SHEET INDEX	
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# SITE DEVELOPMENT PLAN

## PARCEL 3 ACCESS DORSEY RUN INDUSTRIAL CENTER HOWARD COUNTY, MARYLAND

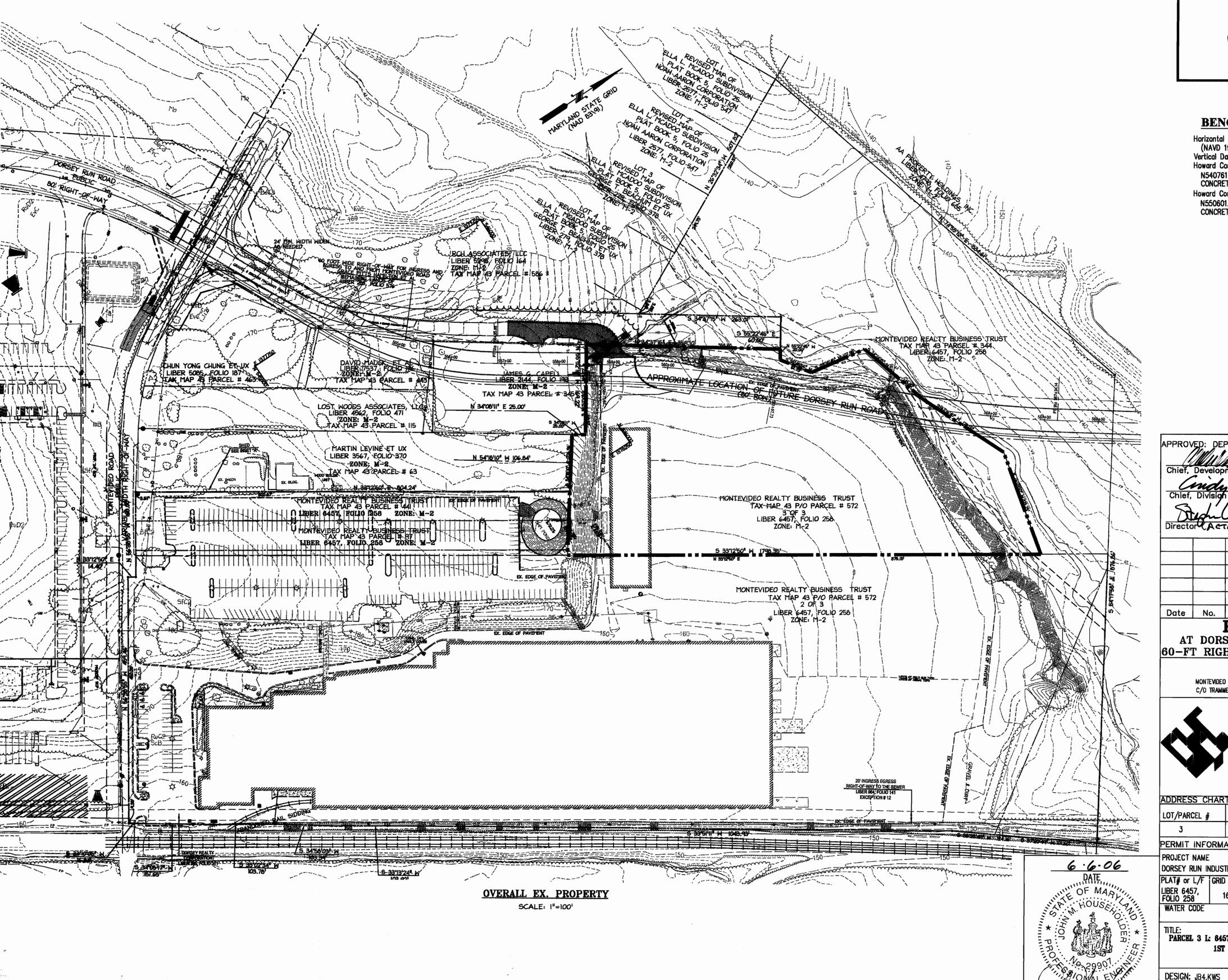
## GENERAL NOTES

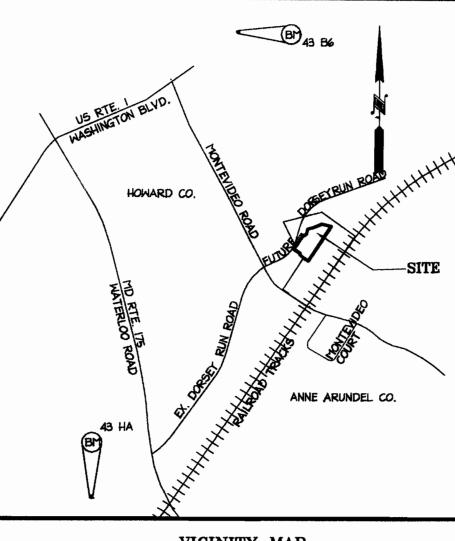
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOL. IV "STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION" PLUS MSHA STANDARDS AND SPECIFICATIONS.
- 2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/ CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- 3. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- 4. 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
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE PER HOWARD COUNTY RECORDS.
- 6. PUBLIC WATER AND SEWER PROVIDED IS EXISTING SERVICE.
- 7. THIS SITE IS LOCATED IN THE DEEP RUN, PATAPSCO WATERSHED.
- 8. ALL FILL AREAS SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED AND VERIFIED IN ACCORDANCE WITH AASHTO T-180--STANDARD.
- CONTRACTOR SHALL MAINTAIN ALL SEDIMENT CONTROL DEVICES WITHIN THE LIMITS OF THE SITE DURING CONSTRUCTION OF THE SITE IMPROVEMENTS, CONTRACTOR SHALL PROVIDE ADDITIONAL EROSION AND SEDIMENTATION CONTROL MEASURES AS MAY BE NECESSARY DURING CONSTRUCTION AND/OR BY GOVERNING AGENCIES.
- 10. A 100 YR FLOODPLAIN STUDY IS NOT REQUIRED FOR THIS PROJECT.
- THERE ARE NO KNOWN CEMETERIES OR BURIAL GROUNDS ON THIS SITE. HOWEVER, UPON DISCOVERY OF ANY EVIDENCE OF BURIAL OR GRAVES, THE DEVELOPER WILL BE SUBJECT TO SECTION 16.1305 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- 12. ALL ADJACENT PROPERTIES ARE NON-RESIDENTAIL USES.
- 13. THE SUBJECT PROPERTY IS ZONED M-2 PER THE COMPREHENSIVE ZONING PLAN (02/02/2004).
- 14. THE FIELD RUN TOPOGRAPHY AND SITE BOUNDARY WERE COMPLETED BY christopher consultants, inc. ON AND BETWEEN DECEMBER 27, 2002 AND DECEMBER 30, 2004.
- 15. THE COCRDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLAN COORDINATE SYSTEM MONUMENT NOS 43HA AND 43B6 WERE USED FOR THIS PROJECT (NAD 1983/91).
- TEST PIT ALL UTILITIES, INCLUDING PROPOSED TIE IN LOCATIONS, AT LEAST 5 DAYS PRIOR TO STARTING ANY WORK ON THESE DRAWINGS. DISCREPANCES SHALL BE REPORTED TO THE ENGINEER IN ADVANCE OF CONSTRUCTION START.
- 17. THE CONTRACTOR SHALL INSURE THAT CURRENT AS BUILT RECORDS ARE MAINTAINED DURING CONSTRUCTION. UPON COMPLETION OF CONSTRUCTION, CERTIFIED (i.e. P.E. STAMPED) AS-BUILT DRAWINGS SHALL BE SUBMITTED TO THE OWNER.
- WATER QUALITY MANAGEMENT FOR THIS SITE WILL BE PROVIDED IN AN ON-SITE BIORETENTION AREA. ALL STRUCTURES WILL BE PRIVATELY MAINTAINED.
- 19. OPERATING EXISTING VALVES, SWITCHES, SERVICES OR START UP OF NEW SERVICES SHALL BE COORDINATED WITH THE OWNERS REPRESENTATIVE.
- 20. THE REFOREST OBLIGATION OF 0.77AC(33,541.2 SQ FT@ \$0.50 PER SQ FT) FOR THIS PLAN HAS BEEN SATISFIED BY A FEE- IN- LIEU PAYMENT OF \$16,770.60 TO THE
- 21. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING IN THE AMOUNT OF \$1,200 HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT. (\$300 EACH FOR 2 SHADE , \$150 EACH FOR 4 EVERGREEN/ORNAMENTAL).
- 22. NO OUTDOOR LIGHTING OR STREET LIGHTS ARE PROPOSED BY THIS PLAN. IF ANY OUTDOOR LIGHTING IS ADDED TO THIS SITE, IT IS REQUIRED TO COMPLY WITH THE REQUIREMENTS OF
- 23. THE FLOODPLAIN INFORMATION FOR THIS AREA WAS DETERMINED IN THE FLOOD INSURANCE STUDY REPORT NUMBER 03-03-24IP DATED JANUARY 7, 2004.
- 23. NO CLEARING, GRADING, FILL, DISTURBANCE OR CONSTRUCTION IS PERMITTED WITHIN THE FLOOD PLAIN, 50' STREAM BUFFER, WETLANDS OR 25' WETLAND BUFFERS, EXCEPT AS SHOWN

## SITE ANALYSIS DATA CHART

HO. CO. FOREST CONSERVATION FUND.

- 1. PRESENT ZONING: M-2 PER THE 02/02/2004 COMP. ZONING PLAN
- 2. APPLICABLE DPZ FILE REFERENCES: N/A
  3. PROPOSED USE OF SITE OR STRUCTURE(S): N/A
  4. PROPOSED WATER AND SEWER SYSTEMS: N/A
- 5. TOTAL SITE AREA 6.50 AC.± (PARCEL 3)
  6. AREA OF THIS PLAN SUBMISSION: 0.55 AC±
  7. LIMIT OF DISTURBED AREA: 0.55 AC.±
- 8. ELECTION DISTRICT: NO.1, HOWARD COUNTY, MARYLAND
- 9. TAX MAP: 43 GRID: 16 10. PRIVATE 601 R/W: 1.495 AC.





VICINITY MAP
SCALE: | = 2000|

#### **BENCHMARK**

Horizontal Datum: Howard County Grid System Vertical Datum: NAVD 1929 Howard County Monument 43HA N540761.72, E1373837.37, Elev. 224.90 CONCRETE PILLAR WITH DISC Howard County Monument 43B6 N550601.61, E1376866.05, Elev. 210.56 CONCRETE PILLAR WITH DISC

APPROVED: DEPARTMENT OF PLANNING AND ZONING 8/1/06

> Revision Description PARCEL 3 ACCESS

AT DORSEY RUN INDUSTRIAL CENTER AND 60-FT RIGHT OF WAY FROM MONTEVIDEO ROAD OWNER / DEVELOPER

> MONTEVIDEO SOUTH BUSINESS TRUST C/O TRAMMELL CROW COMPANY

BETHESDA, MARYLAND 20814 TEL (301) 530-6200 FAX (301) 530-6131

7315 WISCONSIN AVENUE SUITE 300 W



**christopher** consultants engineering · surveying · land planning

christopher consultants, Itd. 7172 columbia gateway drive (suite 100) - columbia, md. 21046-2990 410.872.8690 · metro 301.881.0148 · fax 410.872.8893

STREET ADDRESS 7529 MONTEVIDEO ROAD, HOWARD COUNTY

APPROVED:

ERMIT INFORMATION CHART SECTION/AREA DORSEY RUN INDUSTRIAL CENTER ZONING TAX MAP NO. | ELECT DISTR | CENSUS TRACT

CHECKED: JMH

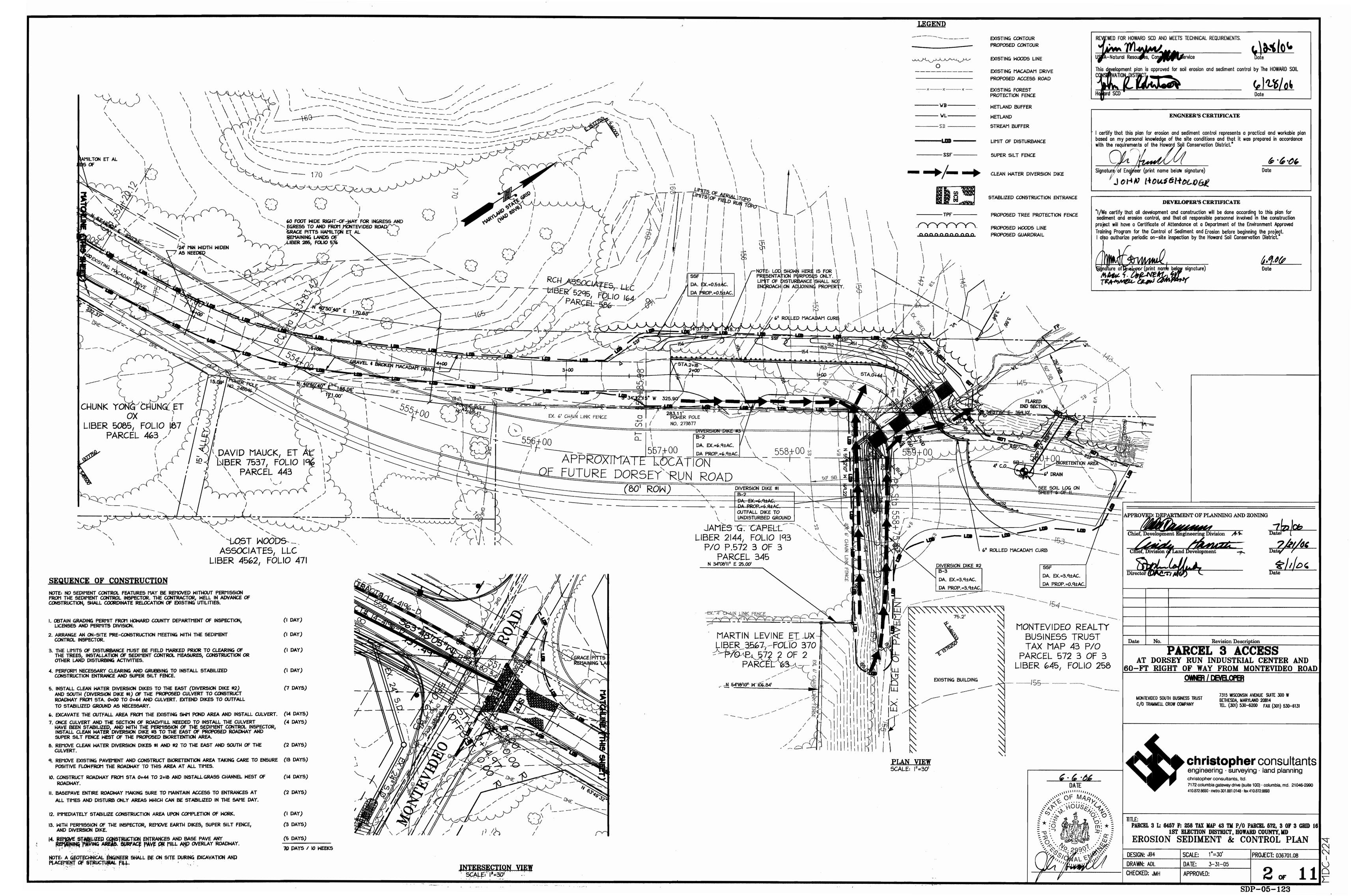
6012.02 222 100 PARCEL 3 L: 8457 F: 258 TAX MAP 43 TM P/O PARCEL 572, 3 OF 3 GRID 16

> 1ST ELECTION DISTRICT HOWARD COUNTY MD COVER SHEET SCALE: 1"=100' PROJECT: 036701.08 DATE: 3-31-05

> > SDP-05-123

LOT/PARCEL NO.

TM/PO PARCEL 572, 3 OF 3



#### 19.0 STANDARDS AND SPECIFICATIONS

RESHAPING OF THE EXISTING LAND SURFACE IN ACCORDANCE WITH A PLAN AS DETERMINED BY ENGINEERING SURVEY AND LAYOUT.

PURPOSE
THE PURPOSE OF A LAND GRADING SPECIFICATION IS TO PROVIDE FOR EROSION CONTROL AND VEGETATIVE ESTABLISHMENT ON THOSE AREAS WHERE THE EXISTING LAND SURFACE IS TO BE RESHAPED

THE GRADING PLAN SHOULD BE BASED UPON THE INCORPORATION OF BUILDING DESIGNS AND STREET LAYOUTS THAT FIT AND UTILIZE EXISTING TOPOGRAPHY AND DESIRABLE NATURAL SURROUNDING TO AVOID EXTREME GRADE MODIFICATIONS. INFORMATION SUBMITTED MUST PROVIDE SUFFICIENT TOPOGRAPHIC SURVEYS AND SOIL INVESTIGATIONS TO DETERMINE LIMITATIONS THAT MUST BE IMPOSED ON THE GRADING OPERATION RELATED TO SLOPE STABILITY, EFFECT ON ADJACENT PROPERTIES AND DRAINAGE PATTERNS, MEASURED FOR DRAINAGE AND WATER REMOVAL AND VEGETATIVE TREATMENT,

MANY COUNTRIES HAVE REGULATIONS AND DESIGN PROCEDURES ALREADY ESTABLISHED FOR LAND GRADING AND CUT AND FILL SLOPES. WHERE THESE REQUIREMENTS EXIST, THEY SHOULD BE FOLLOWED. THE PLAN MUST SHOW EXISTING AND PROPOSED CONTOURS OF THE AREA(S) TO BE GRADED. THE PLAN SHALL ALSO INCLUDE PRACTICES FOR EROSION CONTROL, SLOPE STABILIZATION, SAFE DISPOSAL OF RUNOFF WATER AND DRAINAGE, SUCH AS WATERWAYS, LINED DITCHES, REVERSE SLOPE BENCHES (INCLUDING GRADE AND CROSS-SECTION), GRADE STABILIZATION STRUCTURES, RETAINING WALLS, AND SURFACE AND SUBSURFACE DRAINS. THE PLAN SHALL ALSO INCLUDE PHASING OF THESE PRACTICES. THE FOLLOWING SHALL BE INCORPORATED INTO THE PLAN:

PROVISIONS SHALL BE MADE TO SAFETY CONDUCT SURFACE RUNOFF TO STORM DRAINS, PROTECTED OUTLETS OR TO STABLE WATER COURSES TO INSURE THAT SURFACE RUNOFF WILL NOT DAMAGE SLOPES

2. CUT AND FILL SLOPES THAT ARE TO BE STABILIZED WITH GRASSES SHALL NOT BE STEEPER THEN 2:1. (WHERE THE SLOPE ID TO BE MOWED THE SLOPE SHOULD BE NO STEEPER THEN 3:1: 4:1 IS PREFERRED BECAUSE OF SAFETY FACTORS RELATED TO MOWING STEEP SLOPES.

3. REVERSE BENCHES SHALL BE PROVIDED WHENEVER THE VERTICAL INTERVAL (HEIGHT) OF ANY 2:ISLOPES EXCEEDS 20 FEET; FOR 3:I SLOPES IT SHALL BE INCREASED TO 30 FEET AND FOR 4:I TO 40 FEET. BENCHES SHALL BE LOCATED TO DIVIDE THE SLOPES FACE AS EQUALLY AS POSSIBLE AND SHALL CONVEY THE WATER TO A STABLE OUTLET. SOILS, SEEPS, ROCK OUTCROPS, ETC., SHALL ALSO BE TAKEN INTO CONSIDERATION WHEN DESIGNING BENCHES.

- A. BENCHES SHALL BE A MINIMUM OF SIX-FEET WIDE TO PROVIDE EASE OF MAINTENANCE
- B. BENCHES SHALL BE DESIGNED WITH A REVERSE SLOPE OF 6:1 OF FLATTER TO THE TOE OF THE UPPER SLOPE AND WITH A MINIMUM OF ONE FOOT IN DEPTH. BENCH GRADIENT TO THE OUTLET SHALL BE BETWEEN 2 PERCENT AND 3 PERCENT, UNLESS ACCOMPANIED BY APPROPRIATE DESIGN AND
- C. THE FLOW LENGTH WITHIN A BENCH SHALL NOT EXCEED 800" UNLESS ACCOMPANIED BY APPROPRIATE DESIGN AND COMPUTATIONS. FOR FLOW CHANNEL STABILIZATION SEE TEMPORARY SWALES.

4. SURFACE WATER SHALL BE DIVERTED FROM THE FACE OF ALL CUT AND/OR FILL SLOPES BY THE USE OF EARTH DIKES, DITCHES AND SWALES OR CONVEYED DOWNSLOPE BY THE USE OF A DESIGNATED

- A. THE FACE OF THE SLOPE IS OR SHALL BE STABILIZED AND THE FACE OF ALL GRADED SLOPES SHALL BE PROTECTED FOR SURFACE RUNOFF UNTIL THEY ARE
- B. THE FACE OF THE SLOPE SHALL NOT BE SUBJECTED TO ANY CONCENTRATED SLOWS OF SURFACE WATER SUCH AS FROM NATURAL DRAINWAYS, GRADED SWALES, DOWNSPOUTS, ETC.
- C. THE FACE OF THE SLOPE WILL BE PROTECTED BY SPECIAL EROSION CONTROL MATERIALS, TO INCLUDE, BUT NOT LIMITED TO: APPROVED VEGETATIVE STABILIZATION PRACTICES (SEE SECTION G), RIP-RAP OR OTHER APPROVED

5. CUT SLOPES OCCURRING IN RIPABLE ROCK SHALL BE SERRATED AS SHOWN ON THE FOLLOWING DIAGRAM. THESE SERRATIONS SHALL BE MADE WITH CONVENTIONAL EQUIPMENT AS THE EXCAVATION IS MADE. EACH STEP OR SERRATION SHALL BE CONSTRUCTED ON THE CONTOUR AND WILL HAVE STEPS CUT AS NOMINAL TWO-FOOT INTERVALS WITH NOMINAL THREE-FOOT HORIZONTAL SHELVES. THESE STEPS MILL VARY DEPENDING ON THE SLOPE RATIO OR THE CUT SLOPE. THE NOMINAL SLOPE LINE IS 1:1. THESE STEPS WILL WEATHER AND ACT TO HOLD MOISTURE, LIME, FERTILIZER AND SEED THUS PRODUCING A MUCH QUICKER AND LONGER LIVED VEGETATIVE COVER AND BETTER SLOPE STABILIZATION. OVER LAND FLOW SHALL BE DIVERTED FROM THE TOP OF ALL SERRATED CUT SLOPES AND CARRIED TO

6. SURFACE DRAINAGE SHALL BE PROVIDED WHERE NECESSARY TO INTERCEPT SEEPAGE THAT WOULD OTHERWISE ADVERSELY AFFECT SLOPE STABILITY OR CREATE EXCESSIVELY WET SITE CONDITIONS.

. SLOPES SHALL NOT BE CREATED TO CLOSE TO PROPERTY LINES AS THE ENDANGER ADJOINING PROPERTIES WITHOUT ADEQUATELY PROTECTING SUCH PROPERTIES AGAINST SEDIMENT, EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED DAMAGES.

6. FILL MATERIAL SHALL BE FREE OF BRUSH, RUBBISH, ROCKS, LOGS, STUMPS, BUILDING DEBRIS, AND OTHER OBJECTIONABLE MATERIAL. IT SHOULD BE FREE OF STONES OVER TWO (2) INCHES IN DIAMETER WHERE COMPACTED BY HAND OR MECHANICAL TEMPERS OVER EIGHT (8) INCHES IN DIAMETER WHERE COMPACTED BY ROLLERS OR OTHER EQUIPMENT. FROZEN MATERIAL SHALL NOT BE PLACED IN THE FILL NOR SHALL THE FILL MATERIAL BE PLACED ON A FROZEN FOUNDATION.

9. STOCKPILES, BORROW AREAS AND SPOIL SHALL BE SHOWN ON THE PLANS AND SHALL BE SUBJECTED TO THE PROVISIONS OF THE STANDARD AND SPECIFICATIONS.

ALL DISTURBED AREAS SHALL BE STABILIZED STRUCTURALLY OR VEGETATIVELY IN COMPLIANCE WITH 20.0 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION.

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

TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILD 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 IN NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.
- B. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FURNISH CONTINUING SUPPLIES OF MOISTURE
- C. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIALS TOXIC TO PLANT
- D. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.

FOR THE PURPOSE OF THESE STANDARDS AND SPECIFICATION, AREAS HAVING SLOPES STEEPER THAT 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN FOR ADEQUATE STABILIZATION. AREAS HAVING SLOPES STEEPER THAT 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 SPECIFICATIONS. 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:

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 BOT BE A MIXTURE OF CONTRASTINF TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY

ROOTS, TRASH, OR OTHER MATERIALS LARGE THAN I ? IN DIAMETER.

TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY

II. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSONGRASS, NUTSEDGE, POISON IVY, THISTLE, OR

VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS,

- III. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD TO THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1,000SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED IN TO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.
- 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.

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 TOPSOIL SHALL BE BETWEEN 6.0 AND 7.5. IF TESTED SOIL DEMONSTRATES A PH OF LESS THE 6.0, SUFFICIENT LIME SHALL BE PRESCRIBED TO RAISE PH TO 6.5 OR HIGHER.

- B. ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THEN 1.5 PERCENT BY
- C. TOPSOIL HAVING SOLUBLE SALT CONTENT GRATER THEN 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 DAY MIN.) TO PERMIT DISSIPATION OF

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

PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED ON 20.0 VEGETATIVE <u>STABILIZATION</u> - SECTION | - VEGETATIVE STABILIZATION METHODS AND MATERIALS.

WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICED SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SILT FENCES AND SEDIMENT

GRADES IN THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBEIT 4" - 8" HIGHER IN ELEVATION.

TOPSOIL SHALL BE UNIFORMY DISTRIBUTED IN A 4" - 8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 41. 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.

TOPSOIL SHALL NOT BE PLACE WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL ID EXCESSIVELY WET IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.

ALTERNATIVE FOR PERMANENT SEEDING - INSTEAD OF APPLYING THE FULL AMOUNTS OF LIKE AND COMMERCIAL FERTILIZER, COMPOSTED SLUDGE AND AMENDMENTS MAT BE APPLIED AS SPECIFIED

COMPOSTED SLUDGE MATERIALS FOR USE AS A SOIL CONDITIONER FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES SHALL BE TESTED TO PRESCRIBE AMENDMENTS AND FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

- A. COMPOSTED SLUDGE SHALL BE SUPPLIED BY, OR ORIGINATED FROM, A PERSON OR PERSONS THAT ARE PERMITTED (AT THE TIME OF ACQUISITION OF THE COMPOST) BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT
- B. COMPOSTED SLUDGE SHALL CONTAIN AS LEAST | PERCENT NITROGEN, 1.5 PERCENT PHOSPHORUS, 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
- C. COMPOSTED SLUDGE SHALL BE APPLIED AT A RATE OF I TON/1,000

COMPOSTED SLUDGE SHALL BE AMENDED WITH A POTASSIUM FERTILIZER 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 EXTENTION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTES.

#### 30.0 DUST CONTROL

CONTROLLING DUST BLOWING AND MOVEMENT ON CONSTRUCTION SITES AND ROADS.

TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES, REDUCE ON AND OFF-SITE DAMAGE, HEALTH HAZARDS, AND IMPROVE TRAFFIC SAFETY.

CONDITIONS WHERE PRACTICE APPLIES
THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO DUST BLOWING AND MOVEMENT WHER IN AND OFF-SITE DAMAGE IS LIKELY WITHOUT TREATMENT.

I. 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 ROUGHEN 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 SPACED ABOUT 12" APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICJ 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 - SOILD BOARD FENCES, SILT FENCES, SNOW FENCES, BURLAP FENCES, STAW BALES, AND SIMILAR MATERIALS CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO TREVAILING CURRENTS AT INTERVALS OF ABOUT 10 TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING SOIL BLOWING 6. CALCIUM CHLORIDE - APPLY AT RATES THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.

## PERMANENT METHODS

- 1. PERMANENT VEGETATION SEE STANDARDS FOR PERMANENT VEGETATIVE COVER, AND PERMANENT STABILIZATION WITH SOD. EXISTING TREES OR LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE. ]
- 2. TOPSOIL COVERING WITH LESS EROSIVE MATERIALS. SEE STANDARDS FOR TOPSOILDING.
- 3. STONE COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

I. AGRICULTURE HANDBOOK 346. WIND EROSION FORCES IN THE UNITED STATE AND THEIR USE IN PREDICTING SOIL LOSS.

2. AGRICULTURE INFORMATION BULLETIN 354. HOW TO CONTROL WIND EROSION, USDA - ARS.

## 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:

I. PREFERRED--APPLY 2 TONS/ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ. FT.) AND 600 LBS/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/ACRE 30-0-0 UREA FORM FERTILIZER (9 LBS/1000 SQ. FT.)

2. ACCEPTABLE--APPLY 2 TONS/ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ. FT.) AND 1000 LBS/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! -- APRIL 30, AND AUGUST! -- OCTOBER 15, SEED WITH 60 LBS/ACRE (1.4 LBS/1000 SQ. FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY! -- JULY 31, SEED WITH 60 LBS KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS/ACRE (.05 LBS/1000 SQ. FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 -- FEBRUARY 28, PROTECT SITE BY: OPTION I - TWO TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE

OPTION 2 - USE SOD. OPTION 3 -- SEER: WITH 60 LBS/ACRE KENTUCKY 30 TALL FESCUE AND MULCH WITH 2 TONS/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 SLOPE 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ. FT.) FOR ANCHORING.

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

## TEMPORARY SEEDING NOTES.

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE RE-DISTURBED WHERE A SHORT-TERM VEGETATIVE COVER

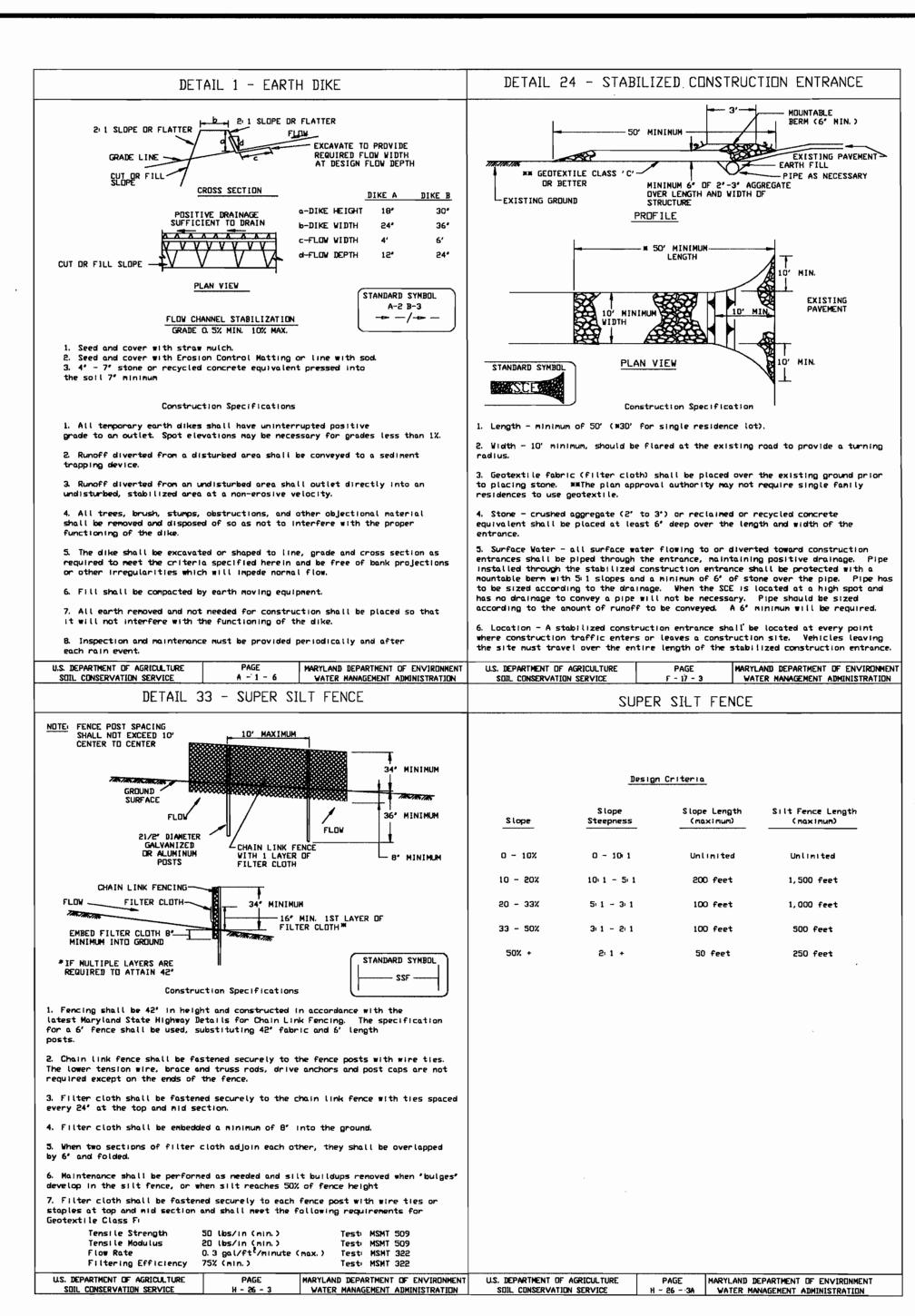
EEDBED PREPARATION: -- LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

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

SEEDING: -- FOR PERIODS MARCH! -- APRIL 30 AND FROM AUGUST 15 -- OCTOBER 15, SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SQ. FT.). FOR THE PERIOD MAY! -- AUGUST 14, SEED WITH 3 LBS/ACRE OF WEEPING LOVEGRASS (.07 LBS/1000 SQ. FT.). FOR THE PERIOD NOVEMBER 16 -- FEBRUARY 28 PROTECT THE SITE BY APPLYING 2 TONS/ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

MULCHING: -- APPLY 1-1/2 TO 2 TONS/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 SLOPE 8 FT. OR HIGHER, USE 348 GAL. PER ACRE (8 GAL/1000 SQ. FT.) FOR ANCHORING.

REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL FOR ADDITIONAL RATES AND METHODS NOT COVERED.



## HOWARD COUNTY SOIL CONSERVATION DISTRICT

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 ANY 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

3. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, 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 I, CHAPTER 12 OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.

5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIC ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARD AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. 51), SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SECTION 52). TEMPORARY STABILIZATION WITH MULCH ALONG 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 BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

7. SITE ANALYSIS: TOTAL AREA OF SITE B 7.98 ACRES (6.49 AC PARCEL 3 + 1.49 AC RIGHT-OF-WAY) AREA DISTURBED \_\_\_\_L23\_\_\_ACRES

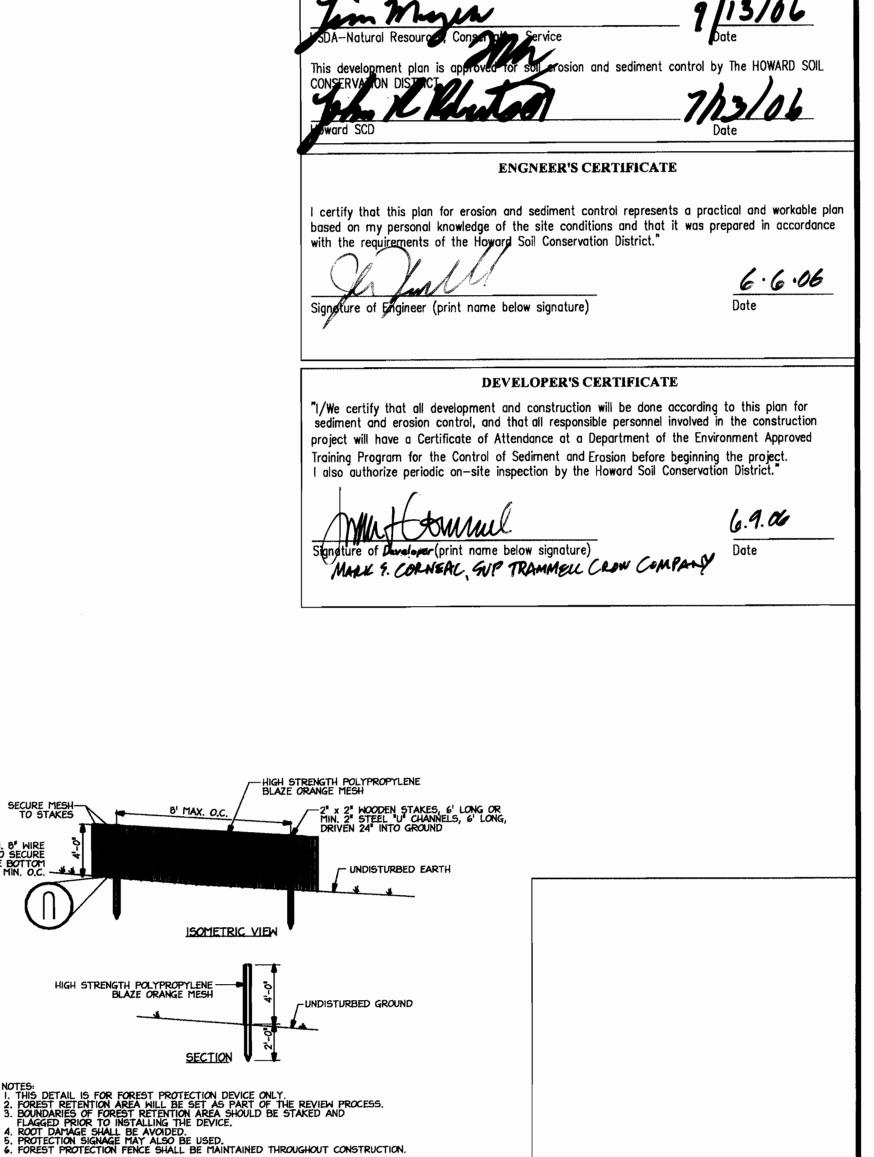
AREA TO BE ROOFED OR PAVED \_\_\_\_O.66\_ ACRES 

TOTAL FILL \_\_\_1231.0\_\_CU. YDS. OFFSITE WASTE/BORROW AREA LOCATION: \_\_\_\_\_\_T.B.D. 8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.

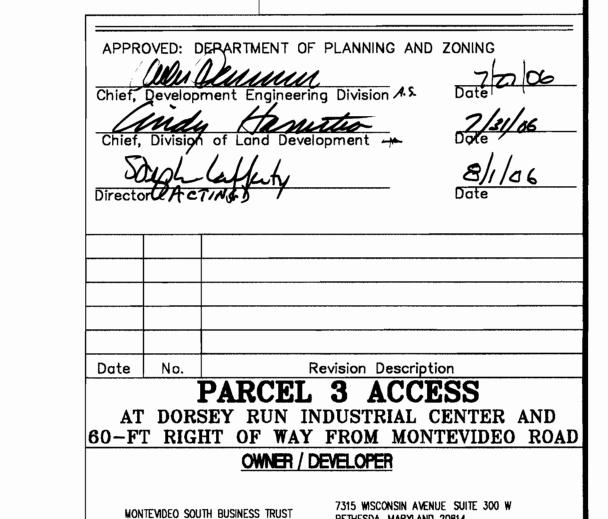
9. ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

10. ON ALL SITE WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTLLATION 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.

II. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORK DAY, WHICHEVER IS SHORTER.



REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.



6.6.06 410.872.8690 · metro 301.881.0148 · fax 410.872.8693 OF MAR HOUSE

C/O TRAMMELL CROW COMPANY

Forest Protection Fence

**christopher** consultants engineering · surveying · land planning christopher consultants, Itd. 7172 columbia gateway drive (suite 100) - columbia, md. 21046-2990

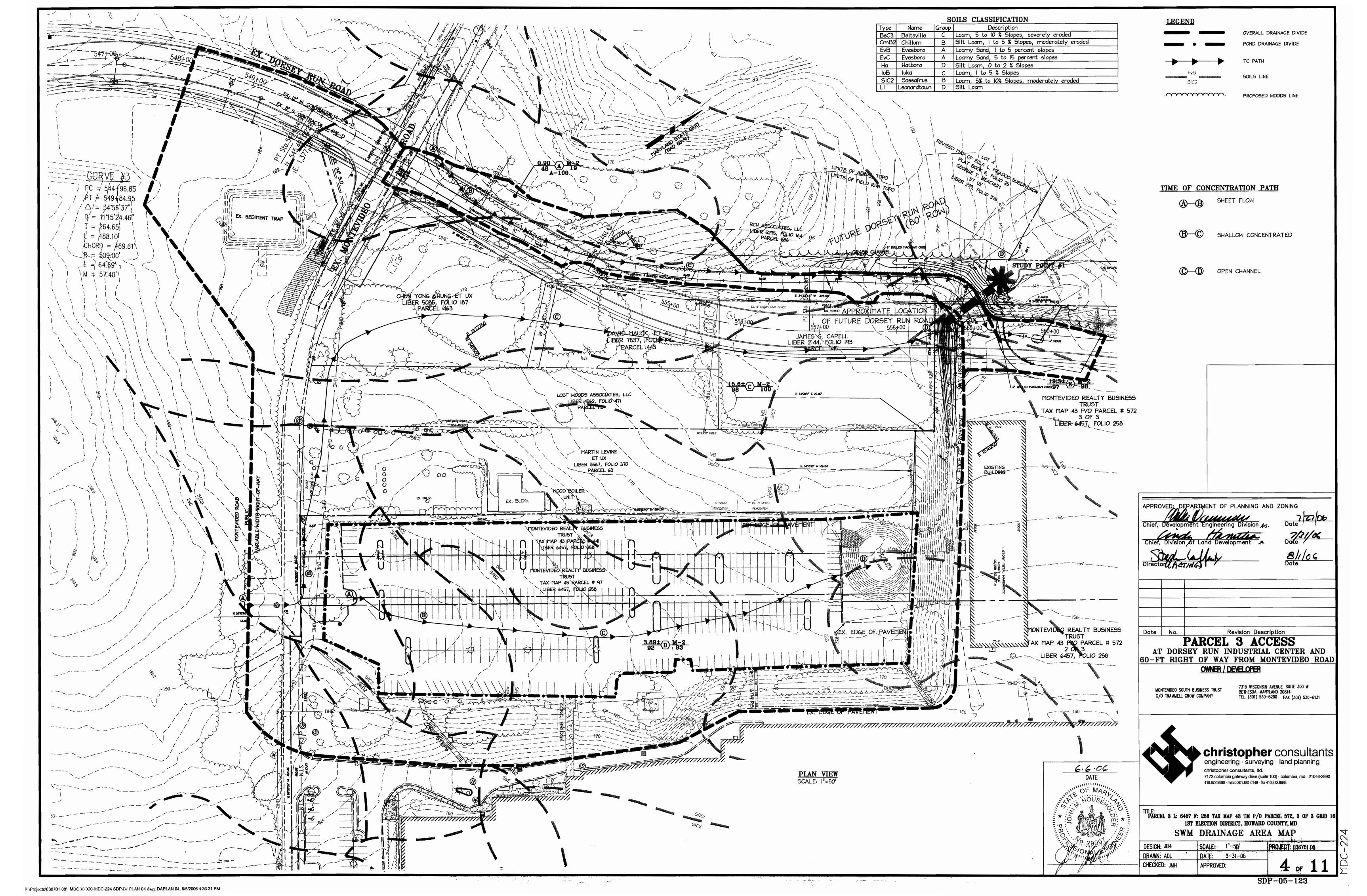
BETHESDA, MARYLAND 20814

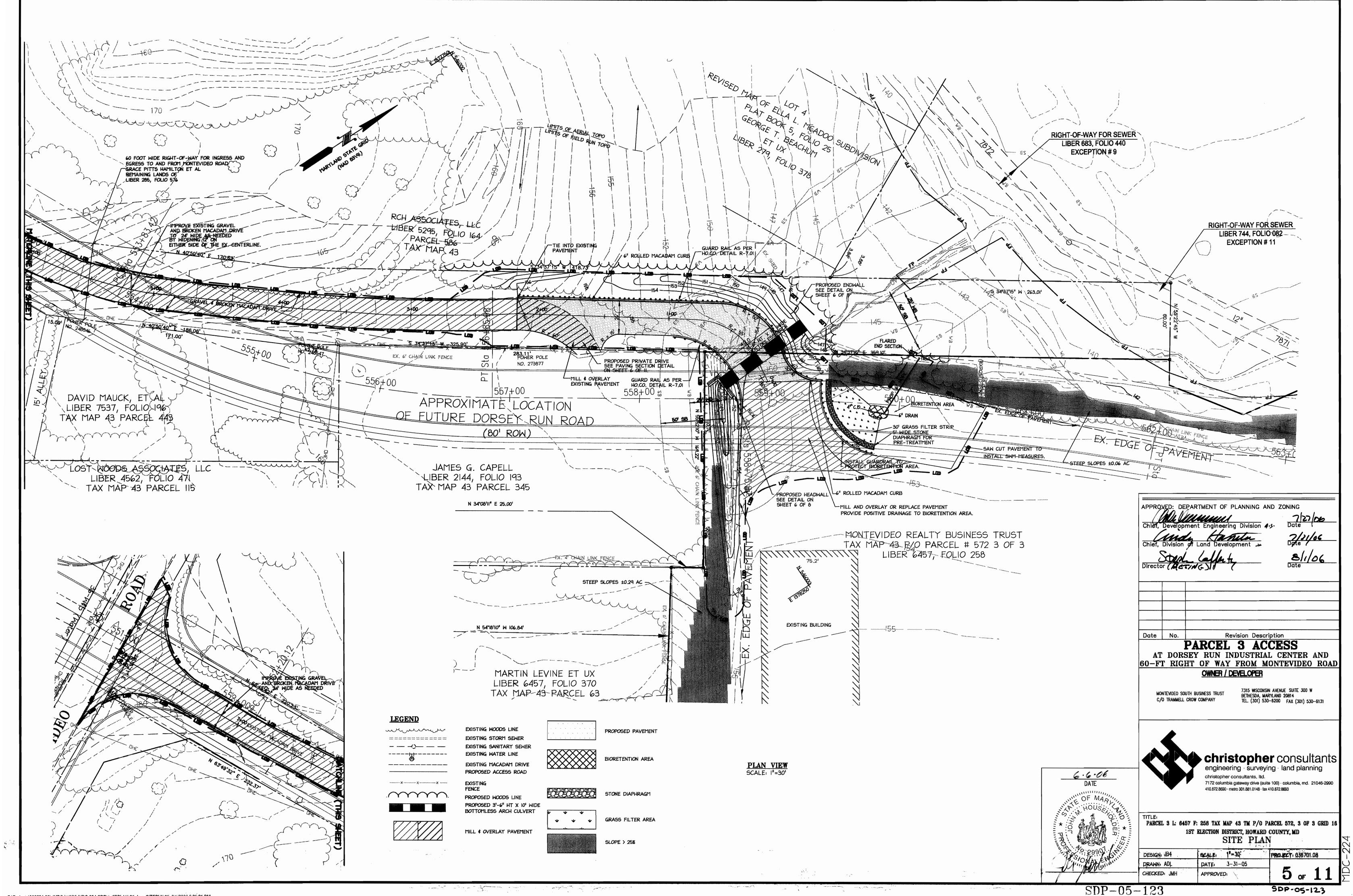
TEL. (301) 530-6200 FAX (301) 530-6131

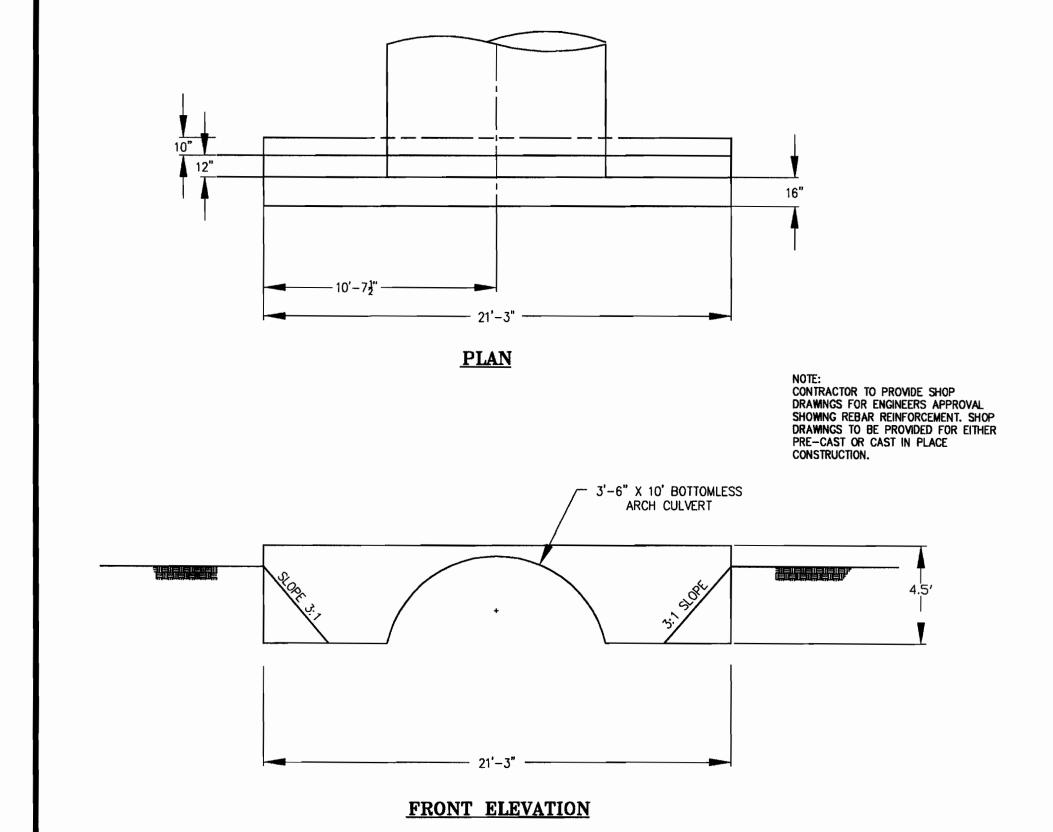
PARCEL 3 L: 6457 F: 258 TAX MAP 43 TM P/O PARCEL 572, 3 OF 3 GRID 1 1ST ELECTION DISTRICT, HOWARD COUNTY, MD EROSION AND SEDIMENT CONTROL

DETAILS SCALE: AS SHOWN PROJECT: 036701.08 DESIGN: JB4 DRAWN: ADL **DATE:** 3–31–05 CHECKED: JMH OF

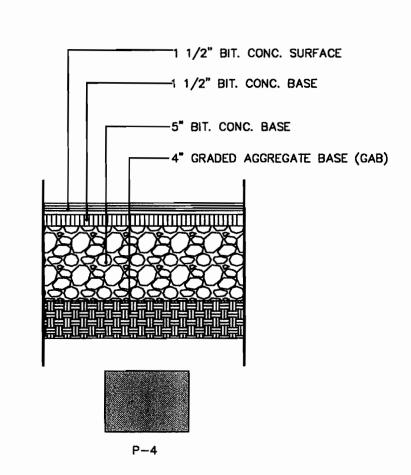
SDP-05-123



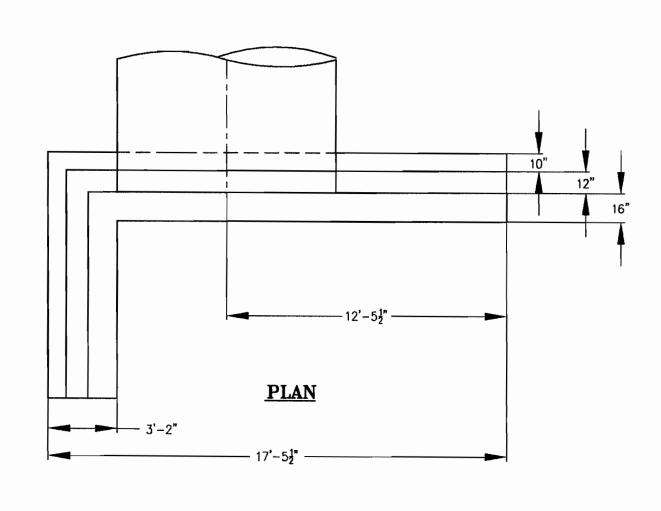


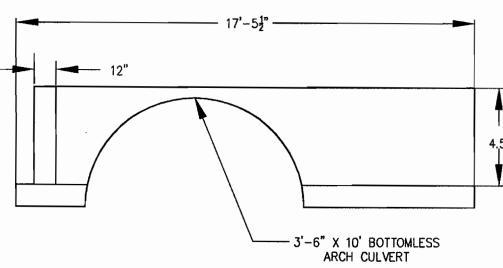


ENDWALL BOTTOMLESS ARCH CULVERT NOT TO SCALE

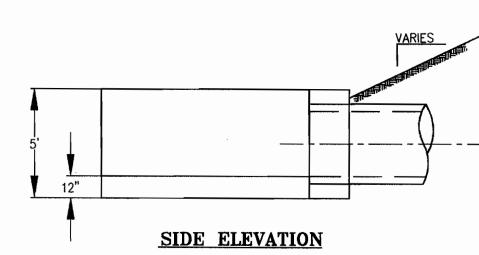


\* BITUMINOUS CONCRETE TO BE PLACED AND COMPACTED IN 5 INCH MAXIUM LOOSE THICKNESS LAYERS.



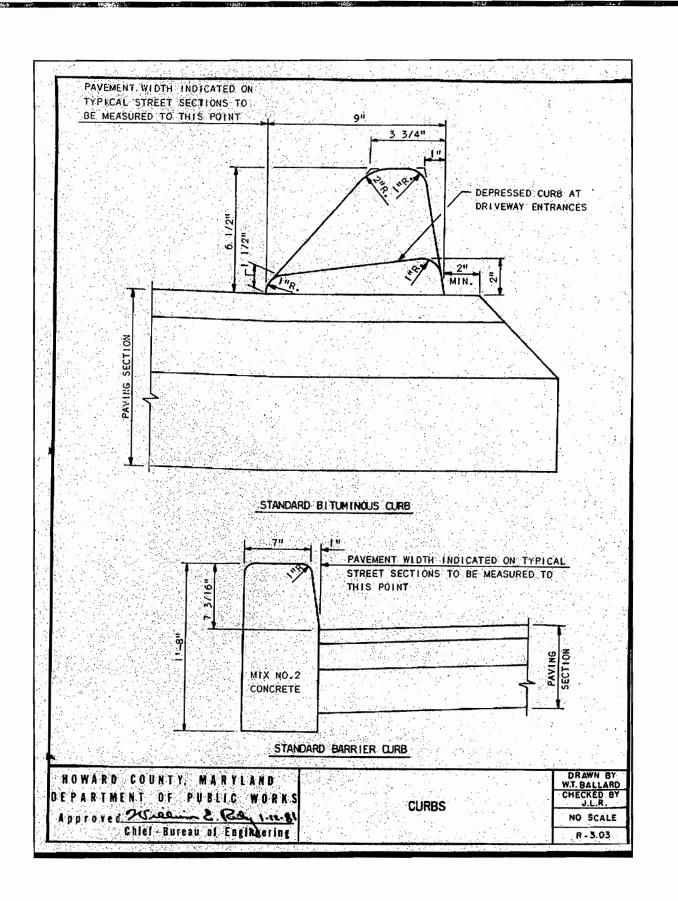


FRONT ELEVATION

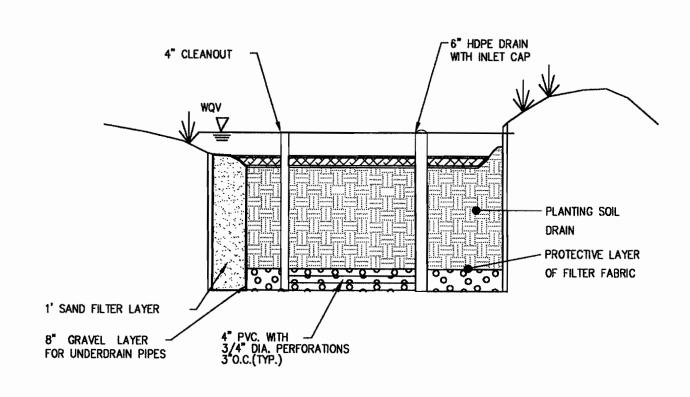


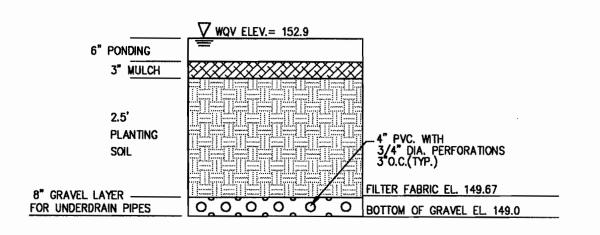
CONTRACTOR TO PROVIDE SHOP
DRAWINGS FOR ENGINEERS APPROVAL
SHOWING REBAR REINFORCEMENT. SHOP
DRAWINGS TO BE PROVIDED FOR EITHER

PRE-CAST OR CAST IN PLACE CONSTRUCTION.

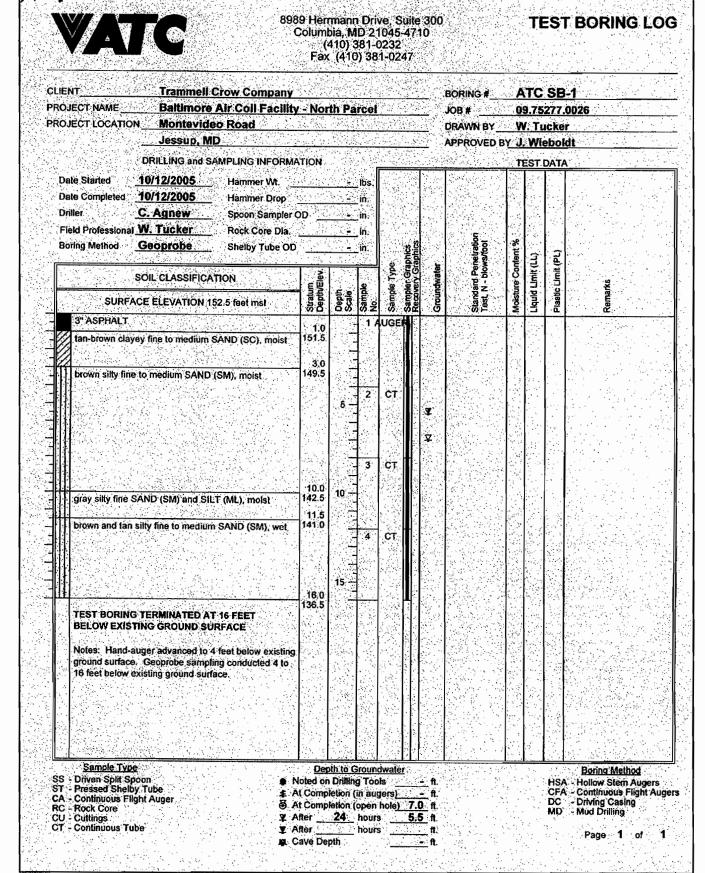


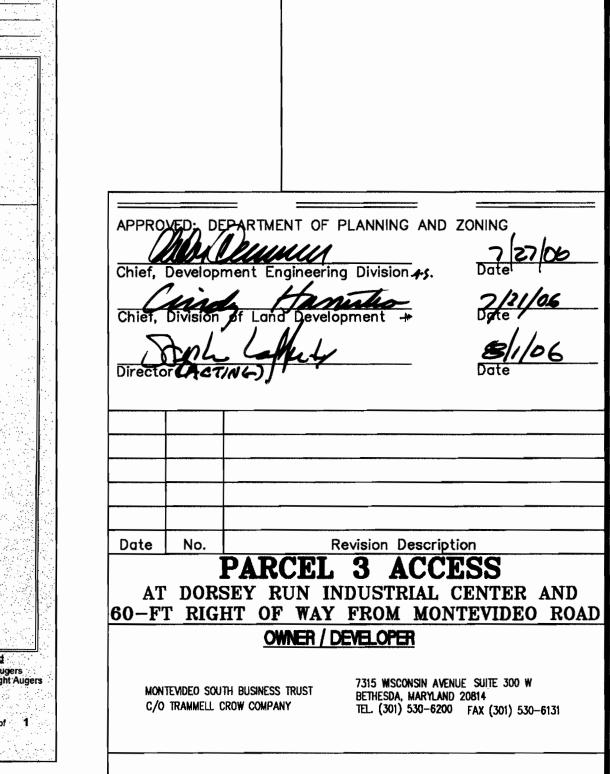
HEADWALL BOTTOMELSS ARCH CULVERT
NOT TO SCALE

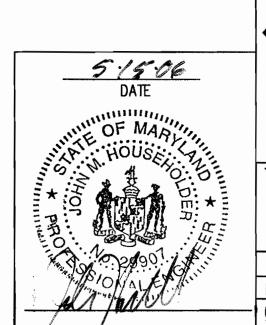




BIORETENTION #1







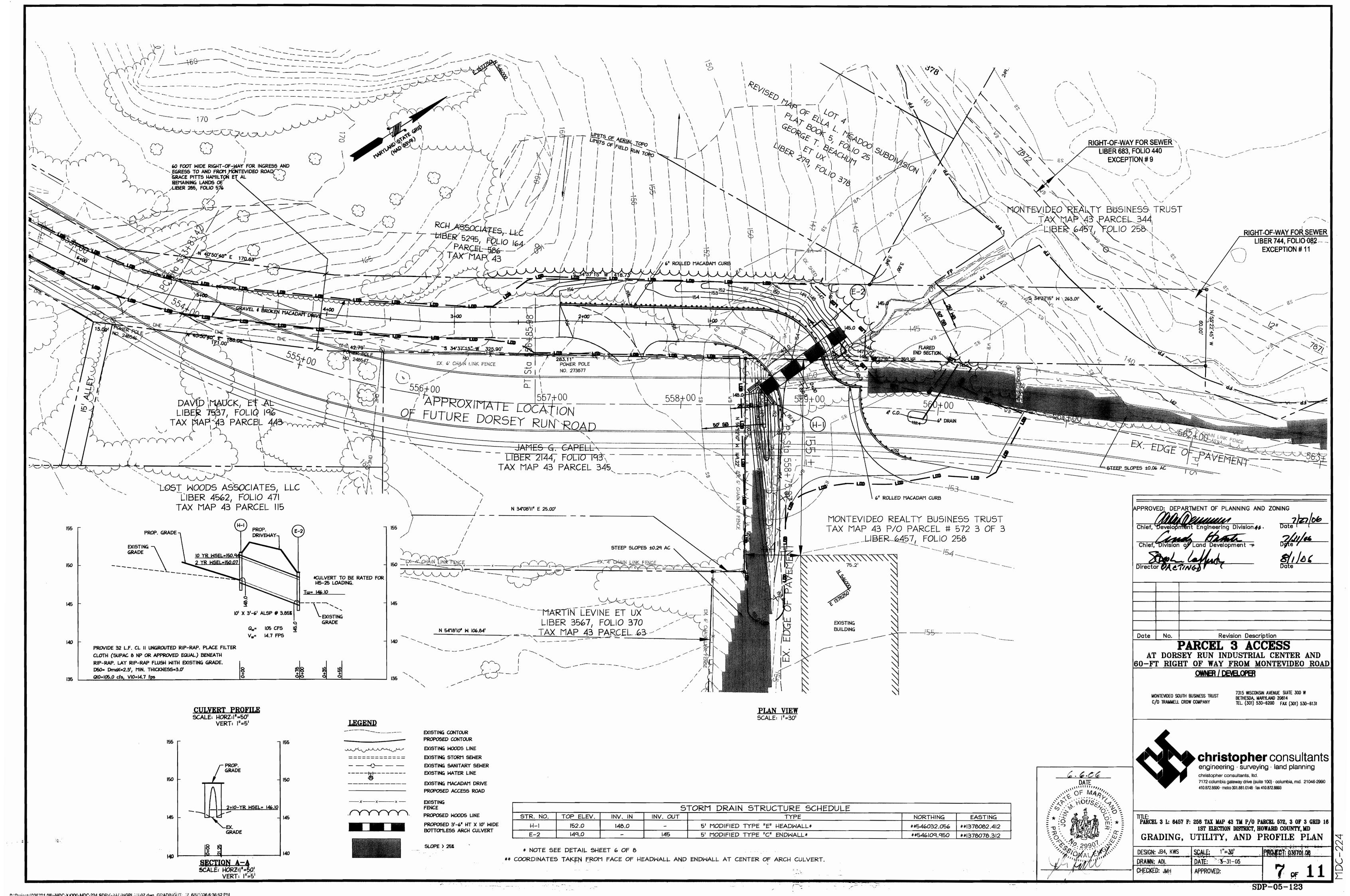
**christopher** consultants engineering · surveying · land planning christopher consultants, ltd. 7172 columbia gateway drive (suite 100) columbia, md. 21046-2990 410.872.8690 · metro 301.881.0148 · fax 410.872.8693

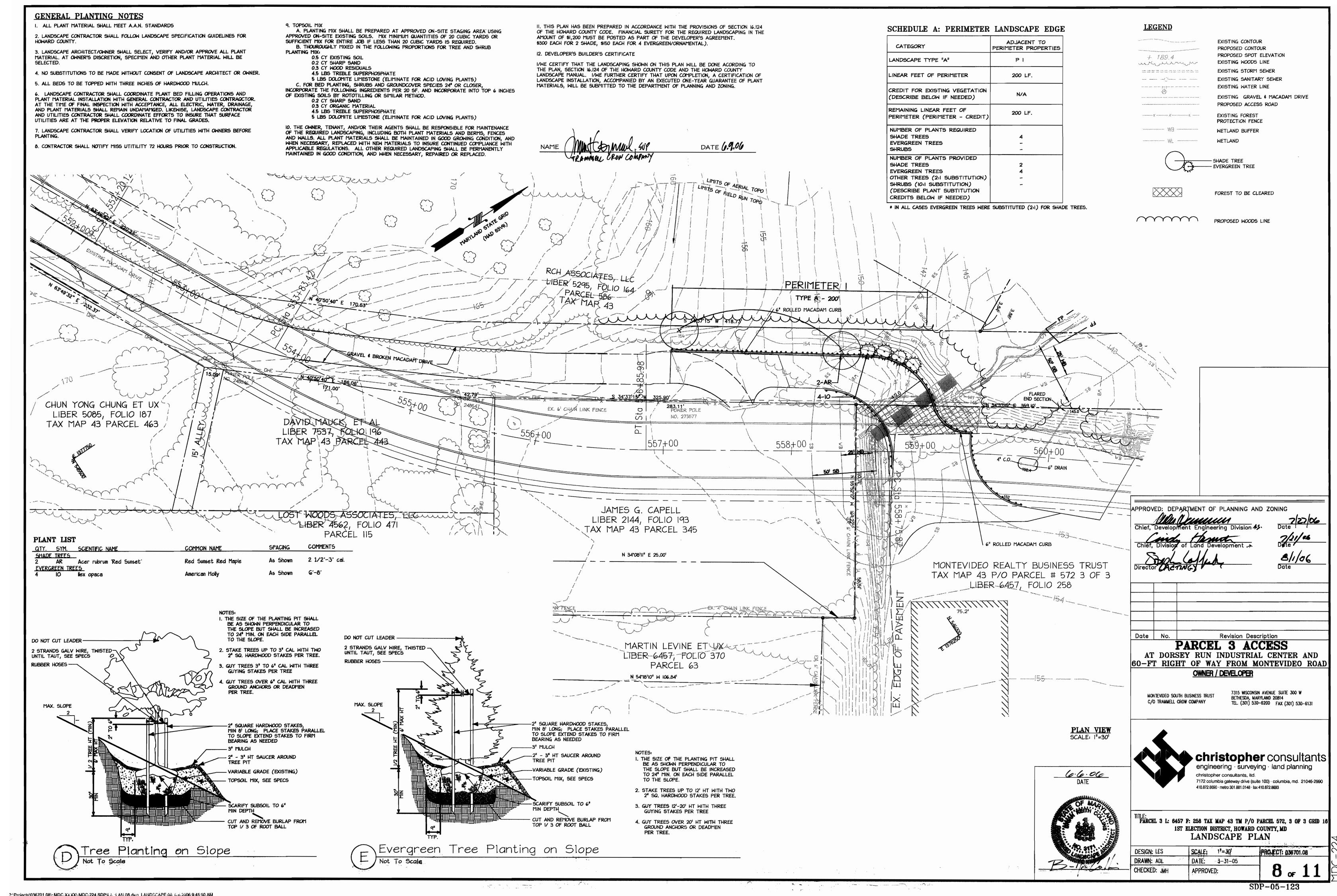
PARCEL 3 L: 6457 F: 258 TAX MAP 43 TM P/O PARCEL 572, 3 OF 3 GRID 16 1ST ELECTION DISTRICT, HOWARD COUNTY, MD SITE DETAILS

PROJECT: 038701.08 SCALE: AS SHOWN DESIGN: ADL DRAWN: ADL DATE: 3-31-65 CHECKED: JMH APPROVED:

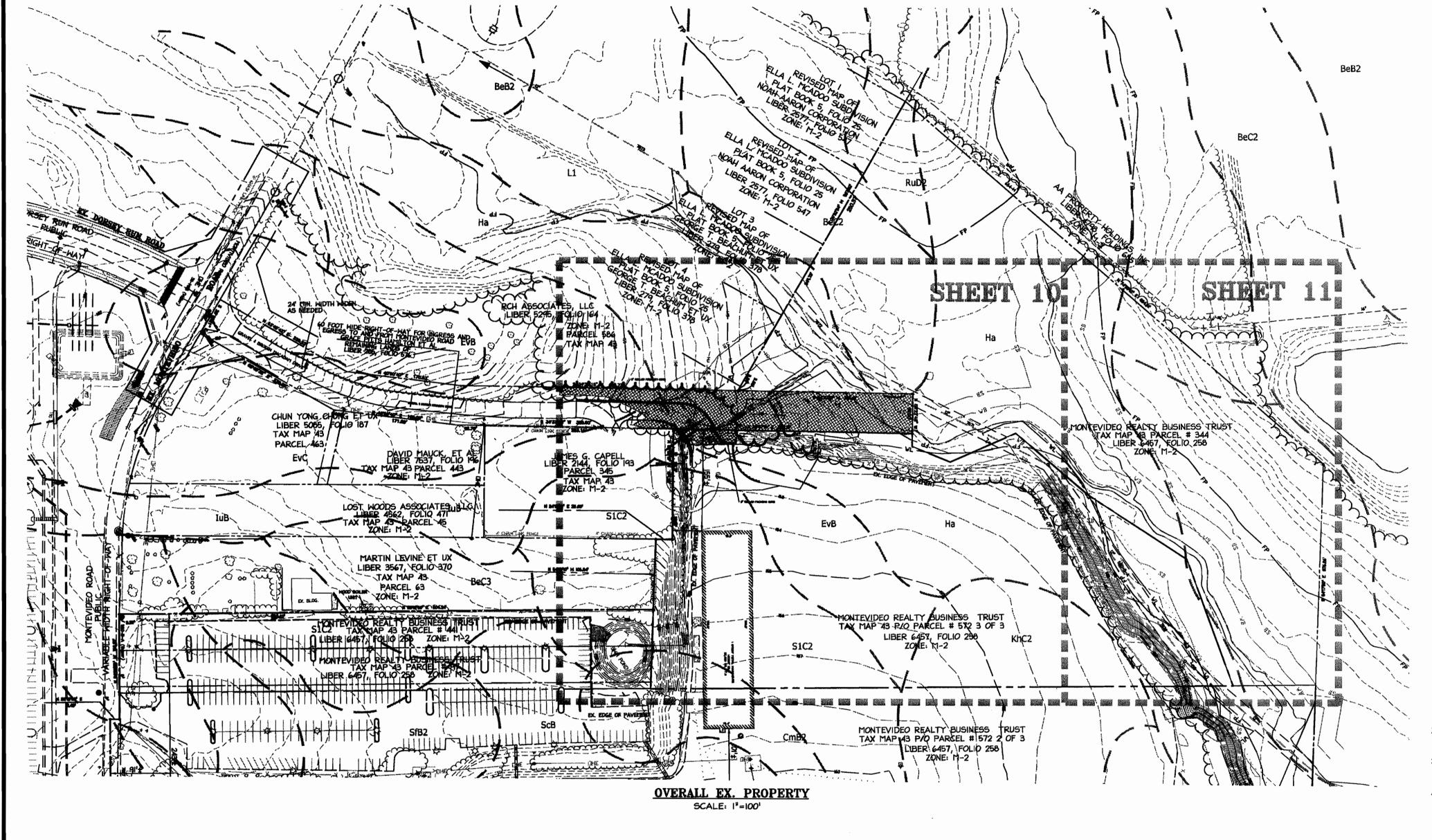
P:\Projects\036701.08\-MDC-XXXX\-MDC-224 SDP\SITEDETAIL-06.dwg, DETAILPLN-06, 4/19/2006 2:41:55 PM

SDP-05-123





## FOREST CONSERVATION PLAN FOR PARCEL 3 AT DORSEY RUN INDUSTRIAL CENTER



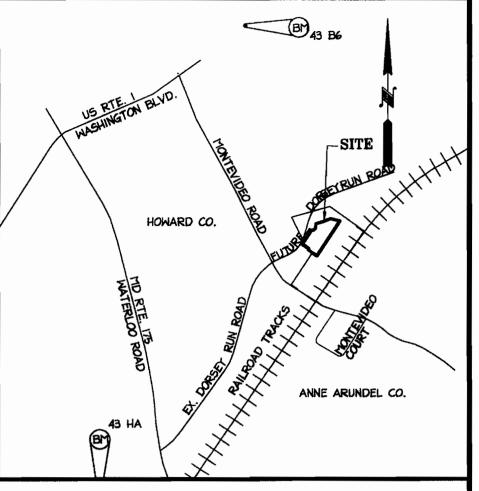
Proposed Treeline

∴ Other Existing Vegetation

Floodplain (100 YR) Boundary

Forest to be Cleared

Forest to Remain



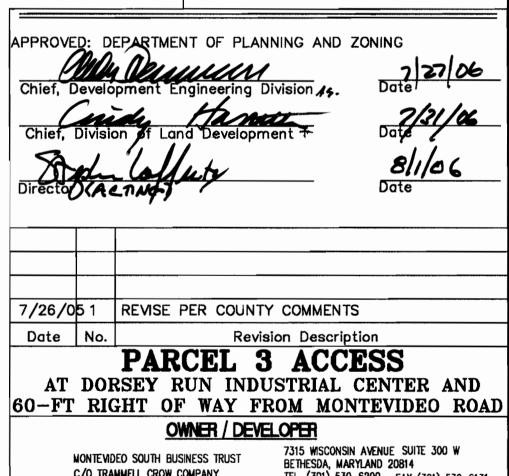
VICINITY MAP
SCALE: |"=2000"

The goal of this plan is to address the Forest Conservation Act and any reforestation/afforestation that may be required for Parcel 3. This project proposes minimal clearing to allow for the connection of the existing access road and existing parking lot, clearing a total of ±0.04 acres on the subject property (not contained in the Net Tract). The remaining existing forest will remain, However it will not be placed in an easement and for the purposes of the calculations has been considered cleared.

Please note: The clearing in the access right-of-way (±0.29 acres) has been assessed separately from Parcel 3. See calculations on sheet 3.

## General Notes

- . All existing forest not on the net tract area is to remain unless otherwise noted. It has not been included in the forest conservation calculations or Forest Conservation Easement.
- 2. Separate calculations were done for the access Right-of Way, see calculations on sheet 3.
- 3. No forest retention is proposed under this plan, therefore no surety is required.
- 4. The forestation obligation of 0.77 acre (33,541.2 sq ft @ \$0.50 per sq ft) for this plan has been satisfied by a fee-in-lieu payment of \$16,770.60 to the H0.Co. Forest Conservation Fund.



7315 WISCONSIN AVENUE SUITE 300 W BETHESDA, MARYLAND 20814 TEL. (301) 530-6200 FAX (301) 530-6131 C/O TRAMMELL CROW COMPANY

**christopher** consultants

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ADDRESS CHART LOT/PARCEL # STREET ADDRESS 7595 MONTEVIDEO ROAD, HOWARD COUNTY, MD PERMIT INFORMATION CHART PROJECT NAME SECTION/AREA LOT/PARCEL NO. DORSEY RUN INDUSTRIAL CENTER TM/PO PARCEL 572, 3 OF 3 PLAT# or L/F GRID # ZONING TAX MAP NO. ELECT DISTR CENSUS TRACT M-2 6012.02 WATER CODE

TITLE: PARCEL 3 L: 6457 F: 258 TAX MAP 43 TM P/O PARCEL 572 3 OF 3 GRID 16
1ST ELECTION DISTRICT, HOWARD COUNTY, MD. COVER SHEET FOREST CONSERVATION PLAN

DATE: 2-7-05 APPROVED:

06/06/06 DKTF

