GENERAL NOTES

- 1. THIS PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS ALTERNATIVE COMPLIANCES HAVE BEEN APPROVED AND NOTED BELOW.
- 2. THE SUBJECT PROPERTY IS ZONED PGCC-2 PER THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN
- . THIS PROJECT IS SUBJECT TO THE 3RD AMENDED TURF VALLEY MULTI-USE SUB-DISTRICT FINAL DEVELOPMENT PLAN RECORDED AS PLAT NUMBERS 21029-21031 ON MARCH 26, 2010 AND THE AMENDED FIFTH EDITION OF THE SUBDIVISION
- 4. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENTS NO. 16E1 AND 0012 WERE USED FOR THIS
- 5. TRACT BOUNDARY IS BASED ON A FIELD SURVEY PERFORMED BY JOHN B. MILDENBERG IN MARCH, 2006.
- 6. THE EXISTING TOPOGRAPHY SHOWN IS BASED ON THE F-20-072 ROAD CONSTRUCTION PLANS.
- 7. THE EXISTING UTILITIES SHOWN ON THESE PLANS HAVE BEEN TAKEN FROM THE F-20-072 ROAD CONSTRUCTION PLANS AND CONTRACT NO. 24-5090-D.
- 8. THERE ARE NO WETLANDS. STREAMS. THEIR REQUIRED BUFFERS. 100 YEAR-FLOODPLAINS, OR STEEP SLOPES 25% OR
- GREATER THAT ARE MORE THAN 20,000 SF OF CONTIGUOUS AREA LOCATED ON THESE LOTS. 9. THE WETLAND LIMITS FOR TURF VALLEY ARE BASED ON A STUDY CONDUCTED BY EXPLORATION RESEARCH, INC. AND VERIFIED
- BY ECO-SCIENCE PROFESSIONALS, INC. ON MAY 26, 2016. THE LIMITS SHOWN ARE IN ACCORDANCE WITH THOSE SHOWN ON THE 4TH AMENDMENT TO THE TURF VALLEY COMPREHENSIVE SKETCH PLAN (S-86-13, PB 368) APPROVED JULY 28, 2006. 10. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO CEMETERIES, BURIAL GROUNDS OR HISTORIC STRUCTURES LOCATED ON
- THE SUBJECT PROPERTY. 11. A NOISE STUDY IS NOT REQUIRED FOR THIS DEVELOPMENT AS NONE OF THE PROPOSED LOTS ARE WITHIN 500 FEET OF THE
- INTERSTATE 70 OR ROUTE 40 RIGHTS-OF-WAY. 12. THE TRAFFIC STUDY WAS PREPARED BY TRAFFIC GROUP ON JANUARY 7, 2005 AND APPROVED UNDER THE 4TH AMENDED
- COMPREHENSIVE SKETCH PLAN ON APRIL 27, 2006. THE INFORMATION WAS UPDATED WITH CONFIRMATION LETTER DATED DECEMBER 30, 2020 AND FURTHER AMENDED BY REVISION LETTER DATED APRIL 9, 2021 AND APPROVED UNDER F-20-071
- 13. THIS SITE IS WITHIN THE METROPOLITAN DISTRICT.
- 14. WATER & SEWER IS PUBLIC. THE CONTRACT NO. IS 24-5090-D. THE DRAINAGE AREA IS THE LITTLE PATUXENT. THIS SUBDIVISION IS SUBJECT TO SECTION 18.122B OF THE HOWARD COUNTY CODE. PUBLIC WATER AND SEWER SERVICE HAS BEEN GRANTED UNDER THESE TERMS AND PROVISIONS, THEREOF, EFFECTIVE 9-22-2021, ON WHICH DATE DEVELOPER AGREEMENT NUMBER F-20-072/24-5090-D WAS FILED AND ACCEPTED
- 15. THIS PROJECT IS EXEMPT FROM THE HOWARD COUNTY FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1202(b)(1)(iv) OF THE HOWARD COUNTY CODE SINCE IT IS A PLANNED UNIT DEVELOPMENT WHICH HAD PRELIMINARY DEVELOPMENT PLAN APPROVAL AND 50% OR MORE OF THE LAND AS RECORDED AND SUBSTANTIALLY DEVELOPED BEFORE DECEMBER 31, 1992
- 16. LANDSCAPING IS PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL VIA A CERTIFIED LANDSCAPE PLAN AS PART OF THIS PLAN SET. FINANCIAL SURETY IN THE AMOUNT OF \$6,900.00 FOR THE REQUIRED 21 SHADE TREES AND 4 EVERGREEN TREES FOR THE REQUIRED PERIMETER AND INTERNAL RESIDENTIAL LANDSCAPE OBLIGATIONS SHALL BE POSTED AS PART OF THE GRADING PERMIT.
- 17. STORMWATER MANAGEMENT FOR THESE LOTS WAS PROVIDED UNDER F-20-072. THERE ARE NO ON-LOT ESD SWM PRACTICES. 18. THIS PROJECT IS EXEMPT FROM THE MODERATE INCOME HOUSING UNIT REQUIREMENT (COUNCIL BILL 35-2013) SINCE IT IS
- 19. 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.
- 20. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK
- 21. DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
 - A) WIDTH 12' (16' SERVING MORE THAN ONE RESIDENCE).
- B) SURFACE 6" OF CRUSHER RUN BASE WITH TAR AND CHIP COATING (1.5" MIN) c) geometry – Max 15% grade, max 10% grade change & min. 45' turning radius.
- D) STRUCTURES (CULVERTS/BRIDGES) CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOAD) E) DRAINAGE ELEMENTS — CAPABLE OF SAFELY PASSING 100 YEAR FLOODPLAIN WITH NO MORE THAN 1 FOOT DEPTH OVER
- F) STRUCTURE CLEARANCES MINIMUM 12 FEET G) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE
- 22. FOR APPLICABLE PREVIOUS HOWARD COUNTY FILE REFERENCES SEE SITE ANALYSIS DATA CHART ON THIS SHEET
- VESTIBULES. BALCONIES AND CHIMNEYS MAY ENCROACH 4 FEET INTO ANY SETBACK OR REQUIRED DISTANCE BETWEEN BUILDINGS PROVIDED THE FEATURE HAS A MAXIMUM WIDTH OF 16 FEET. EXTERIOR STAIRWAYS OR RAMPS, ABOVE OR BELOW GROUND LEVEL (EXCLUDING THOSE ATTACHED TO A PORCH OR DECK) MAY ENCROACH 10 FEET INTO A FRONT SETBACK OR A SETBACK FROM A PROJECT BOUNDARY, 16 FEET INTO A REAR SETBACK, 4 FEET INTO A SIDE SETBACK OR REQUIRED DISTANCE BETWEEN BUILDINGS. OPEN OR ENCLOSED PORCHES OR DECKS AND THE STAIRWAYS OR RAMPS ATTACHED THERETO MAY ENCROACH 10 FEET INTO A FRONT OR REAR SETBACK, SETBACK FROM A PROJECT BOUNDARY OR A REQUIRED DISTANCE BETWEEN BUILDINGS.
- 25. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- 26. SEWER HOUSE CONNECTION (SHC) INVERTS SHOWN ARE LOCATED AT THE PROPERTY (OR EASEMENT) LINE,
- 27. THE ARTICLES OF INCORPORATION FOR THE HOMEOWNERS ASSOCIATION WAS ACCEPTED BY THE STATE DEPARTMENT OF ASSESSMENTS AND TAXATION ON 4-27-2021 ID #5000000004996400.
- 29. THE SETBACKS ON THIS SITE DEVELOPMENT PLAN FOR LOTS 72-88 WERE APPROVED BY THE PLANNING BOARD ON APRIL 7, 2022. THE APPROVAL ALLOWED FOR THE REDUCTION OF THE RESIDENTIAL REAR SETBACK FROM 20 FEET DOWN TO 13.7

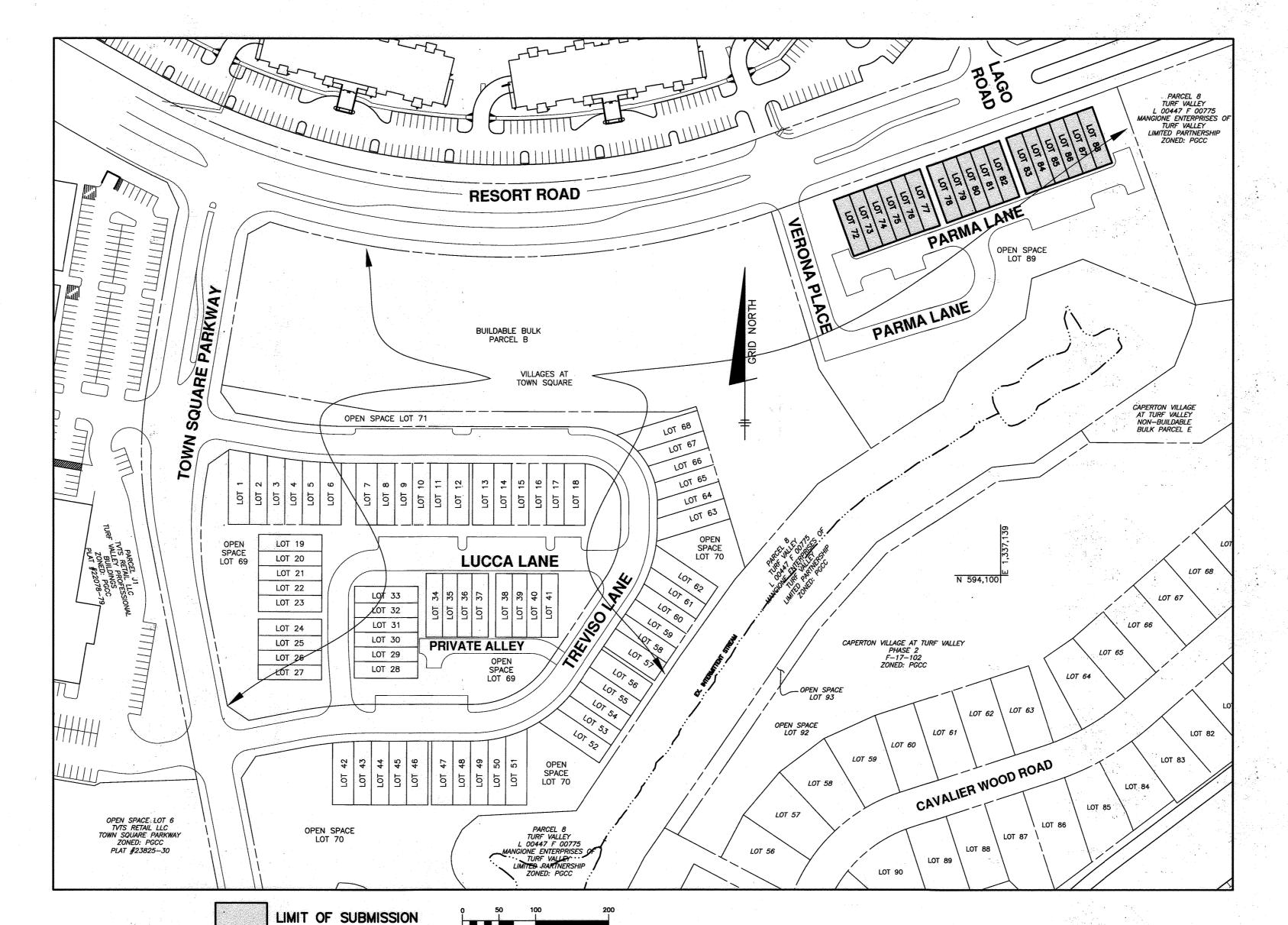
APPROVED PLANNING BOARD OF HOWARD COUNTY

APRIL 7, 2022

APPROVED: HO	WARD COUNTY DEPARTMENT Docusigned by: (HU) Edmondson	OF		AND 2022	ZONING
CHIEF, DEVELOPMENT ENGINEERING DIVISION Docusigned by:		DATE 5/9/2022			
CHIEF, DIVISION	DEVELOPMENT Docusigned by: Amy Glonan		5/9/	DAT /2022	rE
DIRECTOR SB4D5DD9470C4D4		DATE		TE .	

RESIDENTIAL SITE DEVELOPMENT PLAN VILLAGES AT TOWN SQUARE

PHASE 2 - LOTS 72 thru 88



1 inch = 100 ft.

BULK REGULATIONS:

(per 3RD AMENDMENT TO THE TURF VALLEY, MULTI-USE SUBDISTRICT FDP)

ALL USES AS PER TURF VALLEY PGCC DISTRICT, MULTI-USE SUBDISTRICT FINAL DEVELOPMENT PLAN, THIRD AMENDMENT, PLATS 21029-21031. (46 USES OUTLINED FROM RESIDENTIAL USES TO SPECIALTY STORES)

PROPOSED USE: SINGLE FAMILY ATTACHED

PERMITTED HEIGHT: PRINCIPAL STRUCTURE: 34 FEET EXCEPT UNITS WITH GABLE, HIP, OR GAMBREL ROOFS: 40 FEET

MAXIMUM LOT COVERAGE FOR SRUCTURES WITHIN SINGLE-FAMILY ATTACHED PROJECTS DEVELOPED WITH ONE DWELLING UNIT PER LOT: 60 PERCENT MAXIMUM DENSITY FOR TOTAL PGCC DISTRICT IS 2.0 DWELLING UNITS PER ACRE.

MAXIMUM UNITS PER STRUCTURE: SINGLE FAMILY ATTACHED: 8 UNITS MAXIMUM BUILDING LENGTH FOR RESIDENTIAL STRUCTURE: 120 FEET (PLANNING BOARD MAY APPROVE GREATER LENGTH UP TO 300 FEET)

MINIMUM SETBACK REQUIREMENTS:

FROM ARTERIAL ROADS: RESIDENTIAL STRUCTURES___ ACCESSORY USES_____

FROM COLLECTORS AND LOCAL STREETS: FEET FROM A 60 FT. ROW FEET FROM A 50 FT. ROW RESIDENTIAL STRUCTURES _____ FROM NON-PGGC ADJACENT PROPERTIES

FROM RESIDENTIAL DISTRICTS____ 75 FEET FROM ALL OTHER DISTRICTS____ 30 FEET FROM LOT LINES WITHIN PGCC MULTI-USE SUBDISTRICT SINGLE FAMILY DETACHED - SIDE ____

ZERO LOT LINE AND ALL OTHER USES - SIDE___ A MINIMUM OF 10 FEET MUST BE PROVIDED BETWEEN STRUCTURES RESIDENTIAL - REAR.

PGCC-2

MINIMUM DISTANCE BETWEEN ATTACHED DWELLING UNITS FACE TO SIDE/REAR 30 FEET SIDE TO SIDE ____ _15 FEET REAR TO REAR ____

19

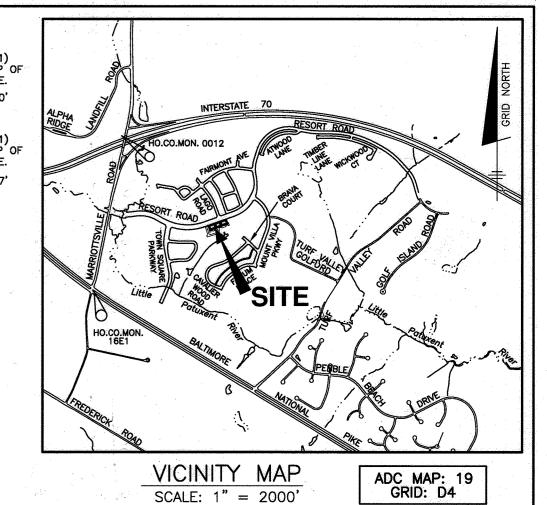
REAR TO FACE ___

26011-26013

PERMIT INFORMATION CHART SUBDIVISION NAME: SECTION/AREA: LOT/PARCEL # VILLAGES AT TOWN SQUARE LOTS 72-88 PHASE 2 CENSUS TRACT GRID No. ZONE TAX MAP NO ELECTION DISTRICT

BENCHMARKS NAD'83 HORIZONTAL HO. CO. #16E1 (AKA: 3438001) STAMPED BRASS DISK SET ON TOP OF A 3ft DEEP COLUMN OF CONCRETE. N 593250.960' E 1340192.70' ELEVATION: 463.981

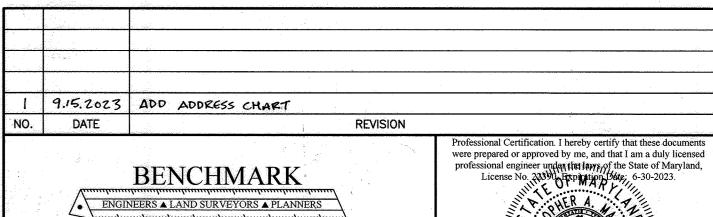
A 3ft DEEP COLUMN OF CONCRETE N 596502.760' E 1340864.37' ELEVATION: 486.298'



	SHEET INDEX	
SHEET	TITLE	
1	SITE DEVELOPMENT PLAN COVER SHEET	
2	SITE DEVELOPMENT AND GRADING PLAN	
3	LANDSCAPE PLAN	
4	SEDIMENT & EROSION CONTROL PLAN	
5	SEDIMENT & EROSION CONTROL NOTES	

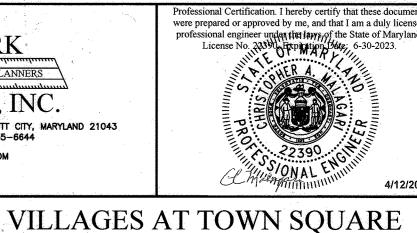
SITE ANALYSIS DATA CHART

A.) TOTAL PROJECT AREA (AS SHOWN ON F-20-072) 3.20 ACRES B.) AREA OF PLAN SUBMISSION (BUILDABLE LOTS ONLY) 0.68 ACRES C.) LIMIT OF DISTURBED AREA _____ D.) PRESENT ZONING: __ E.) PROPOSED USE OF SITE: _RESIDENTIAL - SINGLE FAMILY ATTACHED F.) FLOOR SPACE ON EACH LEVEL OF BLDG PER USE ___ N/A G.) TOTAL NUMBER OF UNITS ALLOWED AS SHOWN ON FINAL PLAT(S)_ H.) TOTAL NUMBER OF UNITS PROPOSED_ I.) MAXIMUM NUMBER OF EMPLOYEES. TENANTS ON SITE PER USE ____ J.) NUMBER OF PARKING SPACES REQUIRED BY HO. CO. ZONING REGS AND/OR FDP CRITERIA _____ 17 SFA x 2.5 = 43 SPACES K.) NUMBER OF PARKING SPACES PROVIDED ONSITE (INCLUDES HANDICAPPED SPACES) 49 (PROVIDED UNDER F-21-072) L.) OPEN SPACE ON-SITE _____ M.) AREA OF RECREATIONAL OPEN SPACE REQUIRED____ N/A AREA OF RECREATIONAL OPEN SPACE PROVIDED_ BASED ON THE LOT WITH _1,006 sf \ LARGEST COVERAGE 50.0% \ PERCENTAGE N.) BUILDING COVERAGE OF SITE __ __59.9% \ (i.e. LOT 73) PERCENTAGE OF GROSS AREA_ (MAXIMUM ALLOWED 60%) _S-86-013, ECP-17-047, S-17-008, O.) APPLICABLE DPZ FILE RÉFERENCES: WP-18-002, F-12-055, F-15-056, P-18-004, F-20-071, F-20-072, WP-21-051



ENGINEERING, INC.

8480 BALTIMORE NATIONAL PIKE ▲ SUITE 315 ▲ ELLICOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644 WWW.BEI-CIVILENGINEERING.COM



MANGIONE ENTERPRISES OF TURF VALLEY, LIMITED PARTNERSHIP 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400

TAX MAP: 16 - GRID: 19 - PARCEL: 8

SCALE:

AS SHOWN

BUILDER: 9720 PATUXENT WOODS DRIVE COLUMBIA, MARYLAND 21046 703-956-4080

DRAFT: DBT

DESIGN: DBT

6030.00

ZONED: PGCC-2 ELECTION DISTRICT NO. 3 - HOWARD COUNTY, MARYLAND SITE DEVELOPMENT PLAN

Phase 2

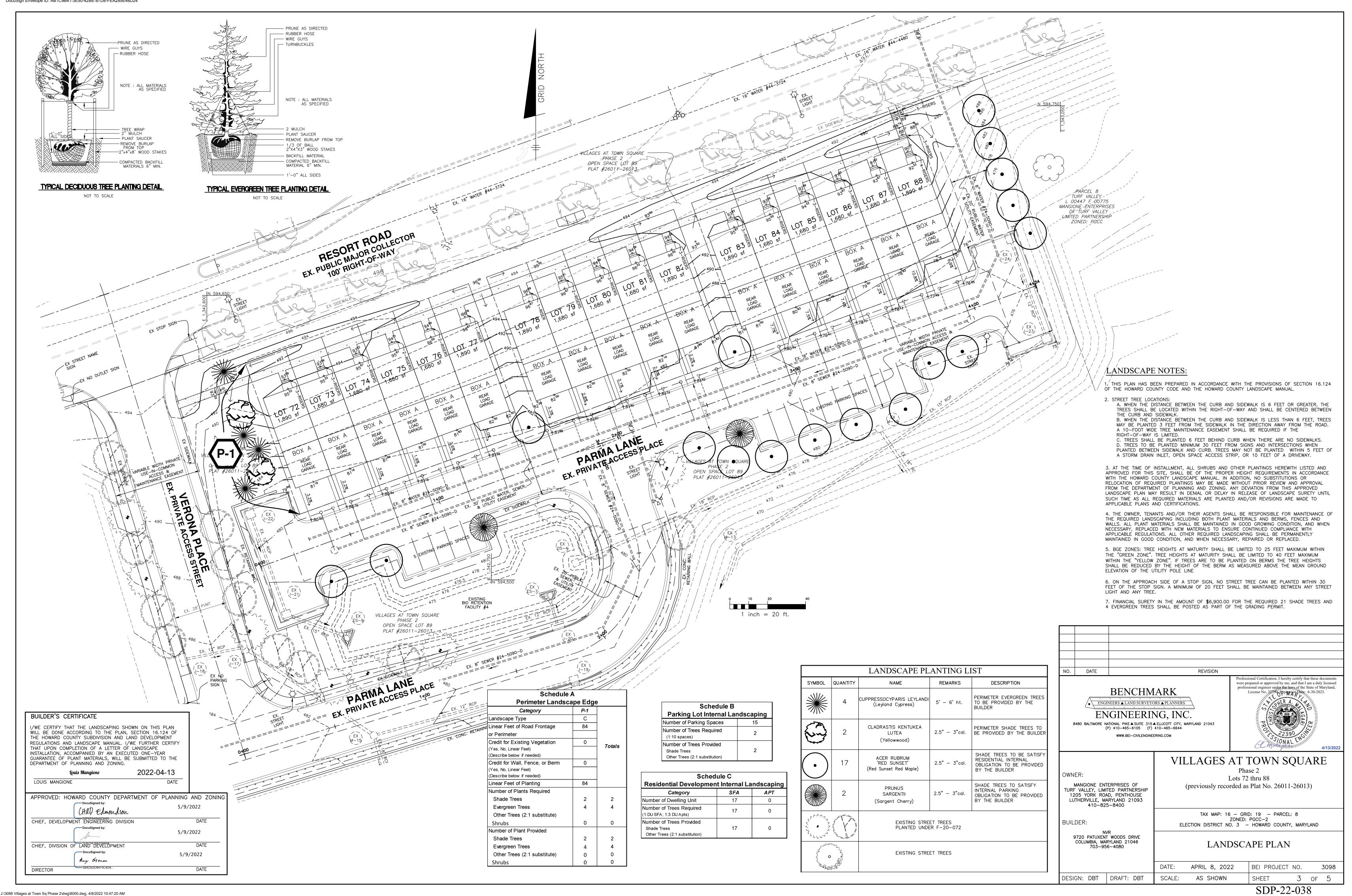
Lots 72 thru 88

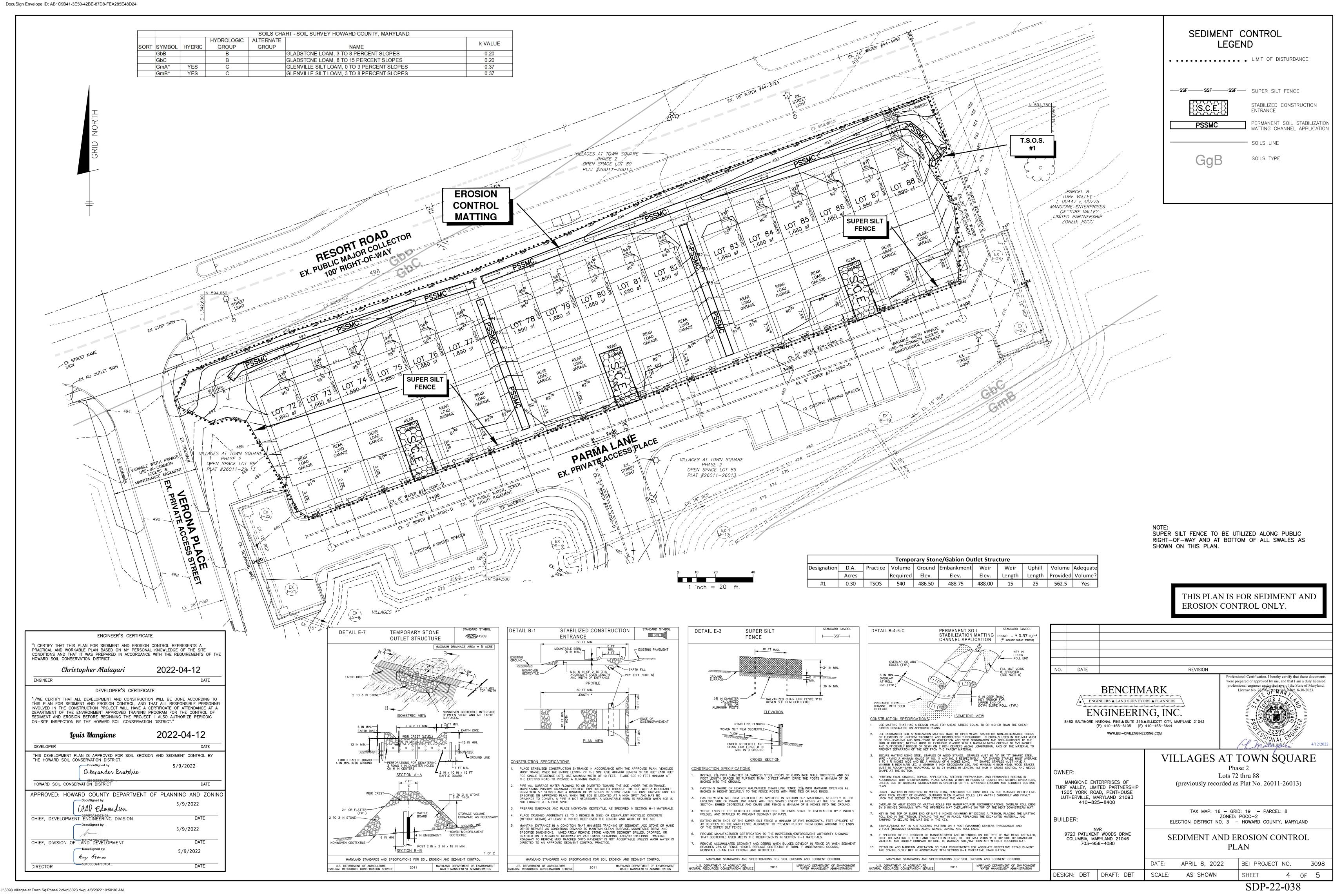
(previously recorded as Plat No. 26011-26013)

COVER SHEET APRIL 8, 2022 BEI PROJECT NO. 3098

> SHEET 1 of 5 SDP-22-038

J:\3098 Villages at Town Sq Phase 2\dwg\8000.dwg, 4/8/2022 10:45:42 AM





B-4 STANDARDS AND SPECIFICATIONS

VEGETATIVE STABILIZATION

Using vegetation as cover to protect exposed soil from erosion.

To promote the establishment of vegetation on exposed soil Conditions Where Practice Applies

On all disturbed areas not stabilized by other methods. This specification is divided into sections on stabilization; soil preparation, soil amendments and topsoiling; seeding and mulching; temporary

stabilization: and permanent stabilization. Effects on Water Quality and Quantity

Stabilization practices are used to promote the establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the soil is less likely to erode and more likely to allow infiltration of rainfall.

reducing sediment loads and runoff to downstream areas. Planting vegetation in disturbed areas will have an effect on the water budget, especially on volumes and runoff, infiltration, evaporation, transpiration, percolation, and groundwater recharge. Over time, vegetation

increase organic matter content and improve the water holding capacity of the soil and subsequent plant Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to receiving waters. Plants will also help protect groundwater supplies by assimilating those substances

Sediment control practices must remain in place during grading, seedbed preparation, seeding, mulching, and vegetative establishment.

Adequate Vegetative Establishment Inspect seeded areas for vegetative establishment and make necessary repairs, replacements, and reseedings within the planting season.

1. Adequate vegetative stabilization requires 95 percent groundcover. 2. If an area has less than 40 percent groundcover, restabilize following the original recommendations for lime, fertilizer, seedbed preparation, and seeding. 3. If an area has between 40 and 94 percent groundcover, over-seed and fertilize using half of the rates

originally specified. 4. Maintenance fertilizer rates for permanent seeding are shown in Table B.6.

B-4-1 STANDARDS AND SPECIFICATIONS NCREMENTAL STABILIZATION

Establishment of vegetative cover on cut and fill slopes.

3. Incremental Stabilization - Fill Slopes

Γο provide timely vegetative cover on cut and fill slopes as work progresses. Conditions Where Practice Applies Any cut or fill slope greater than 15 feet in height. This practice also applies to stockpiles.

A. Incremental Stabilization - Cut Slopes 1. Excavate and stabilize cut slopes in increments not to exceed 15 feet in height. Prepare seedbed and apply seed and mulch on all cut slopes as the work progresses.

2. Construction sequence example (Refer to Figure B.1): a. Construct and stabilize all temporary swales or dikes that will be used to convey runoff around the excavation.

b. Perform Phase 1 excavation, prepare seedbed, and stabilize. c. Perform Phase 2 excavation, prepare seedbed, and stabilize. Overseed Phase 1 areas as

necessary. d. Perform final phase excavation, prepare seedbed, and stabilize. Overseed previously seeded areas as necessary.

Note: Once excavation has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions in the operation or completing the operation out of the seeding season will necessitate the application of temporary stabilization

1. Construct and stabilize fill slopes in increments not to exceed 15 feet in height. Prepare seedbed and apply seed and mulch on all slopes as the work progresses

2. Stabilize slopes immediately when the vertical height of a lift reaches 15 feet, or when the grading operation ceases as prescribed in the plans. 3. At the end of each day, install temporary water conveyance practice(s), as necessary, to intercept surface runoff and convey it down the slope in a non-erosive manner

4 Construction sequence example (Refer to Figure B 2): a. Construct and stabilize all temporary swales or dikes that will be used to divert runoff around the fill. Construct silt fence on low side of fill unless other methods shown on the plans

address this area. b. At the end of each day, install temporary water conveyance practice(s), as necessary, to intercept surface runoff and convey it down the slope in a non-erosive manner. c. Place Phase 1 fill, prepare seedbed, and stabilize

d. Place Phase 2 fill, prepare seedbed, and stabilize. e. Place final phase fill, prepare seedbed, and stabilize. Overseed previously seeded areas as Note: Once the placement of fill has begun the operation should be continuous from grubbing through the

completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions in the operation or completing the operation out of the seeding season will necessitate the application of temporary stabilization. Figure B.

ENGINEER'S CERTIFICATE

CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THI

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO

IHIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNE

INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A

DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF

SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Olexander Bratchie

(Hd) Edmondson

2022-04-12

2022-04-12

5/9/2022

5/9/2022

5/9/2022

5/9/2022

DATE

DATE

DATE

DATE

DATE

DATE

"I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A

PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE

HOWARD SOIL CONSERVATION DISTRICT.

Christopher Malagari

ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

Louis Mangione

B-4-2 STANDARDS AND SPECIFICATIONS SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS

The process of preparing the soils to sustain adequate vegetative stabilization

To provide a suitable soil medium for vegetative growth. Conditions Where Practice Applies Where vegetative stabilization is to be established

Temporary Stabilization

Seedbed preparation consists of loosening soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened, it must not be rolled or dragged smooth but left in the roughened condition. Slopes 3:1 or flatter are to be tracked with ridges running parallel to the contour of the slope. Apply fertilizer and lime as prescribed on the plans.

Incorporate lime and fertilizer into the top 3 to 5 inches of soil by disking or other suitable means. Permanent Stabilization

A soil test is required for any earth disturbance of 5 acres or more. The minimum soil conditions required for permanent vegetative establishment are: i. Soil pH between 6.0 and 7.0.

ii. Soluble salts less than 500 parts per million (ppm). iii. Soil contains less than 40 percent clay but enough fine grained material (greater than 30 percent silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception: if lovegrass will be planted, then a sandy soil (less than 30 percent silt nlus clav) would be acceptable. iv. Soil contains 1.5 percent minimum organic matter by weight.

v. Soil contains sufficient pore space to permit adequate root penetration. Application of amendments or topsoil is required if on-site soils do not meet the above conditions.

Graded areas must be maintained in a true and even grade as specified on the approved plan, then scarified or otherwise loosened to a depth of 3 to 5 inches.

Apply soil amendments as specified on the approved plan or as indicated by the results of a soil test. Mix soil amendments into the top 3 to 5 inches of soil by disking or other suitable means. Rake lawn areas to smooth the surface, remove large objects like stones and branches, and ready the area for seed application. Loosen surface soil by dragging with

a heavy chain or other equipment to roughen the surface where site conditions will not permit normal seedbed preparation. Track slopes 3:1 or flatter with tracked equipment leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. Leave the top 1 to 3 inches of soil loose and friable. Seedbed loosening may be unnecessary on newly disturbed areas.

Topsoil is placed over prepared subsoil prior to establishment of permanent vegetation. The purpose is 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

Topsoil salvaged from an existing site may be used provided 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

Topsoiling 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 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. The original soil to be vegetated contains material toxic to plant growth.

The soil is so acidic that treatment with limestone is not feasible Areas having slopes steeper than 2:1 require special consideration and design. Topsoil Specifications: Soil to be used as topsoil must meet the following criteria:

a. Topsoil must be a loam, sandy loam, clay loam, silt loam, sandy clay loam, or loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Topsoil must not be a mixture of contrasting textured subsoils and must contain less than 5 percent by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than

1½ inches in diameter. b. Topsoil must be free of noxious plants or plant parts such as Bermuda grass, quack grass, Johnson grass, nut sedge, poison ivy, thistle, or others as specified.

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 topsoil.

Topsoil Application

Erosion and sediment control practices must be maintained when applying topsoil. Uniformly distribute topsoil in a 5 to 8 inch layer and lightly compact to a minimum thickness of 4 inches. Spreading is to 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 must be corrected in order to prevent the formation of depressions or water pockets.

Topsoil must not be placed if 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 seedbed preparation.

Soil Amendments (Fertilizer and Lime Specifications) Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas of 5 acres or mo performed by a recognized private or commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.

Fertilizers must be uniform in composition, free flowing and suitable for accurate application by appropriate equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers must all be delivered to the site fully labeled according to the applicable laws and must bear the name, trade name or trademark and

3. Lime materials must be ground limestone (hydrated or burnt lime may be substituted except when hydroseeding) which contains at least 50 percent total oxides (calcium oxide plus magnesium oxide). Limestone must be ground to such fineness that at least 50 percent will pass through a #100 mesh sieve and 98 to 100 percent will pass through a #20 mesh sieve. 4. Lime and fertilizer are to be evenly distributed and incorporated into the top 3 to 5 inches of

soil by disking or other suitable means Where the subsoil is either highly acidic or composed of heavy clays, spread ground limestone at the rate of 4 to 8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of

B-4-3 STANDARDS AND SPECIFICATIONS

SEEDING AND MULCHING

The application of seed and mulch to establish vegetative cover To protect disturbed soils from erosion during and at the end of construction. Conditions Where Practice Applies

To the surface of all perimeter controls, slopes, and any disturbed area not under active grading. Criteria

A. Seeding Specifications a. All seed must meet the requirements of the Maryland State Seed Law. All seed must be

seed to soil contact.

subject to re-testing by a recognized seed laboratory. All seed used must have been tested within the 6 months immediately preceding the date of sowing such material on any project. Refer to Table B.4 regarding the quality of seed. Seed tags must be available upon request to the inspector to verify type of seed and seeding rate. b. Mulch alone may be applied between the fall and spring seeding dates only if the ground is frozen. The appropriate seeding mixture must be applied when the ground thaws.

c. Inoculants: The inoculant for treating legume seed in the seed mixtures must be a pure culture of nitrogen fixing bacteria prepared specifically for the species. Inoculants must not be used later than the date indicated on the container. Add fresh inoculants as directed on the package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep inoculant as cool as possible until used. Temperatures above 75 to 80 degrees Fahrenheit can weaken bacteria and make the inoculant less

d. Sod or seed must not 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.

a. Dry Seeding: This includes use of conventional drop or broadcast spreaders. Incorporate seed into the subsoil at the rates prescribed on Temporary Seeding Table B.1, Permanent Seeding Table B.3, or site-specific seeding summaries. ii. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction. Roll the seeded area with a weighted roller to provide good

b. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil. i. Cultipacking seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seedbed must be firm after

ii. Apply seed in two directions, perpendicular to each other. Apply half the

seeding rate in each direction c. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and

fertilizer). i. If fertilizer is being applied at the time of seeding, the application rates should not exceed the following: nitrogen, 100 pounds per acre total of soluble nitrogen; P2O5 (phosphorous), 200 pounds per acre; K2O (potassium), 200 pounds per acre.

ii. Lime: Use only ground agricultural limestone (up to 3 tons per acre may be

applied by hydroseeding). Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated lime when iii. Mix seed and fertilizer on site and seed immediately and without interruption.

iv. When hydroseeding do not incorporate seed into the soil.

1. Mulch Materials (in order of preference) a. Straw consisting of thoroughly threshed wheat, rye, oat, or barley and reasonably bright in color. Straw is to be free of noxious weed seeds as specified in the Maryland Seed Law and not musty, moldy, caked, decayed, or excessively dusty, Note: Use only sterile straw mulch in areas where one species of grass is desired. b. Wood Cellulose Fiber Mulch (WCFM) consisting of specially prepared wood cellulose processed into a uniform fibrous physical state. i. WCFM is to be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the

uniformly spread slurry ii. WCFM, including dye, must contain no germination or growth inhibiting

iii. WCFM materials are to be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material must form a blotter-like ground cover, on application, having moisture absorption and percolation properties and must cover and hold grass seed in contact with the soil without inhibiting

iv. WCFM material must not contain elements or compounds at concentration levels that will be phyto-toxic. v. WCFM must conform to the following physical requirements: fiber length of approximately 10 millimeters, diameter approximately 1 millimeter, pH range of 4.0 to 8.5, ash content of 1.6 percent maximum and

water holding capacity of 90 percent minimum. a. Apply mulch to all seeded areas immediately after seeding.

uniform loose depth of 1 to 2 inches. Apply mulch to achieve a uniform distribution and depth so that the soil surface is not exposed. When using a mulch anchoring tool, increase the application rate to 2.5 tons per acre. c. Wood cellulose fiber used as mulch must be applied at a net dry weight of 1500 pounds per

a. Perform mulch anchoring immediately following application of mulch to minimize loss by wind

upon the size of the area and erosion hazard: i. A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of 2 inches. This practice is most effective

> dry weight of 750 pounds per acre. Mix the wood cellulose fiber with water at a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water iii. Synthetic binders such as Acrylic DLR (Agro-Tack), DCA-70, Petroset, Terra Tax II, Terra Tack AR or other approved equal may be used. Follow application rates as specified by the manufacturer. Application of liquid binders needs to be heavier at

the edges where wind catches mulch, such as in valleys and on crests of banks. Use of asphalt binders is strictly prohibited iv. Lightweight plastic netting may be stapled over the mulch according to manufacturer

B-4-5 STANDARDS AND SPECIFICATIONS

To stabilize disturbed soils with permanent vegetation.

Conditions Where Practice Applies

General Use

a Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardiness Zone (from Figure B.3) and based on the site condition or purpose found on Table B.2. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The Summary is to be placed on the plan.

Field Office Guild, Section 342 - Critical Area Planting. c For sites having disturbed areas over 5 acres, use and show the rates recommended by the soil

d For areas receiving low maintenance, apply urea form fertilizer (46-0-0) at 3 ½ pounds per 1000 in the Permanent Seeding Summary.

2. Turfgrass Mixtures a. Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites which will receive a medium to high level of maintenance. b. Select one or more of the species or mixtures listed below based on the site conditions or purpose

i. Kentucky Bluegrass: Full sun Mixture: For use in areas that receive intensive management. Irrigation required in the areas of central Maryland and Eastern Shore. Recommended Certified Kentucky Bluegrass Cultivars Seeding Rate: 1.5 to 2.0 pounds per 1000 square feet. Choose a minimum of three Kentucky Bluegrass Cultivars with each ranging from 10 to 35 percent of the total

ii. Kentucky Bluegrass/Perennial Rye: Full Sun Mixture: For use in full sun areas where rapid establishment is necessary and when turf will receive medium to intensive management. Certified Perennial Ryegrass Cultivars/Certified Kentucky Bluegrass Seeding Rate: 2 pounds mixture per 1000 square feet. Choose a minimum of three Kentucky Bluegrass Cultivars with each ranging from 10 to 35 percent of the total mixture by weight. iii. Tall Fescue/Kentucky Bluegrass: Full Sun Mixture: For use in drought prone areas and/or for areas

Certified Tall Fescue Cultivars 95 to 100 percent, Certified Kentucky Bluegrass Cultivars 0 to 5 percent. Seeding Rate: 5 to 8 pounds per 1000 square feet. One or more cultivars may be blended. iv. Kentucky Bluegrass/Fine Fescue: Shade Mixture: For use in areas with shade in Bluegrass lawns. For establishment in high quality, intensively managed turf area. Mixture includes Certified Kentucky Bluegrass Cultivars 30 to 40 percent and Certified Fine Fescue and 60 to 70 percent. Seeding Rate:

consumer protection and assures a pure genetic line. c. Ideal Times of Seeding for Turf Grass Mixtures

Western MD: March 15 to June 1, August 1 to October 1 (Hardiness Zones: 5b, 6a) Central MD:March 1 to May 15, August 15 to October 15 (Hardiness Zone: 6b) Southern MD, Eastern Shore: March 1 to May 15, August 15 to October 15

d. Till areas to receive seed by disking or other approved methods to a depth of 2 to 4 inches, level and rake the areas to prepare a proper seedbed. Remove stones and debris over 1 ½ inches in e. If soil moisture is deficient, supply new seedings with adequate water for plant growth (1/2 to 1 inch

true when seedings are made late in the planting season, in abnormally dry or hot seasons, or on

1. General Specifications foreman and inspector b. Sod must be machine cut at a uniform soil thickness of ¾ inch, plus or minus ¼ inch, at the time of

cutting. Measurement for thickness must exclude top growth and thatch. Broken pads and torn or uneven ends will not be acceptable. c. Standard size sections of sod must be strong enough to support their own weight and retain their

adversely affect its survival. e. Sod must be harvested, delivered, and installed within a period of 36 hours. Sod not transplanted within this period must be approved by an agronomist or soil scientist prior to its installation.

2. Sod Installation a. During periods of excessively high temperature or in areas having dry subsoil, lightly irrigate the

subsoil immediately prior to laying the sod. b. Lay the first row of sod in a straight line with subsequent rows placed parallel to it and tightly wedged against each other. Stagger lateral joints to promote more uniform growth and strength. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent

voids which would cause air drying of the roots. c. Wherever possible, lay sod with the long edges parallel to the contour and with staggering joints. Roll and tamp, peg or otherwise secure the sod to prevent slippage on slopes. Ensure solid contact

exists between sod roots and the underlying soil surface. d. Water the sod immediately following rolling and tamping until the underside of the new sod pad and soil surface below the sod are thoroughly wet. Complete the operations of laying, tamping and irrigating for any piece of sod within eight hours.

a. In the absence of adequate rainfall, water daily during the first week or as often and sufficiently as necessary to maintain moist soil to a depth of 4 inches. Water sod during the heat of the day to b. After the first week, sod watering is required as necessary to maintain adequate moisture content. c. Do not mow until the sod is firmly rooted. No more than 1/3 of the grass leaf must be removed by

the initial cutting or subsequent cuttings. Maintain a grass height of at least 3 inches unless

B-4-4 STANDARDS AND SPECIFICATIONS TEMPORARY STABLIZATION

To stabilize disturbed soils with vegetation for up to 6 month

To use fast growing vegetation that provides cover on disturbed soils.

Conditions Where Practice Applies Exposed soils where ground cover is needed for a period of 6 months or less. For longer duration of time, permanent stabilization practices are required.

1. Select one or more of the species or seed mixtures listed in Table B.1 for the appropriate Plant Hardiness Zone (from Figure B.3), and enter them in the Temporary Seeding Summary below along with application rates, seeding dates and seeding depths. If this Summary is not put on the plan and completed, then Table B.1 plus fertilizer and lime rates must be put on the plan.

2. For sites having soil tests performed, use and show the recommended rates by the testing agency. Soil tests are not required for Temporary Seeding. 3. When stabilization is required outside of a seeding season, apply seed and mulch or straw mulch

alone as prescribed in Section B-4-3.A.1.b and maintain until the next seeding season.

H-5 STANDARDS AND SPECIFICATIONS

Controlling the suspension of dust particles from construction activities.

To prevent blowing and movement of dust from exposed soil surfaces to reduce on and off-site damage health and traffic hazards.

Conditions Where Practice Applies Areas subject to dust blowing and movement where on and off-site damage is likely without treatment.

Mulches: See Section B-4-2 Soil Preparation, Topsoiling, and Soil Amendments, Section B-4-3 Seeding and Mulching, and Section B-4-4 Temporary Stabilization. Mulch must be anchored to prevent blowing.

Vegetative Cover: See Section B-4-4 Temporary Stabilization. Tillage: Till to roughen surface and bring clods to the surface. Begin plowing on windward side of site. Chisel-type plows spaced about 12 inches apart, spring-toothed harrows, and

similar plows are examples of equipment that may produce the desired effect. Irrigation: Sprinkle site with water until the surface is moist. Repeat as needed. The site must not be irrigated to the point that runoff occurs.

Barriers: Solid board fences, silt fences, snow fences, burlap fences, straw bales, and similar

Table B.1: Temporary Seeding for Site Stabilization

1/ Seeding rates for the warm season grasses are in pounds of Pure Live Seed (PLS). Actual planting rates shall be adjusted to reflect percent seed germination and purity, as

for barley, oats, and wheat. For smaller-seeded grasses (annual ryegrass, pearl millet, foxtail millet), do not exceed more than 5% (by weight) of the overall permaner

eeding mix. Cereal rye generally should not be used as a nurse crop, unless planting will occur very late fall beyond the seeding dates for other temporary seedings.

Cereal rye has allelopathic properties that inhibit the germination and growth of other plants. If it must be used as a nurse crop, seed at 1/3 of the rate listed above.

Permanent Seeding Summary

3/ The planting dates listed are averages for each Zone and may require adjustment to reflect local conditions, especially near the boundaries of the zone.

Il Fescue/Kentucky Bluegrass

seeding rates listed above are for temporary seedings, when planted alone. When planted as a nurse crop with permanent seed mixes, use 1/3 of the seeding rate listed abov

Seeding Rate 1/

40 1.0 0.5

96 2.2 1.0

120 2.8 1.0

112 2.8 1.0

Plant Species

Annual Ryegrass (Lolium perenne ss

Cool-Season Grasses

Multiflorum

Barley (Hordeum vulgare)

Wheat (Triticum aestivum)

Cereal Rye (Secale cereale)

Foxtail Millet (Serataria italica)

tested. Adjustments are usually not needed for the cool-season grasses.

Oats are the recommended nurse crop for warm-season grasses.

2/ For sandy soils, plant seeds at twice the depth listed above.

Hardiness Zone (from Figure B.3)

Seed Misture (from Table B.3):

Warm-Season Grasses

Recommended Seeding Dates by Plant Hardiness Zone 3/

Mar 1 to May 15: Aug 1 to Oct 3:

Mar 1 to May 15; Aug 1 to Oct 3

Mar 1 to May 15; Aug 1 to Oct 3

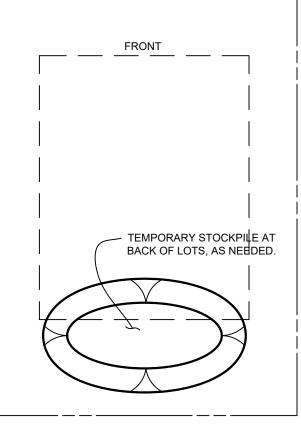
Mar 1 to May 15: Aug 1 to Oct 3:

Mar 1 to May 15; Aug 1 to Nov

May 16 to Jul 31

(10-20-20)

material can be used to control air currents and soil blowing. 6. <u>Chemical Treatment</u>: Use of chemical treatment requires approval by the appropriate plan



B-4-8 STANDARDS AND SPECIFICATIONS STOCKPILE AREA

A mound or pile of soil protected by appropriately designed erosion and sediment control measures

Conditions Where Practice Applies Stockpile areas are utilized when it is necessary to salvage and store soil for later use.

sedimentation, and changes to drainage patterns.

1. The stockpile location and all related sediment control practices must be clearly indicated on the erosion and sediment control plan

accordance with Section B-3 Land Grading.

4. Access the stockpile area from the upgrade side.

concentrated flow in a non-erosive manner. 6. Where runoff concentrates along the toe of the stockpile fill, an appropriate erosion/sediment

7. Stockpiles must be stabilized in accordance with the 3/7 day stabilization requirement as well as Standard B-4-1 Incremental Stabilization and Standard B-4-4 Temporary Stabilization. 8. If the stockpile is located on an impervious surface, a liner should be provided below the stockpile

The stockpile area must continuously meet the requirements for Adequate Vegetative Establishment in accordance with Section B-4 Vegetative Stabilization. Side slopes must be maintained at no steeper than a 2:1 ratio. The stockpile area must be kept free of erosion. If the vertical height of a stockpile exceeds 20

To provide a designated location for the temporary storage of soil that controls the potential for erosion,

2. The footprint of the stockpile must be sized to accommodate the anticipated volume of material and based on a side slope ratio no steeper than 2:1. Benching must be provided in

3. Runoff from the stockpile area must drain to a suitable sediment control practice.

5. Clear water runoff into the stockpile area must be minimized by use of a diversion device such as an earth dike, temporary swale or diversion fence. Provisions must be made for discharging

• Evidence of sediment discharges control practice must be used to intercept the discharge. • Identification of plan deficiencies • Identification of sediment controls that require maintenance

• Identification of missing or improperly installed sediment controls • Compliance status regarding the sequence of construction and stabilization requirements to facilitate cleanup. Stockpiles containing contaminated material must be covered with Monitoring/sampling • Maintenance and/or corrective action performed

9. Trenches for the construction of utilities is limited to three pipe lengths or that which can feet for 2:1 slopes, 30 feet for 3:1 slopes, or 40 feet for 4:1 slopes, benching must be provided in and shall be back filled and stabilized by the end of each work day, whichever is shorter. accordance with Section B-3 Land Grading. 10. Any major changes or revisions to the plan or sequence of construction must be reviewed and approved by the HSCD prior to proceeding with construction. Minor revisions may be allowed by the CID per the list of HSCD—approved field changes.

> 11. Disturbance shall not occur outside the L.O.D. A project is to be sequenced so that grading activities begin on one grading unit (maximum acreage of 20 ac. per grading unit) at a time. Work may proceed to a subsequent grading unit when at least 50 percent of the disturbed area in the preceding grading unit has been stabilized and approved by the CID. Unless otherwise specified and approved by the HSCD, no more than 20 acres cumulatively may be disturbed at a given time.

HOWARD SOIL CONSERVATION DISTRICT (HSCD)
STANDARD SEDIMENT CONTROL NOTES

1. A pre—construction meeting must occur with the Howard County Department of Public

protected areas are marked clearly in the field. A minimum of 48 hours notice to CID must

b. Upon completion of the installation of perimeter erosion and sediment controls, but

c. Prior to the start of another phase of construction or opening of another grading

2. All vegetative and structural practices are to be installed according to the provisions of

3. Following initial soil disturbance or re-disturbance, permanent or temporary stabilization is

required within three (3) calendar days as to the surface of all perimeter controls, dikes.

swales, ditches, perimeter slopes, and all slopes steeper than 3 horizontal to 1 vertical (3:1)

and seven (7) calendar days as to all other disturbed areas on the project site except for

4. All disturbed areas must be stabilized within the time period specified above in accordance

with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT

(Sec. B-4-4) and mulching (Sec. B-4-3). Temporary stabilization with mulch alone can only

 $\underline{\text{CONTROL}}$ for topsoil (Sec. B-4-2), permanent seeding (Sec. B-4-5), temporary seeding

be applied between the fall and spring seeding dates if the ground is frozen. Incremental

concentrated flow, steep slope, and highly erodible areas shall receive soil stabilization

5. 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 CID.

stabilization (Sec. B-4-1) specifications shall be enforced in areas with >15' of cut and/or fill. Stockpiles (Sec. B-4-8) in excess of 20 feet must be benched with stable outlet. All

0.7___ Acres

_ Acres

__ Acres

Acres

Cu Yds

_ Cu Yds

SITE WITH AN ACTIVE GRADING PERMIT

0.9

0.6

0.3

633 *

633 * ,

7. Any sediment control practice which is disturbed by grading activity for placement of

8. Additional sediment control must be provided, if deemed necessary by the CID. The site

rain event. A written report by the contractor, made available upon request, is part of every

and all controls shall be inspected by the contractor weekly; and the next day after each

• Weather information (current conditions as well as time and an=mount of last recorded

• Other inspection items as required by the General Permit for Stormwater Associated with

• Brief description of project's status (e.g. percent complete) and/or current activities

*CUT/FILL NUMBERS

FOR SEDIMENT

TO VERIFY.

ARE ROUGH ESTIMAT

CONTROL PURPOSES

ONLY. CONTRACTOR

Works, Construction Inspection Division (CID), 410-3133-1855 after the future LOD and

before proceeding with any other earth disturbance or grading,

d. Prior to the removal or modification of sediment control practices.

this plan and are to be in conformance with the <u>2011 MARYLAND STANDARDS AND</u>

SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.

be given at the following stages:

those areas under active grading.

Total Area of Site:

• Name and title of inspector

Construction Activities (NPDES, MDE).

Area to be roofed or paved:

Area to be vegetatively stabilized:

Off-site waste/borrow area location:

• Inspection type (routine, pre-storm event, during rain event)

Area Disturbed:

a. Prior to the start of earth disturbance.

12. Wash water from any equipment, vehicles, wheels, pavement, and other sources must be treated in a sediment basin or other approved washout structure. 13. Topsoil shall be stockpiled and preserved on-site for redistribution onto final grade.

14. All silt fence and super silt fence shall be placed on—the—contour, and be imbricated at 25' minimum intervals, with lower ends curled uphill by 2' in elevation. 15. Stream channels must not be disturbed during the following restricted time periods

• Use I and IP March 1 - June 15 • Use III and IIIP October 1 - April 30

 Use IV March 1 − May 31 16. A copy of this plan, the <u>2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL</u>, and associated permits shall be on—site and available when

SEQUENCE PERTAINS TO EACH INDIVIDUAL HOUSE OR TOWNHOUSE STICK AS PERMITS ARE ISSUED. NOT ALL HOUSES/STICKS WILL BE CONSTRUCTED AT THE SAME TIME.

1. Obtain grading/building permit. Notify D.I.L.P. at 410-313-1880 at least 24 hours before starting any work. (1 day)

2. Hold on-site pre-construction meeting. (day 2)

3. Install individual lot perimeter controls (i.e. stabilized construction entrance, super silt

temporary seedbed notes. (day 4-10) 5. Construct house, install water and sewer house connections from easement/right-of-

6. Upon approval from the Howard County Sediment Control Inspector, remove all sediment control devices and stabilize any remaining disturbed areas in accordance with the permanent seedbed notes. (day 91-100)

stabilization shall be completed within:

A. 3 calendar days for all perimeter sediment control structures, dikes, swales and

all slopes greater than 3:1. B. 7 calendar days for all other disturbed areas. NO. DATE REVISION vere prepared or approved by me, and that I am a duly license professional engineer unden the laws of the State of Maryland **BENCHMARK** License No. 22390 Expiration Date: 6-30-2023. ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS ENGINEERING, INC 8480 BALTIMORE NATIONAL PIKE ▲ SUITE 315 ▲ ELLICOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644 WWW.BEI-CIVILENGINEERING.COM VILLAGES AT TOWN SQUARE Phase 2 OWNER:

BUILDER: 9720 PATUXENT WOODS DRIVE COLUMBIA, MARYLAND 21046 703-956-4080

ESIGN: DBT | DRAFT: DBT

Lots 72 thru 88 (previously recorded as Plat No. 26011-26013)

TAX MAP: 16 - GRID: 19 - PARCEL: 8 ZONED: PGCC-2 ELECTION DISTRICT NO. 3 - HOWARD COUNTY, MARYLAND SEDIMENT AND EROSION CONTROL NOTES DATE:

5 of 5

J:\3098 Villages at Town Sq Phase 2\dwg\8023.dwg, 4/8/2022 10:52:14 AM

HOWARD SOIL CONSERVATION DISTRICT

CHIEF. DEVELOPMENT ENGINEERING DIVISION

CHIEF. DIVISION OF LAND DEVELOPMENT

the growth of the grass seedlings.

b. When straw mulch is used, spread it over all seeded areas at the rate of 2 tons per acre to a

acre. Mix the wood cellulose fiber with water to attain a mixture with a maximum of 50 pounds

of wood cellulose fiber per 100 gallons of water. or water. This may be done by one of the following methods (listed by preference), depending

> on large areas, but is limited to flatter slopes where equipment can operate safely. If used on sloping land, this practice should follow the contour. ii. Wood cellulose fiber may be used for anchoring straw. Apply the fiber binder at a net

recommendations. Netting is usually available in rolls 4 to 15 feet wide and 300 to

PERMANENT STABILIZATION

To use long-lived perennial grasses and legumes to establish permanent ground cover on disturbed soils.

Exposed soils where ground cover is needed for 6 months or more. A. Seed Mixtures

b Additional planting specifications for exceptional sites such as shorelines, stream banks, or dunes or for special purposes such as wildlife or aesthetic treatment may be found in USDA-NRCS Technical

square feet (150 pounds per acre) at the time of seeding in addition to the soil amendments shown

Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The summary is to be placed on the plan.

receiving low to medium management in full sun to medium shade. Recommended mixture includes:

1 ½ to 3 pounds per 1000 square feet. Notes: Select turfgrass varieties from those listed in the most current University of Maryland Publication, Agronomy Memo #77, "Turfgrass Cultivar Recommendations for Maryland" Choose certified material. Certified material is the best guarantee of cultivar purity. The certification program of the Maryland Department of Agriculture, Turf and Seed Section, provides a reliable means of

(Hardiness Zones: 7a, 7b) diameter. The resulting seedbed must be in such condition that future mowing of grasses will pose

every 3 to 4 days depending on soil texture) until they are firmly established. This is not especially

B. Sod: to provide quick cover on disturbed areas (2:1 grade or flatter). a. Class of turfgrass must be Maryland State Certified. Sod labels must be made available to the job

size and shape when suspended vertically with a firm grasp on the upper 10 percent of the section. d. Sod must not be harvested or transplanted when moisture content (excessively dry or wet) may

P2O5 Rate (lb/ac.) Dates Depths Mar 1 to May 15 Fescue, Tall 60 1/4 - 1/2 in Aug 1 to Oct 15 Mar 1 to May 15 per acre 90 lb/ac 90 lb/ac 2 tons/ac 9 Bluegrass, Kentuck 1/4 - 1/2 in Aug 1 to Oct 15 (1.0 lb/ 100 sf) 1000 sf) 1000 sf) 1000 sf) 1/4 - 1/2 in

SEQUENCE OF CONSTRUCTION

NOTIFY SEDIMENT CONTROL DIVISION 48 HOURS PRIOR TO START OF WORK

fencing, TSOS, etc.). (day 3)

way up to house, backfill, and construct driveway. (day 11-90)

Note: Following initial soil disturbance or any re-disturbances, permanent or temporary

During grading and after each rainfall, contractor will inspect and provide necessary maintenance to the sediment control measures of this plan.

4. Excavate for foundation, rough grade lot, and stabilize in accordance with the

MANGIONE ENTERPRISES OF TURF VALLEY, LIMITED PARTNERSHI 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400

BEI PROJECT NO. APRIL 8, 2022 SCALE: AS SHOWN SHEET

SDP-22-038

Amy Gonan

THE HOWARD SOIL CONSERVATION DISTRICT

DEVELOPER

ENGINEER

DIRECTOR