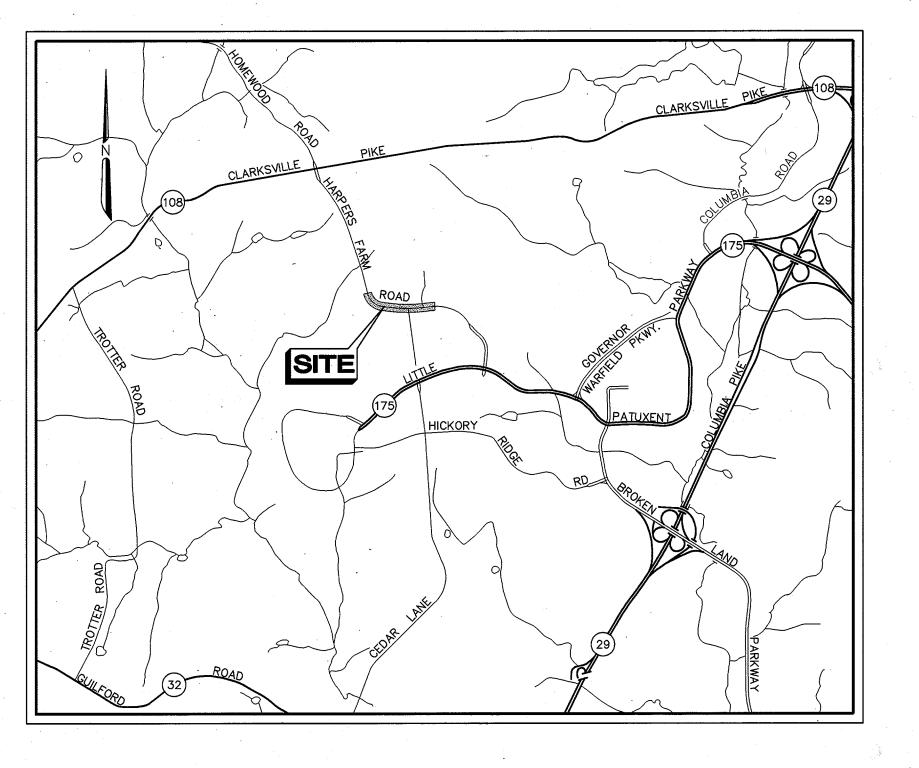
SHEET NO.

DESCRIPTION

PLAN, TYPICAL SECTION AND STORM DRAIN PROFILE
SEDIMENT AND EROSION CONTROL PLAN
SIGNING AND STRIPING PLAN
CROSS SECTIONS



LOCATION MAP SCALE 1" = 2000'

CAPITAL PROJECT NO. J-4164

Harpers Farm Road

STA. 45+00 to STA. 54+40 (STAGE I)

HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS

GENERAL NOTES

- 1. ALL INFORMATION AND DETAILS ON THESE DRAWINGS SHALL BE AS DIRECTED BY THE HOWARD COUNTY ENGINEER.
- 2. ALL STATIONING AND DIMENSIONING ARE TO BE FIELD VERIFIED
- BY CONTRACTOR.

 3. STORM DRAINAGE SLOPES ARE TO BE AS DIRECTED BY HOWARD COUNTY ENGINEER UNLESS OTHERWISE SHOWN ON PLANS.
- 4. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS.

MISS UTILITY 1-800-257-7777

Baltimore Gas & Electric Company — Electric Distribution

THE CONTRACTOR SHALL CONTACT THE HOWARD COUNTY CONSTRUCTION INSPECTION DIVISION OF ENGINEERING FOR VERIFICATION AND/OR INFORMATION REGARDING:

- A. PROPOSED/EXISTING RIGHT-OF-WAY.
- B. UTILITY RELOCATION.
- C. MAINTENANCE OF TRAFFIC DURING CONSTRUCTION.
 D. EROSION/SEDIMENT CONTROL CERTIFICATION AND PERMIT
- E. HORIZONTAL/VERTICAL SURVEY CONTROL.

 5. SEE HOWARD COUNTY STANDARD DETAILS NO'S G-1.01 & G-1.02 FOR
- STANDARD SYMBOLS.

 6 A STACING AND STOCKPHE AREA TO BE DETERMINED BY CONTRACTO
- 6. A STAGING AND STOCKPILE AREA TO BE DETERMINED BY CONTRACTOR AND APPROVED BY HOWARD COUNTY ENGINEER.
- 7. TOPOGRAPHIC SURVEY INFORMATION BASED ON FIELD SURVEY

IMPROVEMENTS SHOWN ON THESE PLANS.

- PREFORMED BY R.B.A. ON 5/8/97

 8. CONTRACTOR TO EXCAVATE TEST PITS AS NECESSARY TO VERIFY THE LOCATION AND ELEVATION OF ANY UTILITIES IN THE VICINITY OF
- DRAINAGE STRUCTURES.

 9. CONTRACTOR TO VERIFY OFFSET DISTANCE AND TOP ELEVATIONS FOR DRAINAGE STRUCTURES TO CONFORM WITHOUT IRREGULARITY TO PROPOSED
- FINISHED PAVING SURFACE AND TOP CURB GRADES RESPECTIVELY.

 10. TRAFFIC SIGNAL STRUCTURES, WIRING AND CONTROLS TO BE RELOCATED "BY OTHERS" UNDER SEPERATE CONTRACT PRIOR TO CONSTRUCTION OF

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

U.S. Natura Resources Conservation Service Date

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

Howard Soil Conservation District

Date

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

CHIEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMEN

, 27,112

C744DZOI

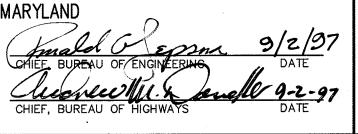
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS

DATE

William J. While J. 8/29/9-7

CHIEF, TRANSPORTATION PROJECTS AND DATE







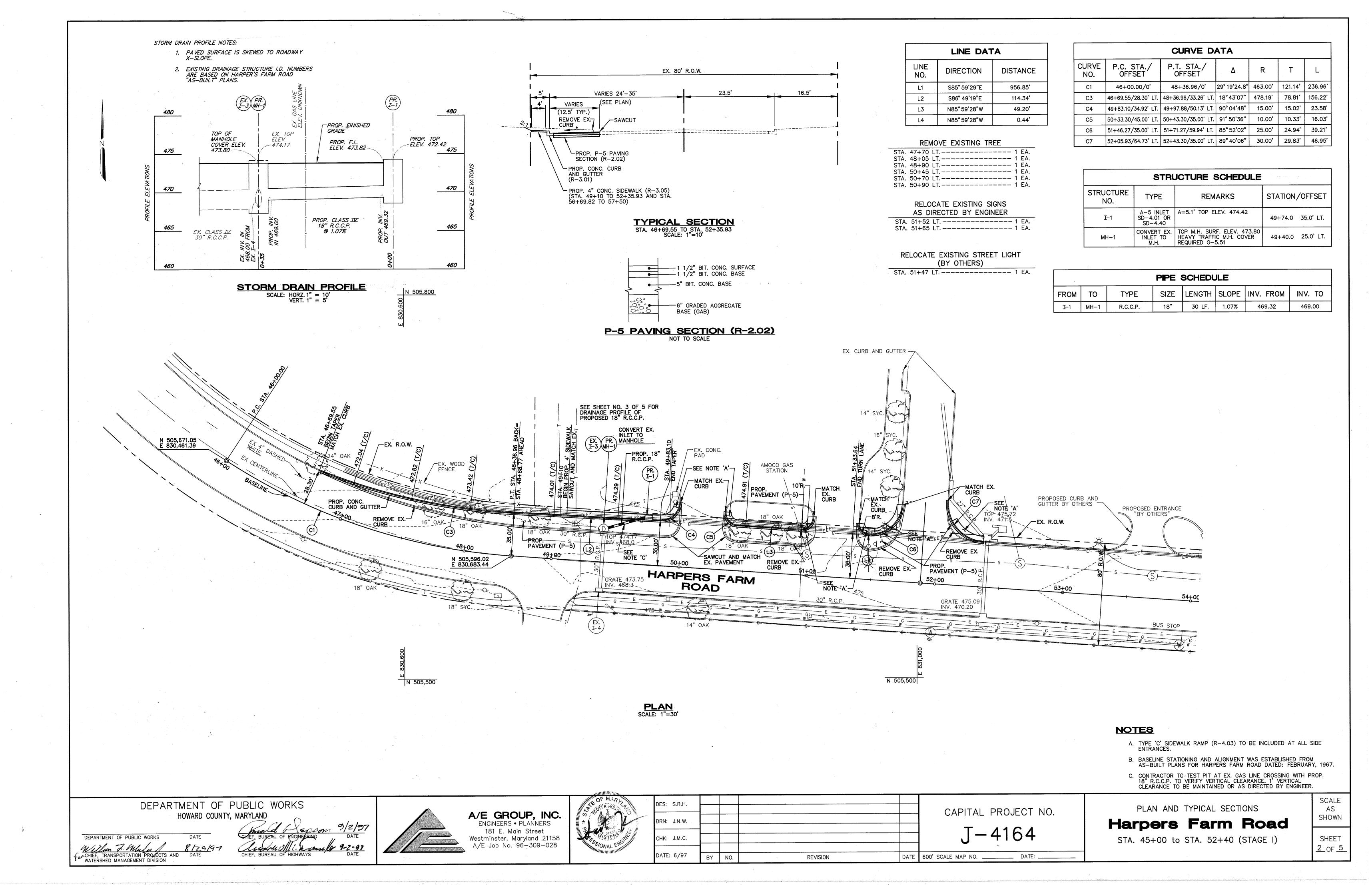
DATE: 6/97	BY	NO.	REVISION	DATE	600' SCALE MAP NO DATE:
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CHK: J.M.C.					J - 4104
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DRN: J.N.W.					
			,		CAPITAL PROJECT NO.
DES: S.R.H.			·		CAPITAL PROJECT NO.

TITLE SHEET

Harpers Farm Road

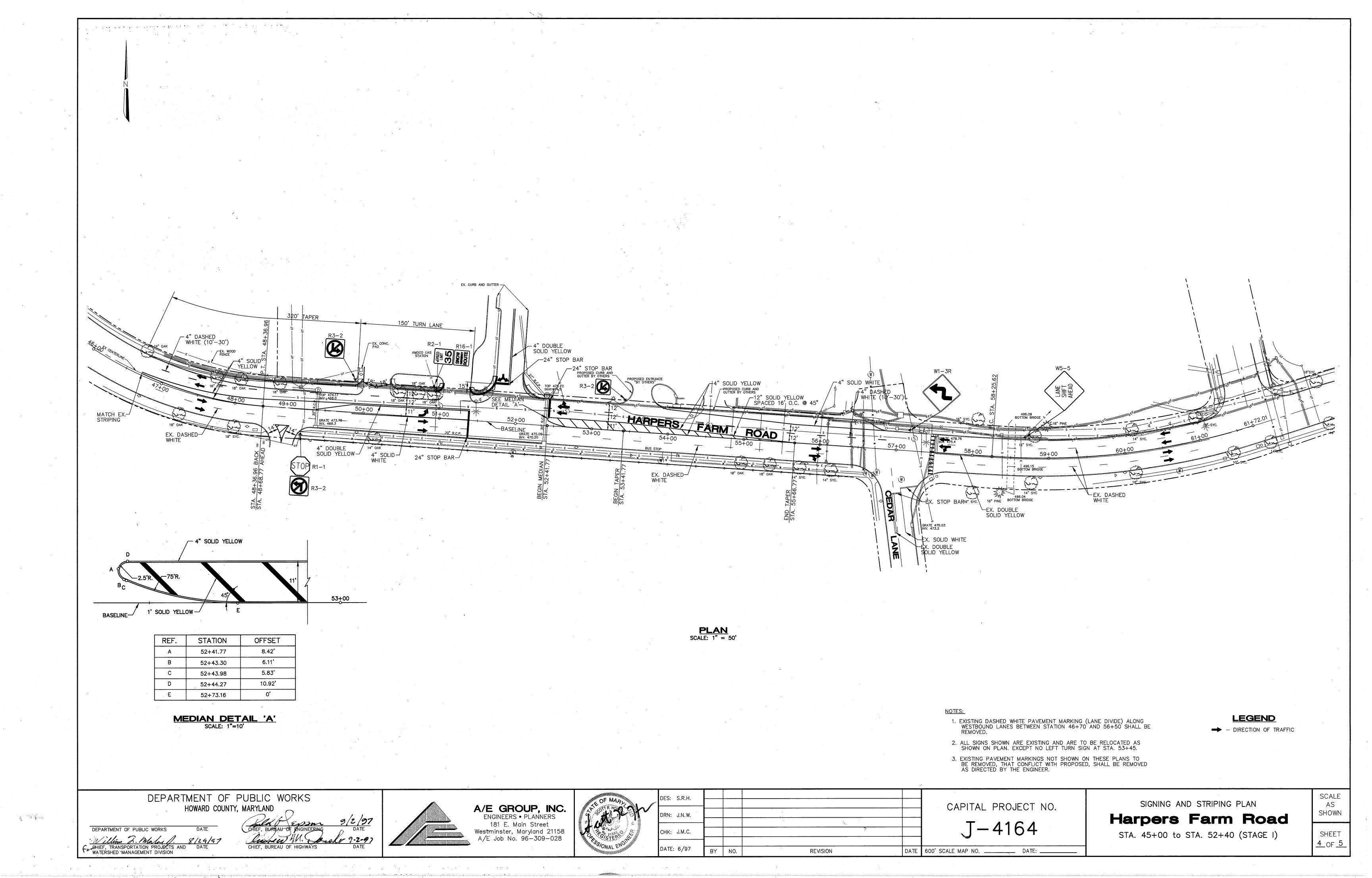
STA. 45+00 to STA. 52+40 (STAGE I)

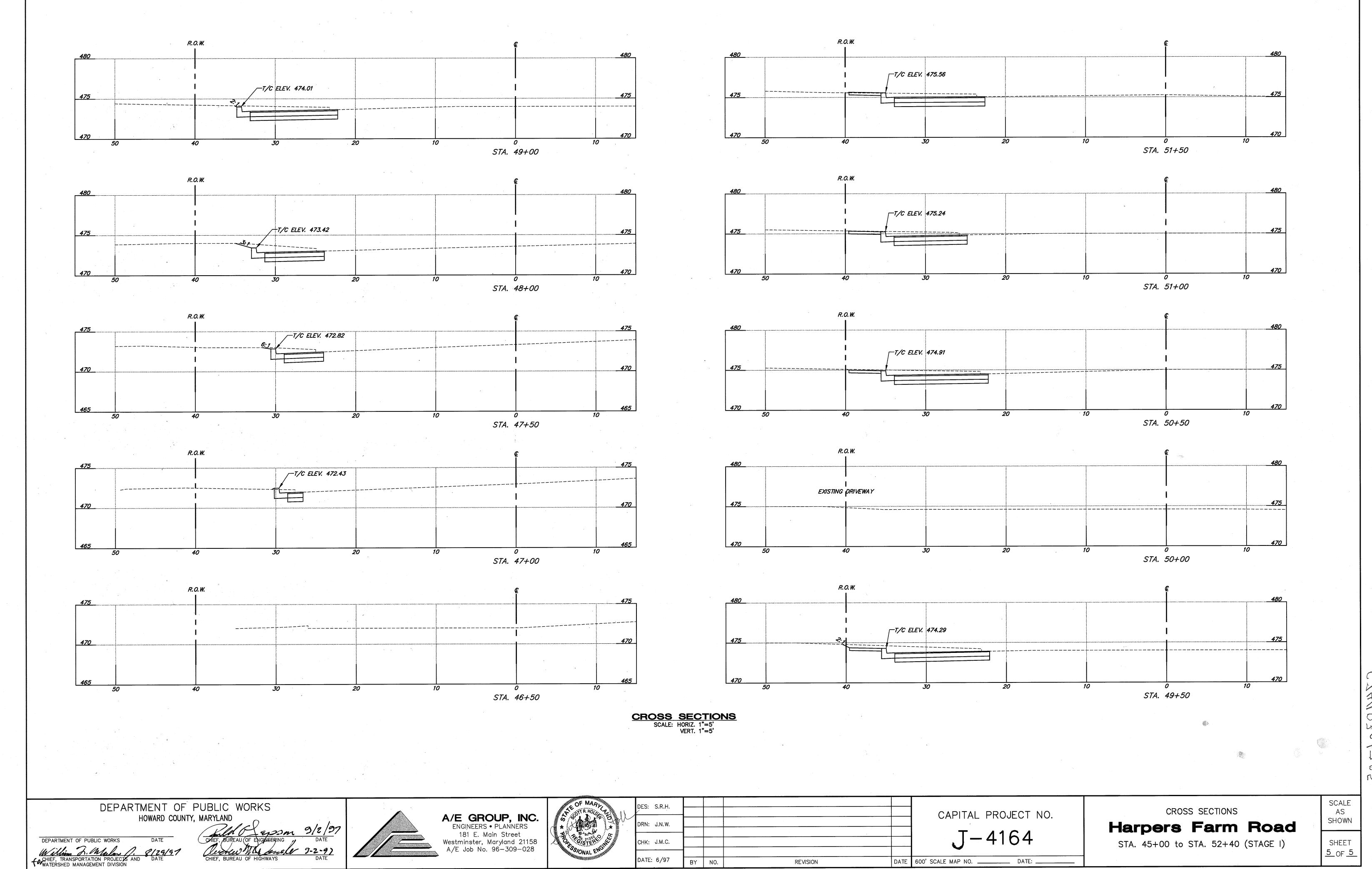
SHEET 1 OF 5



SEDIMENT CONTROL NOTES STANDARD AND SPECIFICATIONS FOR TOPSOIL Section 1 - Vegetative Stabilization Methods and Materials 1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT Definition and Purpose E. Methods of Seeding Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer). broadcast Install erosion and sediment control structures (either temporary or permanent) such as diversions, OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation grade stabilization structures, berms, waterways, or sediment control basins. START OF ANY CONSTRUCTION (410-313-1855). or drop seeder, or a cultipacker seeder To provide a suitable soil medium for vegetative growth. Soils of concern have a low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation. ii. Perform all grading operations at right angles to the slope. Final grading and shaping is not a. If fertilizer is being applied at the time of seeding, the application rates amounts will not 2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO exceed the following: nitrogen; maximum of 100 lbs. per acre total of soluble nitrogen; P205 (phosphorous): 200 lbs/ac; K20 (potassium): 200 lbs/ac. THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1994 usually necessary for temporary seeding. iii. Schedule required soil tests to determine soil amendment composition and application rates for site MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT b. Lime — use only ground agricultural limestone, (Up to 3 tons per acre may be applied by CONTROL AND REVISIONS THERETO. having disturbed area over 5 acres. Conditions Where Practice Applies 3. FOLLOWING INITIAL SOIL DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL hydroseeding). Normally, not more than 2 tons are applied by hydroseeding at any one time. Do I. This practice is limited to areas having 2:1 or flatter slopes where: BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL not use burnt or hydrated lime when hydroseeding. B. Soil Amendments (Fertilizer and Lime Specifications) c. Seed and fertilizer shall be mixed on site and seeding shall be done immediately and without Soil tests must be performed to determine the exact ratios and application rates for both lime and a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth. STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1, B) 14 fertilizer on sites having disturbed areas over 5 acres. Soil analysis may be performed by the DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. ii. Dry Seeding: This includes use of conventional drop or broadcast spreaders. b. The soil material is so shallow that the rooting zone is not deep enough to support plants or University of Maryland or a recognized commercial laboratory. Soil samples taken for engineering 4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED purposes may also be used for chemical analyses. ii. Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by Seed spread dry shall be incorporated into the subsoil at the rates prescribed on the Temporary furnish continuing supplies of moisture and plant nutrients. AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 7, OF THE or Permanent Seeding Summaries or Tables 25 or 26. The seeded area shall then be rolled with HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE. c. The original soil to be vegetated contains material toxic to plant growth. approved equipment. Manure may be substituted for fertilizer with prior approval from the a weighted roller to provide good seed to soil contact. 5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED appropriate approval authority. Fertilizers shall all be delivered to the site fully labeled b. Where practical, seed should be applied in two directions perpendicular to each other. Apply half ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS d. The soil is so acidic that treatment with limestone is not feasible. according to the applicable state fertilizer laws and shall bear the name, trade name or trademark the seeding rate in each direction. FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS, SOD, II. 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 that appropriate stabilization shown on the plans. iii. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil. TEMPORARY SEEDING, AND MULCHING (SEC. G). TEMPORARY STABILIZATION WITH MULCH and warrantee of the producer. a. Cultipacking seeders are required to bury the seed in such a fashion as to provide at least 1/4 iii. Lime materials shall be ground limestone (hydrated or burnt lime may be substituted) which contains ALONE SHALL ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR at least 50% total oxides (calcium oxide plus magnesium oxide). Limestone shall be ground to such fineness that at least 50% will pass through a #100 mesh sieve and 98—100% will pass through a #20 inch of soil covering. Seedbed must be firm after planting. PROPER GERMINATION AND ESTABLISHMENT OF GRASSES. b. Where practical, seed should be applied in two directions perpendicular to each other. Apply half 6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE the seeding rate in each direction. Construction and Material Specifications MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS iv. Incorporate lime and fertilizer into the top 3-5" of soil by disking or other suitable means. Topsoil salvaged from 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 BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR. F. Mulch Specifications (In order of preference) i. Straw shall consist of thoroughly threshed wheat, rye or oat straw, reasonably bright in color, and C. Seedbed Preparation shall not be musty, moldy, caked, decayed, or excessively dusty and shall be free of noxious weed TOTAL AREA OF SITE a. Seedbed preparation shall consist of loosening soil to a depth of 3" to 5" by means of suitable seeds as specified in the Marvland Seed Law. AREA DISTURBED 0.45 ACRES II. Topsoil Specifications — Soil to be used as topsoil must meet the following: agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted AREA TO BE ROOFED OR PAVED 0.15 ACRES ii. Wood Cellulose Fiber Mulch (WCFM). a. WCFM shall consist of specially prepared wood cellulose processed into a uniform fibrous on construction equipment. After the soil is loosened it should not e rolled or dragged smooth AREA TO BE VEGETATIVELY STABILIZED i. 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 contrasting texture subsoils and 0.30 ACRES but left in the roughened condition. Sloped areas (greater than 3:1) should be tracked leaving 275 CU. YDS physical state. WCFM shall be dyed green or contain a green dye in the package that will provide an appropriate the surface in an irregular condition with ridges running parallel to the contour of the slope. CU. YDS. shall contain less than 5% by volume of cinders, stone, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2" in diameter. color to facilitate visual inspection of the uniformly spread slurry. Apply fertilizer and lime as prescribed on the plans. OFFSITE WASTE/BORROW AREA LOCATION TO BE DETERMINED BY CONTRACTOR Incorporate lime and fertilizer into the top 3-5" of soil by disking or other suitable means. WCFM, including dy, shall contain no germination or growth inhibiting factors. (SITE WITH A CURRENT ACTIVE GRADING WCFM materials shall be manufactured and processed in such a manner that the wood cellulose ii. Topsoil must be free of plants or plant parts such as bermuda grass, quackgrass, johnsongrass, Minimum soil conditions required for permanent vegetative establishment: fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, utsedge, poison ivy, thistle, or others as specified fertilizer and other additives to form a homogeneous slurry. The mulch material shall form a 8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR 1. Soil pH shall be between 6.0 and 7.0. blotter-like ground cover, on application, having moisture absorption and percolation properties iii. 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 to 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 procedures. 2. Soluble salts shall be less than 500 parts per million (ppm). 3. The soil shall contain less than 40% clay but enough fine grained material (>30% split plus clay) PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE. and shall cover and hold grass seed in contact with the soil without inhibiting the growth of the 9. ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED. IF DEEMED NECESSARY BY THE to provide the capacity to hold a moderate amount of moisture. An exception is if lovegrass or HOWARD COUNTY INSPECTOR. serecia lespedeza is to be planted, then a sandy soil (<30% silt plus clay) would be acceptable. WCFM material shall contain no elements or compounds at concentration levels that will be 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 4. Soil shall contain 1.5% minimum organic matter by weight. III. For sites having disturbed areas under 5 acres: f. WCFM must conform to the following physical requirements: fiber length to approximately 10 mm., 5. Soil must contain sufficient pore space to permit adequat root penetration. PERIMETER EROSION AND SEDIMENT CONTROLS. BUT BEFORE PROCEEDING WITH ANY 6. If these conditions cannot be met by soils on site, adding topsoil is required in accordance with diameter approximately 1 mm., pH range of 4.0 to 8.5, ash content of 1.6% maximum and water OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION Place topsoil (if required) and apply soll amendments as specified in 20.0 Vegetative Stabilization — Section I — Vegetative Stabilization Methods and Materials. Section 21 Standard and Specification for Topsoil. holding capacity of 90% minimum. APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE Note: Only sterile straw mulch should be used in areas where one species of grass is desired. Areas previously graded in conformance with the drawings shall be maintained in a true and even INSPECTION AGENCY IS MADE. grade, then scarified or otherwise loosened to a depth of 3-5" to permit bonding of the topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil from sliding 11. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS G. Mulching Seeded Areas Mulch shall be applied to all seeded areas immediately after seeding. OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, i. 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. i. If grading is completed outside of the seeding season, mulch alone shall be applied as prescribed i WHICHEVER IS SHORTER down a slope. Apply soil amendments as per soil test or as included on the plans. this section and maintained until the seeding season returns and seeding can be performed in Mix soil amendments into the top 3 - 5" of topsoil by disking or other suitable mans. Lawn areas ii. Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4"-8" higher in elevation. accordance with these specifications ii. When straw mulch is used, it shall be spread over all seeded areas at the rate of 2 tons/acre. Mulch should be raked to smooth the surface, remove large objects like stones and branches, and ready shall be applied to a uniform loose depth of between 1" and 2". Mulch applied shall achieve a the area for seed application. Where site conditions will not permit normal seedbed preparation, iii. Topsoil shall be uniformly disturbed in a 4" — 8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be preformed 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 loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface. uniform distribution and depth so that the soil surface is not exposed. If a mulch anchoring tool is to be used, the rate should be increased to 2.5 tons/acre. Steep slopes (steeper than 3:1) should be tracked by a dozer leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top 1-3" of soil should be loose and friable. Seedbed loosening may not be necessary on newly disturbed areas. iii. Wood cellulose fiber used as a mulch shall be applied at a net dry weight of 1,500 lbs. per acre. The wood cellulose fiber shall be mixed with water, and the mixture shall contain a maximum of 50 lbs. of wood cellulose fiber per 100 gallons of water. D. Seed Specifications i. All seed must meet the requirements of the Maryland State Seed Law. All seed shall be subject to 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 grading and re-testing by a recognized seed laboratory. All seed used shall have been tested within the 6 months Securing Straw Mulch (Mulch Anchoring): Mulch anchoring shall be performed immediately following immediately preceding the date of sowing such material on this job. Note: Seed tags shall be made mulch application to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon size of area and erosion hazard: available to the inspector to verify type and rate of seed used. i. A mulch anchoring tool is a tractor drawing implement designed to punch and anchor mulch into the soil surface a minimum of two (2) inches. The practice is most effective on large areas, but is Inoculant — The inoculant for treating legume seed in the seed mixtures shall be a pure culture of nitrogen—fixing bacteria prepared specifically for the species. Inoculant shall not be used later limited to flatter slopes where equipment can operate safely. If used on sloping land, this practice than the date indicated on the container. Add fresh inoculant as directed on package. Use four should be used on the contour if possible. times the recommended rate when hydroseeding. ii. Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a net Note: It is very important to keep inoculant as cool as possible until used. Temperatures above dry weight of 750 pounds/acre. The wood cellulose fiber shall e mixed with water and the mixture 75-80 F. can weaken bacteria and make the inoculant less effective. shall contain a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water. iii. Application of liquid binders should be heavier at the edges where wind catches mulch, such as in valleys and on crests of banks. The remainder of area should appear to e uniform after binder application. Synthetic binders - such as Acrylic DLR (Agro-Tack), DCA-70, Petroset, Terra Tax II Terra Tack AR or other approved equal may be used at rates recommended by the manufacturer to anchor mulch. 54+00 ° 55+00 57+00 DETAIL 23C - CURB INLET PROTECTION (COG OR COS INLETS) DETAIL 22 - SILT FENCE -36" MINIMUM LENGTH FENCE POST DRIVEN A MINIMUM OF 16" INTO GROUND 16" PINE PLAN SCALE: 1"=50' SEQUENCE OF CONSTRUCTION PERSPECTIVE VIEW SUBMIT NOTIFICATION TO THE COUNTY AS NOTED IN THE SPECIFICATIONS. OBTAIN PERMISSION FROM HOWARD COUNTY SEDIMENT CONTROL INSPECTOR PRIOR TO ANY CONSTRUCTION. INSTALL SEDIMENT CONTROL MEASURES SHOWN ON PLANS. BEGIN EXCAVATION FOR CURB AND GUTTER, ROADWAY AND FENCE POST DRIVEN A MINIMUM OF 16" INTO MAX. DRAINAGE AREA = 1/4 ACRE DRAINAGE STRUCTURES. DEVELOPER'S CERTIFICATE STABILIZE CURB AND GUTTER AND ROADWAY WITH D.G.A.B. MATERIAL. STABILIZE ALL TEMPORARY AND PERMANENT SLOPES I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION EXPOSED DURING CONSTRUCTION. INSTALL SODDING TO ALL Construction Specifications Attach a continuous piece of wire mesh (30" minimum width by throat length plus ENGINEER CERTIFICATE WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY PERMANENT SLOPE AREAS DISTURBED BY CONSTRUCTION. THE CONTRACTOR IS NOT TO EXPOSE EARTH THAT CANNOT BE RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION 4') to the 2" x 4" weir (measuring throat length plus 2') as shown on the standard PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A "I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 24 HOURS DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING CONTROL REPRESENTS A PRACTICAL AND WORKABLE 5. CONSTRUCT AND INSTALL DRAINAGE STRUCTURES, PIPES AND 2. Piggs a continuous piece of Geotextile Class E the same dimensions as the wire PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON—SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT." INLET PROTECTION FILTERS. CONDITIONS AND THAT IT WAS PREPARED IN PLACE PERMANENT STABILIZATION ON EARTH SLOPES. ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD . Fence posts shall be a minimum of 36" long driven 16" minimum into the the Proce and the initial addition in of the dat and not 1 (minimum 2' lengths of LEGEND INSTALL BITUMINOUS CONCRETE BASE COURSE ON ROADWAY. ground. Wood posts shall be $1\frac{1}{2}$ x $1\frac{1}{2}$ square (minimum) outs or $1\frac{3}{4}$ diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be SOIL CONSERVATION DISTRICT." 2" x 4" to the top of the weir at spacer locations). These 2" x 4" anohors shall extend across the injet top and be held in place by sandbags or alternate weight-PLACE BITUMINOUS CONCRETE SURFACE COURSE. 8. REMOVE ALL SEDIMENT CONTROLS WITH THE PERMISSION OF LIMIT OF DISTURBANCE 8/29/97 THE SEDIMENT CONTROL INSPECTOR. fuld Epson 2. Geotextile shall be fastened securely to each fence post with wire ties 5. The assembly shall be placed so that the end spacers are a minimum 1' beyond both ends of the throat opening. - SILT FENCE 9. STABILIZE ANY AREAS DISTURBED BY THEIR REMOVAL. SIGNATURE OF DEVELOPER PRINT NAME BELOW SIGNATURE DATE SIGNATURE OF ENGINEER 6. Form the $\frac{1}{2}$ " x $\frac{1}{2}$ " wire mesh and the geotextile fabric to the concrete gutter and against the face of the curb on both sides of the inlet. Place clean $\frac{5}{4}$ " x $\frac{1}{2}$ " stone over the wire mesh and geotextile in such a manner to prevent water from entering the inlet under or around the geotextile. STANDARD CURB PRINT NAME BELOW SIGNATURE Tensile Modulus Flow Rate INLET PROTECTION NOTE Filtering Efficiency 75% (min.) 7. This type of protection must be inspected frequently and the filter cloth 3. Where ends of geotextile fabric come together, they shall be overlapped PLACE SILT FENCE AS REQUIRED AND/OR AS DIRECTED BY THE EROSION AND SEDIMENT CONTROL INSPECTOR FOR AREAS DISTURBED BY UTILITY AND TRAFFIC SIGNAL RELOCATION. and stone replaced when clogged with sedimentfolded and stapled to prevent sediment bypass 8. Assure that storm flow does not bypass the inlet by installing a temporary earth or asphalt dike to direct the flow to the inlet. 4. Stilt Fence shall be inspected after each rainfall event and maintained when FOR SEDIMENT & EROSION CONTROL ONLY PERMANENTLY STABILIZE WITH SODDING. U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE **SCALE** DEPARTMENT OF PUBLIC WORKS DES: D.P.O. SEDIMENT AND EROSION CONTROL PLAN CAPITAL PROJECT NO. A/E GROUP, INC. HOWARD COUNTY, MARYLAND SHOWN DRN: J.N.W. **ENGINEERS • PLANNERS** Harpers Farm Road 181 E. Main Street J-4164 DEPARTMENT OF PUBLIC WORKS Westminster, Maryland 21158 CHK: J.M.C. STA. 45+00 to STA. 52+40 (STAGE I) SHEET Willin J. Walne A/E Job No. 96-309-028 3 OF 5 CHIEF, TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT DIVISION

DATE 600' SCALE MAP NO. _





DATE: 6/97