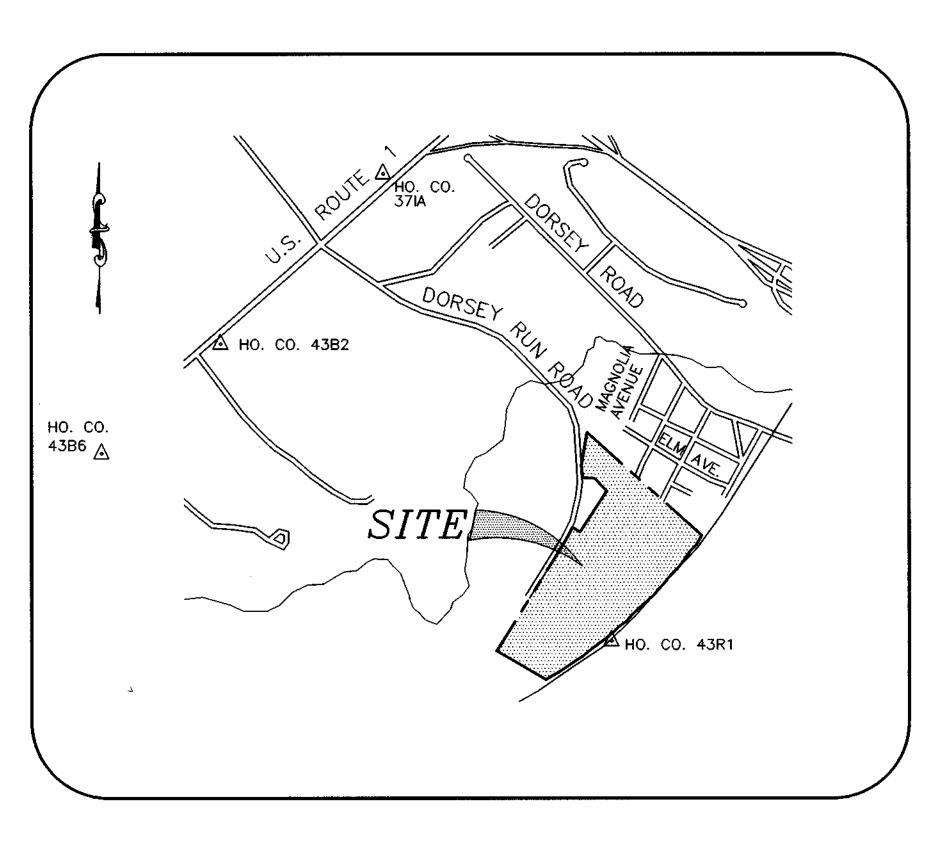
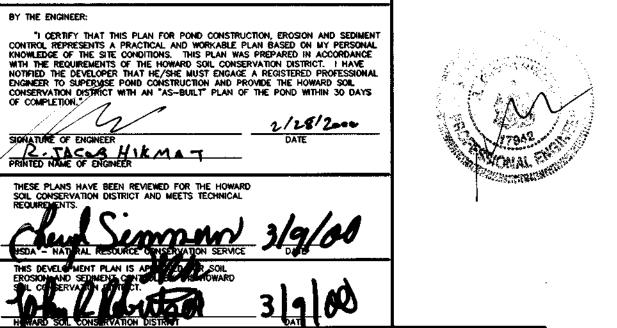
ROAD CONSTRUCTION PLANS HOWARD BUSINESS PARK PARCELS A-1 & B-1 THRU B-4

FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SHEET INDEX	
COVER SHEET	1
ROAD PLAN AND PROFILE	2
GRADING & EROSION AND SEDIMENT CONTROL PLAN	3
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OFF-SITE REFORESTATION PLAN	8
OFF-SITE REFORESTATION PLAN	9



SCALE: 1'=1000'



"I/WE 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 THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENCAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND 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 INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

MARK L. LGVY

PRINTED NAME OF DEVELOPER

DEVELOPER

DORSEY ROCK, LLC
C/O ROCK REALTY, INC.
25 MAIN STREET
REISTERSTOWN, MARYLAND 21136
(410) 526-4030
ATTN: MARK LEVY

GENERAL NOTES

- 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE
- 2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/CONSTRUCTION INSPECTIONS DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- 3. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) DAYS PRIOR TO ANY EXCAVATION WORK:

MISS UTILITY

C&P TELEPHONE COMPANY
HOWARD COUNTY BUREAU OF UTILITIES
AT&T CABLE LOCATION DIVISION
AT&T CABLE LOCATION DIVISION
BALTIMORE GAS & ELECTRIC
STATE HIGHWAY ADMINISTRATION
HOWARD COUNTY DEPT. OF PUBLIC WORKS/
CONSTRUCTION INSPECTION DIVISION

1-800-257-7777
(410) 313-4900
(410) 393-3533
(410) 685-0123
(410) 531-5533

4. PROJECT BACKGROUND:
LOCATION: FIRST ELECTION DISTRICT - TAX MAP 43 - PARCEL 321

ZONING: M-2
TOTAL TRACT AREA: 51.90 ACRES ±
NUMBER OF PROPOSED LOTS: 5
ACREAGE OF PROPOSED LOTS: 51.90 ACRES ±
OPEN SPACE REQUIRED: 0 ACRES
OPEN SPACE PROVIDED: 0 ACRES
PROPOSED ROAD DEDICATION: 0 ACRES
DPZ REFERENCE #:

- SDP-95-60 APPROVED ON JUNE 19, 1995.
 WP-00-23 APPROVED ON AUGUST 31, 1999.
 F-00-27 RECORDED ON OCTOBER 8, 1999, AS PLAT # 13970.
- 5. TWO FOOT CONTOUR TOPOGRAPHY AND EXISTING CONDITIONS BASED ON AERIAL MAPPING TOPOGRAPHIC SURVEY BY WINGS AERIAL MAPPING CO, INC. IN FEBRUARY 1999.
- 6. HORIZONTAL AND VERTICAL DATUMS BASED ON (NAD'83) MARYLAND STATE COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS.

STA. No. 43B6 N 550,601.597 ELEV. 210.54
E 1,376,866.071
STA. No. 43B2 N 551,654.993 ELEV. 209.59
E 1,378,176.951
STA. No. 37IA N 553,315.147 ELEV. 195.75
E 1,379,982.153
STA. No. 43R1 N 548,305.502 ELEV. 134.53
E 1,382,025.818

- 7. STREET LIGHTS WILL BE REQUIRED IN THIS DEVELOPMENT IN ACCORDANCE WITH THE DESIGN MANUAL STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SELECTED SHALL BE IN ACCORDANCE WITH THE LATEST HOWARD COUNTY DESIGN MANUAL, VOLUME III (1993) AND AS MODIFIED BY "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS (JUNE 1993)." THE JUNE 1993 POLICY INCLUDES GUIDELINES FOR LATERAL AND LONGITUDINAL PLACEMENT. A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
- 8. WATER AND SEWER ARE PUBLIC, CONTRACT # 44-3421-D FOR WATER AND CONTRACT # 10-3775-D FOR SEWER.
- 9. STORMWATER MANAGEMENT CONTROL WILL BE PROVIDED UNDER THE FUTURE SITE DEVELOPMENT PLAN.
- 10. TRAFFIC STUDY PREPARED BY THE TRAFFIC GROUP, INC. IN AUGUST 1999.
- I. TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- 12. WETLAND AND STREAM DELINEATION PREPARED BY HILLIS-CARNES ENGINEERING ASSOCIATES, INC. IN
- 13. COMPACTION IN FILL AREAS TO BE 95% AS DETERMINED PER AASHTO T-180.
- 14. CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES ON SITE PRIOR TO COMMENCING CONSTRUCTION.
- 15. FOREST CONSERVATION EASEMENT(S) HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.200 OF HOWARD COUNTY FOREST CONSERVATION ACT. NO CLEARING, GRADING, OF CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, EXCEPT AS SHOWN ON AN APPROVED ROAD CONSTRUCTION DRAWING OR SITE DEVELOPMENT PLAN. HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OR CONSERVATION EASEMENT ARE ALLOWED.
- 16. A PORTION OF THE FOREST CONSERVATION OBLIGATIONS INCURRED BY THIS SUBDIVISION (9.73 ACRES OF REFORESTATION) WILL BE MET VIA OFF-SITE REFORESTATION ON "ROMITI PROPERTY".
- 17. PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT.
- 18. SLOPES IN EXCESS OF 25% EXIST AND ARE IDENTIFIED WHERE THEY EXCEED 20,000 SQ. FT.
- 19. THIS PROJECT IS SUBJECT TO WAIVER PETITION, WP-00-23, APPROVED ON AUGUST 31, 1999, WHICH WAIVED THE FOLLOWING TO PERMIT RECORDATION OF NONBUILDABLE PRESERVATION PARCELS A & B:

SECTION 16.116(a)(4)

SECTION 16.117

SECTION 16.124(a)(3)(ii)

SECTION 16.132

SECTION 16.144(a) & (f)

WETLANDS AND THE REQUIRED BUFFERS FOR WETLAND AND STREAMS SHALL BE DELINEATED ON FINAL PLATS. REQUIRES THE SUBMISSION OF A FOREST CONSERVATION PLAN. FINAL PLAN SUBMISSIONS SHALL INCLUDE THE FINAL LANDSCAPE PLAN IN THE ROAD CONSTRUCTION DRAWINGS. REQUIREMENT TO PROVIDE ROAD IMPROVEMENTS. REQUIRES THE SUBMISSION OF A SKETCH PLAN AND A PRELIMINARY PLAN.

20. THIS PROJECT IS SUBJECT TO WAIVER PETITION, WP-00-26, APPROVED ON DECEMBER 30, 1999, WHICH WAIVED THE FOLLOWING:

SECTION 16.124(a)(3)(ii)

SECTION 16.144(a) & (f)

SECTION 16.120(c)(1)

FINAL PLAN SUBMISSIONS SHALL INCLUDE THE FINAL LANDSCAPE PLAN IN THE ROAD CONSTRUCTION DRAWINGS.
REQUIRES THE SUBMISSION OF A SKETCH PLAN AND A PRELIMINARY PLAN.
REQUIRES COMMERCIAL LOTS TO HAVE A MINIMUM OF 60 FEET OF FRONTAGE ON AN APPROVED PUBLIC ROAD.

- 21. ALL STORM DRAIN PIPES TO BE HDPE UNLESS OTHERWISE NOTED.
- 22. IF MATERIAL IS WITHIN 8% OF OPTIMUM MOISTURE, WORKING THE MATERIAL UNTIL REQUIRED COMPACTION IS ACHIEVED IS CONTRACTOR'S RESPONSIBILITY.
- 23. SEDIMENT CONTROL FOR THIS PROJECT IS PROVIDE UNDER SDP-95-60. ALL SEDIMENT CONTROL DEVICES CONSTRUCTED UNDER SDP-95-60 WILL REMAIN IN PLACE DURING THE CONSTRUCTION OF THE DORSEY RUN ROAD EXTENSION.
- 24. THE STREET LIGHT LOCATIONS AND TYPES OF LIGHTS SHOWN ON SHEET 2 ARE AS FOLLOWS:

 250-WATT HPS VAPOR PENDANT FIXTURE (CUTOFF) MOUNTED AT 30' ON A BRONZE FIBERGLASS POLE USING A 12' ARM ANGLED RADIAL TO THE FILLET AT DORSEY RUN ROAD, STATION 39+27, 11' RIGHT, STATION 45+30, 36' LEFT, AND STATION 47+81, 36' LEFT.
- 25. THE FOREST CONSERVATION ORDINANCE HAS BEEN COMPLIED WITH IN ACCORDANCE WITH THE FOLLOWING:
 TOTAL OBLIGATION = 18.78 ACRES
 OFF-SITE REFORESTATION (ROMITI PROPERTY) = 9.73 ACRES

1 of 9

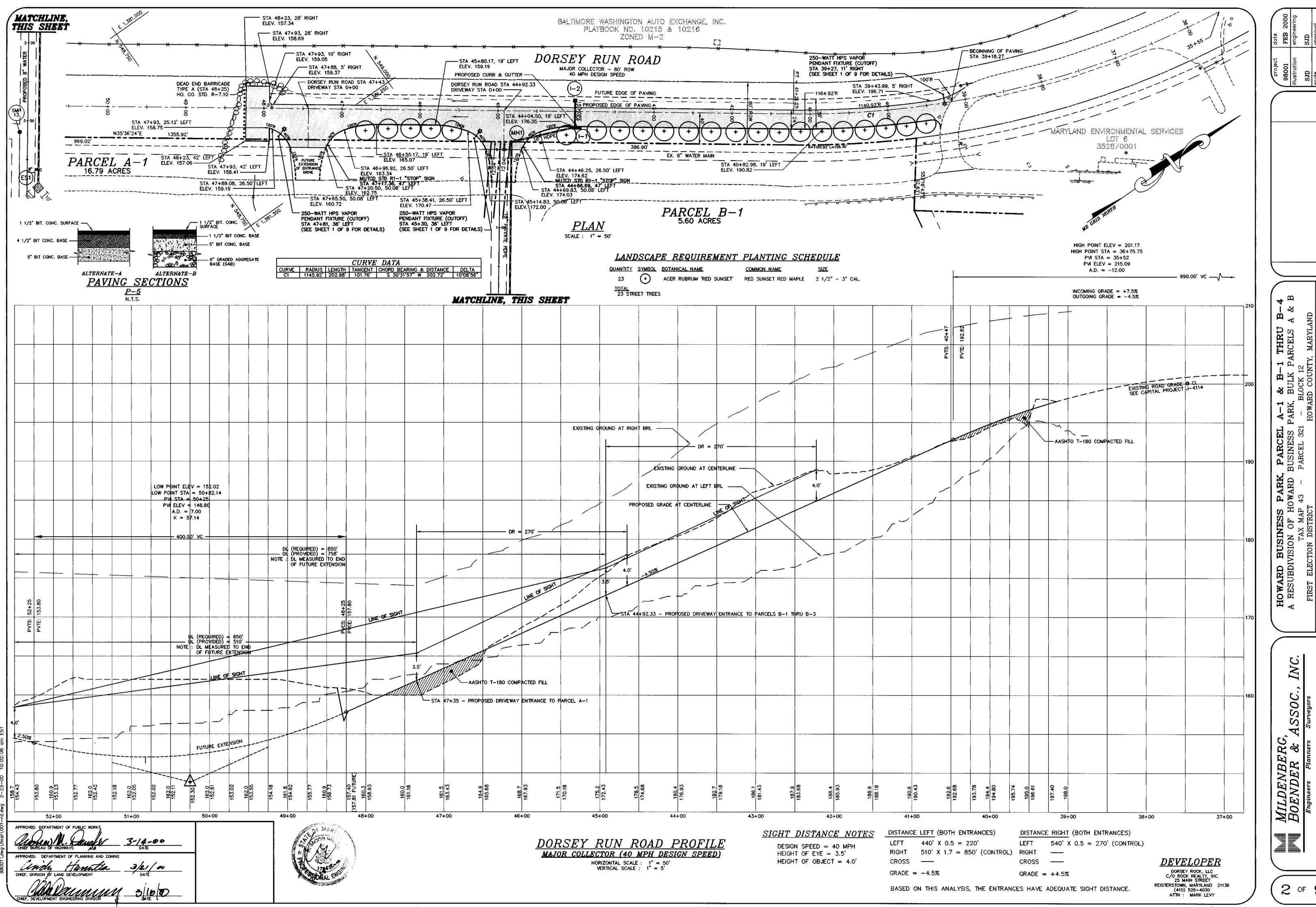
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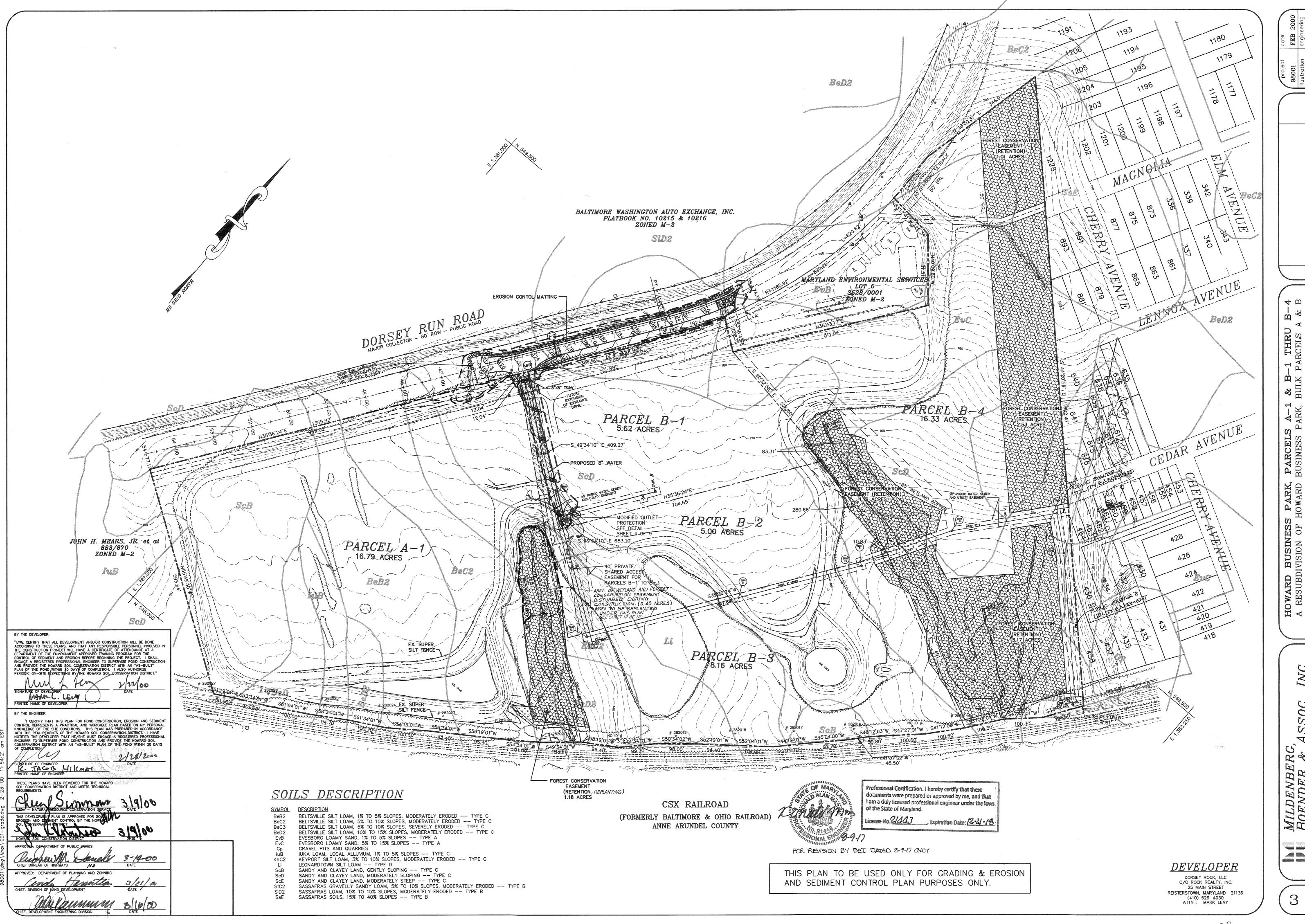
SJD scale date AS SHOWN

no. description revisions

JSINESS PARK, BULK PARCEL ARCEL 321 - BLOCK 12
HOWARD COUNTY, MAR.

HOWARD BUSINESS PARK, I A RESUBDIVISION OF HOWARD B TAX MAP 43 - P FIRST ELECTION DISTRICT



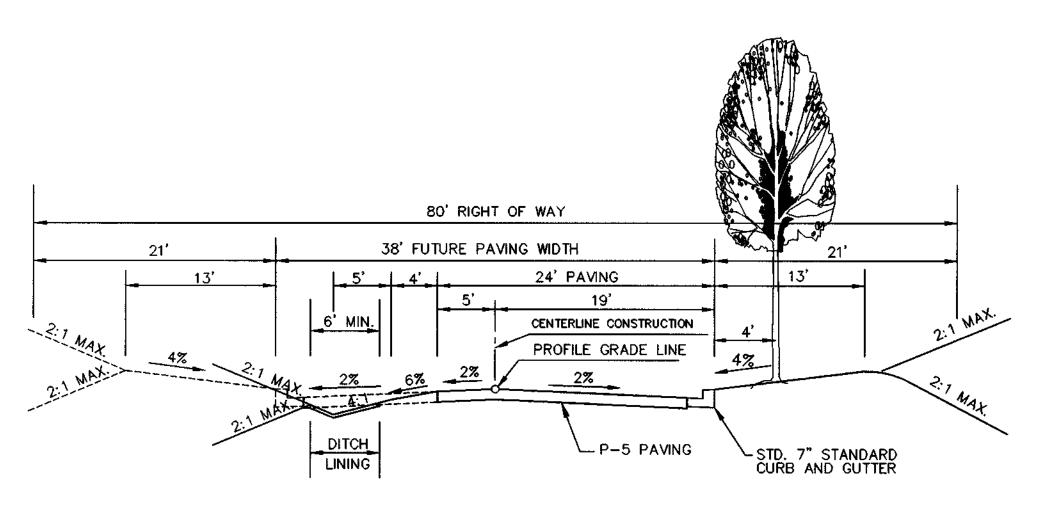


SEDIMENT

HOWARD BUSINESS PARK,
A RESUBDIVISION OF HOWARD I
TAX MAP 43 —
FIRST ELECTION DISTRICT

SSOC.

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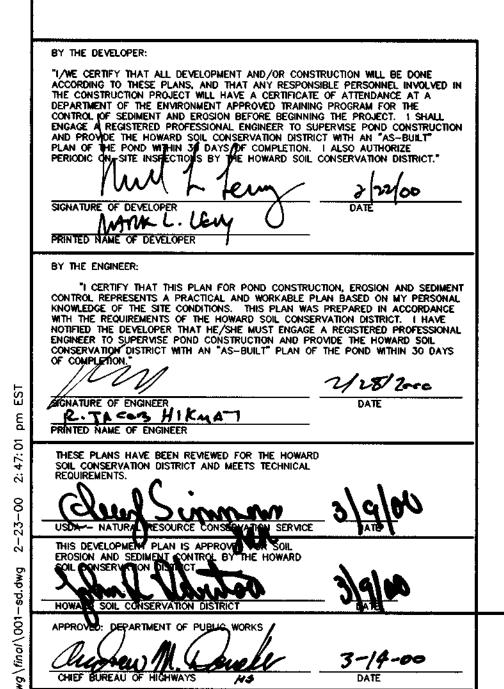


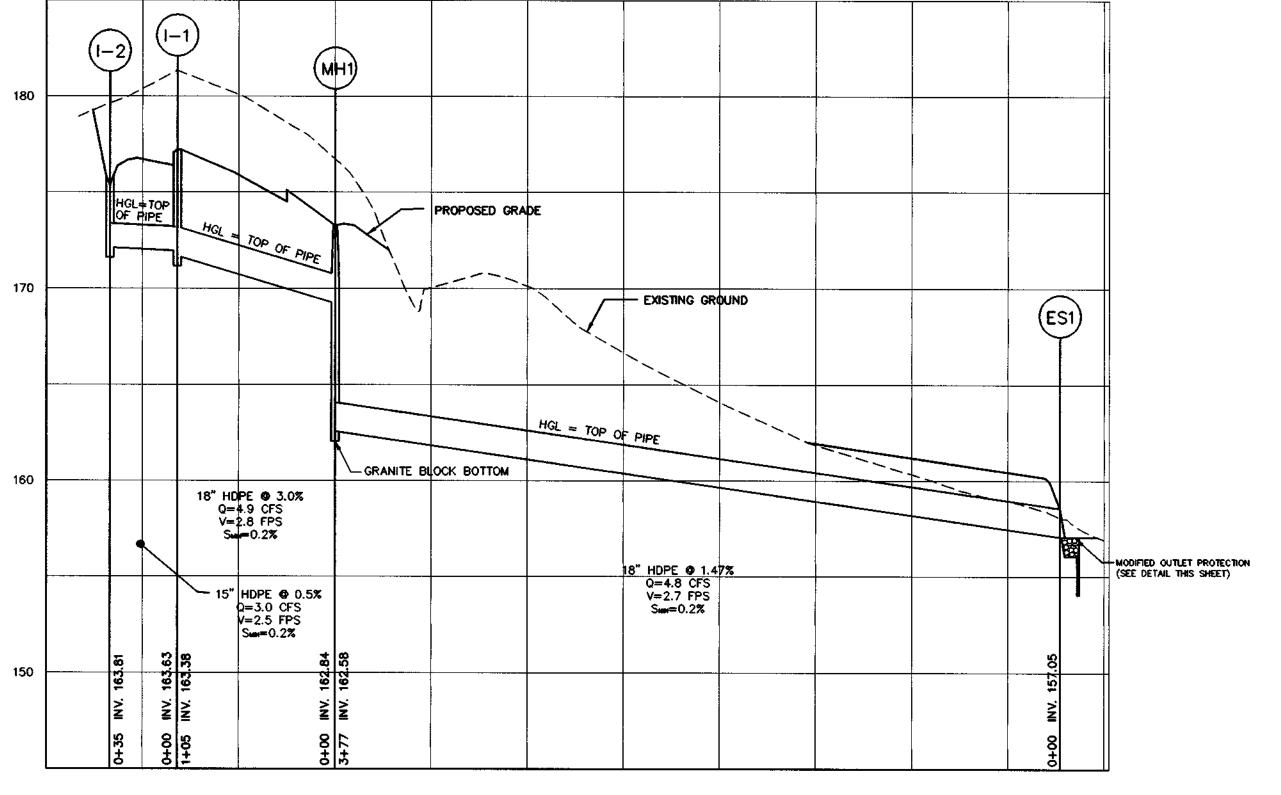
TYPICAL SECTION — MAJOR COLLECTOR 40 MPH DESIGN SPEED STA 39+19.28 TO STA 48+23 N.T.S.

BACKFILL WITH EXISTING NATIVE SOIL 1" GROUND LINE 1 CONVEX BOTTOM 2'-3' TREE PLANTING DETAIL CONTAINER GROWN

PIPE SCHEDULE

QUANTITY	PIPE SIZE
35'	15" HDPE
482'	18" HDPE





STORM DRAIN PROFILE - I-2 TO ES1

HORIZONTAL SCALE: 1" = 50'

VERTICAL SCALE: 1" = 5'

STRUCTURE SCHEDULE

NO.	LOCATION*	TOP**	INV. IN	INV. OUT	COMMENTS
I-1	DORSEY RUN ROAD STA 43+98.84 - 19' LEFT	177.20	171.94	171.69	INLET TYPE A-10 (HO. CO. STD SD 4.02) - 99% EFF.
I-2	DORSEY RUN ROAD STA 44+01.25 - 14' RIGHT	175.37		172.12	INLET TYPE K (HO. CO. STD SD 4.13)
M1	DORSEY RUN ROAD STA 44+82.33 - 40' LEFT	173.27	169.23	162.74	PRECAST MANHOLE (HO. CO. STD SD 5.11)
ES-1	NORTHING 548,842,024 EASTING 1,381,707.254			157.05	18" # HDPE END SECTION (SEE DETAIL ABOVE)

- * STATIONS GIVEN TO CENTERLINE OF INLET AT TOP OF CURB FOR INLETS LOCATED WITHIN THE ROAD RIGHT-OF-WAY. STATIONS FOR "K" INLETS TO CL OF INLET. LOCATION OF END SECTION GIVEN TO THE CENTERLINE OF PIPE AT THE CONNECTION OF THE STORM DRAIN PIPE TO END SECTION.
- ** ELEVATIONS MEASURED TO CENTER OF ALL INLETS.

MODIFIED OUTLET PROTECTION DETAIL

EXISTING CHANNEL TO
BE LINED TO PREVENT
SCOUR OR EROSION
DUE TO PIPE
DISCHARGE

1' MIN

SHA CLASS I RIP—RAP

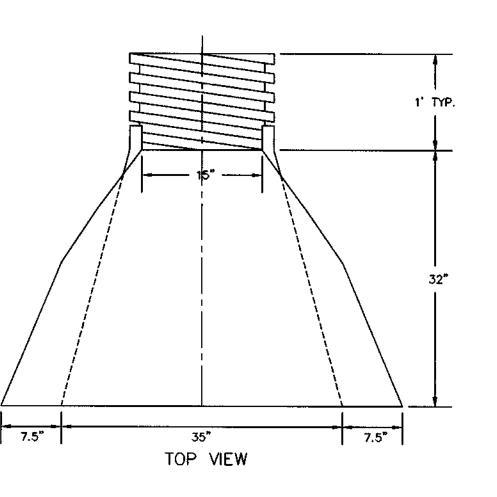
SHA CLASS I RIP—RAP

NOTE*
GEOTEXTILE

NOTE*
GEOTEXTILE CLASS C SHALL BE EMBEDDED AT LEAST 4" AND SHALL
EXTEND AT LEAST 6" BEYOND THE EDGE OF RIP—RAP

CONSTRUCTION SPECIFICATIONS

- 1. EXTREME CARE SHALL BE TAKEN TO PRESERVE THE CHANNEL GEOMETRY AND STABILITY OF THE EXISTING DITCH.
- 2. THE SUBGRADE FOR THE FILTER, RIP-RAP, OR GABION SHALL BE PREPARED TO THE REQUIRED LINES AND GRADES. ANY FILL REQUIRED IN THE SUBGRADE SHALL BE COMPACTED TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
- 3. THE ROCK OR GRAVEL SHALL CONFORM TO THE SPECIFIED GRADING LIMITS WHEN INSTALLED RESPECTIVELY IN THE RIP-RAP OR FILTER
- 4. GEOTEXTILE SHALL BE PROTECTED FROM PUNCHING, CUTTING, OR TEARING. ANY DAMAGE OTHER DAMAGE OTHER THAN AN OCCASIONAL SMALL HOLE SHALL BE REPAIRED BY PLACING ANOTHER PIECE OF GEOTEXTILE OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE. ALL OVERLAPS WHETHER FOR REPAIRS OR FOR JOINING TWO PLACES OF GEOTEXTILE SHALL BE A MINIMUM OF ONE FOOT.
- 5. STONE FOR THE RIP—RAP OR GABION OUTLETS MAY BE PLACED BY EQUIPMENT. THEY SHALL BE CONSTRUCTED TO THE FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. THE STONE FOR RIP—RAP OR GABION OUTLETS SHALL BE DELIVERED AND PLACED IN A MANNER TO PREVENT DAMAGE TO THE FILTER BLANKET OR GEOTEXTILE. HAND PLACEMENT WILL BE REQUIRED TO THE EXTENT NECESSARY TO PREVENT DAMAGE TO THE PERMANENT WORKS.
- 6. THE STONE SHALL BE PLACED SO THAT IT BLENDS IN WITH THE EXISTING GROUND. IF THE STONE IS PLACED TOO HIGH THEN THE FLOW WILL BE FORCED OUT OF THE CHANNEL AND SCOUR ADJACENT TO THE STONE WILL OCCUR.

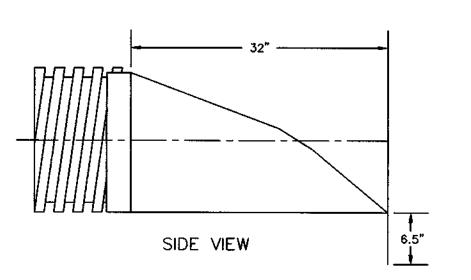


INSTALLATION INSTRUCTIONS 1. SPREAD THE END SECTION COLLAR AND PLACE IT OVER THE LAST PIPE CORRUGATION. MAKE SURE THE

- COLLAR SEATS PROPERLY IN THE CORRUGATION VALLEY.

 2. INSERT THREADED ROD THROUGH THE PRE-DRILLED HOLES IN THE END SECTION
- COLLAR. TIGHTEN WING NUTS.

 3. PLACE BACKFILL AROUND THE END SECTION AND OVER THE TOE PLATE. USE CARE DURING COMPACTION ALONG THE SIDES TO PREVENT DISTORTION.



END VIEW

18" HDPE END SECTION
(PART NO. 1810 NP)
NOT TO SCALE

<u>DEVELOPER</u>

DEVELOPER

ATTN: MARK LEVY
DORSEY ROCK, LLC
C/O ROCK REALTY, INC.
25 MAIN STREET
REISTERSTOWN, MARYLAND 21136
(410) 526-4030

(4 of 9

F-00-29

projection date AS SHC

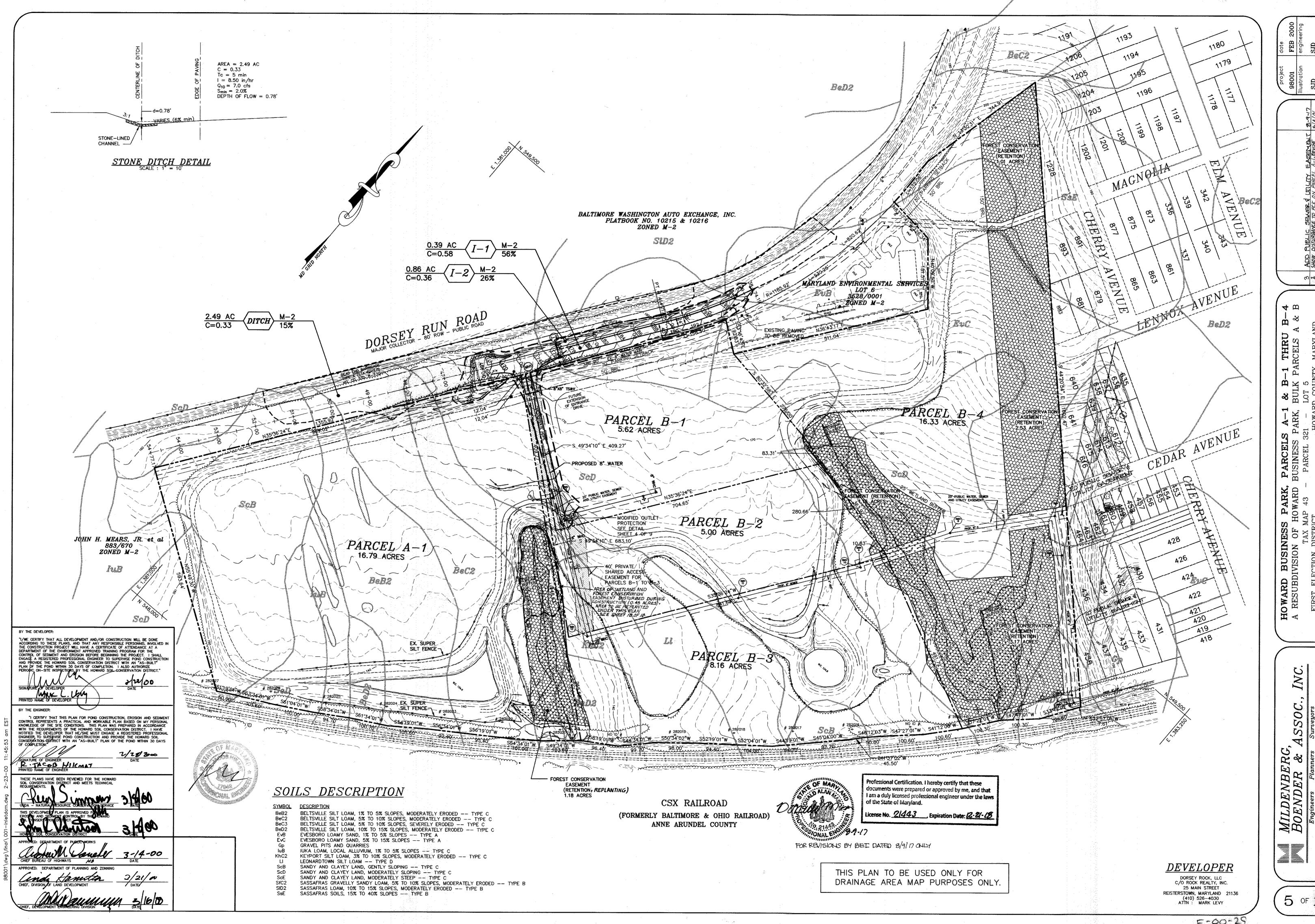
LS A-1 & B-1 THRU B-4
S PARK, BULK PARCELS A & B
321 - BLOCK 12
HOWARD COUNTY, MARYLAND

MAP 43 - PARCEL 321 - IRICT HO

RESUBDIVISION OF HOW
TAX MAP 43
TRST ELECTION DISTRICT

R & ASSOC., INC.
Nanners Surveyors
ite 202, Ellicott City, Maryland 21042

MILDENBERG,
BOENDER & AS
Engineers Planners Sun
orsey Hall Drive, Suite 202, Ellicott (



5 of 10

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HOWARD SOIL CONSERVATION DISTRICT

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING 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 ACRES 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 DISK 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.). 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 DISK 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. KENTUCKY 31 TALL FÉSCUE PER ACRE AND 2 LOBS. 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./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONE/ACRE 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,

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

TEMPORARY SEEDING NOTES

USE 348 GALLONS PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.

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, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, FOR 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 OCTOBER 15, SEED WITH 2-1/2 BUSHEL 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 NOVEMBER 28, PROTECT SITE BY APPLYING 2 TONS PER ACRÉ OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNROTTED WEED FREE SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE (5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GAL PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.

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

STANDARD SEDIMENT CONTROL NOTES

"I/WE 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 THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL. ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHINGSO DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

"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/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF POMPLETION."

M h. henz

PRINTED NAME OF DEVELOPER

SIGNATURE OF ENGINEER

R. TAGA HILMAT

PRINTED NAME OF ENGINEER

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD

UM

- 1) A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF NAY CONSTRUCTION, (313-1855).
- 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 SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", AND 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 1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (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

7) SITE ANALYSIS: TOTAL AREA OF SITE: __ AREA DISTURBED: ACRES AREA TO BE ROOFED OR PAVED: ____ ACRES AREA TO BE VEGITATIVELY STABILIZED: TOTAL CUT:_

> THESE QUANTITIES ARE FOR PERMIT PURPOSES ONLY. CONTRACTOR IS REQUIRED TO PROVIDE HIS OWN QUANTITY MEASUREMENTS.

- 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
- 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
- 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.

STANDARD AND SPECIFICATIONS FOR TOPSOIL

DEFINITION

PLACEMENT OF TOPSOIL OVER A PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION.

TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW pH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.

CONDITIONS WHERE PRACTICE APPLIES

- THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:
 - a. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE
 - b. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS.
 - c. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.
 - d. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE
- FOR THE PURPOSE OF THESE STANDARDS AND SPECIFICATIONS, AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN FOR ADEQUATE STABILIZATION. AREAS HAVING SLOPES STEEPER THAN 2:1 SHALL HAVE THE APPROPRIATE STABILIZATION SHOWN ON THE PLANS.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

- TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATION. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.
- TOPSOIL SPECIFICATIONS SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
- TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CON-TRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 1/2" IN
- ii. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSON-SON GRASS, NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
- WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR 1 THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING
- III. FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:
 - <u>STABILIZATION</u> SECTION I VEGETATIVE STABILIZATION METHODS AND MATERIALS.
- IV. FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES:

FORMATION OF DEPRESSIONS OR WATER POCKETS.

ON SOIL MEETING TOPSOIL SPECIFICATIONS, OBTAIN TEST RESULTS DICTATING FERTILIZER AND LIME AMENDMENTS REQUIRED TO BRING THE SOIL INTO COMPLIANCE WITH THE FOLLOWING:

PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE

- a. PH FOR TOPSOILS SHALL BE BETWEEN 6.0 AND 7.5. IF THE TESTED SOIL DEMONSTRATES A PH OF LESS THAN 6.0, SUFFICIENT LIME SHALL BE PERSCRIBED TO RAISE THE pH TO 6.5 OR HIGHER.
- b. ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THAN 1.5 PERCENT BY WEIGHT.
- c. TOPSOIL HAVING SOLUBLE SALT CONTENT GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED.
- d. NO SOD OR SEED SHALL BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS.

NOTE: TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL

- PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION SECTION I VEGETATIVE STABILIZATION METHODS AND MATERIALS.
- V. TOPSOIL APPLLICATION
 - WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS. GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SILT FENCE AND SEDIMENT TRAPS AND BASINS.
- GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBEIT 4" - 8" HIGHER IN ELEVATION.
- TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4" TO 8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE
- TOPSOIL SHALL NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER
- VI. ALTERNATIVE FOR PERMANENT SEEDING INSTEAD OF APPLYING THE FULL AMOUNTS OF LIME AND COMMERCIAL
- FERTILIZER, COMPOSTED SLUDGE AND AMENDMENTS MAY BE APPLIED AS SPECIFIED BELOW: COMPOSTED SLUDGE MATERIAL FOR USE AS A SOIL CONDITIONER FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES SHALL BE TESTED TO PRESCRIBE AMENDMENTS AND FOR SITES HAVING AREAS UNDER 5 ACRES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
- a. COMPOSTED SLUDGE SHALL BE SUPPLIED BY, OR ORIGINATE FROM, A PERSON OR PERSONS WHO ARE PERMITTED (AT THE TIME OF ACQUISITION OF THE COMPOST) BY THE MARYLAND DEPARTMENT OF THE
- b. COMPOSTED SLUDGE SHALL CONTAIN AT LEASE 1 PERCENT NITROGEN, 1.5 PERCENT PHOSPHOURUS, AND 0.2 PERCENT POTASSIUM AND HAVE A Ph OF 7.0 TO 8.0. IF COMPOST DOES NOT MEET THESE REQUIREMENTS, THE APPROPRIATE CONSTITUENTS MUST BE ADDED TO MEET THE REQUIREMENTS PRIOR TO USE.
- COMPOSTED SLUDGE SHALL BE AMENDED WITH A POTASSIUM FERTILLIZER APPLIED AT THE RATE OF 4 LB/1,000 SQUARE FEET, AND 1/3 THE NORMAL LIME APPLICATION RATE.

REFERENCES: GUIDELINE SPECIFICATIONS, SOIL PREPARATION AND SODDING. MD-VA, PUB. #1, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTES. REVISED 1973.

c. COMPOSTED SLUDGE SHALL BE APPLIED AT A RATE OF 1 TON/1,000 SQUARE FEET

SEQUENCE OF CONSTRUCTION

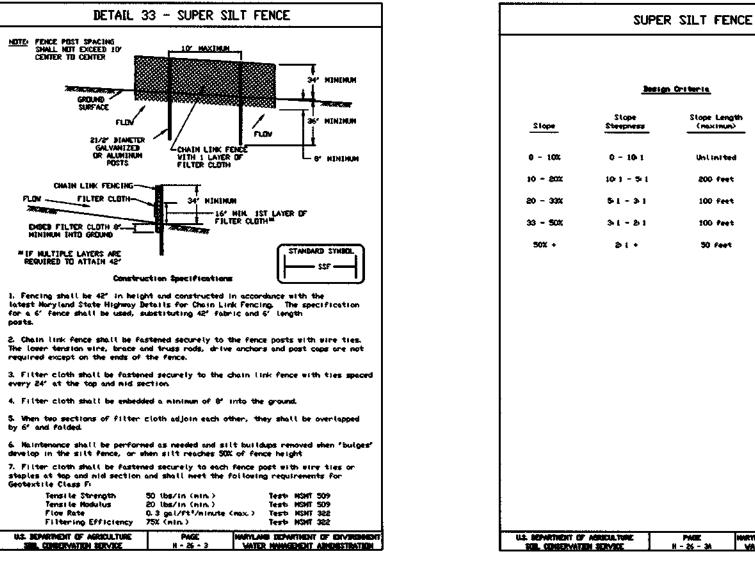
1. OBTAIN GRADING PERMIT

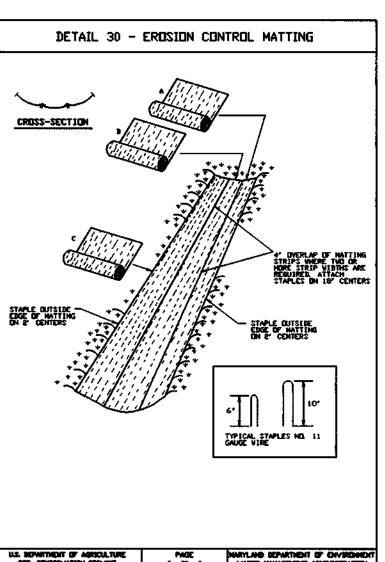
SHOWN. (1 DAY)

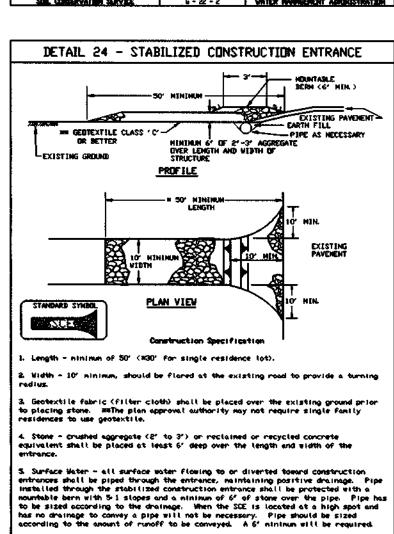
- 2. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES AT LOCATIONS
- 3. INSTALL SEDIMENT CONTROL MEASURES. (1 DAY)
- 4. GRADE SITE. (5 DAYS)
- 5. CONSTRUCT STORM DRAIN SYSTEM AND BLOCK. (3 DAYS)
- 6. BRING SITE TO FINAL GRADE AND PAVE ROAD. (5 DAYS)
- 7. STABILIZE ALL DISTURBED AREAS. (3 DAYS)
- 8. WHEN ALL CONTRIBUTING DRAINAGE AREAS TO SEDIMENT CONTROL DEVICES HAVE BEEN STABILIZED AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE REMAINING DISTURBED AREAS. (3 DAYS)

TEMPORARY DUST CONTROL MEASURES

- 1. MULCHES SEE STANDARDS FOR VEGETATIVE STABILIZATION WITH MULCHES ONLY. MULCH SHOULD BE CRIMPED OR TACKED TO PREVENT BLOWING.
- 2. VEGETATIVE COVER SEE STANDARDS FOR TEMPORARY VEGETATIVE COVER.
- 3. TILLAGE TO ROUGHTN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS APCED ABOUT 12" APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH
- 4. IRRIGATION THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS MOIST. REPEAT AS NEEDED. AT NO TIME SHOULD THE SITE BE IRRIGATED TO THE POINT THAT RUNOFF BEGINS TO FLOW.
- BARRIERS SOLID BOARD FENCES, SILT FENCES, SNOW FENCES, BURLAP FENCES. STRAW BALES, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWNG. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALT OF ABOUT 10 TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING SOIL
- 6. CALCIUM CHLORIDE APPLY AT RATES THAT WILL KEEP SURFACE MOIST. MAY NEED

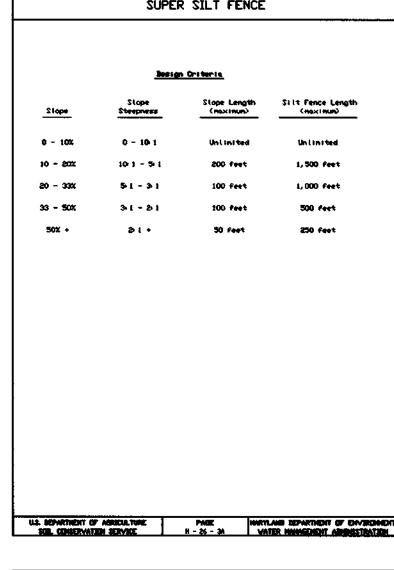


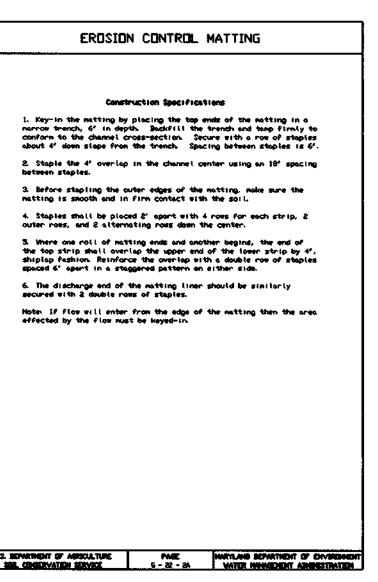




6. Location — A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

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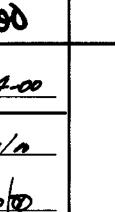
<u>DEVELOPER</u>

DORSEY ROCK, LLC C/O ROCK REALTY, INC. 25 MAIN STREET REISTERSTOWN, MARYLAND 21136 (410) 526-4030 ATTN : MARK LEVY

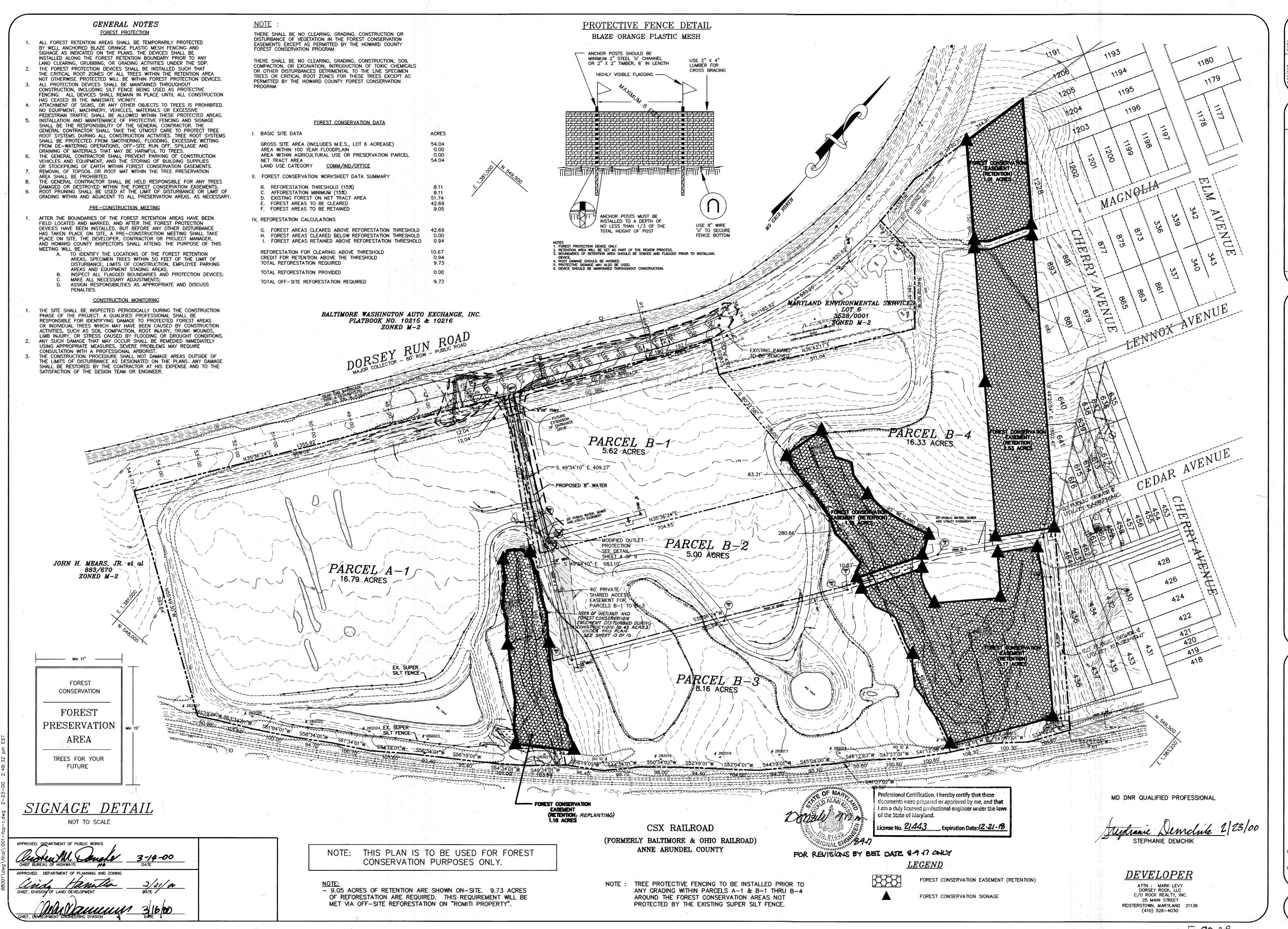
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F-20-29



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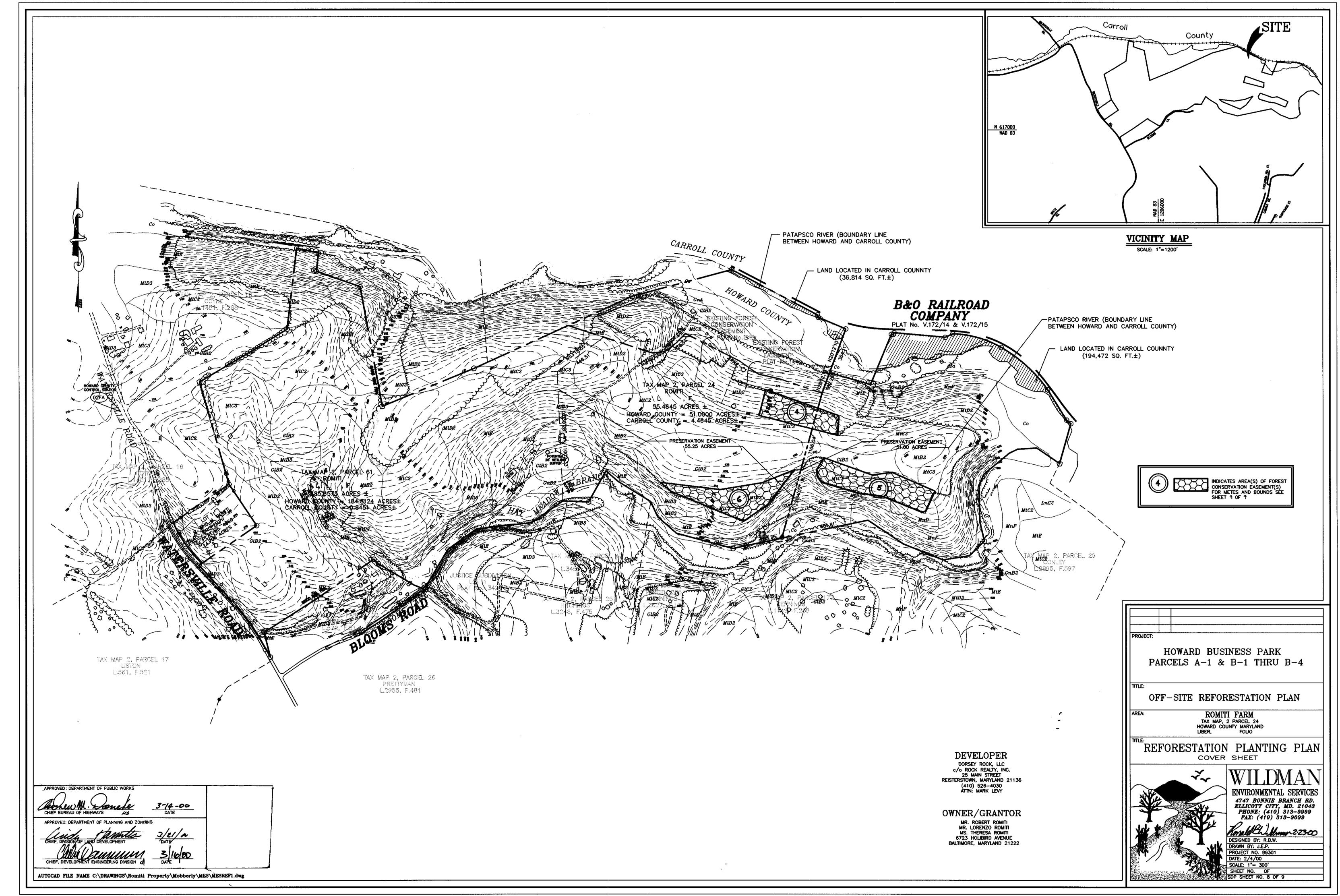


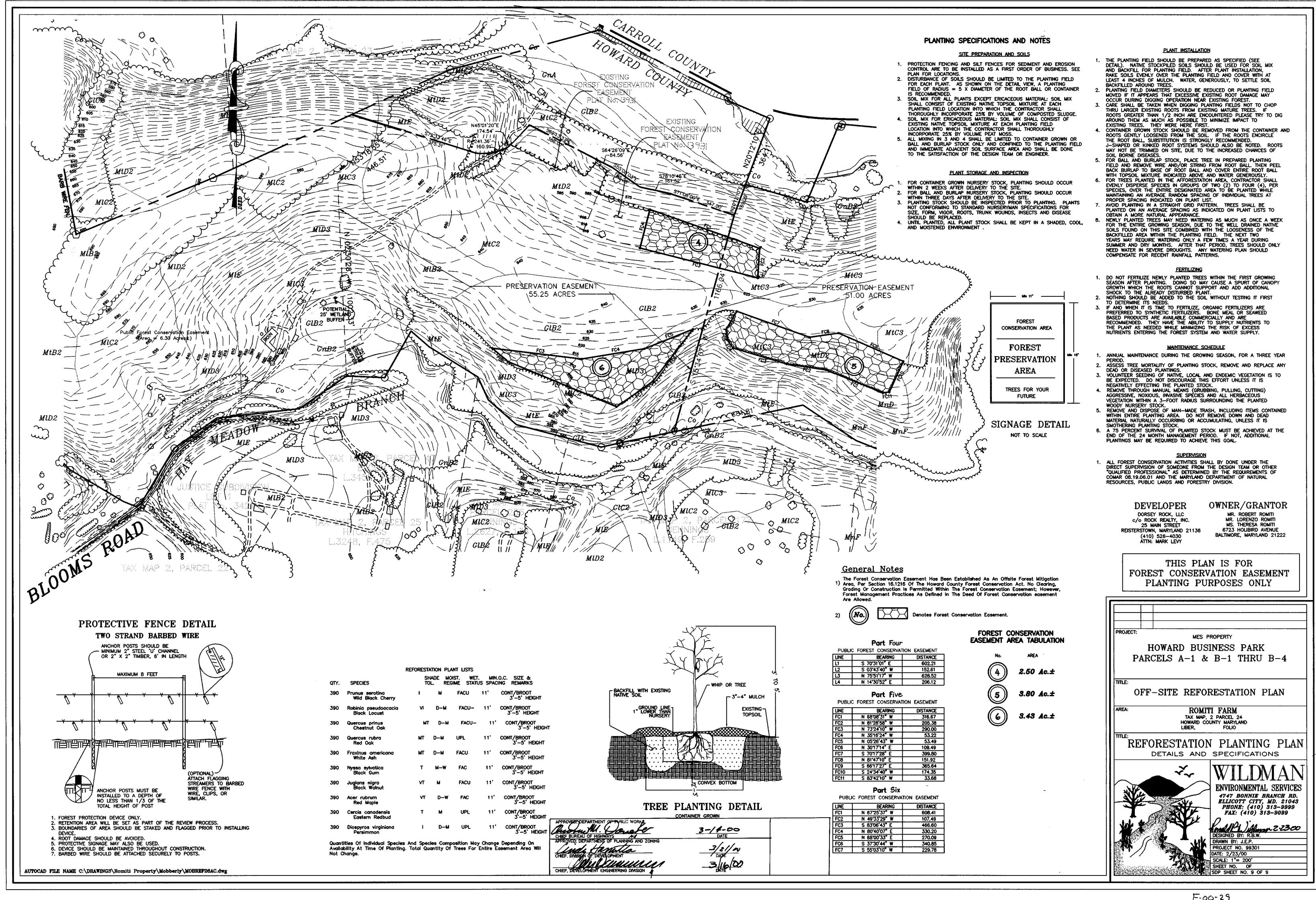
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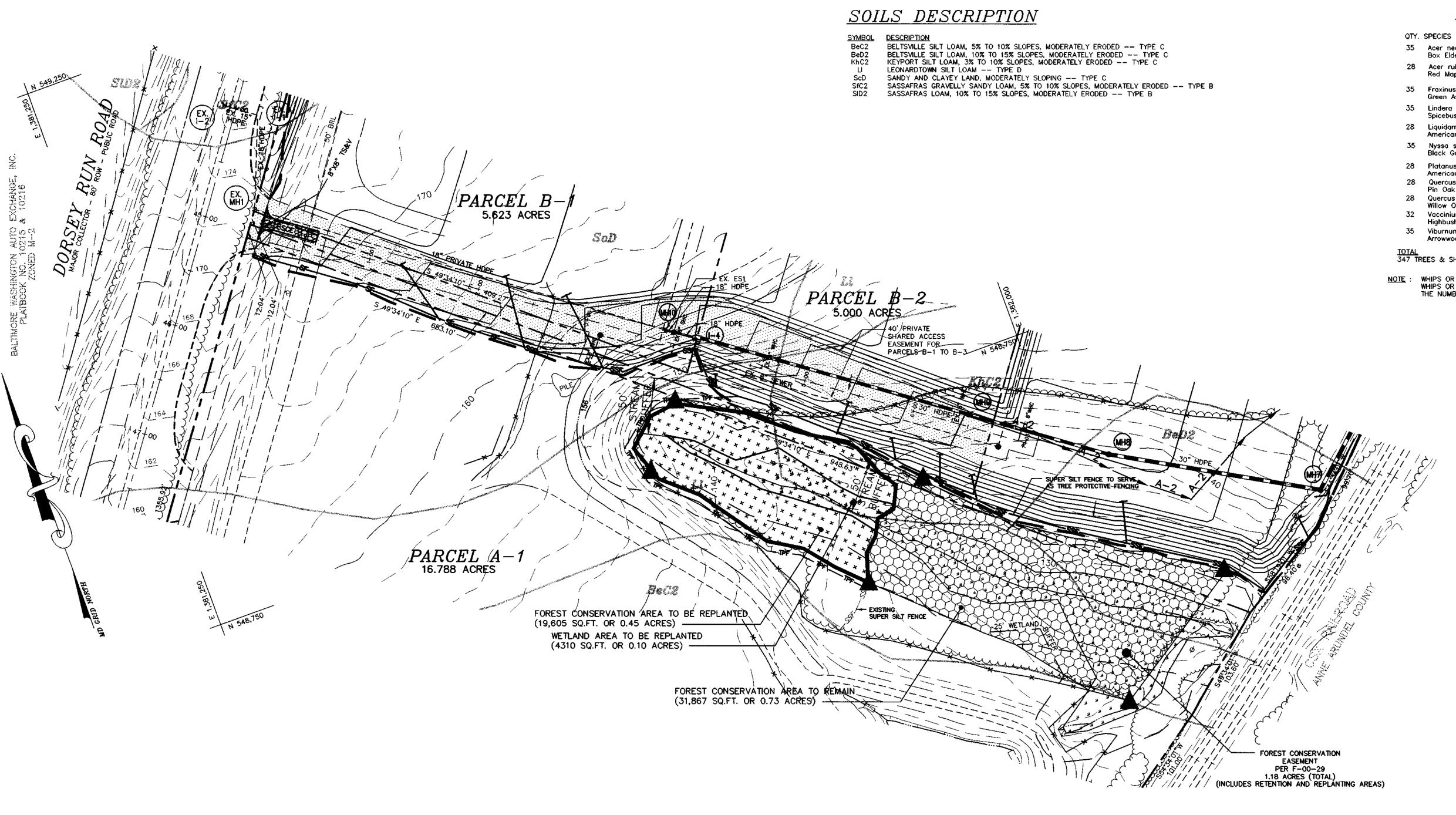
HOWARD BUSINESS PARK,
A RESUBDIVISION OF HOWARD
TAX MAP 43

MILDENBERG, BOENDER &

7 OF 10





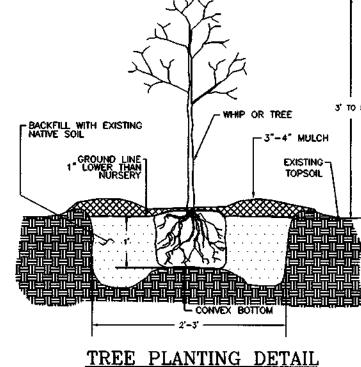


UPLAND AND WETLAND PLANT LIST

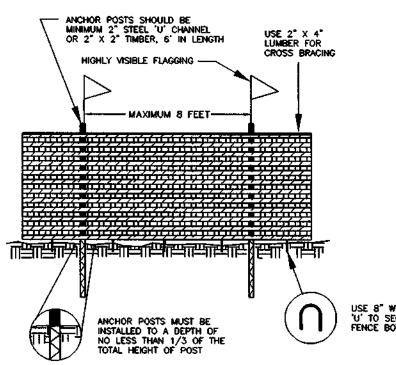
SHADE MOIST. WET. MIN.O.C. SIZE & TOL. REGIME STATUS SPACING REMARKS 3'-5' HEIGHT 15' CONT/B & B 3'-5' HEIGHT CONT/B & B 3'-5' HEIGHT CONT/B & B 1" CALIPER CONT/B & B 28 Platanus occidentalis American Sycamore CONT/B & B Quercus palustris 1" CALIPER CONT/B & B " CALIPER Vaccinium corymbosum CONT/B & B 3'-5' HEIGHT 8' CONT/B & B

TOTAL
347 TREES & SHRUBS (315 TREES & SHRUBS REQUIRED AND 32 ADDITIONAL SHRUBS)

WHIPS OR SEEDLINGS MAY BE SUBSTITUTED FOR THE 1" CALIPER OR 3' - 5' TREES. IF WHIPS OR SEEDLINGS ARE TO BE USED, MULTIPLY THE QUANTITIES BY 3.5 TO DETERMINE THE NUMBER OF TREES REQUIRED.



TREE PLANTING DETAIL



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

PROTECTIVE FENCE DETAIL

BLAZE ORANGE PLASTIC MESH

- 1. THE FOREST CONSERVATION SURETY FOR THE AREA DESIGNATED TO BE REPLANTED HAS BEEN POSTED AS PART OF THE DPW DEVELOPER'S AGREEMENT UNDER THIS PLAN, F-00-29, HOWARD BUSINESS PARK, PARCEL A-1 & B-1 THRU B-4.
- 2. THE FOREST CONSERVATION EASEMENT HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE, FOREST CONSERVATION ACT. NO CLEARING, GRADING, OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT; HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE

NOTE: THIS PLAN IS TO BE USED FOR FOREST

CONSERVATION PURPOSES ONLY.

3. THE EXISTING FOREST CONSERVATION SIGNAGE IS TO REMAIN. THE EXISTING SUPER SILT FENCE SHOWN HEREON IS TO REMAIN IN PLACE UNTIL COMPLETION OF ALL SITE WORK, TO SERVE AS TREE PROTECTIVE FENCING.

PLANTING SPECIFICATIONS AND NOTES SITE PREPARATION AND SOILS

- 1. PROTECTION FENCING AND SILT FENCES FOR SEDIMENT AND EROSION CONTROL ARE TO BE INSTALLED AS A FIRST ORDER OF BUSINESS, IF 2. DISTURBANCE OF SOILS SHOULD BE LIMITED TO THE PLANTING FIELD
- FOR EACH PLANT. AS SHOWN ON THE DETAIL VIEW, A PLANTING FIELD OF RADIUS = 5 X DIAMETER OF THE ROOT BALL OR CONTAINER IS RECOMMENDED.
- 3. SOIL MIX FOR ALL PLANTS EXCEPT ERICACEOUS MATERIAL: SOIL MIX SHALL CONSIST OF EXISTING NATIVE TOPSOIL MIXTURE AT EACH PLANTING FIELD LOCATION INTO WHICH THE CONTRACTOR SHALL PLANTING FIELD LOCATION INTO WHICH PLANTING FIELD FI THOROUGHLY INCORPORATE 25% BY VOLUME OF COMPOSTED SLUDGE. 4. SOIL MIX FOR ERICACEOUS MATERIAL: SOIL MIX SHALL CONSIST OF
- EXISTING NATIVE TOPSOIL MIXTURE AT EACH PLANTING FIELD LOCATION INTO WHICH THE CONTRACTOR SHALL THOROUGHLY INCORPORATE 25% BY VOLUME PEAT MOSS. 5. ALL MIXING IN 3 AND 4 SHALL BE LIMITED TO CONTAINER GROWN OR BALL AND BURLAP STOCK ONLY AND CONFINED TO THE PLANTING FIELD AND IMMEDIATE ADJACENT SOIL SURFACE AREA AND SHALL BE DONE TO THE SATISFACTION OF THE DESIGN TEAM OR ENGINEER.

PLANT STORAGE AND INSPECTION

- 1. FOR CONTAINER GROWN NURSERY STOCK, PLANTING SHOULD OCCUR
- WITHIN 2 WEEKS AFTER DELIVERY TO THE SITE.
 FOR BALL AND BURLAP NURSERY STOCK, PLANTING SHOULD OCCUR WITHIN THREE DAYS AFTER DELIVERY TO THE SITE. 3. PLANTING STOCK SHOULD BE INSPECTED PRIOR TO PLANTING. PLANTS NOT CONFORMING TO STANDARD NURSERYMAN SPECIFICATIONS FOR
- SIZE, FORM, VIGOR, ROOTS, TRUNK WOUNDS, INSECTS AND DISEASE SHOULD BE REPLACED. 4. UNTIL PLANTED, ALL PLANT STOCK SHALL BE KEPT IN A SHADED, COOL, AND MOISTENED ENVIRONMENT .

PLANT INSTALLATION

- 1. THE PLANTING FIELD SHOULD BE PREPARED AS SPECIFIED (SEE DETAIL). NATIVE STOCKPILED SOILS SHOULD BE USED FOR SOIL MIX AND BACKFILL FOR PLANTING FIELD. AFTER PLANT INSTALLATION, RAKE SOILS EVENLY OVER THE PLANTING FIELD AND COVER WITH AT LEAST 4 INCHES OF MULCH. WATER, GENEROUSLY, TO SETTLE SOIL BACKFILLED AROUND TREES.
- 2. PLANTING FIELD DIAMETERS SHOULD BE REDUCED OR PLANTING FIELD MOVED IF IT APPEARS THAT EXCESSIVE EXISTING ROOT DAMAGE MAY OCCUR DURING DIGGING OPERATION NEAR EXISTING FOREST.
- 3. CARE SHALL BE TAKEN WHEN DIGGING PLANTING FIELDS NOT TO CHOP THRU LARGER EXISTING ROOTS FROM EXISTING MATURE TREES. IF ROOTS GREATER THAN 1/2 INCH ARE ENCOUNTERED PLEASE TRY TO DIG AROUND THEM AS MUCH AS POSSIBLE TO MINIMIZE IMPACT TO EXISTING TREES. THEY WERE HERE FIRST.

- 4. CONTAINER GROWN STOCK SHOULD BE REMOVED FROM THE CONTAINER AND ROOTS GENTLY LOOSENED FROM THE SOIL. IF THE ROOTS ENCIRCLE THE ROOT BALL, SUBSTITUTION IS STRONGLY RECOMMENDED. J-SHAPED OR KINKED ROOT SYSTEMS SHOULD ALSO BE NOTED. ROOTS MAY NOT BE TRIMMED ON SITE, DUE TO THE INCREASED CHANCES OF SOIL BORNE DISEASES.
- 5. FOR BALL AND BURLAP STOCK, PLACE TREE IN PREPARED PLANTING FIELD AND REMOVE WIRE AND/OR STRING FROM ROOT BALL. THEN PEEL BACK BURLAP TO BASE OF ROOT BALL AND COVER ENTIRE ROOT BALL WITH TOPSOIL MIXTURE INDICATED ABOVE AND WATER GENEROUSLY. 6. FOR TREES PLANTED IN THE AFFORESTATION AREA, CONTRACTOR SHALL EVENLY DISPERSE SPECIES IN GROUPS OF TWO (2) TO FOUR (4), PER SPECIES, OVER THE ENTIRE DESIGNATED AREA TO BE PLANTED WHILE MAINTAINING AN AVERAGE RANDOM SPACING OF INDIVIDUAL TREES AT
- PROPER SPACING INDICATED ON PLANT LIST. 7. AVOID PLANTING IN A STRAIGHT GRID PATTERN. TREES SHALL BE PLANTED ON AN AVERAGE SPACING AS INDICATED ON PLANT LISTS TO
- OBTAIN A MORE NATURAL APPEARANCE. 8. NEWLY PLANTED TREES MAY NEED WATERING AS MUCH AS ONCE A WEEK FOR THE ENTIRE GROWING SEASON, DUE TO THE WELL DRAINED NATIVE SOILS FOUND ON THIS SITE COMBINED WITH THE LOOSENESS OF THE BACKFILLED AREA WITHIN THE PLANTING FIELD. THE NEXT TWO YEARS MAY REQUIRE WATERING ONLY A FEW TIMES A YEAR DURING SUMMER AND DRY MONTHS. AFTER THAT PERIOD, TREES SHOULD ONLY NEED WATER IN SEVERE DROUGHTS. ANY WATERING PLAN SHOULD COMPENSATE FOR RECENT RAINFALL PATTERNS.

<u>FERTILIZING</u>

- 1. DO NOT FERTILIZE NEWLY PLANTED TREES WITHIN THE FIRST GROWING SEASON AFTER PLANTING. DOING SO MAY CAUSE A SPURT OF CANOPY GROWTH WHICH THE ROOTS CANNOT SUPPORT AND ADD ADDITIONAL SHOCK TO THE ALREADY DISTURBED PLANT. 2. NOTHING SHOULD BE ADDED TO THE SOIL WITHOUT TESTING IT FIRST
- TO DETERMINE ITS NEEDS. 3. IF AND WHEN IT IS TIME TO FERTILIZE, ORGANIC FERTILIZERS ARE PREFERRED TO SYNTHETIC FERTILIZERS. BONE MEAL OR SEAWEED BASED PRODUCTS ARE AVAILABLE COMMERCIALLY AND ARE RECOMMENDED. THEY HAVE THE ABILITY TO SUPPLY NUTRIENTS TO THE PLANT AS NEEDED WHILE MINIMIZING THE RISK OF EXCESS NUTRIENTS ENTERING THE FOREST SYSTEM AND WATER SUPPLY.

MAINTENANCE SCHEDULE

- 1. ANNUAL MAINTENANCE DURING THE GROWING SEASON, FOR A THREE YEAR
- 2. ASSESS TREE MORTALITY OF PLANTING STOCK, REMOVE AND REPLACE ANY DEAD OR DISEASED PLANTINGS. 3. VOLUNTEER SEEDING OF NATIVE, LOCAL AND ENDEMIC VEGETATION IS TO
- BE EXPECTED. DO NOT DISCOURAGE THIS EFFORT UNLESS IT IS NEGATIVELY EFFECTING THE PLANTED STOCK. 4. REMOVE THROUGH MANUAL MEANS (GRUBBING, PULLING, CUTTING) AGGRESSIVE, NOXIOUS, INVASIVE SPÈCIES AND ALL HERBACEOUS
- VEGETATION WITHIN A 3-FOOT RADIUS SURROUNDING THE PLANTED WOODY NURSERY STOCK. 5. REMOVE AND DISPOSE OF MAN-MADE TRASH, INCLUDING ITEMS CONTAINED WITHIN ENTIRE PLANTING AREA. DO NOT REMOVE DOWN AND DEAD MATERIAL NATURALLY OCCURRING OR ACCUMULATING, UNLESS IT IS
- SMOTHERING PLANTING STOCK. 6. A 75 PERCENT SURVIVAL OF PLANTED STOCK MUST BE ACHIEVED AT THE END OF THE 24 MONTH MANAGEMENT PERIOD. IF NOT, ADDITIONAL PLANTINGS MAY BE REQUIRED TO ACHIEVE THIS GOAL.

SUPERVISION

ALL FOREST CONSERVATION ACTIVITIES SHALL BY DONE UNDER THE DIRECT SUPERVISION OF SOMEONE FROM THE DESIGN TEAM OR OTHER "QUALIFIED PROFESSIONAL" AS DETERMINED BY THE REQUIREMENTS OF COMAR 08.19.06.01 AND THE MARYLAND DEPARTMENT OF NATURAL RESOURCES, PUBLIC LANDS AND FORESTRY DIVISION.

STANDARD NON-DISTURBANCE NOTE: "THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION OR DISTURBANCE OF VEGETATION IN THE FOREST CONSERVATION EASEMENTS EXCEPT AS PERMITTED BY HOWARD COUNTY ."



<u>LEGEND</u>

FLOW ARROWS LIMIT OF DISTURBANCE

STABILIZED CONSTRUCTION ENTRANCE -- SF--- SILT FENCE

--- SSF---- SUPER SILT FENCE EX. WETLANDS

TREE PROTECTIVE FENCING . FOREST CONSERVATION EASEMENT (RETAINED)

FOREST CONSERVATION EASEMENT AREA TO BE REPLANTED

WETLANDS TO BE REPLANTED EX. FOREST CONSERVATION SIGNAGE TO REMAIN



SITE CONTRACTOR

CHESAPEAKE CONTRACTING C/O MILDENBERG, BOENDER & ASSOCIATES, INC. 5072 DORSEY HALL DRIVE, SUITE 202 ELLICOTT CITY, MARYLAND 21042 (410) 997-0296

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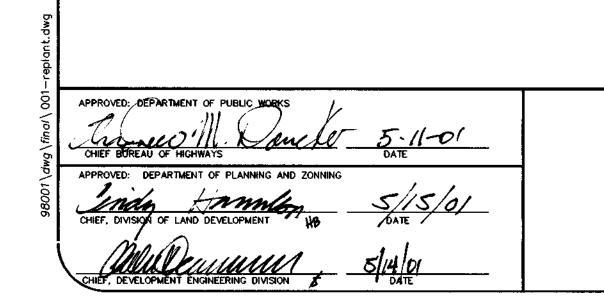
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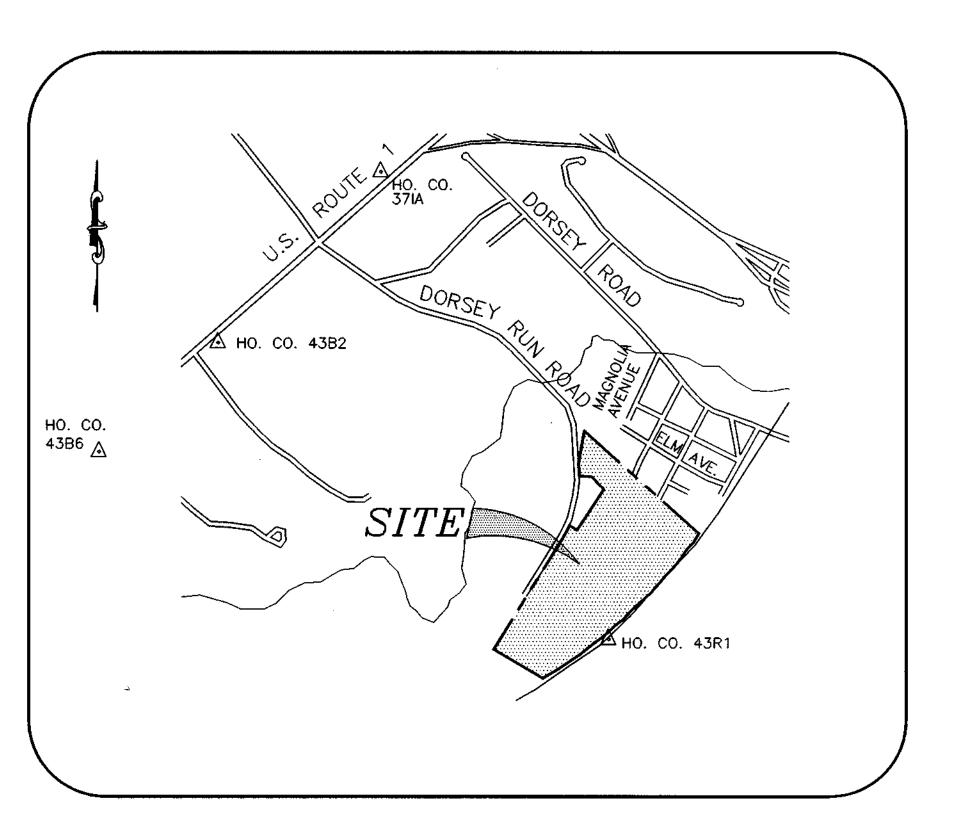
HOWARI PARCELS MAP 43 -

F-00-29



FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SHEET INDEX	
COVER SHEET	1
ROAD PLAN AND PROFILE	2
GRADING & EROSION AND SEDIMENT CONTROL PLAN	3
DETAILS & STORM DRAIN PROFILES	4
DRAINAGE AREA MAP	5
SEDIMENT CONTROL NOTES & DETAILS	6
FOREST CONSERVATION PLAN	7
OFF-SITE REFORESTATION PLAN	8
OFF-SITE REFORESTATION PLAN	9
OFF-SITE REFORESTATION PLAN	9



VICINITY MAP SCALE: 1'=1000'

PRINTED NAME OF DEVELOPER "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/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION." 2/28/2000 PRINTED NAME OF ENGINEER THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL

"I/WE 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 THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND 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 INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

DEVELOPER

DORSEY ROCK, LLC C/O ROCK REALTY, INC. 25 MAIN STREET REISTERSTOWN, MARYLAND 21136 (410) 526-4030 ATTN: MARK LEVY

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS
- 2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/CONSTRUCTION INSPECTIONS DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR
- 3. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) DAYS PRIOR TO ANY EXCAVATION WORK:

MISS UTILITY 1-800-257-7777 C&P TELEPHONE COMPANY (410) 725-9976 (410) 313-4900 HOWARD COUNTY BUREAU OF UTILITIES (410) 393-3533 (410) 685-0123 AT&T CABLE LOCATION DIVISION BALTIMORE GAS & ELECTRIC STATE HIGHWAY ADMINISTRATION (410) 531-5533 HOWARD COUNTY DEPT. OF PUBLIC WORKS/ CONSTRUCTION INSPECTION DIVISION (410) 313-1880

4. PROJECT BACKGROUND: LOCATION: FIRST ELECTION DISTRICT - TAX MAP 43 - PARCEL 321

ZONING: M-2
TOTAL TRACT AREA: 51.90 ACRES ±
NUMBER OF PROPOSED LOTS: 5 ACREAGE OF PROPOSED LOTS : 51.90 ACRES ± OPEN SPACE REQUIRED: 0 ACRES OPEN SPACE PROVIDED: 0 ACRES PROPOSED ROAD DEDICATION: 0 ACRES DPZ REFERENCE #:

- SDP-95-60 APPROVED ON JUNE 19, 1995. WP-00-23 APPROVED ON AUGUST 31, 1999.
- F-00-27 RECORDED ON OCTOBER 8, 1999, AS PLAT # 13970.
- 5. TWO FOOT CONTOUR TOPOGRAPHY AND EXISTING CONDITIONS BASED ON AERIAL MAPPING TOPOGRAPHIC SURVEY BY WINGS AERIAL MAPPING CO, INC. IN FEBRUARY 1999.
- 6. HORIZONTAL AND VERTICAL DATUMS BASED ON (NAD'83) MARYLAND STATE COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS.

STA. No. 4386 N 550,601,597 ELEV. 210.54 E 1,376,866.071 N 551,654.993 ELEV. 209.59 N 553.315.147 STA. No. 371A ELEV. 195.75 E 1,379,982.153 N 548,305.502 ELEV. 134.53

- 7. STREET LIGHTS WILL BE REQUIRED IN THIS DEVELOPMENT IN ACCORDANCE WITH THE DESIGN MANUAL STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SELECTED SHALL BE IN ACCORDANCE WITH THE LATEST HOWARD COUNTY DESIGN MANUAL, VOLUME III (1993) AND AS MODIFIED BY "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS (JUNE 1993)." THE JUNE 1993 POLICY INCLUDES GUIDELINES FOR LATERAL AND LONGITUDINAL PLACEMENT. A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
- 8. WATER AND SEWER ARE PUBLIC, CONTRACT # 44-3421-D FOR WATER AND CONTRACT # 10-3775-D
- 9. STORMWATER MANAGEMENT CONTROL WILL BE PROVIDED UNDER THE FUTURE SITE DEVELOPMENT PLAN.
- 10. TRAFFIC STUDY PREPARED BY THE TRAFFIC GROUP, INC. IN AUGUST 1999.
- 11. TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- 12. WETLAND AND STREAM DELINEATION PREPARED BY HILLIS-CARNES ENGINEERING ASSOCIATES, INC. IN
- 13. COMPACTION IN FILL AREAS TO BE 95% AS DETERMINED PER AASHTO T-180.
- 14. CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES ON SITE PRIOR TO COMMENCING
- 15. FOREST CONSERVATION EASEMENT(S) HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.200 OF HOWARD COUNTY FOREST CONSERVATION ACT. NO CLEARING, GRADING OF CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, EXCEPT AS SHOWN ON AN APPROVED ROAD CONSTRUCTION DRAWING OR SITE DEVELOPMENT PLAN. HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OR CONSERVATION EASEMENT ARE ALLOWED.
- 16. A PORTION OF THE FOREST CONSERVATION OBLIGATIONS INCURRED BY THIS SUBDIVISION (9.73 ACRES OF REFORESTATION) WILL BE MET VIA OFF-SITE REFORESTATION ON "ROMITI PROPERTY".
- 17. PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT.
- 18. SLOPES IN EXCESS OF 25% EXIST AND ARE IDENTIFIED WHERE THEY EXCEED 20,000 SQ. FT.
- 19. THIS PROJECT IS SUBJECT TO WAIVER PETITION, WP-00-23, APPROVED ON AUGUST 31, 1999, WHICH WAIVED THE FOLLOWING TO PERMIT RECORDATION OF NONBUILDABLE PRESERVATION PARCELS A & B :

SECTION 16.116(a)(4) **SECTION 16.117** SECTION 16.124(a)(3)(ii)

WETLANDS AND THE REQUIRED BUFFERS FOR WETLAND AND STREAMS SHALL BE DELINEATED ON FINAL PLATS. REQUIRES THE SUBMISSION OF A FOREST CONSERVATION FINAL PLAN SUBMISSIONS SHALL INCLUDE THE FINAL

LANDSCAPE PLAN IN THE ROAD CONSTRUCTION DRAWINGS. REQUIREMENT TO PROVIDE ROAD IMPROVEMENTS. **SECTION 16.132** SECTION 16.144(a) & (f) REQUIRES THE SUBMISSION OF A SKETCH PLAN AND A PRELIMINARY PLAN.

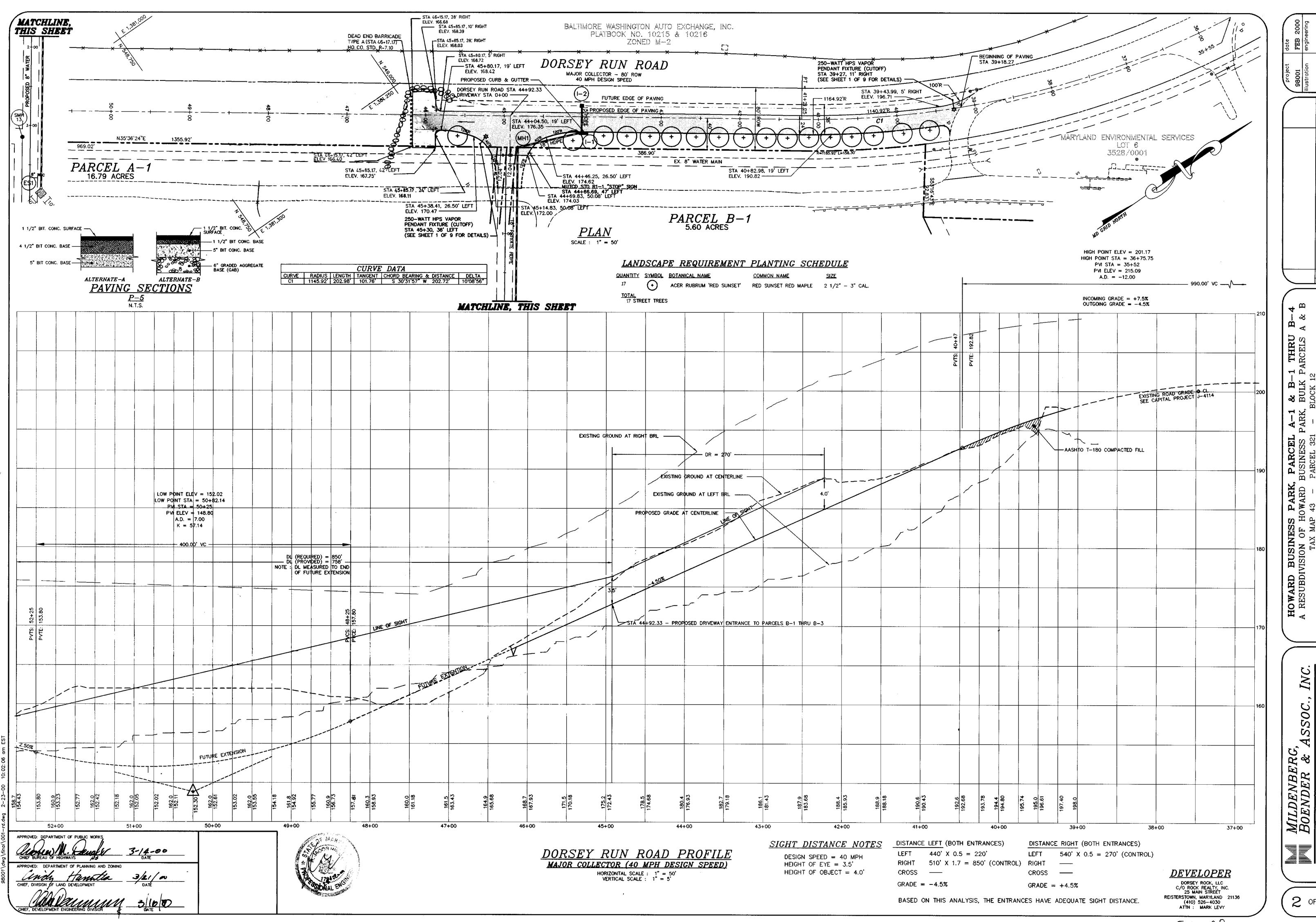
20. THIS PROJECT IS SUBJECT TO WAIVER PETITION, WP-00-26, APPROVED ON DECEMBER 30, 1999, WHICH WAIVED THE FOLLOWING: SECTION 16.124(a)(3)(ii)

SECTION 16.144(a) & (f)

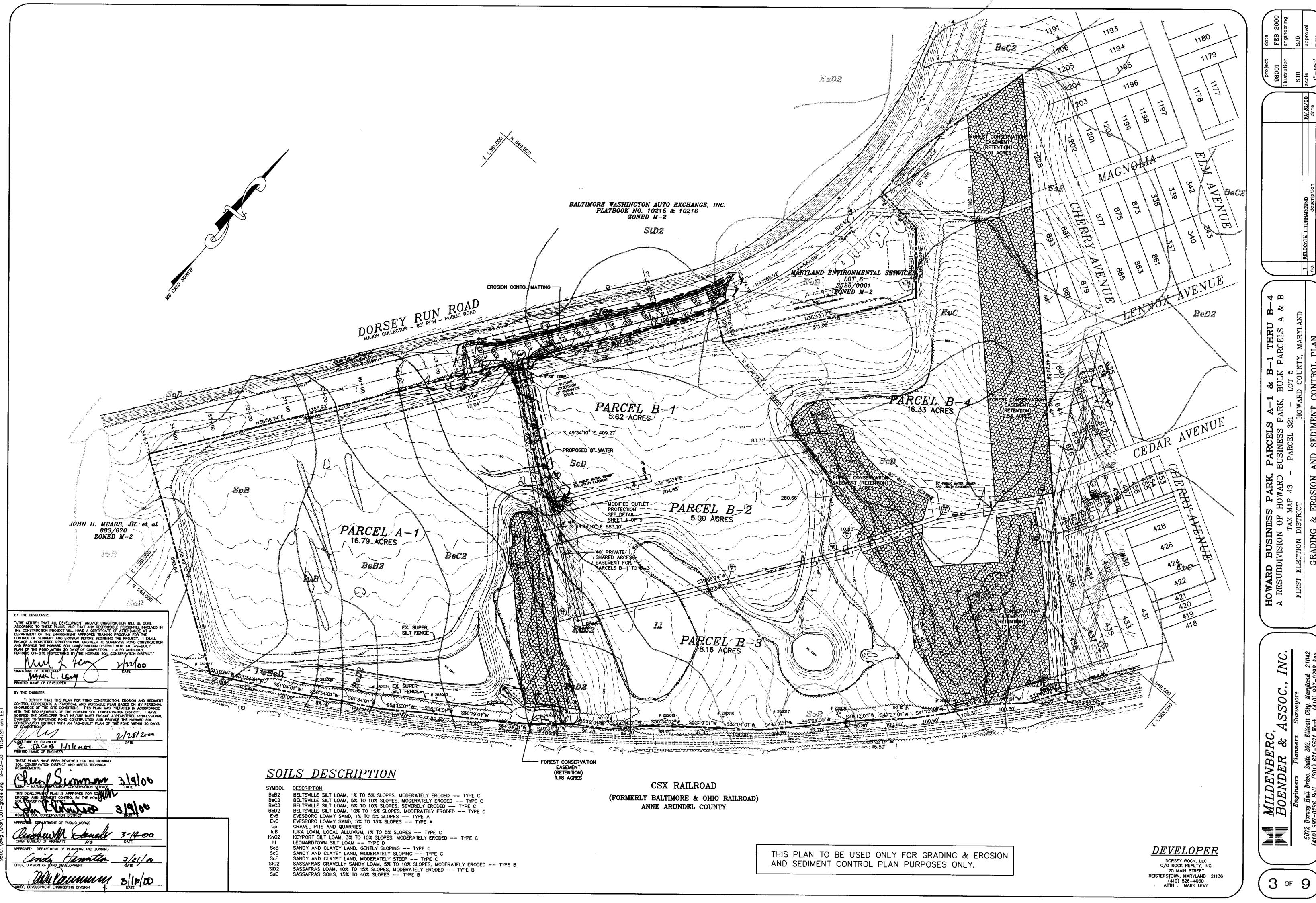
FINAL PLAN SUBMISSIONS SHALL INCLUDE THE FINAL LANDSCAPE PLAN IN THE ROAD CONSTRUCTION DRAWINGS. REQUIRES THE SUBMISSION OF A SKETCH PLAN AND A PRELIMINARY PLAN.

REQUIRES COMMERCIAL LOTS TO HAVE A MINIMUM OF 60 FEET SECTION 16.120(c)(1) OF FRONTAGE ON AN APPROVED PUBLIC ROAD.

- 21. ALL STORM DRAIN PIPES TO BE HDPE UNLESS OTHERWISE NOTED.
- 22. IF MATERIAL IS WITHIN 8% OF OPTIMUM MOISTURE, WORKING THE MATERIAL UNTIL REQUIRED COMPACTION IS ACHIEVED IS CONTRACTOR'S RESPONSIBILITY.
- 23. SEDIMENT CONTROL FOR THIS PROJECT IS PROVIDE UNDER SDP-95-60. ALL SEDIMENT CONTROL DEVICES CONSTRUCTED UNDER SDP-95-60 WILL REMAIN IN PLACE DURING THE CONSTRUCTION OF THE DORSEY RUN ROAD EXTENSION.
- 24. THE STREET LIGHT LOCATIONS AND TYPES OF LIGHTS SHOWN ON SHEET 2 ARE AS FOLLOWS : 250-WATT HPS VAPOR PENDANT FIXTURE (CUTOFF) MOUNTED AT 30' ON A BRONZE FIBERGLASS POLE USING A 12' ARM ANGLED RADIAL TO THE FILLET AT DORSEY RUN ROAD, STATION 39+27, 11' RIGHT, STATION 45+30, 36' LEFT.
- 25. THE FOREST CONSERVATION ORDINANCE HAS BEEN COMPLIED WITH IN ACCORDANCE WITH THE FOLLOWING: TOTAL OBLIGATION = 18.78 ACRES ON—SITE FOREST RETENTION = 9.05 ACRES OFF-SITE REFORESTATION (ROMITI PROPERTY) = 9.73 ACRES

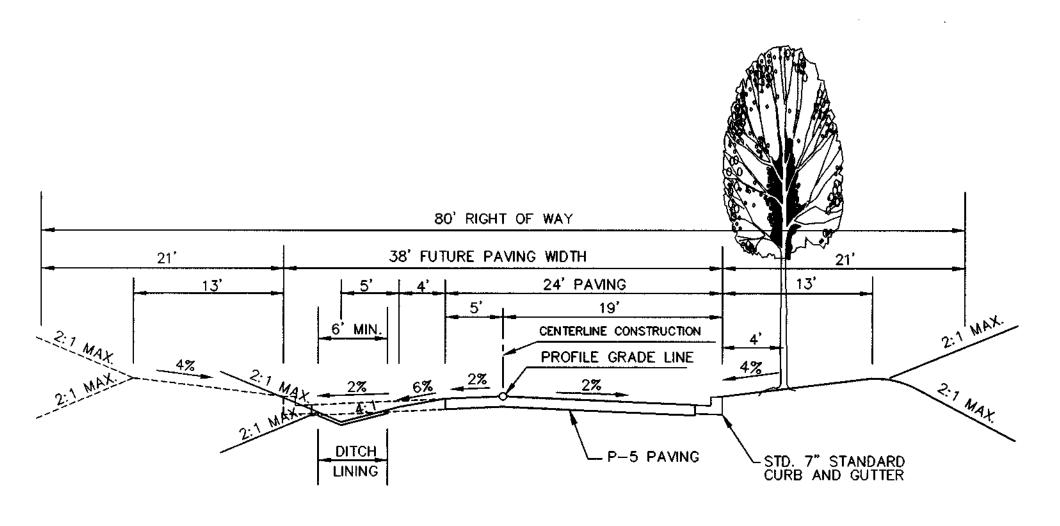


HOWARD BUSINESS PARK
A RESUBDIVISION OF HOWARD
TAX MAP 43 FIRST ELECTION DISTRICT



E-00-29

SEDIMENT

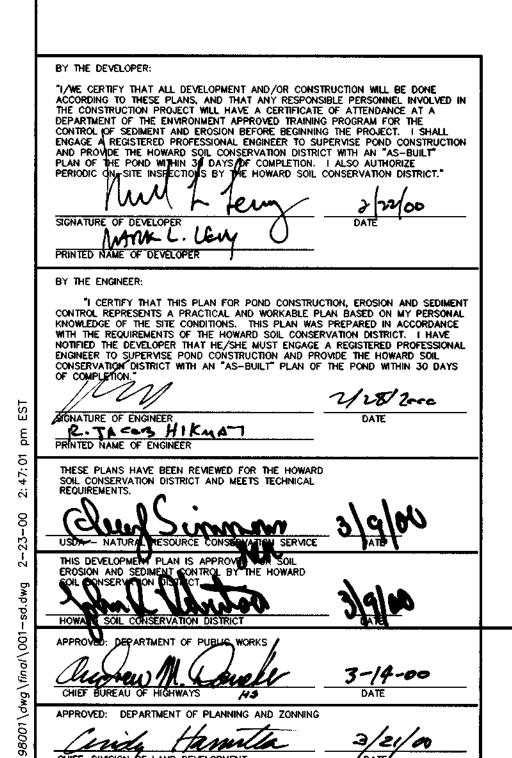


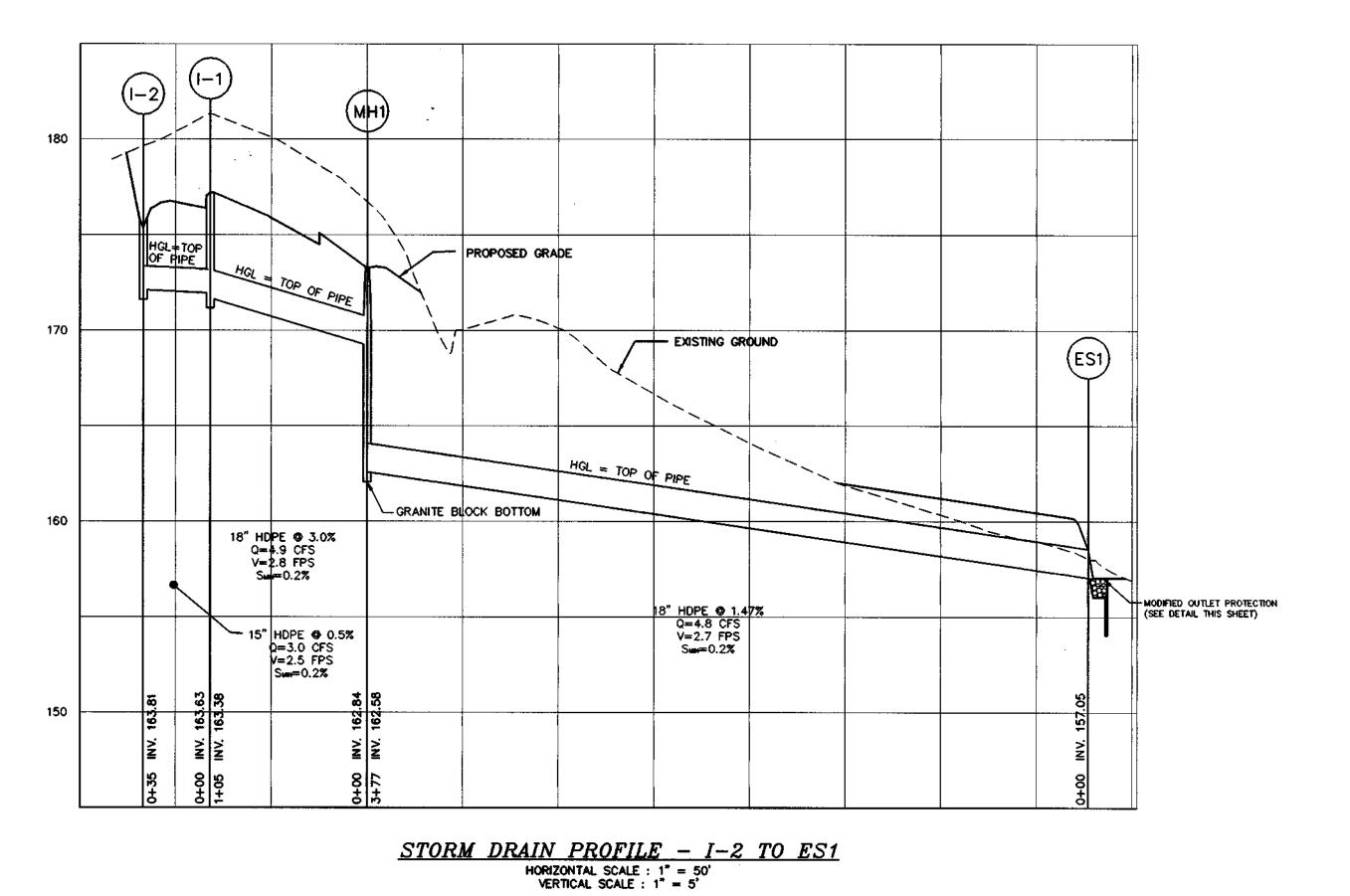
TYPICAL SECTION - MAJOR COLLECTOR 40 MPH DESIGN SPEED STA 39+19.28 TO STA 46+15.17 N.T.S.

STREET TREE BACKFILL WITH EXISTING NATIVE SOIL --3"-4" MULCH EXISTING-**TOPSOIL** CONVEX BOTTOM TREE PLANTING DETAIL CONTAINER GROWN

PIPE SCHEDULE

QUANTITY	PIPE SIZE
35'	15" HDPE
482'	18" HDPE





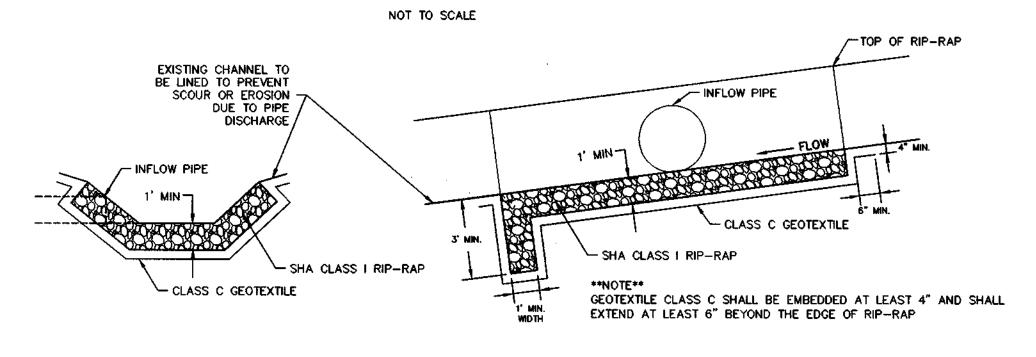
STRUCTURE SCHEDULE

NO.	LOCATION*	TOP**	INV. IN	INV. OUT	COMMENTS
I-1	DORSEY RUN ROAD STA 43+98.84 - 19' LEFT	177.20	171.94	171.69	INLET TYPE A-10 (HO. CO. STD SD 4.02) - 99% EFF.
I-2	DORSEY RUN ROAD STA 44+01.25 - 14' RIGHT	175.37		172.12	INLET TYPE K (HO. CO. STD SD 4.13)
M -1	DORSEY RUN ROAD STA 44+82.33 - 40' LEFT	173.27	169.23	162.74	PRECAST MANHOLE (HO. CO. STD SD 5.11)
E S-1	NORTHING 548,842.024 EASTING 1,381,707.254			157.05	18" Ø HDPE END SECTION (SEE DETAIL ABOVE)

* STATIONS GIVEN TO CENTERLINE OF INLET AT TOP OF CURB FOR INLETS LOCATED WITHIN THE ROAD RIGHT-OF-WAY. STATIONS FOR "K" INLETS TO CL OF INLET. LOCATION OF END SECTION GIVEN TO THE CENTERLINE OF PIPE AT THE CONNECTION OF THE STORM DRAIN PIPE TO END SECTION.

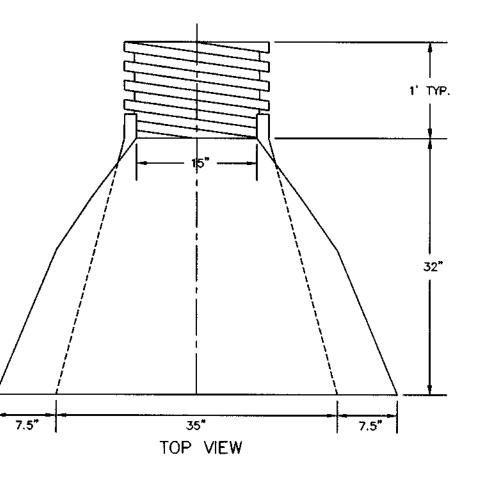
** ELEVATIONS MEASURED TO CENTER OF ALL INLETS.

MODIFIED OUTLET PROTECTION DETAIL



CONSTRUCTION SPECIFICATIONS

- 1. EXTREME CARE SHALL BE TAKEN TO PRESERVE THE CHANNEL GEOMETRY AND STABILITY OF THE EXISTING DITCH.
- 2. THE SUBGRADE FOR THE FILTER, RIP-RAP, OR GABION SHALL BE PREPARED TO THE REQUIRED LINES AND GRADES. ANY FILL REQUIRED IN THE SUBGRADE SHALL BE COMPACTED TO A DENSITY OF APPROXIMATELY THAT OF THE
- 3. THE ROCK OR GRAVEL SHALL CONFORM TO THE SPECIFIED GRADING LIMITS WHEN INSTALLED RESPECTIVELY IN THE RIP-RAP OR FILTER
- 4. GEOTEXTILE SHALL BE PROTECTED FROM PUNCHING, CUTTING, OR TEARING. ANY DAMAGE OTHER DAMAGE OTHER THAN AN OCCASIONAL SMALL HOLE SHALL BE REPAIRED BY PLACING ANOTHER PIECE OF GEOTEXTILE OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE. ALL OVERLAPS WHETHER FOR REPAIRS OR FOR JOINING TWO PLACES OF GEOTEXTILE SHALL BE A MINIMUM OF ONE FOOT.
- 5. STONE FOR THE RIP-RAP OR GABION OUTLETS MAY BE PLACED BY EQUIPMENT. THEY SHALL BE CONSTRUCTED TO THE FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. THE STONE FOR RIP-RAP OR GABION OUTLETS SHALL BE DELIVERED AND PLACED IN A MANNER TO PREVENT DAMAGE TO THE FILTER BLANKET OR GEOTEXTILE. HAND PLACEMENT WILL BE REQUIRED TO THE EXTENT NECESSARY TO PREVENT DAMAGE TO THE PERMANENT WORKS.
- 6. THE STONE SHALL BE PLACED SO THAT IT BLENDS IN WITH THE EXISTING GROUND. IF THE STONE IS PLACED TOO HIGH THEN THE FLOW WILL BE FORCED OUT OF THE CHANNEL AND SCOUR ADJACENT TO THE STONE WILL OCCUR.

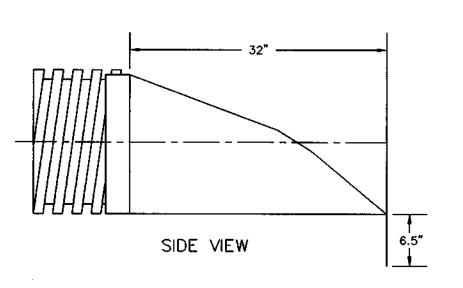


INSTALLATION INSTRUCTIONS

SPREAD THE END SECTION COLLAR AND PLACE IT OVER THE LAST PIPE CORRUGATION. MAKE SURE THE COLLAR SEATS PROPERLY IN THE

CORRUGATION VALLEY.

- INSERT THREADED ROD THROUGH THE PRE-DRILLED HOLES IN THE END SECTION
- COLLAR. TIGHTEN WING NUTS. 3. PLACE BACKFILL AROUND THE END SECTION AND OVER THE TOE PLATE. USE CARE DURING COMPACTION ALONG THE SIDES TO PREVENT DISTORTION.



END VIEW

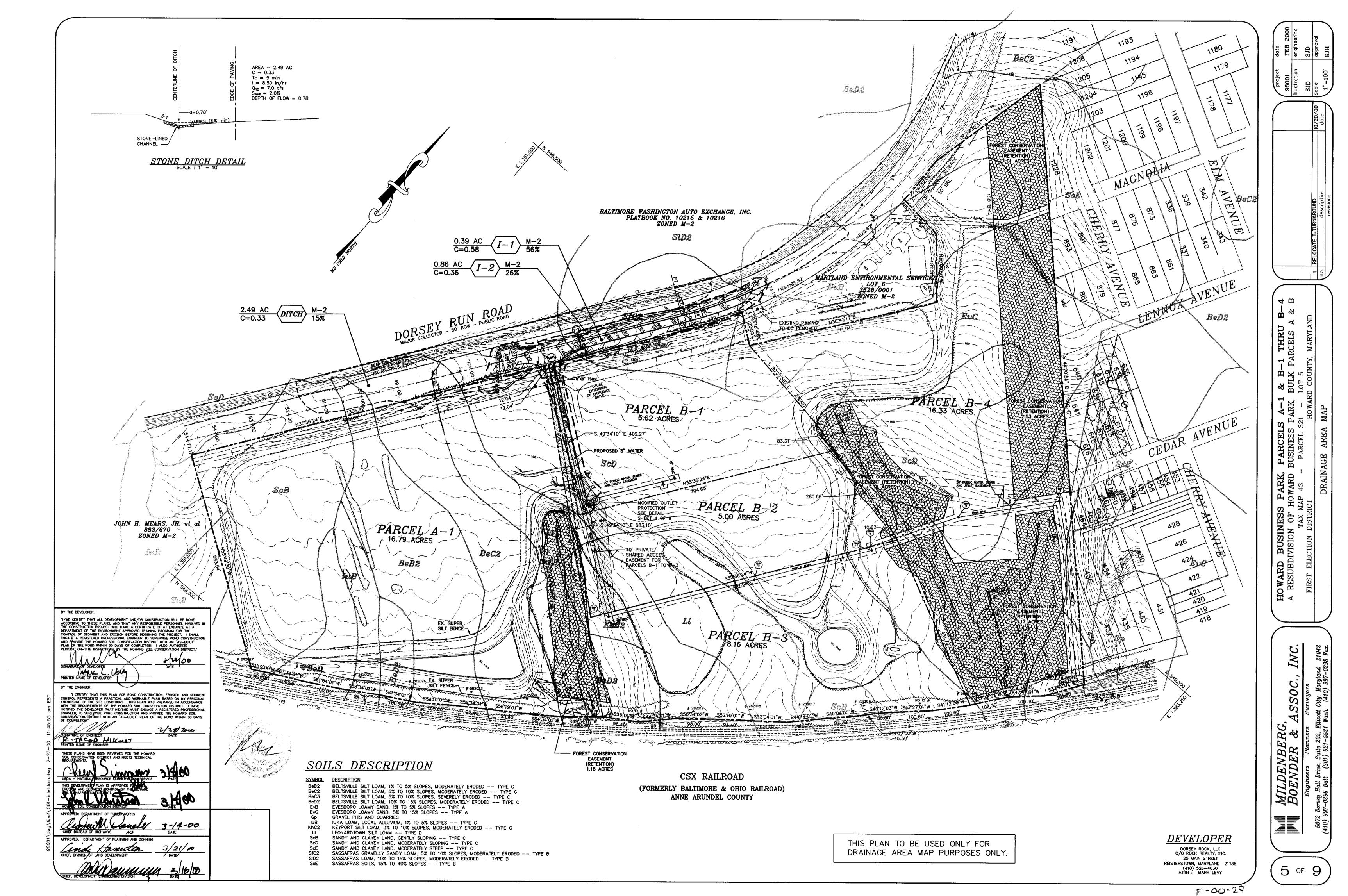
HDPE END SECTION (PART NO. 1810 NP)

<u>DEVELOPER</u> ATTN: MARK LEVY DORSEY ROCK, LLC C/O ROCK REALTY, INC.

25 MAIN STREET REISTERSTOWN, MARYLAND 21136 (410) 526-4030

F-00-29

MILDENBERG, BOENDER & A



HOWARD SOIL CONSERVATION DISTRICT

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING 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 ACRES 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 DISK 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.). 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 DISK 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. KENTUCKY 31 TALL FÉSCUE PER ACRE AND 2 LOBS. 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) -

218 GALLONS PER ACRE (5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER,

SEED WITH 60 LBS./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONE/ACRE 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 IMMÉDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR

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

TEMPORARY SEEDING NOTES

USE 348 GALLONS PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.

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, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, FOR 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 OCTOBER 15, SEED WITH 2-1/2 BUSHEL 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 NOVEMBER 28, PROTECT SITE BY APPLYING 2 TONS PER ACRÉ OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNROTTED WEED FREE SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE (5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GAL PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.

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

STANDARD SEDIMENT CONTROL NOTES

- 1) A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF NAY
- 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 SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", AND 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 1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (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

TOTAL AREA OF SITE: _ area disturbed: ____ AREA TO BE ROOFED OR PAVED: ___ ACRES AREA TO BE VEGITATIVELY STABILIZED: _ ___ CU. YDS. TOTAL WASTE/BORROW AREA LOCATION: __

THESE QUANTITIES ARE FOR PERMIT PURPOSES ONLY. CONTRACTOR IS REQUIRED TO PROVIDE HIS OWN QUANTITY MEASUREMENTS.

- 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.

STANDARD AND SPECIFICATIONS FOR TOPSOIL

DEFINITION

PLACEMENT OF TOPSOIL OVER A PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION.

PURPOSE

TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW pH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.

CONDITIONS WHERE PRACTICE APPLIES

- THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:
- a. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE
- b. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS.
- c. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.
- d. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.
- FOR THE PURPOSE OF THESE STANDARDS AND SPECIFICATIONS, AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN FOR ADEQUATE STABILIZATION. AREAS HAVING SLOPES STEEPER THAN 2:1 SHALL HAVE THE APPROPRIATE STABILIZATION SHOWN ON THE PLANS.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

- TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATION. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.
- II. TOPSOIL SPECIFICATIONS SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
 - TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CON-TRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 1/2" IN
- ii. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSON-SON GRASS, NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
- WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL E SPREAD AT THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR T THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING
- III. FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:
 - PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION - SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS.
- IV. FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES:
- ON SOIL MEETING TOPSOIL SPECIFICATIONS, OBTAIN TEST RESULTS DICTATING FERTILIZER AND LIME AMENDMENTS REQUIRED TO BRING THE SOIL INTO COMPLIANCE WITH THE FOLLOWING:
 - a. ph for topsoils shall be between 6.0 and 7.5. If the tested soil demonstrates a ph of LESS THAN 6.0, SUFFICIENT LIME SHALL BE PERSCRIBED TO RAISE THE pH TO 6.5 OR HIGHER.
- b. ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THAN 1.5 PERCENT BY WEIGHT.
- c. TOPSOIL HAVING SOLUBLE SALT CONTENT GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED.
- d. NO SOD OR SEED SHALL BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS.

NOTE: TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL

- ii. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE <u>STABILIZATION</u> - SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS.
- WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS. GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SILT FENCE AND SEDIMENT TRAPS AND BASINS.
- GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBEIT 4" - 8" HIGHER IN ELEVATION.
- iii. Topsoil shall be uniformly distributed in a 4" to 8" layer and lightly compacted to a minimum THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
- iv. TOPSOIL SHALL NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER
- ALTERNATIVE FOR PERMANENT SEEDING INSTEAD OF APPLYING THE FULL AMOUNTS OF LIME AND COMMERCIAL
- FERTILIZER, COMPOSTED SLUDGE AND AMENDMENTS MAY BE APPLIED AS SPECIFIED BELOW: COMPOSTED SLUDGE MATERIAL FOR USE AS A SOIL CONDITIONER FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES SHALL BE TESTED TO PRESCRIBE AMENDMENTS AND FOR SITES HAVING AREAS UNDER 5
- a. COMPOSTED SLUDGE SHALL BE SUPPLIED BY, OR ORIGINATE FROM, A PERSON OR PERSONS WHO ARE PERMITTED (AT THE TIME OF ACQUISITION OF THE COMPOST) BY THE MARYLAND DEPARTMENT OF THE
- b. COMPOSTED SLUDGE SHALL CONTAIN AT LEASE 1 PERCENT NITROGEN, 1.5 PERCENT PHOSPHOURUS, AND 0.2 PERCENT POTASSIUM AND HAVE A Ph OF 7.0 TO 8.0. IF COMPOST DOES NOT MEET THESE REQUIREMENTS, THE APPROPRIATE CONSTITUENTS MUST BE ADDED TO MEET THE REQUIREMENTS PRIOR TO USE. c. COMPOSTED SLUDGE SHALL BE APPLIED AT A RATE OF 1 TON/1,000 SQUARE FEET
- iv. COMPOSTED SLUDGE SHALL BE AMENDED WITH A POTASSIUM FERTILLIZER APPLIED AT THE RATE OF 4 LB/1,000 SQUARE FEET, AND 1/3 THE NORMAL LIME APPLICATION RATE.

REFERENCES: GUIDELINE SPECIFICATIONS, SOIL PREPARATION AND SODDING. MD-VA, PUB. #1, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTES. REVISED 1973.

ACRES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT

SHOWN. (1 DAY)

- 2. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES AT LOCATIONS
- 3. INSTALL SEDIMENT CONTROL MEASURES. (1 DAY)
- 4. GRADE SITE. (5 DAYS)
- 5. CONSTRUCT STORM DRAIN SYSTEM AND BLOCK. (3 DAYS)
- 6. BRING SITE TO FINAL GRADE AND PAVE ROAD. (5 DAYS)
- 7. STABILIZE ALL DISTURBED AREAS. (3 DAYS)
- 8. WHEN ALL CONTRIBUTING DRAINAGE AREAS TO SEDIMENT CONTROL DEVICES HAVE BEEN STABILIZED AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE REMAINING DISTURBED AREAS. (3 DAYS)

TEMPORARY DUST CONTROL MEASURES

1. MULCHES - SEE STANDARDS FOR VEGETATIVE STABILIZATION WITH MULCHES ONLY. MULCH SHOULD BE CRIMPED OR TACKED TO PREVENT BLOWING.

2. VEGETATIVE COVER - SEE STANDARDS FOR TEMPORARY VEGETATIVE COVER.

TILLAGE - TO ROUGHTN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS APCED ABOUT 12" APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.

4. IRRIGATION - THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS MOIST. REPEAT AS NEEDED. AT NO TIME SHOULD THE SITE BE IRRIGATED TO THE POINT THAT RUNOFF BEGINS TO FLOW.

5. BARRIERS — SOLID BOARD FENCES, SILT FENCES, SNOW FENCES, BURLAP FENCES, STRAW BALES, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALT OF ABOUT 10 TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING SOIL

6. CALCIUM CHLORIDE - APPLY AT RATES THAT WILL KEEP SURFACE MOIST. MAY NEED

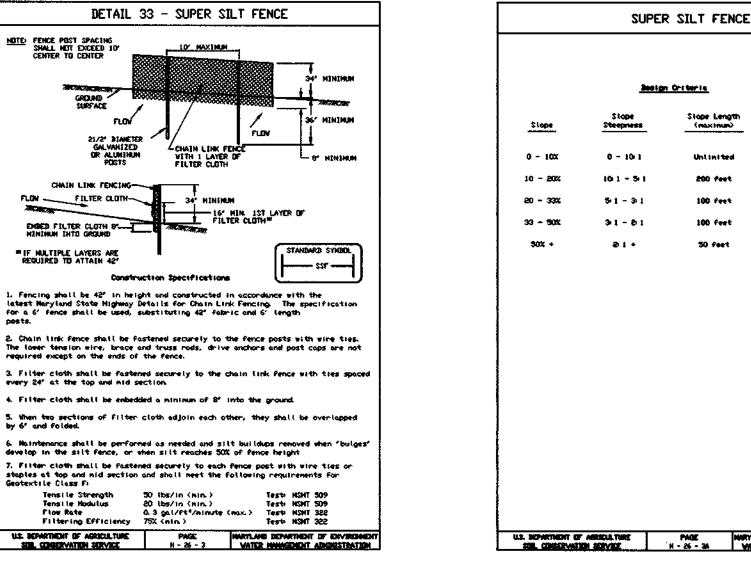
Silt Fence Length

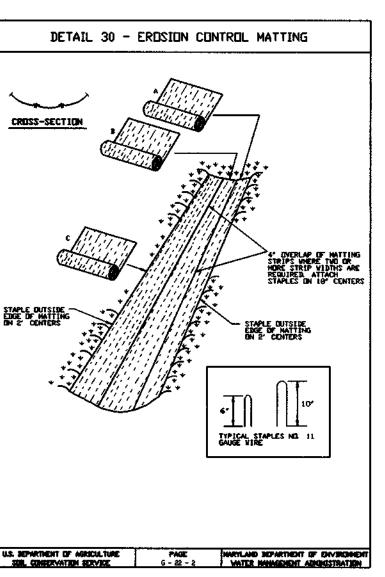
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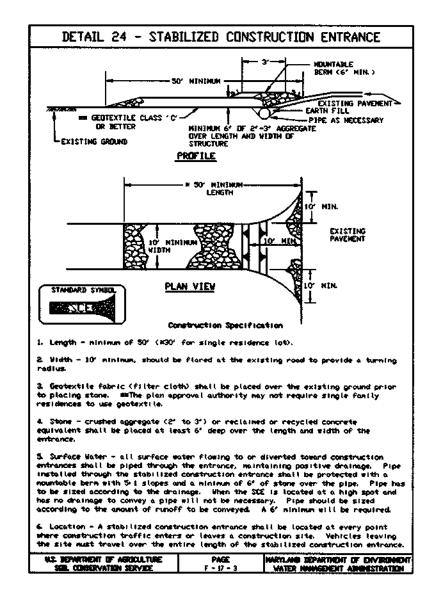
1,500 feet

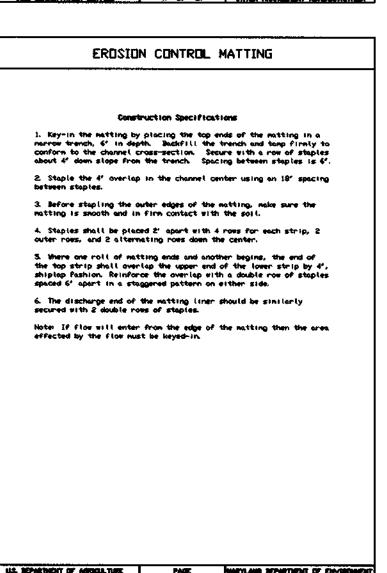
1,000 feet

500 fee









DEVELOPER DORSEY ROCK, LLC C/O ROCK REALTY, INC.

6 of 9

"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/SHE MUST ENGAGE A REGISTERED SOIL ENGINEER TO SOPERMSE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BURLT" PLAN OF THE POND WITHIN 30 DAYS OF COMPUTION." THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD

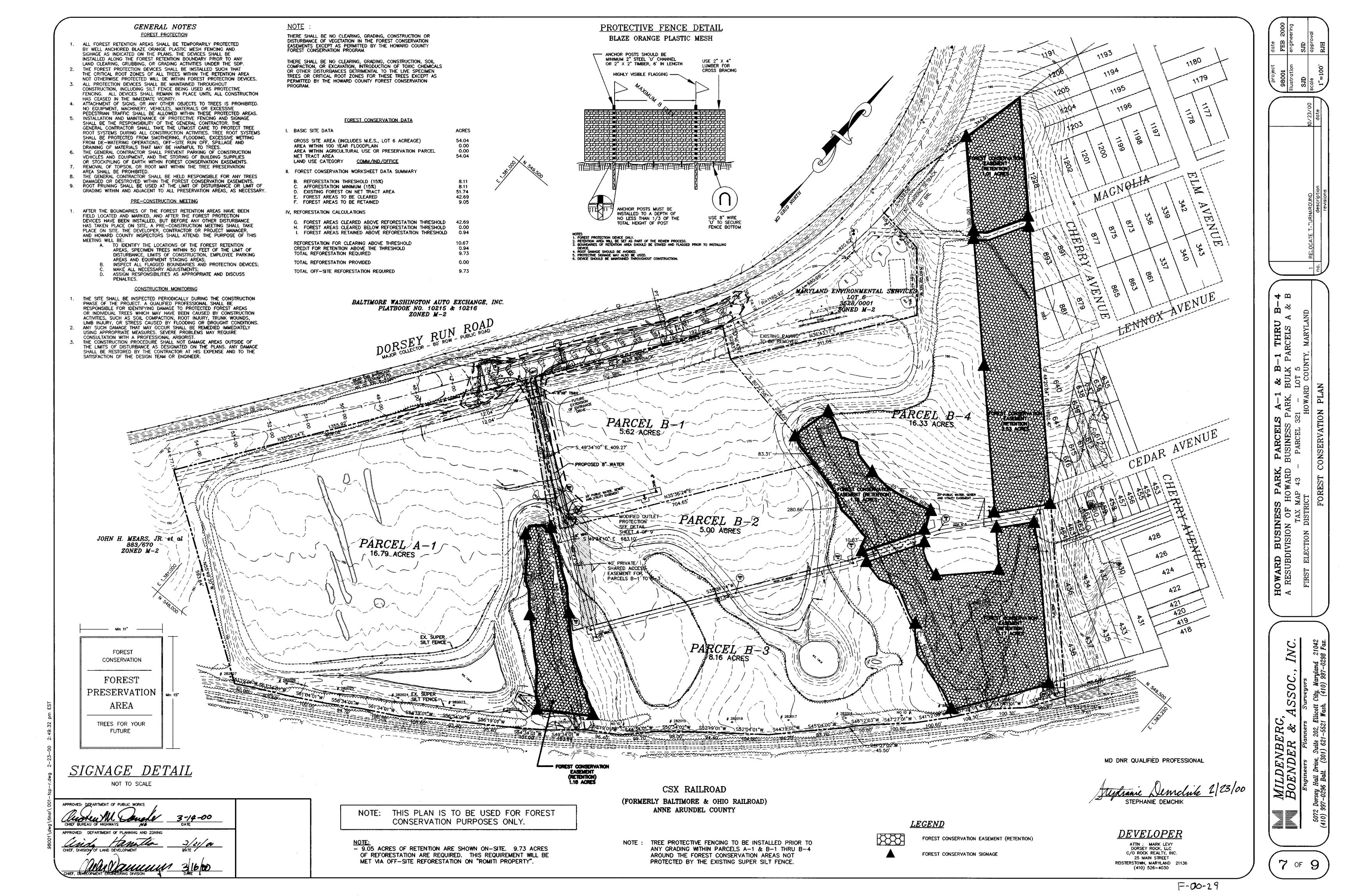
"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHINGSO DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

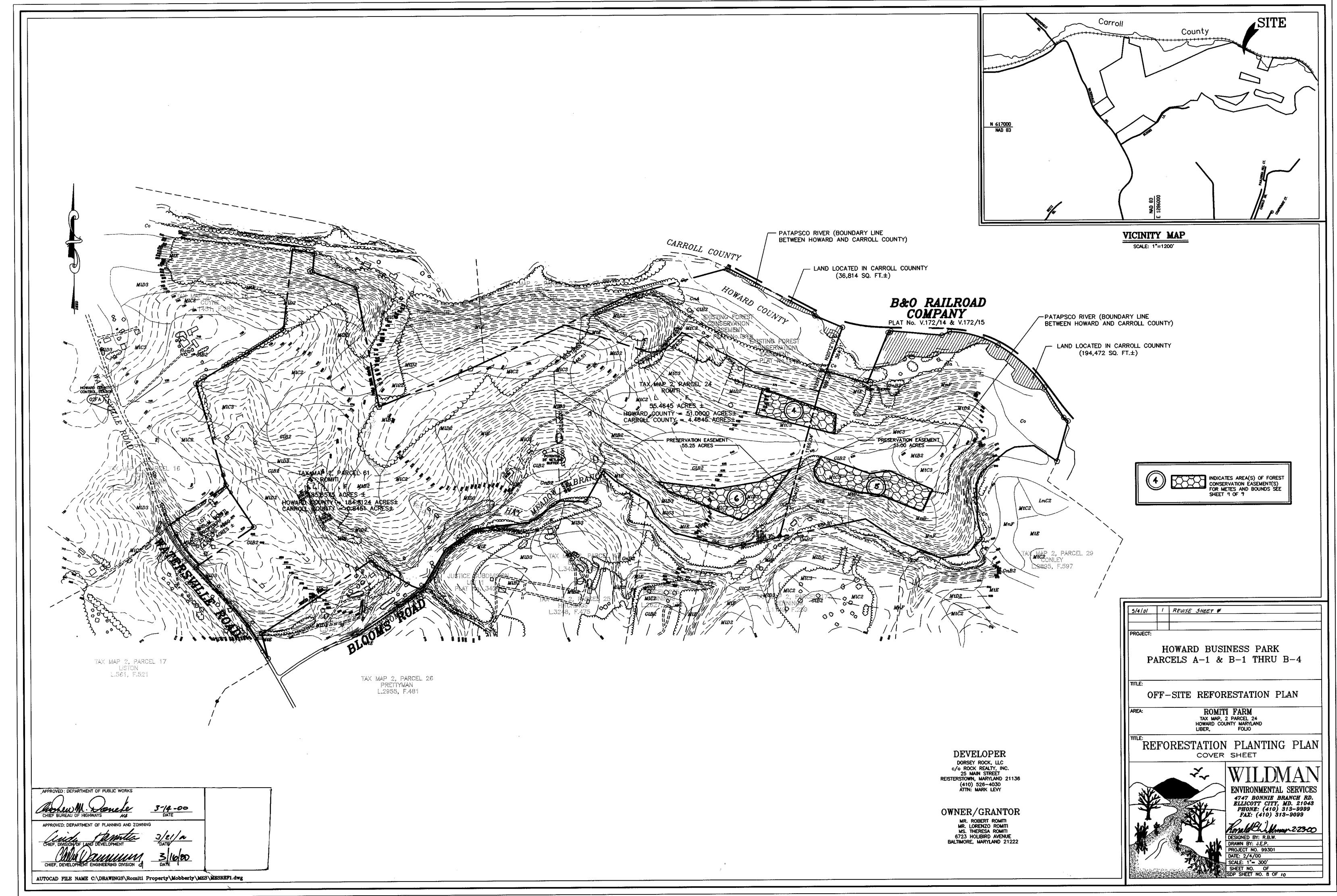
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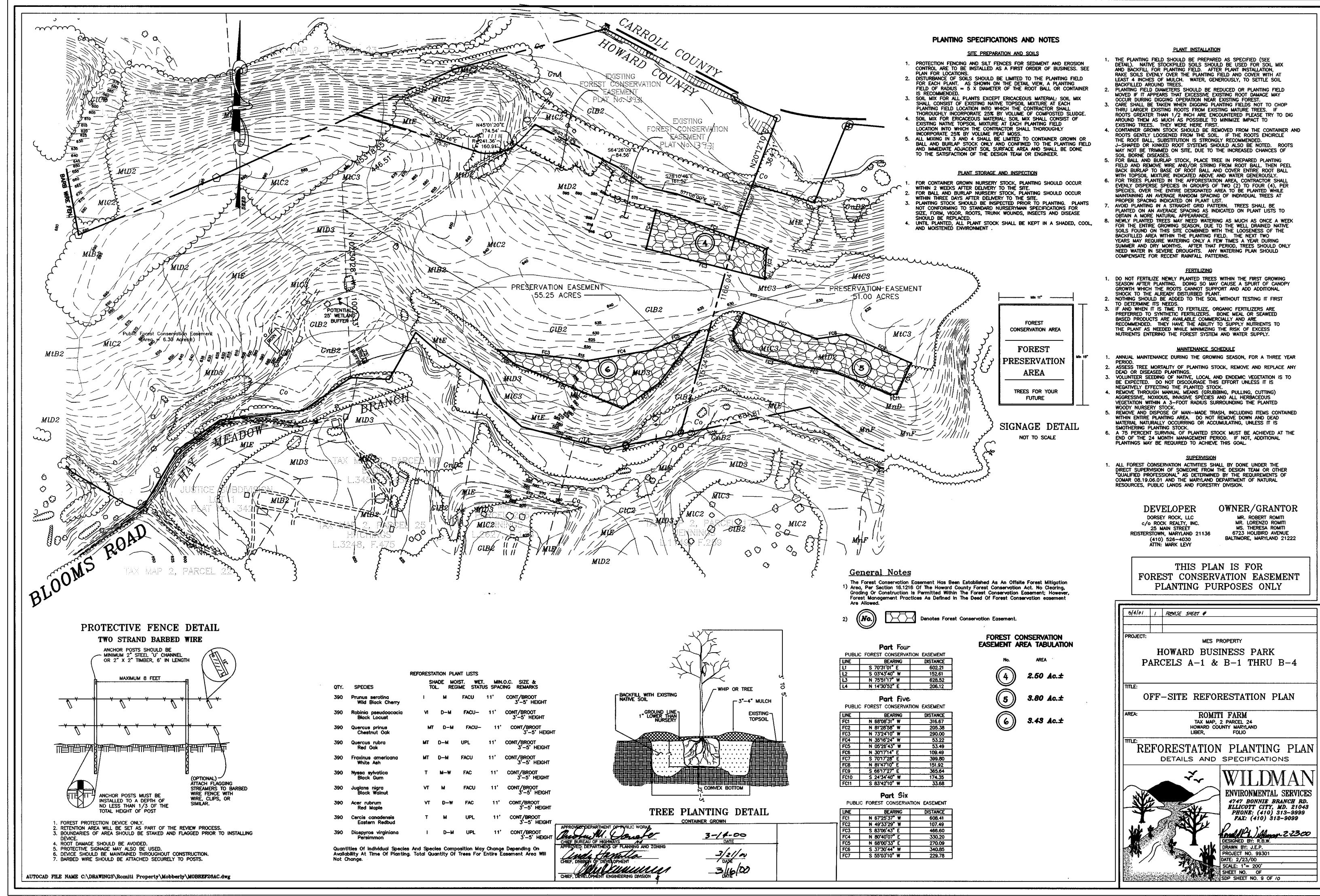
PRINTED NAME OF DEVELOPER

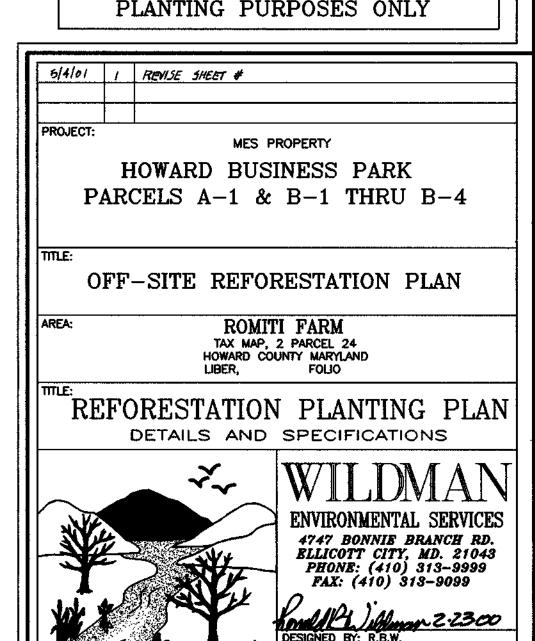


25 MAIN STREET REISTERSTOWN, MARYLAND 21136 (410) 526-4030 ATTN: MARK LEVY



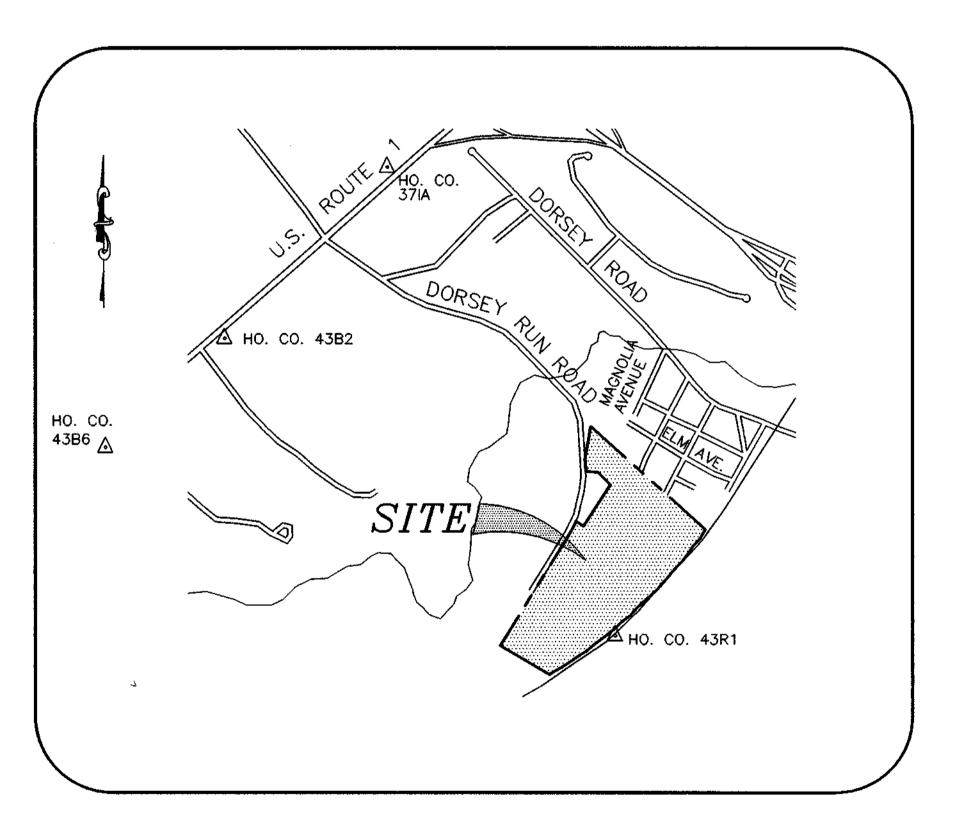




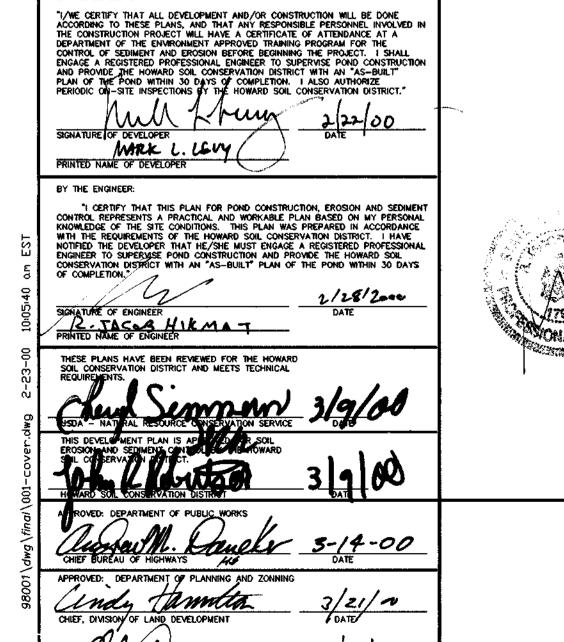


FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SHEET INDEX	
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WÉTLAND & FOREST REPLANTING PLAN	10



SCALE: 1'=1000'



BY THE DEVELOPER:

DEVELOPER

DORSEY ROCK, LLC C/O ROCK REALTY, INC. 25 MAIN STREET REISTERSTOWN, MARYLAND 21136 (410) 526-4030 ATTN: MARK LEVY

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS
- 2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/CONSTRUCTION INSPECTIONS DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR
- 3. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) DAYS PRIOR TO ANY EXCAVATION WORK:

1-800-257-7777 C&P TELEPHONE COMPANY (410) 725-9976 (410) 313-4900 HOWARD COUNTY BUREAU OF UTILITIES AT&T CABLE LOCATION DIVISION (410) 393-3533 BALTIMORE GAS & ELECTRIC (410) 685-0123 STATE HIGHWAY ADMINISTRATION (410) 531-5533 HOWARD COUNTY DEPT. OF PUBLIC WORKS/ CONSTRUCTION INSPECTION DIVISION (410) 313-1880

4. PROJECT BACKGROUND: LOCATION: FIRST ELECTION DISTRICT - TAX MAP 43 - PARCEL 321

TOTAL TRACT AREA: 51.90 ACRES ± NUMBER OF PROPOSED LOTS: 5 ACREAGE OF PROPOSED LOTS : 51.90 ACRES ± OPEN SPACE REQUIRED : 0 ACRES OPEN SPACE PROVIDED : 0 ACRES PROPOSED ROAD DEDICATION: O ACRES DPZ REFERENCE #:

- SDP-95-60 APPROVED ON JUNE 19, 1995. WP-00-23 APPROVED ON AUGUST 31, 1999. - F-00-27 RECORDED ON OCTOBER 8, 1999, AS PLAT # 13970.
- 5. TWO FOOT CONTOUR TOPOGRAPHY AND EXISTING CONDITIONS BASED ON AERIAL MAPPING TOPOGRAPHIC SURVEY BY WINGS AERIAL MAPPING CO, INC. IN FEBRUARY 1999.

6. HORIZONTAL AND VERTICAL DATUMS BASED ON (NAD'83) MARYLAND STATE COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS.

> ELEV. 210.54 E 1,376,866.071 N 551,654.993 ELEV. 209.59 1.378,176,95 ELEV. 195.75 E 1.379.982.153 ELEV. 134.53

- STREET LIGHTS WILL BE REQUIRED IN THIS DEVELOPMENT IN ACCORDANCE WITH THE DESIGN MANUAL STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SELECTED SHALL BE IN ACCORDANCE WITH THE LATEST HOWARD COUNTY DESIGN MANUAL, VOLUME III (1993) AND AS MODIFIED BY "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS (JUNE 1993)." THE JUNE 1993 POLICY INCLUDES GUIDELINES FOR LATERAL AND LONGITUDINAL PLACEMENT. A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
- 8. WATER AND SEWER ARE PUBLIC, CONTRACT # 44-3421-D FOR WATER AND CONTRACT # 10-3775-D FOR SEWER.
- 9. STORMWATER MANAGEMENT CONTROL WILL BE PROVIDED UNDER THE FUTURE SITE DEVELOPMENT PLAN.
- 10. TRAFFIC STUDY PREPARED BY THE TRAFFIC GROUP, INC. IN AUGUST 1999
- 11. TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- 12. WETLAND AND STREAM DELINEATION PREPARED BY HILLIS-CARNES ENGINEERING ASSOCIATES, INC. IN
- 13. COMPACTION IN FILL AREAS TO BE 95% AS DETERMINED PER AASHTO T-180.
- 14. CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES ON SITE PRIOR TO COMMENCING CONSTRUCTION.
- 15. FOREST CONSERVATION EASEMENT(S) HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.200 OF HOWARD COUNTY FOREST CONSERVATION ACT. NO CLEARING, GRADING, OF CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, EXCEPT AS SHOWN ON AN APPROVED ROAD CONSTRUCTION DRAWING OR SITE DEVELOPMENT PLAN. HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OR CONSERVATION EASEMENT ARE ALLOWED.
- 16. A PORTION OF THE FOREST CONSERVATION OBLIGATIONS INCURRED BY THIS SUBDIVISION (9.73 ACRES OF REFORESTATION) WILL BE MET VIA OFF-SITE REFORESTATION ON "ROMITI PROPERTY".
- 17. PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT.
- 18. SLOPES IN EXCESS OF 25% EXIST AND ARE IDENTIFIED WHERE THEY EXCEED 20,000 SQ. FT.
- 19. THIS PROJECT IS SUBJECT TO WAIVER PETITION, WP-00-23, APPROVED ON AUGUST 31, 1999, WHICH WAIVED THE FOLLOWING TO PERMIT RECORDATION OF NONBUILDABLE PRESERVATION PARCELS A & B :

SECTION 16.116(a)(4) **SECTION 16.117** SECTION 16.124(a)(3)(ii)

WETLANDS AND THE REQUIRED BUFFERS FOR WETLAND AND STREAMS SHALL BE DELINEATED ON FINAL PLATS. REQUIRES THE SUBMISSION OF A FOREST CONSERVATION FINAL PLAN SUBMISSIONS SHALL INCLUDE THE FINAL

LANDSCAPE PLAN IN THE ROAD CONSTRUCTION DRAWINGS. REQUIREMENT TO PROVIDE ROAD IMPROVEMENTS. REQUIRES THE SUBMISSION OF A SKETCH PLAN AND A SECTION 16.144(a) & (f) PRELIMINARY PLAN.

20. THIS PROJECT IS SUBJECT TO WAIVER PETITION, WP-00-26, APPROVED ON DECEMBER 30, 1999, WHICH WAIVED THE FOLLOWING: SECTION 16.124(a)(3)(ii)

SECTION 16.144(a) & (f) SECTION 16.120(c)(1)

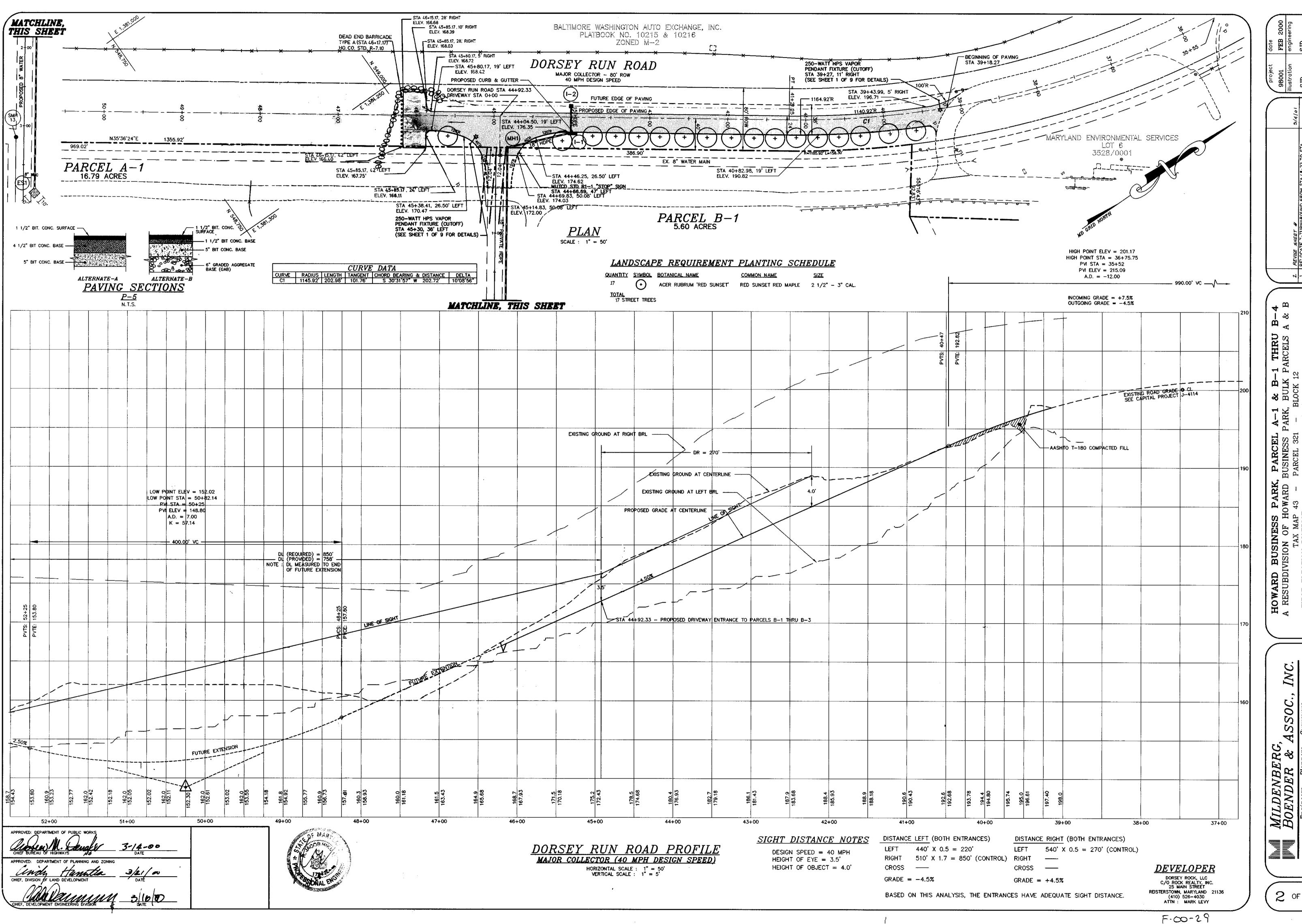
FINAL PLAN SUBMISSIONS SHALL INCLUDE THE FINAL LANDSCAPE PLAN IN THE ROAD CONSTRUCTION DRAWINGS. REQUIRES THE SUBMISSION OF A SKETCH PLAN AND A PRELIMINARY PLAN. REQUIRES COMMERCIAL LOTS TO HAVE A MINIMUM OF 60 FEET

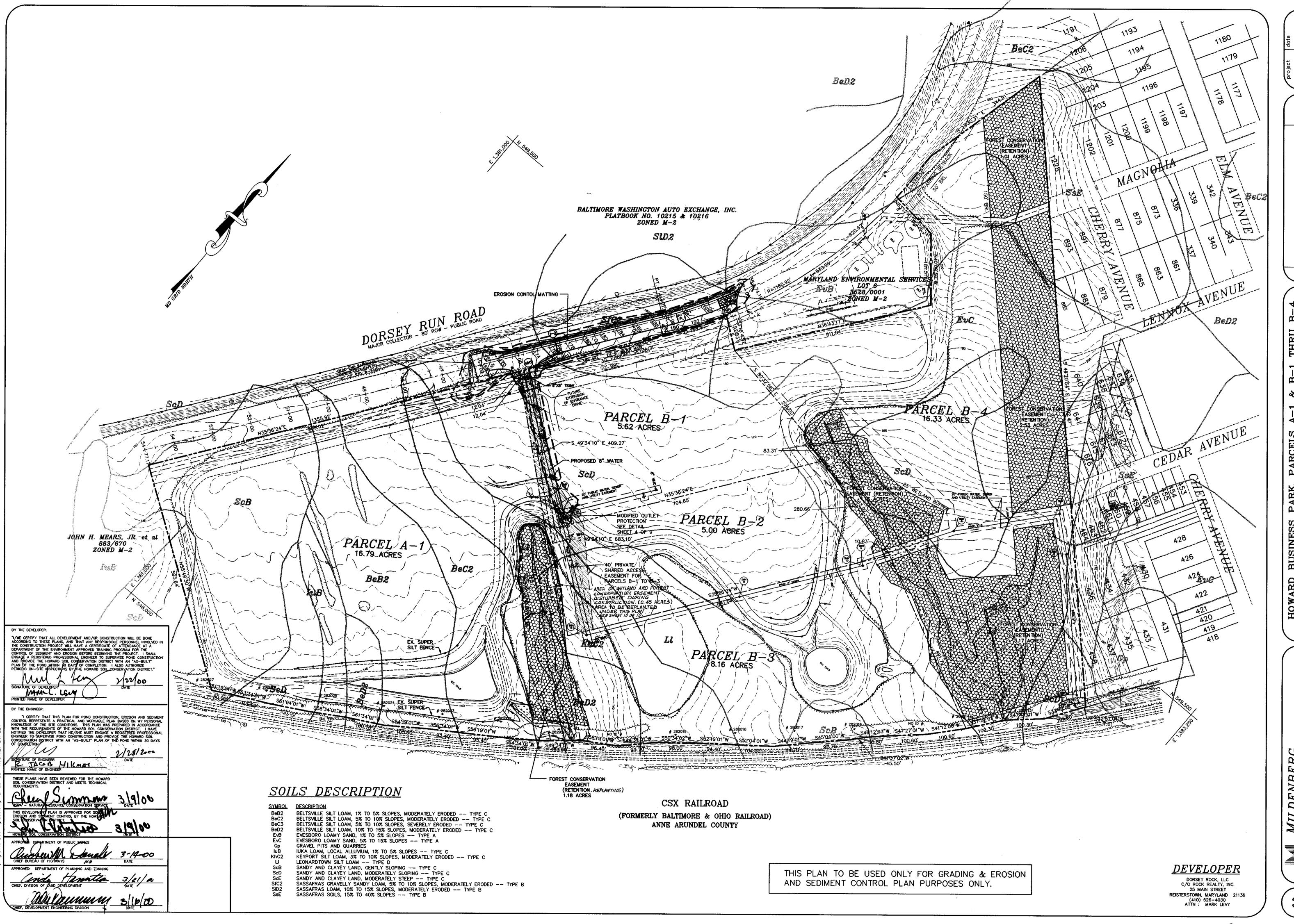
OF FRONTAGE ON AN APPROVED PUBLIC ROAD. 21. ALL STORM DRAIN PIPES TO BE HDPE UNLESS OTHERWISE NOTED.

- 22. IF MATERIAL IS WITHIN 8% OF OPTIMUM MOISTURE, WORKING THE MATERIAL UNTIL REQUIRED COMPACTION IS ACHIEVED IS CONTRACTOR'S RESPONSIBILITY.
- 23. SEDIMENT CONTROL FOR THIS PROJECT IS PROVIDE UNDER SDP-95-60. ALL SEDIMENT CONTROL DEVICES CONSTRUCTED UNDER SDP-95-60 WILL REMAIN IN PLACE DURING THE CONSTRUCTION OF THE DORSEY RUN ROAD EXTENSION.
- 24. THE STREET LIGHT LOCATIONS AND TYPES OF LIGHTS SHOWN ON SHEET 2 ARE AS FOLLOWS: - 250-WATT HPS VAPOR PENDANT FIXTURE (CUTOFF) MOUNTED AT 30' ON A BRONZE FIBERGLASS POLE USING A 12' ARM ANGLED RADIAL TO THE FILLET AT DORSEY RUN ROAD, STATION 39+27, 11' RIGHT, STATION 45+30, 36' LEFT.
- 25. THE FOREST CONSERVATION ORDINANCE HAS BEEN COMPLIED WITH IN ACCORDANCE WITH THE FOLLOWING: TOTAL OBLIGATION = 18.78 ACRES ON-SITE FOREST RETENTION = 9.05 ACRES ** OFF-SITE REFORESTATION (ROMITI PROPERTY) = 9.73 ACRES
 - * 0.45 ACRES OF RETENTION WAS DISTURBED DURING CONSTRUCTION. AREA TO BE REPLANTED UNDER THIS PLAN.

HOWARD BUSINESS PARK
A RESUBDIVISION OF HOWARD
TAX MAP 43 FIRST ELECTION DISTRICT

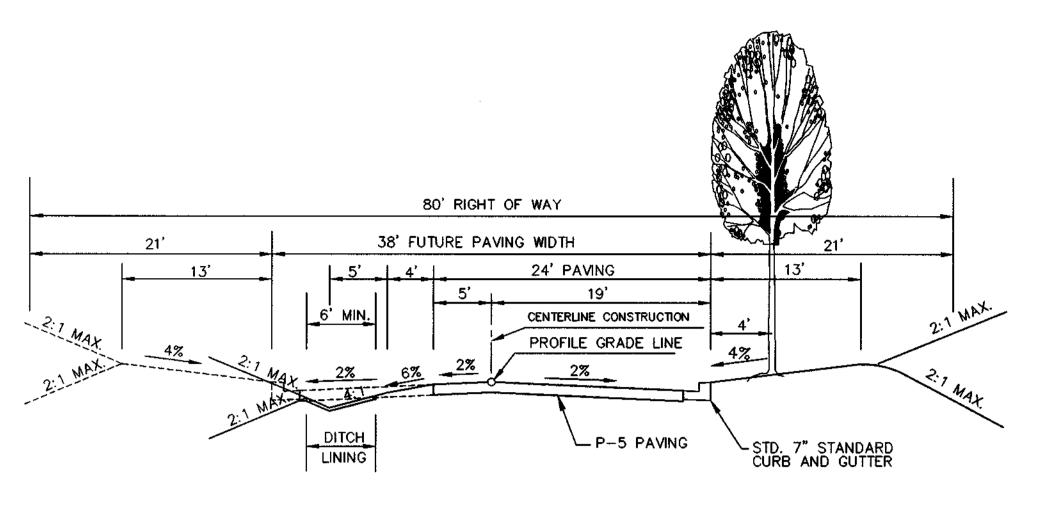
MILDENBE BOENDER





HOWARD BUSINESS PARK,
A RESUBDIVISION OF HOWARD I
TAX MAP 43 -FIRST ELECTION DISTRICT

SSOC.

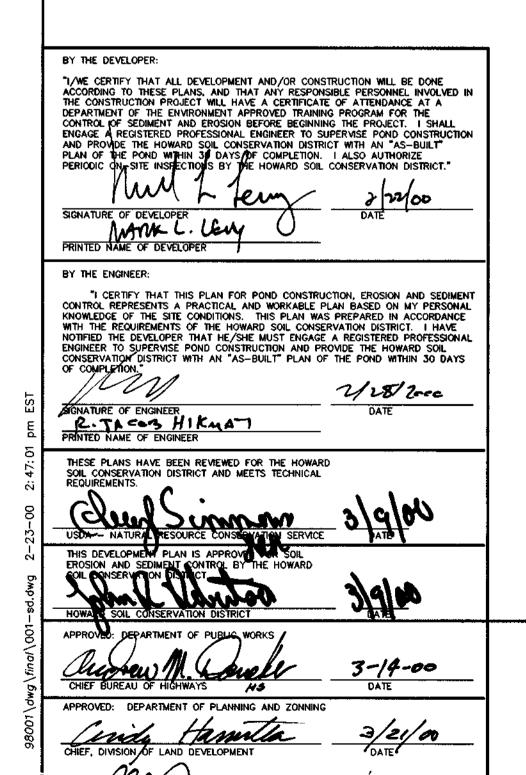


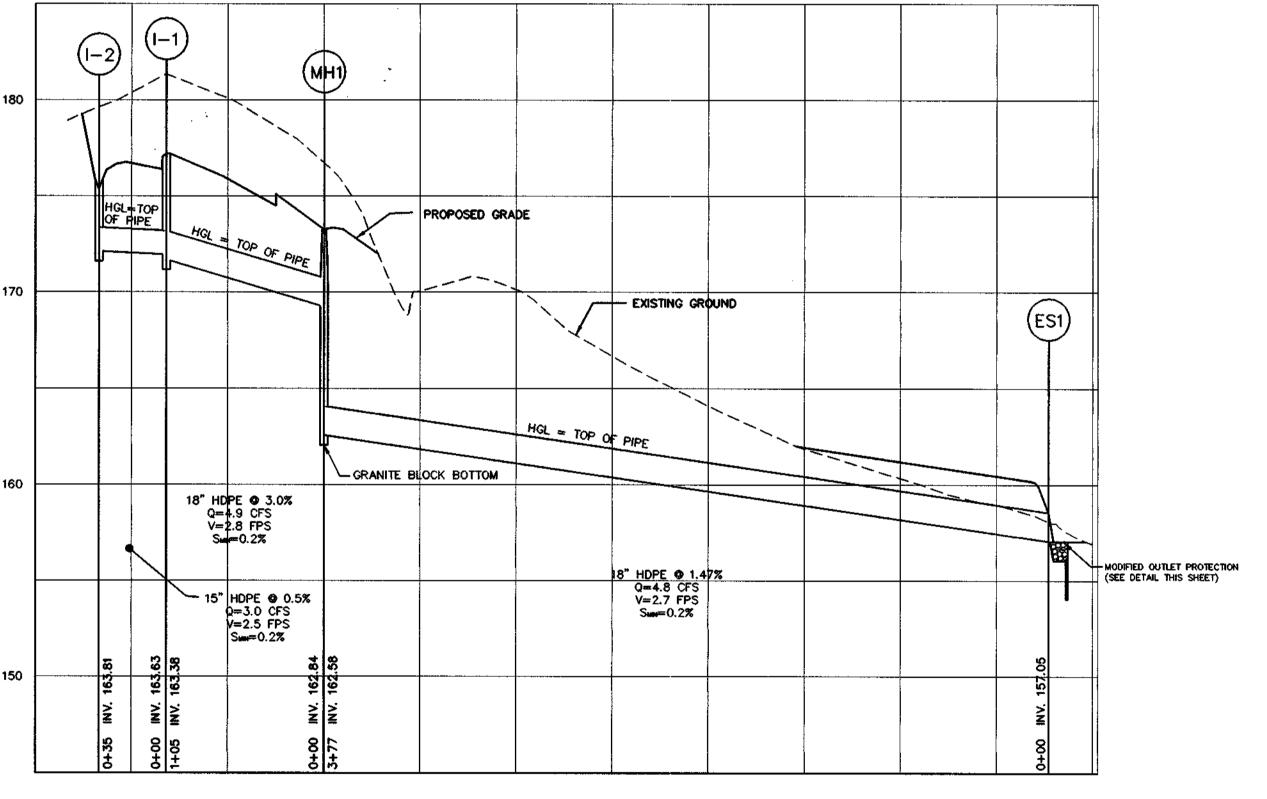
TYPICAL SECTION - MAJOR COLLECTOR 40 MPH DESIGN SPEED STA 39+19.28 TO STA 46+15.17 N.T.S.

STREET TREE BACKFILL WITH EXISTING NATIVE SOIL - 3"-4" MULCH EXISTING-TOPSOIL CONVEX BOTTOM TREE PLANTING DETAIL CONTAINER GROWN

PIPE SCHEDULE

QUANTITY	PIPE SIZE
35'	15" HDPE
482'	18" HDPE





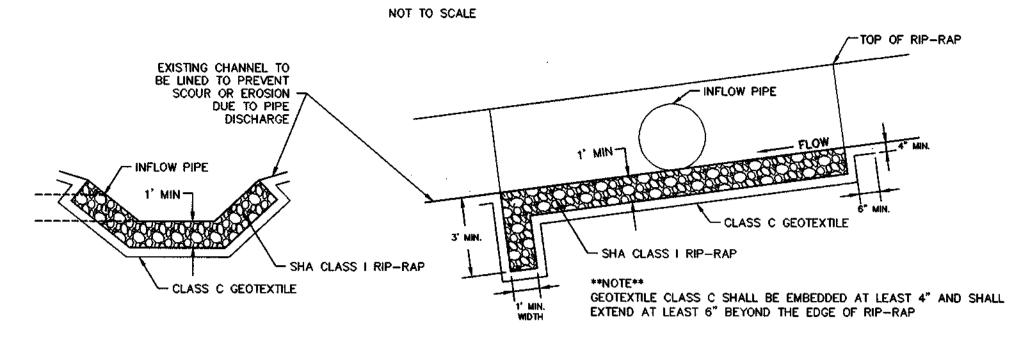
STORM DRAIN PROFILE - I-2 TO ES1 HORIZONTAL SCALE: 1" = 50' VERTICAL SCALE: 1" = 5'

STRUCTURE SCHEDULE

NO.	LOCATION*	TOP**	INV. IN	INV. OUT	COMMENTS
l – 1	DORSEY RUN ROAD STA 43+98.84 - 19' LEFT	177.20	171.94	171.69	INLET TYPE A-10 (HO. CO. STD SD 4.02) - 99% EFF.
I - 2	DORSEY RUN ROAD STA 44+01.25 - 14' RIGHT	175.37		172.12	INLET TYPE K (HO. CO. STD SD 4.13)
M-1	DORSEY RUN ROAD STA 44+82.33 - 40' LEFT	173.27	169.23	162.74	PRECAST MANHOLE (HO. CO. STD SD 5.11)
ES-1	NORTHING 548,842.024 EASTING 1,381,707.254		Ī	157.05	18" # HDPE END SECTION (SEE DETAIL ABOVE)

- * STATIONS GIVEN TO CENTERLINE OF INLET AT TOP OF CURB FOR INLETS LOCATED WITHIN THE ROAD RIGHT-OF-WAY. STATIONS FOR "K" INLETS TO CL OF INLET. LOCATION OF END SECTION GIVEN TO THE CENTERLINE OF PIPE AT THE CONNECTION OF THE STORM DRAIN PIPE TO END SECTION.
- ** ELEVATIONS MEASURED TO CENTER OF ALL INLETS.

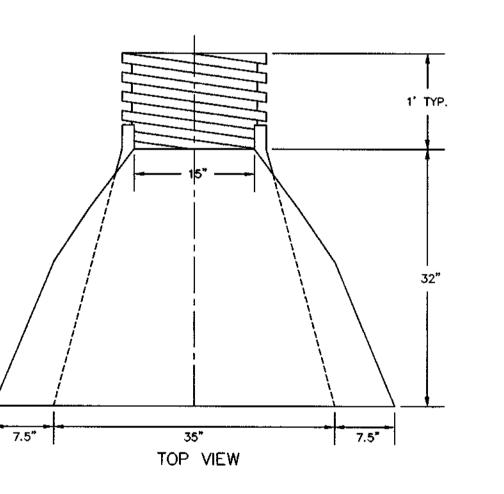
MODIFIED OUTLET PROTECTION DETAIL



CONSTRUCTION SPECIFICATIONS

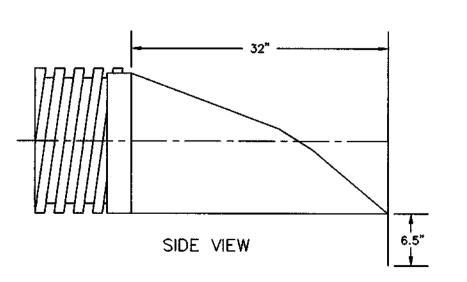
- 1. EXTREME CARE SHALL BE TAKEN TO PRESERVE THE CHANNEL GEOMETRY AND STABILITY OF THE EXISTING DITCH. 2. THE SUBGRADE FOR THE FILTER, RIP-RAP, OR GABION SHALL BE PREPARED TO THE REQUIRED LINES AND GRADES. ANY FILL REQUIRED IN THE SUBGRADE SHALL BE COMPACTED TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
- 3. THE ROCK OR GRAVEL SHALL CONFORM TO THE SPECIFIED GRADING LIMITS WHEN INSTALLED RESPECTIVELY IN THE RIP-RAP OR FILTER
- 4. GEOTEXTILE SHALL BE PROTECTED FROM PUNCHING, CUTTING, OR TEARING. ANY DAMAGE OTHER DAMAGE OTHER THAN AN OCCASIONAL SMALL HOLE SHALL BE REPAIRED BY PLACING ANOTHER PIECE OF GEOTEXTILE OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE. ALL OVERLAPS WHETHER FOR REPAIRS OR FOR JOINING TWO PLACES OF GEOTEXTILE SHALL BE A MINIMUM OF ONE FOOT.
- 5. STONE FOR THE RIP-RAP OR GABION OUTLETS MAY BE PLACED BY EQUIPMENT. THEY SHALL BE CONSTRUCTED TO THE FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. THE STONE FOR RIP-RAP OR GABION OUTLETS SHALL BE DELIVERED AND PLACED IN A MANNER TO PREVENT DAMAGE TO THE FILTER BLANKET OR GEOTEXTILE. HAND PLACEMENT WILL BE REQUIRED TO THE EXTENT NECESSARY TO PREVENT DAMAGE TO THE PERMANENT WORKS.

6. THE STONE SHALL BE PLACED SO THAT IT BLENDS IN WITH THE EXISTING GROUND. IF THE STONE IS PLACED TOO HIGH THEN THE FLOW WILL BE FORCED OUT OF THE CHANNEL AND SCOUR ADJACENT TO THE STONE WILL OCCUR.



INSTALLATION INSTRUCTIONS SPREAD THE END SECTION COLLAR AND PLACE IT OVER THE LAST PIPE CORRUGATION. MAKE SURE THE COLLAR SEATS PROPERLY IN THE

- CORRUGATION VALLEY. 2. INSERT THREADED ROD THROUGH THE PRE-DRILLED HOLES IN THE END SECTION COLLAR. TIGHTEN WING NUTS.
- 3. PLACE BACKFILL AROUND THE END SECTION AND OVER THE TOE PLATE. USE CARE DURING COMPACTION ALONG THE SIDES TO PREVENT DISTORTION.



END VIEW

HDPE END SECTION (PART NO. 1810 NP)

<u>DEVELOPER</u> ATTN: MARK LEVY

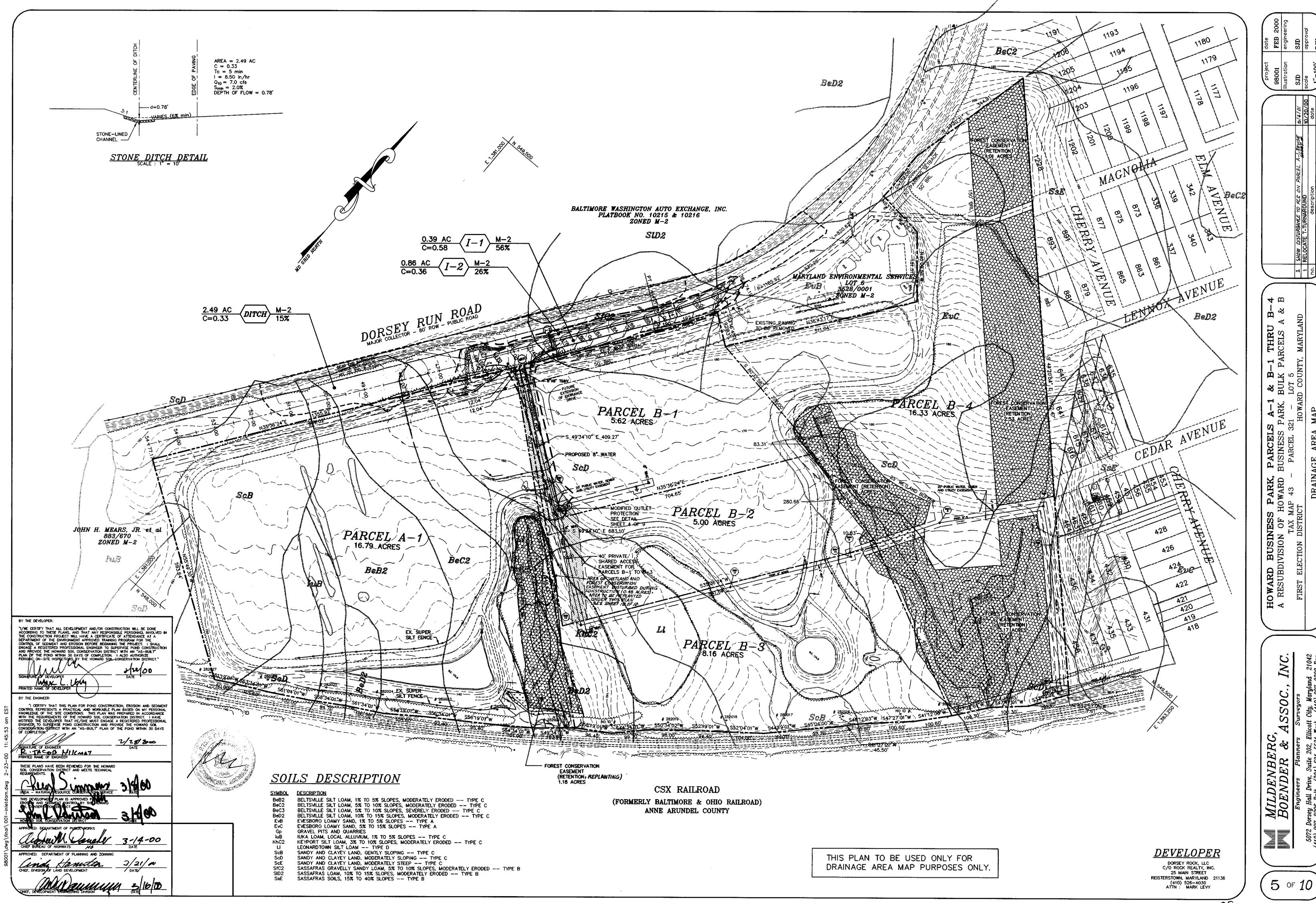
DORSEY ROCK, LLC C/O ROCK REALTY, INC. 25 MAIN STREET REISTERSTOWN, MARYLAND 21136 (410) 526-4030

4 of 10

F-00-29

HOWARD BUSINESS PARK,
A RESUBDIVISION OF HOWARD
TAX MAP 43 FIRST ELECTION DISTRICT

MILDENBERG, BOENDER &



HOWARD SOIL CONSERVATION DISTRICT

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

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

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES: PREFERRED - APPLY 2 TONS PER ACRES 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 DISK 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.). 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 DISK 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. KENTUCKY 31 TALL FÉSCUE PER ACRE AND 2 LOBS. 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./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONE/ACRE 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,

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

TEMPORARY SEEDING NOTES

USE 348 GALLONS PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.

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, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, FOR 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 OCTOBER 15, SEED WITH 2-1/2 BUSHEL 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 NOVEMBER 28, PROTECT SITE BY APPLYING 2 TONS PER ACRÉ OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNROTTED WEED FREE SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE (5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GAL PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.

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

STANDARD SEDIMENT CONTROL NOTES

- 1) A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF NAY CONSTRUCTION, (313-1855).
- 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 SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", AND 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 1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (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.

TOTAL AREA OF SITE: _ AREA DISTURBED: _ AREA TO BE ROOFED OR PAVED: ____ ACRES AREA TO BE VEGITATIVELY STABILIZED: ___ TOTAL CUT: CU. YDS.

THESE QUANTITIES ARE FOR PERMIT PURPOSES ONLY. CONTRACTOR IS REQUIRED TO PROVIDE HIS OWN QUANTITY MEASUREMENTS.

- 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
- 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.

STANDARD AND SPECIFICATIONS FOR TOPSOIL

DEFINITION

PLACEMENT OF TOPSOIL OVER A PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION.

TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW pH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.

CONDITIONS WHERE PRACTICE APPLIES

- THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE
- a. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE
- b. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS.
- c. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.
- d. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE
- FOR THE PURPOSE OF THESE STANDARDS AND SPECIFICATIONS, AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN FOR ADEQUATE STABILIZATION. AREAS HAVING SLOPES STEEPER THAN 2:1 SHALL HAVE THE APPROPRIATE STABILIZATION SHOWN ON THE PLANS.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

- TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATION. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA—SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION. II. TOPSOIL SPECIFICATIONS - SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING
 - TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CON-TRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 1/2" IN
 - TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSON-SON GRASS, NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
 - WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS. GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR T THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND worked into the soil in conjunction with tillage operations as described in the following
- III. FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:
 - PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION - SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS.
- IV. FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES:
- ON SOIL MEETING TOPSOIL SPECIFICATIONS, OBTAIN TEST RESULTS DICTATING FERTILIZER AND LIME AMENDMENTS REQUIRED TO BRING THE SOIL INTO COMPLIANCE WITH THE FOLLOWING:
 - a. ph for topsoils shall be between 6.0 and 7.5. If the tested soil demonstrates a ph of less than 6.0, sufficient lime shall be perscribed to raise the ph to 6.5 or higher.
 - b. ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THAN 1.5 PERCENT BY WEIGHT.
 - c. TOPSOIL HAVING SOLUBLE SALT CONTENT GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED.
- d. NO SOD OR SEED SHALL BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS.

NOTE: TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL

- PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN <u>20.0 VEGETATIVE</u> <u>STABILIZATION</u> SECTION I VEGETATIVE STABILIZATION METHODS AND MATERIALS.
- V. TOPSOIL APPLLICATION
 - WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SILT FENCE AND SEDIMENT TRAPS AND BASINS.
 - GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE
 - MAINTAINED, ALBEIT 4" 8" HIGHER IN ELEVATION. TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4" TO 8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE
 - FORMATION OF DEPRESSIONS OR WATER POCKETS. TOPSOIL SHALL NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER

SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE

- ALTERNATIVE FOR PERMANENT SEEDING INSTEAD OF APPLYING THE FULL AMOUNTS OF LIME AND COMMERCIAL
- FERTILIZER, COMPOSTED SLUDGE AND AMENDMENTS MAY BE APPLIED AS SPECIFIED BELOW: COMPOSTED SLUDGE MATERIAL FOR USE AS A SOIL CONDITIONER FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES SHALL BE TESTED TO PRESCRIBE AMENDMENTS AND FOR SITES HAVING AREAS UNDER 5
- ACRES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS: COMPOSTED SLUDGE SHALL BE SUPPLIED BY, OR ORIGINATE FROM, A PERSON OR PERSONS WHO ARE PERMITTED (AT THE TIME OF ACQUISITION OF THE COMPOST) BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT UNDER COMAR 26.04.06.
- b. COMPOSTED SLUDGE SHALL CONTAIN AT LEASE 1 PERCENT NITROGEN, 1.5 PERCENT PHOSPHOURUS, AND 0.2 PERCENT POTASSIUM AND HAVE A Ph OF 7.0 TO 8.0. IF COMPOST DOES NOT MEET THESE REQUIREMENTS, THE APPROPRIATE CONSTITUENTS MUST BE ADDED TO MEET THE REQUIREMENTS PRIOR TO USE.
- c. COMPOSTED SLUDGE SHALL BE APPLIED AT A RATE OF 1 TON/1,000 SQUARE FEET. iv. COMPOSTED SLUDGE SHALL BE AMENDED WITH A POTASSIUM FERTILLIZER APPLIED AT THE RATE OF 4 LB/1,000 SQUARE FEET, AND 1/3 THE NORMAL LIME APPLICATION RATE.

REFERENCES: GUIDELINE SPECIFICATIONS, SOIL PREPARATION AND SODDING. MD-VA, PUB. #1, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTES. REVISED 1973.

SEQUENCE OF CONSTRUCTION

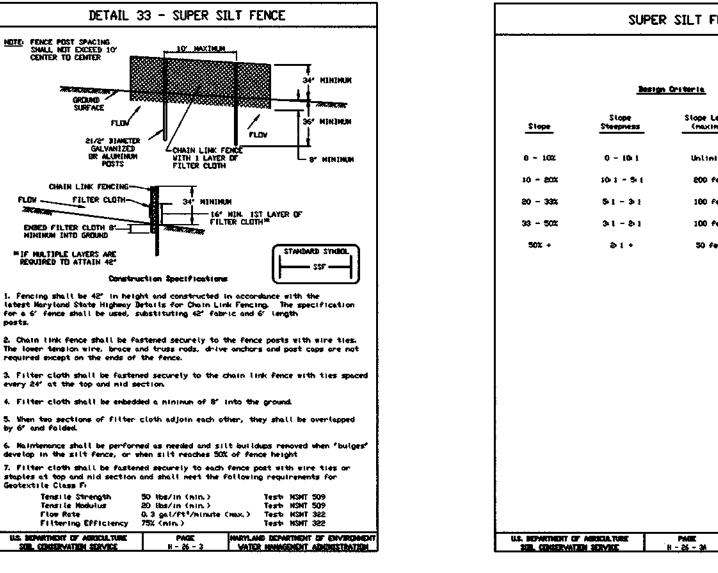
1. OBTAIN GRADING PERMIT

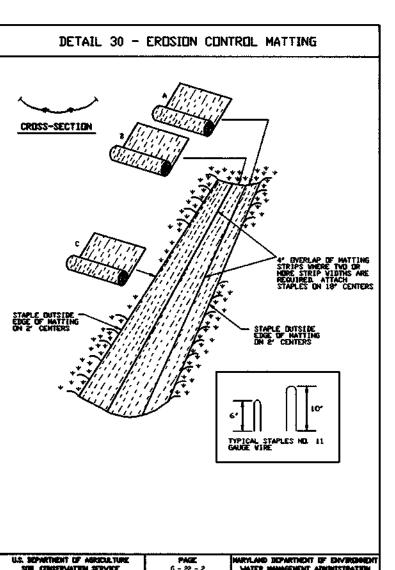
SHOWN. (1 DAY)

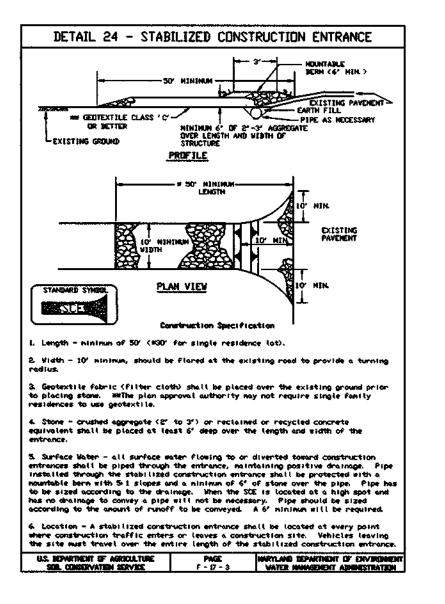
- 2. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES AT LOCATIONS
- 3. INSTALL SEDIMENT CONTROL MEASURES. (1 DAY)
- 4. GRADE SITE. (5 DAYS)
- 5. CONSTRUCT STORM DRAIN SYSTEM AND BLOCK. (3 DAYS)
- 6. BRING SITE TO FINAL GRADE AND PAVE ROAD. (5 DAYS)
- 7. STABILIZE ALL DISTURBED AREAS. (3 DAYS)
- 8. WHEN ALL CONTRIBUTING DRAINAGE AREAS TO SEDIMENT CONTROL DEVICES HAVE BEEN STABILIZED AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE REMAINING DISTURBED AREAS. (3 DAYS)

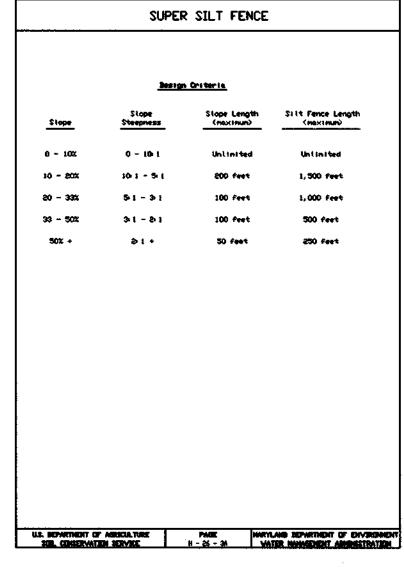
TEMPORARY DUST CONTROL MEASURES

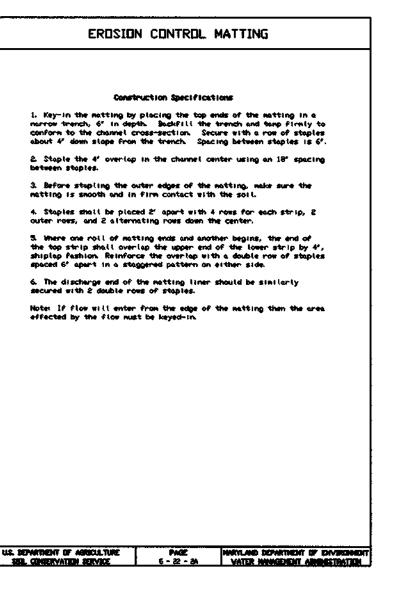
- . MULCHES SEE STANDARDS FOR VEGETATIVE STABILIZATION WITH MULCHES ONLY. MULCH SHOULD BE CRIMPED OR TACKED TO PREVENT BLOWING.
- 2. VEGETATIVE COVER SEE STANDARDS FOR TEMPORARY VEGETATIVE COVER.
- 3. TILLAGE TO ROUGHTN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS APCED ABOUT 12" APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH
- 4. IRRIGATION THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS MOIST. REPEAT AS NEEDED. AT NO TIME SHOULD THE SITE BE IRRIGATED TO THE POINT THAT RUNOFF BEGINS TO FLOW.
- BARRIERS SOLID BOARD FENCES, SILT FENCES, SNOW FENCES, BURLAP FENCES, STRAW BALES, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALT OF ABOUT 10 TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING SOIL
- 6. CALCIUM CHLORIDE APPLY AT RATES THAT WILL KEEP SURFACE MOIST. MAY NEED









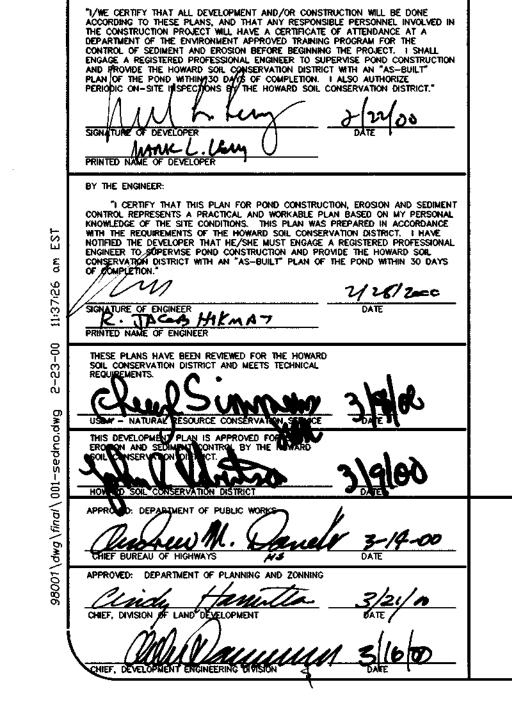


DEVELOPER

DORSEY ROCK, LLC C/O ROCK REALTY, INC 25 MAIN STREET REISTERSTOWN, MARYLAND 21136

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BY THE DEVELOPER





(410) 526-4030 ATTN: MARK LEVY

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