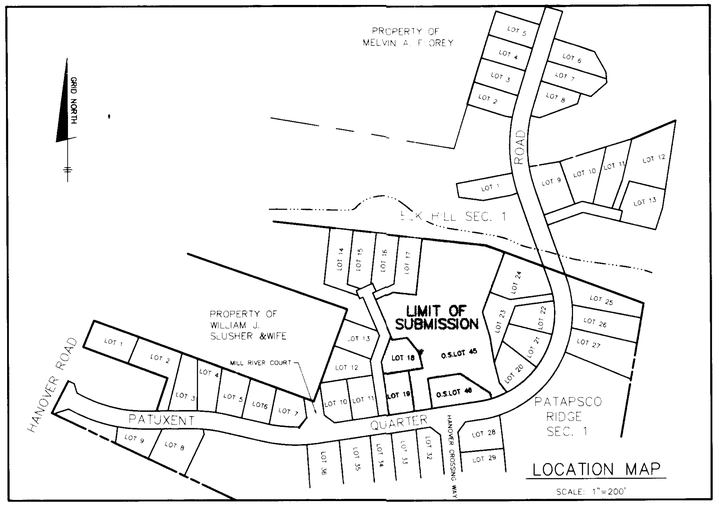
SHEET INDEX	
SHEET NO.	TITLE
1	TITLE SHEET
2	SITE DEVELOPMENT
3	SEDIMENT CONTROL PLAN, NOTES AND DETAILS
4	PLANTING PLAN, NOTES AND DETAILS



BENCH MARKS—NAD 27

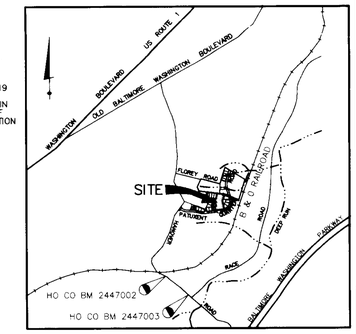
HO. CO. # 2447002 ELEV. 89.82

CONC. MON. NE CORNER RR TRACKS AND HANOVER ROAD, 0.3' BELOW SURFACE.

N 494994.546 E 878209.658

HO. CO. # 2242002 ELEV. 365.719

REBAR 7.73' NORTH EAST OF NAIL & CAP IN POLE C&P #1 ON THE NORTH EAST SIDE OF OAKLAND MILLS ROAD NEAR THE INTERSECTION OF GUILFORD ROAD (RTE 32)
N 484617.531 E 847967.759

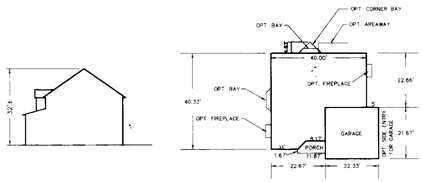


VICINITY MAP

SCALE : 1"=2000'

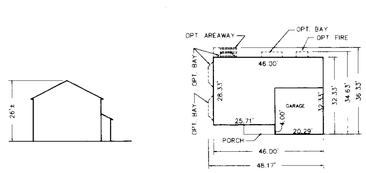
GENERAL NOTES:

1. SUBJECT PROPERTY IS ZONED: R-12 PER 10-18-93 COMPREHENSIVE ZONING PLAN.
2. THE TOTAL AREA INCLUDED IN THIS SUBMISSION IS : 2.94 ACRES.
3. THE TOTAL NUMBER OF LOTS INCLUDED IN THIS SUBMISSION IS 4. TOTAL BUILDABLE LOTS ARE 2.
4. IMPROVEMENT TO THE PROPERTY: SINGLE FAMILY DETACHED.
5. UTILITIES SHOWN AS EXISTING ARE TAKEN FROM APPROVED WATER AND SEWER PLAN CONTRACT #14-3192-D AND APPROVED ROAD CONSTRUCTION PLANS F-92-25.
6. THE TOPOGRAPHY SHOWN HEREON, WITHIN OPEN SPACE LOTS 45 AND 46 WAS BASED ON FIELD RUN SURVEY PERFORMED BY TSA GROUP INC., DATED MARCH, 1995 AND IS SHOWN AT TWO (2) FOOT CONTOUR INTERVALS. THE FINAL ROAD AND ADJACENT LOT GRADING SHOWN ON THESE PLANS IS BASED ON APPROVED ROAD CONSTRUCTION DRAWINGS F-92-25 AND SITE DEVELOPMENT PLANS SDP-95-29, RESPECTIVELY AND IS SHOWN AT TWO (2) FOOT CONTOUR INTERVALS.
7. ANY DAMAGE TO THE COUNTY/STATE OWNED RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S/BUILDER'S EXPENSE.
8. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON MARYLAND GRID SYSTEM NAD-27 - HOWARD COUNTY MONUMENT NOS.: 2447002 AND 2447003.
9. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS\BUREAU OF ENGINEERING \CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 24 HOURS PRIOR TO THE START OF WORK.
10. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
11. THE CONTRACTOR SHALL VERIFY LOCATION OF UTILITIES AND EASEMENTS PRIOR TO THE CONSTRUCTION.
12. FOR DRIVEWAY APRON DETAIL SEE HOWARD COUNTY DETAIL R-6.03.
13. ALL ROADWAYS ARE PUBLIC AND EXISTING.
14. FOR FLAG OR PIPE STEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPE STEM AND ROAD RIGHT OF WAY LINE AND NOT TO THE FLAG OR PIPE STEM LOTS DRIVEWAY.
15. MAINTENANCE AGREEMENT FOR THE USE-IN-COMMON DRIVEWAY FOR PATAPSCO RIDGE LOTS 12-18 RECORDED ON PLAT #11313 IN LIBER 3300 AT FOLIO 578.
16. DRIVEWAYS SHALL BE PROVIDED PRIOR TO THE RESIDENTIAL OCCUPANCY TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
    A.) WIDTH: 12' (16' SERVING MORE THAN ONE RESIDENCE.)
    B.) SURFACE: 6" OF COMPACT CRUSHER RUN BASE W/TAR AND CHIP COATING.
    C.) GEOMETRY: MAX. 15% DRIVEWAY GRADE, MAX. 10% GRADE CHANGE.
    D.) WHERE COMMON DRIVEWAYS ARE PROPOSED, A HOUSE NUMBER SIGN SHALL BE PLACED AT EACH LOT ENTRANCE INDICATING THE RANGE OF STREET ADDRESS & HOUSE NUMBERS PLACED WHERE THE COMMON DRIVEWAY INTERSECTS WITH THE MAIN ROAD.
17. STORMWATER MANAGEMENT IS PROVIDED BY EXTENDED DETENTION, AS APPROVED UNDER F-92-25
18. FLOODPLAIN STUDY COMPLIED BY TSA GROUP,INC. DATED JUNE 1991 AND APPROVED UNDER F-92-25.
19. WETLAND DELINEATION WAS PERFORMED BY EXPLORATION RESEARCH INC., DATED SEPT.1990.
20. GEOTECHNICAL REPORT COMPLIED BY ATEC ASSOC., INC. DATED OCTOBER 1990.
21. STREET TREES WILL BE PROVIDED IN ACCORDANCE WITH SECTION 16.131 OF THE HOWARD COUNTY SUBDIVISION REGULATIONS BY BUILDER AS APPROVED UNDER F-92-25.
22. PORCHES OR DECKS, OPEN OR ENCLOSED EXTERIOR STAIRWAYS CANNOT PROJECT MORE THAN 10' INTO THE REQUIRED FRONT OR REAR YARD SETBACK AREA.
23. ALL FIREPLACE CHIMNEYS, BAY WINDOWS, BALCONIES, EXTERIOR STAIRWAYS NOT MORE THAN 10 FEET IN WIDTH, MAY PROJECT NOT MORE THAN FOUR (4) FEET INTO ANY REQUIRED SETBACK AREA.
24. CONTRACTOR SHALL ADJUST ALL UTILITY APPURTENANCES TO FINISHED GRADE.
25. STAKEOUT OF BUILDING SHOWN HEREON SHALL BE BASED ON AN APPROVED SDP AND RECORDED RECORD PLATS.
26. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARDS & SPECIFICATIONS OF HOWARD COUNTY AND MSHA
27. ALL PLAN DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
28. PREVIOUS COUNTY FILE NUMBERS: S-89-73, P-91-10, P-92-11, WP-91-54, F-92-25, F-95-90 AND SDP-95-29



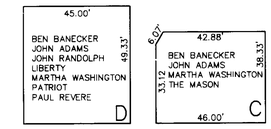
MODEL "R"—JOHN RANDOLPH

SCALE: 1" = 30'



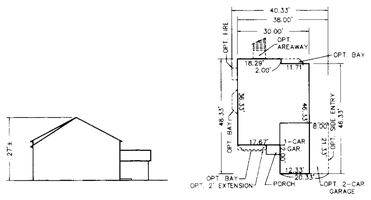
MODEL "N"—THE MASON

SCALE: 1" = 30'



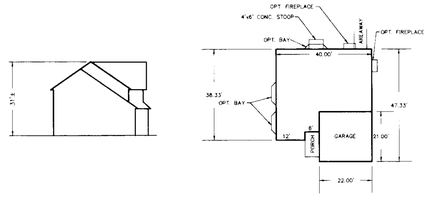
GENERIC BOX TYPES

SCALE: 1" = 30'



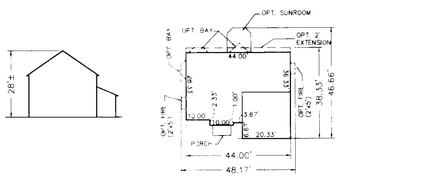
MODEL "L"—THE LIBERTY

SCALE: 1" = 30'



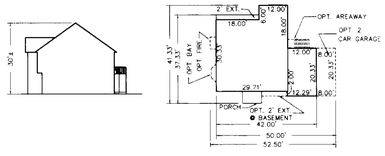
MODEL "Q" THE PATRIOT

SCALE: 1" = 30'



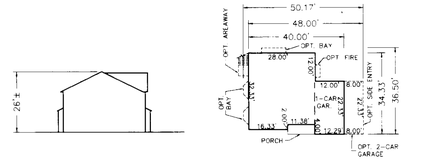
MODEL "T"—BENJAMIN BANECKER

SCALE: 1" = 30'



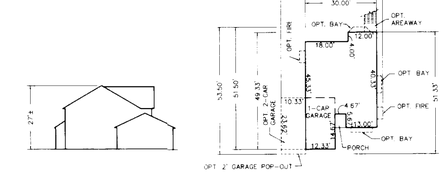
MODEL "A"—JOHN ADAMS

SCALE: 1" = 30'



MODEL "B"—MARTHA WASHINGTON

SCALE: 1" = 30'



MODEL "E"—PAUL REVERE

SCALE: 1" = 30'

HOUSE REVISION (RESITE) REQUIRED WHEN THE FOLLOWING OCCURS:

1. ADD OR DELETE A HOUSE TYPE
2. CHANGE A DRIVEWAY LOCATION FROM FRONT LOADED TO A SIDE LOADED GARAGE UNLESS THE HOUSE MATRIX ALLOWS THIS TO OCCUR
3. "FLIP" THE HOUSE SO THAT THE GARAGE AND DRIVEWAY ARE OPPOSITE TO WHAT THE APPROVED SDP SHOWS
4. CHANGE THE ELEVATION OF HOUSE ONE FOOT (PLUS OR MINUS)
5. TO CHANGE THE GRADING FROM IN-GROUND BASEMENT TO WALKOUT BASEMENT

MIN. CELLAR ELEVATION		
LOT NO.	SHC INV. @ P.L.	MIN. CELLAR ELEV.
18	108.50	112.10
19	99.52	103.30

ADDRESS CHART	
LOT NO.	STREET ADDRESS
18	6261 PATUXENT QUARTER ROAD
19	6265 PATUXENT QUARTER ROAD

HOUSE MATRIX							
LOT #	BENJAMIN BANECKER	JOHN ADAMS	JOHN RANDOLPH	THE LIBERTY	THE MASON	THE PATRIOT	PAUL REVERE
18	Y,1,5	Y,1,4	N	N	Y,1,3	N	N
19	Y,2,3	Y,2,4	Y,2,3,6	Y,2,3,6	N	Y,2,3	Y,2,3

Y = HOUSE TYPE DOES FIT WITH THE OPTIONS AS INDICATED
N = HOUSE TYPE DOES NOT FIT
NA = HOUSE TYPE NOT APPLICABLE

OPTIONS:

1 = GARAGE LOCATED ON RIGHT SIDE
2 = GARAGE LOCATED ON LEFT SIDE
3 = ALL OPTIONS AS INDICATED ON THIS SHEET
4 = NO 2 CAR GARAGE
5 = NO REAR SUNROOM
6 = NO SIDE ENTRY GARAGE

MODIFIED BOX = ONLY HOUSES AS INDICATED ON MATRIX ARE ALLOWED IN ORDER TO OBTAIN USABLE REAR YARD.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION, CHARLES DAMMERS — DATE 10/31/95

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH, GINA TIRINNANZI — DATE 11/1/95

DIRECTOR, JOSEPH RUTTER, JR. — DATE 11/2/95

TSA GROUP, INC.
planning • architecture • engineering
8480 Baltimore National Pike • Ellicott City, Maryland 21043 • (410) 465-6105

PERMIT INFORMATION CHART

SUBDIVISION NAME
PATAPSCO RIDGE
LOTS 18,19 & OPEN SPACE LOTS 45 & 46

SECTION	PARCEL #	PREVIOUS FILE:
ONE	263, 793 & 849	S-89-73, P-91-10, P-92-11, WP-91-54, WP-92-127, F-92-25 SDP-95-29

PLAT No.	BLOCK No.	ZONE	TAX MAP	ELEC. DIST.	CENSUS
11314 & 11684	15	R-12	38	1ST	6012.00

WATER CODE	SEWER CODE
A01	2130000

SCALE: AS SHOWN — DATE: APRIL 24, 1995

OWNER/DEVELOPER:
SECURITY DEVELOPMENT CORP.
P.O. BOX 417
ELLICOTT CITY, MARYLAND 21041
(410) 465-4244

BUILDER:
PATRIOT HOMES
P.O. BOX 1018
COLUMBIA, MARYLAND 21044
(410) 997-5522

DES: JH/DAM DRN: JH

PROJECT: **PATAPSCO RIDGE**
SECTION ONE
LOTS 18,19 & OPEN SPACE LOTS 45 & 46
S-89-73,P-91-10,P-92-11,WP-91-10,WP-92-127,F-92-25,SDP-95-29

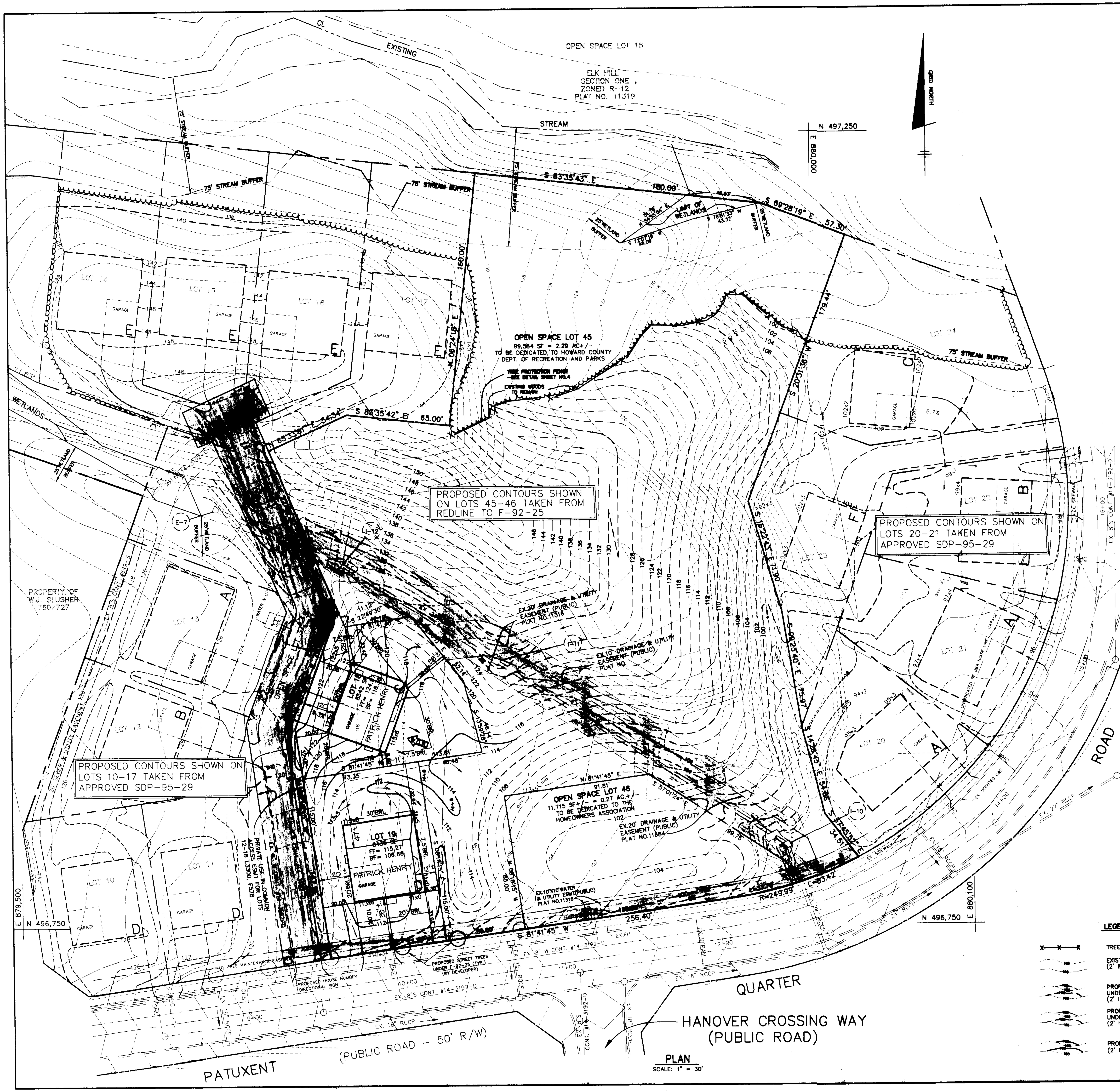
LOCATION:
TAX MAP 38 PARCELS 263, 793 & 849
1ST. ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

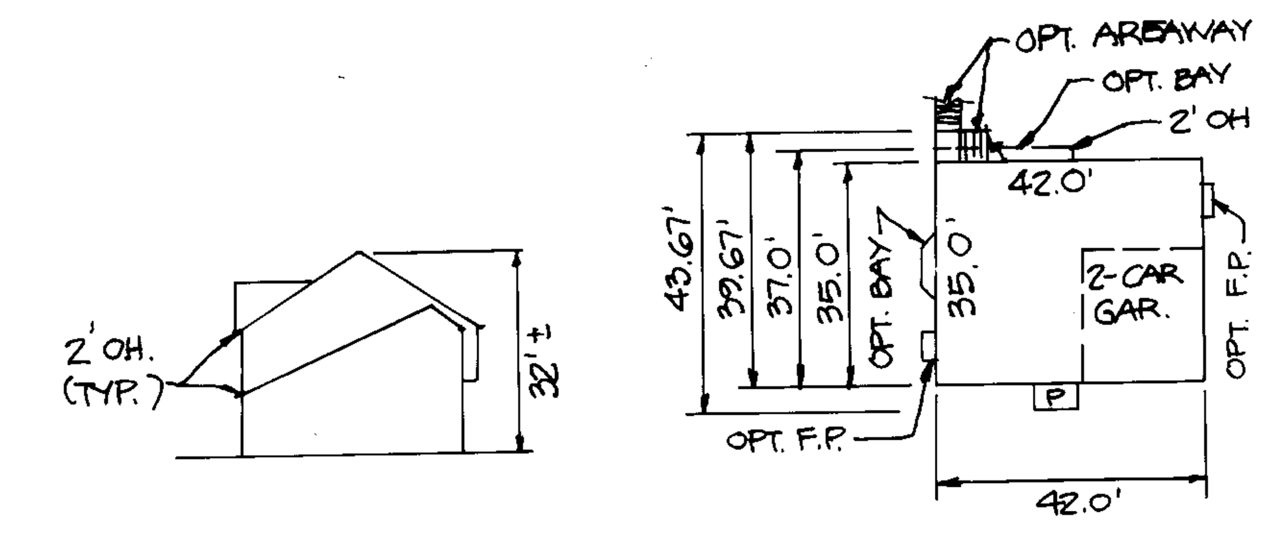
TITLE: **TITLE SHEET**

DATE: MAY 5, 1995 / AUGUST 10, 1995 — PROJECT NO. 0399

SCALE: AS SHOWN — DRAWING 1 OF 4

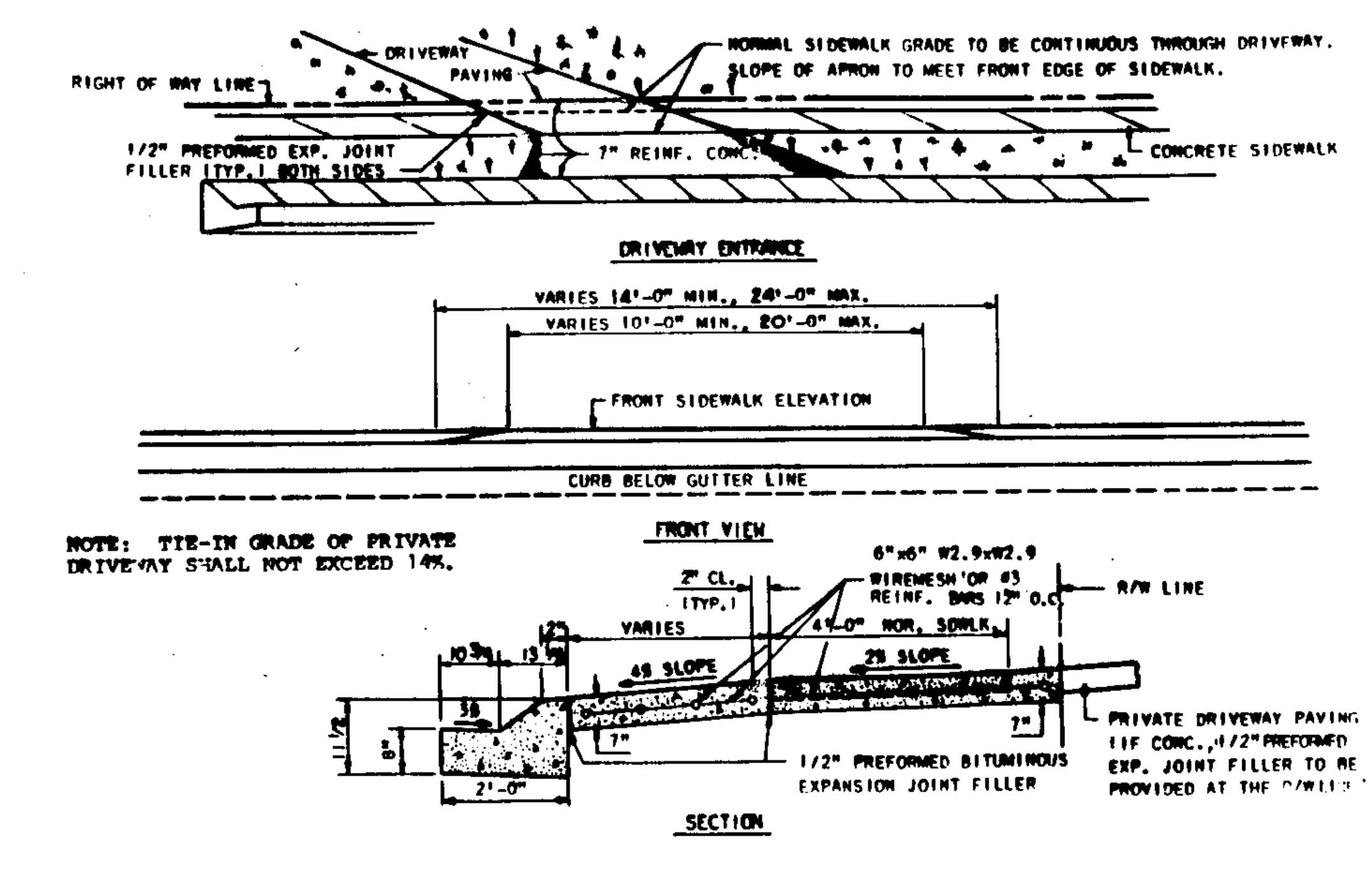
SDP-95-119





MODEL "Y-95" - THE PATRICK HENRY

SCALE: 1" = 30'



DRIVEWAY ENTRANCE DETAIL

NOT TO SCALE

LEGEND

- TREE PROTECTION FENCE
- EXISTING CONTOURS (2' INTERVALS)
- PROPOSED CONTOURS UNDER SDP-95-29 (2' INTERVALS)
- PROPOSED CONTOURS UNDER F-92-25 (2' INTERVALS)
- PROPOSED CONTOURS (2' INTERVALS)

11-8-95 HOUSE SITING LOTS 18 & 19, ADDED HOUSE TYPE #1

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION, CHARLES DAMMERS — DATE 10/31/95

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH, GINA TIRINNANZI — DATE 11/1/95

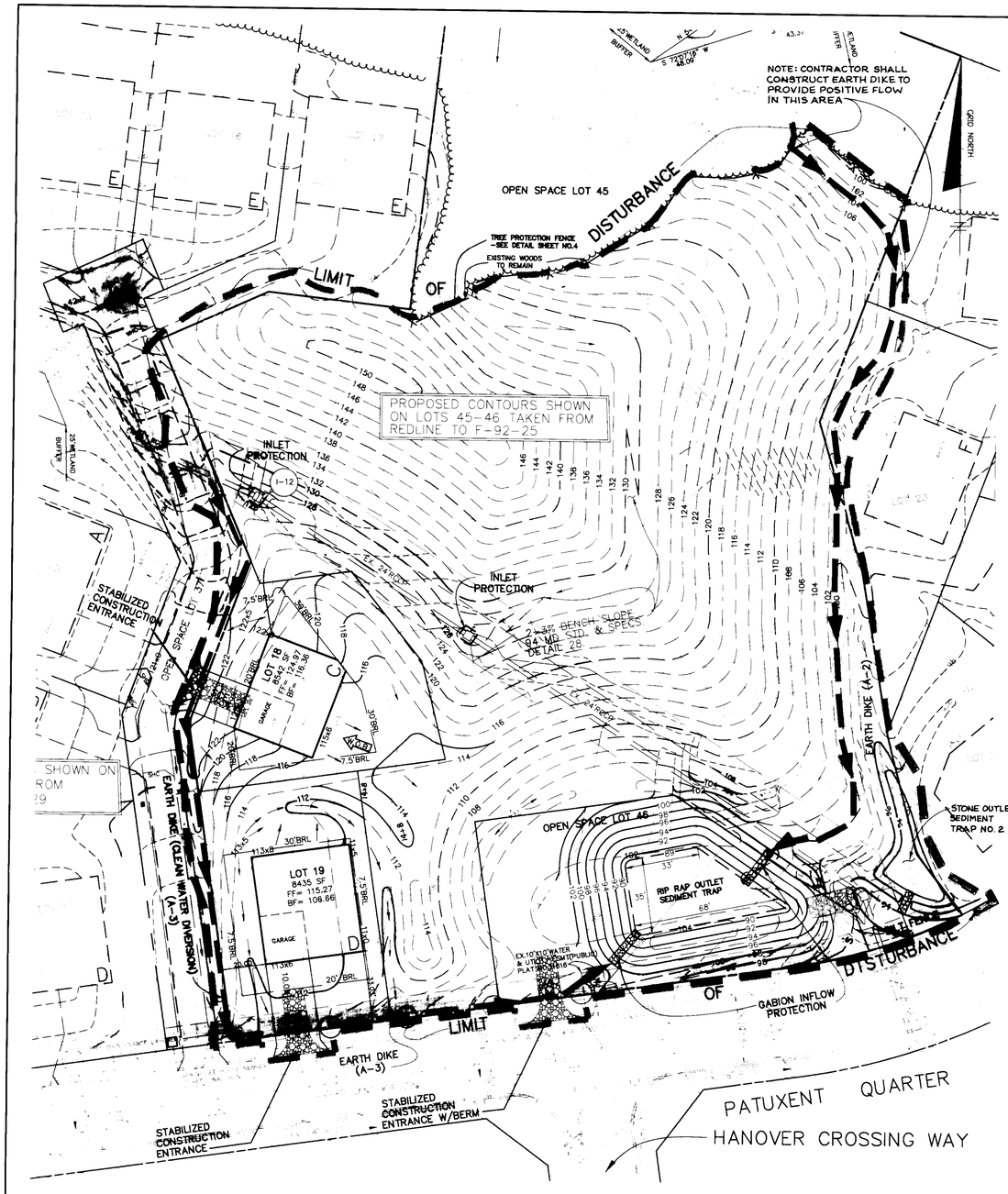
DIRECTOR, JOSEPH RUTTER, JR. — DATE 11/2/95

TSA GROUP, INC.
planning • architecture • engineering

STATE OF MARYLAND — DONALD ALAN MASON — REGISTERED PROFESSIONAL ENGINEER

OWNER/DEVELOPER:	PROJECT:
SECURITY DEVELOPMENT CORP. P.O. BOX 417 ELLICOTT CITY, MARYLAND 21041 (410) 465-4244	PATAPSCO RIDGE SECTION ONE LOTS 18,19 & OPEN SPACE LOTS 45 & 46 S-88-73,P-91-10,P-92-11,WP-91-10,WP-92-127,F-92-25,SDP-95-29
	LOCATION: TAX MAP 38 PARCELS 263, 793 & 849 1ST. ELECTION DISTRICT HOWARD COUNTY, MARYLAND
BUILDER: PATRIOT HOMES P.O. BOX 1018 COLUMBIA, MARYLAND 21044 (410) 997-5522	TITLE: SITE DEVELOPMENT PLAN
	DATE: ~~MAY 5, 1995~~ AUGUST 10, 1995 — PROJECT NO. 0399
DES: JH/DAM — DRN: JH	SCALE: AS SHOWN — DRAWING 2 OF 4

SDP-95-119



PLAN

SCALE: 1" = 30'

LEGEND

- S——S SILT FENCE
- SSF——SSF SUPER SILT FENCE
- X—X—X TREE PROTECTION FENCE
- INLET PROTECTION
- SCE STABILIZED CONSTRUCTION ENTRANCE
- LIMIT OF DISTURBANCE
- EARTH DIKE

SEQUENCE OF CONSTRUCTION

DAY 1	OBTAIN GRADING PERMIT
DAY 2-5	INSTALL STABILIZED CONSTRUCTION ENTRANCES, TREE PROTECTION FENCE, SUPER SILT FENCE, SEDIMENT TRAP AND EARTH DIKES
DAY 6	INSTALL INLET PROTECTION AT I-11
DAY 7-20	•FINAL GRADE SITE AND STABILIZE IN ACCORDANCE WITH PERMANENT SEEDBED NOTES
DAY 21-86	CONSTRUCT HOMES, INSTALL DRIVEWAYS AND UTILITIES.
DAY 87-91	UPON APPROVAL OF THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS LICENSES AND PERMITS SEDIMENT CONTROL INSPECTOR, REMOVE ALL REMAINING SEDIMENT CONTROL DEVICES AND STABILIZE IN ACCORDANCE WITH PERMANENT SEEDBED NOTES

• NOTE: OPEN SPACE LOTS 45 AND 46 SHALL BE PERMANENTLY SEEDED IN ACCORDANCE WITH CONSERVATION AREA SEEDING NOTES— SEE SHEET 4 OF 4

OWNER/DEVELOPER SHALL CLEAN AND RESTORE THE STORMWATER MANAGEMENT FACILITY TO THE CONFIGURATION APPROVED ON ROAD CONSTRUCTION PLANS (F-92-25) AND STABILIZE IN ACCORDANCE WITH PERMANENT SEEDBED NOTES.

RIP RAP OUTLET SEDIMENT TRAP

DRAINAGE AREA:	2.20 AC
STORAGE REQUIRED:	11,880 CF
STORAGE PROVIDED:	12,145 CF
BOTTOM ELEVATION:	89.00
CREST ELEVATION:	95.00
EMBANKMENT ELEVATION:	96.00
CLEANOUT ELEVATION	92.00
CREST WIDTH(b):	6.0'
STORAGE ELEVATION:	93.5
(a) DEPTH:	1.5
TOP ELEVATION:	98.00

STONE OUTLET SEDIMENT TRAP

DRAINAGE AREA:	0.27AC
STORAGE REQUIRED:	272 CF
STORAGE PROVIDED:	1200 CF
BOTTOM ELEVATION:	92.5
CREST ELEVATION:	95.0
EMBANKMENT ELEVATION:	96.0
CLEANOUT ELEVATION:	93.75
CREST WIDTH	4.0'

SEDIMENT CONTROL NOTES

1. A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTION, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION. (313-1850)
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 MOST CURRENT MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL, REVISIONS THERETO.
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	2.95	ACRES
AREA DISTURBED	2.48	ACRES
AREA TO BE ROOFED OR PAVED	0.12	ACRES
AREA TO BE VEGETATIVE LY STABILIZED	0.35	ACRES
TOTAL CUT	2,625	C.Y.
TOTAL FILL	2,625	C.Y.
OFFSITE WASTE/BORROW AREA LOCATION	E.K. HINE SUBDIVISION S-93-99, SDP-95-29 & SDP-95-112	

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 CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
10. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
11. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER

PERMANENT SEEDBED PREPARATION

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 ON OF THE FOLLOWING SCHEDULES:

1. PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ FT) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ FT) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS/1000 SQ FT).
2. ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ FT) AND 1000 LBS PER ACRE 10-10-10 FERTILIZER (23 LBS/1000 SQ FT) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL.

SEEDING: FOR THE PERIODS MARCH 1 THROUGH APRIL 30 AND AUGUST 1 THROUGH OCTOBER 15, SEED WITH 60 LBS PER ACRE (1.4 LBS/1000 SQ FT) 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 THROUGH 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.

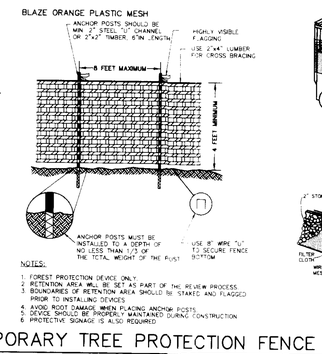
SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: APPLY 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ FT).

SEEDING: FOR PERIOD MARCH 1 THROUGH APRIL 30 AND FROM AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 2-1/2 BUSHELS PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SQ FT). FOR THE PERIOD MAY 1 THROUGH AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (.07 LBS/1000 SQ FT). FOR THE PERIOD NOVEMBER 16 THROUGH 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 FEET 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.

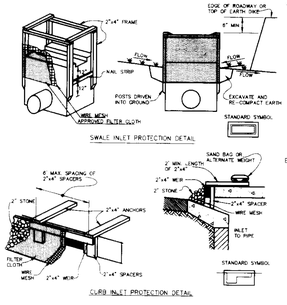


NOTES:

1. FOREST PROTECTION DEVICE ONLY.
2. RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
3. BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICES.
4. AVOID ROOT DAMAGE WHEN PLACING ANCHOR POSTS.
5. DEVICE SHOULD BE PROPERLY MAINTAINED DURING CONSTRUCTION
6. PROTECTIVE SIGNAGE IS ALSO REQUIRED

TEMPORARY TREE PROTECTION FENCE

NOT TO SCALE



CONSTRUCTION SPECIFICATIONS FOR IPD-1

A. A swale, ditchline or yard inlet protection

1. Excavate completely around inlet to a depth of 18" below notch elevation.
2. Drive 2 - 4 post 1" into ground at four corners of inlet. Place nail strips between posts on ends of inlet. Assemble top portion of 2 x 4 frame using overlap joint shown. Top of frame (weir) must be 6" below edge of roadway adjacent to inlet.
3. Stretch wire mesh tightly around frame and fasten securely. Ends must meet post.
4. Stretch filter cloth tightly over wire mesh, the cloth must extend from top of frame to 18" below inlet notch elev. fasten securely to frame. Ends must meet at post, be overlapped and folded, then fastened down.
5. Backfill around inlet in compacted 6" layers until layer of earth is even with notch elevation on ends and top elevation on sides.
6. If the inlet is not in a low point, construct a compacted earth dike in the ditchline below it. The top of this dike is to be at least 6" higher than the top of frame (weir).
7. This structure must be inspected frequently and the filter fabric replaced when clogged.

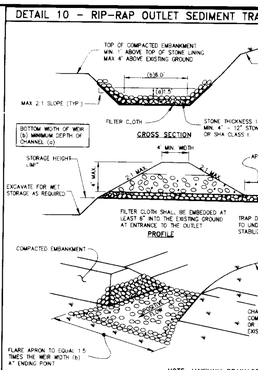
B. curb inlet protection.

1. Attach a continuous piece of wire mesh (30" min. width by throat length plus 4') to the 2"x4" weir (measuring throat length plus 2') as shown on the standard drawing.
2. Place a piece of approved filter cloth (40-85 sieve) of the same dimensions as the wire mesh over the wire mesh and securely attach to the 2"x4".
3. Securely nail the 2"x4" weir to 9" long vertical spacers to be located between the weir and inlet face (max. 6' apart).
4. Place the assembly against the inlet throat and nail (min. 2 lengths of 2"x4", to the top of the weir spacer locations. These 2"x4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.
5. The assembly shall be placed so that the end spacers are a minimum 1' beyond both ends of the throat opening.
6. From the wire mesh and filter cloth to the concrete gutter and against the face of curb on both sides of the inlet. Place clean 2" stone over the wire mesh and filter fabric in such a manner as to prevent water from entering the inlet under or around the filter cloth.
7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.
8. Assure that storm flow does not bypass inlet by installing temporary earth or asphalt dikes directing flow into inlet.

INLET PROTECTION DETAIL

NOT TO SCALE

DETAIL 10 – RIP-RAP OUTLET SEDIMENT TRAP – ST III



NOTE: MAXIMUM DRAINAGE AREA = 10 Ac.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE | PAGE C - 9 - 13 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

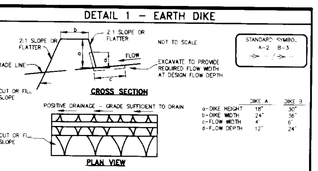
RIP-RAP OUTLET SEDIMENT TRAP – ST III

CONSTRUCTION SPECIFICATIONS

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 4', measured at centerline of embankment.
3. All cut and fill slopes shall be 2:1 or flatter.
4. Elevation of the top of any dike directing water into trap must equal or exceed the height of trap embankment.
5. Storage area provided shall be figured by computing the volume measured from top of excavation. (For storage requirements see Table 10)
6. Filter cloth shall be placed over the bottom and sides of the outlet channel prior to placement of stone. Section of fabric must overlap at least 1' with section nearest the entrance placed on top. Fabric shall be embedded at least 6" into existing ground at entrance of outlet channel.
7. Stone used in the outlet channel shall be 4" - 12" placed 18" thick.
8. Outlet – An outlet shall be provided, which includes a means of conveying the discharge in an erosion free manner to an existing stable channel. Protection against scour at the discharge end shall be provided as necessary.
9. Outlet channel must have positive drainage from the trap.
10. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/4 of the wet storage depth of the trap (1350 cf/ac). Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
11. The structure shall be inspected periodically after each rain and repaired as needed.
12. Construction of traps shall be carried out in such a manner that sediment pollution is avoided. Once constructed, the top and outside face of the embankment shall be stabilized with seed and mulch. Points of concentrated inflow shall be protected in accordance with Grade Stabilization Structure criteria. The remainder of the interior slopes should be stabilized (one time) with seed and mulch upon trap completion and monitored and maintained erosion free during the life of the trap.
13. The structure shall be dewatered by approved methods, removed and the area stabilized when the drainage area has been properly stabilized.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE | PAGE A - 6 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 1 – EARTH DIKE



FLOW CHANNEL STABILIZATION GRADE 0.5% MIN. 10% MAX.

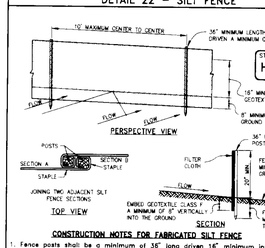
1. Seed and cover with straw mulch.
2. Seed and cover with Erosion Control Matting or line with sod.
3. 4" - 7" stone or recycled concrete equivalent pressed into the soil 7" minimum.

CONSTRUCTION SPECIFICATIONS

1. All temporary earth dikes shall have uninterrupted positive grade to an outlet. Spot elevations may be necessary for grades less than 1%.
2. Runoff diverted from a disturbed area shall be conveyed to a sediment trapping device.
3. Runoff diverted from an undisturbed area shall outlet directly into an undisturbed, stabilized area at a non erosive velocity.
4. All trees, brush, stumps, obstructions, and other objectional material shall be removed and disposed of so as not to interfere with the proper functioning of the dike.
5. The dike 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. Fill shall be compacted by earth moving equipment.
7. All earth removed and not needed for construction shall be placed so that it will not interfere with the functioning of the dike.
8. Inspection and maintenance must be provided periodically and after each rain event.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE | PAGE E - 15 - 3 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 22 – SILT FENCE



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1 1/2" x 1 1/2" square (minimum) cut, or 1 3/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot.
2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal ft²/ minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
4. Silt fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE | PAGE E - 15 - 3A | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

SILT FENCE

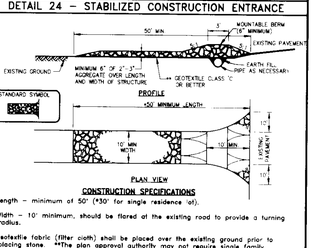
SILT FENCE DESIGN CRITERIA

Slope Steepness	(Maximum) Slope Length	(Maximum) Silt Fence Length
Flatter than 50:1	unlimited	unlimited
50:1 to 10:1	125 feet	1,000 feet
10:1 to 5:1	100 feet	750 feet
5:1 to 3:1	60 feet	500 feet
3:1 to 2:1	40 feet	250 feet
2:1 and steeper	20 feet	125 feet

Note: In areas of less than 2% slope and sandy soils (USDA general classification system, soil Class A) maximum slope length and silt fence length will be unlimited. In these areas a silt fence may be the only perimeter control required.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE | PAGE F - 17 - 3 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 24 – STABILIZED CONSTRUCTION ENTRANCE



CONSTRUCTION SPECIFICATIONS

1. Length – minimum of 50' (*50' for single residence lot).
2. Width – 10' minimum, should be flared at the existing road to provide a turning radius.
3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. **The plan approval authority may not require single family residences to use geotextile.
4. Stone – crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6' deep over the entire width of the entrance.
5. Surface Water – all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
6. Location – A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

BY THE DEVELOPER:

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

DEVELOPER: _____ DATE: 8/11/95

BY THE ENGINEER:

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

ENGINEER: _____ DATE: 8/11/95

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

NATURAL RESOURCES CONSERVATION SERVICE _____ DATE: 10/30/95

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

HOWARD SOIL CONSERVATION DISTRICT _____ DATE: 10/30/95

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION, CHARLES DAMMERS _____ DATE: 10/30/95

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH, GLNA TIRINNANZI _____ DATE: 11/1/95

DIRECTOR, JOSEPH RUTTER, JR. _____ DATE: 11/2/95

TSA GROUP, INC.
planning • architecture • engineering
8480 Baltimore National Pike • Ellicott City, Maryland 21043 • (410) 465-6105

OWNER/DEVELOPER: SECURITY DEVELOPMENT CORP. P.O. BOX 417 ELLICOTT CITY, MARYLAND 21041 (410) 465-4244	PROJECT: PATAPSCO RIDGE SECTION ONE OPEN SPACE LOTS 45 AND 46 S-89-73, P-91-10, P-92-11, WP-91-10, WP-92-127, F-92-25,
BUILDER: PATRIOT HOMES P.O. BOX 1010 COLUMBIA, MARYLAND 21244 (410) 997-5522	LOCATION: TAX MAP 38 PARCELS 263, 793 & 849 1ST. ELECTION DISTRICT HOWARD COUNTY, MARYLAND
	TITLE: SEDIMENT CONTROL PLAN, NOTES AND DETAILS
DES: JH/DAM DRN: JH	DATE: JUNE 7, 1995 AUGUST 10, 1995 — PROJECT NO. 0399
	SCALE: AS SHOWN — DRAWING 3 OF 4

SDP-95-119

PLAN
SCALE: 1" = 30'

LEGEND

- TREE PROTECTION FENCE
- EXISTING CONTOURS (2' INTERVALS)
- PROPOSED CONTOURS UNDER SDP-95-29 (2' INTERVALS)
- PROPOSED CONTOURS UNDER F-92-25 (2' INTERVALS)
- PROPOSED CONTOURS (2' INTERVALS)

WARRANTY NOTES

Trees shall be monitored by the landscape contractor. Trees shall be guaranteed for a 2 year period with a minimum of 90% survivability in year one and 75% survivability at the end of year 2. A written report shall be submitted at the time installation is completed and at the end of the "1 year inspection" and the "2nd year inspection." The landscape architect (or other certified professional) shall inspect the site at the completion of installation and at the "1 and 2 year inspection" to verify the rate of survivability.

CONSERVATION AREA SEED MIXTURE

Species	Amount (lbs/ac)
Forest Conservation Mix:	40
Sheep Fescue 20%	
Little Bluestem 30%	
Indian Grass 20%	
Side Oats Grama 10%	
Big Bluestem 10%	
Annual Rye Grass	130

MEADOW AREA SEED MIX

Species	Amount (lbs/ac)
Meadow Seed Mix:	172
Cochise 34%	
Monarch 33%	
Eldorado 33%	

SITE PREPARATION
PREFERRED METHOD

1. Established the Conservation Area mixture during the preferred planting time period of August 15 – October 1 or March 15 to May 15. The method is as follows:
   A. Seed entire planting bed by broadcasting seed uniformly over Forest Conservation Area.
   B. Mulch may be applied by hand or by suitable equipment.

PLANTING SCHEDULE NOTES

1. Bare root areas will be planted in late winter and early spring. Planting may begin as soon as the ground is no longer frozen and the danger of killing frosts is minimal. Earliest planting dates will vary from year to year but all planting should be completed by May 15.
2. Balled and burlapped material may be planted either in the springs up till May 15 or in the fall between October 1 and December 15.
3. Conservation area seeding may be before or after the completion of the tree planting depending on time of year grading is completed.
4. Stock will be hand-planted as per industry standards.

PLANT MATERIALS & HANDLING NOTES

1. Plant materials will consist of bareroot stock with minimum heights as per industry standards. All stock will be planted as received; no root or top pruning will be done at the site. Stock not meeting specifications shall be returned to the supplier.
2. All seed used for the conservation area mixture shall be certified as to purity, percent live seed, and germination percentage by the supplier. All seed shall be certified as free of state listed noxious weeds. Seeding varieties may be altered if availability or site conditions warrant.
3. All planting stock shall be protected from sunscald, desiccation, and structural damage during shipment to the site. Delivery of materials will be no sooner than one week prior to planting. Materials held for planting will be moistened and placed in cool, shaded areas until ready for placement. During planting, all materials will be kept moist with the roots protected from desiccation.
4. Balled and burlapped material shall be planted in accordance with the latest specifications of Landscape Contractor's Association.

FOREST CONSERVATION AREA NOTES

1. Soil amendment and fertilization recommendations will be made based upon the results of soil analysis for nitrogen, phosphorus, potassium, organic matter content, and PH. Forest Conservatic.r Area will be prepared by discing or chisel-harrowing to a depth not less than 6" from the surface. Apply wood chips or hardwood bark mulch in a 2' min. radius around each tree as shown in the detail provided.
2. Planting materials will consist of bare root stock planted on 8x8 spacing or as shown on plan. Hardwood planting will consist of a mix of four species (Red Oak, Sweet Gum, Pin Oak along with a 50% mix shrubs, Elderberry, Hazelnut, Highbush Blueberry, Viburnum and Shadblow).
3. The location of balled and burlapped material shall be installed as per plan.

PLANT LIST			
SYMBOL	QUANTITY	NAME	REMARKS
RO	11	QUERCUS RUBRA Red Oak	2" CALIPER
RO	7	QUERCUS RUBRA Red Oak	1" CALIPER
PO	4	QUERCUS PALUSTRIS Pin Oak	2" CALIPER
PO	7	QUERCUS PALUSTRIS Pin Oak	1" CALIPER
SG	7	LIQUIDAMBAR STYRACFLUA Sweet Gum	2" CALIPER
SG	8	LIQUIDAMBAR STYRACFLUA Sweet Gum	1" CALIPER
WA	4	FRAXINUS AMERICANA White Ash	2" CALIPER
BG	1	NYSSA SYLVATICA Black Gum	1" CALIPER
WP	56	PINUS STROBUS White Pine	3' EVERGREEN
VP	42	PINUS VIRGINIANA Virginia Pine	3' EVERGREEN
RC	16	JUNIPERUS VIRGINIANA Red Cedar	3' EVERGREEN
x	190 TOTAL	ELDERBERRY (19) HAZLENUT (19) HIGHBUSH BLUEBERRY (19) VIBURNUM SPECIES (19) SHADBLOW (19) RED OAK (32) SWEET GUM (32) PIN OAK (31) (50% SHRUBS)	UNPROTECTED SEEDLINGS RANDOMLY PLACED

FOREST CONSERVATION AREA MANAGEMENT NOTES

Preconstruction

Conduct a preconstruction meeting with contractor to ensure forest protection measures are followed.

During Construction

1. Provide maintenance to tree protection devices.
2. Water trees having critical root zone impacts on a bi-weekly basis or as needed.
3. Monitor condition of remaining trees, i.e. insect infestations, leaf discoloration, early leafdrop etc.

Post construction – two (2) year minimum

Inspect existing trees around the perimeter of disturbed limits for signs of root or trunk damage and soil compaction.

Evaluate remaining trees for signs of stress and conduct appropriate cultural management: Crown reduction, pruning, watering, soil aeration, fertilizing, etc. Remove dead or dying trees and evaluate for hazard trees.

PLANTING CONSTRUCTION SEQUENCE

1. Spread 6" layer of "forest duff".
2. Disc all lawn and planting area compacted by construction equipment.
3. Apply all grass seed mixes.
4. Install forest conservation planting and permanent signage.
5. Remove tree protection fencing.
6. Inspect and maintain forest conservation planting for a 2 year period.
7. Provide final report and certification of planting.

FENCING AND SIGNAGE NOTES

Woodland conservation/tree save areas and limits of clearing will be clearly marked prior to the beginning of any activities.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION, CHARLES DAMMERS — DATE 10/31/95

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH, GINA TIRINNANZI — DATE 11/1/95

DIRECTOR, JOSEPH RUTTER, JR. — DATE 11/2/95

TSA GROUP, INC.
planning · architecture · engineering
8480 Baltimore National Pike · Ellicott City, Maryland 21043 · (410) 465-6105

Slater Associates, Inc.
5560 Sterrett Place
Suite 302
Columbia, MD 21044
tel: (410) 992-0001 fax: (410) 992-0212

OWNER/DEVELOPER:
SECURITY DEVELOPMENT CORP.
P.O. BOX 417
ELLICOTT CITY, MARYLAND 21041
(410) 465-4244

BUILDER:
PATRIOT HOMES
P.O. BOX 1018
COLUMBIA, MARYLAND 21044
(410) 997-5522

DES: JH/DAM DRN: JH

PROJECT: **PATAPSCO RIDGE**
SECTION ONE
LOTS 18,19 & OPEN SPACE LOTS 45 & 46
S-89-73,P-91-10,P-92-11,WP-91-10,WP-92-127,F-92-25,SDP-95-29

LOCATION:
TAX MAP 38 PARCELS 263, 793 & 849
1ST. ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE:
PLANTING PLAN,
NOTES AND DETAILS

DATE: MAY 5, 1995 / AUGUST 10, 1995
PROJECT NO. 0399

SCALE: AS SHOWN
DRAWING 4 OF 4

SDP-95-119