## **GENERAL NOTES**

- 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. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE. THE EXISTING TOPOGRAPHY IS TAKEN FROM A FIELD RUN SURVEY WITH 2 FOOT CONTOUR INTERVALS PREPARED BY A.B.
- CONSULTANTS, INC. DATED OCTOBER 2007 AND FROM THE PROPOSED GRADES OF THE APPROVED FINAL ROAD CONSTRUCTION PLANS DATED 2/6/2018. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED UPON
- THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 37B4 AND 37R2 WERE USED FOR
- BOUNDARY INFORMATION SHOWN HEREON IS BASED ON A FIELD RUN SURVEY PERFORMED BY MORRIS & RITCHIE ASSOC., INC. IN DECEMBER 2007.
- THE OFFSITE FLOODPLAIN SHOWN IS PER SHA PLAT NO. 54587. THE SUBJECT PROPERTY IS ZONED R-SA-8 PER THE 10/6/2013 COMPREHENSIVE ZONING PLAN.
- ). NO CEMETERIES OR HISTORIC STRUCTURES EXIST ON—SITÉ.
- I. WATER IS PUBLIC. CONTRACT NUMBER #320-W AND #14-4993-D. 12. SEWER IS PUBLIC, CONTRACT NUMBER #546-S. 14-4993-D. PATAPSCO WASTE WATER TREATMENT PLANT.
- 3. A FOREST STAND DELINEATION WAS PERFORMED BY GEO-TECHNOLOGY ASSOCIATES, INC. IN 2007 AND RECONFIRMED/REVISITED BY FIELD INVESTIGATION IN OCTOBER 2014.
- 14. A TRAFFIC STUDY WAS PREPARED BY TRAFFIC GROUP, ENTITLED "TRAFFIC IMPACT ANALYSIS", IN MARCH 2015. 15. A NOISE STUDY WAS PREPARED BY PHOENIX NOISE AND VIBRATION, LLC, ENTITLED "TROTTER'S KNOLL PHASE 1 NOISE
- 6. Wetlands and waters of U.S. Shown Hereon were delineated and GPS located by Geo—technology ASSOCIATES, INC ON DECEMBER 17, 2007, RECONFIRMED ON AUGUST 24, 2011, PERMITTED ON FEBRUARY 12, 2016,
- . THE GEO-TECHNICAL REPORT FOR THIS PROJECT WAS PREPARED BY GEO-TECHNOLOGY ASSOCIATES, INC., DATED AUGUST 25,
- 2016. 18. THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN
- 19. LOTS 85-100 WERE APPROVED ON 5/21/2019 ON FINAL PLAN F-18-107.

AND 10 ORNAMENTAL/EVERGREEN TREES @ \$150.00 EACH.

- 20. PRIOR DPZ CASES: ECP-15-020, WP-18-043, WP-15-085, WP-15-042 (WITHDRAWN), WP-17-040 (WITHDRAWN) SP-17-005, SP-16-002, F-17-027, F-18-107. 1. ON NOVEMBER 30, 2015 THE HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING PLANNING DIRECTOR, APPROVED THE NOVEMBER 3, 2015 REQUEST FOR AN INCREASED BUILDING LENGTH PER SECTION 111.0.D.1(E) OF THE ZONING
- REGULATION SUBJECT TO THE FOLLOWING CONDITIONS: - EACH TOWNHOUSE UNIT SHALL HAVE THE 2' JOG BETWEEN THE BUILDING FACADES OF EACH UNIT AND ADJACENT UNITS AS PROPOSED BY THE APPLICANT. - EACH UNIT SHALL HAVE THE DIFFERENT ARCHITECTURAL CHARACTER AS PROPOSED BY THE APPLICANT TO

INCLUDE BUILDING MATERIALS, COLOR PALETTE AND/OR ARCHITECTURAL FEATURES. ADDITIONALLY, THE

- APPLICANT SHALL VARY THE ARCHITECTURAL CHARACTER OF THE ROOF DESIGN TO INCLUDE VARYING HEIGHTS, - A FINAL DETERMINATION OF THE BUILDING ARCHITECTURAL DESIGN AND VISUAL IMPACT OF THE BUILDING LENGTH SHALL BE FURTHER EVALUATED BY THIS OFFICE WITH THE REVIEW AND APPROVAL OF THE SITE
- DEVELOPMENT PLAN. 23. IN ACCORDANCE WITH SECTION 128.0.A.10 OF THE ZONING REGULATIONS TROTTER'S KNOLL SECTIONS I & II ARE CONSIDERED AN INTEGRATED DEVELOPMENT THEREFORE STRUCTURE AND USE SETBACKS ARE NOT REQUIRED BETWEEN
- 4. LANDSCAPING FOR LOT(S) 85-100 ARE PROVIDED IN ACCORDANCE WITH CERTIFIED LANDSCAPE PLAN F-18-107 (SHEETS 15 AND 16 INCLUDED WITH THE ROAD CONSTRUCTION PLAN SET) IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING SHALL BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$4,800 (8 SHADE TREES @ \$300.00 EACH
- 5. This plan is in compliance with the amended fifth edition of the subdivision and land development REGULATIONS PER COUNCIL BILL 45-2003 AND THE 10/6/13 COMPREHENSIVE ZONING PLAN. DEVELOPMENT OR CONSTRUCTION ON THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN.
- 6. ALL STORMWATER MANAGEMENT CONTROL DEVICES AND ASSOCIATING PIPES WILL BE OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION. STORMWATER MANAGEMENT IS ACHIEVED BY USING ESD WITH BMP'S. SEE APPROVED FINAL
- 7. SHC ELEVATIONS SHOWN ARE LOCATED AT THE UTILITY EASEMENT. 28. FOR DRIVEWAY ENTRANCE DETAILS REFER TO THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL
- 29. DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS: WIDTH- 12' (16' SERVING MORE THAN ONE RESIDENCE)
- SURFACE- 6" OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1 1/2" MIN) GEOMETRY- MAX. 15% GRADE, MAX. 10% GRADE CHANGE AND MIN. 45' TURNING RADIUS STRUCTURE (CULVERTS/BRIDGES)- CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING) DRAINAGE ELEMENTS- SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAM(S), OR THEIR REQUIRED BUFFERS, FLOODPLAIN AND FOREST CONSERVATION EASEMENT AREAS WITHOUT AN APPROVED ALTERNATIVE COMPLIANCE REQUEST.
- . TROTTER'S KNOLL PROJECT IS DEVELOPED AS TWO SECTIONS, SECTION ONE AND SECTION TWO, PER APPROVED SP-17-005 AND F-18-107, PLAT #25354-25359. THIS PLAN SET IS FOR TROTTER'S KNOLL SECTION TWO ONLY AND
- 2. FOREST CONSERVATION REQUIREMENTS ARE MET WITH ON-SITE RETENTION OF 1.72 ACRES UNDER F-18-107, PLAT #
- . IN ACCORDANCE WITH SECTION 128.0 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS. PORCHES, OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD
- 4. THE 65DBA NOISE LINE ESTABLISHED BY HOWARD COUNTY TO ALERT DEVELOPERS, BUILDERS AND FUTURE RESIDENTS THAT AREAS BEYOND THIS THRESHOLD MAY EXCEED GENERALLY ACCEPTED NOISE LEVELS ESTABLISHED BY THE U.S.
- DEPT OF HOUSING AND URBAN DEVELOPMENT. 35. ALL PARKING SPACES PROVIDED ON SITE SHALL BE MAINTAINED BY THE H.O.A.
- 6. ALL MIHU REQUIREMENTS FOR THIS PROJECT ARE BEING PROVIDED BY UNITS ON-SITE AS SHOWN ON THE MIHU ALLOCATION EXEMPTIONS TRACKING CHART, THIS PAGE. MIHU AGREEMENT WAS RECORDED IN L.19196, P.38. 37. ALL REFUSE ON SITE WILL BE COLLECTED FROM INDIVIDUAL HOMEOWNERS BY HOWARD COUNTY. THERE IS A REFUSE COLLECTION CHARGE LEVIED ANNUALLY ON ALL RESIDENTIAL PROPERTY FOR WHICH THE COUNTY PROVIDES REFUSE
- DEVELOPMENT REGULATIONS WAS APPROVED TO REMOVE SPECIMEN TREE #4, BUT DENIED THE REQUEST TO REMOVE SPECIMEN TREE #5. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS: (1) SPECIMEN TREE #5 MUST BE SAVED, PROTECTED AND MAINTAINED AS SHOWN ON THE REVISED ENVIRONMENTAL CONCEPT PLAN UPLOADED TO PROJECTDOX. IN ORDER TO FURTHER PROTECT DISTURBANCE TO THE CRITICAL ROOT ZONE FOR SPECIMEN TREE #5. DPZ RECOMMENDS THE APPLICANT MOVE UNITS 95 & 96 AND RELOCATED THEM NEXT TO UNIT 27. THIS EXCHANGE SHOULD BE CONSIDERED AND EVALUATED DURING THE DESIGN AND REVIEW OF THE SUBDIVISION PLAN; (2) IN ACCORDANCE WITH THE DEPARTMENT OF RECREATION AND PARKS COMMENTS DATED JANUARY 21, 2015 - SPECIMEN TREE #5 SHOULD BE PROTECTED DURING CONSTRUCTION. A REGISTERED ARBORIST MUST INSPECT THE TREE AND IMPLEMENT RECOMMENDATIONS FOR PROFESSIONAL PRUNING OF ROOTS AND FOLIAGE ALL PRUNING MUST BE PERFORMED BY A MARYLAND LICENSED TREE EXPERT. TREE PROTECTION FENCING MUST BE INSTALLED AROUND THE TREES PERIMETER TO PREVENT ROOT AND FOLIAGE DAMAGE DURING CONSTRUCTION AND ALTERNATIVE DESIGNS OF THE SITE LAYOUT MUST BE CONDUCTED BY THE CONSULTANT IN ORDER TO MINIMIZE ROOT DAMAGE; (3) EFFORTS SHOULD BE MADE TO SAVE AND PROTECT SPECIMEN TREE #4 DURING CONSTRUCTION. HOWEVER SHOULD GRADING CONDITIONS ASSOCIATED WITH THE PLAN PROHIBIT THE SAVING OF THIS SPECIMEN TREE. THE

38. ON 02/18/15 AN ALTERNATIVE COMPLIANCE, WP-15-085, TO SECTION 16.1205(a)(7)&(10) OF THE SUBDIVISION AND LAND

REMOVAL OF SPECIMEN TREE #4 IS APPROVED UNDER THIS WAIVER REQUEST. THE REMOVAL OF SPECIMEN TREE #4 WILL REQUIRE MITIGATION OF ONE 3" - 4" CALIPER TREE. THE MITIGATED TREE SHALL BE OF SIMILAR SPECIES AS THE REMOVED TREE, BE SHOWN AS PART OF THE LANDSCAPE PLAN, AND SHALL BE BONDED WITH THE LANDSCAPE OBLIGATION. THE SEWER CONNECTION WAS DETERMINED TO BE AN ESSENTIAL AND NECESSARY DISTURBANCE AND WAS APPROVED BY THE PLANNING DIRECTOR UNDER SP-17-005 APPROVED FEBRUARY 2, 2018. SEE GENERAL NOTE 27 ON SP-17-005. O. BEFORE ISSUING ANY PERMITS WITHIN THE 50' STRUCTURE AND USE SETBACK ON LOT 100, WRITTEN PERMISSION MUST BE OBTAINED FROM THE MARYLAND STATE HIGHWAY ADMINISTRATION.

\* PROVIDED UNDER F-18-107

OPEN SPACE TABULATIONS				
	SECTION 2			
REQUIRED OPEN SPACE (25% OF GROSS)	1.22 ACRES			
PROVIDED OPEN SPACE	7.39 ACRES			
CREDITED OPEN SPACE	7.27 ACRES			
NON-CREDITED OPEN SPACE	O.II ACRES			
NON-CREDITED COMMON OPEN SPACE	O.OI ACRES			
RECREATIONAL OPEN SPACE REQ (400 SF/UNIT)	6,400 SF			
RECREATIONAL OPEN SPACE PROVIDED	6,475 SF			

SITE ANALYSIS DATA

PROPERTY AREA (GROSS)

NO. OF UNITS PROPOSED:

A. GENERAL BULK REGULATIONS:

MAXIMUM HEIGHT:

TOTAL AREA OF PROPOSED LOTS:

AREA OF PROPOSED OPEN SPACE:

NO. OF RESIDENTIAL LOTS PROPOSED: 10. PROPOSED WATER AND SEWER SHALL BE PUBLIC.

1.1. PRINCIPAL STRUCTURE:

1.2. ACCESSORY STRUCTURES:

MAXIMUM UNITS PER STRUCTURE: 4. MAXIMUM BUILDING LENGTH:

(SEE GENERAL NOTE #21)

1.1.1. FRONT OR SIDE:

OR PRIVATE STREET

2.1.1. FRONT OR SIDE:

FROM VICINAL PROPERTIES

3.2.1 FACE TO FACE

3.2.2 SIDE TO SIDE

2.1.2. REAR TO PUBLIC STREET:

2.2. USES (OTHER THAN STRUCTURES):

3.1. FROM AN RC, RR, R-20, R-12, R-ED, OR

3.1.1. SINGLE-FAMILY ATTACHED DWELLINGS:

3.1.2. OTHER STRUCTURES OR USES:

3.2 BETWEEN MULTI-FAMILY BUILDINGS

AREA OF A NT, PGCC, OR MXD DISTRICT

R-SC DISTRICT OR A SINGLE-FAMILY LAND USE

2.1. STRUCTURES

A. <u>MINIMUM SETBACK REQUIREMENTS:</u>

1.1. STRUCTURES

1.1.2. REAR: 1.2. USES:

2. MAXIMUM LOT COVERAGE FOR STRUCTURES

WITHIN SINGLE-FAMILY ATTACHED PROJECTS DEVELOPED WITH ONE DWELLING UNIT PER LOT:

(DIRECTOR MAY APPROVED UP TO 300')

2. FROM OTHER PUBLIC STREET RIGHT-OF-WAY

1. FROM ARTERIAL OR MAJOR COLLECTOR

AREA OF PROPOSED ROADS:

100 YEAR FLOODPLAIN

PROPOSED USE:

R-SA-8

8.82 AC.

3.73 AC.

0.613 AC.

RESIDENTIAL

REQUIRED

7.443 AC. (83.8% OF GROSS)

**PROVIDED** 

51%

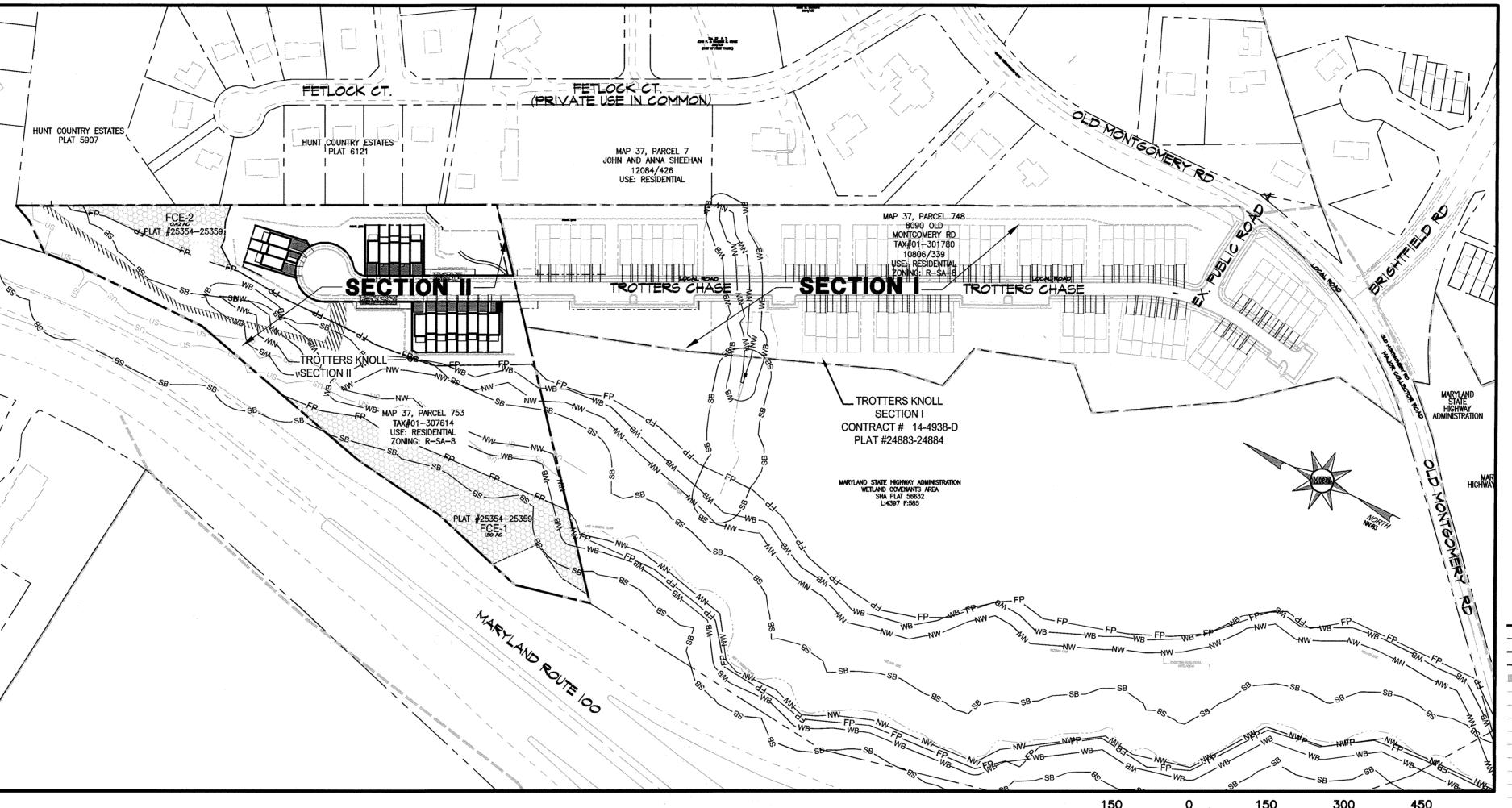
MIN. 90

(SINGLE FAMILY ATTACHED)

#### HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING HIEF, DEVELOPMENT ENGINEERING DIVISION 137 6/8/2020 CHÆF, DIVISION OF LAND DEVELOPMENT😿 DATE 6-9-2020 XX (200-RECTOR OF PLANNING AND ZONING DATE

# SITE DEVELOPMENT PLAN TROTTER'S KNOLL - SECTION III SINGLE FAMILY ATTACHED

LOTS 85-100 PLAT #25354-25359



## **LOCATION PLAN** SCALE: 1" = 150'

#### REQUIRED **PROVIDED** C. MODERATE INCOME HOUSING UNITS AT LEAST 10% OF THE DWELLINGS IN EACH R-SA-8 1.6 UNITS (10%) 2 UNITS (12.5%) DEVELOPMENT SHALL BE MODERATE INCOME (SPECIFIC UNITS TBD) HOUSING UNITS.

#### D. PARKING REQUIREMENTS: 1. REQUIRED PARKING (16 SINGLE-FAMILY ATTACHED UNITS):

1.1. RESIDENTIAL UNITS (2 SPACES PER DWELLING UNIT)  1.2. VISITOR PARKING (0.5 PER DWELLING UNIT)	8 SPACES
2. PROVIDED PARKING 2.1. SINGLE FAMILY ATTACHED GARAGES SPACES: 2.2. SINGLE FAMILY ATTACHED DRIVEWAY SPACES: 2.3. OFF-STREET RESIDENTIAL SPACES: 2.4. OFF-STREET VISITOR SPACES:	57 SPACES TOTAL PRO 12 SPACES* 31 SPACES* 6 SPACES 8 SPACES
* UNITS W/ 1-CAR GARAGE AND 2 - CAR DRIVEWAYS  * UNITS W/ 2-CAR GARAGE AND 2- CAR DRIVEWAYS  * UNITS W/ 2-CAR OFF-STREET SPACES EACH  # UNIT W/ 1-CAR GARAGE & I CAR DRIVEWAY	UNITS 86-88 UNITS 85, 89, 90, 92 UNITS 93-100 UNITS 91

	P	ERMIT	INFORMATION	CHART	
	SUBI	DIVISION	NAME		PARCEL NO.
	TROTTERS	KNOLL -	-SECTION II		PARCEL 753
LAT NO. OR L/F	GRID #	ZONING	TAX MAP NO.	ELECT. DIS	T. CENSUS TRACT
SHA PLAT 10. 25354-25359	2	R-SA-8	37	1	6011.05

MODERATE INCOME HOUSING UNITS (	MIHU) ALLOCATION EXEMPTIONS TRACKING
TOTAL NUMBER OF LOTS/UNITS PROPOSED	16
NUMBER OF MIHU REQUIRED	2
NUMBER OF MIHU PROVIDED ONSITE (EXEMPT FROM APFO ALLOCATIONS)	2 PROVIDED - LOTS 97 & 99 PER MIHU AGREEMENT EXECUTED L.19196, F.38
NUMBER OF APFO ALLOCATIONS REQUIRED (REMAINING LOTS/UNITS)	16 REQUIRED / 16 PROVIDED
MIHU FEE-IN-LIEU (INDICATE LOT/UNIT NUMBERS)	NOT APPLICABLE REQUIREMENTS MET ON SITE

(INDICATE LOT/UNIT NUMBERS)

## SHEET INDEX

1	COVER SHEET
2	LAYOUT PLAN - LOTS 85-100
3	GRADING, SOILS, SEDIMENT AND EROSION CONTROL PLAN
4	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS
5	HOUSE TYPES

## OWNER / DEVELOPER:

CALATLANTIC GROUP, INC. ADDRESS: 7035 ALBERT EINSTEIN DRIVE, SUITE 200

COLUMBIA, MD 21046 CONTACT: RYAN HOUCK DIVISION PRESIDENT PHONE: 410-997-5522 EMAIL: Ryan.Houck@lennar.com

ADDRESS: 7035 ALBERT EINSTEIN DRIVE, SUITE 200 COLUMBIA, MD 21046 PHONE: 410-997-5522

**BENCH MARKS** 

3/B4 N 563,928.5542 E 1,373,109.1044 ELEV. 401.41' NAD 83/91 NAVD 88

37R2 N 562,611.4210 E 1,371,554.4972 ELEV. 399.73' NAD 83/91 NAVD 88



**VICINITY MAP** SCALE: 1" = 2,000'

ADDRESS CHART						
LOT NO.	STREET ADDRESS					
85	8148 TROTTERS CHASE					
86	8150 TROTTERS CHASE					
87	8152 TROTTERS CHASE					
88	8154 TROTTERS CHASE					
89	8156 TROTTERS CHASE					
90	8160 TROTTERS CHASE					
91	8162 TROTTERS CHASE					
92	8164 TROTTERS CHASE					
93	8147 TROTTERS CHASE					
94	8145 TROTTERS CHASE					
95	8143 TROTTERS CHASE					
96	8141 TROTTERS CHASE					
97	8139 TROTTERS CHASE					
98	8137 TROTTERS CHASE					
99	8135 TROTTERS CHASE					
100	8133 TROTTERS CHASE					

**LEGEND** 

EX. PROPERTY LINE		EX. TV LINE
EX. ADJACENT PROPERTY LINE	<b>E</b>	EX. ELECTRIC MANHOLE
EX. RIGHT OF WAY	<b></b>	EX. TELEPHONE MANHOLE
EX. EASEMENT	<b>∂</b> B−1	EX. BORING LOCATION
EX. ZONING LINE	* * * *	
EX. BUILDING	* * * *	EX. NON TIDAL WETLANDS
EX. CONCRETE	NWNW	EX. NON TIDAL WETLANDS
EX. PAVEMENT	WB	EX. 25' WETLAND BUFFER
EX. ROAD CENTERLINE	FP FP	EX. FLOODPLAIN
EX. FENCE	consistent and the second sec	EX. WATERS OF THE US
EX. OVERHEAD LINE	—— SB ——— SB ———	EX. STREAM BUFFER
EX. WATER LINE		EV ODEONIEM TOES
EX. SEWER LINE		EX. SPECIMEN TREE
ex. Stream	NOTE THE PETER NOTE THAT THE THE THE THE THE THE THE THE THE TH	EX. 1' CONTOUR
EX. STREAM BUFFER		EX. 2' CONTOUR
EX. TREE LINE	202	
EX. GUARD RAIL		EX. 10' CONTOUR
EX. ELECTRIC CONDUIT	XXXXXXXXX	EX. SLOPES 15%-25%
EX. LIGHT POLES	r-r-r-r-r-r-r	
EX. GAS LINE		EX. SLOPES +25%
EX. STORM DRAIN	SSB SSB	EX. STEEP SLOPES BUFFER
EX. CONDUIT		EX. CILLI CLOI LO DOITEN
EX. FIBER OPTIC		
		PR. FOREST CONSERVATION



ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS 14280 PARK CENTER DRIVE

LAUREL, MD 20707 (410) 792-9792 / (301) 776-1690 FAX: (410) 792-7395

MRAGTA.COM



HEREBY CERTIFY THAT

THESE DOCUMENTS WERE

LICENSED PROFESSIONAL

LICENSE NO. 19916,

EXPIRATION DATE:

01/14/2021.

PREPARED OR APPROVED BY

ME. AND THAT I AM A DULY

ENGINEER UNDER THE LAWS

OF THE STATE OF MARYLAND,

mmmmm

----- UG------ UG-----

----- F0------- F0-----

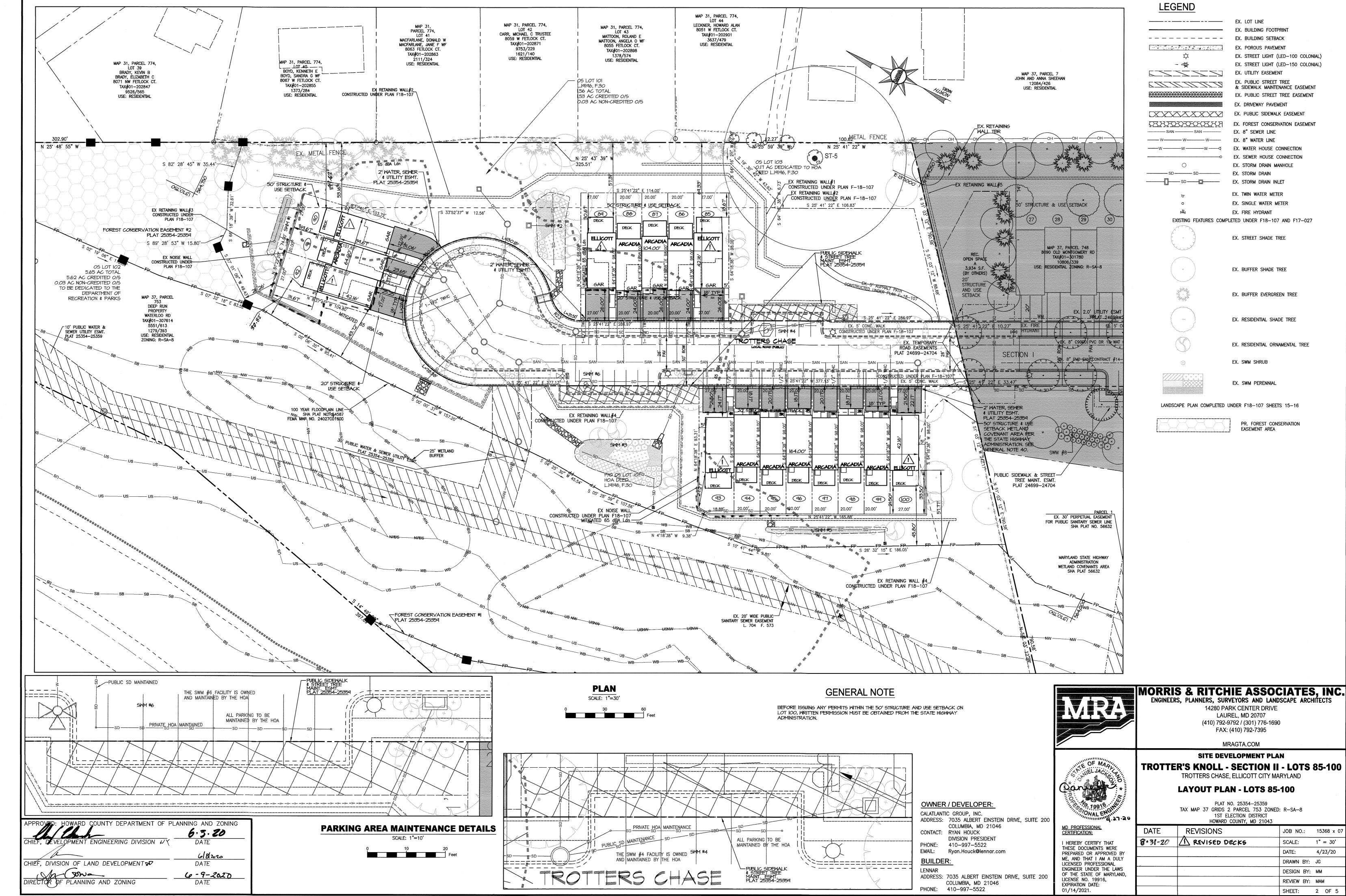
34 ×

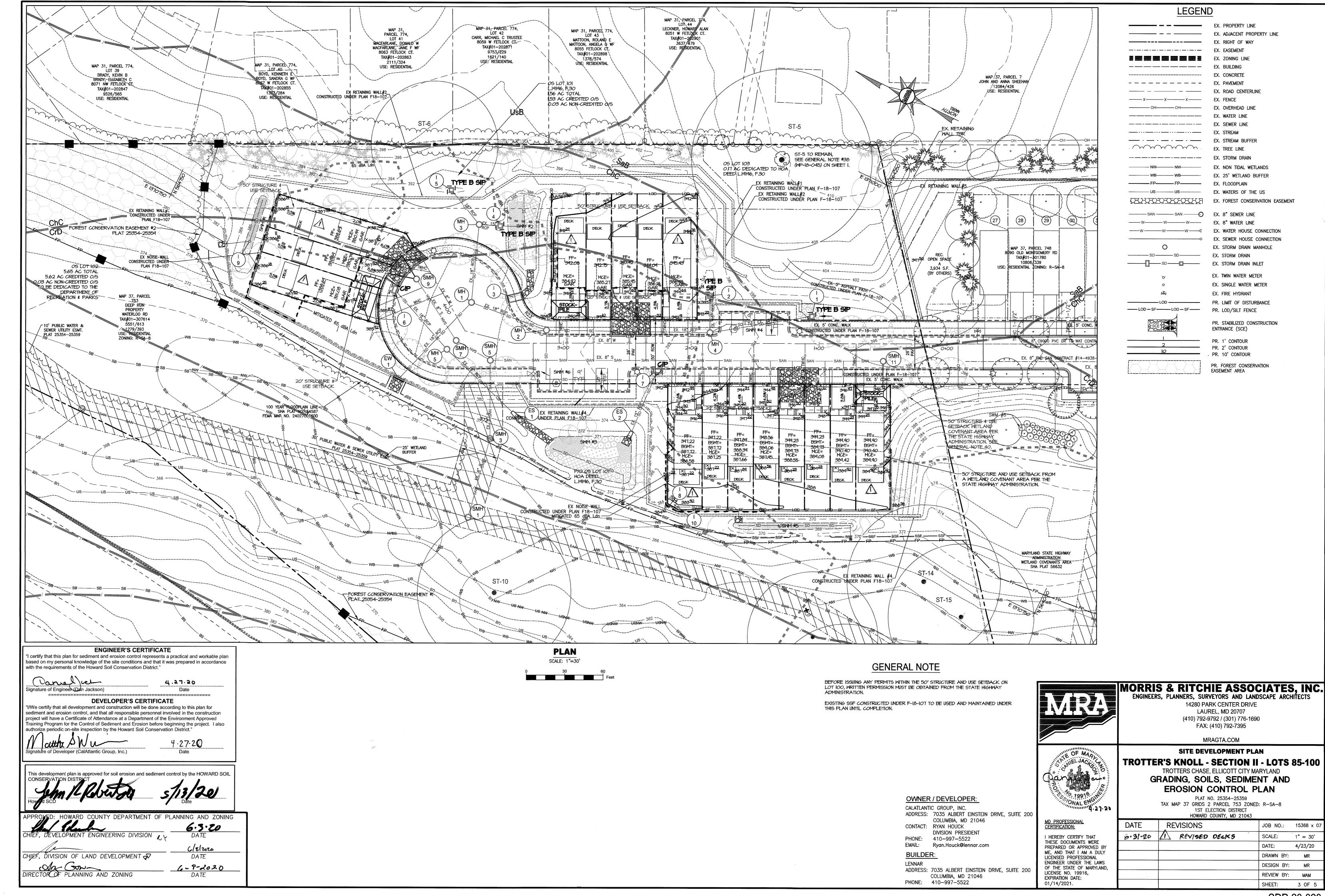
SITE DEVELOPMENT PLAN TROTTER'S KNOLL - SECTION II - LOTS 85-100 TROTTERS CHASE, ELLICOTT CITY MARYLAND

**COVER SHEET** 

PLAT NO. 25354-25359 TAX MAP 37 GRIDS 2 PARCEL 753 ZONED: R-SA-8 1ST ELECTION DISTRICT HOWARD COUNTY, MD 21043

DATE	REVISIONS	JOB NO.:	15368 x 07
		SCALE:	1" = 150'
		DATE:	4/23/20
		DRAWN BY:	MR
-		DESIGN BY:	MR
		REVIEW BY:	DJ
		SHEET: 1	OF 5





To provide a suitable soil medium for vegetative growth.

Where vegetative stabilization is to be established.

#### A. Soil Preparation

- a. 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
- b. Apply fertilizer and lime as prescribed on the plans.
- c. Incorporate lime and fertilizer into the top 3 to 5 inches of soil by disking or other suitable

but left in the roughened condition. Slopes 3:1 or flatter are to be tracked with ridges running

- a. 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 plus clay

- iv. Soil contains 1.5 percent minimum organic matter by weight.
- v. Soil contains sufficient pore space to permit adequate root penetration. b. Application of amendments or topsoil is required if on-site soils do not meet the above
- c. 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.
- d. Apply soil amendments as specified on the approved plan or as indicated by the results of a soil
- e. Mix soil amendments into the top 3 to 5 inches of soil by disking or other suitable means, Rak 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 seedbe preparation. Track slopes 3:1 or flatter with tracked equipment leaving the soil in an irregula condition with ridges running parallel to the contour of the slope. Leave the top 1 to 3 inches o

## soil loose and friable. Seedbed loosening may be unnecessary on newly disturbed areas.

- 1. 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 gradation.
- 2. 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 USDA-NRCS.
- 3. Topsoiling is limited to areas having 2:1 or flatter slopes where:
- The texture of the exposed subsoil/parent material is 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 and plant nutrients
- c. The original soil to be vegetated contains material toxic to plant growth. d. The soil is so acidic that treatment with limestone is not feasible.
- Areas having slopes steeper than 2:1 require special consideration and design.
- 5. 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 subsoil 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
- c. Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientis 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
- 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 esulting from topsoiling or other operations must be corrected in order to prevent the
- c. Topsoil must not be placed if the topsoil or subsoil is in a frozen or maddy 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

- 1. 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 more. Soil analysis may be performed by a recognized private or commercial laboratory. Soil samples taken for engineering purposes may also
- 2. 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 warranty of the producer 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 exide). 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.

with the requirements of the Howard Soil Conservation District."

Warrell Jeel

Signature of Enginee (Dah Jackson)

ignature of Developer (CalAtlantic Group, Inc.)

5. 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 topsoil.

**ENGINEER'S CERTIFICATE** 

**DEVELOPER'S CERTIFICATE** 

"I/We certify that all development and construction will be done according to this plan for

sediment and erosion control, and that all responsible personnel involved in the construction

Training Program for the Control of Sediment and Erosion before beginning the project. I also

project will have a Certificate of Attendance at a Department of the Environment Approved

authorize periodic on-site inspection by the Howard Soil Conservation District."

4.27.20

I certify that this plan for sediment and erosion control represents a practical and workable plan

based on my personal knowledge of the site conditions and that it was prepared in accordance

#### **B-43 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 Appli To the surface of all perimeter controls, slopes, and any disturbed area not under active grading

weaken bacteria and make the inoculant less effective

- a. All seed must meet the requirements of the Maryland State Seed Law. All seed must be 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 thaw
- 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
- 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.

inoculant as cool as possible until used. Temperatures above 75 to 80 degrees Fahrenheit can

- a. Dry Seeding: This includes use of conventional drop or broadcast spreaders i. 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 seed to soil
- 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 planting. ii. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in
- c. Hydroseeding: Apply seed uniformly with hydroseeder (shurry 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 eding). Normally, not more than 2 tons are applied by hydrosceding at any one time. Do not use burnt or hydrated lime when hydroseeding.
- 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 factor
- 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 shurry. 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 the growth of the grass seedlings.
- iv. WCFM material must not contain elements or compounds at concentration levels that will r. 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.

- b. When straw mulch is used, spread it over all seeded areas at the rate of 2 tons per acre to a 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 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
- a. Perform mulch anchoring immediately following application of mulch to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending 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 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 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
- iv. Lightweight plastic netting may be stapled over the mulch according to manufacture recommendations. Netting is usually available in rolls 4 to 15 feet wide and 300 to 3.000

#### **B-4-4 STANDARDS AND SPECIFICATIONS**

## FOR

TEMPORARY STABILIZATION Definition

To stabilize disturbed soils with vegetation for up to 6 months

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 time rates must be put on the plan.

2. For sites having soil tests performed, use and show the recommended rates by the testing agency. 3. When stabilization is required outside of a seeding season, apply seed and mutch or straw mulch lone as prescribed in Section B-4-3.A.1.b and maintain until the next seeding season.

Temporary Seeding Summary

#### lardiness Zone (from Figure B.3): 6B Rate Lime Rate Application | Seeding (10-20-20)Rate (lb/ac) Dates Depths 30 5/16-7/31 05" 436 lb/ac 2 tons/ac 10 lb/1000 sf) (90 lb/1000 sf)

#### **B-4-5 STANDARDS AND SPECIFICATIONS**

**FOR** 

To stabilize disturbed soils with permanent vegetatio

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

Conditions Where Practice Applies

#### Exposed soils where ground cover is needed for 6 months or more

#### Seed Mixtures

#### 1. General Use

testing agency.

- a. Sciect one or more of the species or mixtures listed in Table B.3 for the appropriate Plani 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.
- 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 Field Office Guide, Section 342 Critical Area Planting. c. For sites having disturbed area 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 pe 1000 square feet (150 pounds per acre) at the time of seeding in addition to the soil amendment shown in the Permanent Seeding Summary.
- 2. Turferass Mixtures a. Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites which will receive a medium to high level of maintenan
- b. Select one or more of the species or mixtures listed below based on the site conditions or purpose. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The summary is to be placed on the plan. 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 source feet. Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight. 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 receiving low to medium management in full sun to medium shade. Recommended mixture includes: 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 Pescue: Shade Mixture: For use in areas with shade in Bluegras 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: 11/2 to 3 pounds per 1000 square feet.
- Select turfgrass varieties from those listed in the most current University of Maryland Publication, Agronomy Memo #77, "Turigrass 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 consumer protection and assures a pure genetic line
- 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)
- Hardiness Zones: 7a, 7b) 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 11/2 inches in diameter. The resulting seedbed must be in such condition that future mowing of grasses will

Southern MD, Eastern Shore: March 1 to May 15, August 15 to October 15

e. If soil moisture is deficient, supply new seedings with adequate water for plant growth (1/2 to 1 inch every 3 to 4 days depending on soil texture) until they are firmly established. This is especially true when seedings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.

#### Permanent Seeding Summary

Hardiness Zone (from Figure B.3): 6B  Seed Mixture (from Table B.3): 9					Fertilizer Rate (10-20-20)					Lime Rate	
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> 0	Time Race			
1	T. FESC.	60	3/1-5/15	1/4- 1/2 in	45 pounds	5 pounds 90 lb/ac 96	90 lb/ac	2 tons/ac			
2	K. BLUE.	40	3/1-5/15	¼- ½ in	per acre	(2 16/	(2 lb/ 1000 sf)	(90 lb/			
				1/4- 1/2 in	1000 sf)	1000 sf)		1000 sf)			

#### Sod: To provide quick cover on disturbed areas (2:1 grade or flatter).

- a. Class of turfgrass sod must be Maryland State Certified. Sod labels must be made available to the job foreman and inspector.
- b. Sod must be machine cut at a uniform soil thickness of % inch, plus or minus % 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 size and shape when suspended vertically with a firm grasp on the upper 10 percent of the
- d. Sod must not be harvested or transplanted when moisture content (excessively dry or wet) may 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

## 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 tightle 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 routs 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
- b. After the first week, sod watering is required as necessary to maintain adequate moisture
- c. Do not mow until the sod is firmly rooted. No more than '4 of the grass leaf must be removed by the initial cutting or subsequent cuttings. Maintain a grass height of at least 3 inches unless

#### HOWARD SOIL CONSERVATION DISTRICT (HSCD)

- A pre-construction meeting must occur with the Howard County Denartment of Public Works Construction Inspection Division (CID), 410-313-1855 after the future LOD and protected areas are
- marked clearly in the field. A minimum of 48 hour notice to CID must be given at the following stages:
- Prior to the start of earth disturbance.
- b. Upon completion of the installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading,
- Prior to the start of another phase of construction or opening of another grading unit, d. Prior to the removal or modification of sediment control practices.
- Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made. Other related state and federal permits shall be referenced, to ensure coordination and to avoid conflicts with this plan.
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto. 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 those areas under active grading. 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 CONTROL for topsoil (Sec. B-4-2), permanent seeding (Sec. B-4-5), temporary seeding (Sec. B-4-4) and mulching (Sec. B-4-3). Temporary stabilization with mulch alone can only be applied between the fall and spring seeding dates if the ground is frozen. Incremental 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 ft. must be benched with stable outlet. All concentrated flow, steep slope, and highly crodible areas shall receive soil stabilization matting (Sec. B-4-6).
- All sediment control structures are to remain in place, and are to be maintained in operative condition until permission for their removal has been obtained from the CID.
- Site Analysis Total Area of Site Area Disturbed: Acres Area to be roofed or paved: Area to be vegetatively stabilized: Acres Total Cut: Cu. Yds Total Fill: Offsite waste/borrow area location:
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment control must be provided, if deemed necessary by the CID. The site and all controls shall be inspected by the contractor weekly; and the next day after each rain event. A written report by the contractor, made available upon request, is part of every inspection and should include:
  - Inspection date Inspection type (routine, pre-storm event, during rain event)

Monitoring/sampling

- Name and title of inspector Weather information (current conditions as well as time and amount of last recorded precipitation)
- · Brief description of project's status (e.g., percent complete) and/or current activities Evidence of sediment discharges 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 Photographs
- Maintenance and/or corrective action performed · Other inspection items as required by the General Permit for Stormwater Associated with Construction Activities (NPDES, MDE). Trenches for the construction of utilities is limited to three pipe lengths or that which can and shall be
- back-filled and stabilized by the end of each workday, whichever is shorter. 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 allowed by the CID per the
- 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 30 acres cumulatively may be disturbed at a given time.

Disturbance shall not occur outside the L.O.D. A project is to be sequenced so that grading activities

- 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. Stream channels must not be disturbed during the following restricted time periods (inclusive): Use I and IP March I - June 15
- Use III and IIIP October 1 April 30 Use IV March 1 - May 31 A copy of this plan, the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and associated permits shall be on-site and available when

## B-4 STANDARDS AND SPECIFICATIONS

#### VEGETATIVE STABILIZATION

Definition Using vegetation as cover to protect exposed soil from erosion.

To promote the establishment of vegetation on exposed soil

#### Purpose

Conditions Where Practice Applies On all disturbed areas not stabilized by other methods. This specification is divided into sections on incremental 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 crode and more likely to allow infiltration of rainfall, thereby

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 rates of runoff, infiltration, evaporation, transpiration, percolation, and groundwater recharge. Over time, vegetation will increase organic matter content and improve the water holding capacity of the soil and subsequent plant growth. Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by ramoif to receiving waters. Plants will also help protect groundwater supplies by assimilating those substances present.

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

## Adequate Vegetative Establishment

Inspect seeded areas for vegetative establishment and make necessary repairs, replacements, and reseedings within the

Adequate vegetative stabilization requires 95 percent groundcover.

If an area has less than 40 percent groundcover, restabilize following the original recommendations

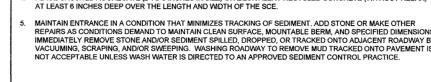
3. If an area has between 40 and 94 percent groundcover, over-seed and fertilize using half of the rates originally specified.

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

for lime, fertilizer, seedbed preparation, and seeding

## SCE ENTRANCE PIPE (SEE NOTE 2) PROFILE 50 FT MIN. PLAN VIEW CONSTRUCTION SPECIFICATIONS PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (\*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE. MAINTAINING

- POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 S AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLIFE SCE BY LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS,
- PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT, ADD STONE OR MAKE OTHER



MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

2011

9 GAUGE CHAIN

ISOMETRIC VIEW

SECTION FOR TYPE A AND B

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL FROSION AND SEDIMENT CONTROL

ELEVATION

CROSS SECTION

INSTALL 2 3/8 INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.

FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2 3/8 INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.

FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND.

WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED,

45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.

PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

OWNER / DEVELOPER:

ADDRESS: 7035 ALBERT EINSTEIN DRIVE, SUITE 200

ADDRESS: 7035 ALBERT EINSTEIN DRIVE, SUITE 200

COLUMBIA, MD 21046

Ryan.Houck@lennar.com

COLUMBIA, MD 21046

DIVISION PRESIDENT

CALATLANTIC GROUP, INC.

CONTACT: RYAN HOUCK

EMAIL:

LENNAR

BUILDER:

PHONE: 410-997-5522

PHONE: 410-997-5522

EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT

DETAIL E-3 SUPER SILT FENCE

CHAIN LINK FENCING

WOVEN SLIT FILM GEOTEXTILE

CONSTRUCTION SPECIFICATIONS

AND STAPLED TO PREVENT SEDIMENT BY PASS.

U.S. DEPARTMENT OF AGRICULTURE

18 IN INTO GROUND

EDGE OF ROADWAY OR TOP

TYPE B

STANDARD SYMBO

-----SSF------I

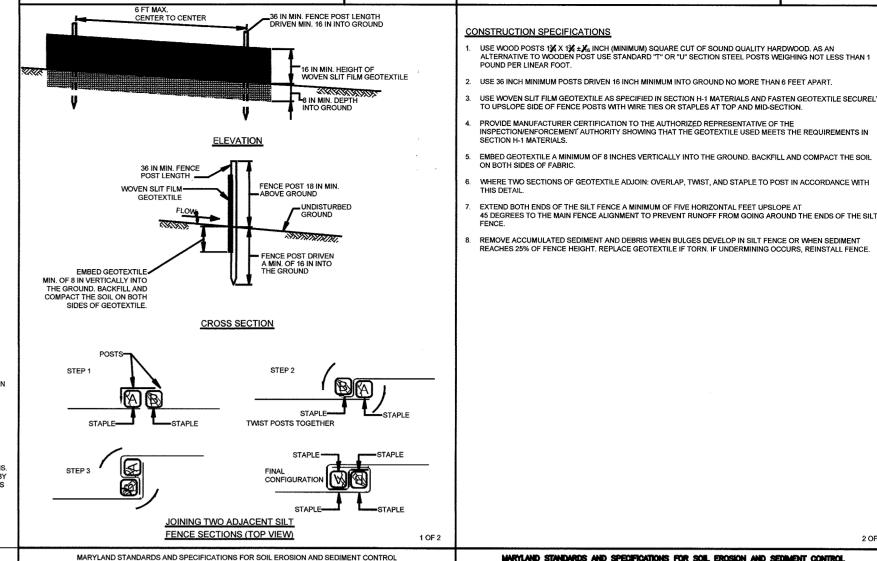
DETAIL E-9-1 STANDARD INLET PROTECTION

-TOP ELEVATION

WOVEN SLIT FILM

TYPE A

**GEOTEXTILE** 



DETAIL E-1 SILT FENCE

#### [==] CIP DETAIL E-9-3 CURB INLET PROTECTION MAXIMUM DRAINAGE AREA = 1/4 ACRE 2 IN x 4 IN WEIR-SANDBAG OR OTHER APPROV 6 FT MAX. SPACING OF 2 IN x 4 IN SPACERS ¾ TO 1½ STONE GROUND AT EACH CORNER OF THE INLET. PLACE NAIL STRIPS BETWEEN THE POSTS, DRIVEN I POOT INTO THE ASSEMBLE THE TOP PORTION OF THE 12X4 FRAME AS SHOWN, STRETCH 1/2 INCH GALVANIZED HARDWARE CLOTH TIGHTLY AROUND THE FRAME AND FASTEN SECURELY. FASTEN GEOTEXTILE SECURELY TO THE HARDWARE CLOTH WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND HARDWARE CLOTH A L 2 IN x 4 IN WEIR SECTION A-A EDGE OF GUTTER PAN STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE, REMOVE ACCUMULATED SEDIMENT AFTER CONSTRUCTION SPECIFICATIONS USE NOMINAL 2 INCH x 4 INCH LUMBER USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS. NAIL THE 2x4 WEIR TO 9 INCH LONG VERTICAL SPACERS (MAXIMUM 6 FEET APART).

2011

DETAIL E-1 SILT FENCE

- ATTACH A CONTINUOUS PIECE OF 1/4 INCH GALVANIZED HARDWARE CLOTH, WITH A MINIMUM WIDTH OF 30 INCHES AND A MINIMUM LENGTH OF 4 FEET LONGER THAN THE THROAT OPENING, TO THE 2x4 WEIR, EXTENDING IT 2 FEET BEYOND THROAT ON EACH SIDE.
  - PLACE A CONTINUOUS PIECE OF NONWOVEN GEOTEXTILE OF THE SAME DIMENSIONS AS THE HARDWARE CLOTH OVER THE HARDWARE CLOTH AND SECURELY ATTACH TO THE 2x4 WEIR.
  - PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL TO 2x4 ANCHORS (MINIMUM 2 FEET LENGTH). EXTEND THE ANCHORS ACROSS THE INLET TOP AND HOLD IN PLACE BY SANDBAGS OR OTHER APPROVED ANCHORING
  - INSTALL END SPACERS A MINIMUM OF 1 FOOT BEYOND THE ENDS OF THE THROAT OPENING. FORM THE HARDWARE CLOTH AND THE GEOTEXTILE TO THE CONCRETE GUTTER AND FACE OF CURB TO SPAN THE INLET OPENING. COVER THE HARDWARE CLOTH AND GEOTEXTILE WITH CLEAN 3/4 TO 1 1/2 INCH STONE OR
  - AT NON-SUMP LOCATIONS, INSTALL A TEMPORARY SANDBAG OR ASPHALT BERM TO PREVENT INLET BYPASS
  - 10. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOE OT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOV
  - ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STONE

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

5 DAYS

2 DAYS

2 DAYS

4 MONTHS TO 1 YEAR

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

2011

EXCAVATE COMPLETELY AROUND THE INLET TO A DEPTH OF 18 INCHES BELOW THE NOTCH ELEVATION

FOR TYPE A. USE NOMINAL 2 INCH X 4 INCH CONSTRUCTION GRADE LUMBER POSTS. DRIVEN 1 FOOT INTO THE

MINIMUM OF 18 INCHES BELOW THE WEIR CREST. THE ENDS OF THE GEOTEXTILE MUST MEET AT A POST, BE OVERLAPPED AND FOLDED, THEN FASTENED TO THE POST.

FOR TYPE B. USE 2 3/8 INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND 6 FOOT

LENGTH, DRIVEN A MINIMUM OF 35 INCHES BELOWTHE WEIR CREST AT EACH CORNER OF THE STRUCTURE.

FASTEN 9 GAUGE OR HEAVIER CHAIN LINK FENCE, 42 INCHES IN HEIGHT, SECURELY TO THE FENCE POSTS WITH
WIRE TIES. FASTEN GEOTEXTILE SECURELY TO THE CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT
THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 18 INCHES BELOW THE

BACKFILL AROUND THE INLET IN LOOSE 4 INCH LIFTS AND COMPACT UNTIL SOIL IS LEVEL WITH THE NOTCH

DETAIL E-9-1 STANDARD INLET PROTECTION

USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS

ELEVATION ON THE ENDS AND TOP ELEVATION ON THE SIDES

CONSTRUCTION SPECIFICATIONS

- SEQUENCE OF CONSTRUCTION
- THE LIMITS OF DISTURBANCE MUST BE FIELD MARKED PRIOR TO GRADING, INSTALLATION OF SEDIMENT CONTROL MEASURES, CONSTRUCTION, OR OTHER LAND DISTURBING ACTIVITIES. OBTAIN GRADING PERMIT NOTIFY HOWARD COUNTY BUREAU OF INSPECTIONS AND PERMITS (410-313-2455) AT LEAST 24 HOURS BEFORE STARTING ANY WORK. 4. INSTALL SEDIMENT CONTROL MEASURES AS SHOWN ON PLAN IN ACCORDANCE WITH DETAILS AND MAINTAIN/REPAIR

#### AS NEEDED THE SEDIMENT CONTROL MEASURES AS APPROVED UNDER F-18-107. AFTER OBTAINING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR TO PROCEED, STAKEOUT AND ROUGH 6. INSTALL FOUNDATIONS AND BACKFILL, CONSTRUCT HOUSES, DRIVEWAYS, LEAD WALKS. STABILIZE LOT AREAS WITH SEED AND MULCH AND/OR SOD. THE FIRST FLOOR ELEVATIONS CANNOT BE MORE THAN 1' HIGHER OR 0.2' LOWER THAN THE ELEVATIONS SHOWN ON THIS PLAN. UPON STABILIZATION OF ALL DISTURBED AREAS AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVICES.

## LOPES AND ALL SLOPES GREATER THAN 3:1.

DURING GRADING AND AFTER EACH RAINFALL, THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL MEASURES SHOWN HEREON. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLIED WITH: A. 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, SWALES, DITCH PERIMETER



B. 14 CALENDAR DAYS FOR ALL OTHER DISTURBED AREAS.

#### MORRIS & RITCHIE ASSOCIATES, INC ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS

14280 PARK CENTER DRIVE

**LAUREL, MD 20707** (410) 792-9792 / (301) 776-1690 FAX: (410) 792-7395

MRAGTA.COM

SITE DEVELOPMENT PLAN

PLAT NO. 25354-25359

TAX MAP 37 GRIDS 2 PARCEL 753 ZONED: R-SA-8

1ST ELECTION DISTRICT



ENGINEER UNDER THE LAWS

LICENSE NO. 19916.

EXPIRATION DATE:

01/14/2021.

OF THE STATE OF MARYLAND,

TROTTER'S KNOLL - SECTION II - LOTS 85-100 TROTTERS CHASE, ELLICOTT CITY MARYLAND EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

HOWARD COUNTY, MD 21043 MD PROFESSIONAL CERTIFICATION: DATE HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME. AND THAT I AM A DULY LICENSED PROFESSIONAL

**REVISIONS** JOB NO.: 15368 x ( SCALE: AS-SHOWN DATE: 4/23/20 DRAWN BY: MBF DESIGN BY: MBF REVIEW BY: MM SHEET: 4 OF 5

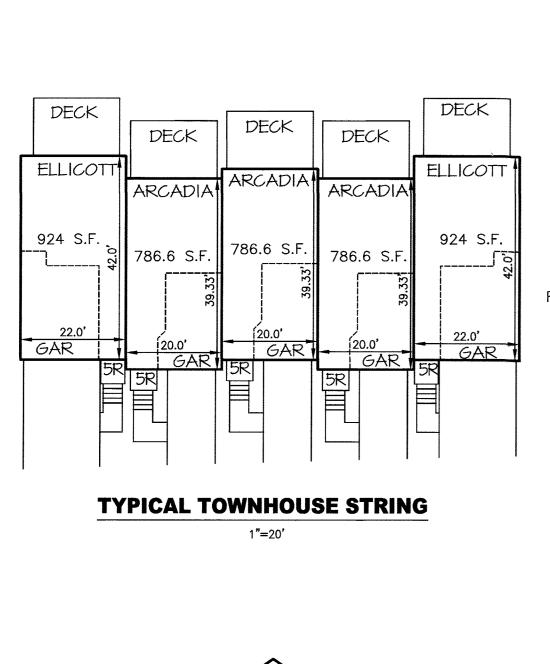
SDP-20-028

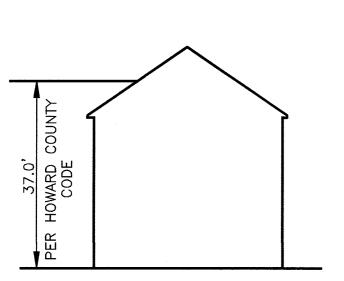
COUNTY DEPARTMENT OF PLANNING AND ZONING DÉVELOPMENT ENGINEERING DIVISION , 6/8/2020 CHIEF, DIVISION OF LAND DEVELOPMENT 🛷 DATE On On-6-9-2020 RECTOR OF PLANNING AND ZONING

# FOX. MILL.

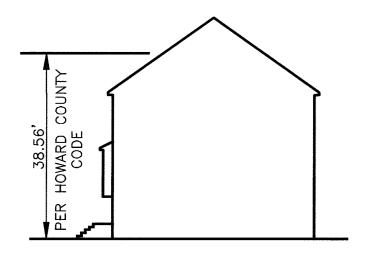
# PERMANENT STABILIZATION

- STANDARD SEDIMENT CONTROL NOTES

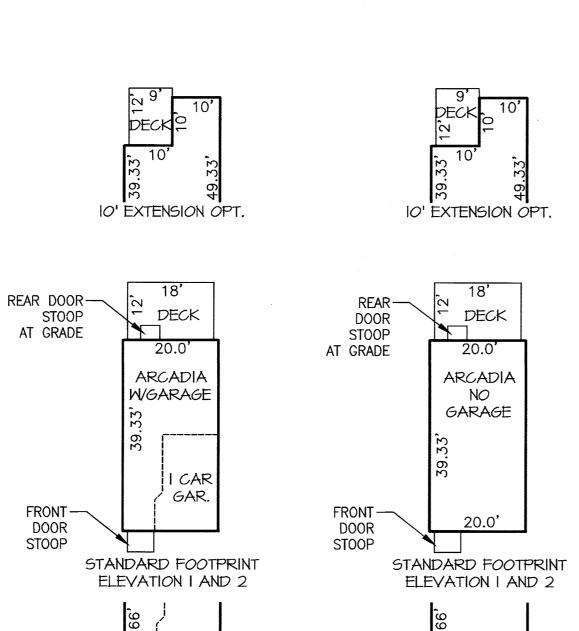


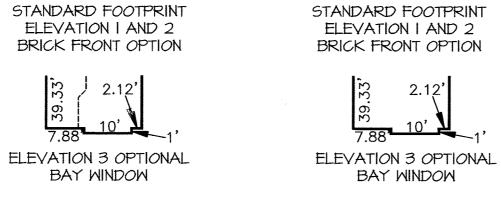


**TYPICAL ARCADIA HOUSE ELEV.** SCALE: 1"=20'



TYPICAL ELLICOTT HOUSE ELEV. SCALE: 1"=20'





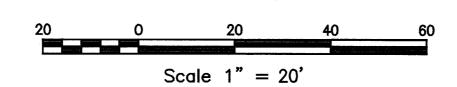
NOTE: OTHER ELEVATIONS VARY BY GARAGE DOOR LOCATION ONLY ON GROUND FLOOR, ELEVATION 3 HAS A BAY WINDOW ON THE SECOND FLOOR.

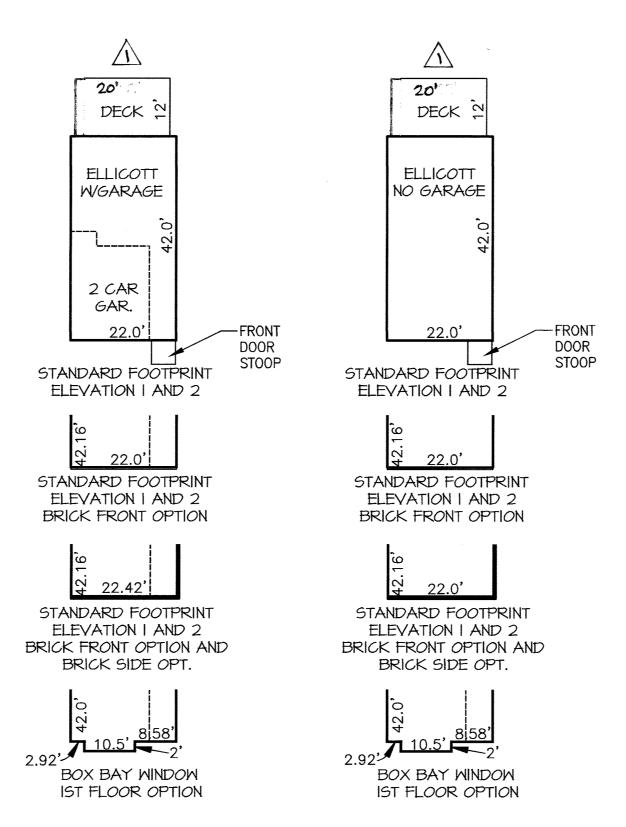
NOTE: BUILDING DECKS TO BE BUILT AT 10' DEPTH IF LOCATED ON A LOT CONSTRAINED BY STRUCTURE AND USE SETBACKS OR OTHER SITE CONSTRAINTS ARE PRESENT.

#### **ARCADIA HOUSE TYPE**

SCALE: 1"=20'

NOTE: ALL TOWNHOUSES TO HAVE AUTOMATIC FIRE SUPPRESION

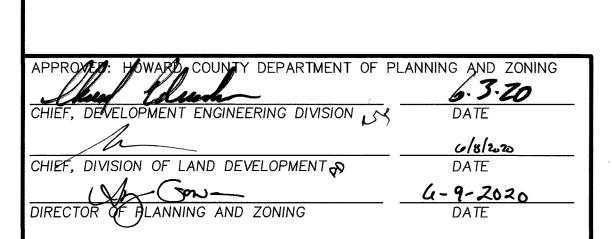




NOTE: BUILDING DECKS TO BE BUILT AT IO' DEPTH IF LOCATED ON A LOT CONSTRAINED BY STRUCTURE AND USE SETBACKS OR OTHER SITE CONSTRAINTS ARE PRESENT.

#### **ELLICOTT HOUSE TYPE**

SCALE: 1"=20'



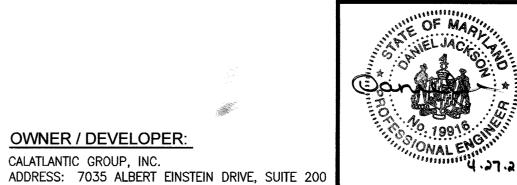


## MORRIS & RITCHIE ASSOCIATES, INC.

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SITE DEVELOPMENT PLAN



MD PROFESSIONAL CERTIFICATION:

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE

PREPARED OR APPROVED BY ME, AND THAT I AM A DULY

LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS

OF THE STATE OF MARYLAND,

LICENSE NO. 19916,

EXPIRATION DATE: 01/14/2021.

#### **TROTTER'S KNOLL - SECTION II - LOTS 85-100** TROTTERS CHASE, ELLICOTT CITY MARYLAND

HOUSE TYPES

PLAT NO. 25354-25359 TAX MAP 37 GRIDS 2 PARCEL 753 ZONED: R-SA-8 1ST ELECTION DISTRICT HOWARD COUNTY, MD 21043

DATE	REVISIONS	JOB NO.:	15368 x 07
3.31.20	A REVISED DECKS	SCALE:	1" = 20'
		DATE:	4/23/20
		DRAWN BY:	MAM
		DESIGN BY:	MAM
		REVIEW BY:	ММ
		SHEET:	5 OF 5

ADDRESS: 7035 ALBERT EINSTEIN DRIVE, SUITE 200 COLUMBIA, MD 21046 PHONE: 410-997-5522

COLUMBIA, MD 21046

DIVISION PRESIDENT

OWNER / DEVELOPER:

CALATLANTIC GROUP, INC.

CONTACT: RYAN HOUCK

BUILDER:

PHONE: 410-997-5522

EMAIL: Ryan.Houck@lennar.com

SDP-20-028