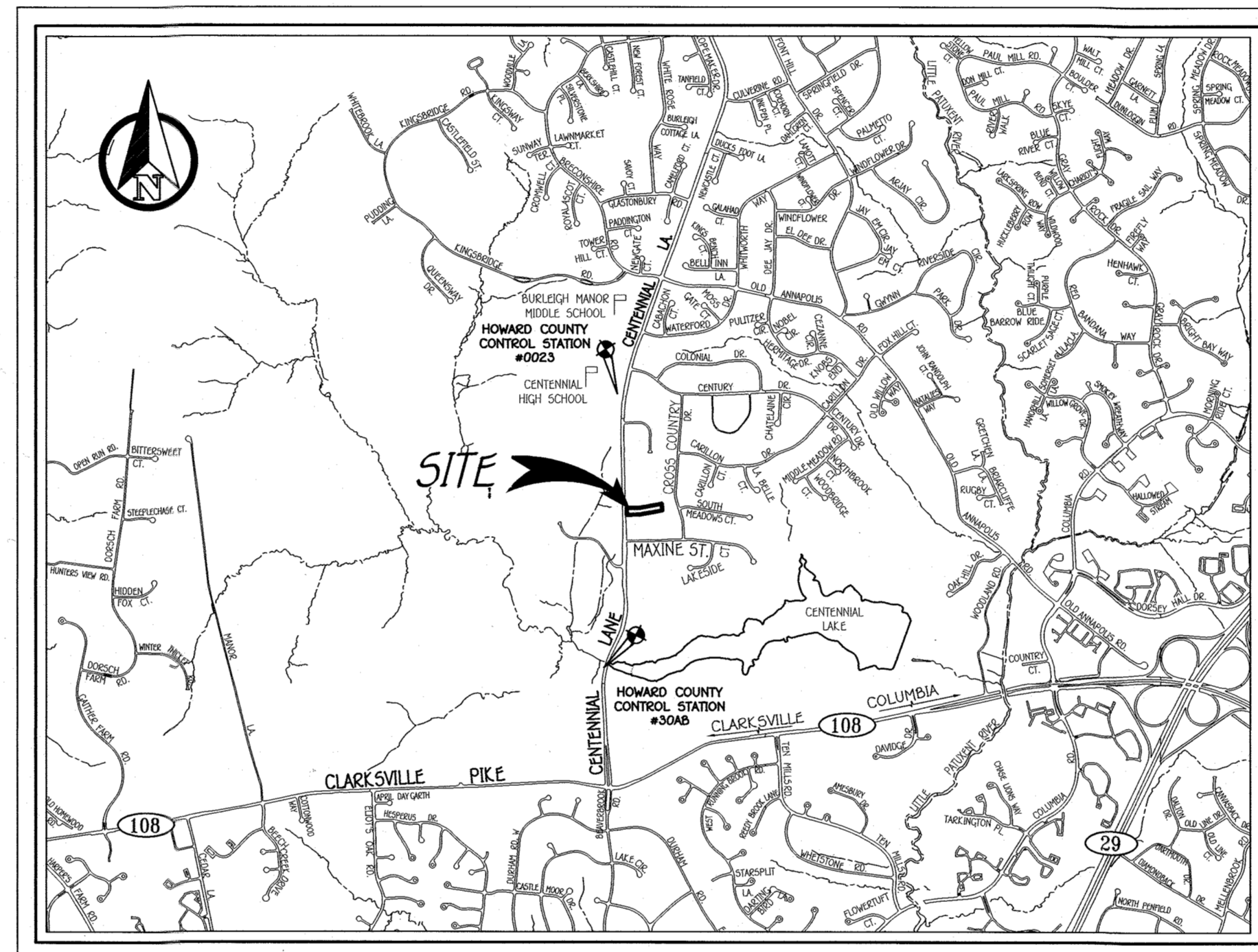
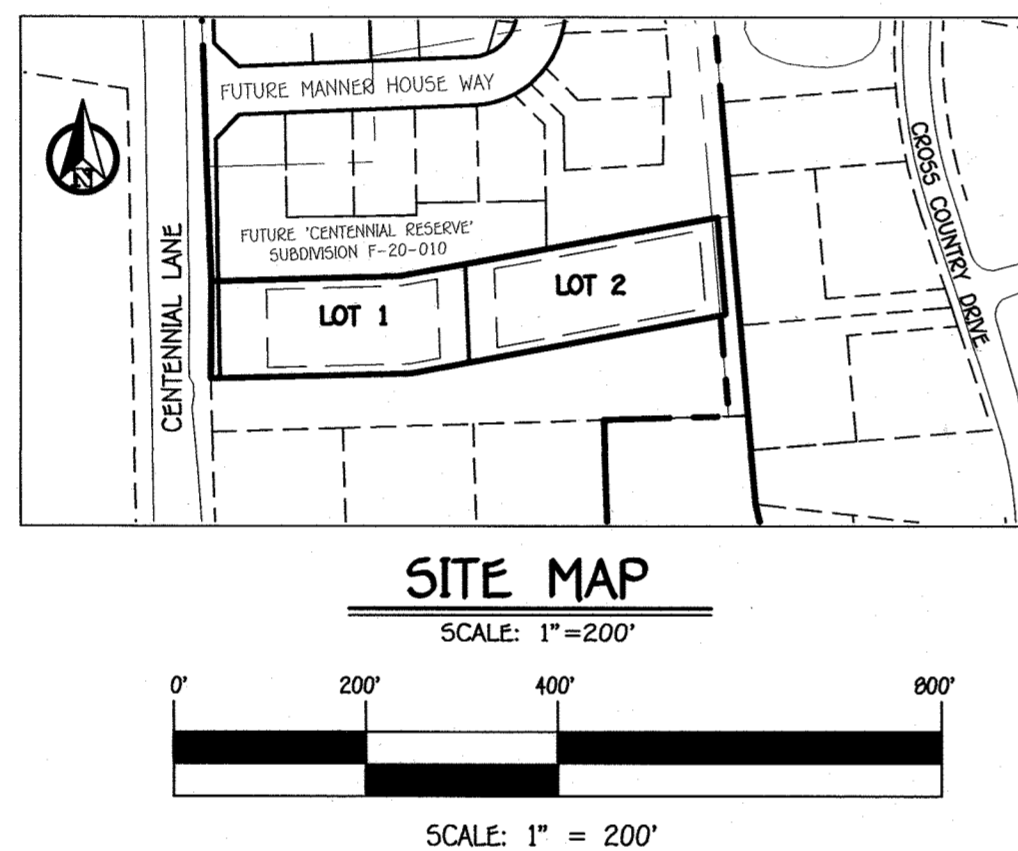


SHEET INDEX	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	GRADING AND STORMWATER MANAGEMENT PLAN
3	SEDIMENT & EROSION CONTROL PLAN
4	LANDSCAPE PLAN
5	NOTES AND DETAILS

SOILS LEGEND			
SOIL	NAME	CLASS	K _v VALUE
GgC	Glenelg loam, 0 to 15 percent slopes	B	0.20
GhB	Glenelg-Urban land complex, 0 to 0 percent slopes	B	0.20

SWM PRACTICES		
LOT No.	BIO-RETENTION (M-S)	DRYWELLS (M-S)
2	1	2

STREET ADDRESS CHART	
LOT No.	ADDRESS
1	4515 CENTENNIAL LANE (EX. HOUSE)
2	5016 MANNER HOUSE WAY (PR. HOUSE)



HOWARD COUNTY GEODEIC SURVEY CONTROL NO. 0023 N 577,373.143 E 1,349,751.273 ELEVATION: 479.240
 HOWARD COUNTY GEODEIC SURVEY CONTROL NO. 30AB N 573,239.305 E 1,349,547.046 ELEVATION: 361.90
 REFER TO HOWARD CO. ADC MAP 26-E3, E4, F3 & F4



PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/23.
 [Signature] 11/21/21 Date

OWNER/DEVELOPER
 PRASAD & JAKSHI APARNA MATTUPALLI
 4515 CENTENNIAL LANE
 ELLICOTT CITY, MD 21042
 443-528-1010

REVISIONS		
NO.	DESCRIPTION	DATE

Approved: Department Of Planning And Zoning

Chief, Division Of Land Development [Signature] 11/21/21 Date
 Chief, Development Engineering Division [Signature] 11/21/21 Date

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 15272 BALTIMORE NATIONAL PARK
 ELLICOTT CITY, MARYLAND 21042
 (410) 461-2855

SUPPLEMENTAL PLAN MATTUPALLI PROPERTY

LOTS 1 & 2

ZONING: R-20 (RESIDENTIAL: SINGLE DISTRICT)
TAX MAP No. 30 GRID No. 01 PARCEL No. 06
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

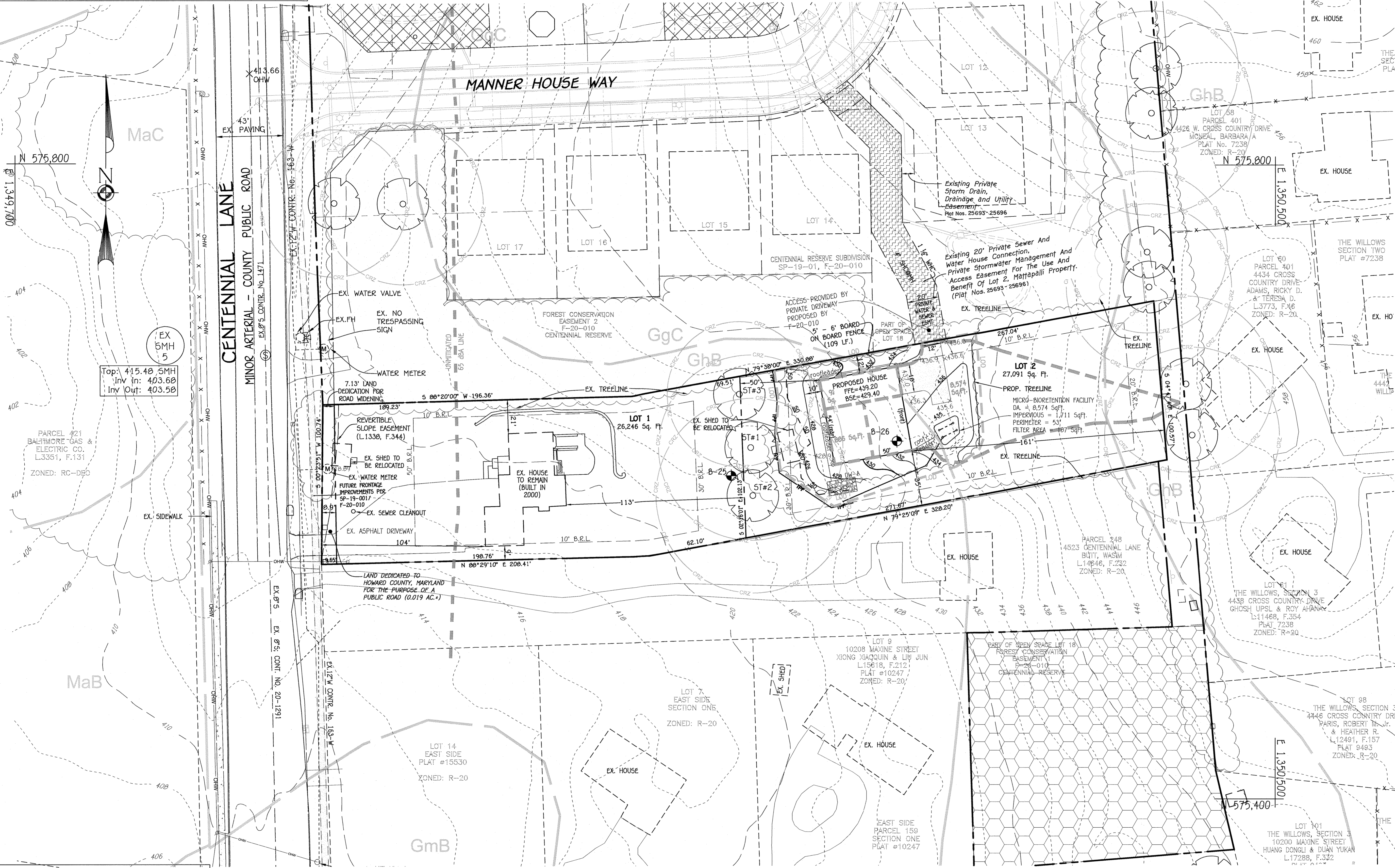
GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS, BUREAU OF ENGINEERING, CONSTRUCTION INSPECTION DIVISION AT (410) 313-1000 AT LEAST (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.
- THE SUBJECT PROPERTY IS ZONED R-20 (PER 10/06/13 COMPREHENSIVE ZONING PLAN).
- BOUNDARY IS BASED ON A FIELD RUN SURVEY PERFORMED BY FISHER, COLLINS & CARTER ON OR ABOUT FEBRUARY, 2018.
- CONTOURS ARE BASED ON A TOPOGRAPHIC FIELD RUN SURVEY PERFORMED BY FISHER, COLLINS AND CARTER, ON OR ABOUT AUGUST, 2018.
- COORDINATES BASED ON NAD'83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODEIC CONTROL STATIONS NO. 0023 AND NO. 30AB:
 HOWARD COUNTY MONUMENT NO. 0023 N 577,373.143 E 1,349,751.273 ELEV. 479.240
 HOWARD COUNTY MONUMENT NO. 30AB N 573,239.305 E 1,349,547.046 ELEV. 361.90
- STORM WATER MANAGEMENT IS IN ACCORDANCE WITH THE M.O.E. STORM WATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009. THIS PLAN PROPOSES THE USE OF TWO (2) M-5 DRY WELLS AND ONE (1) M-5 BIO RETENTION FACILITY.
- THIS PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT. PUBLIC WATER AND SEWER WILL BE UTILIZED FOR THIS PROJECT.
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- A PRE-SUBMISSION COMMUNITY MEETING WAS HELD ON DECEMBER 10, 2018 FOR THIS PROJECT.
- THIS PROJECT IS EXEMPT FROM FOREST CONSERVATION BASED ON SECTION 16.1202(b)(viii) OF HOWARD COUNTY FOREST AND FOREST CONSERVATION MANUAL SINCE IT IS A MINOR SUBDIVISION THAT CREATES ONE ADDITIONAL LOT AND HAS NO FURTHER SUBDIVISION POTENTIAL.
- THIS SITE IS SUBJECT TO APPROVAL OF AN ALTERNATIVE COMPLIANCE TO SECTION 16.120 (c)(1)(2)(3) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS FOR MINIMUM FRONTAGES.
- PERIMETER LANDSCAPING SHALL BE IN ACCORDANCE WITH SECTION 16.124 OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND LANDSCAPE MANUAL. FINANCIAL SURETY IN THE AMOUNT OF \$1,200.00 FOR 2 SHADE TREES (\$300 ea.) & 20 SHRUBS (\$30 ea.) WILL BE PROVIDED AS PART OF THE BUILDING / GRADING PERMIT FOR LOT 2.
- DRIVEWAY SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING (MINIMUM) REQUIREMENTS:
 A) WIDTH - 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE)
 B) SURFACE - SIX (6") INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING
 C) GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM OF 45 FOOT TURNING RADIUS
 D) STRUCTURES (CULVERTS/BRIDGES) CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING)
 E) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE
 F) STRUCTURE CLEARANCES - MINIMUM 12 FEET
 G) MAINTENANCE SURFACENT TO ENSURE ALL WEATHER USE
- STORM WATER MANAGEMENT DEVICES WILL BE OWNED AND MAINTAINED BY PROPERTY OWNER OF LOT 2.
- EXISTING UTILITIES ARE BASED ON MISS UTILITY MARKINGS, FIELD LOCATIONS AND AVAILABLE COUNTY INFORMATION.
- TO THE BEST OF OUR KNOWLEDGE NO CEMETERIES ARE LOCATED ON-SITE BASED ON THE HOWARD COUNTY CEMETERY INVENTORY MAP.
- B.R.L. DENOTES BUILDING RESTRICTION LINE.
- SITE IS NOT ADJACENT TO A SCENIC ROAD.
- ALL LOT/PARCEL AREAS ARE MORE OR LESS.
- A NOISE STUDY WAS PERFORMED BY THE MARS GROUP ON SEPTEMBER 13, 2018 AND WAS EXPANDED TO INCLUDE THE NORTHERN SEGMENT ALONG CENTENNIAL LANE ON APRIL 6, 2019.
- LETTER OF FINDINGS DATED OCTOBER 10, 2019 PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. DETERMINED THAT THERE ARE NO WETLANDS, WETLAND BUFFERS, STREAM AND STREAM BUFFER LOCATED WITHIN THE LIMITS OF THE FINAL PLAN.
- THERE IS AN EXISTING DWELLING AND AN EXISTING SHED ON LOT 1 TO REMAIN. THERE IS ONE EXISTING SHED ON LOT 2 TO BE RELOCATED. NO NEW BUILDINGS, EXTENSIONS OR ADDITIONS TO THE EXISTING DWELLING ARE TO BE CONSTRUCTED AT A DISTANCE LESS THAN THE ZONING REGULATION REQUIREMENTS.
- WATER AND SEWER SERVICE TO THESE LOTS WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 16.1228 OF THE HOWARD COUNTY CODE.
- PUBLIC WATER AND SEWER ALLOCATION WILL BE GRANTED AT THE TIME OF ISSUANCE OF THE BUILDING PERMIT IF CAPACITY IS AVAILABLE AT THAT TIME.
- THIS PLAN IS IN COMPLIANCE WITH THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE 10/06/13 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, WAIVER PETITION APPLICATION, OR BUILDING/GRADING PERMIT.
- APPROVAL OF A SITE DEVELOPMENT PLAN IS REQUIRED FOR THE DEVELOPMENT OF ALL RESIDENTIAL LOTS WITHIN THIS SUBDIVISION PRIOR TO ISSUANCE OF ANY GRADING OR BUILDING PERMITS FOR NEW HOUSE CONSTRUCTION IN ACCORDANCE WITH SECTION 16.155 OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- THE EXISTING PRIVATE USE-IN-COMMON DRIVEWAY ACCESS EASEMENT AND MAINTENANCE AGREEMENT FOR SHARED DRIVEWAY PROVIDING DRIVEWAY ACCESS TO BOTH LOT 13 AND TAX PARCEL 6 IS RECORDED IN LIBER 20458 AT FOLIO 144.
- FEE IN LIEU OF PROVIDING OPEN SPACE HAS BEEN PAID IN THE AMOUNT OF \$1,500.00.
- NO HISTORIC STRUCTURES EXIST WITHIN THE LIMITS OF THIS PLAT SUBMISSION.
- PROPERTY IS A MINOR SUBDIVISION AND IS EXEMPT FROM APFO TRAFFIC REPORT IN ACCORDANCE WITH SECTION 4.7.B.5. OF THE HOWARD COUNTY DESIGN MANUAL, VOLUME III - ROADS AND BRIDGES.
- THE 65 DBA NOISE CONTOUR LINE DRAWN ON THIS PLAT IS ADVISORY AS REQUIRED BY THE HOWARD COUNTY DESIGN MANUAL, CHAPTER 5, REVISED FEBRUARY, 1992, AND CANNOT BE CONSIDERED TO EXACTLY LOCATE THE 65 DBA NOISE EXPOSURE. THE 65 DBA NOISE LINE WAS ESTABLISHED TO ALERT DEVELOPERS, BUILDERS AND FUTURE RESIDENTS THAT AREAS BEYOND THIS THRESHOLD MAY EXCEED GENERALLY ACCEPTED NOISE LEVELS ESTABLISHED BY THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT. THE LOCATION OF THE 65 DBA NOISE CONTOUR LINE IS BASED ON LOCATION SHOWN ON PLAT NOS. 25693 THRU 25696. (F-20-010).
- SUBDIVISION IS SUBJECT TO SECTION 100.D.E. OF THE ZONING REGULATIONS. AT LEAST 10% OF THE DWELLING UNITS SHALL BE MODERATE INCOME HOUSING UNITS (M.I.H.U.) OR AN ALTERNATIVE COMPLIANCE WILL BE PROVIDED. THE DEVELOPER SHALL EXECUTE A M.I.H.U. AGREEMENT WITH THE DEPARTMENT OF HOUSING TO INDICATE HOW THE M.I.H.U. REQUIREMENT WILL BE MET. THE M.I.H.U. AGREEMENT WILL BE RECORDED SIMULTANEOUSLY WITH THIS PLAT IN THE LAND RECORDS OFFICE OF HOWARD COUNTY, MARYLAND. THIS DEVELOPMENT WILL MEET M.I.H.U. ALTERNATIVE COMPLIANCE BY A PAYMENT OF A FEE-IN-LIEU TO THE DEPARTMENT OF HOUSING FOR EACH REQUIRED UNIT. MODERATE INCOME HOUSING UNIT (M.I.H.U.) TABULATION:
 a. M.I.H.U. REQUIRED = (1 LOT X 10%) = 0.1 M.I.H.U.
 b. M.I.H.U. PROPOSED = DEVELOPER WILL PURSUE ALTERNATIVE COMPLIANCE BY PAYING A FEE-IN-LIEU TO THE HOWARD COUNTY HOUSING DEPARTMENT FOR THE UNITS REQUIRED BY THE DEVELOPMENT.
- REFUSE COLLECTION AND HALL DELIVERY FOR LOT 2 IS PROVIDED AT THE JUNCTION OF THE PRIVATE DRIVEWAY AND THE ROAD RIGHT OF WAY LINE.
- THIS PROJECT WILL BE SUBJECT TO THE REQUIREMENTS OF SECTION 16.127. RESIDENTIAL INFILL DEVELOPMENT.

TITLE SHEET
MATTUPALLI PROPERTY
 LOTS 1 & 2
 (4515 CENTENNIAL LANE)

TAX MAP NO.: 30 GRID NO.: 01 PARCEL NO.: 06
 ZONED R-20
 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: NOVEMBER, 2021
 SHEET 1 OF 5

SOILS LEGEND			
SOIL	NAME	CLASS	K VALUE
GgC	Genelg loam, 0 to 15 percent slopes	B	0.20
GhB	Genelg-Urbn land complex, 0 to 8 percent slopes	B	0.20



LEGEND	
SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	EXISTING CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
x 448.5	SPOT ELEVATION
---	EXISTING STORM DRAIN
---	PROPOSED STORM DRAIN PIPE
---	EX. F.H.
---	EXISTING WATER LINE
---	EXISTING SEWER LINE
---	PROPOSED SEWER
---	PROPOSED WATER
---	EXISTING CABLE LINE
---	EXISTING GAS LINE
---	EXISTING OVERHEAD WIRE
---	PROPOSED PAVING
---	LIMIT OF DISTURBANCE
---	SUPER SILT FENCE
---	SILT FENCE
---	EXISTING TREE LINE
---	PROPOSED TREE LINE
---	PROPOSED BOARD ON BOARD FENCE
---	DRAINAGE AREA
---	SOIL LINES AND TYPES
---	M-5 DRYWELL
---	MICRO-BIO RETENTION FACILITY (M-6)
---	STABILIZED CONSTRUCTION ENTRANCE
---	DENOTES EXISTING TREES TO REMAIN
---	CRITICAL ROOT ZONE
---	TREE PROTECTION FENCE
---	SOIL DISTURBANCE (SD) WITHIN CRZ
---	UNMITIGATED 65 dba NOISE CONTOUR LINE
---	EXISTING 20' PRIVATE SEWER AND WATER HOUSE CONNECTION, PRIVATE STORMWATER MANAGEMENT AND ACCESS EASEMENT FOR THE USE AND BENEFIT OF LOT 2 (MATTUPALLI PROPERTY), SUBMISSION RECORDED WITH CENTENNIAL RESERVE, PLAT NOS.

SPECIMEN TREE CRZ DISTURBANCE CALCULATION	
ST1 CRZ AREA = 10,751 Sq.Ft.	AREA WITHIN LOD = 2,643 Sq.Ft.
	= 24.6% CRZ DISTURBANCE
	AREA WITHIN SD = 1,750 Sq.Ft.
	= 15% CRZ DISTURBANCE
ST2 CRZ AREA = 11,882 Sq.Ft.	AREA WITHIN LOD = 1,709 Sq.Ft.
	= 15% CRZ DISTURBANCE
	AREA WITHIN SD = 1,044 Sq.Ft.
	= 8.8% CRZ DISTURBANCE
ST3 CRZ AREA = 6,576 Sq.Ft.	AREA WITHIN LOD = 936 Sq.Ft.
	= 14% CRZ DISTURBANCE
	AREA WITHIN SD = 441 Sq.Ft.
	= 6.7% CRZ DISTURBANCE

REVISIONS		
NO.	DESCRIPTION	DATE

Approved: Department Of Planning And Zoning

Chief, Division Of Land Development *[Signature]* 11/13/21 Date

Chief, Development Engineering Division *[Signature]* 11/13/21 Date

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PARK
 ELICOTT CITY, MARYLAND 21042
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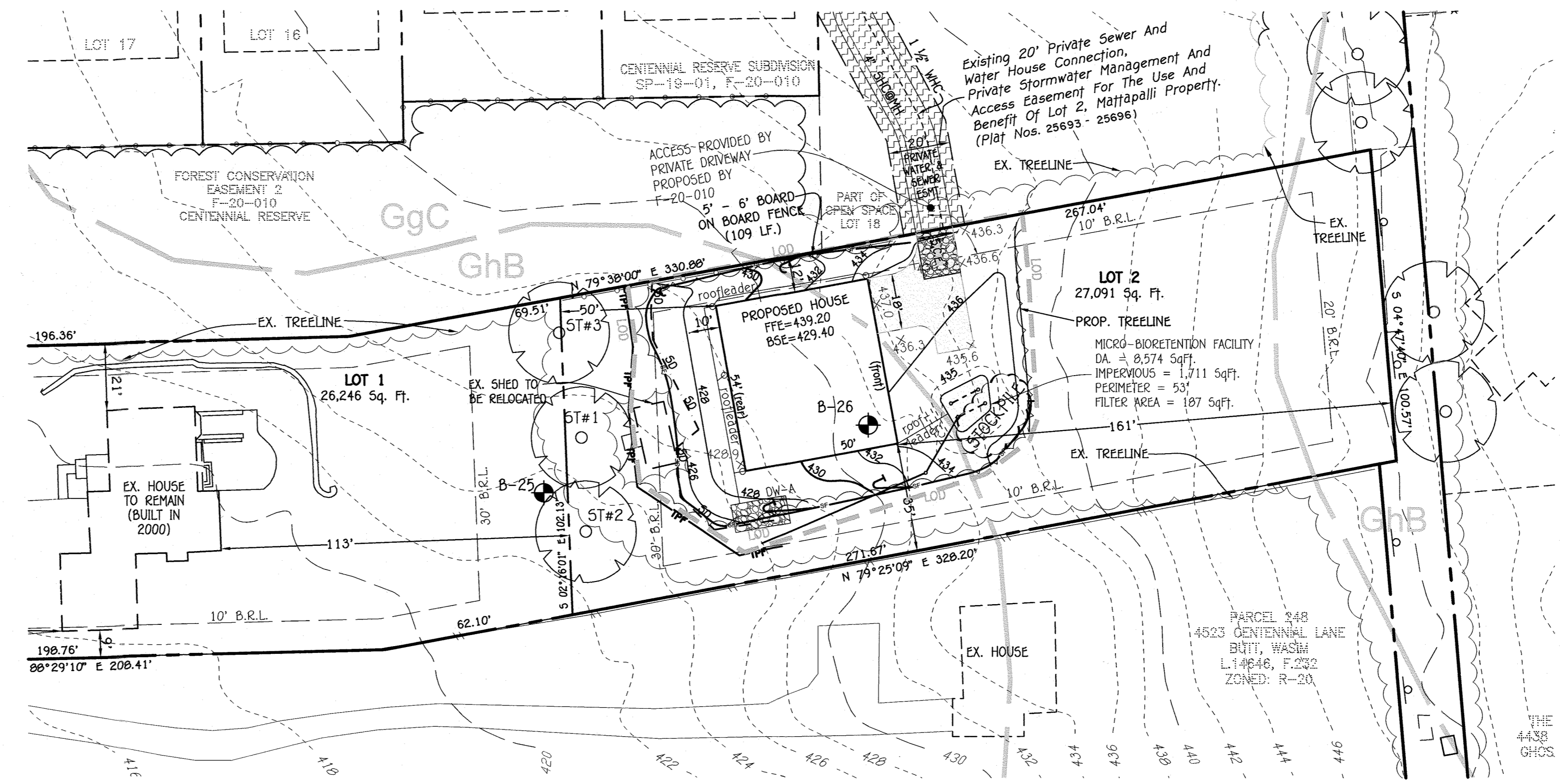
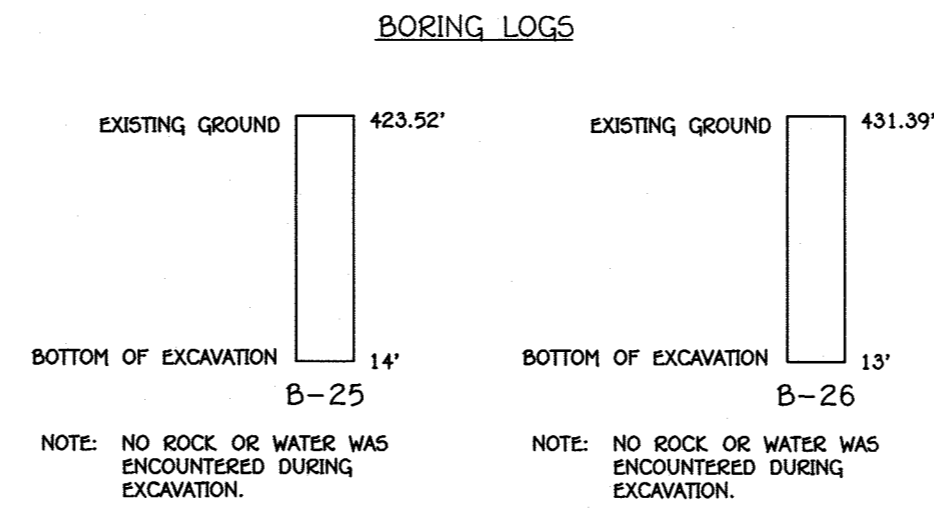
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[Signature]
 FRANK MANLANSAN II
 Date: 11/13/21

OWNER/DEVELOPER
 PRASAD & LAKSHMI APARNA MATTUPALLI
 4515 CENTENNIAL LANE
 ELICOTT CITY, MD 21042
 443-528-1010

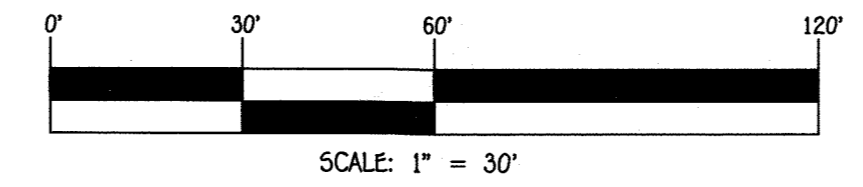
GRADING AND STORMWATER MANAGEMENT PLAN
MATTUPALLI PROPERTY
 LOTS 1 & 2
 (4515 CENTENNIAL LANE)

TAX MAP NO.: 30 GRID NO.: 01 PARCEL NO.: 06
 ZONED R-20
 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: NOVEMBER, 2021
 SHEET 2 OF 5

LEGEND	
SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	EXISTING CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
448.5	SPOT ELEVATION
12" 50	EXISTING STORM DRAIN
12" 50	PROPOSED STORM DRAIN PIPE
EX. F.H.	EXISTING FIRE HYDRANT
EX. W.L.	EXISTING WATER LINE
EX. S.W.L.	EXISTING SEWER LINE
PRO. S.W.L.	PROPOSED SEWER
PRO. W.L.	PROPOSED WATER
---	EXISTING CABLE LINE
---	EXISTING GAS LINE
---	EXISTING OVERHEAD WIRE
---	PROPOSED PAVING
LOD	LIMIT OF DISTURBANCE
SSP	SUPER SILT FENCE
SF	SILT FENCE
---	EXISTING TREE LINE
---	PROPOSED TREE LINE
---	PROPOSED BOARD ON BOARD FENCE
---	DRAINAGE AREA
---	SOIL LINES AND TYPES
M-5	M-5 DRYWELL
M-6	MICRO-BIO RETENTION FACILITY (M-6)
---	STABILIZED CONSTRUCTION ENTRANCE
---	DENOTES EXISTING TREES TO REMAIN
---	CRITICAL ROOT ZONE
---	TREE PROTECTION FENCE
---	SOIL DISTURBANCE (50) WITHIN CRZ
---	UNMITIGATED 65 dba NOISE CONTOUR LINE
---	EXISTING 20' PRIVATE SEWER AND WATER HOUSE CONNECTION, PRIVATE STORMWATER MANAGEMENT AND ACCESS EASEMENT FOR THE USE AND BENEFIT OF LOT 2 (MATTUPALLI PROPERTY). SUBDIVISION RECORDED WITH CENTENNIAL RESERVE, PLAT NOS.



CONCEPTUAL SEDIMENT & EROSION CONTROL PLAN



REVISIONS		
NO.	DESCRIPTION	DATE

Approved: Department Of Planning And Zoning

Chief, Division Of Land Development *[Signature]* 11/18/21 Date

Chief, Development Engineering Division *[Signature]* 11/18/21 Date

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PK. ELLICOTT CITY, MARYLAND 21042
 (410) 461 - 2955



PROFESSIONAL CERTIFICATION

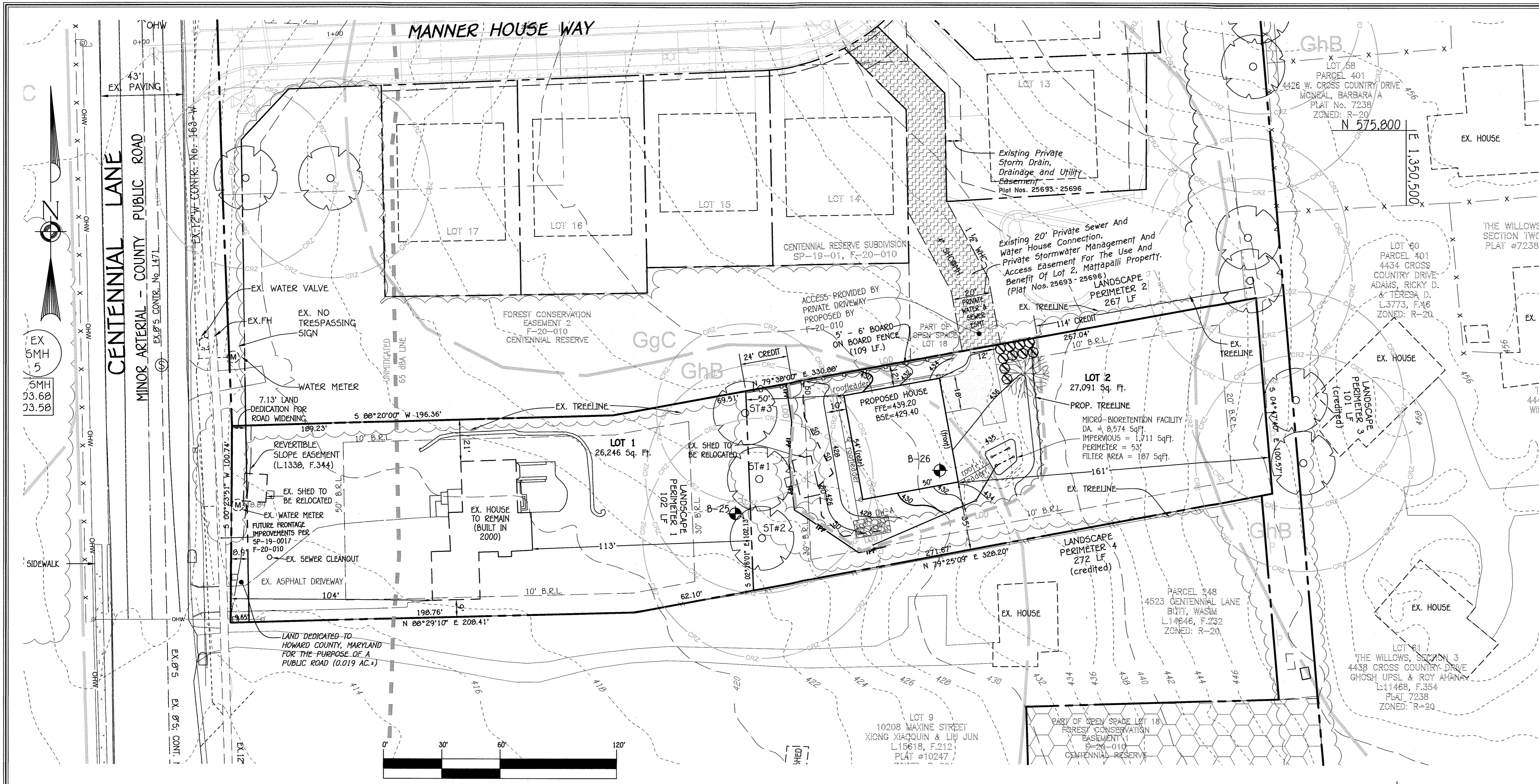
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[Signature] 11/21/21 Date

OWNER/DEVELOPER
 PRASAD & LAKSHMI APARNA MATTUPALLI
 4515 CENTENNIAL LANE
 ELLICOTT CITY, MD 21042
 443-528-1010

SEDIMENT AND EROSION CONTROL PLAN
MATTUPALLI PROPERTY
 LOTS 1 & 2
 (4515 CENTENNIAL LANE)

TAX MAP NO.: 30 GRID NO.: 01 PARCEL NO.:06
 ZONED R-20
 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: NOVEMBER, 2021
 SHEET 3 OF 5



PLANTING SPECIFICATIONS

PLANTS, RELATED MATERIAL, AND OPERATIONS SHALL MEET THE DETAILED DESCRIPTION AS GIVEN ON THE PLANS AND AS DESCRIBED HEREIN.

ALL PLANT MATERIAL, UNLESS OTHERWISE SPECIFIED, SHALL BE NURSERY GROWN, UNIFORMLY BRANCHED, HAVE A VIGOROUS ROOT SYSTEM, AND SHALL CONFORM TO THE SPECIES, SIZE, ROOT AND SHAPE SHOWN ON THE PLANT LIST AND THE AMERICAN ASSOCIATION OF NURSERMEN (AAN) STANDARDS. PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, FREE FROM DEFECTS, DECAY, DISTURBING ROOTS, SUN SCALD INJURIES, ABRASIONS OF THE BARK, PLANT DISEASE, INSECT PEST EGGS, BORERS AND ALL FORMS OF INSECT INFESTATIONS OR OBJECTIONABLE DISORDERINGS. PLANT MATERIAL THAT IS WEAK OR WHICH HAS BEEN CUT BACK FROM LARGER GRADES TO MEET SPECIFIED REQUIREMENTS WILL BE REJECTED. TREES WITH FORCED LEADERS WILL NOT BE ACCEPTED. ALL PLANTS SHALL BE FRESHLY DUG, NO HEATED-IN PLANTS FROM COLD STORAGE WILL BE ACCEPTED.

UNLESS OTHERWISE SPECIFIED, ALL GENERAL CONDITIONS, PLANTING OPERATIONS, DETAILS AND PLANTING SPECIFICATION SHALL CONFORM TO "LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE-WASHINGTON METROPOLITAN AREA", (HEREINAFTER "LANDSCAPE GUIDELINES") APPROVED BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF METROPOLITAN WASHINGTON AND THE POTOMAC CHAPTER OF THE AMERICAN SOCIETY OF LANDSCAPE ARCHITECT, LATEST EDITION, INCLUDING ALL AMEND.

CONTRACTOR SHALL BE REQUIRED TO GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR AFTER DATE OF ACCEPTANCE IN ACCORDANCE WITH THE APPROPRIATE SECTION OF THE LANDSCAPE GUIDELINES. CONTRACTOR'S ATTENTION IS DIRECTED TO THE MAINTENANCE REQUIREMENTS FOUND WITHIN THE ONE YEAR SPECIFICATIONS INCLUDING WATERING AND REPLACEMENT OF SPECIFIED PLANT MATERIAL.

BID SHALL BE BASED ON ACTUAL SITE CONDITIONS. NO EXTRA PAYMENT SHALL BE MADE FOR WORK ARISING FROM SITE CONDITIONS DIFFERING FROM THOSE INDICATED ON DRAWINGS AND SPECIFICATIONS.

ALL SHRUBS SHALL BE PLANTED IN CONTINUOUS TRENCHES OR PREPARED PLANTING BEDS AND MULCHED WITH COMPOSTED HARDWOOD MULCH AS DETAILS AND SPECIFIED EXCEPT WHERE NOTED ON PLANS.

POSITIVE DRAINAGE SHALL BE MAINTAINED IN PLANTING BEDS 2 PERCENT SLOPE.

PLANTING MIX SHALL BE AS FOLLOWS: DECIDUOUS PLANTS - TWO PARTS TOPSOIL, ONE PART WELL-ROTTED COW OR HORSE MANURE, ADD 3 LBS. OF STANDARD FERTILIZER PER CUBIC YARD OF PLANTING MIX. EVERGREEN PLANTS - TWO PARTS TOPSOIL, ONE PART HUMUS OR OTHER APPROVED ORGANIC MATERIAL, ADD 3 LBS. OF EVERGREEN (ACIDIC) FERTILIZER PER CUBIC YARD OF PLANTING MIX. TOPSOIL SHALL CONFORM TO THE LANDSCAPE GUIDELINES.

WEED CONTROL: INCORPORATE A PRE-EMERGENT HERBICIDE INTO THE PLANTING BED FOLLOWING RECOMMENDED RATES ON THE LABEL. CAUTION: BE SURE TO CAREFULLY CHECK THE CHEMICAL USED TO ASSURE ITS ADAPTABILITY TO THE SPECIFIC GROUND COVER TO BE TREATED.

ALL AREAS WITHIN CONTRACT LIMITS DISTURBED DURING OR PRIOR TO CONSTRUCTION NOT DESIGNATED TO RECEIVE PLANTS AND MULCH SHALL BE FINE GRADED AND SEEDED.

LEGEND

SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	EXISTING CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
448.5	SPOT ELEVATION
18" 50	EXISTING STORM DRAIN
18" 50	PROPOSED STORM DRAIN PIPE
EX. F.H.	EXISTING FIRE HYDRANT
EX. S.W.	EXISTING SEWER LINE
PRO. S.W.	PROPOSED SEWER
PRO. W.	PROPOSED WATER
---	EXISTING CABLE LINE
---	EXISTING GAS LINE
---	EXISTING OVERHEAD WIRE
---	PROPOSED PAVING
LOO	LIMIT OF DISTURBANCE
SSP	SUPER SILT FENCE
SF	SILT FENCE
---	EXISTING TREE LINE
---	PROPOSED TREE LINE
---	PROPOSED BOARD ON BOARD FENCE
---	DRAINAGE AREA
---	SOIL LINES AND TYPES
M-5	M-5 DRYWELL
---	MICRO-BIO RETENTION FACILITY (M-6)
---	STABILIZED CONSTRUCTION ENTRANCE
---	DENOTES EXISTING TREES TO REMAIN
---	CRITICAL ROOT ZONE
---	TREE PROTECTION FENCE
---	SOIL DISTURBANCE (SD) WITHIN CRZ
---	UNMITIGATED 65 dba NOISE CONTOUR LINE
---	EXISTING 20' PRIVATE SEWER AND WATER HOUSE CONNECTION, PRIVATE STORMWATER MANAGEMENT AND ACCESS EASEMENT FOR THE USE AND BENEFIT OF LOT 2 (MATTUPALLI PROPERTY), SUBDIVISION RECORDED WITH CENTENNIAL RESERVE, PLAT NOS. _____

- ### NOTES
- THE PERIMETER LANDSCAPE OBLIGATION IS PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. A LANDSCAPE SURETY IN THE AMOUNT OF \$1,200.00 BASED ON (2) SHADE TREES @ \$300/SHADE TREE AND 20 SHRUBS @ \$30/SHRUB SHALL BE BONDED AS PART OF THE DEVELOPER'S AGREEMENT. THE LANDSCAPING REQUIRED FOR THE SCREENING OF THE USE-IN-COMMON DRIVEWAY FROM THE ADJOINING LOTS WILL BE COMPLETED AS PART OF THE SDR REQUIREMENT.
 - AT THE TIME OF INSTALLATION, ALL SHRUBS AND OTHER PLANTINGS HEREWITH LISTED AND APPROVED FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATIONS OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.
 - THE OWNER, TENANT, AND/OR THESE AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS AND BENCHES, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
 - FOR ANY TREE DESIGNATED FOR PRESERVATION, FOR WHICH CREDIT IS GIVEN, BE REMOVED OR DIE PRIOR TO RELEASE OF BONDS, THE OWNER WILL BE REQUIRED TO REPLACE THE TREE WITH THE EQUIVALENT SPECIES OR IF THE TREE IS LISTED AS A PROHIBITED OR BANNED SPECIES ON THE SPEC TREE LIST IT SHOULD BE REPLACED WITH A RECOMMENDED TREE SPECIES WHICH WILL OBTAIN THE SAME HEIGHT, SPREAD AND GROWTH CHARACTERISTICS. THE REPLACEMENT TREE SHALL BE A MINIMUM OF 3 INCHES IN CALIPER AND INSTALLED AS REQUIRED IN THE LANDSCAPE MANUAL.

"At the time of plant installation, all trees listed and approved on the Landscape Plan, shall comply with the proper height requirement in accordance with the Howard County Landscape Manual. In addition, no substitutions or relocations of the required plantings may be made without prior review and approval from the Department of Planning and Zoning. Any deviations from the approved Landscape Plan may result in denial or delay in the release of landscape surety until such time as all required materials are planted and/or revisions are made to the road drawing plans."

"The Owner, tenants and/or their agents shall be responsible for maintenance of the required perimeter landscaping. All plant materials shall be maintained in good growing condition, and when necessary, replaced with new materials to ensure continued compliance with applicable regulations. All other required landscaping shall be permanently maintained in good condition, and when necessary, repaired or replaced."

LANDSCAPE DEVELOPER'S CERTIFICATE

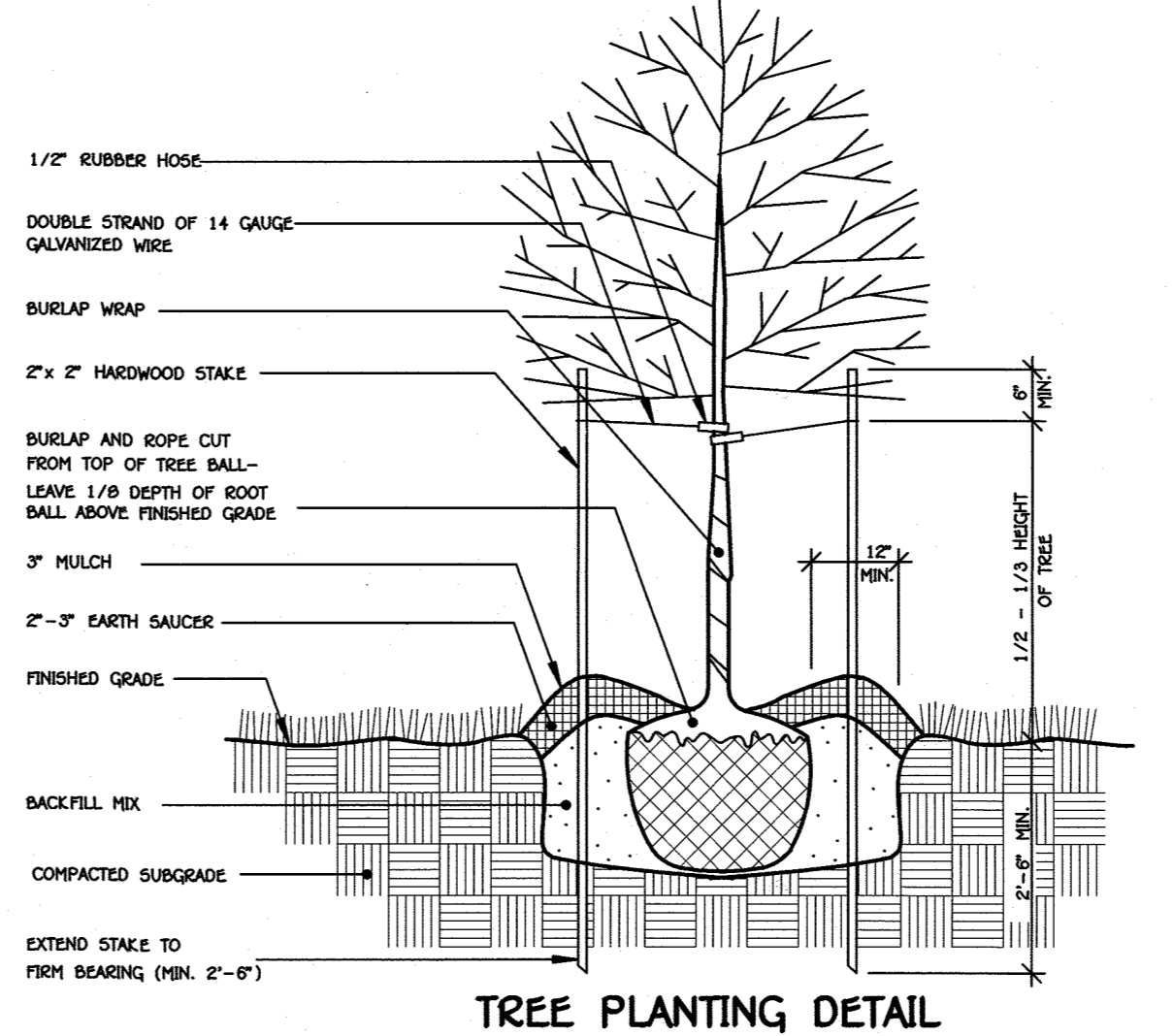
I/We certify that the landscaping shown on this plan will be done according to the plan, Section 16.124 of the Howard County Code and the Howard County Landscape Manual. I/We further certify that upon completion a letter of landscape installation accompanied by an executed one year guarantee of plant materials will be submitted to the Department of Planning and Zoning.

Mprasad Name _____ 11/2/21 Date

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/23.

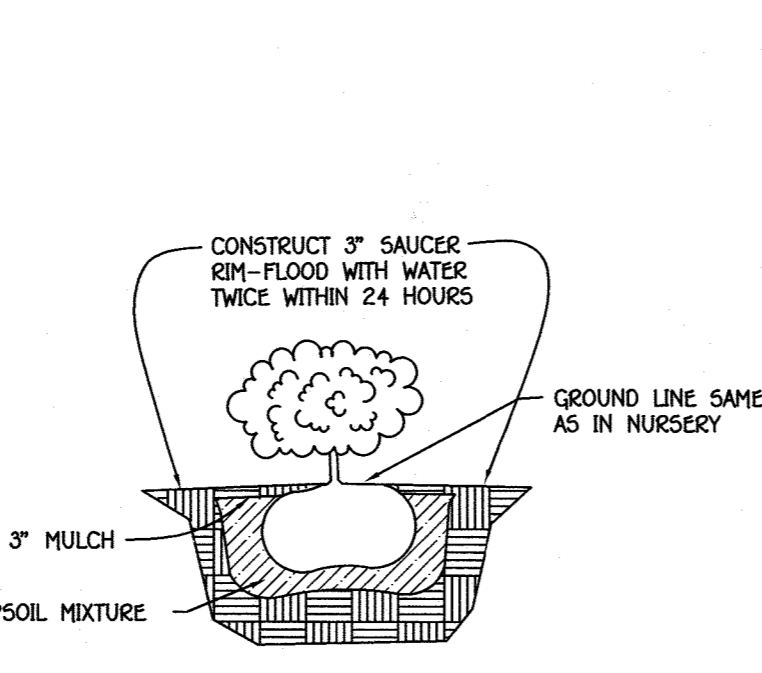
Frank Manalansan II Name _____ 11/2/21 Date



LANDSCAPING PLANT LIST

QTY.	KEY	NAME	SIZE
1	(Symbol)	ACER RUBRUM 'OCTOBER GLORY' (OCTOBER GLOWY RED MAPLE)	2 1/2" - 3" CALIPER FULL CROWN, BAB
10	(Symbol)	LEUCODHE AXILLARIS 'COAST LEUCODHE'	18" - 24" SPREAD

TOTAL: 1 SHADE TREE, 10 SHRUBS



SCHEDULE A PERIMETER LANDSCAPE EDGE

PERIMETER	P1	P2	P3	P4	TOTALS
CATEGORY	Adjacent to Existing House	Adjacent to Perimeter Properties	Adjacent to Perimeter Properties	Adjacent to Perimeter Properties	
LANDSCAPE TYPE	C	C	C	C	
LINEAR FEET OF PERIMETER	N/A	267 LF	101 LF	272 LF	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	-	YES, 136 LF	YES 101 LF	YES 272 LF	
CREDIT FOR WALL, FENCE OR BERRH (YES, NO, LINEAR FEET) (DESCRIBE IF NEEDED)	-	yes, 109 lf fence	NO	NO	
NUMBER OF PLANTS REQUIRED					
SHADE TREES	-	1	-	-	1
EVERGREEN TREES	-	-	-	-	-
SHRUBS	-	-	-	-	-
NUMBER OF PLANTS PROVIDED					
SHADE TREES	-	1	-	-	1
SMALL DECIDUOUS	-	0	-	-	0
EVERGREEN TREES	-	-	-	-	-
SHRUBS	-	*10 (10:1 sub.)	-	-	10*

Specimen Tree Chart

Key (X#)	Species	Size (in dbh)	CRZ (feet radius)	Comments
1	Silver maple	39	58.5	fair condition, some dieback TO REMAIN
2	Silver maple	41	61.5	fair condition, some dieback TO REMAIN
3	Silver maple	30.5	45.75	twin stems above BH TO REMAIN

REVISIONS

NO.	DESCRIPTION	DATE

Approved: Department Of Planning And Zoning

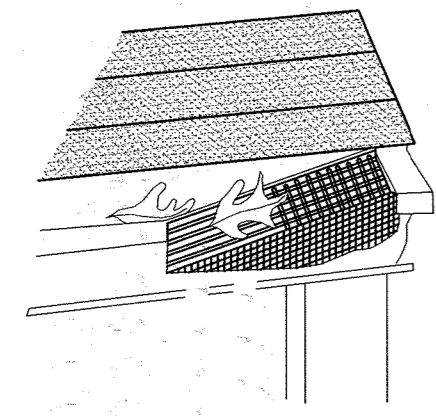
Chief, Division Of Land Development _____ Date 11/2/21

Chief, Development Engineering Division _____ Date 11/2/21

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PKC
 ELLICOTT CITY, MARYLAND 21042
 (410) 461 - 2855

LANDSCAPE PLAN
MATTUPALLI PROPERTY
 LOTS 1 & 2
 (4515 CENTENNIAL LANE)

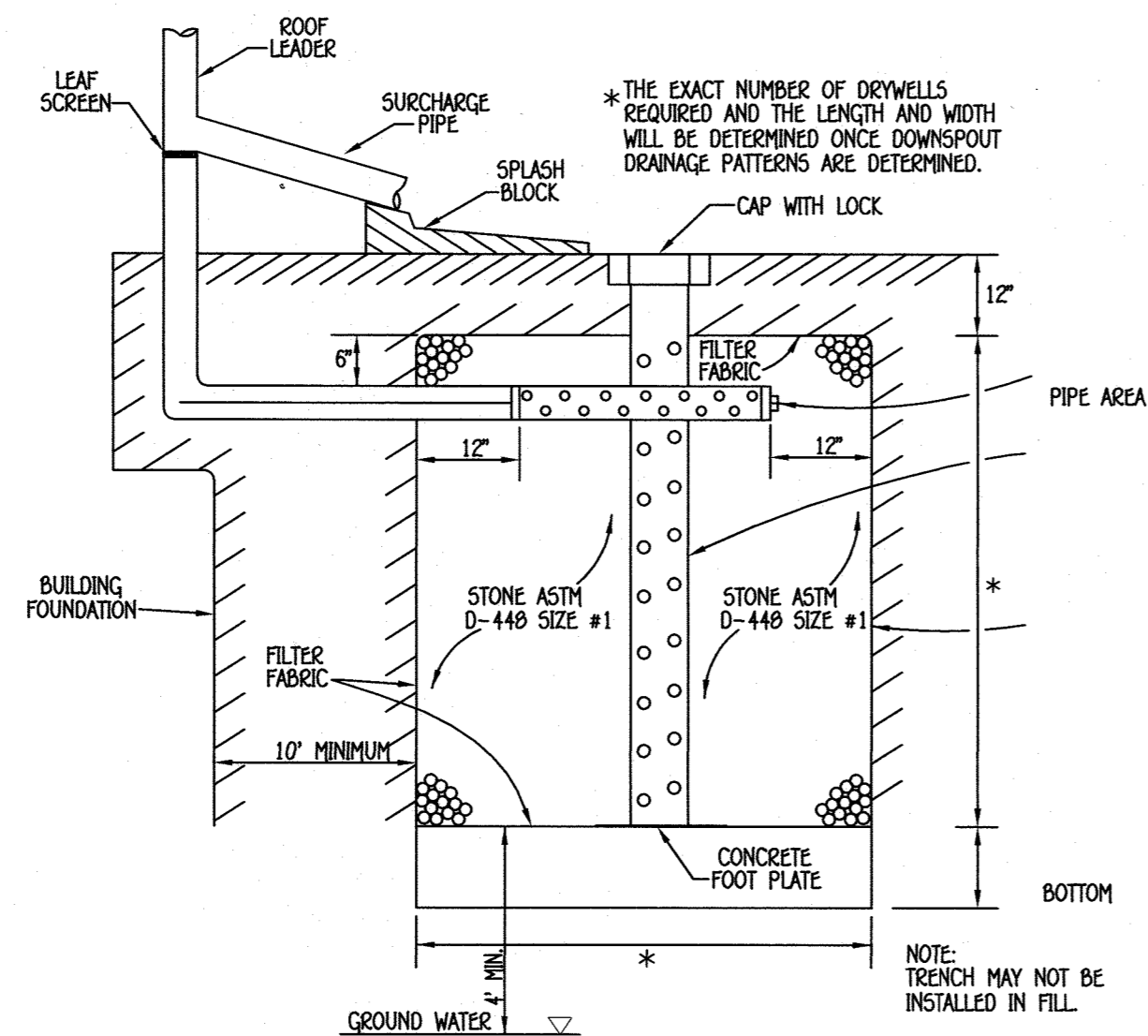
TAX MAP NO.: 30 GRID NO.: 01 PARCEL NO.:06
 ZONED R-20
 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: NOVEMBER, 2021
 SHEET 4 OF 5



GUTTER DRAIN FILTER DETAIL
NOT TO SCALE

STORMWATER MANAGEMENT NOTES

1. STORMWATER MANAGEMENT IS PROVIDED IN ACCORDANCE WITH CHAPTER 5, "ENVIRONMENTAL SITE DESIGN" OF THE 2007 MARYLAND STORMWATER MANAGEMENT DESIGN MANUAL, EFFECTIVE MAY 4, 2010.
2. MAXIMUM CONTRIBUTING ROOF TOP AREA TO EACH DOWNSPOUT SHALL BE 500 SQ. FT. OR LESS.
3. DRYWELLS SHALL BE PROVIDED AT LOCATIONS WHERE THE LENGTH OF DISCONNECTION IS LESS THAN 75' AT 5%. THE SIZE AND CONSTRUCTION OF THE DRYWELL SHALL BE IN ACCORDANCE WITH THE DETAIL SHOWN ON THIS SHEET.
4. FINAL GRADING IS SHOWN ON THIS SITE DEVELOPMENT PLAN.



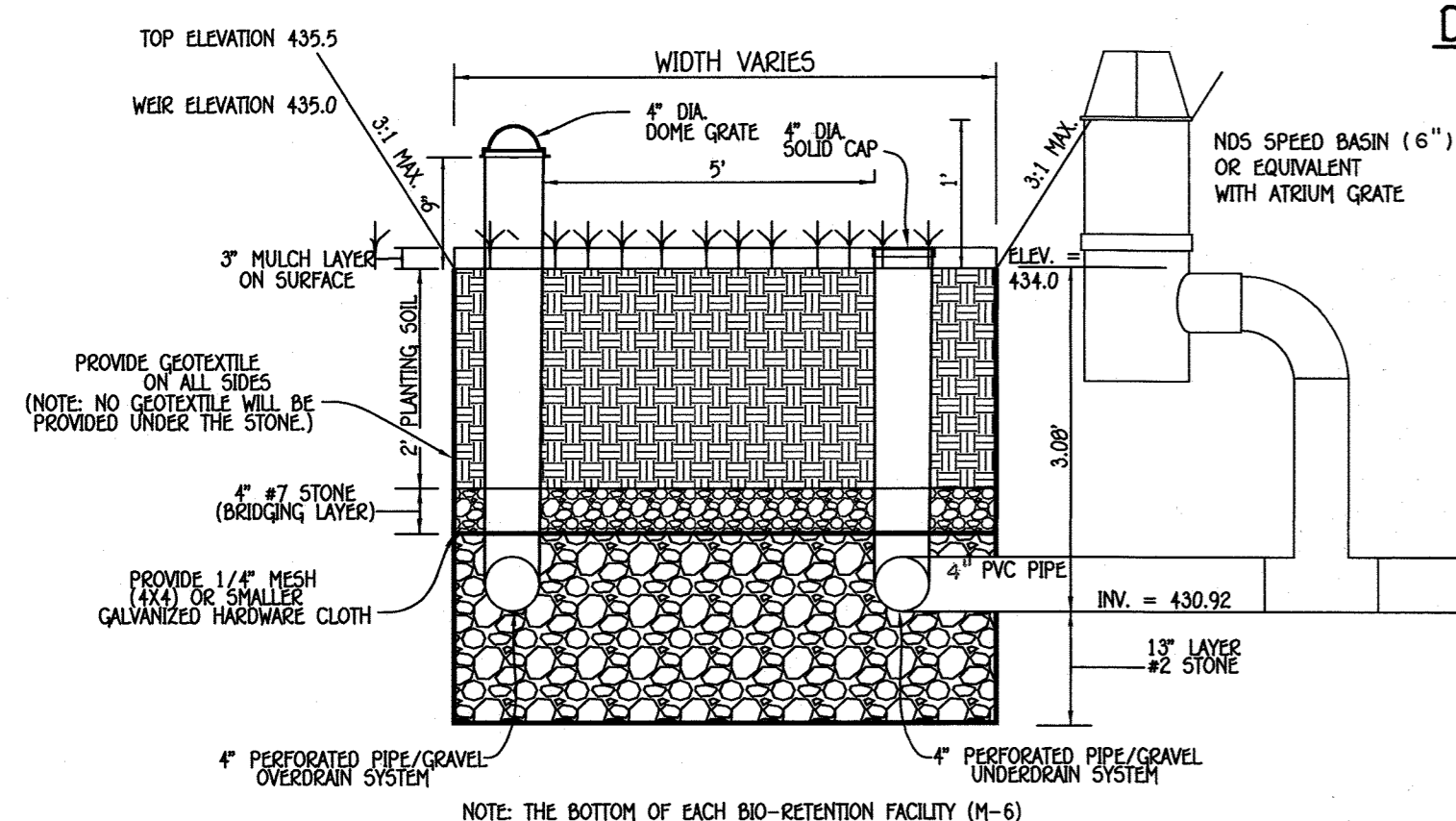
DRY WELL DETAIL (M-5)
NOT TO SCALE

DRY WELL CHART						
LOT No.	DRYWELL No.	AREA OF ROOF PER DRYWELL	VOLUME REQUIRED	VOLUME PROVIDED	AREA OF TREATMENT	L W D
LOT 2	2A	1,814 SQ.FT.	259 CU.FT.	259 CU.FT.	100%*	10' x 9' x 4'

* AREA OF TREATMENT EXCEEDS THAT REQUIRED.

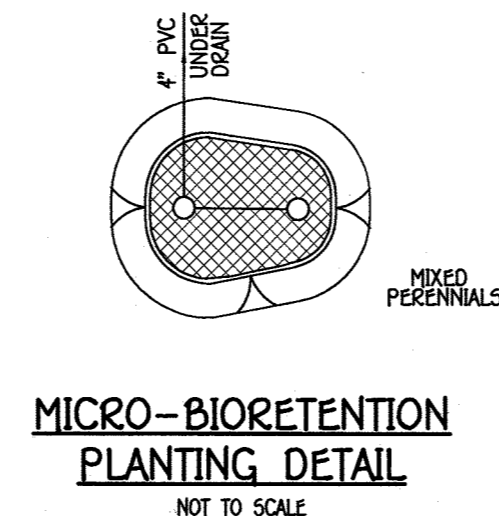
OPERATION & MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DRY WELLS (M-5)

- A. THE OWNER SHALL INSPECT THE MONITORING WELLS AND STRUCTURES ON A QUARTERLY BASIS AND AFTER EVERY HEAVY STORM EVENT.
- B. THE OWNER SHALL RECORD THE WATER LEVELS AND SEDIMENT BUILD UP IN THE MONITORING WELLS OVER A PERIOD OF SEVERAL DAYS TO ENSURE TRENCH DRAINAGE.
- C. THE OWNER SHALL MAINTAIN A LOG BOOK TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
- D. WHEN THE FACILITY BECOMES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN A SEVENTY-TWO (72) HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BE TAKEN.
- E. THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
- F. ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION FACILITY HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.



TYPICAL SECTION BIO-RETENTION FACILITY (M-6)
NO SCALE

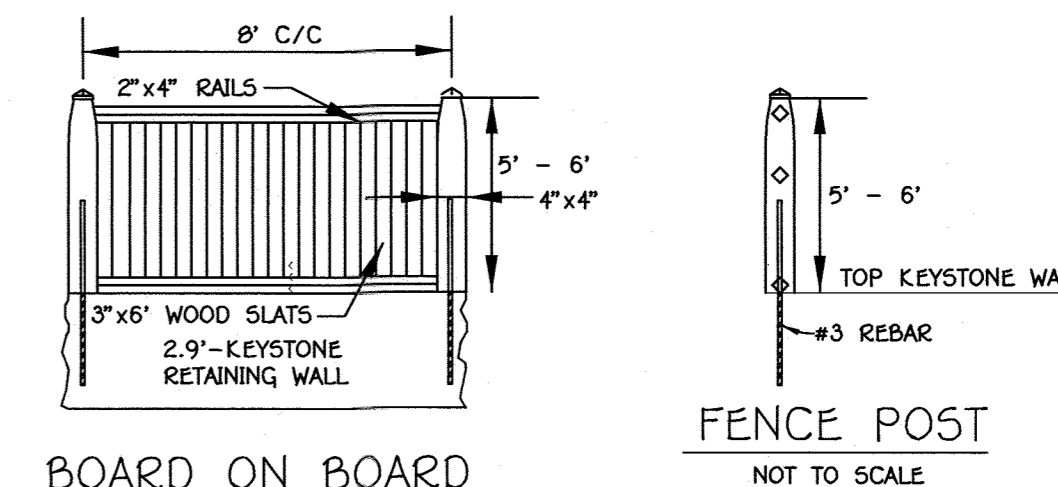
MICRO-BIORETENTIONS PLANT MATERIAL					
MICRO-BIO 1 QUANTITY	MICRO-BIO 2 QUANTITY	MICRO-BIO 3 QUANTITY	MICRO-BIO 4 QUANTITY	NAME	MAXIMUM SPACING (FT.)
140	160	85	115	MIXED PERENNIALS	1.5 TO 3.0 FT.
2	2	1	2	SILEY DOGWOOD	PLANT AWAY FROM INFLOW LOCATION



MICRO-BIORETENTION PLANTING DETAIL
NOT TO SCALE

OPERATION & MAINTENANCE SCHEDULE FOR MICRO-BIORETENTION (M-6)

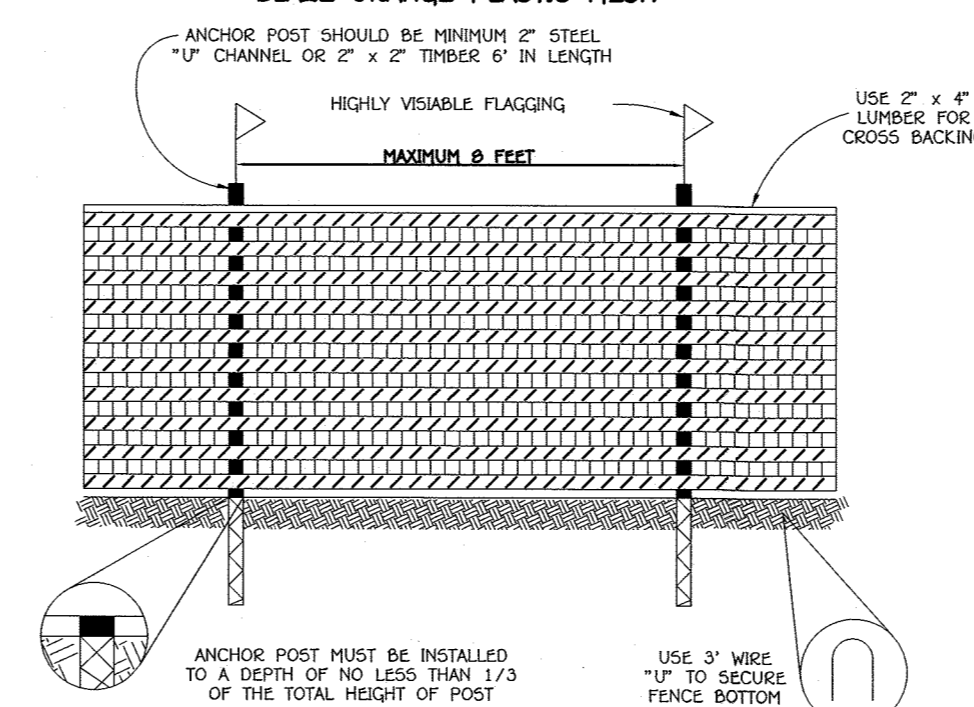
- A. THE OWNER SHALL MAINTAIN THE PLANT MATERIAL, MULCH LAYER AND SOIL LAYER ANNUALLY. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL, VOLUME II, TABLE A.4.1 AND 2.
- B. THE OWNER SHALL PERFORM A PLANT IN THE SPRING AND IN THE FALL OF EACH YEAR. DURING THE INSPECTION, THE OWNER SHALL REMOVE DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT. REPLACE DEAD PLANT MATERIAL WITH ACCEPTABLE REPLACEMENT PLANT MATERIAL. TREAT DISEASED TREES AND SHRUBS AND REPLACE ALL DEFICIENT STAKES AND WIRES.
- C. THE OWNER SHALL INSPECT THE MULCH EACH SPRING. THE MULCH SHALL BE REPLACED EVERY TWO TO THREE YEARS. THE PREVIOUS MULCH LAYER SHALL BE REMOVED BEFORE THE NEW LAYER IS APPLIED.
- D. THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM.



BOARD ON BOARD PRIVACY FENCE DETAIL
NOT TO SCALE

FENCE POST
NOT TO SCALE

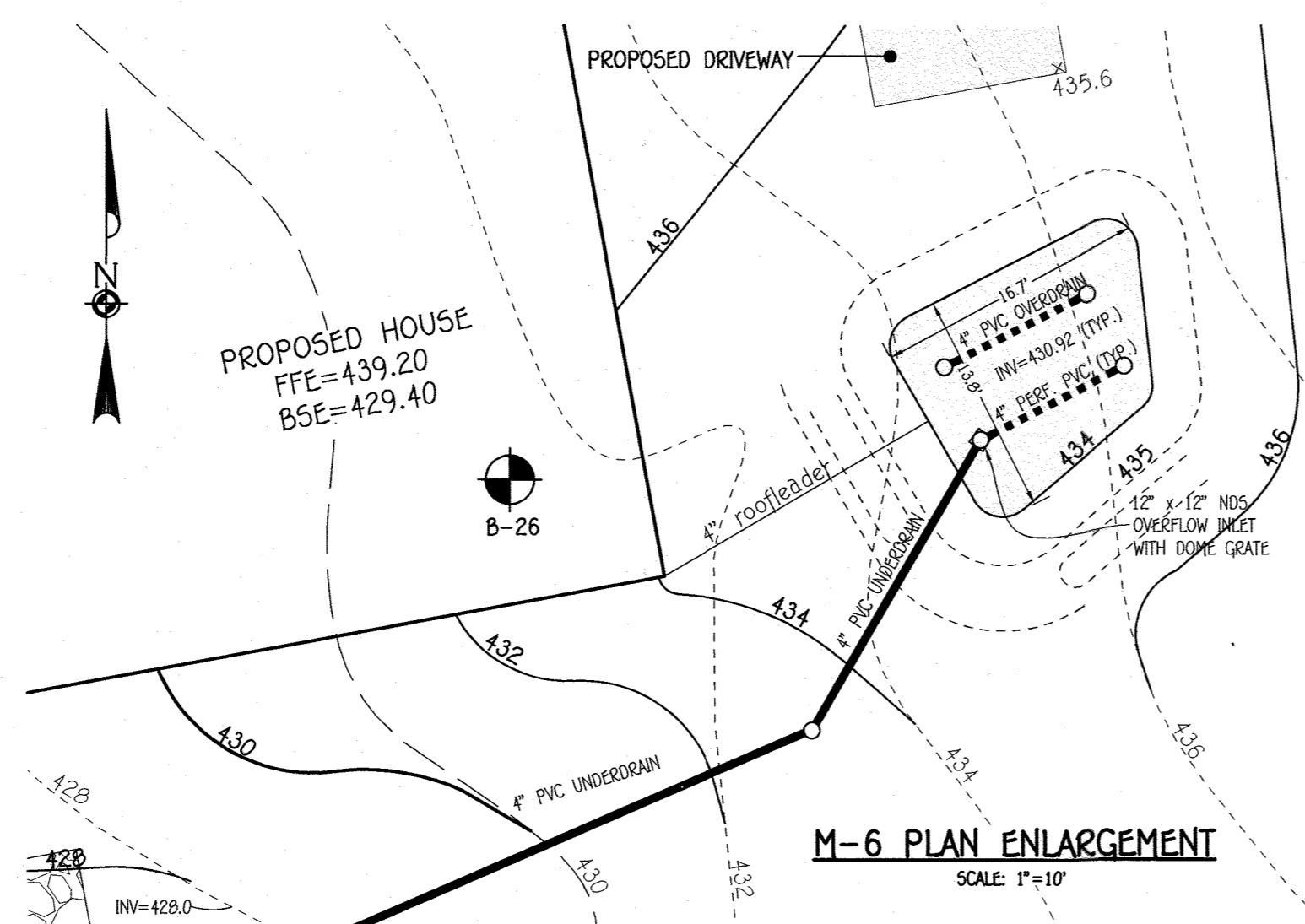
BLAZE ORANGE PLASTIC MESH



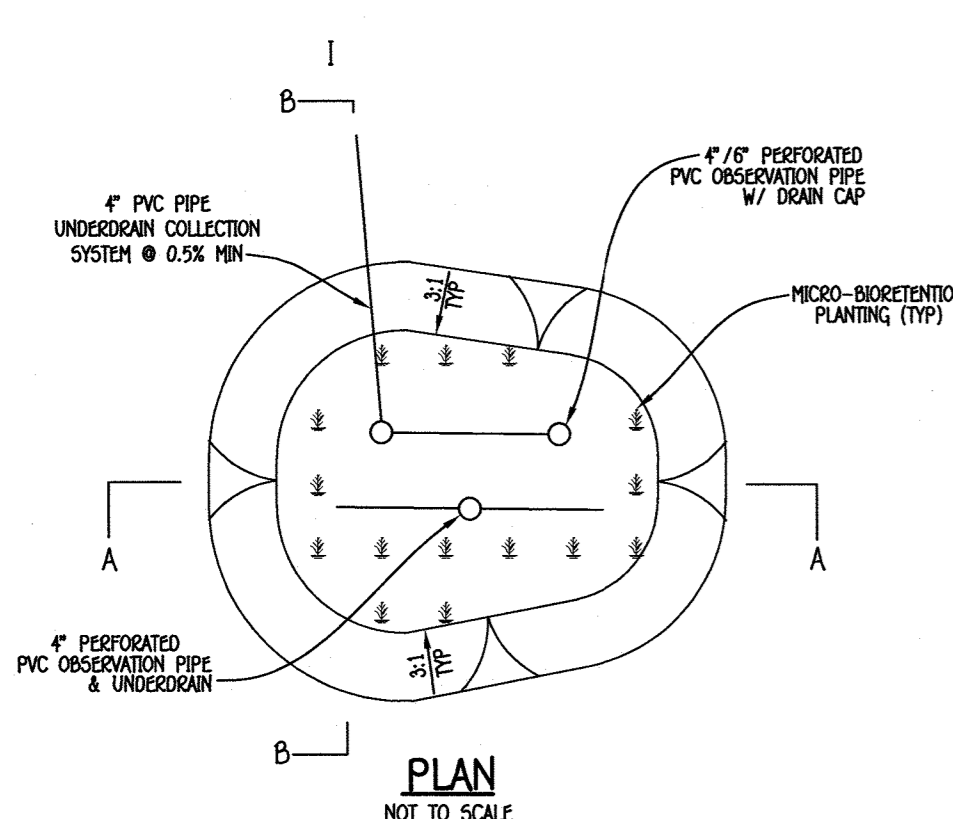
- NOTES:
1. FOREST PROTECTION DEVICES ONLY.
 2. RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
 3. BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.
 4. ROOT DAMAGE SHOULD BE AVOIDED.
 5. SIGNAGE MAY BE USED IN ADDITION TO FENCING.
 6. DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION AND REMOVED WHEN SITE IS STABILIZED.

TREE PROTECTION DETAIL

NOT TO SCALE



M-6 PLAN ENLARGEMENT
SCALE: 1"=10'



PLAN
NOT TO SCALE

REVISIONS		
NO.	DESCRIPTION	DATE

Approved: Department Of Planning And Zoning

Chief, Division Of Land Development: [Signature] Date: 12/16/21

Chief, Development Engineering Division: [Signature] Date: 11-18-21

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL Pk.
ELLSWORTH CITY, MARYLAND 21042
(410) 461 - 2895



PROFESSIONAL CERTIFICATION

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Frank Manalansan II Date: 11/2/21

OWNER/DEVELOPER
PRASAD & LAKSHMI APARNA MATTUPALLI
4515 CENTENNIAL LANE
ELLSWORTH CITY, MD 21042
443-528-1010

NOTES AND DETAILS
MATTUPALLI PROPERTY
LOTS 1 & 2
(4515 CENTENNIAL LANE)

TAX MAP NO.: 30 GRID NO.: 01 PARCEL NO.:06
ZONED R-20
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: NOVEMBER, 2021
SHEET 5 OF 5