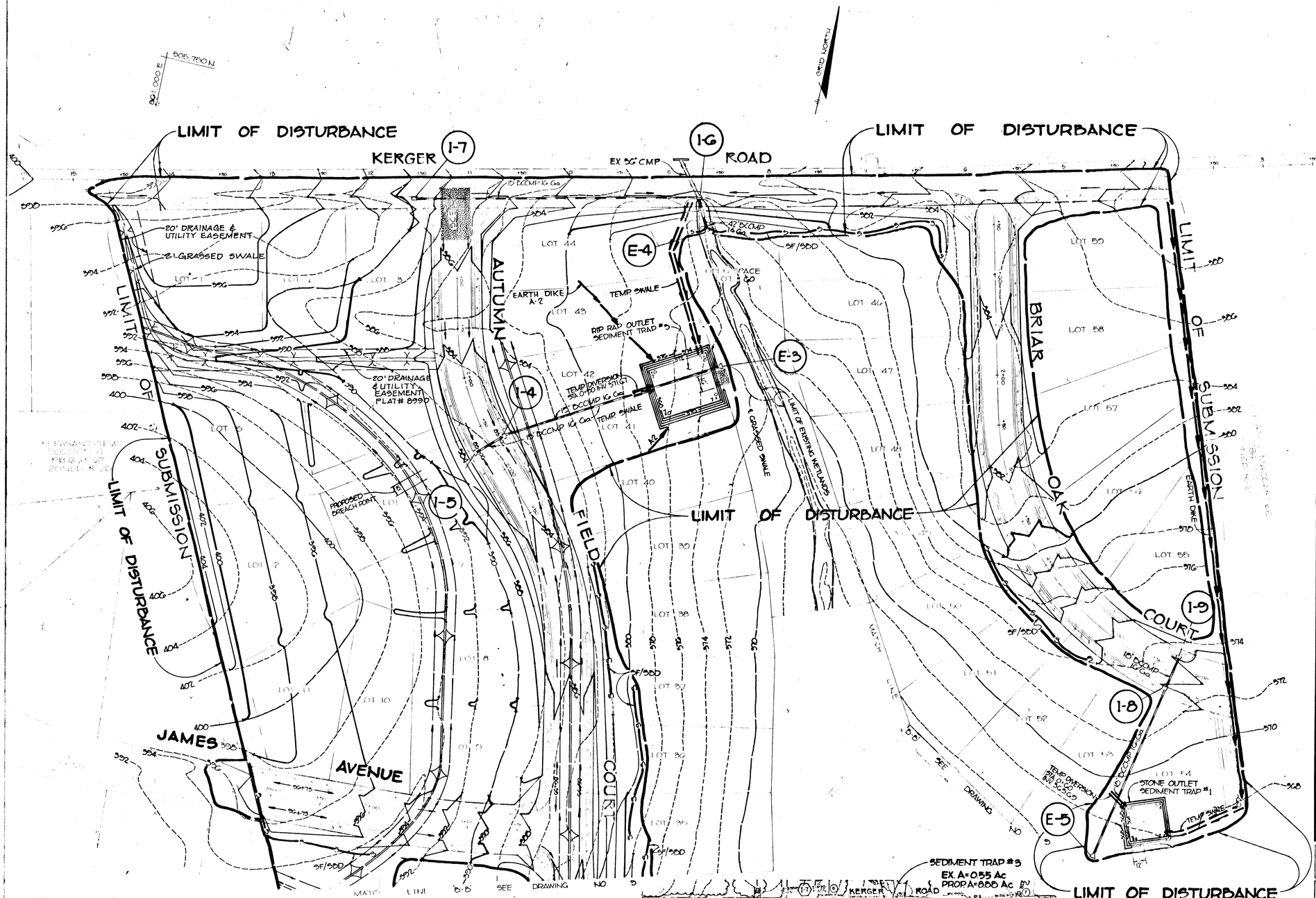
LOCATION
TAX MAP NO 31 PARCEL 225
1ST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

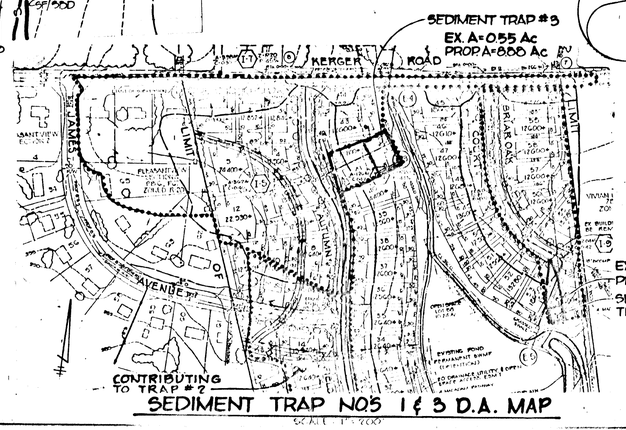
TITLE
DETAILS

DATE DEC 1, 1988 / 7-10-80
PROJECT NO 0045
DES. RJW DRN JCA/JLR
SCALE AS SHOWN
DRAWING 7 OF 13

1469

F-89-98





SEDIMENT TRAP DATA

	#1	#2	#3
DRAINAGE AREA	2.82 Ac	.52 Ac	8.88 Ac
DISTURBED AREA	1.45 Ac	1.09 Ac	6.14 Ac
STORAGE REQUIRED	2574 cf	3616 cf	15,984 cf
STORAGE PROVIDED	2662 cf	3670 cf	16,120 cf
CREST ELEV.	3670	3554	372.50
CLEANOUT ELEV.	3647	3550	3690
BOTTOM ELEV.	3654	3516	3670
TRAP DIMENSIONS	52' X 52' X 26'	45' X 45' X 28'	65' X 62' X 40'
EXISTING GROUND @ OUTLET	3670	3554	373.50

"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 ALSO AUTHORIZE 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."

DEVELOPER: JAMES R MOXLEY JR. PRESIDENT SECURITY DEVELOPMENT CORP. — 7/19/89

"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."

ENGINEER: JAMES K TRACY JR #10516 — 7/19/89

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.

U.S. SOIL CONSERVATION SERVICE — 7/27/89

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

APPROVED Robert W Fisher HOWARD SOIL CONSERVATION DISTRICT — 7/28/89

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKES

DIRECTOR — 8/3/89

Charles Nitsmlff, atty — 8/18/89

8-21-89

RECOMMENDED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

CHIEF, DEVELOPMENT — 9/21/89

⚠ 1/10/90 ADDED SWALE LOT 1

NO. DATE REVISION

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

STATE OF MARYLAND — JAMES KENNETH TRACY — NO. 10516 — REGISTERED PROFESSIONAL ENGINEER

James K Tracy

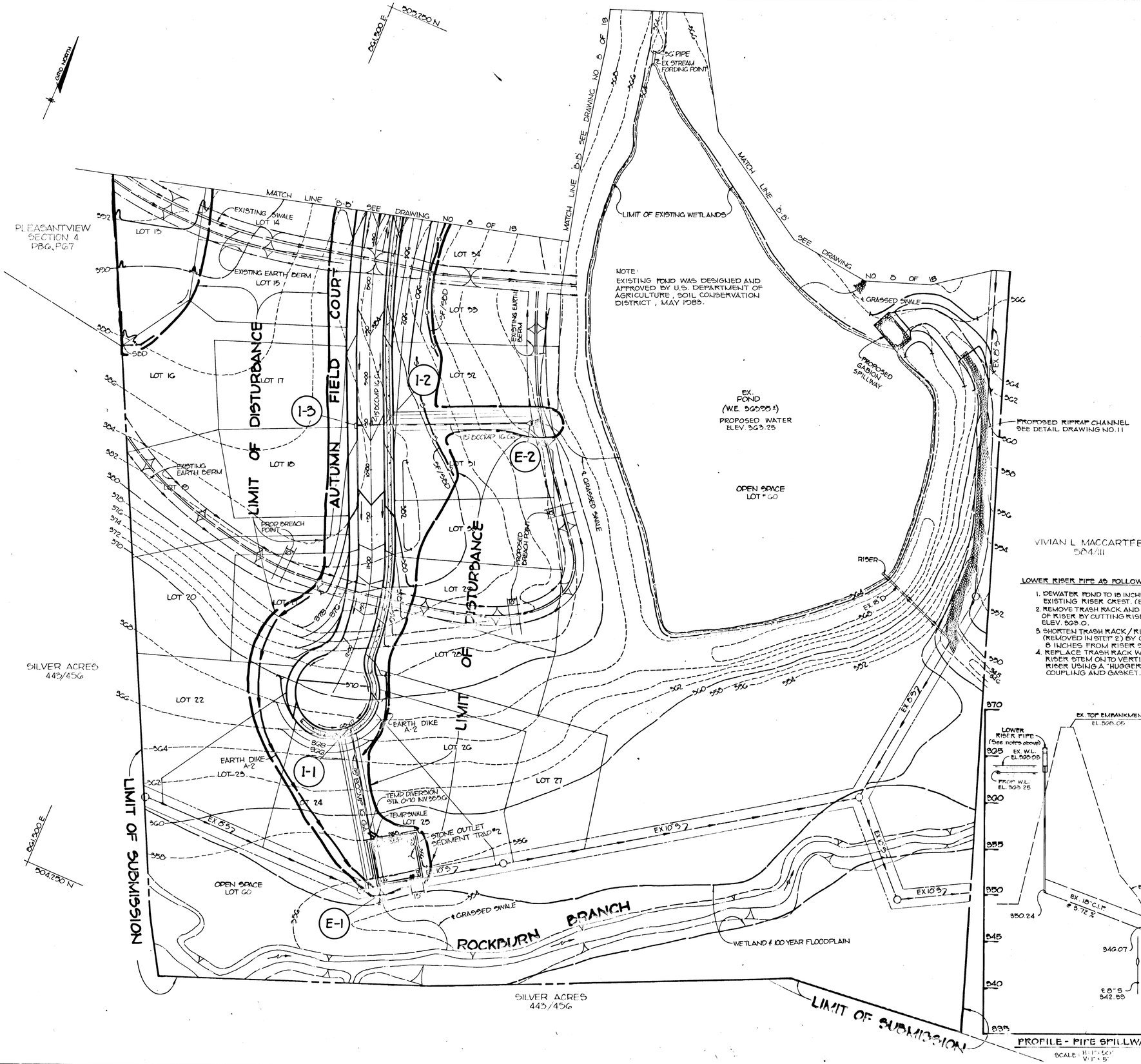
OWNER:
ELEANOR NICOLAIDES ET AL
P.O. BOX 417
ELLICOTT CITY, MARYLAND 21043

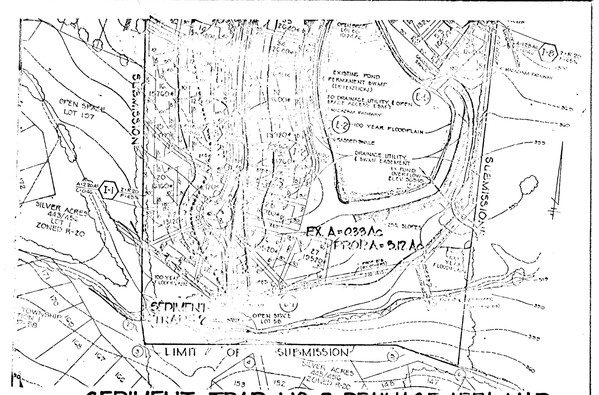
DEVELOPER:
SECURITY DEVELOPMENT CORP.
P.O. BOX 417
ELLICOTT CITY, MARYLAND 21043

PROJECT: S-88-50, P-88-80, F-89-98
STRAWBERRY FIELDS
LOCATION: 3RD ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
TITLE: GRADING AND SEDIMENT CONTROL PLAN
DATE: DEC 1, 1988; 7-10-89
DES. RJW DRN. JLR/JCT SCALE 1"=50' DRAWING 8 OF 13

1469

F-89-98





SEDIMENT TRAP NO 2 DRAINAGE AREA MAP

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 Mosley Jr. 7.19.89
DEVELOPER: JAMES R. MOSLEY 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 7.19.89
ENGINEER: JAMES K. TRACY PE # 15666 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.

U.S. SOIL CONSERVATION SERVICE 7/27/89 DATE

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

Robert W. Tschan 7/28/89
HOWARD S.C.D. DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

CHIEF, DIVISION OF ENGINEERING 8/3/89 DATE
CHIEF, BUREAU OF HIGHWAYS 8/7/89 DATE
CHIEF, BUREAU OF ENGINEERING 8-21-89 DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

CHIEF, DIVISION OF COMPREHENSIVE PLANNING AND LAND DEVELOPMENT 8/16/89 DATE

NO	DATE	REVISION

TRACY, SCHULTE & ASSOCIATES INC.
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8490 Baltimore National Pike • Ellicott City, Maryland 21043 • (301) 465-6105

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PO BOX 417
ELLICOTT CITY, MARYLAND 21043

DEVELOPER
SECURITY DEVELOPMENT CORP
PO BOX 417
ELLICOTT CITY, MARYLAND 21043

PROJECT S-88-58, P-88-80, F-89-98
STRAWBERRY FIELDS
SECTION 1 AREA 1 LOTS 1 THRU 60

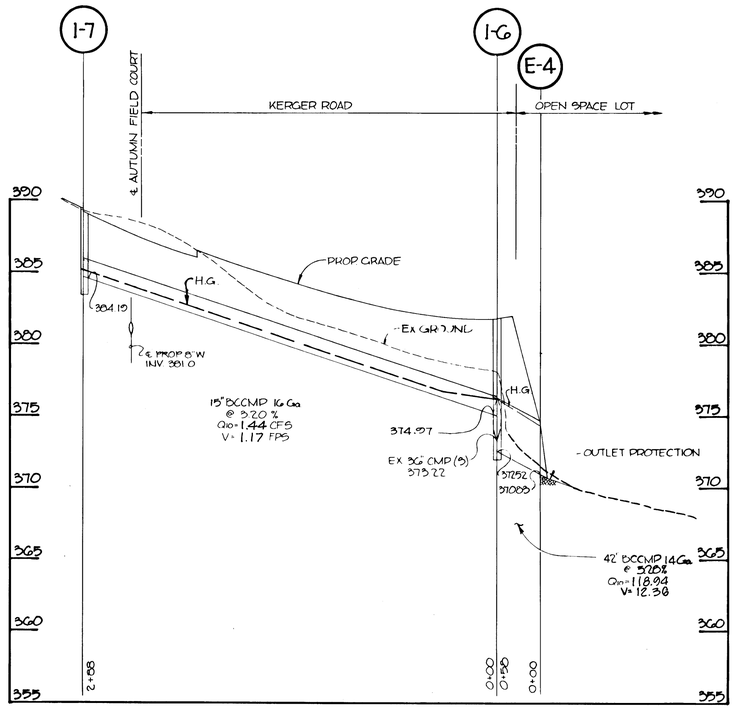
LOCATION
TAX MAP NO 51 PARCEL 225
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

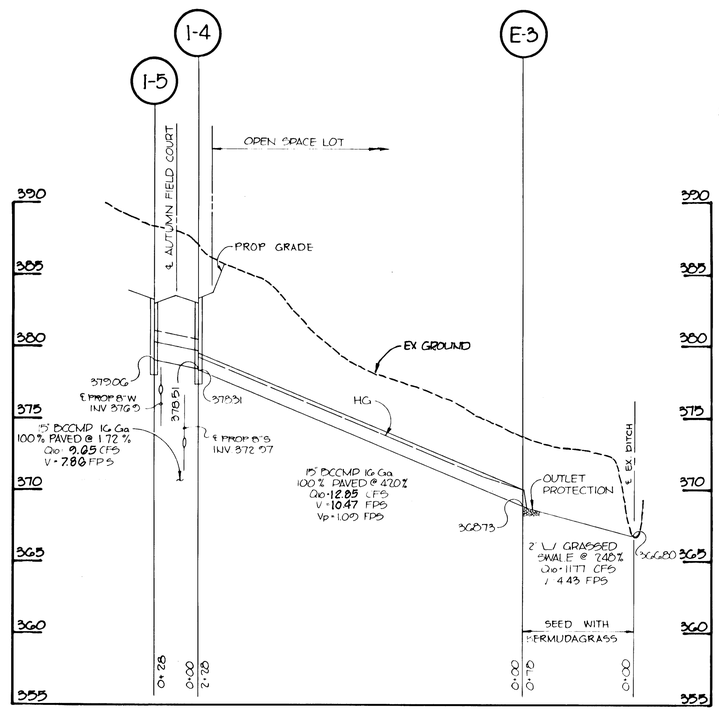
TITLE
GRADING, SEDIMENT CONTROL PLAN

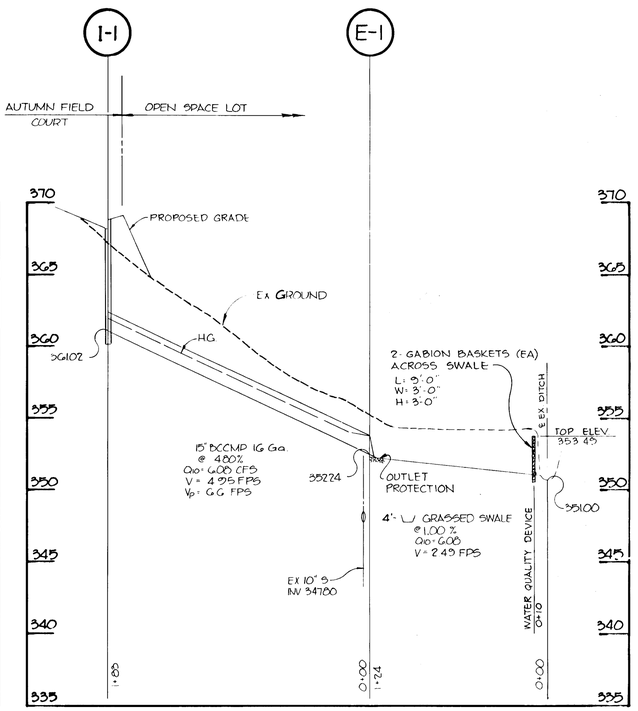
DATE DESIGN 7-19-89 PROJECT NO 00045
SCALE 1"=50' DRAWING 9 OF 18
DES RJW DRN JLR/JLT

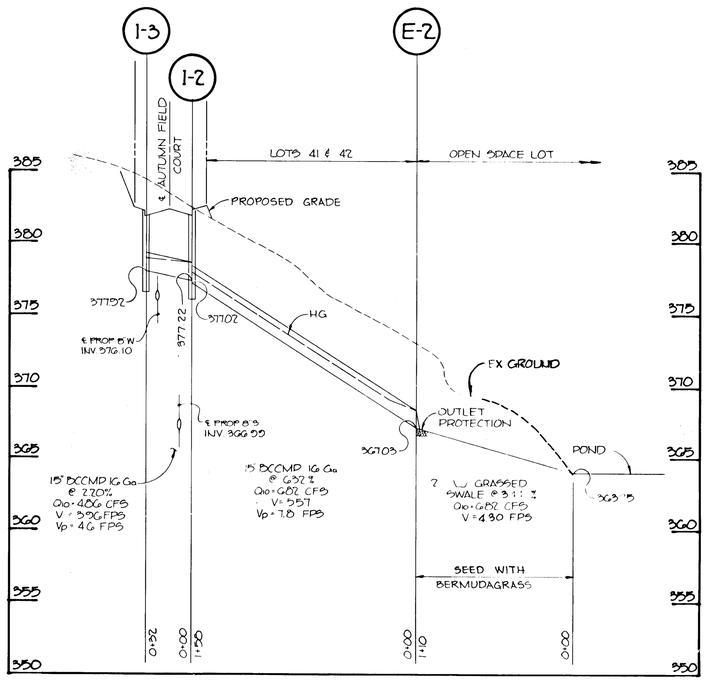
1469

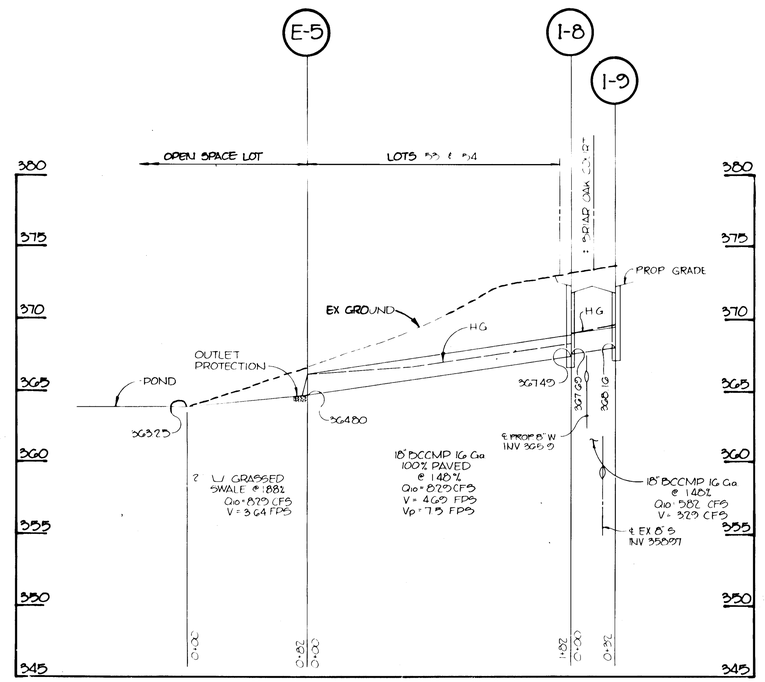
F-89-98











APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

CHIEF, DIVISION OF UTILITIES — DATE 8/3/89

CHIEF, BUREAU OF HIGHWAYS — DATE 7/6/89

CHIEF, BUREAU OF ENGINEERING — DATE 8-21-89

APPROVED: HOWARD COUNTY DEPT OF PLANNING AND ZONING

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 9/20/89

NO	DATE	REVISION
1	1/10/90	REVISE DATA I-5 TO E-3 AND I-7 TO E-4

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

OWNER
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ELLICOTT CITY, MARYLAND
21043

DEVELOPER
SECURITY DEVELOPMENT CORP
PO BOX 417
ELLICOTT CITY, MARYLAND
21043

PROJECT S-88-58, P-88-80, F-89-98
STRAWBERRY FIELDS
SECTION 1 AREA 1 LOTS 1 THRU 60

LOCATION: TAX MAP NO 31 PARCEL 223
1ST ELECTION DISTRICT
HOWARD COUNTY MARYLAND

TITLE: STORM DRAIN PROFILES

DATE: DEC. 1, 1988 / 7-15-89 — PROJECT NO 0045

DES RJW — DRN JLT — SCALE H: 1"=50' V: 1"=5' — DRAWING 10 OF 13

469

F-89-98

STRUCTURE	d - 50	LENGTH (L)	WIDTH (W)	THICKNESS (T)
E-1	4"	9.0	10.5	6"
E-2	4"	9.5	11	6"
E-3	6"	12.0	13.5	9"
E-4	1.1'	34.0	37.5	1.65'
E-5	4"	10.5	12.0	6"

NOTE: STORM WATER MANAGEMENT IS NOT REQUIRED FOR THIS PROJECT.

SEQUENCE OF CONSTRUCTION

DAY 1	1.	OBTAIN A GRADING PERMIT.
DAY 2-3	2.	CLEAR AND GRUB AREAS FOR AND INSTALL STABILIZED CONSTRUCTION ENTRANCE (SCE).
DAY 3-15	3.	CLEAR AND GRUB AREAS FOR AND INSTALL SEDIMENT TRAPS AND STABILIZE DISTURBED AREAS IN ACCORDANCE WITH TEMPORARY SEEDING NOTES.
DAY 15-18	4.	CLEAR AND GRUB AREAS FOR AND INSTALL REMAINDER OF SEDIMENT CONTROL DEVICES. WHEN SEDIMENT TRAPS ARE FUNCTIONAL AND ALL SEDIMENT CONTROL DEVICES ARE IN PLACE BREACH EXISTING EARTH BERMS WITHIN LIMITS OF DISTURBANCE LINES AND AT ADDITIONAL POINTS WHERE SHOWN ON PLANS.
DAY 18-19	5.	LOWER POND TO ELEVATION 362.5 AND ADJUST RISER ELEVATION AS SHOWN ON THESE PLANS. WATER LEVEL IN POND TO BE LOWERED BY PUMPING DURING THIS OPERATION.
DAY 19-22	6.	CLEAR AND GRUB REMAINDER OF SITE.
DAY 22-40	7.	GRADE SITE.
DAY 40-90	8.	INSTALL UTILITIES IE: WATER, SEWER, STORM DRAINS ETC. NOTE THAT THE STORM DRAINS BETWEEN A) E-1 AND I-1 AT STA 0+70 B) E-3 AND I-4 AT STA 0+90 AND C) E-5 AND I-8 AT STA 0+60 SHOULD BE TEMPORARILY DIVERTED INTO THE APPROPRIATE SEDIMENT TRAPS. THIS TEMPORARY DIVERSION IS TO REMAIN IN PLACE UNTIL ALL AREAS DRAINING INTO THE APPROPRIATE SEDIMENT TRAPS ARE STABILIZED.
DAY 90-92	9.	STABILIZE ALL SLOPES IN ACCORDANCE WITH PERMANENT SEEDING NOTES.
DAY 92-120	10.	COMPLETE ALL ROADWAY CONSTRUCTION AND STABILIZE ALL DISTURBED AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES.
DAY 120-128	11.	UPON APPROVAL OF SEDIMENT CONTROL (INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVICES AND REMOVE STORM DRAIN DIVERSIONS AND STABILIZE ALL DISTURBED AREAS AS PER PERMANENT SEEDING NOTES.

TEMPORARY SWALE

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.

TEMPOPARY SWALE
NO SCALE

SILT FENCE

CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD

FENCE: WOVEN WIRE, 14 GA. 6" MAX. MESH OPENING

FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL

PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL.

SILT FENCE
NO SCALE

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	32.50 ACRES
AREA DISTURBED	6.41 ACRES
AREA TO BE ROOFED OR PAVED	2.46 ACRES
AREA TO BE VEGETATIVELY STABILIZED	3.95 ACRES
TOTAL CUT	4587 CU.YDS.
TOTAL FILL	11806 CU.YDS.
OFFSITE WASTE/BORROW AREA LOCATION	ON SITE

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.

GABION 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 Moxley Jr — 7·19·89

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 — 7·19·89

ENGINEER: JAMES K. TRACY PE # 5566 — 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.

[signature] — 7/27/89

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 — 7/28/89

HOWARD S.C.D. — DATE

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

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/10000 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 OF 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 PER ACRE OF KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS PER ACRE OF WELL ANCHORED STRAW.

MULCHING: APPLY 1-1/2 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 SEEDBED PREPARATION

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, IF NOT PREVIOUSLY LOOSENED.

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 2-1/2 BUSHELS 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 1-1/2 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 FT. OR HIGHER, USE 348 GALLONS 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.

STONE OUTLET SEDIMENT TRAP V

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

CONSTRUCTION SPECIFICATIONS FOR ST-V

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
2. The fill material for the embankment shall be free of roots and other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.
3. All cut and fill slopes shall be 2:1 or flatter.
4. The stone used in the outlet shall be small riprap 4"-8" along with a 1' thickness of 2" aggregate placed on the up-grade side on the small riprap on embedded filter cloth in the riprap.
5. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to ½ the design depth of the trap.
6. The structure shall be inspected after each rain and repairs made as needed.
7. Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
8. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

STONE OUTLET SEDIMENT TRAP
NO SCALE

STRAW BALE DIKE

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

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[signature] — 8/3/89

CHIEF, LAND DEVELOPMENT DIVISION — DATE

[signature] acting — 8/18/89

CHIEF, BUREAU OF HIGHWAYS — DATE

[signature] — 8-21-89

CHIEF, BUREAU OF ENGINEERING — DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

[signature] — 9/21/89

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT -DATE

NO	DATE	REVISION

8'-0" RIPRAP SPILLWAY CHANNEL TYPICAL SECTION
NO SCALE

Maryland SCS/WRA — April 1983

CONSTRUCTION SPECIFICATIONS FOR ST-VI

1. The area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
2. The fill material for the embankment shall be free of roots or other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed. Maximum height of embankment shall be five (5) feet, measured at centerline of embankment.
3. All fill slopes shall be 2:1 or flatter; cut slopes 1:1 or flatter.
4. Elevation of the top of any dike directing water into trap must equal or exceed the height of embankment.
5. Storage area provided shall be figured by computing the volume available behind the outlet channel up to an elevation of one (1) foot below the level weir crest.
6. Filter cloth shall be placed over the bottom and sides of the outlet channel prior to placement of stone. Sections of fabric must overlap at least one (1) foot with section nearest the entrance placed on top. Fabric shall be embedded at least six (6) inches into existing ground at entrance of outlet channel.
7. Stone used in the outlet channel shall be four (4) to eight(8) inches (riprap). To provide a filtering effect, a layer of filter cloth shall be embedded one (1) foot back into the upstream face of the outlet stone or a one (1) foot thick layer of two (2) inch or finer aggregate shall be placed on the upstream face of the outlet.
8. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
9. The structure shall be inspected after each rain and repaired as needed.
10. Construction operations shall be carried out in such a manner that erosion and water pollution are minimized.
11. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.
12. Drainage area for this practice is limited to 15 acres or less.

RIPRAP OUT SEDIMENT TRAP
NO SCALE

CONSTRUCTION SPECIFICATIONS

1. ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
3. TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. RUNOFF SHALL BE CONVEYED TO A SEDIMENT 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. 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

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

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

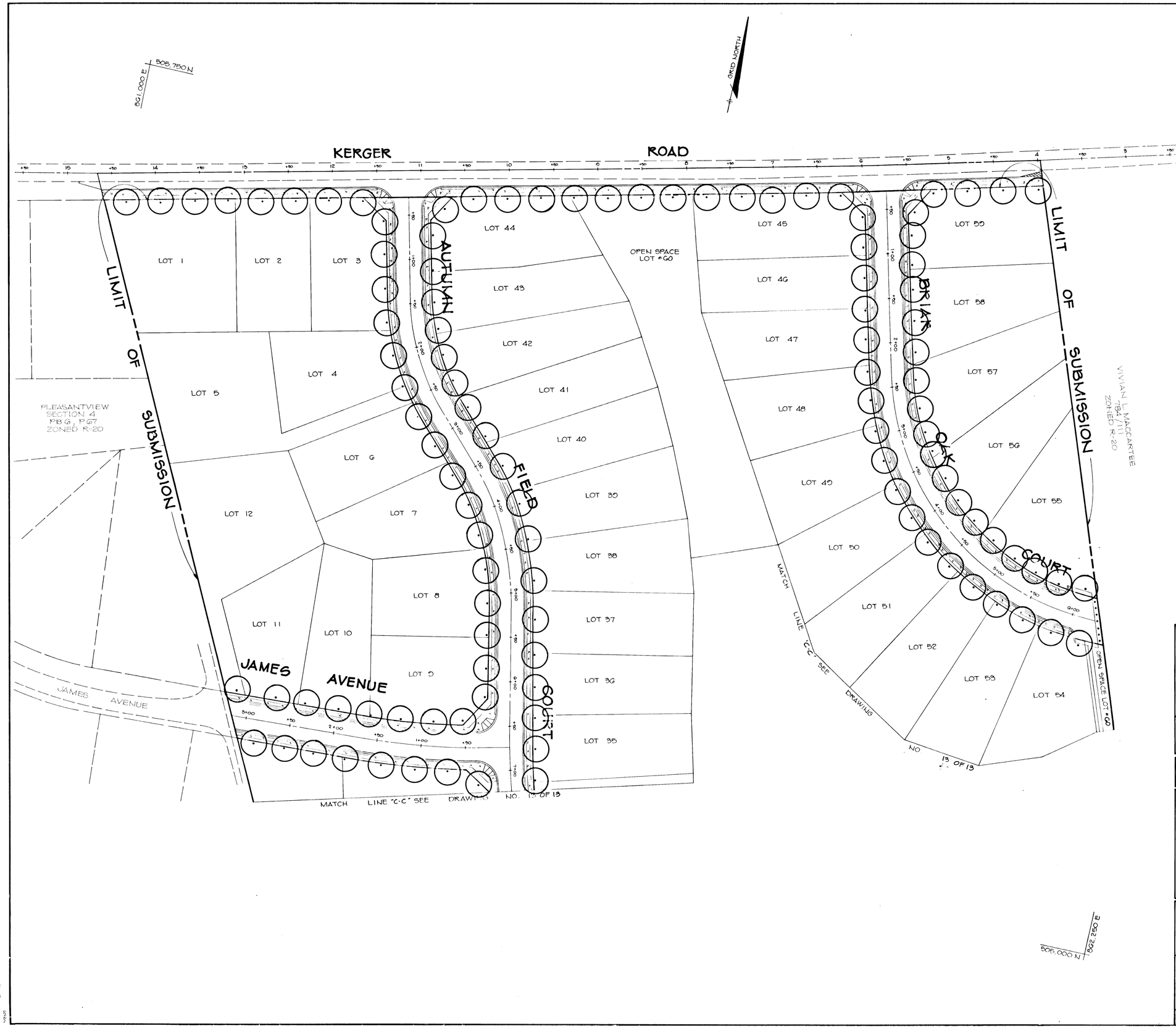
James K Tracy

OWNER ELEANOR NICOLAI, ET. AL. P.O. BOX 417 ELLICOTT CITY, MARYLAND 21043	PROJECT S-88-58, P-88-80, F-89-98 **STRAWBERRY FIELDS** SECTION I, AREA I LOTS 1 THRU 60
	LOCATION TAX MAP NO. 31 PARCEL 223 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DEVELOPER SECURITY DEVELOPMENT CORP. P.O. BOX 417 ELLICOTT CITY, MARYLAND 21043	TITLE SEDIMENT CONTROL NOTES AND DETAILS
	DATE DEC 1, 1988 / 7-19-89 — PROJECT NO. 0045
DES. RJW — DRN. JLT	SCALE AS SHOWN — DRAWING 11 OF 13

F-89-98

1469

N05620



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[signature] DIVISION	8/3/89 DATE
[signature] CHIEF, BUREAU OF HIGHWAYS	8/17/89 DATE
[signature] CHIEF, BUREAU OF ENGINEERING	8-21-89 DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

[signature] CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT	9/21/89 DATE

NO	DATE	REVISION

TRACY, SCHULTE & ASSOCIATES INC.
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STATE OF MARYLAND JAMES KENNETH TRACY REGISTERED PROFESSIONAL ENGINEER

[signature]

OWNER
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ELLICOTT CITY, MARYLAND
21043

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

PROJECT S-88-58, P-88-80, F-89-98
STRAWBERRY FIELDS
SECTION 1, AREA 1 LOTS 1 THRU 60

LOCATION
TAX MAP NO. 31 PARCEL 223
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

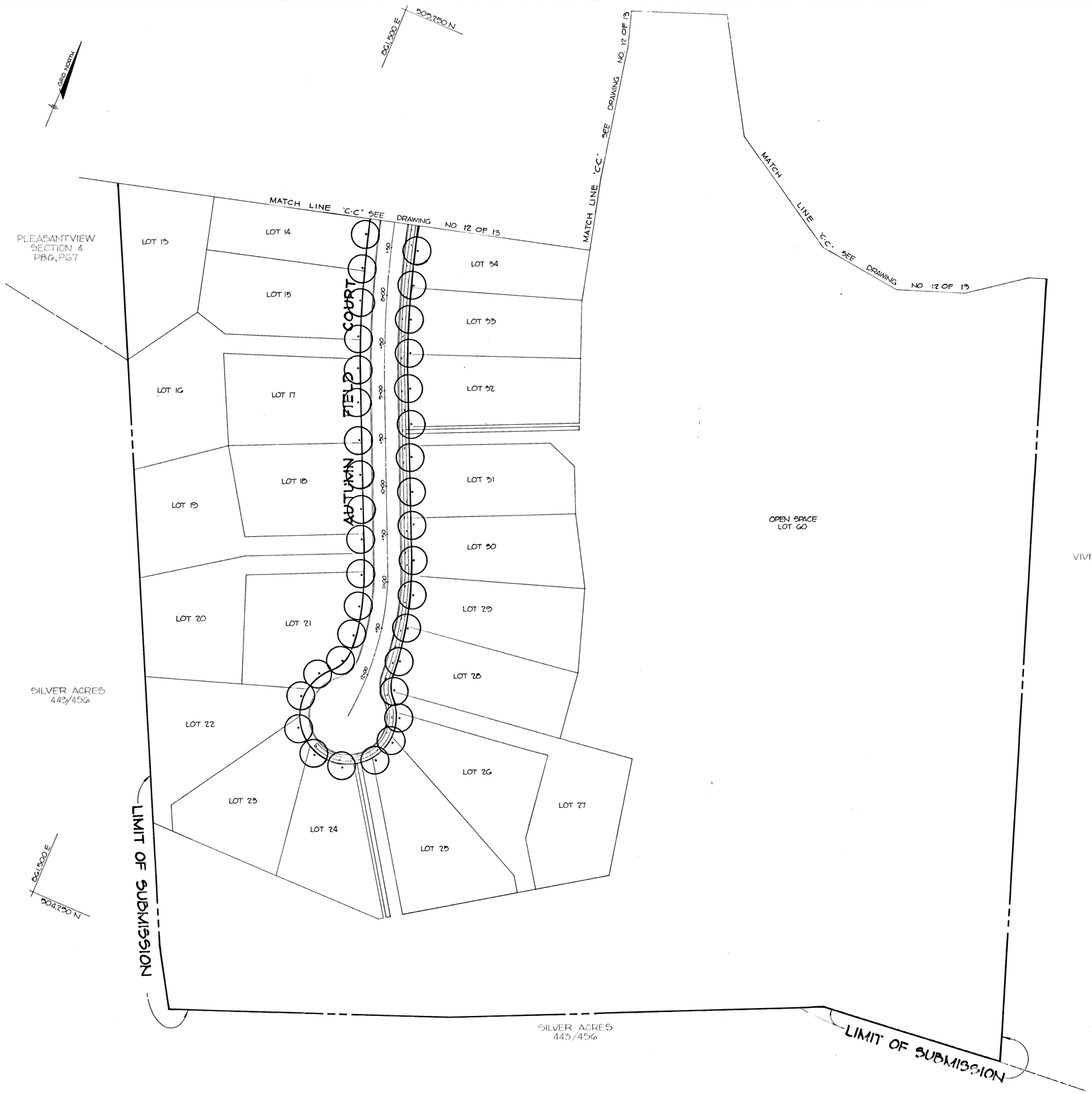
TITLE
STREET TREE PLAN

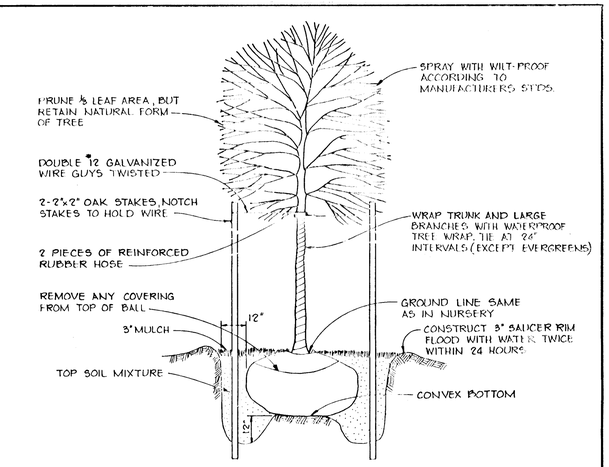
DATE DEC. 1, 1988 7-19-89 PROJECT NO 0045

DES RJW DRN JLR/JLT SCALE 1"=50' DRAWING 12 OF 13

F-89-98

1469





TREE PLANTING DETAIL

NO SCALE

PLANT LIST

SYMBOL	QUANTITY	NAME	REMARKS
⊙	147	ALL STREET TREES VARIETIES TO BE ACER RUBRUM - RED MAPLE	2½ Min Cal B&B Full Head

1063.41 LENGTH OF EXISTING KERGER RD. ÷ 40		26.50
264.46 LENGTH OF AUTUMN FIELD RD. ÷ 40		6.60
LENGTH OF PROPOSED ROADS		
314.45 JAMES AVENUE	÷ 20	15.72
626.75 BRIAR OAK COURT	÷ 20	31.34
1185.08 AUTUMN FIELD COURT	÷ 20	59.27
TOTAL REQUIRED		139.52
TOTAL PROVIDED		147

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR OF PUBLIC WORKS / DIVISION — DATE 8/3/89

CHIEF, BUREAU OF ENGINEERING — DATE 8/10/89

CHIEF, BUREAU OF ENGINEERING — DATE 8-21-89

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 7/26/89

NO	DATE	REVISION

TRACY, SCHULTE & ASSOCIATES INC.
planning • architecture • engineering
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STATE OF MARYLAND — JAMES K. TRACY — REGISTERED PROFESSIONAL ENGINEER

James K. Tracy

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DEVELOPER
SECURITY DEVELOPMENT CORP
PO BOX 417
ELLICOTT CITY, MARYLAND
21043

PROJECT S-88-50, P-88-80, F-89-98
STRAWBERRY FIELDS
SECTION 1 AREA 1 — LOTS 1 THRU 60

LOCATION
TAX MAP NO 31 PARCEL 223
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE
STREET TREE PLAN

DATE DEC. 1, 1988; 7-10-89 — PROJECT NO 0045

DES RJW — DRN JLR/JLT — SCALE 1"=50' — DRAWING 13 OF 13

1469

F-89-98