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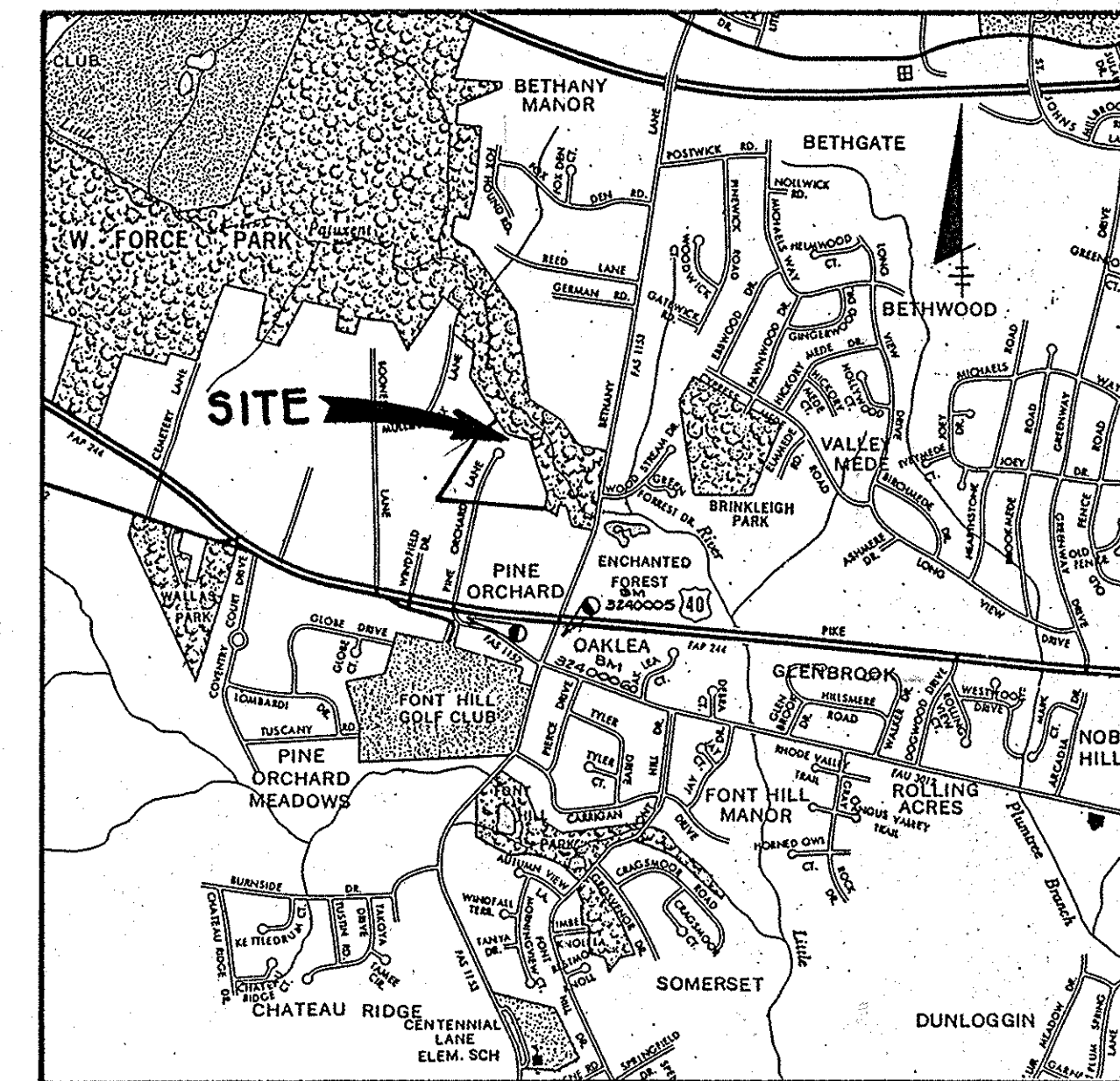
# SITE DEVELOPMENT PLAN REVISION TO SDP-89-07

## ORCHARD HILL

### SECTION 1, AREA 1

### 2ND ELECTION DISTRICT

### HOWARD COUNTY, MARYLAND



**VICINITY MAP**  
SCALE: 1"=2000'

HC BM# 3240005 NO ELEV.  
CONCRETE MONUMENT 0.4' BELOW SURFACE.  
HC BM# 3240006 ELEV. 408.26  
CONCRETE MONUMENT 0.2' BELOW SURFACE.

**GENERAL NOTES**

- ALL WATER LINES SHALL BE CONSTRUCTED A MINIMUM OF 42" COVER BELOW FINISHED GRADE.
- CORRUGATED STEEL PIPE SECTIONS WILL BE JOINED WITH A SINGLE OR TWO PIECE CORRUGATED BAND WITH A WATER TIGHT NEOPRENE GASKET. DIMPLETED BAND CONNECTORS WILL NOT BE PERMITTED.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION AND AMENDED UNANIMOUS ORD.
- 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 OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK SHOWN ON THIS/ THESE DRAWINGS:  
C & P TELEPHONE COMPANY 725-9976  
HOWARD COUNTY BUREAU OF UTILITIES 992-2366  
AT&T CABLE LOCATION DIVISION 393-3553  
BALTIMORE GAS AND ELECTRIC COMPANY 688-0123  
STATE HIGHWAY ADMINISTRATION 531-5533  
HOWARD COUNTY CONSTRUCTION INSPECTION DIVISION 992-2417/2418
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITH 2'-0" OF EXTERIOR HANGING WALLS.
- PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT TO SUBGRADE.
- TOPO TAKEN FROM FIELD RUN SURVEY BY TRACY, SCHULTE AND ASSOCIATES, INC. DATED JULY 1999.
- STORMWATER MANAGEMENT FOR THIS SITE PROVIDED UNDER FACILITY INSTALLED UNDER GP-88-71 AND SDP-89-07.
- ORCHARD HILL COMMUNITY BUILDINGS WILL BE FOR THE USE OF THE ORCHARD HILL COMMUNITY ONLY. SITE ANALYSIS FOR SDP-89-07

20. REDLINE REVISION JULY 27, 2015 DID NOT EXPAND THE 3000 SF LOD REVISION AS INDICATED IN NOTE 17 BELOW.

Area of Parcel 637,112 square feet or 14.626 ac.  
Zoning (Case 28 837H) R-A-15  
Floor Space:

	Blgs 1 thru 3	Blgs 4 thru 14	COMMUNITY BUILDING
Lower Level	4,800	4,800	BASEMENT 4080
First Floor	4,800	4,800	FIRST FLOOR 1,740
Second Floor	4,800	4,800	SECOND FLOOR 567
Third Floor	N/A	4,800	
<b>Total</b>	<b>14,400</b>	<b>19,200</b>	<b>2,801</b>

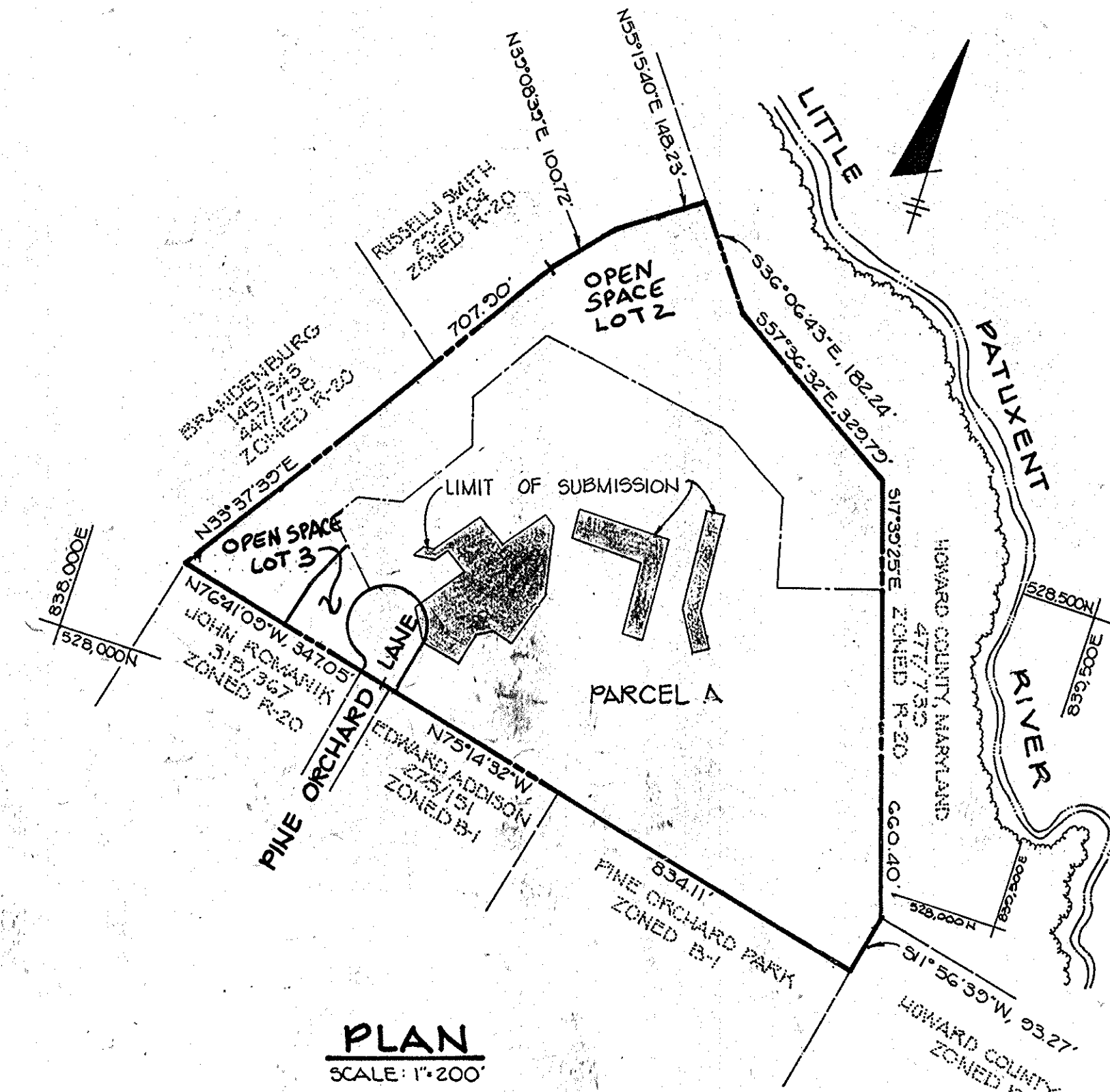
Total number of apartment units allowed 285  
Total number of apartments proposed

1 bedroom apartments (1049 square feet)	12
2 bedroom apartments (1153 square feet) incl. 7 1/2 units	191
1 bedroom apt w/den (1150 square feet) incl. 1 1/2 units	284
<b>Total</b>	<b>287</b>

Maximum number of tenants  
1 bedroom apartments - 2 ea.  
2 bedroom apartments - 4 ea.

Parking spaces required - 488 FOR RESIDENCE  
405 FOR COMMUNITY BLDG. EMPLOYEE  
PARKING SPACES PROVIDED  
52 CARPORTS  
317 COMMON PARKING SPACES = 409\* (SEE NOTE 15)  
(INCLUDES 9 C. PARKING SPACES)  
Open space (green area) to remain on-site = 9.94 ac. or 66.6%  
Building coverage of site (res./community bldg.) 60,046 sq ft or 10.6%

AREA OF THIS SUBMISSION = 1.14 AC. ±

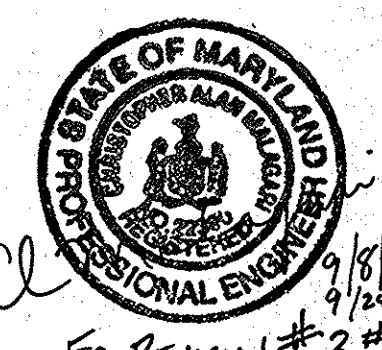


**PLAN**  
SCALE: 1"=200'

- FOUR PARKING SPACES RELOCATED OFF SITE BY SDP-00-108, ORCHARD PARK CONDOMINIUM, APARTMENT DWELLINGS, SECTION 2, AREA 1.  
ON SITE PARKING SPACES = 405  
OFF SITE PARKING SPACES = 4  
TOTAL PARKING SPACES PROVIDED = 409
- IN THE EVENT OF A CHANGE IN OWNERSHIP OR CONTROL OF EITHER ORCHARD PARK CONDOMINIUM, SECTION 2, AREA 1, OR ORCHARD HILL, SECTION 1, PARCEL A TO AN ENTITY THAT WOULD NOT CONTROL BOTH PARCELS, EASEMENTS WILL BE REQUIRED FOR ACCESS, GRADING, UTILITY, SWM, AND PARKING TO ENSURE VIABILITY OF BOTH PARCELS AND USES.
- THE LIMIT OF DISTURBANCE (3,000sq ft) FOR THE PLAN REVISION DATED NOV. 19, 2014 DOES NOT TRIGGER A FOREST CONSERVATION OBLIGATION AT THIS TIME (MUST BE A TENTH OF AN ACRE). HOWEVER THIS LIMIT OF DISTURBANCE MUST BE TRACED AND COMBINED WITH ANY FUTURE LIMIT OF DISTURBANCE IN ORDER TO SATISFY THE FOREST CONSERVATION REQUIREMENT FOR THIS SITE.
- A PLAT OF REVISION (PLAT NO 23151), DPZ FILE # F-15-150, WAS RECORDED ON 12-19-2014 IN THE LAND RECORDS OF HOWARD COUNTY. THE PURPOSE OF THE REVISION PLAT IS TO REVISE THE BRL SETBACKS PER THE NEW ZONING OF VICINAL PROPERTIES AND THE CURRENT ZONING REGULATIONS.
- A RESUBDIVISION PLAT WAS RECORDED IN THE LAND RECORDS OF HOWARD COUNTY IN ORDER TO MERGE 0.29 AC. OF OPEN SPACE LOT 1 WITH PARCEL B TO CREATE OPEN SPACE LOT 3 AND OPEN SPACE LOT 2. OPEN SPACE LOT 2 WILL BE OWNED BY THE COUNTY AND OS LOT 3 WILL BE PRIVATELY OWNED.

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly Licensed Professional Engineer under the laws of the State of Maryland.  
License No. 22390, Expiration Date: 6/30/17

NOTE: THIS SITE PLAN IS A REVISION TO SDP-89-07 RELOCATING THE POOL AND COMMUNITY BUILDING AND ADJUSTING PARKING AREAS.



ADDRESS CHART	
LOT NO.	ADDRESS
1	OPEN SPACE
PARCEL B	3176 PINE ORCHARD LANE
PARCEL A	3141 PINE ORCHARD LANE

ADDRESS CHART	
LOT NO.	ADDRESS
1	OPEN SPACE
PARCEL B	3176 PINE ORCHARD LANE
PARCEL A	3141 PINE ORCHARD LANE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.  
*Joyce M. Boyd* COUNTY HEALTH OFFICER 4/2/90 DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.  
*James W. ...* DIRECTOR 3/30/90 DATE

*...* CHIEF, BUREAU OF ENGINEERING 3-29-90 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.  
*...* PLANNING 4/12/90 DATE

*...* CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT 4/12/90 DATE

2 11-19-14 ADD GENERAL NOTE 17 & 18 PER OLD LETTER DATED OCT 29, 2014  
1 3-7-92 RELOCATE 4 ON SITE PARKING SPACES TO ADJOINING PARCEL REVISION

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

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

**PROJECT**  
**ORCHARD HILL**  
SECTION 1 AREA 1 LOT 1 & PARCELS A & B  
APARTMENT DWELLINGS

**LOCATION**  
TAX MAP NOS. 17 & 24  
PARCELS 150 204450  
2ND ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

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

**TITLE SHEET**  
REVISION TO SDP-89-07  
28 887M  
SDP 89-07

**DATE** JANUARY 1990  
**PROJECT NO.** 0243

**DES. RJW** **DRN. KMN/SAB** **SCALE: 1"=200'** **DRAWING 1 OF 13**

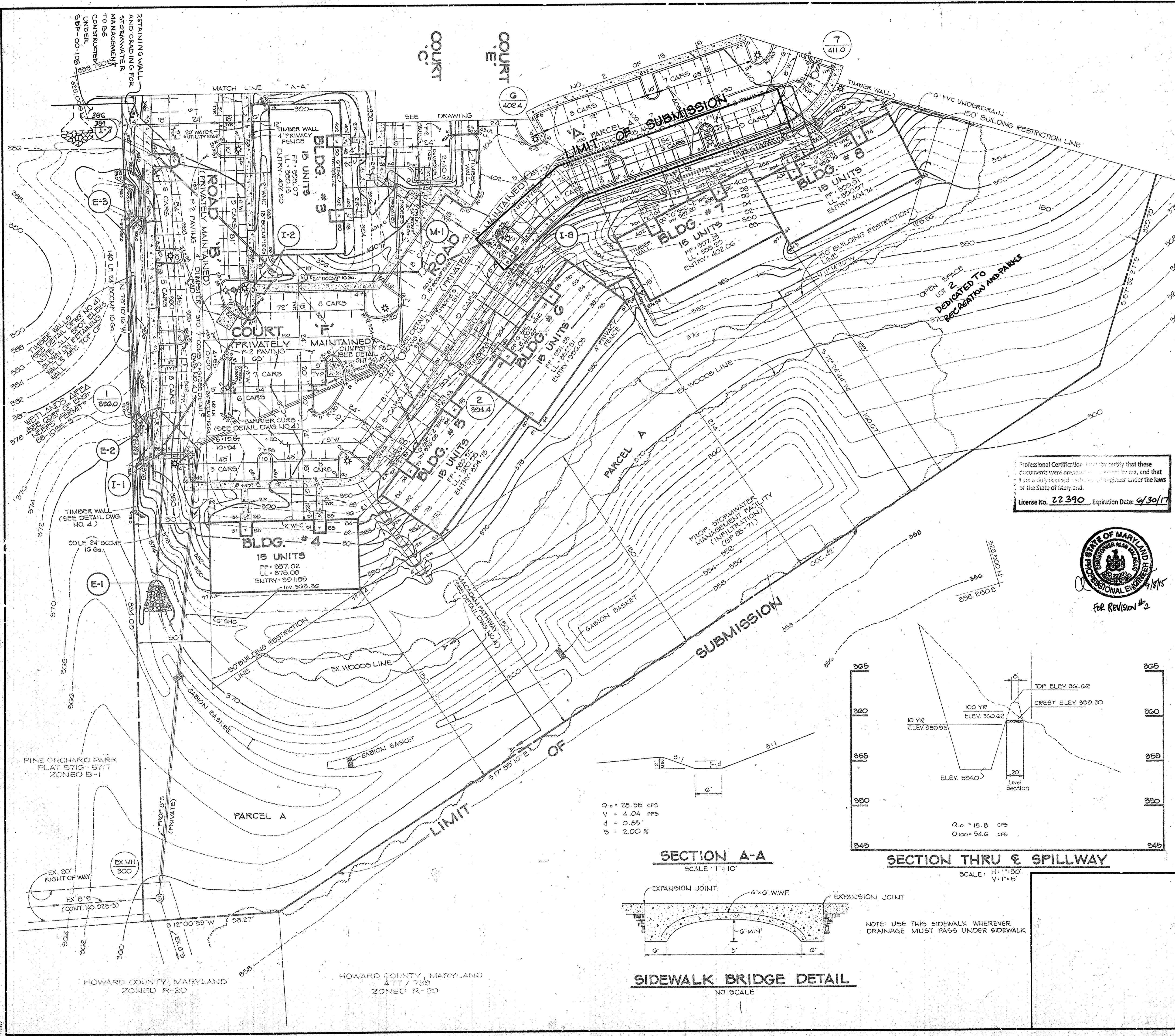
NO.	BY	DATE	REVISION
4	BEF	9-17-15	Show 2nd Clubhouse Addition & General Note 20
3	BEF	8-4-15	Remove Parcel B, Revise Lot 1 Add O.S. (15 24 3

SUBDIVISION NAME	SECT./AREA	LOT/PARCEL#
ORCHARD HILL	1/1	1, 2, 4, 3

PLAT # OR LIF	BLOCK#	ZONE	TAX ZONE MAP	ELEC. DIST.	CENSUS TR.
8530	1C	RA-1B	17	2	6011

WATER CODE	SEWER CODE
F14	5080000





STRUCTURE SCHEDULE						
NO.	TYPE	LOCATION	INV. IN	INV. OUT	TOP ELEV.	REMARKS
1-1	S	SEE PLAN	380.53	378.53	@ GRATE 385.3	H.C. STD. SD 4.22
1-2	S	SEE PLAN	382.15 382.90	381.95	@ GRATE 386.3	H.C. STD. SD 4.22 OPEN 4 SIDES
1-3	S	SEE PLAN	391.28	390.78	@ GRATE 395.54	H.C. STD. SD 4.22
1-4	DOUBLE S	SEE PLAN	393.30	392.40	@ GRATE 396.1	H.C. STD. SD 4.23
1-5	A-5	SEE PLAN	406.00	405.80	TOP SLAB 409.40	H.C. STD. SD 4.01
1-6	A-5	SEE PLAN	--	407.61	TOP SLAB 411.51	H.C. STD. SD 4.01
1-7	S	SEE PLAN	--	386.20	@ GRATE 389.64	H.C. STD. SD 4.22
1-8	A-5	SEE PLAN	--	398.50	TOP SLAB 400.30	H.C. STD. SD 4.01
1-9	S	SEE PLAN	--	401.78	@ GRATE 405.20	H.C. STD. SD 4.22
M-1	STD. M.H.	SEE PLAN	389.05 393.24	387.05	397.25	H.C. STD. G 5.01
M-2	STD. M.H.	SEE PLAN	401.28	396.00	406.10	H.C. STD. G 5.01
E-1	24" METAL END SECT.	SEE PLAN	368.20	367.81	--	H.C. STD. SD 5.61
E-2	24" METAL END SECT.	SEE PLAN	371.12	371.0	--	H.C. STD. SD 5.61
E-3	24" METAL END SECT.	SEE PLAN	376.0	375.88	--	H.C. STD. SD 5.61

Note: All storm drains to have class "C" bedding.

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT  
*James M. Boyd* COUNTY HEALTH OFFICER 4/2/90 DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*James J. Sh...* DIRECTOR 3/6/90 DATE  
*...* CHIEF, BUREAU OF ENGINEERING 3-29-90 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.  
*...* PLANNING 4/12/90 DATE  
*...* CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT 3/12/90 DATE

2 B-4-15 REMOVE PARCEL B & ADD OPENSACE LOTS 2 & 3  
 1 3/7/02 ADD GRADING, WALL AND SWM PROPOSED UNDER SDP-CO-108

NO	DATE	REVISION
1	3/7/02	ADD GRADING, WALL AND SWM PROPOSED UNDER SDP-CO-108

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, MARYLAND 21043

PROJECT: ORCHARD HILL SECTION 1 AREA 1, LOT 1 & PARCELS A APARTMENT DWELLINGS

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

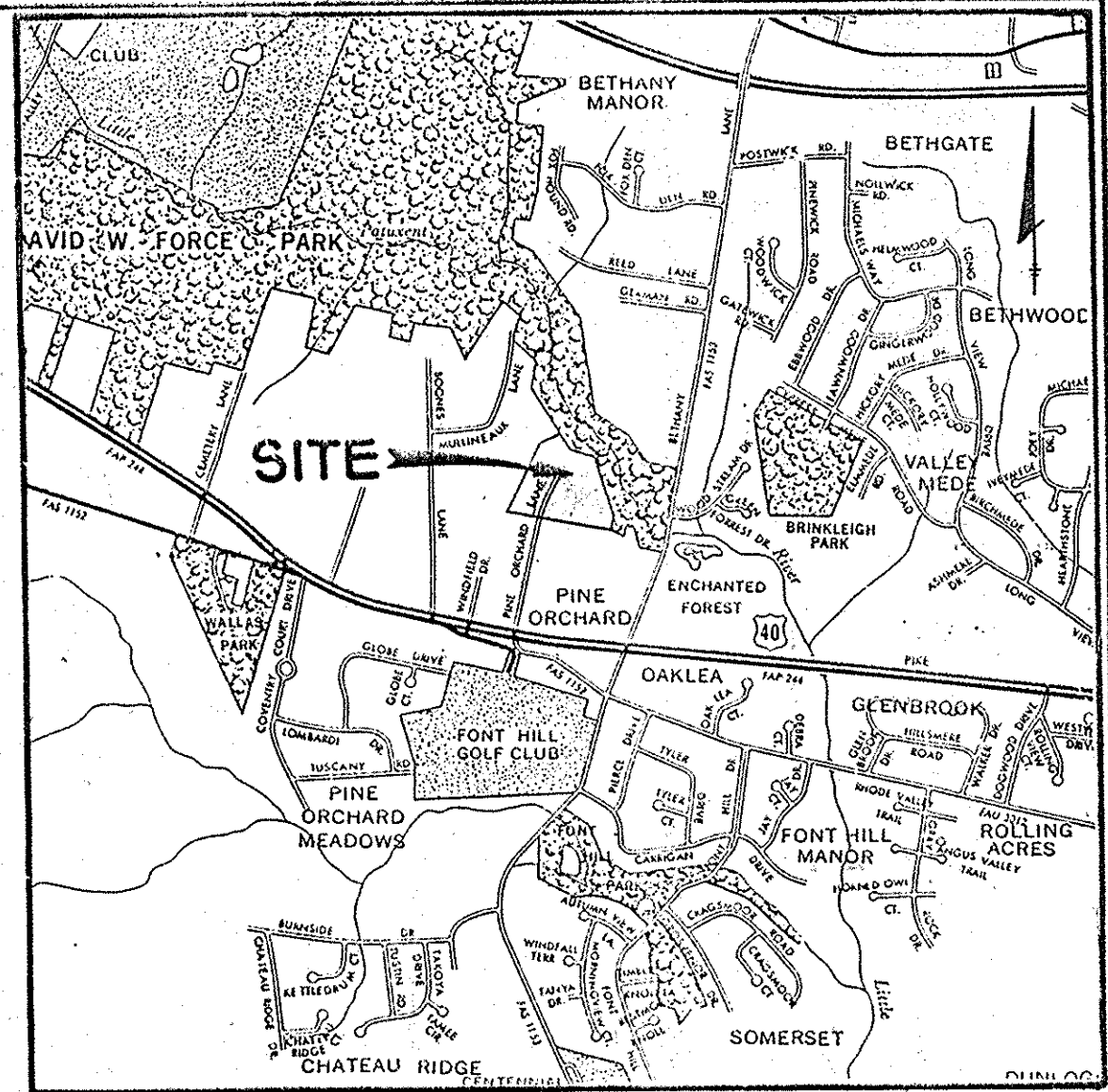
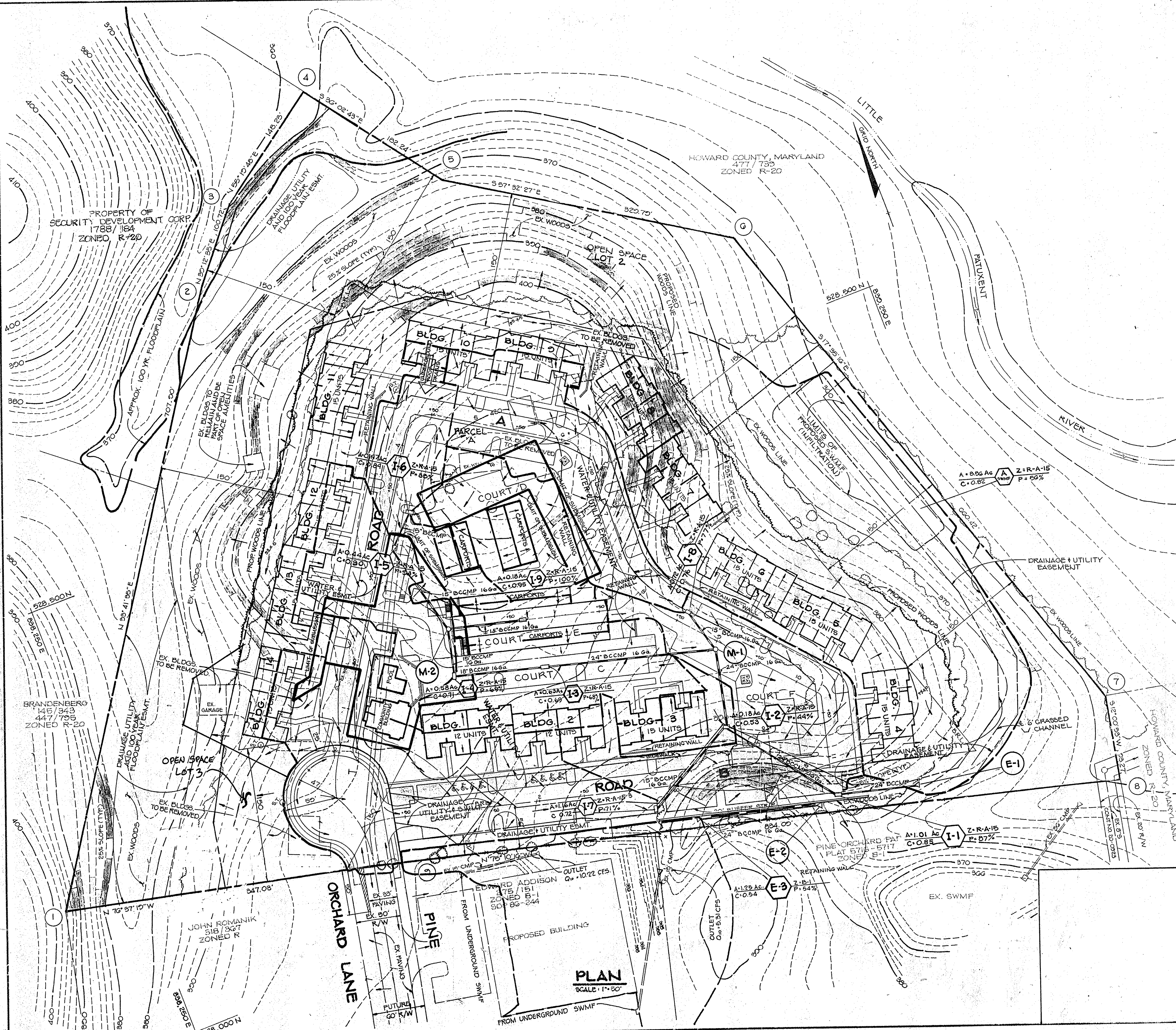
TITLE: SITE DEVELOPMENT PLAN REVISION TO SDP-80-07

DATE: JANUARY 1990 PROJECT: NO 243 SDP

DES: RJW DRN: JLR SCALE: 1" = 30' DRAWING: 2 OF 13

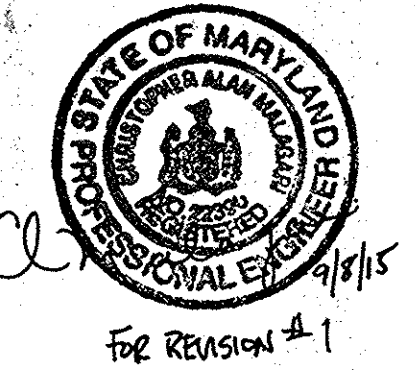






VICINITY MAP  
SCALE: 1" = 2000'

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
License No. 22390, Expiration Date: 6/30/17



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

*James M. Boyd*  
COUNTY HEALTH OFFICER  
DATE: 4/2/90

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

*James P. Lee*  
DIRECTOR  
DATE: 3/30/90

*James P. Lee*  
CHIEF, BUREAU OF ENGINEERING  
DATE: 3-29-90

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*James P. Lee*  
PLANNING  
DATE: 4/12/90

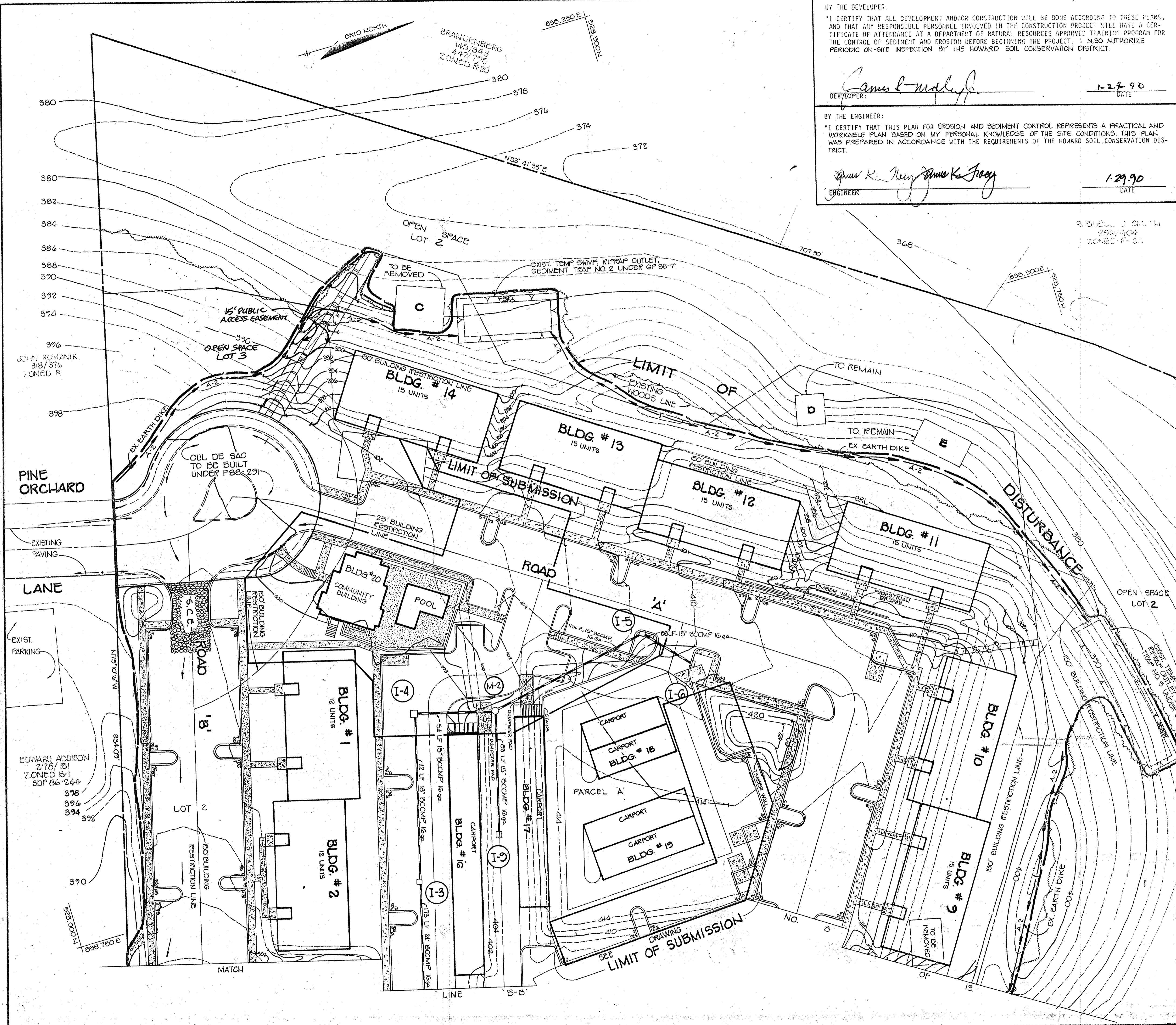
*Barbara C. Langley*  
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT  
DATE: 4/12/90

NO.	DATE	REVISION
1	8-4-15	REMOVE PARCEL 'B' AND ADD OPEN SPACE LOTS 2 & 3

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*James R. Schulte*

OWNER SECURITY DEVELOPMENT CORP. P.O. BOX 417 ELLICOTT CITY, MARYLAND 21043	PROJECT <b>ORCHARD HILL</b> SECTION 1 AREA 1, LOTS 1 & PARCELS A APARTMENT DWELLINGS LOCATION: TAX MAP NO. 17 DEED REF. 809/137 PARCEL 130, 204 & 519 2 <sup>ND</sup> ELECTION DISTRICT HOWARD COUNTY, MARYLAND CENSUS TRACT NO. 6011
DEVELOPER SECURITY DEVELOPMENT CORP. P.O. BOX 417 ELLICOTT CITY, MARYLAND 21043	TITLE <b>DRAINAGE AREA MAP</b> REVISION TO SDP-90-07 5-8-18 P. 80-35 ZB 897M DATE: JANUARY 1990 PROJECT NO: 7243
DES: RJW	DRN: JLR
SCALE: 1" = 50'	DRAWING: 6 OF 13



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 ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."  
 DEVELOPER: James L. Molyneux 1-27-90 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. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."  
 ENGINEER: James K. Tracy 1-29-90 DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.  
James M. Bond COUNTY HEALTH OFFICER 4/2/90 DATE

APPROVED FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.  
James J. [Signature] DIRECTOR 3/30/90 DATE

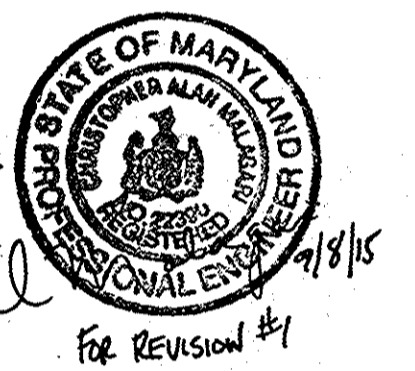
James J. [Signature] CHIEF, BUREAU OF ENGINEERING 3-29-90 DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING.  
Joseph [Signature] PLANNING DIRECTOR 4/10/90 DATE  
James J. [Signature] CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT 4/20/90 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 U.S. SOIL CONSERVATION SERVICE 3/23/90 DATE

THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.  
John L. Robertson HOWARD S.C.D. 3/22/90 DATE

Professional Certification: I hereby certify that these documents were prepared as approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. 22390, Expiration Date: 6/30/91



NO	DATE	REVISION
1	8-4-15	REMOVE PARCEL 'B' AND ADD OPENSACE LOTS 2 & 3

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

PROJECT: ORCHARD HILL SECTION 1 AREA 1, LOT 1, PARCELS A APARTMENT DWELLINGS

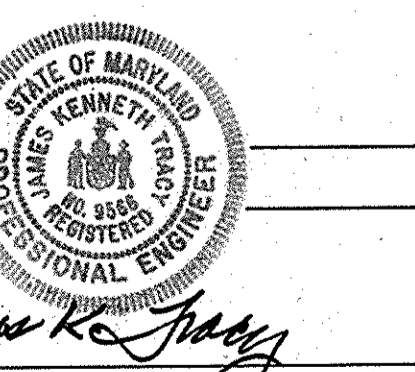
LOCATION: TAX MAP NO. 17 DEED REF. 509/437 PARCEL 130, 204, & 519 2<sup>ND</sup> ELECTION DISTRICT HOWARD COUNTY, MARYLAND

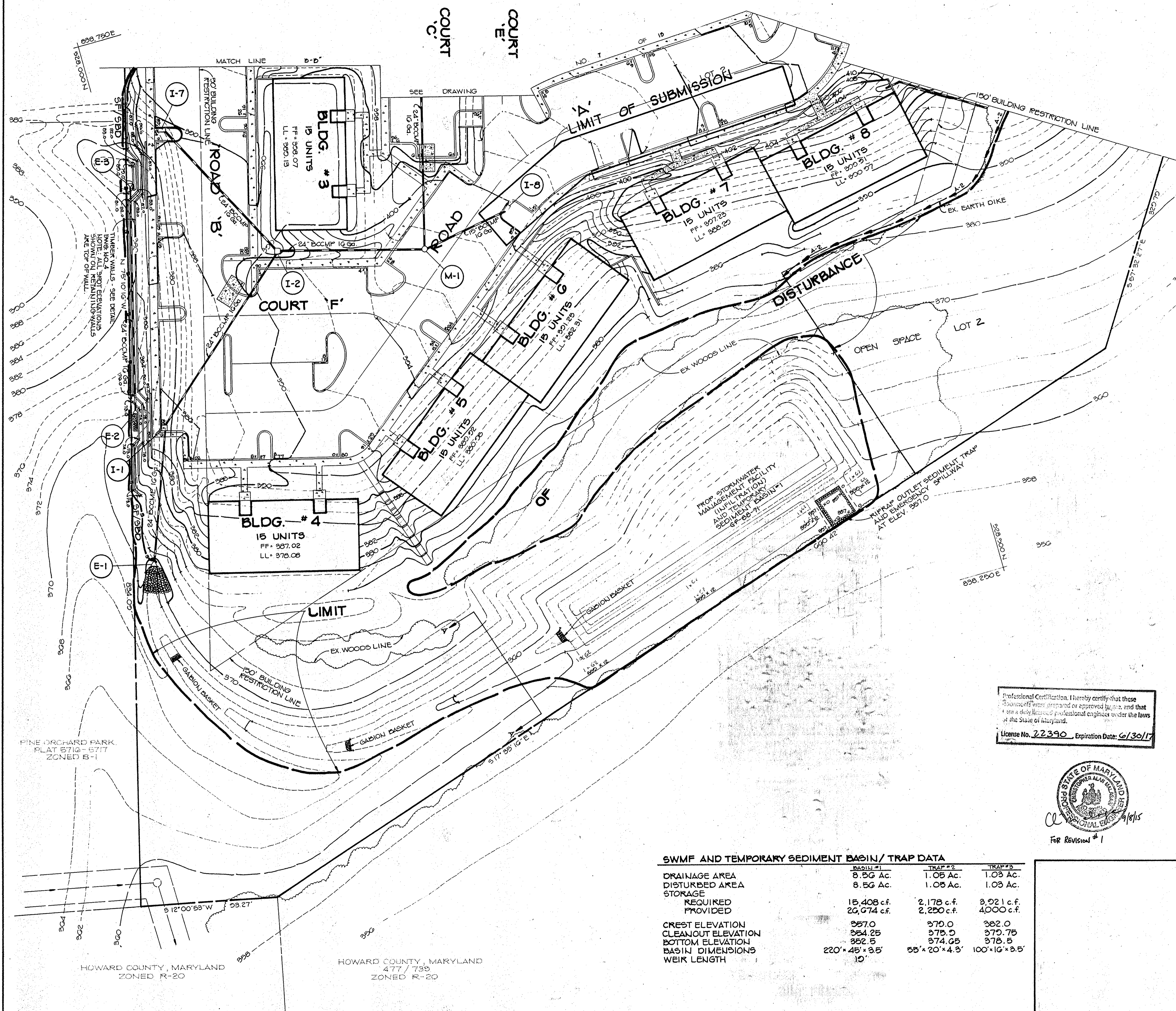
DEVELOPER: SECURITY DEVELOPMENT CORP. P.O. BOX 417, ELLICOTT CITY, MARYLAND 21043

TITLE: SEDIMENT CONTROL PLAN REVISION TO SDP-89-07 P-88-18 P-88-201 ZB8837M

DATE: JANUARY 1990 PROJECT NO: 0243

DES: RJW DRN: EWM SCALE: 1"=30' DRAWING: 7 OF 13





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 ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

*James R. Mulvey*  
 DEVELOPER: \_\_\_\_\_ DATE: 3-14-90

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. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

*James Koza*  
 ENGINEER: \_\_\_\_\_ DATE: 1-29-90

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*  
 U.S. SOIL CONSERVATION SERVICE DATE: 3/23/90

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

APPROVED *John L. Robertson*  
 HOWARD S.C.D. DATE: 3/27/90

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

*Joyce M. Boyd*  
 COUNTY HEALTH OFFICER DATE: 4/2/90

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

*James P. Law*  
 DIRECTOR DATE: 3/30/90

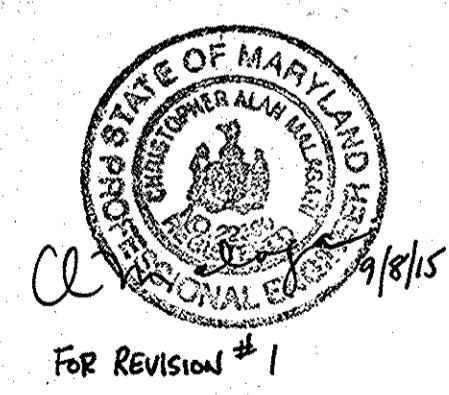
*William S. Edin*  
 CHIEF, BUREAU OF ENGINEERING DATE: 3-22-90

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

*Joseph R. Butler*  
 PLANNING DATE: 4/12/90

*Charles S. Drayton*  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE: 4/2/90

Professional Certification. I hereby certify that these drawings were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. 22390, Expiration Date: 6/30/17



SWMF AND TEMPORARY SEDIMENT BASIN/ TRAP DATA			
	TRAP #1	TRAP #2	TRAP #3
DRAINAGE AREA	8.56 Ac.	1.03 Ac.	1.03 Ac.
DISTURBED AREA	8.56 Ac.	1.03 Ac.	1.03 Ac.
STORAGE			
REQUIRED	15,408 c.f.	2,178 c.f.	3,921 c.f.
PROVIDED	20,074 c.f.	2,280 c.f.	4,000 c.f.
CREST ELEVATION	357.0	370.0	362.0
CLEANOUT ELEVATION	354.25	375.0	375.75
BOTTOM ELEVATION	352.5	374.05	378.5
Basin Dimensions	220' x 45' x 3.5'	55' x 20' x 4.3'	100' x 16' x 3.5'
Weir Length	10'		

NO.	DATE	REVISION
1	8-4-15	REMOVE PARCEL 'B' ADD OPEN SPACE LOT 2 & 3

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

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

PROJECT: ORCHARD HILL SECTION 1, AREA 1, LOT 1 PARCELS A & B APARTMENT DWELLINGS  
 LOCATION: TAX MAP NO. 17, DEED REF 500/437 PARCEL 130,204 & 510 2<sup>ND</sup> ELECTION DISTRICT HOWARD COUNTY, MARYLAND

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

TITLE: SEDIMENT CONTROL PLAN  
 REVISION TO SDP-80-07  
 9-88-18 P-88-23 F-88-201 ZB897M

DATE: JANUARY 1990 PROJECT NO.: 0243

DES: RJW DRN: JLR SCALE: 1" = 50' DRAWING: 8 OF 13



PERMANENT SEEDING PREPARATION

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCHING 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) UNFERTILIZED - APPLY 2 TONS PER ACRE VOLCANIC LESTONITE (92 1b/1000 sq ft) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 1b/1000 sq ft) BEFORE SEEDING. HARBOR OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS PER ACRE 30-0-0 UREAFORM FERTILIZER (9 1b/1000 sq ft).

- 2) ACCEPTABLE - APPLY 2 TONS PER ACRE VOLCANIC LESTONITE (92 1b/1000 sq ft) AND 1000 LBS PER ACRE 10-10-10 FERTILIZER (23 1b/1000 sq ft) BEFORE SEEDING. HARBOR OR DISC INTO UPPER THREE INCHES OF SOIL.

SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS PER ACRE (1.4 1b/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 1b/1000 sq ft) OF SEEDING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 29, 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 SOIL 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 100 1b/1000 sq ft) OF UNWETTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 210 GALLONS PER ACRE (5 9a/1000 sq ft) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 240 GALLONS PER ACRE (6 9a/1000 sq ft) FOR ANCHORING.

MAINTENANCE: INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

TEMPORARY SEEDING 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, DISCHING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: APPLY 600 LBS PER ACRE 10-10-10 FERTILIZER (14 1b/1000 sq ft).

SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 1 THRU NOVEMBER 15, SEED WITH 1-1/2 BUSHELS PER ACRE OF ANNALS RYE (3.2 1b/1000 sq ft). FOR THE PERIOD MAY 1 THRU AUGUST 15, SEED WITH 3 LBS PER ACRE OF SEEDING LOVEGRASS (.07 1b/1000 sq ft). FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 29, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOO.

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 100 1b/1000 sq ft) OF UNWETTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 210 GALLONS PER ACRE (5 9a/1000 sq ft) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FT. OR HIGHER, USE 240 GALLONS PER ACRE (6 9a/1000 sq ft) FOR ANCHORING.

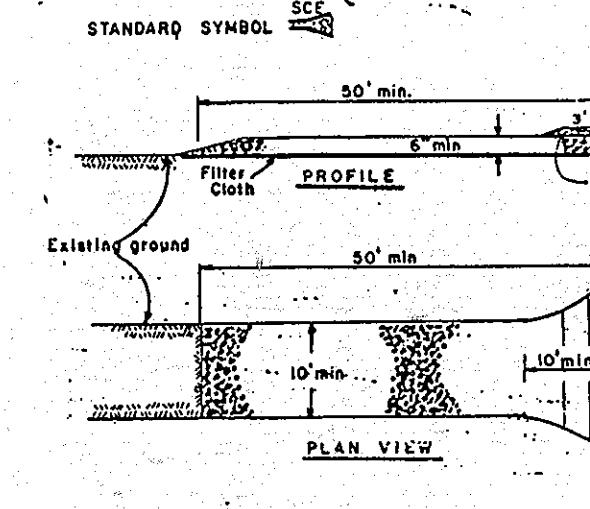
REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

SEQUENCE OF CONSTRUCTION

- DAY 1 1. OBTAIN A GRADING PERMIT.
DAY 2-3 2. CLEAR AND GRUB AREA FOR AND INSTALL STABILIZED CONSTRUCTION ENTRANCE (SCE).
DAY 3-7 3. MAKE ANY NECESSARY REPAIRS OR ADJUSTMENTS TO EXISTING SWAP/TEMPORARY SEDIMENT BASIN AND EXISTING SEDIMENT TRAPS. ADJUST RIPRAP OUTLET STRUCTURES TO PROPER SIZE AND CLEAN OUT ACCUMULATED SEDIMENT TO ELEVATION 956.0 IN SEDIMENT BASIN NUMBER 1.
DAY 7-15 4. INSTALL REMAINING SEDIMENT CONTROL DEVICES.
DAY 15-28 5. GRADE SITE.
DAY 28-75 6. INSTALL UTILITIES (WATER, SEWER, AND STORM DRAINS).
DAY 75-180 7. COMPLETE ALL CONSTRUCTION AND STABILIZE ALL DISTURBED AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES.
DAY 180-190 8. UPON APPROVAL OF SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVICES AND EXCAVATE BOTTOM OF SWAP TO ELEVATION 956.0 AND SPREAD SEDIMENT ACROSS AREA IN THE REAR OF BUILDINGS 4, 5, 6, AND 7.

RIPRAP OUTLET SEDIMENT TRAP

NO SCALE

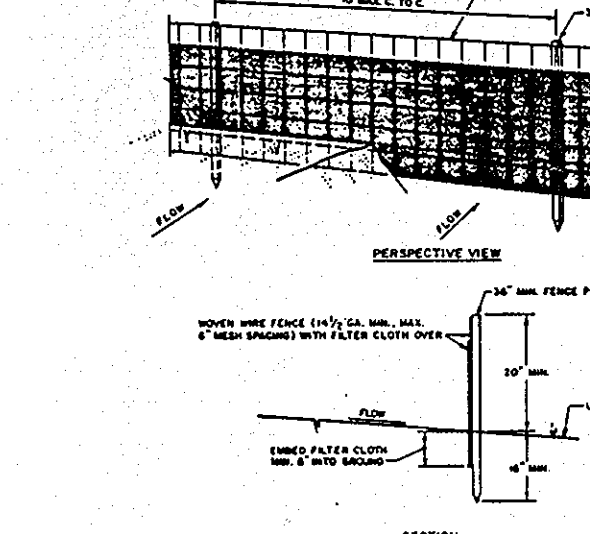


CONSTRUCTION SPECIFICATIONS

- 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 rest-gance joint where a 20 foot minimum length would apply).
3. Thickness - Not less than six (6) inches.
4. Width - Ten (10) foot minimum, but less than the full width at points where angles or curves occur.
5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a slight fall residence lot.
6. Surface Water - All surface water flowing over construction entrance shall be piped across the entrance. If piping is impractical, a mountable beam with 3/4" slope will be provided in a condition which will prevent tracking or flowing of sediment onto public right-of-way. This may require periodic top dressing with additional stone as condition change and repair and/or cleanout of any measure used to trap sediment. All sediment applied, dropped, washed or tracked onto public right-of-way must be removed immediately.
7. Washing - Washalls shall be cleaned to remove sediment prior to entrance onto public right-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.
8. Routine inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE

NO SCALE



CONSTRUCTION NOTES FOR STABILIZED CONSTRUCTION ENTRANCE

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SILT FENCE

NO SCALE



CONSTRUCTION NOTES FOR EARTH DIKE

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CONSTRUCTION NOTES FOR STRAW BALE DIKE

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- 1. NEVER WALK UPON TO BE FASTENED REGULARLY TO POLE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH SHALL BE FASTENED REGULARLY TO POLE POSTS WITH WIRE TIES OR STAPLES.
3. MAKE THE SECTIONS OF FILTER CLOTH TIGHTLY ADJACENT TO EACH OTHER WITH NO GAPS.
4. MAINTENANCE SHALL BE PROVIDED AS NECESSARY TO REMOVE SEDIMENT FROM THE FILTER CLOTH.

CONSTRUCTION NOTES FOR RIPRAP OUTLET SEDIMENT TRAP

- 1. NEVER WALK UPON TO BE FASTENED REGULARLY TO POLE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH SHALL BE FASTENED REGULARLY TO POLE POSTS WITH WIRE TIES OR STAPLES.
3. MAKE THE SECTIONS OF FILTER CLOTH TIGHTLY ADJACENT TO EACH OTHER WITH NO GAPS.
4. MAINTENANCE SHALL BE PROVIDED AS NECESSARY TO REMOVE SEDIMENT FROM THE FILTER CLOTH.

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4. MAINTENANCE SHALL BE PROVIDED AS NECESSARY TO REMOVE SEDIMENT FROM THE FILTER CLOTH.

CONSTRUCTION NOTES FOR STABILIZED CONSTRUCTION ENTRANCE

- 1. NEVER WALK

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 track of the equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction can be obtained with the equipment used.

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

Cutoff Trench

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

III. STRUCTURAL BACKFILL

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

IV. PIPE CONDUITS

All pipes shall be circular in cross section.

A. Corrugated Metal Pipe

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

Steel pipes with polymeric coatings shall have a minimum coating thickness of 0.01 inch (10 mil) on both sides of the pipe. The following coatings are commercially available: Nexon, Plast-Gote, Blac-Klad, and Tech-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, and sections, etc. must be composed of the same material as the pipe. Metals must be insulated from dissimilar materials with use of rubber or plastic insulating materials at least 24 mils in thickness. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer. Hot dip galvanized bolts may be used for connections. The pH of the surrounding soils shall be less than 9 and greater than 4.

- 2. Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe and riser are metal. Watertight coupling bands or flanges shall be used at all joints. Anti-seep collars shall be connected to the pipe in such a manner as to the completely watertight. Dimple bands are not considered to be watertight.
3. Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.

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

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

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

B. Reinforced Concrete Pipe

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

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

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

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

- d. Coarse Aggregate - The coarse aggregate shall be clean, hard, strong and durable, and free from clay or dirt. It shall be well graded with a maximum size of one and one-half (1 1/2) inches.

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

- 2. Design Mix - The concrete shall be mixed in the following proportions, measured by weight. The water-cement ratio shall be 5-1/4 to 6 U.S. Gallons of water per 94-pound bag of cement. The proportion of materials for the trial mix shall be 1:2:3-1/2. 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.

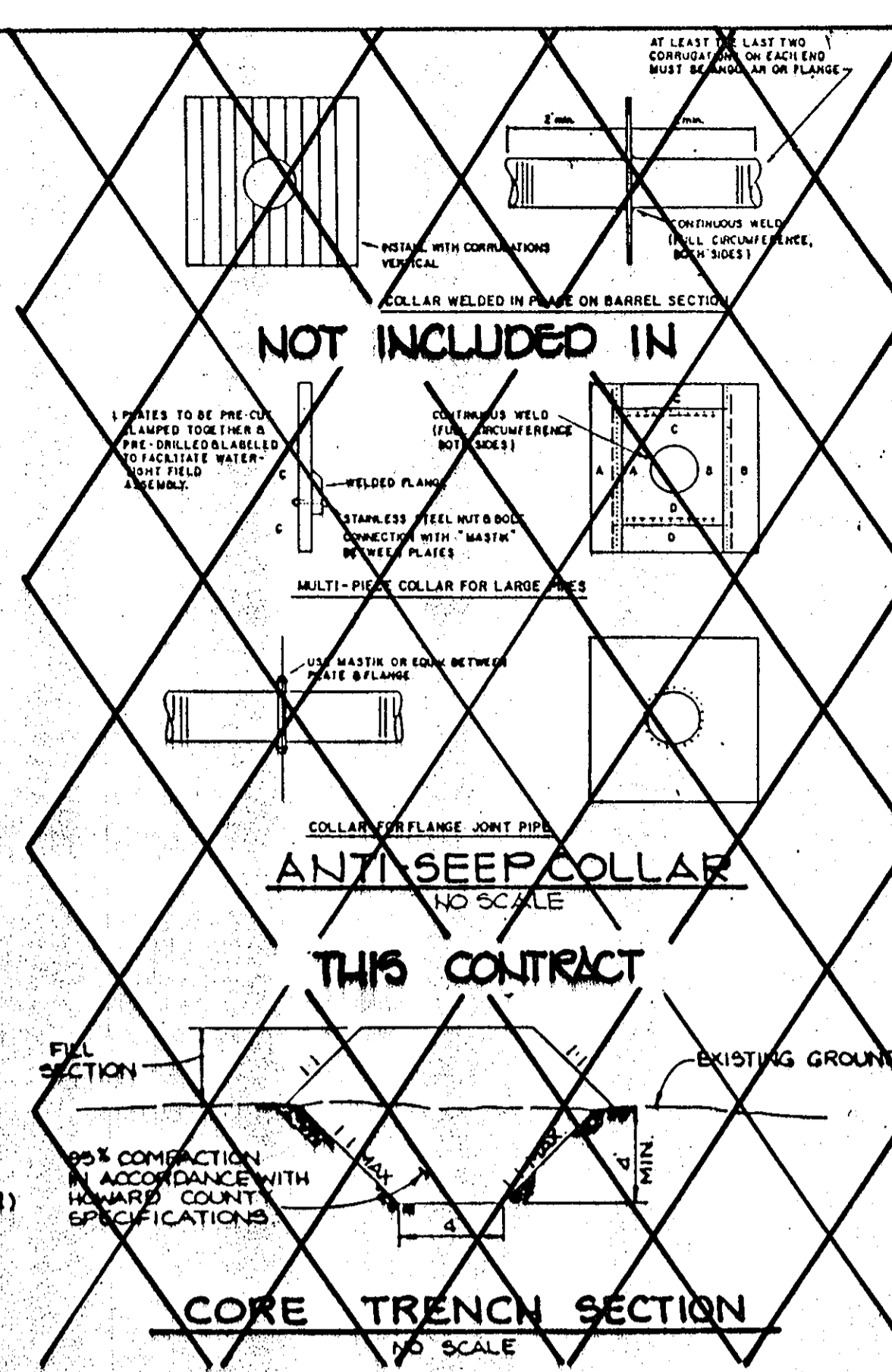
- 9. Placing Temperature - Concrete may not be placed at temperatures below 37°F with the temperature falling, or 34° with the temperature rising.

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.



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. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

James K. Tracy
ENGINEER: JAMES K. TRACY, P.E. 12990 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 ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

James R. Moxley, Jr.
DEVELOPER: JAMES R. MOXLEY, JR., PRESIDENT SECURITY DEVELOPMENT CORPORATION 3-14-90 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
U. S. SOIL CONSERVATION SERVICE 3/23/90 DATE

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

John R. Roberts
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT 3/23/90 DATE

Joyce M. Boyd
APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS 4/2/90 DATE

James R. Moxley, Jr.
DIRECTOR 3/23/90 DATE

McLean S. O'Sullivan
CHIEF, BUREAU OF ENGINEERING 3/23/90 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

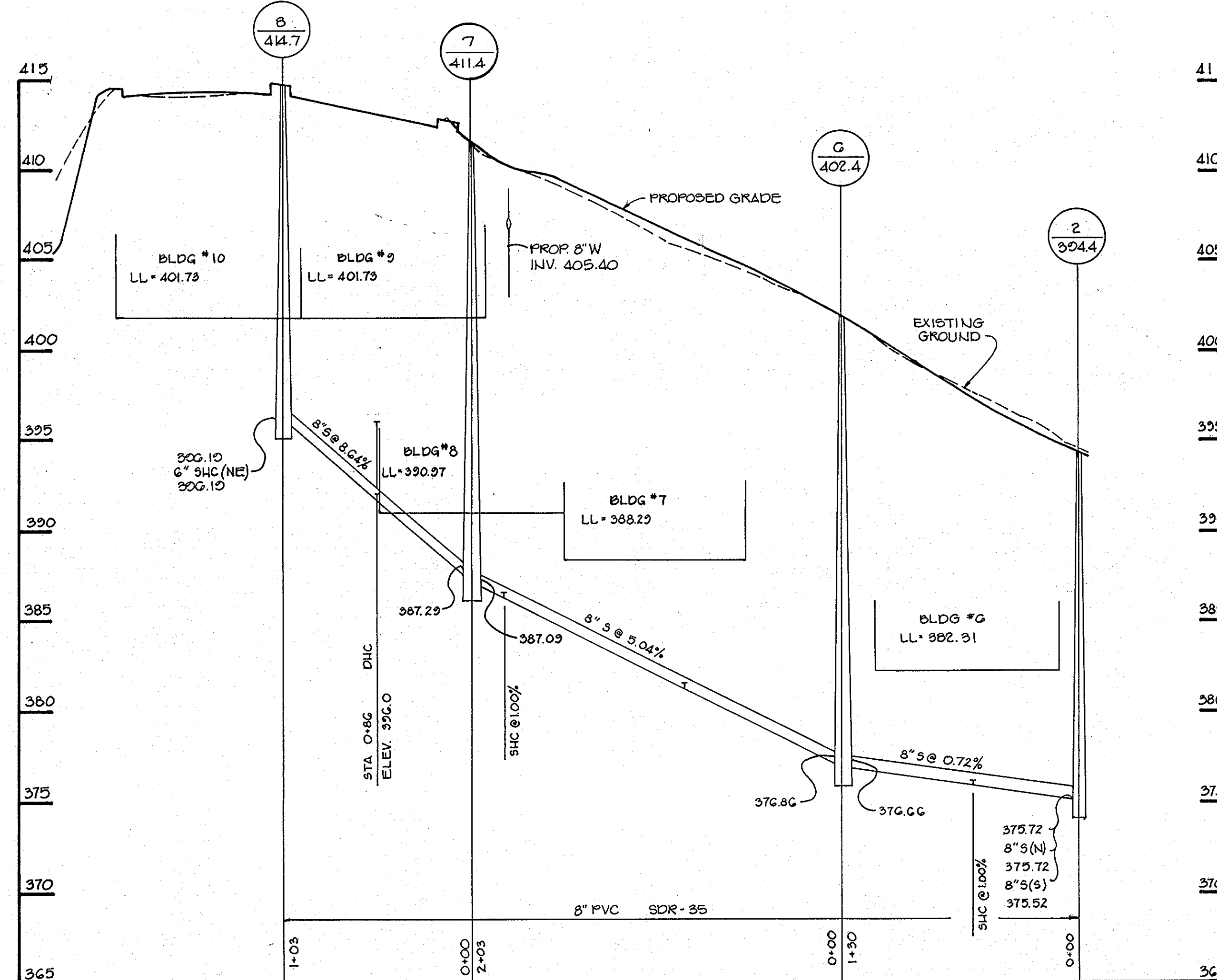
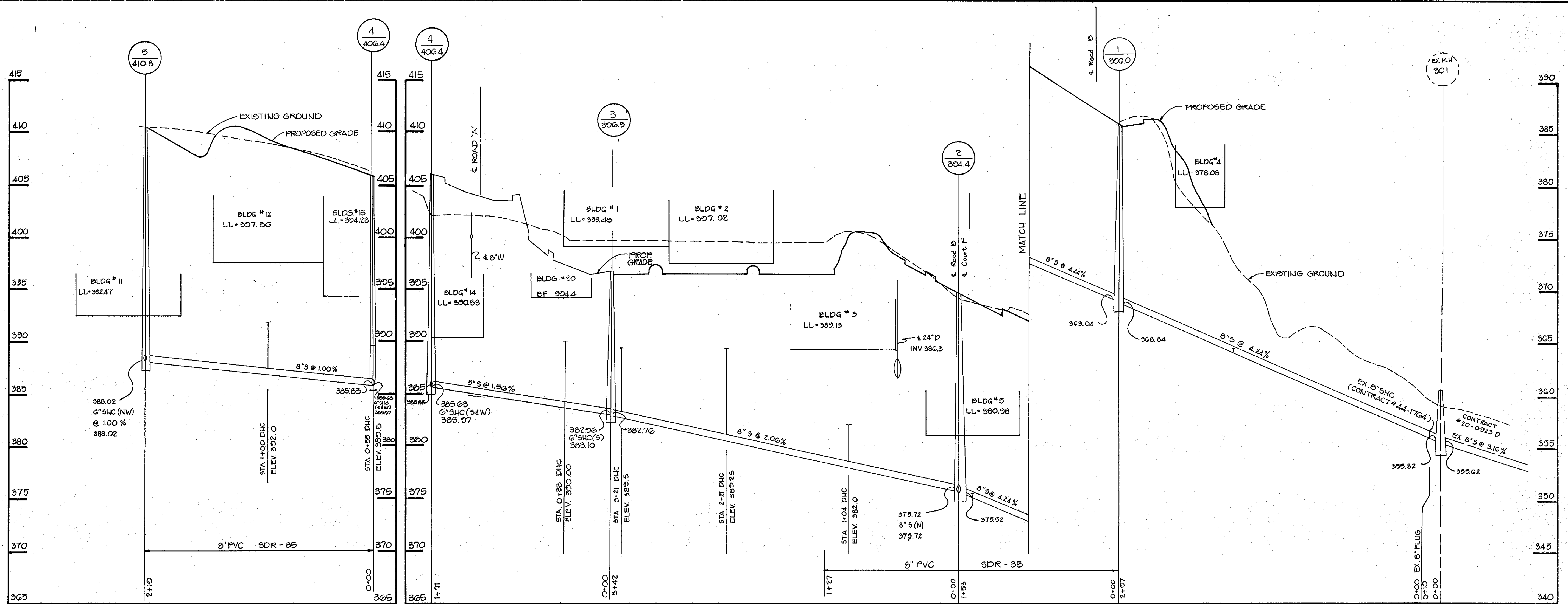
Juanita A. K...
PLANNING 4/16/90 DATE

Derek J. D...
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT 4/16/90 DATE

NO DATE REVISION

TRACY, SCHULTE & ASSOCIATES INC.
planning • architecture • engineering
8480 Baltimore National Pike • Ellicott City, Maryland 21043 • (301) 465-5100

OWNER: SECURITY DEVELOPMENT CORP. P.O. BOX 417, ELLICOTT CITY, MARYLAND 21043
PROJECT: ORCHARD HILL SECTION BARRA LOTT PARCELS A&B APARTMENT DWELLINGS
LOCATION: TAX MAP NOS. 17 & 22 PARCELS 180, 204 & 210 ELECTION DISTRICT HOWARD COUNTY, MARYLAND
TITLE: SWM SPECIFICATION NOTES AND DETAILS
SCALE: AS SHOWN DRAWING: IC-024



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

*Joyce M. Boyd* COUNTY HEALTH OFFICER 4/2/90 DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

*James J. ...* DIRECTOR 3/30/90 DATE

*...* CHIEF, BUREAU OF ENGINEERING 3-29-90 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*...* PLANNING 4/12/90 DATE

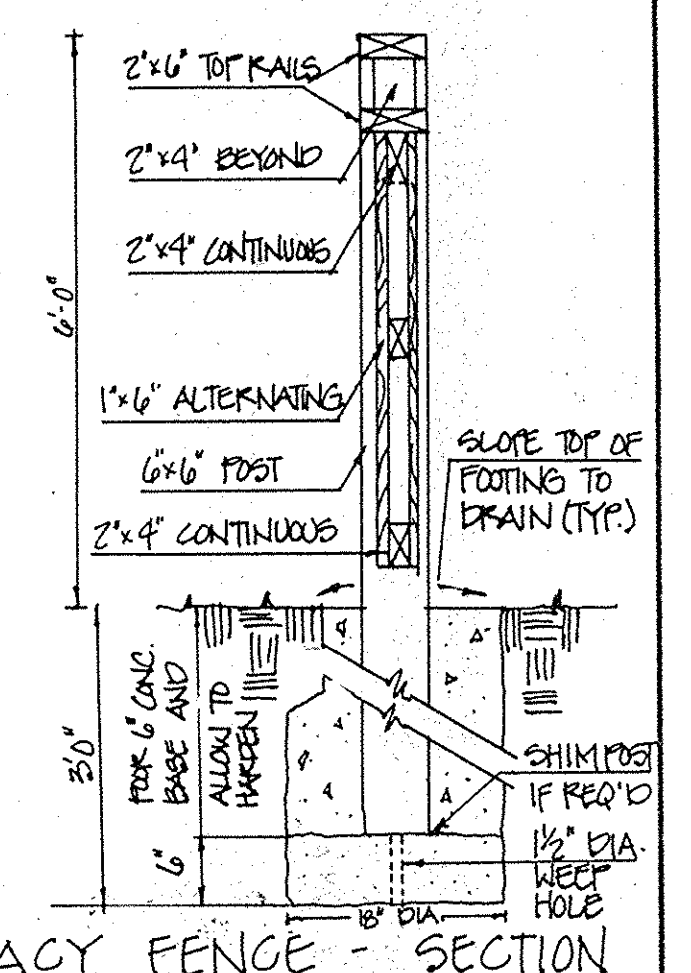
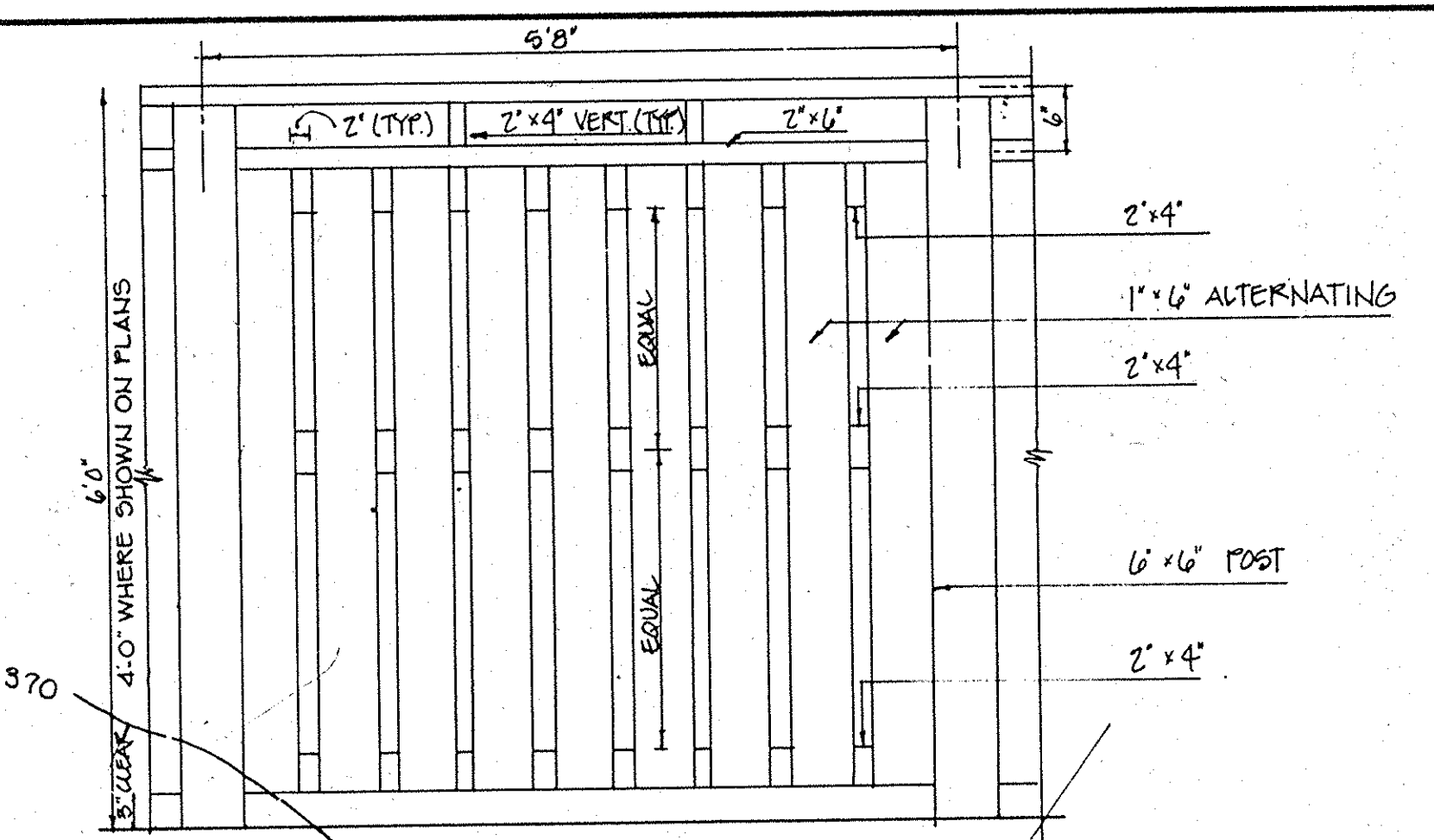
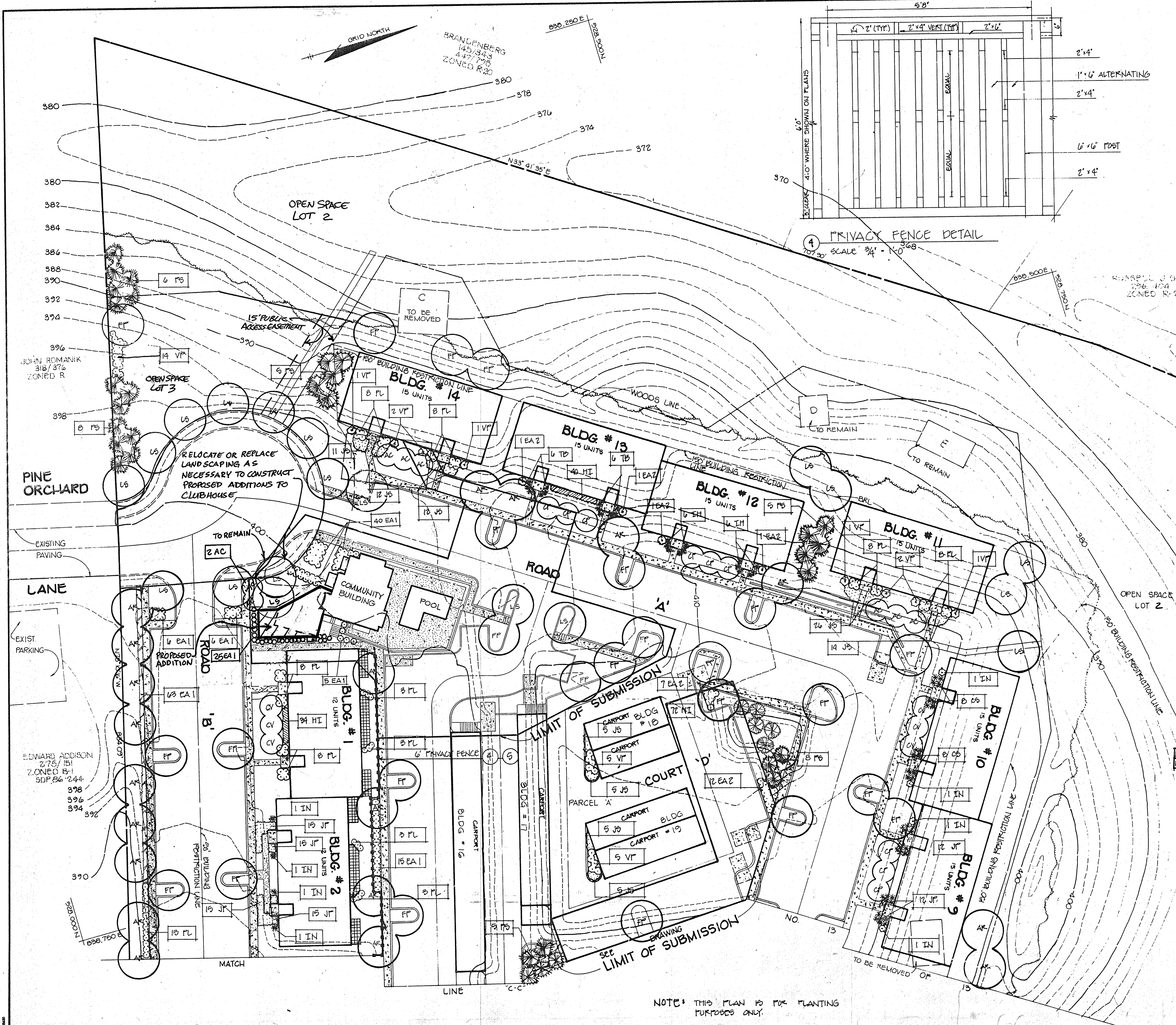
*...* CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT 4/22/90 DATE

NO	DATE	REVISION

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

STATE OF MARYLAND PROFESSIONAL ENGINEER REGISTRATION BOARD

OWNER SECURITY DEVELOPMENT CORP. P.O. BOX 417 ELLICOTT CITY, MARYLAND 21043	PROJECT <b>ORCHARD HILL</b> SECTION 1 AREA 1, LOT 1 & PARCELS A & B APARTMENT DWELLINGS
DEVELOPER SECURITY DEVELOPMENT CORP. P.O. BOX 417 ELLICOTT CITY, MARYLAND 21043	LOCATION TAX MAP NO. 17 DEED REF. 309/437 PARCEL 150, 204 & 510 2 <sup>ND</sup> ELECTION DISTRICT HOWARD COUNTY, MARYLAND CENSUS TRACT NO. 601
DATE JANUARY 1990	TITLE <b>SEWER PROFILES</b> REVISION TO SDP-89-07 9-89-16 P-88-35 F-88-20 Z-83TM
DES. RJW	DRN. VLN
SCALE HORIZ. 1" = 50'	VERT. 1" = 5'
PROJECT NO. 0243	DRAWING 11 OF 13



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT  
*Jaeger M Boyd* per *per J. Sen* 4/2/90  
 COUNTY HEALTH OFFICE DATE

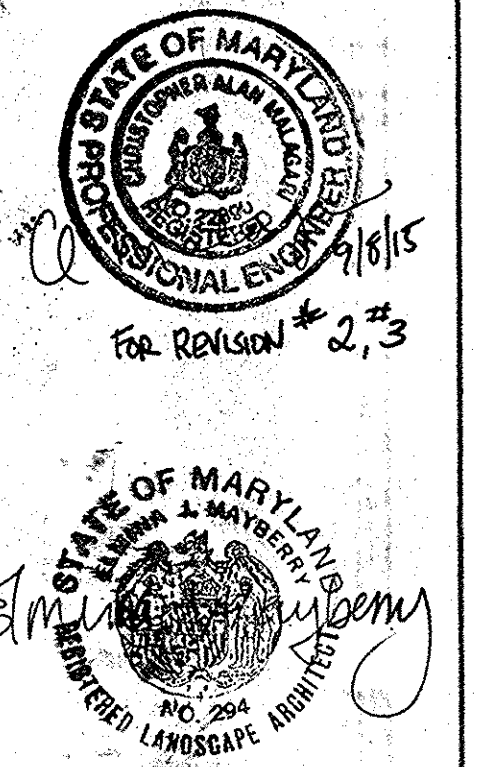
APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*James D. Sen* 3/30/90  
 DIRECTOR DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*James D. Sen* 3-29-90  
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*James D. Sen* 4/12/90  
 PLANNING DATE

*David S. Lander* 4/2/90  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. 22390, Expiration Date: 6/30/17



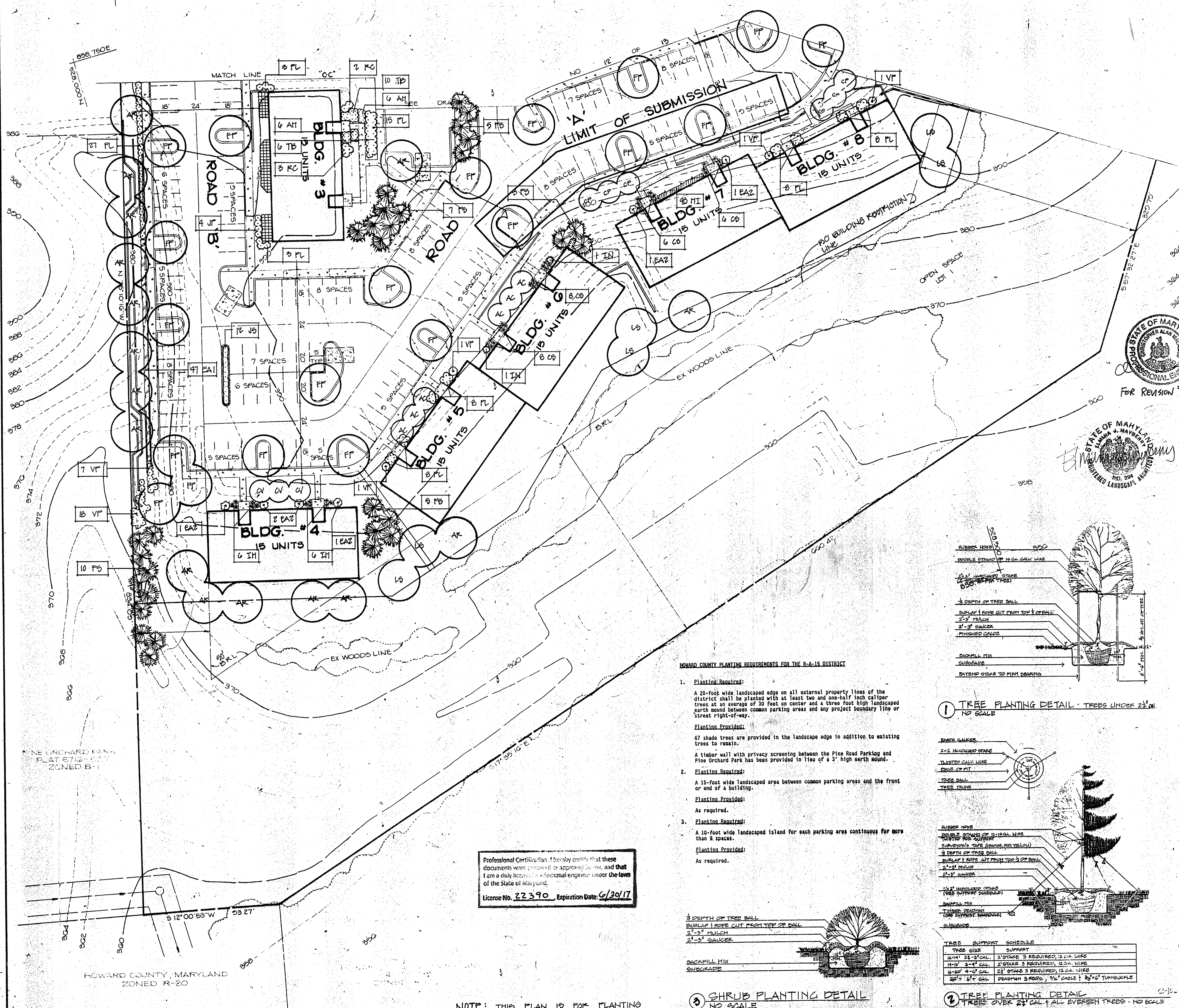
REV	NO	DATE	REVISION
3	19-17-15		ADD CLUBHOUSE ADDITION & REVISE LANDSCAPING
2	8-4-15		REVISE PARCELS & ADD OPEN SPACE LOTS 2 & 3
1	11-19-14		PROVIDE CLUBHOUSE ADDITIONS & REVISE LANDSCAPING

**TRACY, SCHULTE & ASSOCIATES INC.**  
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**LANDSCAPE PLAN**

<b>OWNER</b> SECURITY DEVELOPMENT CORP PO BOX 417 ELLCOTT CITY, MARYLAND 21043	<b>PROJECT</b> <b>ORCHARD HILL</b> SECTION 1 AREAS, LOT 1 PARCELS A APARTMENT DWELLINGS
<b>DEVELOPER</b> SECURITY DEVELOPMENT CORP PO BOX 417 ELLCOTT CITY, MARYLAND 21043	<b>LOCATION</b> TAX MAP NO 17 DEED REF 509437 PARCEL 150, 204, & 519 2 <sup>ND</sup> ELECTION DISTRICT HOWARD COUNTY, MARYLAND
<b>TITLE</b> LANDSCAPE PLAN REVISION TO SDP-89-C7 S-88-18 P-88-55 P-88-20 Z9897M DATE: JANUARY 1990 PROJECT NO 0243	<b>DESIGNER</b> DES RJW <b>DRAWN</b> DRN EWM <b>SCALE</b> SCALE 1"=30' <b>DRAWING</b> DRAWING 12 OF 13

NOTE: THIS PLAN IS FOR PLANTING PURPOSES ONLY.



**PLANT LIST**

KEY	QUANTITY	BOTANICAL/COMMON NAME	SIZE	ROOT	COMMENTS
EVERGREEN TREES					
PS	67	Pinus Strobus/Eastern White Pine	6' - 8' ht.	BB	12' O.C.
DECIDUOUS TREES					
AR	25	Acer rubrum 'October Glory' / October Glory Red Maple	2-1/2" - 3" cal.	BB	Full crown, central leader
AC	21	Ampelchier canadensis / Shadblow Serviceberry	8' - 10' ht.	BB	Multi-stem (min. 5 stem) 15' O.C.
CP	15	Crataegus phoenopyrum/Washington Hawthorn	1-1/2" - 2" cal.	BB	Tree form, full crown, 15' O.C.
CV	9	Chaioanthus virginicus / Fringetrees	1-1/2" - 2" cal.	BB	Specimens: 15 O.C.
FP	45	Fraxinus pennsylvanica 'Marshall's Seedless Green Ash	2-1/2" - 3" cal.	BB	Full crown, central leader
LS	25	Liquidambar styraciflua/American Sweetgum	2-1/2" - 3" cal.	BB	Full crown, central leader
SHRUBS					
AH	12	Azalea 'Hino Crismon' / Hino Crismon	18" - 24" sp.	BB/CG	2 1/2' O.C.
CS	44	Cotoneaster salicifolius 'Repens' / Willowleaf Cotoneaster	18" - 24" sp.	BB/CG	2 1/2' O.C.
EAI	160	Eunonymus alatus 'Compacta' / Dwarf Winged Euonymus	2' - 2-1/2' ht.	BB/CG	3' O.C.
EAZ	24	Eunonymus alatus / Winged Euonymus	2' - 2-1/2' ht.	BB	6' O.C.
IH	24	Ilex crenata 'Helleri' / Helleri Holly	18" - 24" sp.	BB/CG	2 1/2' O.C.
IN	10	Ilex 'Helle R. Stevens' / Helle Stevens Holly	6' - 7' ht.	BB	
JP	4	Juniperus chinensis 'Pfitzeriana Compacta' / Compact Pfitzer Juniper	2' - 2-1/2' ht.	BB/CG	4' O.C.
JS	107	Juniperus chinensis 'Sargentii' / Sargent Juniper	18" - 24" sp.	BB/CG	2 1/2' O.C.
JP	84	Juniperus horizontalis 'plumosa' / Andorra Juniper	18" - 24" sp.	BB/CG	2 1/2' O.C.
PL	120	Prunus laurocerasus 'Otto Luyken' / Otto Luyken Cherry Laurel	24" - 30" sp.	BB/CG	3 1/2' O.C.
RC	5	Rhododendron catawbiense 'Roseum elegans' / Roseum Elegans Rhododendron	2' - 2-1/2'	BB/CG	5' O.C.
TB	28	Taxus baccata 'Repandens' / Spreading English Yew	18" - 24" sp.	BB/CG	2 1/2' O.C.
VP	64	Viburnum plicatum 'Harrisi' / Harle's Doublefile Viburnum	2-1/2" - 3" ht.	BB/CG	
PERENNIALS					
HI	144	Heurocallis 'Bright Banner' / Bright Banner Daylily	1 gal.	cont.	Double roses, 18" o.c.

STATE OF MARYLAND  
 PROFESSIONAL ENGINEER  
 9/24/15  
 FOR REVISION #1

STATE OF MARYLAND  
 LANDSCAPE ARCHITECT  
 11/2/15

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT  
*Jayne M. Bowland* 4/2/90  
 COUNTY HEALTH OFFICER DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*James M. Shuman* 3/30/90  
 DIRECTOR DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*Joseph S. Kottler* 4/2/90  
 PLANNING DATE

*Derek J. J. Campbell* 7/12/15  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

1-9-17-15 REVISE PLANT LIST AE1 TO 160 REVISION B&T  
 NO. DATE REVISION

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 8480 Baltusque National Pike • Ellicott City, Maryland 21043 • (301) 463-6103

**LANDSCAPE PLAN**

OWNER SECURITY DEVELOPMENT CORP. - SECTION A, B&C LOT 1 PARCELS A&B APARTMENT DWELLINGS  
 ELLICOTT CITY, MARYLAND 21043  
 LOCATION TAX MAP NO. 17 DEED REF. 802/437 PARCEL 190, 204 & 210 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

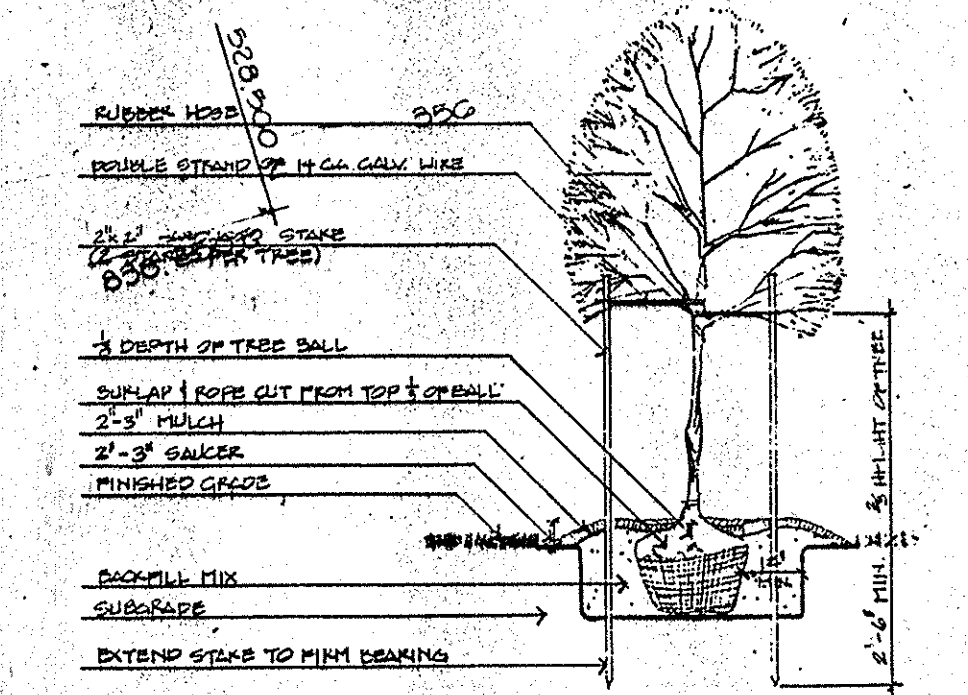
DEVELOPER SECURITY DEVELOPMENT CORP. - TAX MAP NO. 17 PARCELS A&B REVISIONS TO SDP-07  
 ELLICOTT CITY, MARYLAND 21043  
 TITLE LANDSCAPING PLAN REVISIONS TO SDP-07  
 DATE: 11/2/15 PROJECT NO. 0243

DES. RJW DRN. JLR SC. E. 11/1/90 DRAWING: 18" x 24"

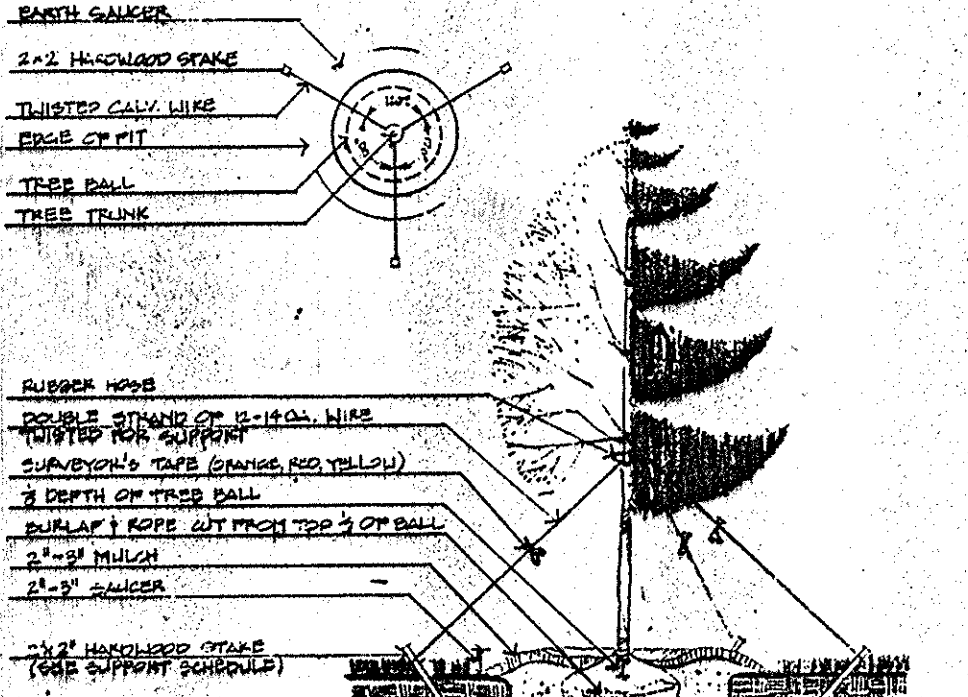
**HOWARD COUNTY PLANTING REQUIREMENTS FOR THE R-A-15 DISTRICT**

- Planting Required:**  
 A 20-foot wide landscaped edge on all external property lines of the district shall be planted with at least two and one-half inch caliper trees at an average of 30 feet on center and a three foot high landscaped earth mound between common parking areas and any project boundary line or street right-of-way.  
**Planting Provided:**  
 67 shade trees are provided in the landscape edge in addition to existing trees to remain.  
 A timber wall with privacy screening between the Pine Road Parking and Pine Orchard Park has been provided in lieu of a 3' high earth mound.
- Planting Required:**  
 A 15-foot wide landscaped area between common parking areas and the front or end of a building.  
**Planting Provided:**  
 As required.
- Planting Required:**  
 A 10-foot wide landscaped island for each parking area continuous for more than 9 spaces.  
**Planting Provided:**  
 As required.

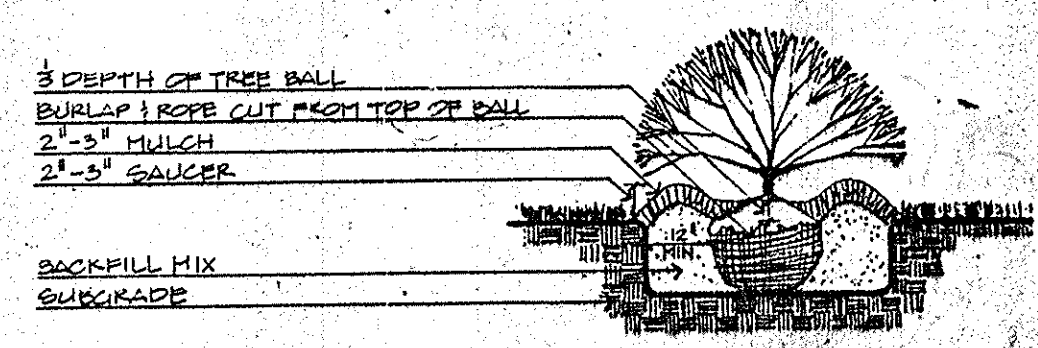
Professional Certification: I hereby certify that these documents were prepared or supervised by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. 22390 Expiration Date: 6/30/17



1 TREE PLANTING DETAIL - TREES UNDER 2 1/2" CAL. NO SCALE



2 TREE PLANTING DETAIL - TREES OVER 2 1/2" CAL. & ALL EVERGREEN TREES - NO SCALE



3 SHRUB PLANTING DETAIL NO SCALE

NOTE: THIS PLAN IS FOR PLANTING PURPOSES ONLY.