GENERAL NOTES . ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATION OF HOWARD COUNTY PLUS MDSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.

2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT 410-313-1880 AT LEAST FIVE(5) WORKING DAYS PRIOR TO THE START OF WORK. 3. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.

05/18/2021 5. TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE

4. EXISTING TOPOGRAPHIC CONTOURS BASED ON BOUNDARY & TOPOGRAPHY SURVEY PERFORMED BY DCI ENGINEERS ON

PRIOR TO THE PLACEMENT OF ANY ASPHALT a.) THE R1-1 "STOP" SIGN, STREET NAME SIGN (SNS) ASSEMBLY, AND/OR RANGE OF ADDRESS SIGN FOR THE DEVELOPMENT MUST BE INSTALLED BEFORE THE BASE PAVING IS COMPLETED. b.) THE TRAFFIC CONTROL DEVICE LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MUST BE FIELD

APPROVED BY HOWARD COUNTY TRAFFIC DIVISION (410-313-2430) PRIOR TO THE INSTALLATION OF ANY OF THE TRAFFIC CONTROL DEVICES. c.) THE TRAFFIC CONTROL DEVICES AND THEIR LOCATIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF

THE MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MDMUTCD). d.) ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED "QUICK PUNCH", SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE)-3' LONG. THE ANCHOR SHALL NOT EXTEND MORE THAN TWO "QUICK PUNCH" HOLES ABOVE GROUND LEVEL. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON THE TOP OF EACH POST.

6. ALL OUTDOOR LIGHTING SHALL COMPLY WITH THE REQUIREMENT OF ZONING SECTION 134. 7. 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. 4218 AND 421B WERE

4218- N-542107.856 E-1362386.084 42IB- N-542366.884 E-1363076.043

8. WATER FOR THIS PROJECT TO BE PUBLIC EXTENSION OF CONTRACT NO. 24-5209-D PATUXENT RIVER (MIDDLE). 9. SEWER FOR THIS PROJECT TO BE PUBLIC EXTENSION OF CONTRACT NO. 24-5209-D

10. EXISTING UTILITIES ARE BASED ON FIELD RUN SURVEY INFORMATION AND HOWARD COUNTY APPROVED CONSTRUCTION DRAWINGS. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE TO CONSTRUCTION ACTIVITIES AN TAKE ALL NECESARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. 11. STORMWATER MANAGEMENT WILL BE PROVIDED ON -SITE BY THE FOLLOWING MEANS

-WATER QUALITY VOLUME WILL BE PROVIDED BY USING TWO M-8 (BIOSWALES) AND FOUR M-5 (DRYWELLS). RECHARGE VOLUME IS PROVIDED USING THESE SAME FACILITIES. CHANNEL PROTECTION VOLUME IS BEING PROVIDED WHERE IT IS REQUIRED. THE 10-YEAR AND 100-YEAR STORM ATTENUATION IS NOT REQUIRED PER HOWARD COUNTY DUE TO NO DOWNSTREAM EROSION. THE STORMWATER FACILITIES WILL BE MAINTAINED BY THE HOMEOWNERS AND THE HOMEOWNERS ASSOCIATION.

12. NO CEMETERIES OR GRAVE SITES ARE LOCATED ON THE PROPERTY. THE SUBJECT PROPERTY DOES NOT CONTAIN A CEMETRY PER THE HOWARD COUNTY CEMETERY

INVENTORY MAP

13. THIS PLAN IS SUBJECT TO THE AMENDED, FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS EFFECTIVE 10/02/03. 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 APPLICATION.

14. IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOW, CHIMNEYS OR EXTERIOR STAIRWAYS 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 SETBACK (APPLIES FOR RESIDENTIAL SDP'S). 15. THE SUBJECT PROPERTY IS ZONED R-12 PER THE OCTOBER 6,2013 COMPREHENSIVE ZONING PLAN.

16. 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 (1-11/2" MIN)

GEOMETRY- MAX. 15% GRADE, MAX 10% GRADE CHANGE AND MIN. 45' TURNING RADIUS STRUCTURE (CULVERT/BRIDGES)-CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING)

DRAINAGE ELÈMENTS -SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THÀN 1 FOOT DEPTH OVER DRIVEWAY SURFACE

MAINTENANCE -SUFFICIENT TO INSURE ALL WEATHER USE

17. 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.

18. FLAG AND PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENACE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND ROAD RIGHT-OF-WAY AND NOT ONTO THE PIPESTEM LOT DRIVEWAY. 19. ROAD DEDICATION - REFERENCE THE DEDICATION AREA WITH THE FOLLOWING NOTE:

i. LAND DEDICATED TO HOWARD COUNTY, MARYLAND FOR PURPOSES OF A PUBLIC ROAD (0.014 ACRES).

ii. LAND DEDICATED TO STATE OF MARYLAND FOR PURPOSES OF A PUBLIC ROAD (0.00 ACRES). 20. THIS SUBDIVISION IS SUBJECT TO SECTION 18.122B OF THE HOWARD COUNTY CODE. PUBLIC WATER AND/OR SEWER SERVICE HAS BEEN GRANTED UNDER THE TERMS AND PROVISIONS, THEREOF, EFFECTIVE _____, ON WHICH DATE DEVELOPER AGREEMENT # $_____$ WAS FILED AND ACCEPTED

21. THERE ARE TWO EXISTING DWELLING/STRUCTURE(S) LOCATED ON LOT(S) 9 AND 11 TO REMAIN. NO NEW BUILDINGS, EXTENSIONS OR ADDITIONS TO THE EXISTING DWELLING(S) ARE TO BE CONSTRUCTED AT A DISTANCE LESS THAN THE ZONING REGULATION REQUIREMENTS. 22. THE LANDSCAPE PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE

HOWARD COUNTY CODE AND LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED 9 SHADE TREES AND 6 SHRUBS, THE AMOUNT OF \$2,880.00 SHALL BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT FOR THIS

23. THIS SUBDIVISION IS EXEMPT FROM THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION WAS PREVIOUSLY ADDRESSED AS PART OF F-05-159 24. A FOREST CONSERVATION EASEMENT HAS ALREADY BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION

16.1200 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE FOREST CONSERVATION MANUAL. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST EASEMENT ARE ALLOWED. THE REQUIRED FOREST CONSERVATION SHALL MEET THE INTENT OF SECTION 16.117 OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. TOTAL FOREST CONSERVATION OBLIGATION OF THIS PROJECT TO BE FULFILLED BY ESTABLISHING A 0.386 ACRE FOREST RETENTION EASEMENT ON OPEN SPACE LOT 10.

25. THIS PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT 26. THE ENVIRONMENTAL CONCEPT PLAN (ECP-22-008) WAS APPROVED ON 01/10/2022.

27. THERE IS NO 100 YEAR FLOODPLAIN LOCATED ON SITE.

28. NO STEEP SLOPES OVER 20,000 SF CONTIGUOUS ARE LOCATED ON SITE.

29. THERE ARE NO ON-SITE NON-TIDAL WETLANDS OR STREAMS.

30. A NOISE STUDY IS NOT REQUIRED. 31. JONES ROAD IS CLASSIFIED AS A LOCAL ROAD AND ALSO CAN BE DEFINED AS NEIGHBORHOOD YIELD STREET UNDER STREET TYPE CATEGORY. THERE IS ONE PROPOSED PRIVATE USE-IN-COMMON DRIVEWAY WHICH CAN BE DEFINED AS

32. THE SUBJECT PROPERTY IS NOT A HISTORIC SITE PER THE HOWARD COUNTY HISTORIC SITE MAP.

33. THE PROPOSED UNITS SHALL HAVE AN AUTOMATIC FIRE PROTECTIVE SPRINKLER SYSTEM. 34. AN ON-LINE PRE-SUBMISSION COMMUNITY MEETING WAS HELD ON 06/29/2021

DATE

35. IN ACCORDANCE WITH SECTION 16.121(A)(2) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, THE OPEN SPACE REQUIREMENTS FOR THIS R-12 PROJECT IS 10% OF GROSS AREA(2.90 AC.X10%=0.29 AC.). REFER TO PROPOSED OPEN SPACE TABULATION HERE ON.

36. ÍN ACCORDANCE WITH SECTION 16.121(a)(4) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS RECREATION OPEN SPACE TO THIS R-12 PROJECT IS NOT REQUIRED BECAUSE IT HAS LESS THAN 10

37. THE SUBJECT PROPERTY IS ELIGIBLE FOR A SINGLE LOT FAMILY MEMBER EXEMPTION PER SECTION 16-1107(b)(1)(vi) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. IN CONFORMITY WITH SECTION 16-1107(b)(1)(vi) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, UPON RECORDATION OF A PLAT CREATING AN ADDITIONAL BUILDING LOT ON THIS PROPERTY, THE OWNERS SHALL CONVEY THE NEWLY CREATED LOT TO BRONZWYN PALMER AND HER HUSBAND

38. THIS PROJECT IS A SUBJECT TO DESIGN MANUAL WAIVER TO DMV 02-22-2012. ON JANUARY 13, 2022 THE DEPARTMENT OF PUBLIC WORKS UTILITY DESIGN DIVISION CHIEF INDICATED THE TWO DESIGN ITEMS WOULD BE ADDRESSED DURING PRELIMINARY PLAN DEVELOPMENT. THESE WAIVER ITEMS ARE:

IN LIEU OF THE REQUIRED 10' WIDE PERMANENT STRUCTURE SETBACK, THE APPLICANT WOULD LIKE TO PROVIDE A 8.40' FROM BUILDING ON LOT 11, 0.9' FROM STORMWATER FACILITY M8-1, 0.6' FROM STORMWATER FACILITY M8-2, AND 6.15' FROM BUILDING ON LOT 9.

39. DEVELOPER IS RESPONSIBLE TO PAY THE COUNTY TO INSTALL A R1-1 ("STOP") SIGN AND PRIVATE STREET NAME SIGN AT THE ENTRANCE OFF JONES ROAD. REFER TO PLAN SHEET FOR DETAILS. CONTACT HOWARD COUNTY TRAFFIC AT 410-313-5752 TO ARRANGE FOR PAYMENT AND INSTALLATION.

APPROVED HOWARD DEPARTMENT OF PUBLIC WORKS 6/8/2023

APPROVED: HOWABOUSGALLY DEPARTMENT OF PLANING AND ZONING

CHIEF, DEVELOPMENT DIVISION 6/8/2023

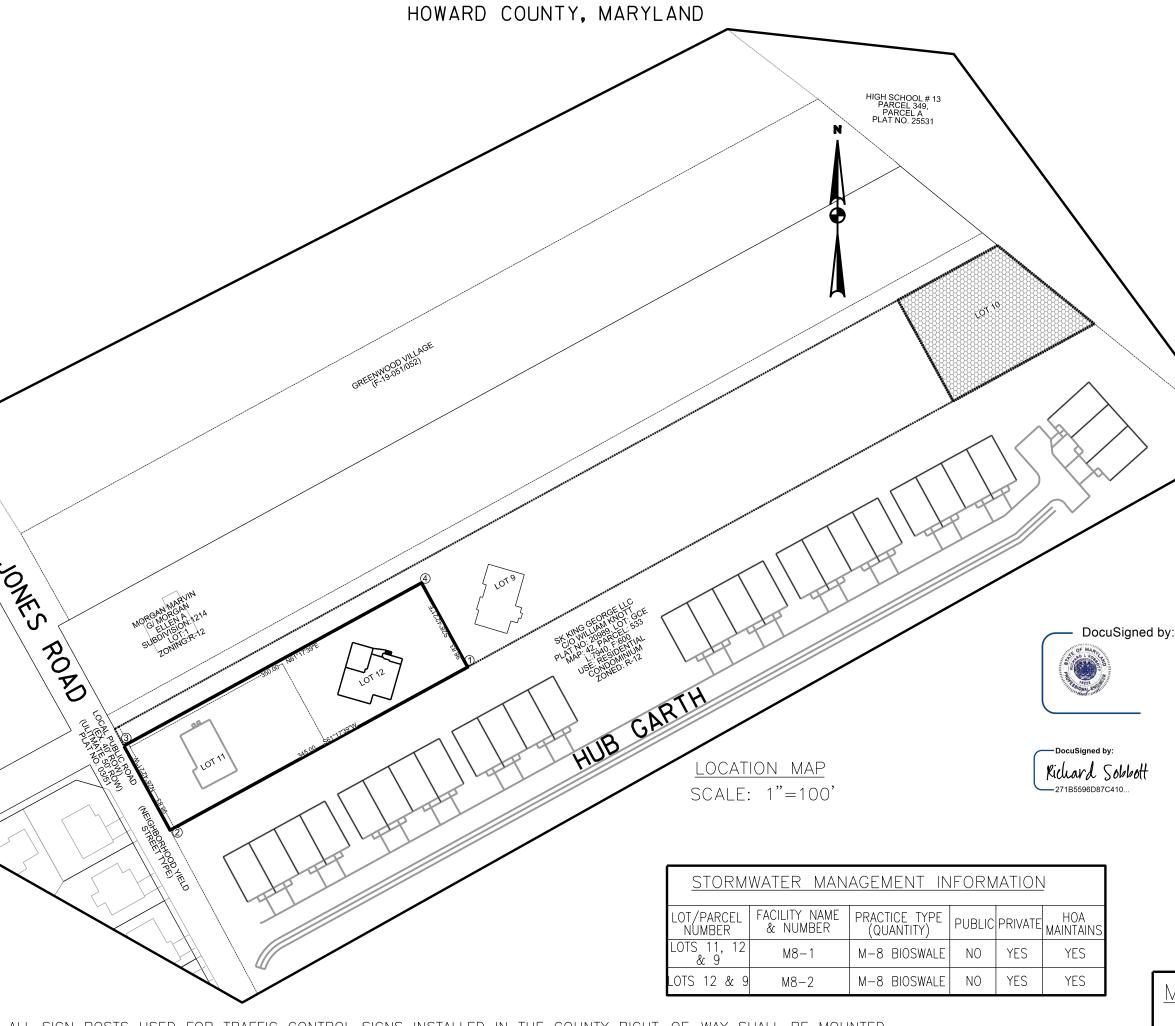
CHIEF, BUREAU OF HIGHWAYS

CHIEF, DIVISION OF LAND DEVELOPMENT

THE FOLLOWING COMPANIES WERE NOTIFIED BY MISS UTILITY (1-800-282-8555) AND REQUESTED TO MARK OUT UNDERGROUND FACILITIES AFFECTING AND SERVICING THIS SITE. THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS BASED UPON THE UTILITY COMPANIES RESPONSE TO THIS REQUEST.

UTILITY COMPANY PHONE NUMBER (800) 778-9140BGE ELECTRIC-USIC (800) 778-9140BGE GAS-USIC (678) 762-2403COLONIAL PIPELINE (410) 785-4900 HWD CO GOVT HOWARD COUNTY WATER/SEWER (410) 313-4982 COMCAST/UTILIQUEST (410) 536-0070 (410) 536-0070 COMCAST-FIBER/UTILIQUEST (410) 536-0070 VERIZON (410) 393-3553

FINAL SUBDIVISION PLAN NORDAU, SECTION E-2, LOTS 11-12 A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8



40. ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE)—3' LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.

41. NO TRAFFIC STUDY IS REQUIRED. BY SECTION 16.1107(B)(1)(VI) MINOR SUBDIVISIONS THAT CREATE ONLY ONE DWELLING UNIT CONVEYED TO AN IMMEDIATE FAMILY MEMBER ARE EXEMPT FROM APFO. BY SECTION 16.1107(B)(2) MINOR SUBDIVISION ARE EXEMPT FROM APFO.

42. PER SECTION 109.O.E OF THE ZONING REGULATIONS, AT LEAST 10% OF THE DWELLINGS IN A R-12 DEVELOPMENT SHALL BE MODERATE INCOME HOUSING UNIT (MIHU). 1×10%=0.1 UNITS. A FEE IN LIEU WILL BE PAID. 43. STORMWATER MANAGEMENT PRACTICES ARE REQUIRED IN ACCORDANCE WITH THE DESIGN MANUALS. PRIOR TO SIGNATURE APPROVAL OF THE FINAL PLAT. THE DEVELOPER WILL BE REQUIRED TO EXECUTE THE DECLARATION OF COVENENT AND/OR A DEVELOPER'S AGREEMENT FOR THE CONSTRUCTION OF THE STORMWATER MANAGEMENT PRACTICES AND MAINTENANCE AGREEMENT.

44. A MAINTENANCE AGREEMENT FOR THE SHARED DRIVEWAY SERVING THE LOTS AND OPEN SPACE LOT AND THE LOTS CREATED WITH THE FUTURE RESUBDIVISION OF THE LOTS WAS RECORDED IN THE LAND RECORDS OF HOWARD COUNTY, MARYLAND. IN LIBER 9507 FOLIO 382.

46. ON SEPT. 26, 2005 THE ARTICLES OF INCORPORATION FOR THE IMANI MEADOWS HOMEOWNERS ASSOCIATION INC. WERE FILED WITH THE STATE OF MARYLAND DEPARTMENT OF ASSESSMENTS AND TAXATION NUMBER D10882603. THE DECLARATION OF COVENANTS AND EASEMENTS ARE RECORDED IN LIBER 9507 FOLIO 364. 47. A COMMUNITY ASSOCIATION HAS BEEN FORMED FOR THIS SUBDIVISION AND THE COVENANTS THAT GOVERN THE

MAINTENANCE OF THE COMMUNITY-OWNED OPEN SPACE WILL BE RECORDED IN THE LAND RECORDS OF HOWARD COUNTY

SIMULTANEOUSLY WITH THE RECORDATION OF THIS PLAT. 48. ON-LOT HOA MAINTAINED FACILITIES INCLUDE MICRO-SCALE PRACTICE BIOSWALES (M-8). THESE FACILITIES WILL BE PRIVATELY OWNED (INDIVIDUAL LOT OWNERS) AND MAINTAINED BY HOA. MAINTENANCE INCLUDES: MAINTENANCE OF OUTLET STRUCTURES AND PIPES, MULCH, WEEDING, PLANTINGS, PERFORATED UNDERDRAINS, FEEDER PIPES AND ROUTINE SOIL REPLACEMENT.

49. ON-LOT PRIVATELY OWNED AND MAINTAINED FACILITIES INCLUDE MICRO-SCALE DRYWELLS (M-5).

MINIMUM LOT SIZE CHART							
T/PARCEL NUMBER	GROSS AREA	PIPESTEM AREA	NET AREA	MIN. LOT SIZE			
12	17,122 SF	716 SF	16,406 SF	10,800 SF			
11	16,975 SF	N/A	16,975 SF	10,800 SF			
9	74,752 SF	6900 SF	67,852 SF	10,800 SF			
10	16,826.33 SF	N/A					

HOUSES MAY NOT BE BUILT USING . ALL WATER CONNECTIONS SHALL BE 5" OR 1" OUTSIDE METER SETTINGS, JNLESS OTHERWISE NOTED. REFER TO COUNTY DETAIL W-3.28 OUTSIDE METER

BIO-SWALE TABLE

(PRIVATE/PUBLIC)

PRIVATE

PRIVATE

|WIDTH (FT.)|LENGTH (F⁻

FACILITY

- LOT 12 IS EXEMPT FROM APFO PER SECTION 16.1107 (b)(1)(vi).)PEN SPACE TABULATION

- THERE ARE EXISTING

MAINTENANCE

PRIVATE HOA

PRIVATE HOA

PRIVATE/PUBLIC/JOINT)

HOUSES ON LOTS 11 & 9.

IN ACCORDANCE WITH SECTION 16.121(A)(2)OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS THE OPEN SPACE REQUIREMENTS FOR THIS R-12 PROJECT IS 10% OF GROSS AREA (2.885 AC. GROSS AREA x 10%=0.29 AC.)

OPEN SPACE PROVIDED CREDITED IS 0.386 AC. O.S. LOT 10 0.386 AC.

LEGEND: EASTING NORTHING ----- PROPERTY LINE DCI-200 540527.960 1365037.636 281.86 ----- EXISTING PERRENIAL STREAMS DCI-201 540852.089 1365684.347 DCI - 203 540897.367 1366058.204 | 291.04 — — — — BUILDING RESTRICTION LINE DCI-204 541049.248 1366079.998 282.99 ——————— FEMA 100 YEAR FLOODPLAIN DCI-205 541149.608 1366218.132 284.27

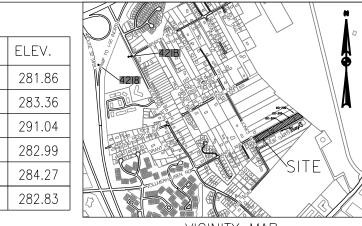
PROPOSED CONCRETE PAVEMENT/ ASPHALT PAVING

EXISTING DEDICATED RIGHT-OF-WAYS

PROPOSED CONCRETE PAVING

EXISTING STORM DRAIN DCI-206 541260.743 1366292.270 282.83 PROP. STORM DRAIN W/ OUTFALL

CONTROL POINTS



<u>VICINITY MAP</u> SCALE: 1"=2000' ADC MAP 41, GRID A-2

LEGEND: DCI-100 △ TRAVERSE CONTROL EXISTING SANITARY SEWER MANHOLE **EXISTING TREE EXISTING BUSH/SHRUBS**

EXISTING STORMDRAIN MANHOLE EXISTING TELEPHONE/COMM. MANHOLE

EXISTING GAS MANHOLE EXISTING MANHOLE (UNKNOWN)

EXISTING WATER MANHOLE EXISTING WATER MAIN W/FIRE HYDRANT

PROPOSED WATER MAIN W/ FIRE HYDRANT

EXISTING SAN. SEWER PROPOSED SAN. SEWER

OR EASEMENT

EASEMENT

EXISTING STRUCTURE

EXISTING TREELINE

15% - 25% SLOPES > 25% SLOPES

ZONING MAP

----X---- EXIST. METAL FENCE EXIST. WOOD FENCE PROPOSED BUSH/SHRUBS

---- 405 ---- FIELD SURVEY PROPOSED CONTOURS

EXISTING SPOT ELEVATION SPOT ELEVATION

MODERATE INCOME HOUSING UNIT (MIHU APPLICATION EXEMPTION TRACKING TOTAL NUMBER OF LOTS/UNIT PROPOSED TOTAL NUMBER OF MIHU'S REQUIRED 0.3 NUMBER OF MIHU'S PROVIDED ONSITE (EXEMPT FROM APFO ALLOCATIONS) NUMBER OF APFO ALLOCATIONS REQUIRED 0 (REMAINING LOTS/UNITS) MIHU FEE-IN-LIEU LOT 12

ESD PRACTICE

(4) DRY WELL (M-5)

(INDICATE LOTS/UNITS NUMBERS)

2.513 A.C.

2.499 AC.

0.386 AC.

R - 12

10800 SF

0.00 AC.

0.00 AC.

0.00 AC.

1492 SF

935 SF

0.00 AC.

2.499 A.C.

0.75 AC.

0.23 A.C.

PUBLIC

PUBLIC

Tax Map No. | Elect. District | Census Tract

PERMIT INFORMATION CHART

Section/Area

0042

Sewer Code

E-6

SINGLE FAMILY

606901

(13% OPEN SPACE)

9.0 (2.499/0.29)

3 BUILDABLE LOTS

0.29 AC. (10%) PER F-05-159

Parcel No.

STORMWATER MANAGEMENT PRACTICE CHART BY LOT

ADDRESS

SITE ANALYSIS DATA CHART

7911 HAZEL WAY, JESSUP MD-20794

OT/PARCEL NUMBER

TOTAL PROJECT AREA (GROSS)

PRESENT ZONING DESIGNATION

TOTAL NO. OF UNITS ALLOWED

TOTAL NO. OF UNITS PROPOSED

AREA OF OPEN SPACE REQUIRED

AREA OF WETLAND AND BUFFER

AREA OF STEEP SLOPES (15% TO 25%)

AREA OF STEEP (25% OR GREATER)

HIGHLY ERODIBLE SOILS (K>0.25)

LIMIT OF DISTURBANCE AREA

PROPOSED WATER SYSTEM

PROPOSED SEWER SYSTEM

Subdivision Name:

AREA OF 100-YR FLOODPLAIN

LOT 10: 0.386 AC. (13% OPEN SPACE)

MIN. LOT SIZE BASED ON 10% OPEN SPACE

AREA OF PLAN SUBMISSION:

LOT 11,12 & 9

AREA OF FOREST

NET TRACT AREA

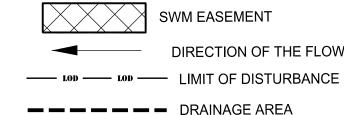
PROPOSED USE

IMPERVIOUS COVER

EXISTING ELECTRICAL MANHOLE EXISTING FIRE HYDRANT **EXISTING WATER VALVE** EXISTING WATER METER **EXISTING GAS METER EXISTING GAS VALVE** EXISTING LIGHT/STREET POLE EXISTING ELECTRIC/UTILITY POLE **EXISTING GUY POLE/WIRE** EXISTING JUNCTION/HAND BOX **EXISTING INLET EXISTING CLEANOUT** EXISTING BOLLARD

FOREST PRESERVATION AREA

MICRO BIO-RETENTION ——— 405 ——— EXISTING GIS CONTOUR



COORDINATE CHART POINT NORTHING EASTING 1 540815.5574 1365842.683 2 | 540647.4473 | 1365535.700

3 | 540734.1293 | 1365488.23

4 | 540902.2393 | 1365795.21

זט	KAINAGE AREA	
	<u>ADDRES</u>	S CHART
	LOT/PARCEL NUMBER	ADDRESS
	11	8001 JONES ROAD, JESSUP MD-20794
	12	7911 HAZEL WAY, JESSUP MD-20794
	9	7915 HAZEL WAY, JESSUP MD-20794

	 	<u> </u>
	LOT/PARCEL NUMBER	ADDRESS
58)1	11	8001 JONES ROAD, JESSUP MD-20794
52	12	7911 HAZEL WAY, JESSUP MD-20794
	9	7915 HAZEL WAY, JESSUP MD-20794
	¬ SHEET IND)EX

COVER SHEET

SITE PLAN I

SITE PLAN II

SITE DETAIL

LOT INFORMATION MINIMUM LOT | MINIMUM LOT WIDT LOT TYPE AT FRONT BRL 10.800 SF 11,12 & 9 EXCLUDING PIPE FAMILY

	HYDROLOGIC SOIL	GROL	<u>JP</u>
MAP UNIT SYMBOL	MAP UNIT NAME	RATING	K-VALUE
CeC	Chillium Loam, 5%-10% slope	С	0.43
CrD	Croom and Evesboro soils, 10%—15% slopes	С	0.32
EbC	Evesboro Loamy Sand, 2%-10% slopes	А	0.02
RuB	Russett and Beltsville soils, 2%-5% slopes	С	0.28
RuC	Russett and Beltsville soils, 5%-10% slopes	С	0.28

STEM

CONTROL PLAN-I

BMP DRAINAGE AREA MAP STORMWATER DETAILS 10. STORMWATER PRACTICE TABLES 11. E&S GENERAL NOTES AND DETAILS 12. EXISTING SEDIMENT AND EROSION

EXISTING CONDITION PLAN

PRE CONSTRUCTION DRAINAGE AREA

POST CONSTRUCTION DRAINAGE AREA

13. EXISTING SEDIMENT AND EROSION CONTROL PLAN-II 14. PROPOSED SEDIMENT AND EROSION CONTROL PLAN-I

15. PROPOSED SEDIMENT AND EROSION CONTROL PLAN-II 16. LANDSCAPE PLAN-1 17. BMP LANDSCAPE PLAN & BORING

18. SIGHT INTERSECTION LINE PLAN

COVER SHEET

NORDAU, SECTION E-2, LOTS 11-12 A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8

OWNER/DEVELOPER

LYN MYRICK CABASSA, JAMES ROBERT HUNT MIGUEL A. CABASSA JR. SHANNON M. HUNT

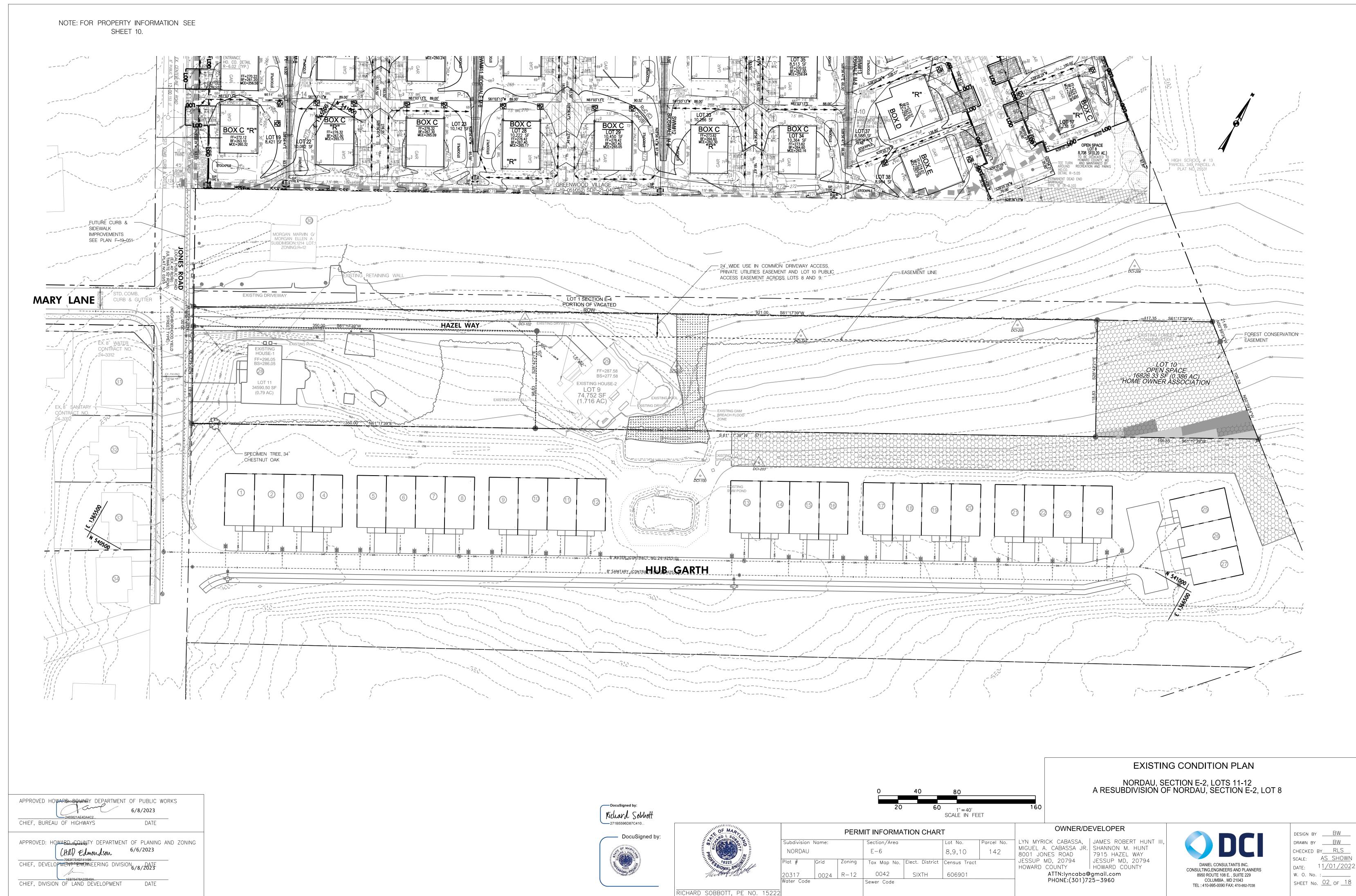
8001 JONES ROAD 7915 HAZEL WAY JESSUP MD, 20794 JESSUP MD, 20794 HOWARD COUNTY HOWARD COUNTY ATTN:lyncaba@gmail.com PHONE:(301)725-3960



DESIGN BY ____BW___ drawn by <u>BW</u> CHECKED BY RLS <u>AS SHOWN</u> SCALE: 1<u>1/01/202</u>2 DATE: W. O. No. :_____ SHEET No. <u>01</u> OF <u>18</u>

NORDAU

RICHARD SOBBOTT, PE NO. 1522



APPROVED HOWARD DEPARTMENT OF PUBLIC WORKS

(HD) Edmondson

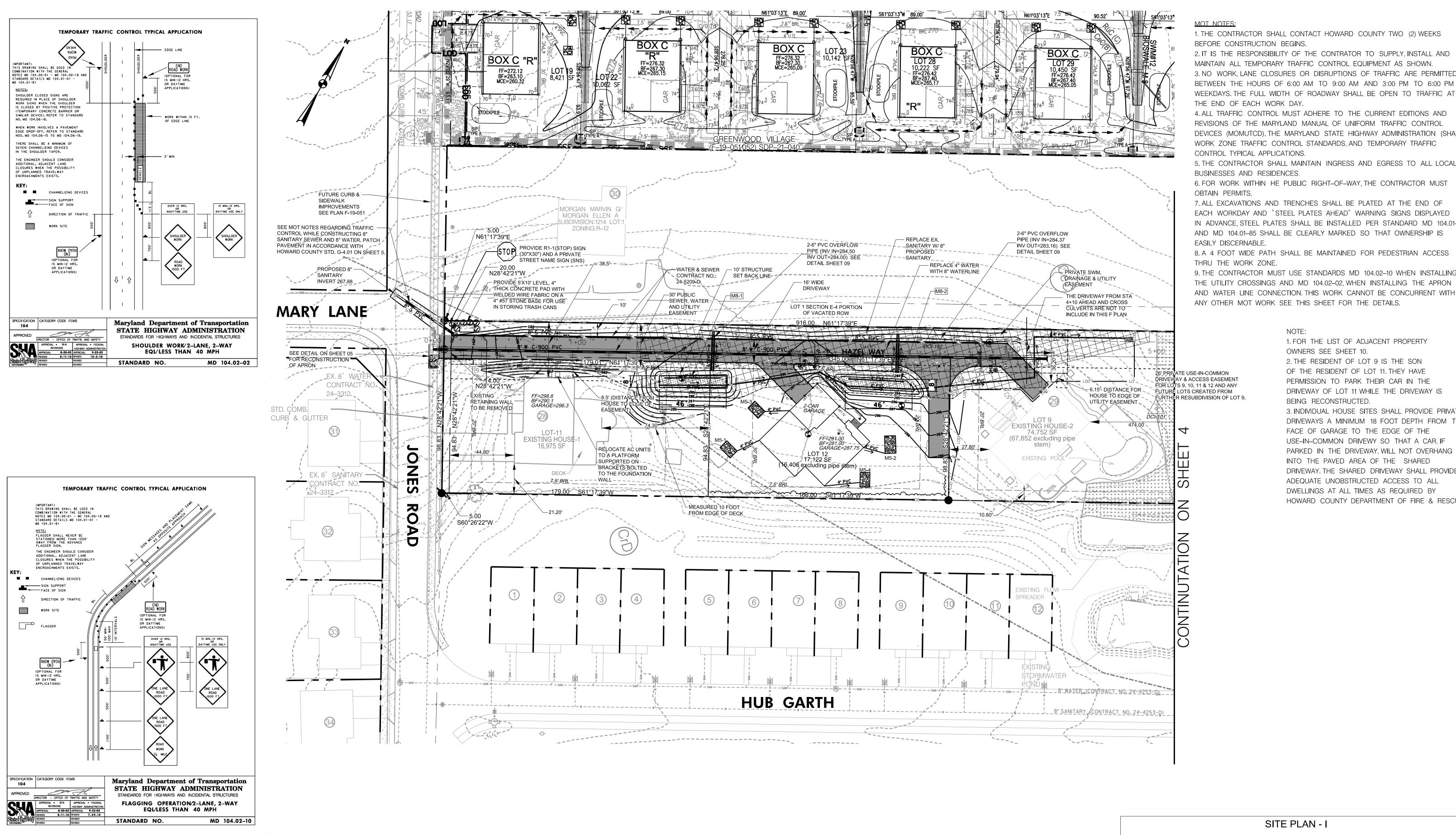
CHIEF, DEVELOPMENTO DIVISION 6/8/2023

CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED: HOWABQUSGQQUINTY DEPARTMENT OF PLANING AND ZONING

6/6/2023

CHIEF, BUREAU OF HIGHWAYS



1. THE CONTRACTOR SHALL CONTACT HOWARD COUNTY TWO (2) WEEKS

BEFORE CONSTRUCTION BEGINS. 2. IT IS THE RESPONSIBILITY OF THE CONTRATOR TO SUPPLY, INSTALL AND MAINTAIN ALL TEMPORARY TRAFFIC CONTROL EQUIPMENT AS SHOWN. 3. NO WORK, LANE CLOSURES OR DISRUPTIONS OF TRAFFIC ARE PERMITTED BETWEEN THE HOURS OF 6:00 AM TO 9:00 AM AND 3:00 PM TO 6:00 PM

THE END OF EACH WORK DAY. 4. ALL TRAFFIC CONTROL MUST ADHERE TO THE CURRENT EDITIONS AND REVISIONS OF THE MARYLAND MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MOMUTCD). THE MARYLAND STATE HIGHWAY ADMINISTRATION (SHA) WORK ZONE TRAFFIC CONTROL STANDARDS, AND TEMPORARY TRAFFIC

5. THE CONTRACTOR SHALL MAINTAIN INGRESS AND EGRESS TO ALL LOCAL BUSINESSES AND RESIDENCES.

6. FOR WORK WITHIN HE PUBLIC RIGHT-OF-WAY, THE CONTRACTOR MUST

7. ALL EXCAVATIONS AND TRENCHES SHALL BE PLATED AT THE END OF EACH WORKDAY AND "STEEL PLATES AHEAD" WARNING SIGNS DISPLAYED IN ADVANCE, STEEL PLATES SHALL BE INSTALLED PER STANDARD MD 104.01-86 AND MD 104.01-85 SHALL BE CLEARLY MARKED SO THAT OWNERSHIP IS

8. A 4 FOOT WIDE PATH SHALL BE MAINTAINED FOR PEDESTRIAN ACCESS THRU THE WORK ZONE.

9. THE CONTRACTOR MUST USE STANDARDS MD 104.02-10 WHEN INSTALLING THE UTILITY CROSSINGS AND MD 104.02-02, WHEN INSTALLING THE APRON AND WATER LINE CONNECTION. THIS WORK CANNOT BE CONCURRENT WITH ANY OTHER MOT WORK SEE THIS SHEET FOR THE DETAILS.

1. FOR THE LIST OF ADJACENT PROPERTY OWNERS SEE SHEET 10. 2. THE RESIDENT OF LOT 9 IS THE SON

OF THE RESIDENT OF LOT 11. THEY HAVE PERMISSION TO PARK THEIR CAR IN THE DRIVEWAY OF LOT 11 WHILE THE DRIVEWAY IS BEING RECONSTRUCTED. 3. INDIVIDUAL HOUSE SITES SHALL PROVIDE PRIVATE

DRIVEWAYS A MINIMUM 18 FOOT DEPTH FROM THE FACE OF GARAGE TO THE EDGE OF THE USE-IN-COMMON DRIVEWY SO THAT A CAR, IF PARKED IN THE DRIVEWAY, WILL NOT OVERHANG INTO THE PAVED AREA OF THE SHARED DRIVEWAY. THE SHARED DRIVEWAY SHALL PROVIDE ADEQUATE UNOBSTRUCTED ACCESS TO ALL DWELLINGS AT ALL TIMES AS REQUIRED BY HOWARD COUNTY DEPARTMENT OF FIRE & RESCUE

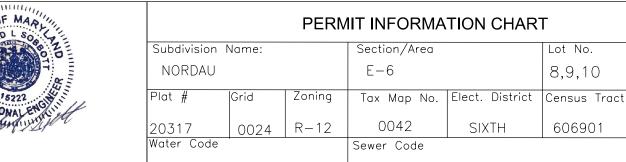
SITE PLAN - I

NORDAU, SECTION E-2, LOTS 11-12 A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8

271B5596D87C410... DocuSigned by

Richard Sobbott





1" = 30'

SCALE IN FEET

8,9,10

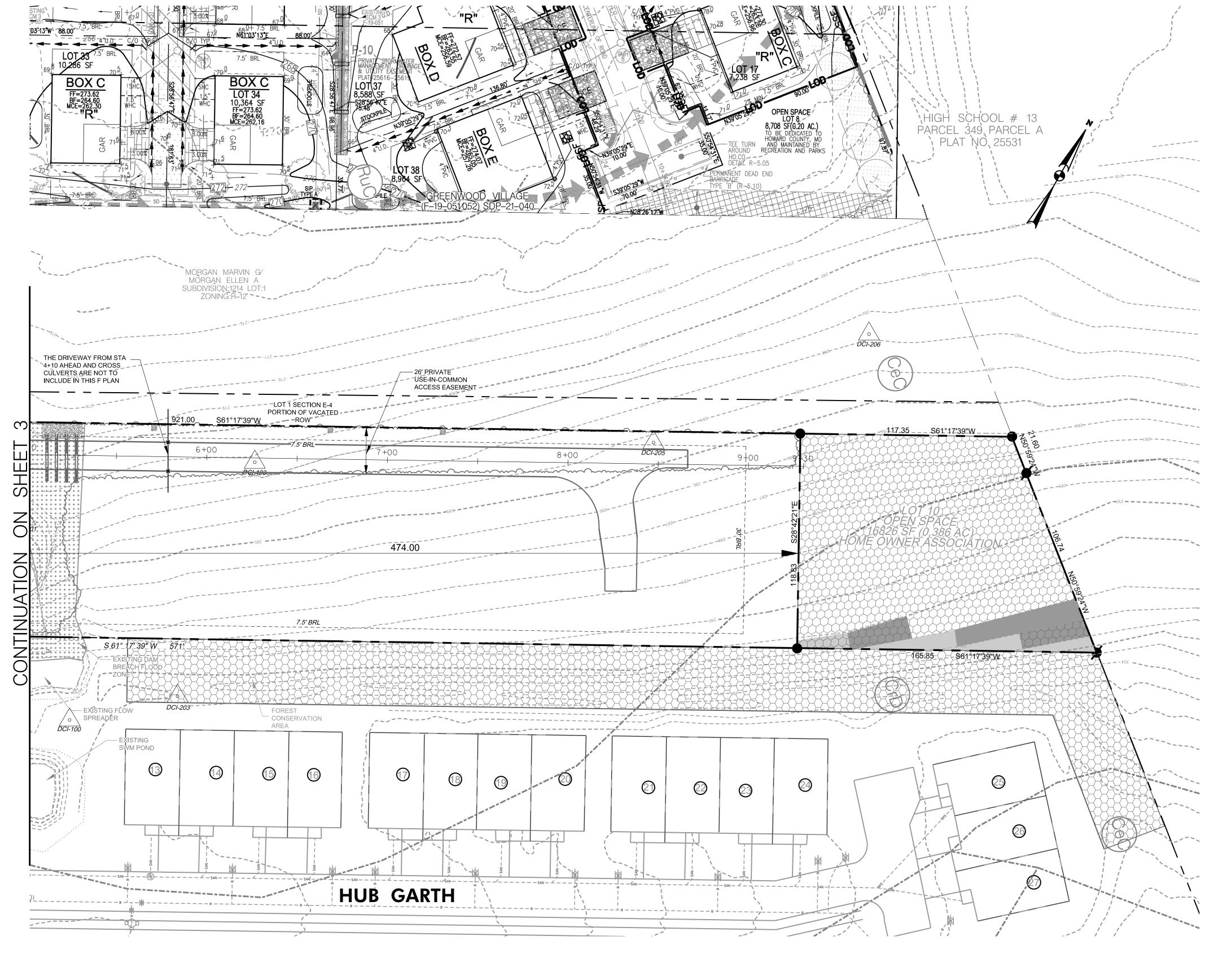
606901

OWNER/DEVELOPER LYN MYRICK CABASSA. | JAMES ROBERT HUNT MIGUEL A. CABASSA JR. SHANNON M. HUNT 8001 JONES ROAD 7915 HAZEL WAY JESSUP MD, 20794 JESSUP MD, 20794 HOWARD COUNTY HOWARD COUNTY ATTN:lyncaba@gmail.com

PHONE:(301)725-3960



DESIGN BY ____BW drawn by ____BW CHECKED BY RLS SCALE: AS SHOWN DATE: 11/01/2022 W. O. No. :_____ SHEET No. <u>03</u> OF <u>18</u>



DEVELOPMENT SHOWN IN GREY AFTER STA 4+10 IS THE FUTURE EXTENSION WILL BE DEVELOPED IN PHASE 2.

APPROVED HOWARD DEPARTMENT OF PUBLIC WORKS CHIEF, BUREAU OF HIGHWAYS

APPROVED: HOWABOUS GOLDING TY DEPARTMENT OF PLANING AND ZONING CHAD Edmondson

CHIEF, DEVELOPMENTO DIVISION 6/8/2023

CHIEF, DIVISION OF LAND DEVELOPMENT

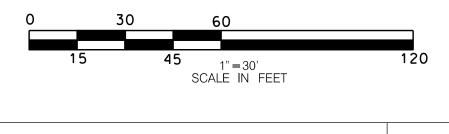
Richard Sobbott DocuSigned by:

RICHARD SOBBOTT, PE NO. 15222

Subdivision Name:

Sewer Code

NORDAU



SITE PLAN - II NORDAU, SECTION E-2, LOTS 11-12 A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8

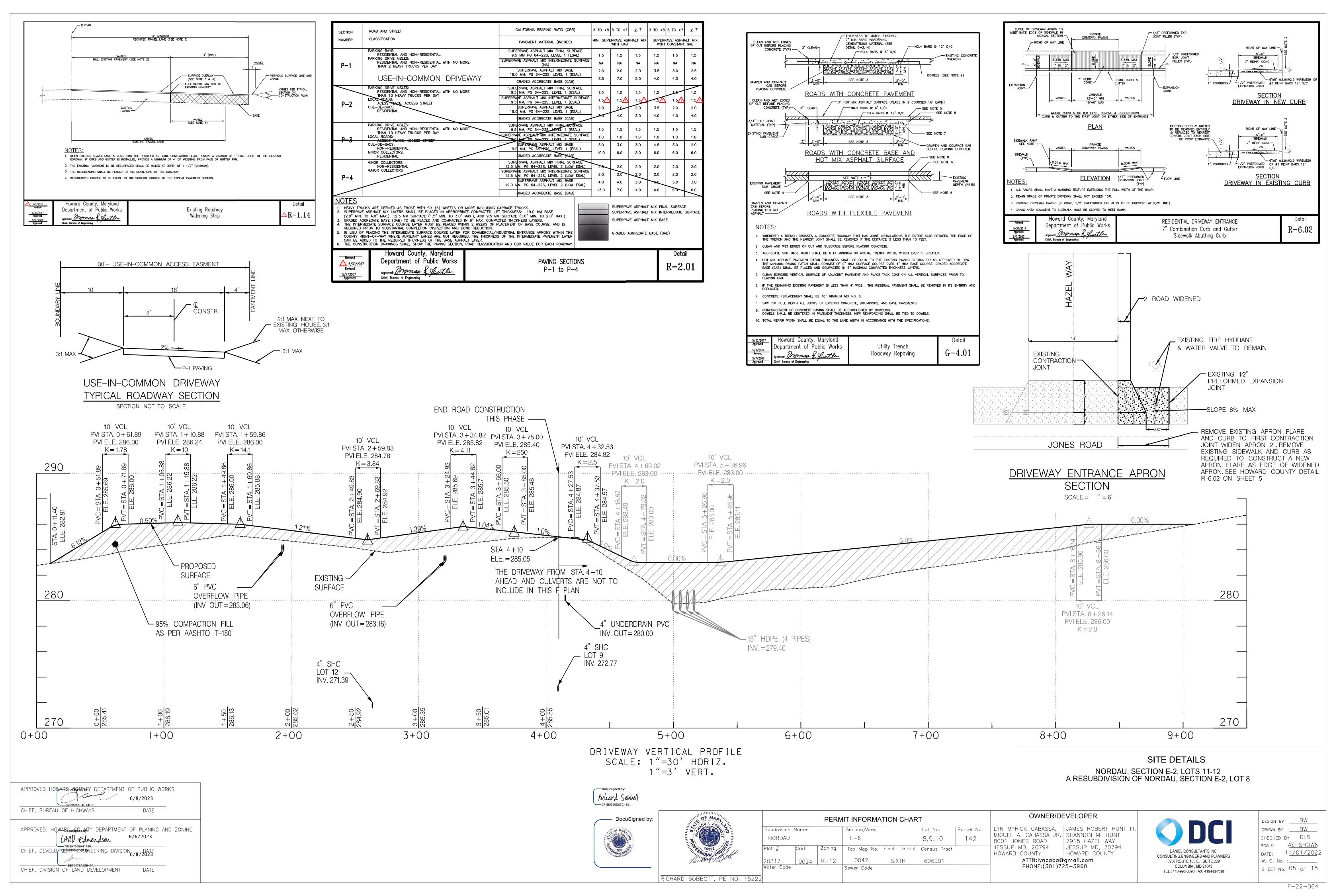
OWNER/DEVELOPER PERMIT INFORMATION CHART

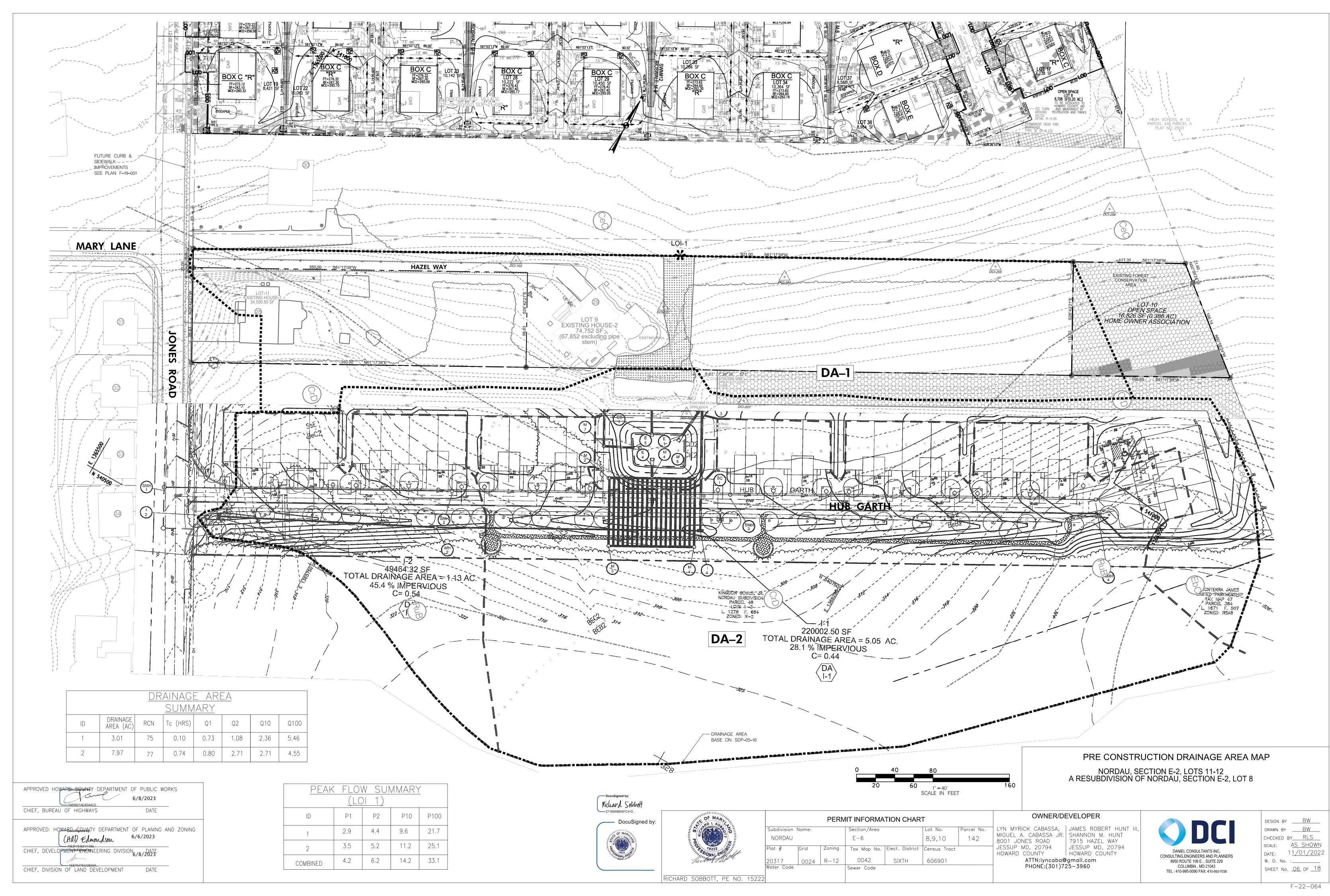
LYN MYRICK CABASSA, | JAMES ROBERT HUNT 7915 HAZEL WAY JESSUP MD, 20794

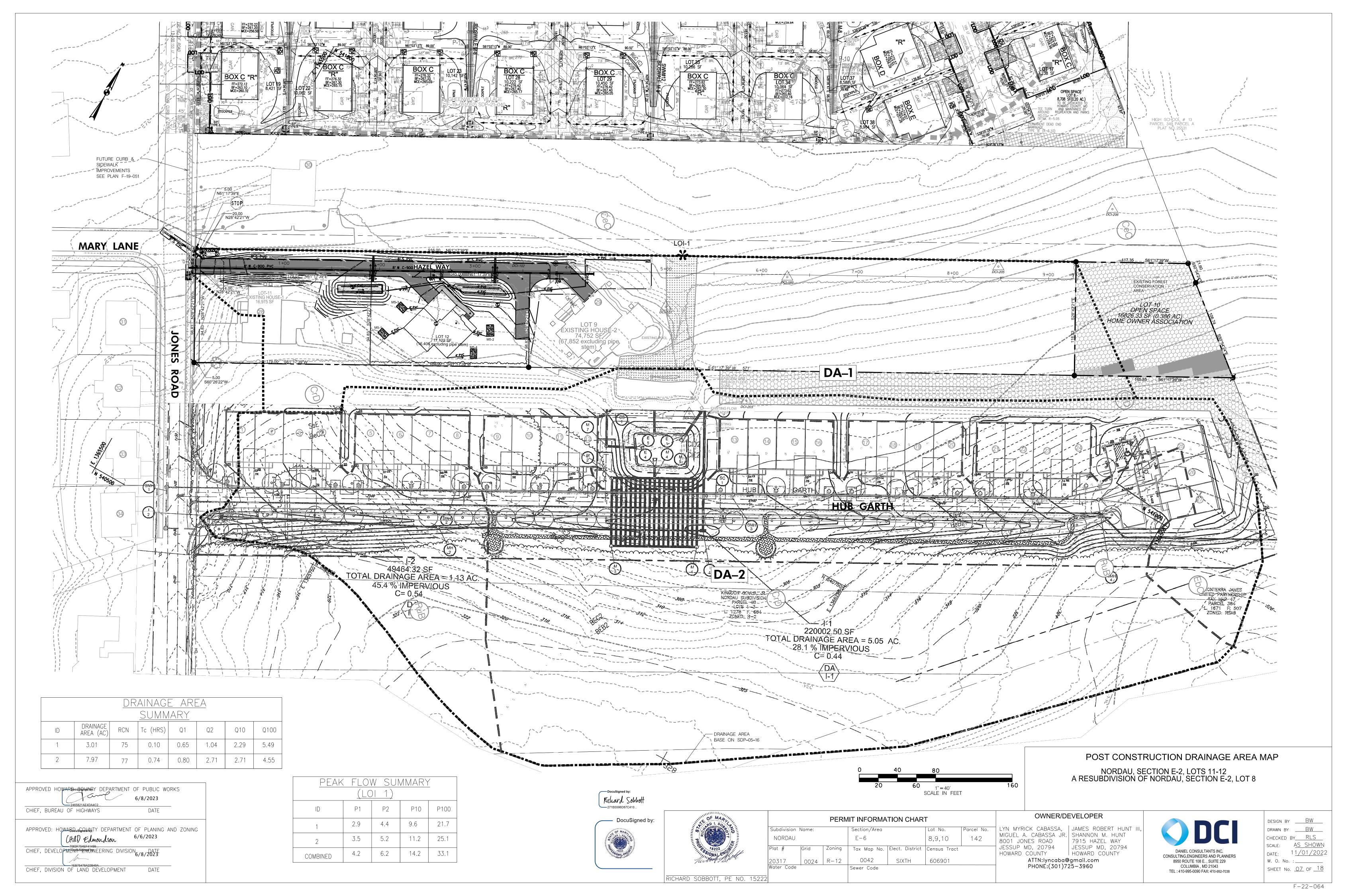
CONSULTING, ENGINEERS AND PLANNERS 8950 ROUTE 108 E. , SUITE 229 COLUMBIA , MD 21043

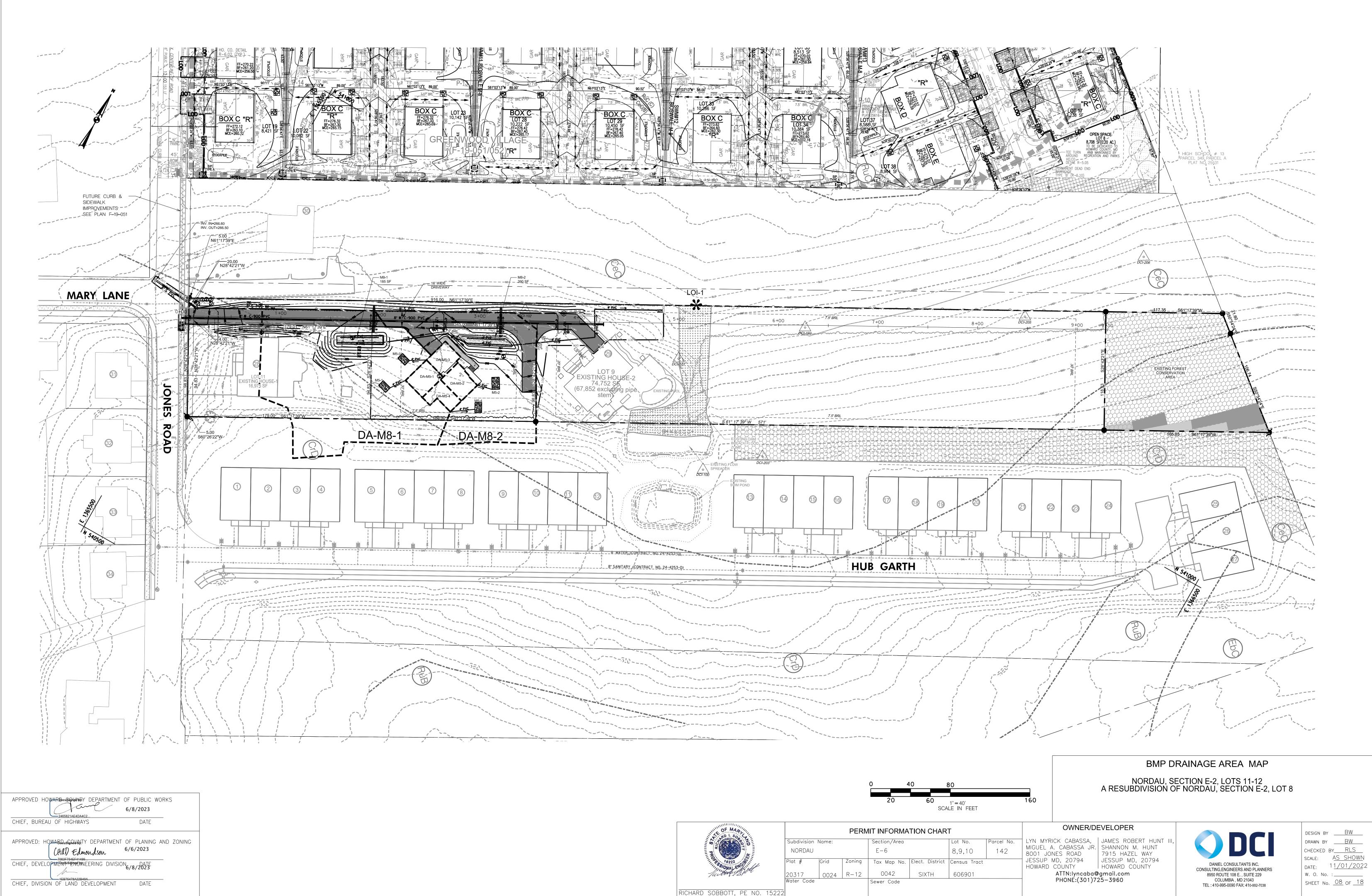
TEL: 410-995-0090 FAX: 410-992-7038

DESIGN BY ____BW DRAWN BY ____BW___ CHECKED BY RLS SCALE: AS SHOWN DATE: 1<u>1/01/202</u>2 W. O. No. :_____ SHEET No. <u>04</u> OF <u>18</u>









Material

Plantings

Planting soil

[2' to 4' deep]

Organic content

Curtain drain

Geotextile

required)

Pea gravel diaphragm

Gravel (underdrains and infiltration berms)

Poured in place concrete (if

Underdrain piping

Mulch

Appendix B.4. Construction Specifications for Environmental Site Design Practices

loamy sand (60 - 65%) &

compost (35 - 40%)

Min. 10% by dry weight

pea gravel: ASTM-D-448

ornamental stone: washed

F 758, Type PS 28 or AASHTO

psi @ 28 days, normal weight,

air-entrained; reinforcing to

meet ASTM-615-60

MSHA Mix No. 3; $f'_{c} = 3500$ n/a

AASHTO-M-6 or ASTM-C-33 | 0.02" to 0.04"

sandy loam (30%), coarse sand (30%) &

compost (40%)

(ASTM D 2974)

AASHTO M-43

shredded hardwood

Specification

Table B.4.1 Materials Specifications for Micro-Bioretention, Rain Gardens & Landscape Infiltration-

NO. 8 OR NO. 9

(1/8" TO 3/8")

n/a

stone: 2" to $\overline{5}$ "

NO. 57 OR NO. 6

4" to 6" rigid schedule 40

AGGREGATE (3/8" to 3/4")

PVC or SDR35

see Appendix A, Table A.4 n/a

plantings are site-specific

PE Type 1 nonwoven

galvanized hardware cloth

USDA soil types loamy sand or sandy loam; clay content < 5%

Slotted or perforated pipe; 3/8" perf. @ 6" on center, 4 holes per

underneath pipes. Perforated pipe shall be wrapped with ¼-inch

28 day strength and slump test; all concrete design (cast-in-place

standards requires design drawings sealed and approved by a

[H-10 or H-20]; allowable horizontal loading (based on soil

professional structural engineer licensed in the State of Maryland

- design to include meeting ACI Code 350.R/89; vertical loading

Sand substitutions such as Diabase and Graystone (AASHTO)

#10 are not acceptable. No calcium carbonated or dolomitic sand

substitutions are acceptable. No "rock dust" can be used for sand.

row; minimum of 3" of gravel over pipes; not necessary

or pre-cast) not using previously approved State or local

on-site testing of poured-in-place concrete required:

pressures); and analysis of potential cracking

aged 6 months, minimum; no pine or wood chips

OPERATION AND MAINTENANCE SCHEDULE FOR BIO SWALE (M-8)

1. 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 PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESING MANUAL, VOLUME II,

TABLE A.4.1 AND 2. 2. 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

WIRES. 3. 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.

DISEASED TREES AND SHRUBS, AND REPLACE ALL DEFICIENT STAKES AND

4. THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM.

BIOSWALE FACILITY—DESIGN EVALUATION CHART TOP OF 4" BRIDGING TOP MULCH (A) LENGTH (FT.) WIDTH (FT.) LAYER RESERVOIR (D DRIVEWAY FACILITY # | WSEL (LOW END HIGH END LOW END |HIGH END|LOW END HIGH END LOW END HIGH END LOW END HIGH END 283.75 284.00 281.17 284.50 281.75 281.42 281.50 280.59 280.84 285.50 46 284.37 283.37 283.62 283.12 283.37 281.12 281.37 280.79 280.46 285.50 46 281.04 280.21

PLANTING

4" BRIDGING LAYER -

7" STONE RESERVOIR-

WASHED #57 AGGREGATE FOR -

PROVIDE GEOTEXTILE

FABRIC AT SIDES OF FACILITY ONLY

(1/8"-3/8" STONE)

(#57 STONE)

REV. (6")

SOIL (VARIES)

UTILITY AND UTILITY -

M8-1, W=8'

-FREEBOARD

BIO SWALE (M-8) DETAIL

NOT TO SCALE

OVERFLOW PIPE

-4" PERF. UNDERDRAIN

► OVERFLOW SCH 40

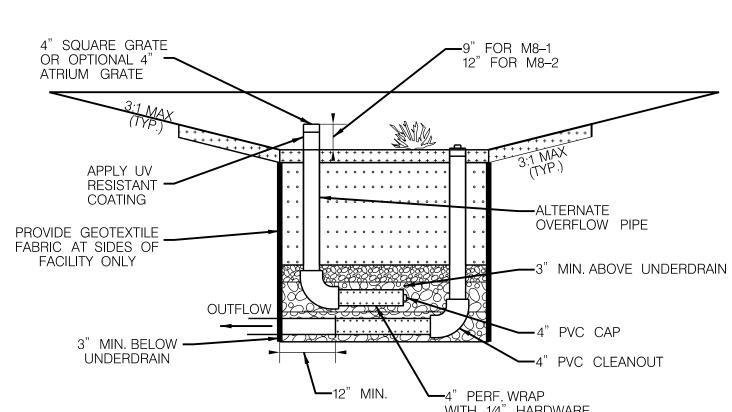
SLOPE (MIN.) (H)

PVC PIPE WITH 0.5%

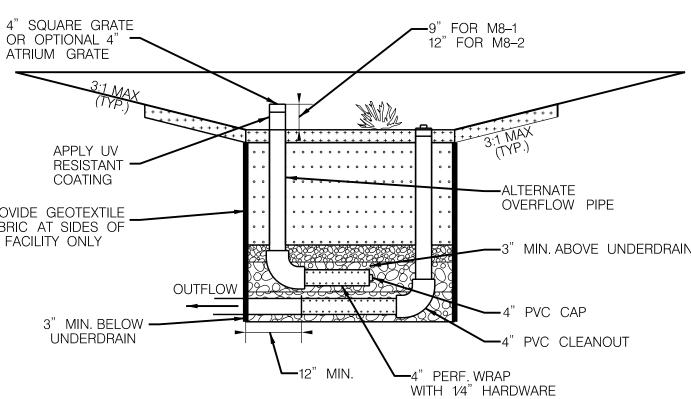
M8-2, W=8

TRENCH EXCLUSION

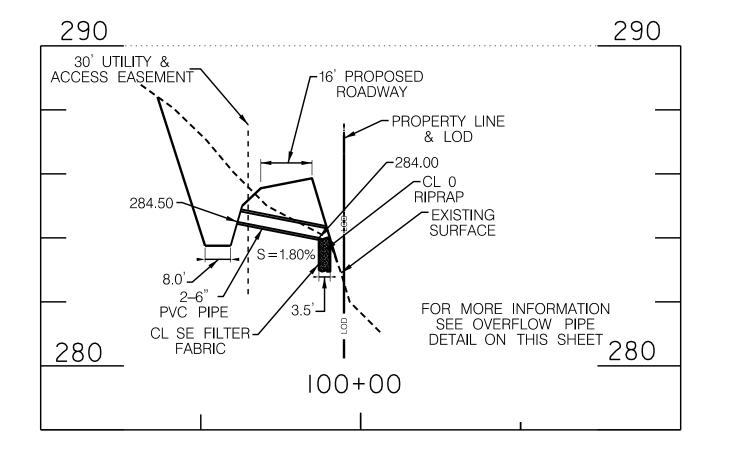
ZONE



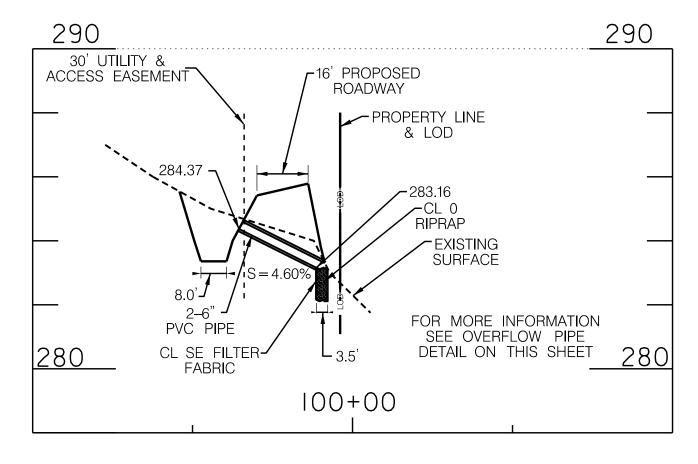
1. MINIMUM 5' DISTANCE NEED TO BE MAINTAINED BETWEEN CLEANOUT AND ALTERNATE OVERFLOW PIPE. 2. UNDERDRAIN AND OVERDRAIN ARE SHOWN AT DIFFERENT ELEVATION FOR CLARITY, BUT THEY ARE TO BE CONSTRUCTED AT THE SAME ELEVATIONS.



BIO SWALE (M-8) SECTION NOT TO SCALE

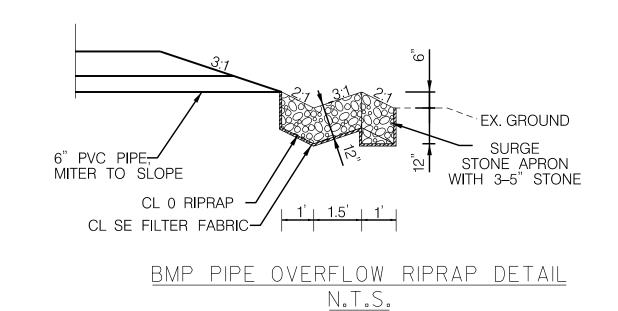


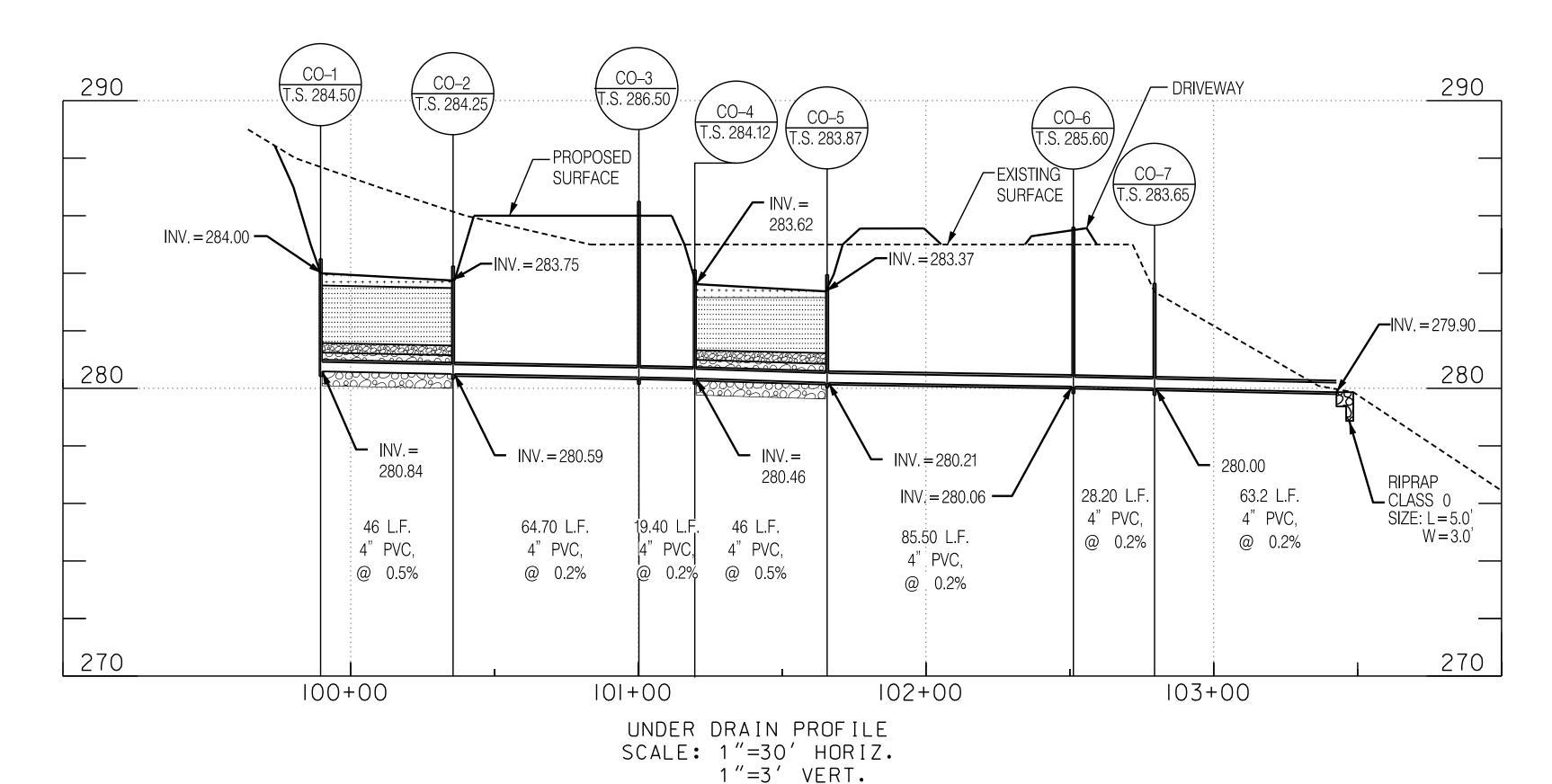
BIOSWALE (M8-1) SCALE: 1"=50' HORIZ. 1"=5' VERT.



BIOSWALE (M8-2) SCALE: 1"=50' HORIZ. 1"=5' VERT.

APPROVED HOWARDOWS DEPARTMENT OF PUBLIC WORKS	
6/8/2023	
CHIEF, BUREAU OF HIGHWAYS DATE	
APPROVED: HOWABOUS FALLINITY DEPARTMENT OF PLANING AND ZONING (HD) Edmondson 7063E754EF41499	
CHIEF, DEVELOPMENT OF THE CHIEF	
CHIEF, DIVISION OF LAND DEVELOPMENT DATE	









OF MAR			PERM	IJΤ
6 3	Subdivision I	Name:		S
The state of the s	NORDAU			
15222 SIONAL ENGLISH	Plat #	Grid	Zoning	T
The tory Jeffer	20317	0024	R-12	

RICHARD SOBBOTT, PE NO. 1522

PERMIT INFORMATION CHART							OWNER/DE	EVELOPER
Subdivision N	Name:		Section/Area		Lot No.	Parcel No.	LYN MYRICK CABASSA,	JAMES ROBERT HUNT I
NORDAU			E-6		8,9,10	142	MIGUEL A. CABASSA JR. 8001 JONES ROAD	7915 HAZEL WAY
Plat #	Grid	Zoning	Tax Map No.	Elect. District	Census Tract		JESSUP MD, 20794 HOWARD COUNTY	JESSUP MD, 20794 HOWARD COUNTY
20317	0024	R-12	0042	SIXTH	606901		ATTN:lyncaba@	gmail.com
Vater Code			Sewer Code				PHONE:(301)72	25-3960



STORMWATER DETAILS

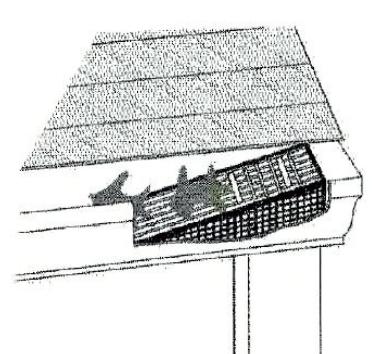
NORDAU, SECTION E-2, LOTS 11-12 A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8

DESIGN BY ____BW drawn by <u>BW</u> CHECKED BY RLS SCALE: AS SHOWN DATE: 11/01/2022 W. O. No. :_____ SHEET No. <u>09</u> OF <u>18</u>

NO:	PROPERTY DESCRIPTION	NO:	PROPERTY DESCRIPTION	NO:	PROPERTY DESCRIPTION
			BELGARD MARY C TR BEARD JENNIFER E TR		PALLARES MARIO ENRIQUE RAMIREZ
	BAKER CYNTHIA C/O WILLIAM KNOTT		ETAL		RAMIREZ MARIA ELENA
1	SUBDIVISION: 1209 LOT: UN1	12	SUBDIVISION: 1209 LOT: UN12	23	SUBDIVISION: 1209 LOT: UN23
	PLAT NO: 20989		PLAT NO: 20989		PLAT NO: 21007
	ZONING:R-12		ZONING:R-12		ZONING:R-12
	AHLERS CLARKE F		HARVEY BRIAN K HARVEY DEBI		BROWNE CAMILLE J BROWNE CARMINE
	SUBDIVISION: 1209 LOT: UN2		SUBDIVISION: 1209 LOT: UN13		SUBDIVISION: 1209 LOT: UN24
2		13		24	
	PLAT NO: 20989		PLAT NO: 21007		PLAT NO: 21007
	ZONING:R-12		ZONING:R-12		ZONING:R-12
	BULLINGER MARLIENE A CARTER ROGER				
	LETAL		WITHROW MITZI		SK KING GEORGE LLC C/O WILLIAM KNO
3	SUBDIVISION: 1209 LOT: UN3	14	SUBDIVISION: 1209 LOT: UN14	25	SUBDIVISION: 1209 LOT: GCE
	PLAT NO: 20989		PLAT NO: 21007		PLAT NO: 21007
	ZONING:R-12		ZONING:R-12		ZONING:R-12
					CAVANAGH KATHLEEN M CAVANAGH BRI
	ADAEVOH ERNEST K ADAEVOH PATRICIA M		WADE OLLIE		J
4	SUBDIVISION: 1209 LOT: UN4	15	SUBDIVISION: 1209 LOT: UN15	26	SUBDIVISION: 1209 LOT: UN25
4		15		20	
	PLAT NO: 20989		PLAT NO: 21007		PLAT NO: 21007
	ZONING:R-12		ZONING:R-12		ZONING:R-12
	COBERT G WILLIAM COBERT KATHARINE J		PIPGRASS CAMDEN WEBSTER PAMELA SUE		LEWIS ROSA M
5	SUBDIVISION: 1209 LOT: UN5	16	SUBDIVISION: 1209 LOT: UN16	27	SUBDIVISION: 1209 LOT: UN26
5	PLAT NO: 20989	10	PLAT NO: 21007	27	PLAT NO: 21007
	ZONING:R-12		ZONING:R-12		ZONING:R-12
					CABASSA MIGUEL A JR MYRICK CABASS
	HIRTH JAMES HIRTH MARIA		D'ANTUONO LOUIS P		LYN T/E
6	SUBDIVISION: 1209 LOT: UN6	17	SUBDIVISION: 1209 LOT: UN17	28	SUBDIVISION: 1214 LOT: 8
O		17		20	
	PLAT NO: 20989		PLAT NO: 21007		PLAT NO: 20317
	ZONING:R-12		ZONING:R-12		ZONING:R-12
					HUNT JAMES ROBERT III HUNT SHANNON
	GUSDORF BETTY WHYM TRUSTEE		LEE CHUN S LEE TAE B		ETAL J/T
7	SUBDIVISION: 1209 LOT: UN7	18	SUBDIVISION: 1209 LOT: UN18	29	SUBDIVISION: 1214 LOT: 9
	PLAT NO: 20989		PLAT NO: 21007		PLAT NO: 20317
	ZONING:R-12		ZONING:R-12		ZONING:R-12
			FITZGERALD RONALD FITZGERALD		
	BEARD JENNIFER E BEARD STEPHEN F		MARGARET		
8	SUBDIVISION: 1209 LOT: UN8	19	SUBDIVISION: 1209 LOT: UN19	30	MORGAN MARVIN G MORGAN ELLEN A
0		19		30	
	PLAT NO: 20989		PLAT NO: 21007		SUBDIVISION: 1214 LOT: 1
	ZONING:R-12		ZONING:R-12		ZONING:R-12
					LEATHERMAN IAN ANDREW
	MCKINZEY JOANN	1	SURIN MARIE ST		LEATHERMAN LAURA EMILY
9	SUBDIVISION: 1209 LOT: UN9	20	SUBDIVISION: 1209 LOT: UN20	31	SUBDIVISION: 1002 LOT: 2
	PLAT NO: 20989		PLAT NO: 21007		PLAT NO: 20277
	ZONING:R-12	1	ZONING:R-12		ZONING:R-12
	2511115111 12	1	251111011112		DAGOSTINO KEVIN
	DIDDICK BELLIALI MAAT		CURTIN IAMES IOUNI CURTINI DARBADA ANINI		
10	RIDDICK BEULAH MAE	24	CURTIN JAMES JOHN CURTIN BARBARA ANN	22	DAGOSTINO KAITLIN
10	SUBDIVISION: 1209 LOT: UN10	21	SUBDIVISION: 1209 LOT: UN21	32	SUBDIVISION: 1002 LOT: 3
	PLAT NO: 20989		PLAT NO: 21007		PLAT NO: 20277
	ZONING:R-12		ZONING:R-12		ZONING:R-12
					RAJPARA NILESH D
	BRUNNER CHRISTINE SANDRA		SCHAEFER ARLENE B		RAJPARA DEEPALI N
11	SUBDIVISION: 1209 LOT: UN11	22	SUBDIVISION: 1209 LOT: UN22	33	SUBDIVISION: 1002 LOT: 4
-	PLAT NO: 20989		PLAT NO: 21007		PLAT NO: 20277
	ZONING:R-12	1	ZONING:R-12		ZONING:R-12
	ZOIVING.N-1Z	+	ZOINING.N-1Z		MYERS JUSTIN
					MYERS MARY
				34	SUBDIVISION: 1002 LOT: 5
		1		1	PLAT NO: 20277
			l l	l .	

OPERATION AND MAINTENANCE SCHEDULE FOR DRY WELLS (M-5) 1. DRYWELLS SHALL BE INSPECTED AND CLEANED ANNUALLY. THIS INCLUDE PIPES, GUTTERS, DOWNSPOUTS AND ALL FILTERS. 2. PONDING, STANDING WATER OR ALGAE GROWTH ON THE TOP OF A DRYWELL MAY INDICATE FAILURE DUE TO SEDIMENTATION IN THE GRAVEL MEDIA.

3. IF WATER PONDS FOR MORE THAN 48 HOURS AFTER A MAJOR STORM OR MORE THAN 6" OF SEDIMENT HAS ACCUMULATED, THE GRAVEL MEDIA SHOULD BE EXCAVATED AND REPLACED. 4. PRIVATELY OWNED PRACTICES SHALL HAVE A MAINTENANCE PLAN AND SHALL BE PROTECTED BT EASMENT, DEED RESTRICTION, ORDINANCE OR OTHER LEGAL MEASURES PREVENTING ITS NEGLECT, ADVERSE ALTERATION AND REMOVAL.

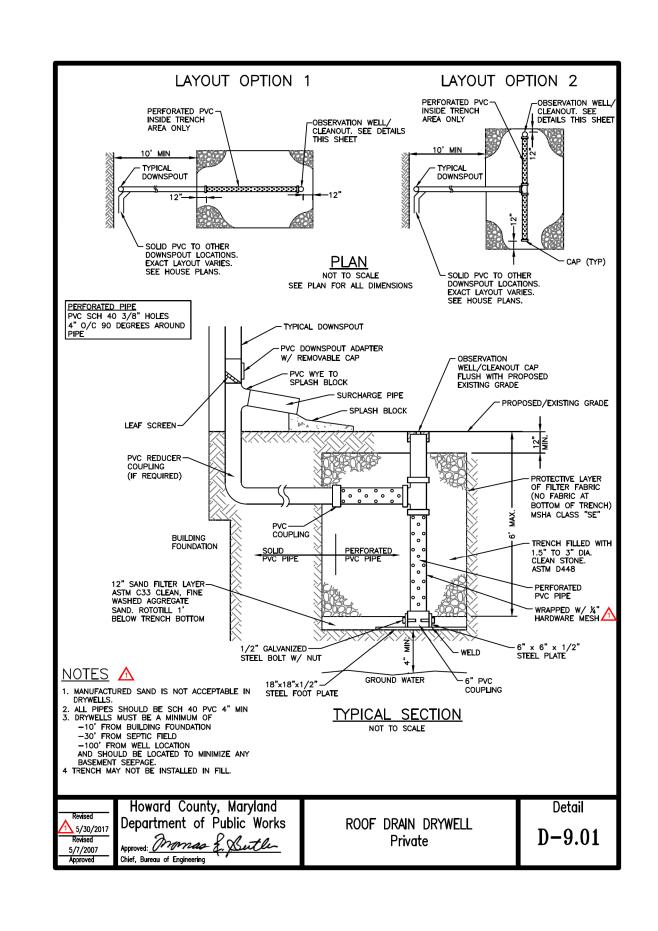


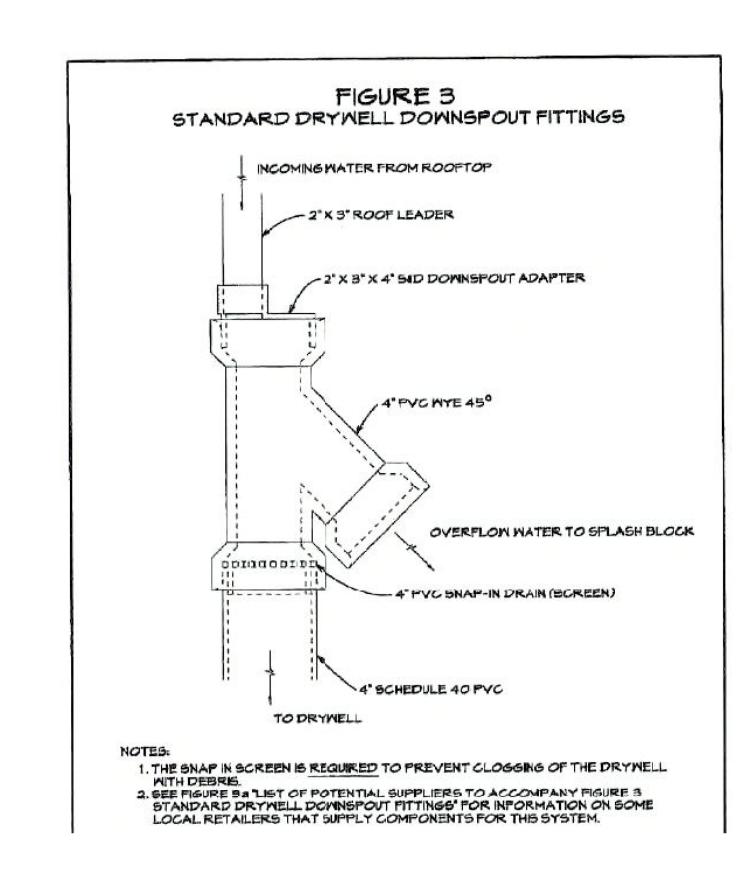
Gutter Drain Filter (Typical)

PROVIDE GUTTER DRAIN FILTER AT DOWNSPOUT LOCATIONS.

APPROVED	HOWARDocuSigned No VI:Y	DEPARTMENT	OF PUBLIC W	ORKS
	2465821AE4DA4C2		6/8/2023	
CHIEF, BUF	REAU OF HIGHWAYS		DATE	
	HOWABOUSGOODSTY CHAD Edmo	ndson	6/6/2023	AND ZONING
CHIEF, DEV	ELO MEPOGUSIONO DINE	ERING DIVISIOI	6/8/2023	
CHIEF, DIVI	SION OF LAND DE'	VELOPMENT	DATE	_

DRYWELL DIMENSIONS							
BMP NO.	DESIGN						
	LENGTH	DEPTH					
M5-1	10	6.6	5				
M5-2	10	6.9	5				
M5-3	10	7.1	5				
M5-4	10	6.2	5				





			NOF	RDAU SE	CTON E-2	2. LOTS 11	-12 FINAL	ESDV COM	IPUTATIONS				
	SITE AREA:	0.75	AC	32618	SF								
	IMPERVIOUS AREA	0.23		9836									
	TARGET Pe:	1.6	IN										
	SITE IMPERVIOUS:		PERCENT										
	SITE Rv:	0.32											
	SITE ESDv:	1397.8											
	S	0.13											
	SITE REV	113.6											
Rv=0.05+0.00	9*(% IMP)												
V min=1.0" ra	ainfall	(1.0*Rv*A)/12											
V max=1 yr ra	ainfall=2.6"	(2.6*Rv*A)/12											
Rev=ESDV*S													
DRAINAGE	DAAD ID	0/ 18 49 59 410 116	D	DA (-f)	DA ()	MIN. VOL.	MAX. VOL.	Pe	ESDv VOL.	REV VOL.	IMPREV.	IMPERV.	GREEN
AREA	BMP ID	% IMPERVIOUS	Rv	DA (sf)	DA (ac)	(cf)	(cf)	PROVIDED	PROVIDED (cf)	PROVIDED (cf)	(sf)	(ac)	AREA (ac)
LOT 12	M5-1	100	0.95	644	0.015	51.0	132.6	2.6	132.6	132.6	644	0.015	0.000
LOT 12	M5-2	100	0.95	671	0.015	53.1	138.1	2.6	138.1	138.1	671	0.015	0.000
LOT 12	M5-3	100	0.95	689	0.016	54.5	141.8	2.6	141.8	141.8	689	0.016	0.000
LOT 12	M5-4	100	0.95	601	0.014	47.6	123.7	2.6	123.7	123.7	601	0.014	0.000
LOT 11, 12, 9	M8-1	19	0.22	19689	0.452	358.0	930.9	1.1	379.9	-	3680	0.084	0.368
LOT 12, 9	M8-2	31	0.33	12,354	0.284	342.2	889.7	1.7	570.1	-	3,876	0.089	0.195
TOTAL				34648	0.795	906.4	2356.7		1486.2	536	10161	0.233	0.562

NO RECHARGE VOLUME (REV) PROVIDED IN BIOSWALES (M8).

Richard Sobbott



OF MARY

RICHARD SOBBOTT, PE NO. 15222

OF MARY			PERM
3 3	Subdivision I	Name:	
	NORDAU		
500 MALENG 1	Plat #	Grid	Zoning
Confinition of the	20317	0024	R-12
	Water Code		

PERMIT INFORMATION CHART							
Subdivision	Name:		Section/Area		Lot No.	Parcel No.	
NORDAU E-6			8,9,10	142			
Plat #	Grid	Zoning	Tax Map No.	Elect. District	Census Tract	1	
20317	0024	R-12	0042	SIXTH	606901		
Water Code	•		Sewer Code				

OWNER/DEVELOPER

ATTN:lyncaba@gmail.com

PHONÉ:(301)725-3960

YN MYRICK CABASSA, | JAMES ROBERT HUNT II MIGUEL A. CABASSA JR. SHANNON M. HUNT 3001 JONES ROAD 7915 HAZEL WAY ESSUP MD, 20794 JESSUP MD, 20794 HOWARD COUNTY HOWARD COUNTY CONSULTING, ENGINEERS AND PLANNERS 8950 ROUTE 108 E., SUITE 229 COLUMBIA, MD 21043

STORMWATER PRACTICE TABLE

NORDAU, SECTION E-2, LOTS 11-12 A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8

DESIGN BY ____BW___ DRAWN BY ____BW___ CHECKED BY RLS scale: <u>AS SHOWN</u> DATE: 1<u>1/01/202</u>2 W. O. No. :_____ SHEET No. 10 OF 18 TEL: 410-995-0090 FAX: 410-992-7038

B-4 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

G VEGETATION AS COVER TO PROTECT EXPOSED SOIL FROM EROSION. PURPOSE TO PROMOTE THE ESTABLISHMENT OF VEGETATION ON EXPOSED SOIL.

CONDITIONS WHERE PRACTICE APPLIES
ON ALL DISTURBED AREAS NOT STABILIZED BY OTHER METHODS. THIS SPECIFICATION IS DIVIDED INTO SECTIONS ON INCREMENTAL
STABILIZATION; SOIL PREPARATION, SOIL AMENDMENTS AND TOPSOILING; SEEDING AND MULCHING; TEMPORARY STABILIZATION; AND PERMANENT

STABILIZATION. EFFECTS ON WATER QUALITY AND QUANTITY EFFECTS ON WATER QUALITY AND QUANTITY
STABILIZATION PRACTICES ARE USED TO PROMOTE THE ESTABLISHMENT OF VEGETATION ON EXPOSED SOIL. WHEN SOIL IS STABILIZED WITH
VEGETATION, THE SOIL IS LESS LIKELY TO ERODE AND MORE LIKELY TO ALLOW INFILTRATION OF RAINFALL, 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,
MELITATION OF MADDITION TO AND REPORT OF THE WATER BUDGET, ESPECIALLY ON VOLUMES AND RATES OF RUNOFF,
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VEGETATION WILL HELP REDUCE THE MOVEMENT OF SEDIMENT, NUTRIENTS, AND OTHER CHEMICALS CARRIED BY RUNOFF TO RECEIVING WATERS. PLANTS WILL ALSO HELP PROTECT GROUNDWATER SUPPLIES BY ASSIMILATING THOSE SUBSTANCES PRESENT WITHIN THE ROOT ZONE.

SEDIMENT CONTROL PRACTICES MUST REMAIN IN PLACE DURING GRADING, SEEDBED PREPARATION, SEEDING, MULCHING, AND VEGETATIVE ADFQUATE VEGETATIVE ESTABLISHMENT

NSPECT SEEDED AREAS FOR VEGETATIVE ESTABLISHMENT AND MAKE NECESSARY REPAIRS, REPLACEMENTS, AND RESEEDINGS WITHIN THE PLANTING SEASON.

1. ADEQUATE VEGETATIVE STABILIZATION REQUIRES 95 PERCENT GROUNDCOVER.

2. IF AN AREA HAS LESS THAN 40 PERCENT GROUNDCOVER, RE STABILIZE FOLLOWING THE ORIGINAL RECOMMENDATIONS FOR LIME, FERTILIZER, SEEDBED PREPARATION, AND SEEDING.
3. IF AN AREA HAS BETWEEN 40 AND 94 PERCENT GROUNDCOVER, OVER-SEED AND FERTILIZE USING HALF OF THE RATES ORIGINALLY 4. MAINTENANCE FERTILIZER RATES FOR PERMANENT SEEDING ARE SHOWN IN TABLE B.6.

B-4-1 STANDARDS AND SPECIFICATIONS FOR INCREMENTAL STABILIZATION <u>DEFINITION</u>
ESTABLISHMENT OF VEGETATIVE COVER ON CUT AND FILL SLOPES.

 $\frac{\text{PURPOSE}}{\text{TO PROVIDE TIMELY VEGETATIVE COVER ON CUT AND FILL SLOPES AS WORK PROGRESSES.}}$ CONDITIONS WHERE PRACTICE APPLIES

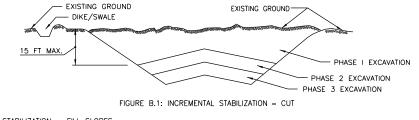
ANY CUT OR FILL SLOPE GREATER THAN 15 FEET IN HEIGHT. THIS PRACTICE ALSO APPLIES TO STOCKPILES.

A. INCREMENTAL STABILIZATION — CUT SLOPES

1. EXCAVATE AND STABILIZE CUT SLOPES IN INCREMENTS NOT TO EXCEED 15 FEET IN HEIGHT. PREPARE SEEDBED AND APPLY SEED AND MULCH ON ALL CUT SLOPES AS THE WORK PROGRESSES. 2. CONSTRUCTION SEQUENCE EXAMPLE (REFER TO FIGURE B.1):
A. CONSTRUCT AND STABILIZE ALL TEMPORARY SWALES OR DIKES THAT WILL BE USED TO CONVEY RUNOFF AROUND

B. PERFORM PHASE 1 EXCAVATION, PREPARE SEEDBED, AND STABILIZE.
C. PERFORM PHASE 2 EXCAVATION, PREPARE SEEDBED, AND STABILIZE. OVERSEED PHASE 1 AREAS AS NECESSARY.
D. PERFORM FINAL PHASE EXCAVATION, PREPARE SEEDBED, AND STABILIZE. OVERSEED PREVIOUSLY SEEDED

NOTE: ONCE EXCAVATION HAS REGUN THE OPERATION SHOULD BE CONTINUOUS FROM GRUBBING THROUGH THE COMPLETION OF GRADING AND PLACEMENT OF TOPSOIL (IF REQUIRED) AND PERMANENT SEED AND MULCH. ANY INTERRUPTIONS IN THE OPERATION OR COMPLETING THE OPERATION OUT OF THE SEEDING SEASON WILL NECESSITATE THE APPLICATION OF TEMPORARY STABILIZATION.



B. INCREMENTAL STABILIZATION — FILL SLOPES

1. CONSTRUCT AND STABILIZE FILL SLOPES IN INCREMENTS NOT TO EXCEED 15 FEET IN HEIGHT. PREPARE SEEDBED AND APPLY SEED
AND MULCH ON ALL SLOPES AS THE WORK PROGRESSES.

2. STABILIZE SLOPES IMMEDIATELY WHEN THE VERTICAL HEIGHT OF A LIFT REACHES 15 FEET, OR WHEN THE GRADING OPERATION CEASES AS PRESCRIBED IN THE PLANS SEASES AS PRESCRIBED IN THE PLANS.

3. AT THE END OF EACH DAY, INSTALL TEMPORARY WATER CONVEYANCE PRACTICE(S), AS NECESSARY, TO INTERCEPT SURFACE RUNOFF AND CONVEY IT DOWN THE SLOPE IN A NON-EROSIVE MANNER. 4. CONSTRUCTION SEQUENCE EXAMPLE (REFER TO FIGURE B.2):
A. CONSTRUCT AND STABILIZE ALL TEMPORARY SWALES OR DIKES THAT WILL BE USED TO DIVERT RUNOFF AROUND THE FILL.

B. AT THE END OF EACH DAY, INSTALL TEMPORARY WATER CONVEYANCE PRACTICE(S), AS NECESSARY, TO INTERCEPT SURFACE RUNOFF D CONVEY IT DOWN THE SLOPE IN A NON-EROSIVE MANNER C. PLACE PHASE 1 FILL, PREPARE SEEDBED, AND STABILIZE.

D. PLACE PHASE 2 FILL, PREPARE SEEDBED, AND STABILIZE.

E. PLACE FINAL PHASE FILL, PREPARE SEEDBED, AND STABILIZE.

E. PLACE FINAL PHASE FILL, PREPARE SEEDBED, AND STABILIZE. OVERSEED PREVIOUSLY SEEDED AREAS AS NECESSARY.

NOTE: ONCE THE PLACEMENT OF FILL HAS BEGUN THE OPERATION SHOULD BE CONTINUOUS FROM GRUBBING THROUGH THE COMPLETION OF GRADING AND PLACEMENT OF TOPSOIL (IF REQUIRED) AND PERMANENT SEED AND MULCH. ANY INTERRUPTIONS IN THE OPERATION OR COMPLETING THE OPERATION OUT OF THE SEEDING SEASON WILL NECESSITATE THE APPLICATION OF TEMPORARY STABILIZATION.

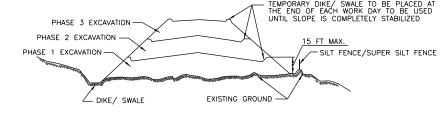


FIGURE B.2: INCREMENTAL STABILIZATION FILL

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

DEFINITION
THE PROCESS OF PREPARING THE SOILS TO SUSTAIN ADEQUATE VEGETATIVE STABILIZATION. PURPOSE
TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. WHERE VEGETATIVE STABILIZATION IS TO BE ESTABLISHED.

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 BUT LETF IN THE ROUGHENED CONDITION. SLOPES 3:1 OR FLATTER ARE TO BE TRACKED WITH RIGGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS . INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.

. PERMANENT STABILIZATION
A. A SOIL TEST IS REQUIRED FOR ANY EARTH DISTURBANCE OF 5 ACRES OR MORE. THE MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE: SOIL PH BETWEEN 6.0 AND 7.0. II. SOLUBLE SALTS LESS THAN 500 PARTS PER MILLION (PPM).

III. SOLUBLE SALTS 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) WOULD BE ACCEPTABLE.

IV. SOIL CONTAINS 1.5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT.

IV. SOIL CONTAINS 1.3 PERCENT MINIMOM OFCANIC MATIER 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 CONDITIONS.

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 S INDICATED BY THE RESULTS OF A SOIL TEST.

MY SOIL CONTAINS 1.3 PERCENT MINIMOM OF AND THE APPROVED PLAN OR S INDICATED BY THE RESULTS OF A SOIL TEST.

MY SOIL CAMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL PAY DISPUSE OR SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL AMENDMENTS AND THE TOP 3 TO 5 INCHES OF SOIL AMENDMENTS AND THE TOP 3 TO 5 INCHES OF SOIL AMENDMENT AND THE TOP 3 TO 5 INCHES OF SOIL AMENDMENT AND THE TOP 3 TO 5 INCHES OF SOIL AMENDMENT AND THE TOP 3 TO 5 INCHES OF SOIL AMENDMENT AND THE TOP 3 TO 5 INCHES OF SOIL AMENDMENT AND THE TOP 3 TO 5 INCHES OF SOIL AMENDMENT AND THE SOIL AMENDMENT AND THE TOP 3 TO 5 INCHES OF SOIL AMENDMENT AND THE TOP 3 TO 5 INCHES OF SOIL AMENDMENT AND THE TOP 3 TO 5 INCHES OF SOIL AMENDMENT AND THE TOP 3 TO 5 INCHES OF SOIL AMENDMENT A . MIX SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. RAKE LAWN AREAS TO SMOOTH THE SURFACE, REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. LOOSEN SURFACE SOIL BY DRACGING WITH A HEAVY CHAIN OR OTHER FOLIPMENT TO ROUGHEN THE SURFACE WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDBED PREPARATION. TRACK SLOPES 3:1 OR FLATTER WITH TRACKED EQUIPMENT LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE

B. TOPSOILING

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,

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 ARCAS HAVING 2:1 OR FLATTER SLOPES WHERE:

A. 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 SUPPORT PLANTS OR FURNISH CONTINUING

B. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPSUPPLIES 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.

SEEDBED LOOSENING MAY BE UNNECESSARY ON NEWLY DISTURBED AREAS.

4. AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN.

CONTOUR OF THE SLOPE. LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRIABLE.

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 LOAM, OR LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. TOPSOIL MUST NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND MUST CONTAIN LESS THAN 5 PERCENT BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1½ INCHES IN 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 SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL A. EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED WHEN APPLYING TOPSOIL.

B. UNIFORMLY DISTRIBUTE TOPSOIL IN A 5 TO 8 INCH LAYER AND LIGHTLY COMPACT TO A MINIMUM THICKNESS OF 4 INCHES. UNIFORMET DISTRIBUTE TO SOUL IN A 5 TO 6 INCHEATER AND LIGHTLY COMPACT TO A MINIMOM FINCKNESS OF 4 INCHES.

SPREADING IS TO BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMOM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS MUST BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.

TOPSOIL MUST NOT BE PLACED IF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.

C. 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 BE USED FOR CHEMICAL ANALYSES. . FERTILIZERS MUST BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION BY APPROPRIA 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 PRODUCCR.

3. LIME MATERIALS MUST BE GROUND LIMESTONE (HYDRATED OR BURNT LIME MAY BE SUBSTITUTED EXCEPT WHEN HYDROSEEDING) WHICH CONTAINS AT LEAST 50 PERCENT TOTAL OXIDES (CALCIUM OXIDE PLUS MAGNESIUM OXIDE). LIMESTONE MUST BE GROUND TO SUCH FINENESS THAT AT LEAST 50 PERCENT WILL PASS THROUGH A #100 MESH SIEVE AND 98 TO 100 PERCENT WILL PASS THROUGH A #20 MESH SIEVE.
4. LIME AND FERTILIZER ARE TO BE EVENLY DISTRIBUTED AND INCORPORATED INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR

OTHER SUITABLE MEANS.

5. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, SPREAD GROUND LIMESTONE AT THE RATE OF 4 TO 8

DATE

TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL

APPROVED HOWARD DEPARTMENT OF PUBLIC WORKS

(Hd) Edmondson

CHIEF, DEVELOPMENTOUNEERING DIVISION 6/8/2023

CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED: HOWABOUSGALLY DEPARTMENT OF PLANING AND ZONING

CHIEF, BUREAU OF HIGHWAYS

B-4-3 STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING

<u>DEFINITION</u> THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER. <u>PURPOSE</u>
TO PROTECT DISTURBED SOILS FROM EROSION DURING AND AT THE END OF CONSTRUCTION. CONDITIONS WHERE PRACTICE APPLIES
TO THE SURFACE OF ALL PERIMETER CONTROLS, SLOPES, AND ANY DISTURBED

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 D. MOLCH ALLOW MAT BE APPLIED BETWEEN THE FALL AND SPRINGS SECURING DATES ONL! IF THE GROUND IS
FROZEN. THE APPROPRIATE SEEDING MIXTURE MUST BE APPLIED WHEN THE GROUND THAWS.

C. INOCULANTS: THE INOCULANT FOR TREATING LEGUME SEED IN THE SEED MIXTURES MUST BE A PURE CULTURE
OF NITROGEN FIXING BACTERIA PREPARED SPECIFICALLY FOR THE SPECIES. INOCULANTS MUST NOT BE USED
LATER THAN THE DATE INDICATED ON THE CONTAINER, ADD FRESH INOCULANTS AS DIRECTED ON THE PACKAGE.

USE FOUR TIMES THE RECOMMENDED RATE WHEN HYDROSEEDING. NOTE: IT IS VERY IMPORTANT TO KEEP
INOCULANT AS COOL AS POSSIBLE UNTIL USED. TEMPERATURES ABOVE 75 TO 80 DEGREES FAHRENHEIT CAN WEAKEN BACTERIA AND MAKE THE

INOCOLORIN LESS EFFECTIVE 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 2. APPLICATION 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. . 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

CUNIACI.

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 EACH DIRECTION.

HYDROSEEDING: APPLY SEED UNIFORMLY WITH HYDROSEEDER (SLURRY INCLUDES SEED AND FERTILIZER). IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE APPLICATION RATES SHOULD NOT EXCEED 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; P205 (PHOSPHOROUS), 200 POUNDS PER ACRE; K20 (POTASSIUM), 200 POUNDS

STOCKPILE AREAS ARE UTILIZED WHEN IT IS NECESSARY TO SALVAGE AND STORE SOIL FOR LATER USE.

PER AURE.

II. LIME: USE ONLY GROUND AGRICULTURAL LIMESTONE (UP TO 3 TONS PER ACRE MAY BE APPLIED BY HYDROSEEDING). NORMALLY, NOT MORE THAN 2 TONS ARE
APPLIED BY HYDROSEEDING AT ANY ONE TIME. DO NOT USE BURNT OR HYDRATED LIME WHEN HYDROSEEDING.

III. MIX SEED AND FERTILIZER ON SITE AND SEED IMMEDIATELY AND WITHOUT INTERRUPTION.

IV. WHEN HYDROSEEDING DO NOT INCORPORATE SEED INTO THE SOIL.

SEED AMULCHING. . MULCHING
I. 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

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.
1. 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.
11. WCFM, INCLUDING DYE, MUST CONTAIN NO GERMINATION OR GROWTH INHIBITING FACTORS.
111. WCFM MATERIALS ARE TO BE MANUFACTURED AND PROCESSED IN SUCH A MANNER THAT THE WOOD CELLULOSE FIBER MULCH WILL REMAIN IN UNIFORM SUSPENSION IN WATER UNDER AGITATION AND WILL BLEND WITH SEED, FERTILIZER AND OTHER ADDITIVES TO FORM A HOMOGENEOUS SLURRY. THE MULCH MATERIAL MUST FORM A BLOTTER—LIKE GROUND COVER, ON APPLICATION, HAVING MOISTURE ABSORPTION AND PROPERTIES AND MUST COVER AND HOLD GRASS SEED IN CONTACT WITH THE SOIL WITHOUT INHIBITING THE GROWTH OF THE GRASS SEEDLINGS.
10. WCFM MATERIAL MUST NOT CONTAIN ELEMENTS OR COMPOUNDS AT CONCENTRATION LEVELS THAT WILL BE PHYTO—TOXIC.
20. 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.

2. APPLICATION
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 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

D. ANCHONING 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 HAZARE

1. 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. . WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DR WEIGHT OF 750 POUNDS FIBER WITH WATER AT A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER. III. SYNTHETIC BINDERS SUCH AS ACRYLIC DUR (AGRO-TACK), DCA-70, PETROSET, TERRA TAX II, TERRA TACK AR OR OTHER APPROVED EQUAL MAY BE USED. FOLLOW APPLICATION RATES AS SPECIFIED BY THE MANUFACTURER. APPLICATION OF LIQUID BINDERS NEEDS TO BE HEAVIER AT THE EDGES WHERE WIND CATCHES MULCH, SUCH AS IN VALLEYS AND ON CRESTS OF BANKS. USE OF ASPHALT BINDERS IS STRICTLY PROHIBITED.

IV. LIGHTWEIGHT PLASTIC NETTING MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER RECOMMENDATIONS. NETTING IS USUALLY AVAILABLE IN ROLLS 4 TO 15 FEET WIDE AND 300 TO 3,000 FEET LONG. B-4-4 STANDARDS AND SPECIFICATIONS FOR TEMPORARY STABILIZATION

<u>DEFINITION</u>
TO STABILIZE DISTURBED SOILS WITH VEGETATION FOR UP TO 6 MONTHS. PURPOSE
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 CRITERIA

1. SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B.1 FOR THE APPROPRIATE PLANT HARDINESS ZONE FROM FIGURE B.3), AND ENTER THEM IN THE TEMPORARY SEEDING SUMMARY BELOW ALONG WITH APPLICATION RATES, SEEDING DATES AND SEEDING DEPTHS. IF THIS SUMMARY IS NOT PUT ON THE PLAN AND COMPLETED, THEN TABLE B.1 PLUS FERTILIZER AND LIME RATES MUST BE PUT ON THE PLAN. RATES MUST BE PUT ON THE PLAN.

2. FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING.

3. WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING SEASON, APPLY SEED AND MULCH OR STRAW MULCH ALONE AS PRESCRIBED IN SECTION B-4-3.A.1.B AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

TEMPORARY SEEDING SUMMARY

	HARDINESS ZON SEED MIXTURE		FERTILIZER RATE	LIME DATE			
NO.	SPECIES	APPLICATION RATE(LB/AC)	02200	SEEDING DEPTHS	(10-20-20)	LIME RATE	
1	ANUAL RYEGRASS	40	2/15 - 4/30 8/15 - 11/30	0.5	436 LB/ AC (10 LB/1000 SF)	2 TONS/AC (90 LB/1000 SF)	
6	FOXTAIL MILLET	30	5/1 - 8/14	0.5			
7	PEAR MILLET	20	5/1 - 8/14	0.5			

B-4-5 STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

<u>DEFINITION</u>
TO STABILIZE DISTURBED SOILS WITH PERMANENT VEGETATION.

<u>'URPOSE</u> O USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER ON DISTURBED SOILS. <u>CONDITIONS WHERE PRACTICE APPLIES</u>
EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR 6 MONTHS OR MORE.

. GENERAL US A. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED IN TABLE B.3 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3) AND BASED ON THE SITE CONDITION OR PURPOSE FOUND ON TABLE B.2. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN. B. ADDITIONAL PLANTING SPECIFICATIONS FOR EXCEPTIONAL SITES SUCH AS SHORELINES, STREAM BANKS, OR DUNES OR FOR SPECIFICATIONS. 342 - CRITICAL AREA PLANTING.
FOR SITES HAVING DISTURBED AREA OVER 5 ACRES, USE AND SHOW THE RATES RECOMMENDED BY THE SOIL TESTING AGENCY. D. FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREA FORM FERTILIZER (46-0-0) AT 3 ½ POUNDS PER 1000 SQUARE FEET (150 POUNDS PER ACRE) AT THE TIME OF SEEDING IN ADDITION TO THE SOIL AMENDMENTS SHOWN IN THE PERMANENT SEEDING

2. TURFGRASS MIXTURES A. AREAS WHERE TURFGRASS MAY BE DESIRED INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE.

B. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED BELOW BASED ON THE SITE CONDITIONS OR PURPOSE. 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 SQUARE 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 F 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.

WENTURKY PULICRASS (FIRE FESCUE) ELANDE MIXTURE, FOR USE IN APPEAR BUT LEADER IN BUT CRASS LANDS FOR IV. KENTUCKY BLUEGRASS/FINE FESCUE: SHADE MIXTURE: FOR USE IN AREAS WITH SHADE IN BLUEGRASS LAWNS. FOR ESTABLISHMENT IN HIGH QUALITY, INTENSIVELY MANAGED TURF AREA, MIXTURE INCLUDES: CERTIFIED KENTUCKY BLUEGRASS

NOTES.
SELECT TURFGRASS VARIETIES FROM THOSE LISTED IN THE MOST CURRENT UNIVERSITY OF MARYLAND PUBLICATION, AGRONOMY MEMO #77, "TURFGRASS CULTIVAR RECOMMENDATIONS FOR MARYLAND" CHOOSE CERTIFIED MATERIAL. CERTIFIED MATERIAL IS THE BEST GUARANTEE OF CULTIVAR PURITY. THE CERTIFICATION PROGRAM OF THE MARYLAND DEPARTMENT OF AGRICULTURE, TURF AND SEED SECTION, PROVIDES A RELIABLE MEANS OF CONSUMER PROTECTION AND ASSURES A PURE GENETIC LINE

. IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURES WESTERN MD: MARCH 15 TO JUNE 1, AUGUST 1 TO OCTOBER 1 (HARDINESS ZONES: 5B, 6A) CENTRAL MD: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONE: 6B) SOUTHERN MD, EASTERN SHORE: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (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 1½ INCHES IN DIAMETER. THE RESULTING SEEDBED MUST BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASSES WILL POSE NO DIFFICULTY.

. 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.

		PEF	RMANENT SEEDII	NG SUMMA	<u>RY</u>			
	ARDINESS ZONE (FROM FIGURE B.3): 7a FERTILIZER RATE EED MIXTURE (FROM TABLE B.3): 8, 9, 11 (10-20-20)							
0.	l SPFCIFS	APPLICATION RATE(LB/AC)	SEEDING DATES	SEEDING DEPTHS	N	P ₂ O ₅	K ₂ 0	LIME RATE
3	TALL FESCUE	100	2/15 - 4/30 8/15 - 10/31 11/1 - 11/30	14-1/2 IN	45 LBS PER ACRE	(2.0 LB/	90 LB/ AC (2.0 LB/	2 TONS/AC (90 LB/
9	HARD FESCUE KENTUCKY BLUEGRASS PERENNIAL RYEGRASS	40 40 20	2/15 - 4/30 8/15 - 10/31 11/1 - 11/30		(1.0 LB/ 1000 SF)	1000 SF)	1000 SF)	1000 SF)
1	CREEPING RED FESCUE CHEWING FESCUE KENTUCKY FESCUE	30 30 20	2/15 - 4/30 8/15 - 10/31 11/1 - 11/30					

B. 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 B. SOD MUST BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 1/4 INCH. PLUS OR MINUS 1/4 INCH. AT THE TIME OF CUTTIN DREMENT FOR THICKNESS MUST EXCLUDE TOP GROWTH AND THATCH. BROKEN PADS AND TORN OR UNEVEN ENDS WILL NOT BE OCTINOLE.
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 SECTION D. SOD MUST NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS E. SOD MUST BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPLANTED WITHIN THIS PERIOD MUST BE APPROVED BY AN AGRONOMIST OR SOIL SCIENTIST PRIOR TO ITS INSTALLATION. PRIOR TO LATING THE SUD.

B. LAY THE FIRST ROW OF SOD IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO IT AND TIGHTLY WEDGED AGAINST EACH. OTHER. STAGGER LATERAL JOINTS TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. ENSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE AIR DRYING OF THE ROOTS. C. WHEREVER POSSIBLE, LAY SOD WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERING JOINTS. ROLL AND TAMP, PLOR OTHERWISE SECURE THE SOD TO PREVENT SLIPPAGE ON SLOPES. ENSURE SOLID CONTACT EXISTS BETWEEN SOD ROOTS AND THE

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

A. IN THE ABSENCE OF ADEQUATE RAINFALL, WATER DAILY DURING THE FIRST WEEK OR AS OFTEN AND SUFFICIENTLY AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF 4 INCHES. WATER SOD DURING THE HEAT OF THE DAY TO PREVENT WILTING.

B. AFTER THE FIRST WEEK, SOD WATERING IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT.

C. DO NOT MOW UNTIL THE SOD IS FIRMLY ROOTED, NO MORE THAN % OF THE GRASS LEAF MUST BE REMOYED BY THE INITIAL CUTTING OR SUBSEQUENT CUTTINGS. MAINTAIN A GRASS HEIGHT OF AT LEAST 3 INCHES UNLESS OTHERWISE SPECIFIED. B-4-7 STANDARDS AND SPECIFICATIONS FOR HEAVY USE AREA PROTECTION

STABILIZATION OF AREAS FREQUENTLY AND INTENSIVELY USED BY SURFACING WITH SUITABLE MATERIALS (E.G., MULCH AND AGGREGATE). <u>PURPOSE</u>
TO PROVIDE A STABLE, NON-ERODING SURFACE FOR AREAS FREQUENTLY USED AND TO IMPROVE THE WATER QUALITY FROM THE RUNOFF OF THESE AREAS.

CONDITIONS WHERE PRACTICE APPLIES

THIS PRACTICE APPLIES TO INTENSIVELY USED AREAS (E.G., EQUIPMENT AND MATERIAL STORAGE, STAGING AREAS, HEAVILY USED TRAVEL LANES).

A MINIMUM 4-INCH BASE COURSE OF CRUSHED STONE OR OTHER SUITABLE MATERIALS INCLUDING WOOD CHIPS OVER NON-WOVEN GEOTEXTILE SHOULD BE PROVIDED AS SPECIFIED IN SECTION H-1 MATERIALS.

 SELECT THE STABILIZING MATERIAL BASED ON THE INTENDED USE, DESIRED MAINTENANCE FREQUENCY, AND RUNOFF CONTROL.

 THE TRANSPORT OF SEDIMENTS, NUTRIENTS, OILS, CHEMICALS, PARTICULATE MATTER ASSOCIATED WITH VEHICULAR TRAFFIC AND EQUIPMENT, AND MATERIAL STORAGE NEEDS TO BE CONSIDERED IN THE SELECTION OF MATERIAL. ADDITIONAL CONTROL MEASURES MAY BE NECESSARY TO CONTROL SOME OF THESE POTENTIAL POLLUTANTS.

4. SURFACE EROSION CAN BE A PROBLEM ON LARGE HEAVY USE AREAS. IN THESE SITUATIONS, MEASURES TO REDUCE THE FLOW LENGTH OF RUNOFF OR EROSIVE VELOCITIES NEED TO BE CONSIDERED.

MAINTENANCE
THE HEAVY USE AREAS MUST BE MAINTAINED IN A CONDITION THAT MINIMIZES EROSION. THIS MAY REQUIRE ADDING SUITABLE MATERIAL, AS SPECIFIED ON THE APPROVED PLANS, TO MAINTAIN A CLEAN SURFACE. B-4-8 STANDARDS AND SPECIFICATIONS FOR STOCKPILE AREA

MOUND OR PILE OF SOIL PROTECTED BY APPROPRIATELY DESIGNED EROSION AND SEDIMENT CONTROL MEASURES. <u>PURPOSE</u> TO PROVIDE A DESIGNATED LOCATION FOR THE TEMPORARY STORAGE OF SOIL THAT CONTROLS THE POTENTIAL FOR EROSION, SEDIMENTATION,

1. THE STOCKPILE LOCATION AND ALL RELATED SEDIMENT CONTROL PRACTICES MUST BE CLEARLY INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN.
2. THE FOOTPRINT OF THE STOCKPILE MUST BE SIZED TO ACCOMMODATE THE ANTICIPATED VOLUME OF MATERIAL AND BASED ON A SIDE I THE POUTPRINT OF THE STOCKPILE MUST BE SIZED TO ACCOMMODATE THE ANTICIPATED VOLUME OF MATERIAL AND BASED ON A S SLOPE RATIO NO STEEPER THAN 2:1. BENCHING MUST BE PROVIDED IN ACCORDANCE WITH SECTION B-3 LAND GRADING. B. RUNOFF FROM THE STOCKPILE AREA MUST DRAIN TO A SUITABLE SEDIMENT CONTROL PRACTICE. CLEAR WATER RUNOFF INTO THE STOCKPILE AREA MUST BE MINIMIZED BY USE OF A DIVERSION DEVICE SUCH AS AN EARTH DIKE, TEMPORARY SWALE OR DIVERSION FENCE. PROVISIONS MUST BE MADE FOR DISCHARGING CONCENTRATED FLOW IN A NON-EROSIVE

6. WHERE RUNOFF CONCENTRATES ALONG THE TOE OF THE STOCKPILE FILL, AN APPROPRIATE EROSION/SEDIMENT CONTROL PRACTICE MUST BE USED TO INTERCEPT THE DISCHARGE.

7. STOCKPILES MUST BE STABILIZED IN ACCORDANCE WITH THE 3/7 DAY STABILIZATION REQUIREMENT AS WELL AS STANDARD B-4-1 INCREMENTAL STABILIZATION AND STANDARD B-4-4 TEMPORARY STABILIZATION.

8. IF THE STOCKPILE IS LOCATED ON AN IMPERVIOUS SURFACE, A LINER SHOULD BE PROVIDED BELOW THE STOCKPILE TO FACILITATE CLEANUP. STOCKPILES CONTAINING CONTAMINATED MATERIAL MUST BE COVERED WITH IMPERMEABLE SHEETING. <u>MAINTENANCE</u>

THE STOCKPILE AREA MUST CONTINUOUSLY MEET THE REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN

THE STOCKPILE AREA MUST CONTINUOUSLY MEET THE REQUIREMENTS FOR ADEQUAL'S VEGETATIVE ESTABLISHMENT IN A 2:1 RATIO. THE STOCKPILE AREA MUST BE KEPT FREE OF EROSION. IF THE VERTICAL HEIGHT OF A STOCKPILE EXCEEDS 20 FEET FOR 2:1 SLOPES, 30 FEET FOR 3:1 SLOPES, OR 40 FEET FOR 4:1 SLOPES, BENCHING MUST BE PROVIDED IN ACCORDANCE WITH SECTION B-3 LAND GRADING. STANDARD STABILIZATION NOTE FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY

STABILIZATION MUST BE COMPLETED WITHIN:

A.) THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND B.) SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE

THIS NOTE SHOULD BE USED FOR MINIMAL AREAS WITHIN THE LIMITS OF DISTURBANCE THAT DO NOT DRAIN TO A SEDIMENT CONTROL MEASURE AND /OR WHERE THE INSTALLATION OF CONTROLS IS NOT FEASIBLE (ROAD WIDENING, SIDEWALK INSTALLATION, ETC.). THE CONTRACTOR SHALL ONLY DISTURB THAT AREA WHICH CAN BE COMPLETED AND STABILIZED BY THE END OF EACH DAY. STABILIZATION SHALL BE AS FOLLOW: 1. FOR AREAS TO BE PAVED, THE APPLICATION OF STONE BASE.

 2. FOR AREAS TO BE VEGETATIVELY STABILIZED:
 A.) PERMANENT SEED AND SOIL STABILIZATION MATTING OR SOD FOR ALL STEEP SLOPES, CHANNELS OR SWALES.

B.) PERMANENT SOD AND MULCH FOR ALL OTHER AREAS.

ANY AREAS WHICH CAN NOT BE STABILIZED BY THE END OF EACH WORKING DAY MUST HAVE SILT FENCE INSTALLED ON

STABILIZED CONSTRUCTION ENTRANCE NOTE

1. MAINTENANCE-THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR OF CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED SPILLED ONTO THE PUBLIC RIGHT-OF-WAY MUST BE IMMEDIATELY REMOVED BY VACUUMING SCRAPING AND/OR SWEEPING. WASHING THE ROADWAY TO REMOVE SEDIMENT TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE.

2. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

SITE DATA SITE AREA =2.885 AC OR 125,671 SQ.FT TOTAL DISTURBED AREA=2.499 AC OR 108,857 SQ.FT TOTAL CUT=200 CY TOTAL FILL=200 CY FILL/CUT RATIO=1:1 SITE WITH AN ACTIVE GRADING PERMIT	MAINTENANCE NOTE CONTRACTOR SHALL, WITHOUT EXTRA COST TO THE PROJECT, REPAIR AND MAINTAIN EXISTING SEDIMENT CONTROL DEVICES UNTIL ALL AREAS WITHIN LIMITS OF CONSTRUCTION ARE STABILIZED. ALL SEDIMENT CONTROL MEASURES REFERRED TO THESE PLANS SHALL BE IN ACCORDANCE WITH THE PUBLICATION ENTITLED "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL".
NOTE: ALL CUT/FILL AS SHOWN HEREON ARE FOR INFORMATIONAL PURPOSES ONLY AS REQUIRED BY THE MUNICIPAL SEDIMENT CONTROL AUTHORITIES INVOLVED. THE CONTRACTORS SHALL VERIFY ALL SUCH CALCULATIONS TO THEIR OWN SATISFACTION FOR BID CONTRACTOR PURPOSES. SITE ADDRESS 7915 HAZEL WAY JESSUP, MD 20794	APPLICANT LYN MYRICK CABASSA, MIGUEL A. CABASSA JR. 8001 JONES ROAD JESSUP MD, 20794 HOWARD COUNTY JAMES ROBERT HUNT III, SHANNON M. HUNT 7915 HAZEL MAY JESSUP MD, 20794 HOWARD CIUNTY
CONTACT RICHARD L. SOBBOTT DANIEL CONSULTANTS INC. 8950 ROUTE 108 E, SUITE 229 COLUMBIA, MD 21045 CONTACT: RICHARD SOBBOTT PHONE: 410-300-6530	ATTN: lyncaba@gmail.com PHONE:(301)725-3960

STANDARD SEDIMENT CONTROL NOTES

1. A PRE-CONSTRUCTION MEETING MUST OCCUR WITH THE HOWARD COUNTY DEPARTMENT 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 HOURS NOTICE TO CID MUST BE GIVEN AT THE FOLLOWING STAGES:

A. 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,
C. 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 NSPECTION AGENCY IS MADE. OTHER RELATED STATE AND FEDERAL PERMITS SHALL BE REFERENCED, TO ENSURE COORDINATION AND TO AVOID CONFLICTS WITH THIS PLAN.

2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT

3. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPOPORARY STABILIZATION IS REQUIRED WITHIN THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROL, DIKES, SWALS, 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 4. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT 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 CONCENTRATE FLOW, STEEP SLOPE, AND HIGHLY ERODIBLE AREAS SHALL RECEIVE SOIL STABILIZATION MATTING (SEC. B-4-6). 5. ALL SEDIMENT CONTROL STRUCUTRES ARE TO REMAIN IN PLACE, AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION

UNITL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE CID. 6. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTRIBUTED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE. 7. ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE CID. THE SITE AND LL CONTROLS

SHALL BE INSPECTED BY THE CONTRACTOR WEEKLY: AND THE NEXT DAY AFTER FACH 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) NAME AND TITLE OF INSPECTOR - WEATHER INFORMATION (CURRENT CONDITIONS AS WELL AS TIME AND AMOUNT OF LAST RECORDED PRECIPITATION) BRIEF DESCRIPTION OF PROJECTS STATUS (E.G., PERCENT COMPLETE) AND/OR CURRENT ACTIVITIES

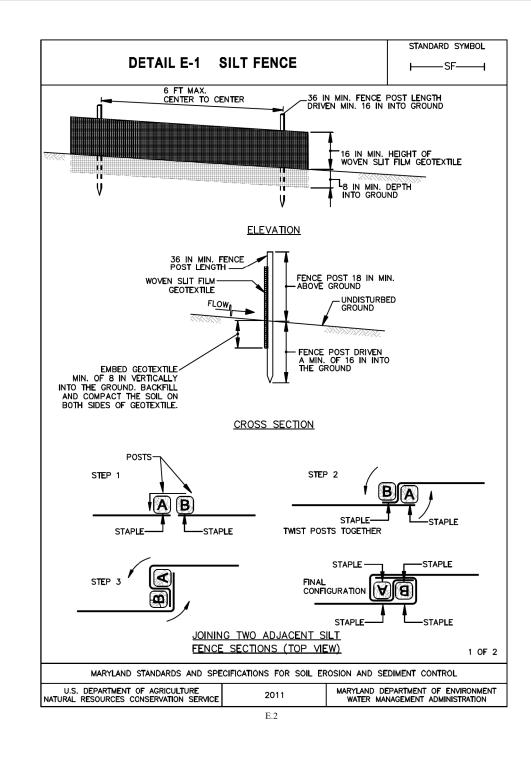
EVIDENCE OF SEDIMENT DISCHARGES IDENTIFICATION OF SEDIMENT CONTROLS THAT REQUIRE MAINTENANCE IDENTIFICATION OF MISSING OR IMPROPERLY INSTALLED SEDIMENT CONTROLS COMPLIANCE STATUS REGARDING THE SEQUENCE OF CONSTRUCTION AND STABILIZATION REQUIREMENTS

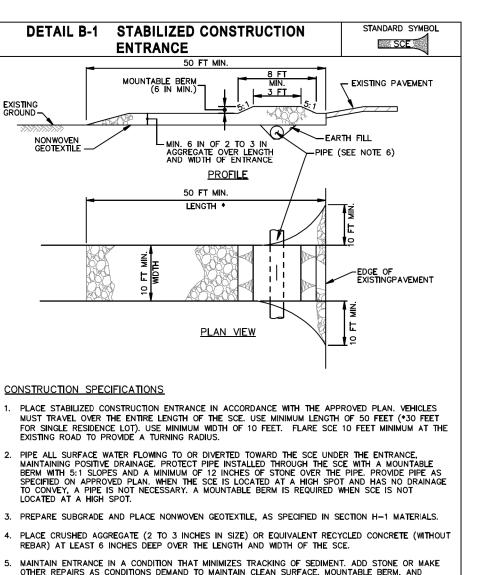
BACK-FILLED AND STABILIZED BY THE END OF EACH WORKDAY, WHIICHEVER IS SHORTER.

- MONITORING/SAMPLING - MAINTENANCE AND/OR CORRECTIVE ACTION PERFORMED - OTHER INSPECTION ITEMS AS REQUIRED BY THE GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH CONSTRUCTION 8. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN AND SHALL BE

9. 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 LIST OF HSCD-APPROVED FIELD CHANGES. IO. DISTURBANCE SHALL NOT OCCUR OUTSIDE THE LOD. A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE OF 20 AC. PER GRADING UNIT) AT TIME. WORK MAY PROCEED TO A SURSPOLIFIT GRADING LINIT HAS BEEN STABILIZED AND APPROVED BY THE CID. UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE CID, NO MORE THAN 30 ACRES CUMULATIVELY MAY BE DISTURBED AT A GIVEN TIME. 11. WASH WATER FROM ANY EQUIPMENT, VEHICLES, WHEELS, PAVEMENT, AND OTHER SOURCES MUST BE TREATED IN A SEDIMENT BASIN OR OTHER APPROVED WASHOUT STRUCTURE. 12. TOPSOIL SHALL BE STOCKPILED AND PRESERVED ON-SITE FOR REDISTRIBUTION ONTO FINAL GRADE. 13 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. 14. STREAM CHANNELS MUST NOT BE DISTRIBUTED DURING THE FOLLOWING RESTRICTED TIME PERIODS (INCLUSIVE): - USE I AND IP MARCH 1 - JUNE 15 - USE III AND IIIP OCTOBER 1 - APRIL 30 - USE IV MARCH 1 - MAY 31

15. 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 THE SITE IS ACTIVE



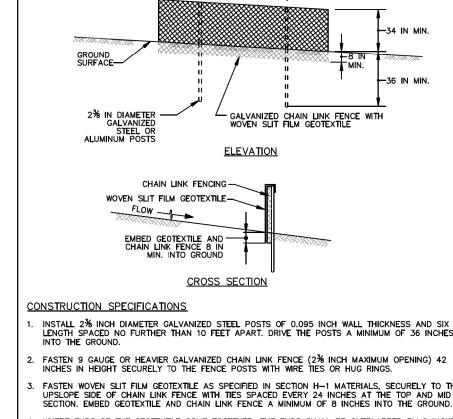


SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR

ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL FROSION AND SEDIMENT CONTROL

TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING



DETAIL E-3 SUPER SILT FENCE

DETAIL E-1 SILT FENCE

. USE WOOD POSTS 1¾ X 1¾ ± ⅓6 INCH (MINIMUM) SQUARE CUT OF SOUND QUALITY HARDWOOD. AS AN ALTERNATIVE TO WOODEN POST USE STANDARD "T" OR "U" SECTION STEEL POSTS WEIGHING NOT LESS THAN 1 POUND PER LINEAR FOOT.

. USE 36 INCH MINIMUM POSTS DRIVEN 16 INCH MINIMUM INTO GROUND NO MORE THAN 6 FEET APART.

3. USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS AND FASTEN GEOTEXTILE SECURELY TO UPSLOPE SIDE OF FENCE POSTS WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION.

5. EMBED GEOTEXTILE A MINIMUM OF 8 INCHES VERTICALLY INTO THE GROUND. BACKFILL AND COMPACT THE SOIL ON BOTH SIDES OF FABRIC.

EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SILT FENCE.

REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL FENCE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL FROSION AND SEDIMENT CONTROL

2011

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

WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, TWIST, AND STAPLE TO POST IN

CONSTRUCTION SPECIFICATIONS

INSTALL 2% 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.

5. 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, AND STAPLED TO PREVENT SEDIMENT BY PASS.

EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 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. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL 2011

his development place is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT oward SCD

ENGINEER'S CERTIFICATE I hereby 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 with the requirements of the Howard Soil Conservation District Nichary Saltet 05/17/2023 Signature of Engineer [print name below signature] Date DEVELOPER'S CERTIFICATE

I/We certify that all development and construction will be done according to this plan of development for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic onsite inspections by the Howard Soil Conservation District." Bronzwyn Palmer Signature of Developer [print name below signature] Date

DESIGN CERTIFICATION: HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERRVATION DISTRICT."

Keehall Sakhoot 10/27/2022 DESIGN SIGNATURE MD REGISTRATION NO. <u>15222</u> RICHARD SOBBOTT (P.E.), R.L.S., OR R.L.A. (circle one) PRINTED NAME

OWNER/DEVELOPER

Bronzwyn Palmer OWNER/DEVELOPER SIGNATURE Bronzwyn M. Palmer, Owner David P. Lunden, President, Timberlake Building and Renovations, LLC PRINTED NAME & TITLE

STANDARD SYMBOL

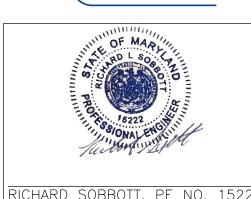
⊢----SF-------

2 OF

STANDARD SYMBOL

⊢—SSF——I

E&S GENERAL NOTES AND DETAILS NORDAU, SECTION E-2, LOTS 11-12 A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8



Richard Sobbott

DocuSigned by

271B5596D87C410

PERMIT INFORMATION CHART Subdivision Name: Parcel No. Section / Area NORDAU E-68,9,10 Tax Map No. | Elect. District | Census Tract 0042 R-12606901 Sewer Code

LYN MYRICK CABASSA, JAMES ROBERT HUNT MIGUEL A. CABASSA JR. SHANNON M. HUNT 8001 JONES ROAD | 7915 HAZEL WAY JESSUP MD, 20794 JESSUP MD, 20794 HOWARD COUNTY HOWARD COUNTY ATTN:lyncaba@gmail.com PHONE:(301)725-3960

CONSULTING, ENGINEERS AND PLANNERS 8950 ROUTE 108 E. . SUITE 229 COLUMBIA MD 21043 TEL: 410-995-0090 FAX: 410-992-7038

OWNER/DEVELOPER CERTIFICATION:

CONSERVATION DISTRICT AND/OR MDE."

"I/WE CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR

DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION

AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING

CONTROLS, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE

CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT

MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING

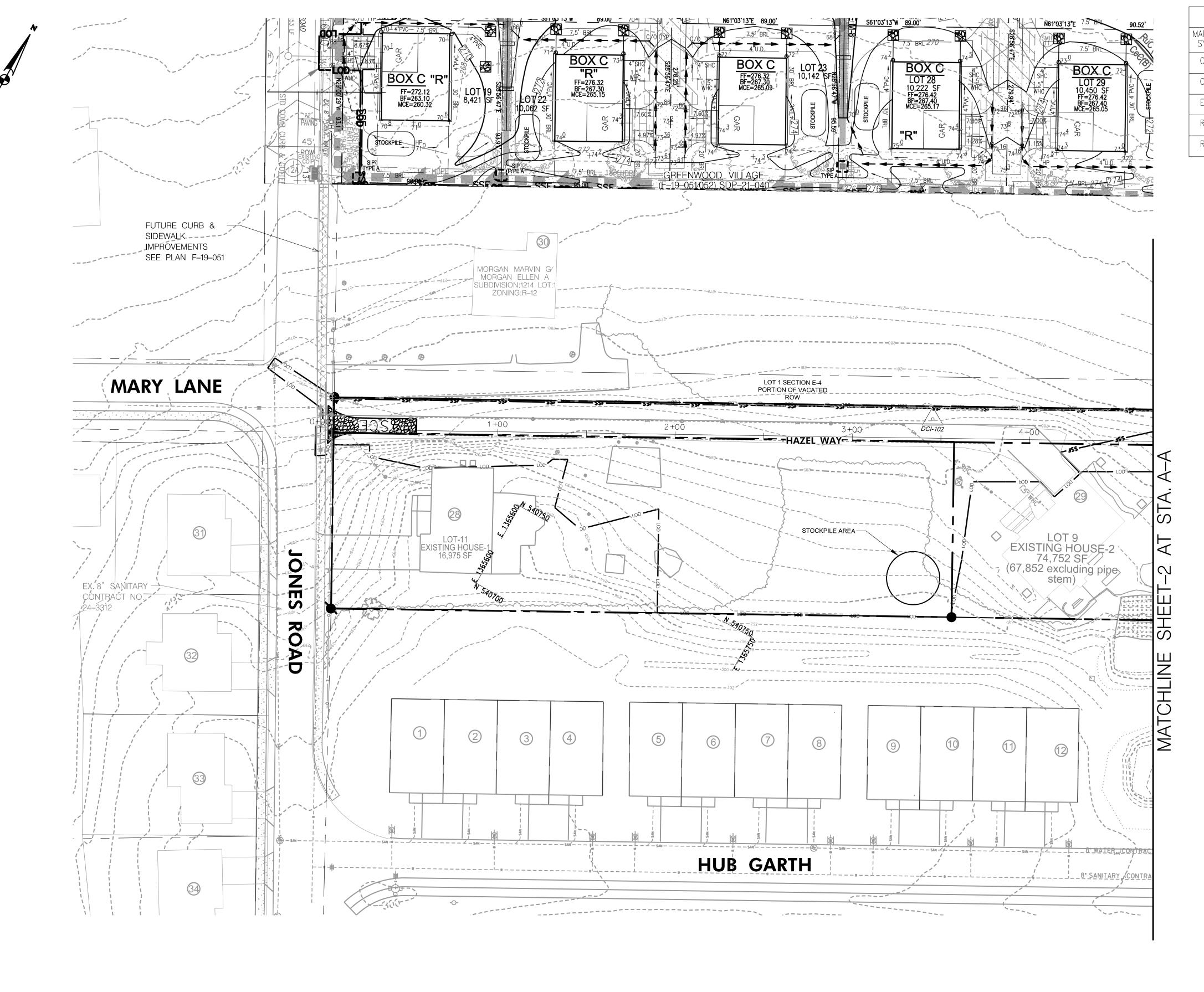
PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO

BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC

ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL

DESIGN BY ____BW__ drawn by <u>BW</u> CHECKED BY___RLS <u>AS SHOWN</u> SCALE: DATE: 1/01/2022 W. O. No. :_____ SHEET No. <u>11</u> OF <u>18</u>

10/12/2022



MAP UNIT RATING K-VALUE SYMBOL 0.43 Chillium Loam, 5%-10% slope | Croom and Evesboro soils, 10%-15%| 0.32 Evesboro Loamy Sand, 2%-10% 0.02 | Russett and Beltsville soils, 2%-5% 0.28 Russett and Beltsville soils, 5%-10% 0.28

HYDROLOGIC SOIL GROUP

LEGENDS

PROPOSED CONTOUR LIMIT OF DISTURBANCE STABILIZED CONSTRUCTION ENTRNACE SUPER SILT FENCE

SILT FENCE

— LOD —

EXISTING SEDIMENT AND EROSION CONTROL PLAN - I NORDAU, SECTION E-2, LOTS 11-12 A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8

OWNER/DEVELOPER YN MYRICK CABASSA, | JAMES ROBERT HUNT

DESIGN BY ____BW drawn by BW CHECKED BY RLS SCALE: AS SHOWN DATE: 11/01/2022 W. O. No. :_____ SHEET No. <u>12</u> OF <u>18</u>

APPROVED HOWARD DEPARTMENT OF PUBLIC WORKS CHIEF, BUREAU OF HIGHWAYS

APPROVED: HOWABOUSGOLUNITY DEPARTMENT OF PLANING AND ZONING

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

ENGINEER'S CERTIFICATE

"I hereby 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 with the requirements of the Howard Soil

DEVELOPER'S CERTIFICATE "I/We certify that all development and construction will be done according to this plan of development for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspections by the Howard Soil Conservation District."

Olexander Bratchie

Signature of Engineer [print name below signature] Date

Bronzwyn Palmer Signature of Developer [print name below signature] Date

Howard SCD 65648D5BA9B64C1...

Conservation District.

CHIEF, DEVELOPMENT DIVISION 6/8/2023

CHIEF, DIVISION OF LAND DEVELOPMENT

DESIGN CERTIFICATION: I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERRVATION DISTRICT."

DESIGN SIGNATURE

RICHARD SOBBOTT

PRINTED NAME

MD REGISTRATION NO. 15222 (P.E.), R.L.S., OR R.L.A. (circle one)

PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND/OR MDE." OWNER/DEVELOPER SIGNATURE

"I/WE CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR

DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION

AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING

CONTROLS, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE

CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A

MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING

OWNER/DEVELOPER CERTIFICATION:

10/12/2022 David P. Lunden, President, Timberlake Building and Renovations, LLC PRINTED NAME & TITLE

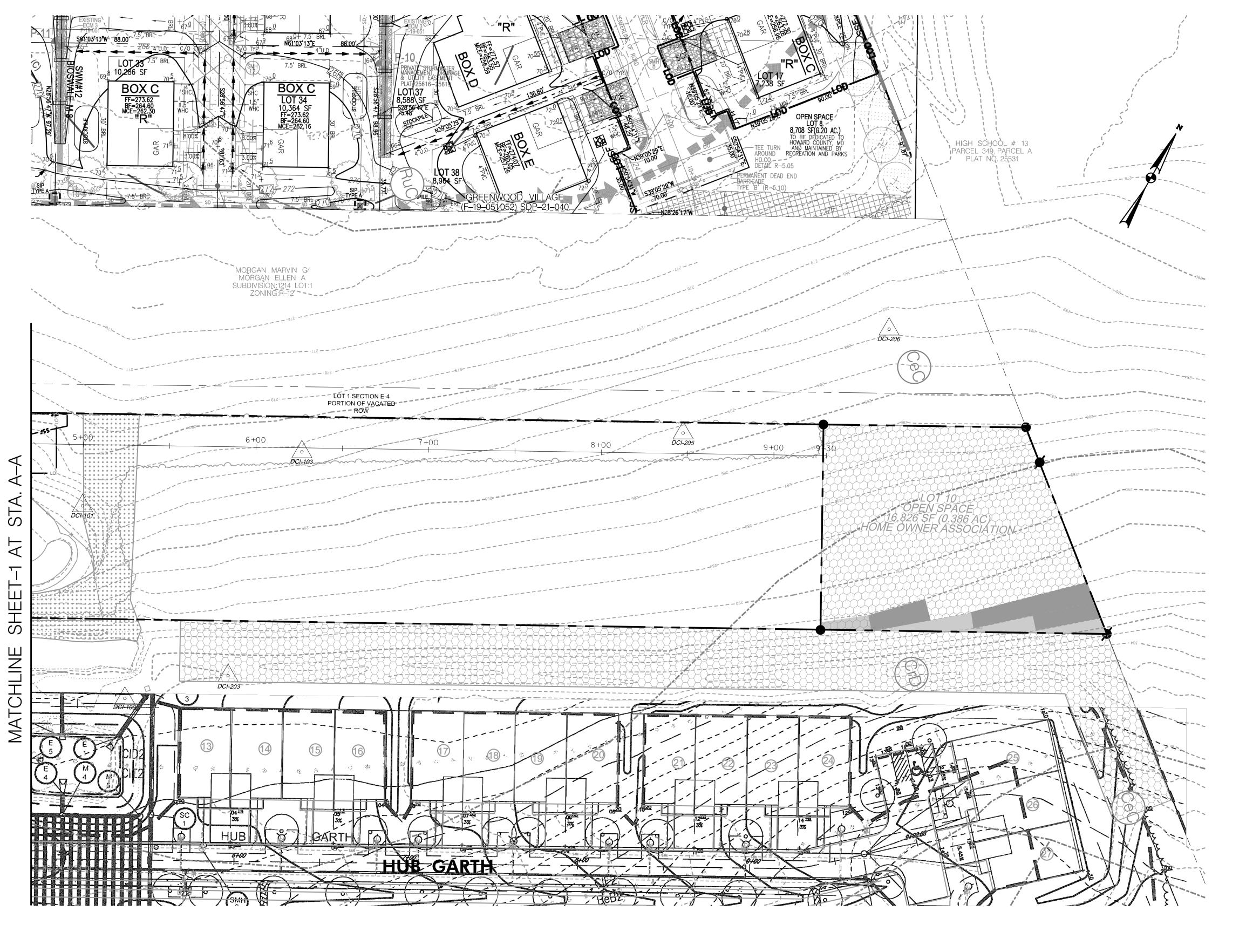


Richard Sobbott



	PERMIT INFORMATION CHART							OWNER/DEVELOPER			
	Subdivision NORDAU	Name:		Section/Area		Lot No. 8,9,10	Parcel No.	LYN MYRICK CABASSA, MIGUEL A. CABASSA JR. 8001 JONES ROAD	JAMES ROBERT HUNT SHANNON M. HUNT 7915 HAZEL WAY		
	Plat #	Grid	Zoning	Tax Map No.	Elect. District	Census Tract		JESSUP MD, 20794 HOWARD COUNTY	JESSUP MD, 20794 HOWARD COUNTY		
	20317 Water Code	0024	R-12	0042 Sewer Code	SIXTH	606901		ATTN:lyncaba@ PHONE:(301)7:	gmail.com		
. 15222	2										

SCALE IN FEET



HYDROLOGIC SOIL GROUP RATING K-VALUE SYMBOL 0.43 CeC Chillium Loam, 5%-10% slope Croom and Evesboro soils, 10%-15% 0.32 Evesboro Loamy Sand, 2%-10% Russett and Beltsville soils, 2%-5% 0.28 Russett and Beltsville soils, 5%-10% 0.28

<u>LEGENDS</u>

— LOD —

PROPOSED CONTOUR LIMIT OF DISTURBANCE

STABILIZED CONSTRUCTION ENTRNACE SUPER SILT FENCE SILT FENCE

This development planding specified for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT. 6/6/2023

ENGINEER'S CERTIFICATE I hereby 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 with the requirements of the Howard Soil Conservation District." Signature of Engineer [print name below signature] Date DEVELOPER'S CERTIFICATE "I/We certify that all development and construction will be done according to this plan of development for sediment and erosion control, and that all responsible

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Brongwyn Palmer 05/17/2023
Signature of Developer [print name below signature] Date

APPROVED HOWARD DEPARTMENT OF PUBLIC WORKS CHIEF, BUREAU OF HIGHWAYS

APPROVED: HOWABOUSGOLUNITY DEPARTMENT OF PLANING AND ZONING CHAD Edmondson 6/6/2023

CHIEF, DEVELOPMENTONNEERING DIVISION 6/8/2023

CHIEF, DIVISION OF LAND DEVELOPMENT

DESIGN CERTIFICATION: I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERRVATION DISTRICT."

10/27/2022 DESIGN SIGNATURE RICHARD SOBBOTT MD REGISTRATION NO. <u>15222</u>

PRINTED NAME

(P.E.), R.L.S., OR R.L.A. (circle one)

OWNER/DEVELOPER CERTIFICATION: "I/WE CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND/OR MDE."

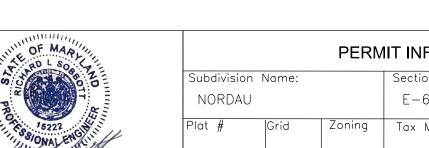
10/12/2022 OWNER/DEVELOPER SIGNATURE Bronzwyn M. Palmer, Owner David P. Lunden, President, Timberlake Building and Renovations, LLC

PRINTED NAME & TITLE



Richard Sobbott

RICHARD SOBBOTT, PE NO. 15222



PERMIT INFORMATION CHART								
Subdivision	Name:		Section/Area		Lot No.	Parcel No.		
NORDAU			E-6		8,9,10	142		
Plat #	Grid	Zoning	Tax Map No.	Elect. District	Census Tract			
20317	0024	R-12	0042	SIXTH	606901			
Water Code			Sewer Code					

SCALE IN FEET

OWNER/DEVELOPER

MYRICK CABASSA, JAMES ROBERT HUNT GUEL A. CABASSA JR. SHANNON M. HUNT 01 JONES ROAD 7915 HAZEL WAY SSUP MD, 20794 JESSUP MD, 20794 WARD COUNTY | HOWARD COUNTY ATTN:lyncaba@gmail.com

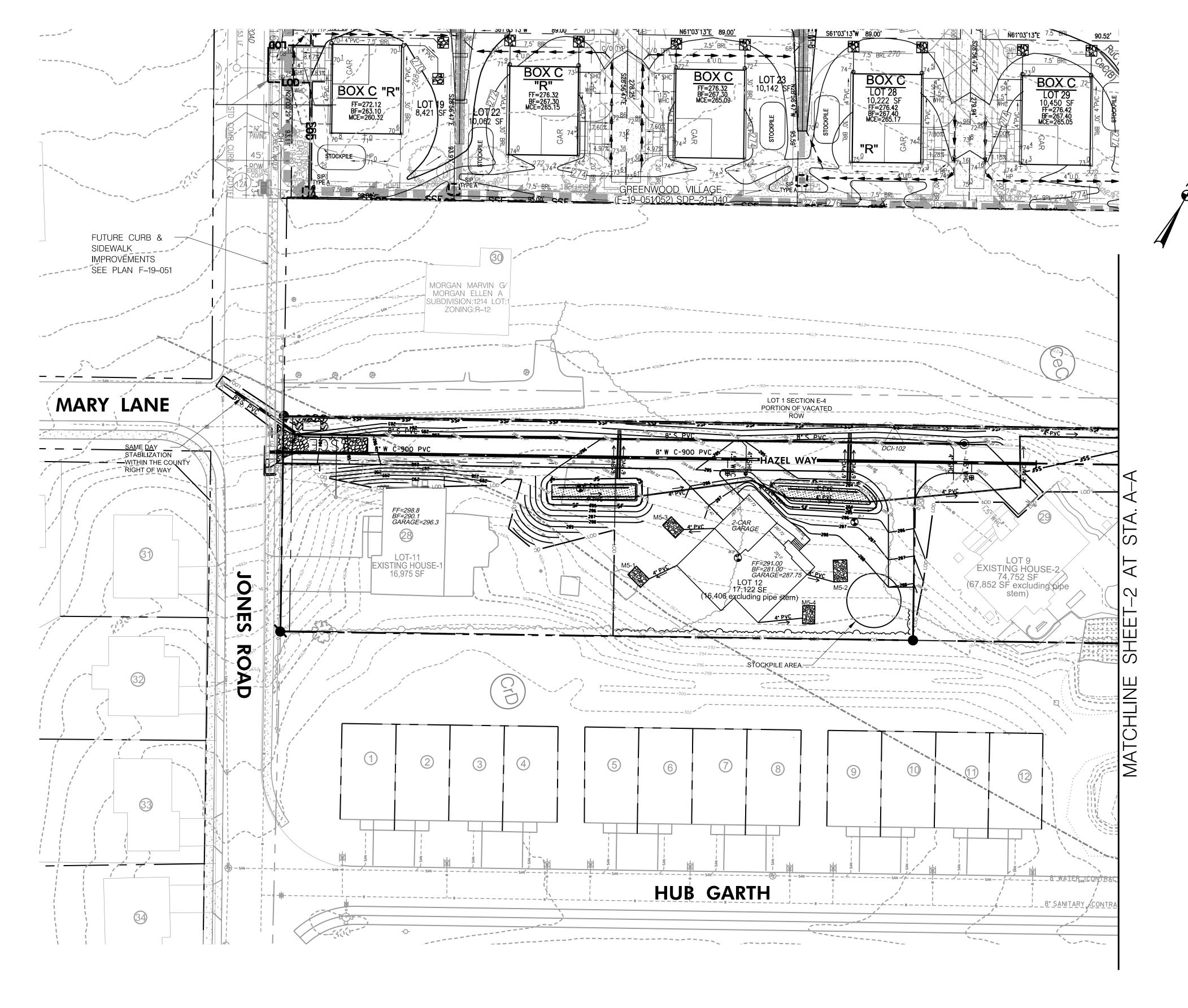
PHONÉ:(301)725-3960



EXISTING SEDIMENT AND EROSION CONTROL PLAN - II

NORDAU, SECTION E-2, LOTS 11-12 A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8

DESIGN BY ____BW drawn by BW CHECKED BY RLS scale: <u>AS SHOWN</u> DATE: 1<u>1/01/202</u>2 W. O. No. :_____ SHEET No. <u>13</u> OF <u>18</u>



SEQUENCE OF CONSTRUCTION

NOTE: HOUSES MAY NOT BE BUILT USING THIS PLAN.

1. OBTAIN GRADING PERMIT.- 1 DAY

2. DEVELOPER/CONTRACTOR SHALL REQUEST A PRE-CONSTRUCTION MEETING WITH THE APPROPRIATE ENFORCEMENT AUTHORITY PRIOR TO BEGINNING CONSTRUCTION.- 1 DAY 3. NOTIFY HOWARD COUNTY BUREAU OF INSPECTIONS AND PERMITS (410-313-1880) AT

LEAST 24 HOURS BEFORE STARTING ANY WORK.- 1 DAY

4. STAKEOUT LIMITS OF DISTURBANCE.- 1 DAY

5. INSTALL STABILIZED CONSTRUCTION ENTRANCE AND SSF, WHERE SHOWN HEREON.— 1 DAY 6. COMPLETE ANY REQUIRED CLEARING AND GRUBBING ONSITE AREA FOR THE INSTALLATION OF PERIMETER CONTROLS.

7. THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROLS SHOWN HEREON AFTER EACH RAINFALL AND ON A DAILY BASIS.— 1 DAY

8. INSTALL USE-IN-COMMON DRIVEWAY CULVERTS AND STABILIZE WITH RIPRAP.— 4 DAYS
9. CONSTRUCT ESD MICRO-BIORETENTION FACILITIES. STABILIZE SIDE SLOPES WITH SOD AND

SURROUND FACILITIES WITH SILT FENCE.— 5 DAYS

10. BEGIN CONSTRUCTION OF INDIVIDUAL HOMES (REFER TO ASSOCIATED BUILDER SDP).

PROTECT ANY INSTALLED ESD FACILITIES FROM RECEIVING DIRTY RUNOFF.

11. UPON COMPLETION OF PROJECT HOME CONSTRUCTION AND WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, COMPLETE ANY REMAINING FINE GRADING IN ACCORDANCE WITH STORMWATER MANAGEMENT CRITERIA, ADD TOPSOIL PER THE SPECIFICATIONS SHOWN HEREON, AND STABILIZE DISTURBED AREAS WITH PERMANENT SEEDING MIXTURE AND STRAW MULCH.— 5 DAYS

12. INSTALL LANDSCAPPING.- 3 DAYS

13. WITH PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR, REMOVE ANY REMAINING PERIMETER EROSION AND SEDIMENT CONTROLS AND STABILIZE THESE DISTURBED AREAS WITH PERMANENT SEEDING MIXTURE AND STRAW MULCH.— 7 DAYS

NOTE: ANY CHANGES OR REVISIONS TO THE SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE PLAN APPROVAL AUTHORITY PRIOR TO PROCEEDING WITH CONSTRUCTION.

1. STABILIZATION IS TO BE DONE AT THE DIRECTION OF THE SEDIMENT

CONTROL INSPECTOR OR AT THE INTERVALS REQUIRED A THE 2011 STDS.

& SPECS. WHICHEVER IS MORE RESTRICTIVE 2. LOCATE STOCKPILE AS SHOWN HEREON

OR AS DIRECTED BY THE SEDIMENT CONTROL INSPECTOR. ANY STOCKPILES EXCEEDING 15 FEET IN HEIGHT SHALL BE BENCHED.

3. SILT FENCE IS TO BE REPLACED WITH SUPER SILT FENCE AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.

4. SILT FENCE SHALL BE CURLED UPHILL NO MORE THAN 35 FEET APART.
5. DOUBLE ROWS OF SUPER SILT FENCE SHALL BE INSTALLED AT THE DIRECTION

OF THE SEDIMENT CONTROL INSPECTOR.

NOTE:

- HOUSE MAY NOT BE BUILT USING THIS

- THE HOWARD SCD STANDARD SEDIMENT CONTROL PLAN MAY NOT BE USED TO OBTAIN PERMITS FOR THIS PROJECT.

EROSION AND SEDIMENT CONTROL NOTES:

1. EITHER PERMANENT OR TEMPORARY STABILIZATION IS TO BE APPLIED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR REGARDLESS OF DAYS/DATES IN THE STANDARD SEDIMENT CONTROL NOTES AND/OR SEEDING SPECIFICATIONS.

2. AT NO TIME DURING CONSTRUCTION WILL FENCING BE ALLOWED TO INTERCEPT CONCENTRATION FLOWS.

3. A DOUBLE ROW OF SSF MAY BE REQUIRED AT THE DOWNHILL BOUNDARY

4. SOILS CONSIDERED HIGHLY ERODIBLE BY THE HOWARD SOIL CONSERVATIVE DISTRICT MAY REQUIRE MORE STRINGENT SEEDING AND STABILIZATION METHODS.

This development plasification proved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT. 6/6/2023

"I hereby 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 with the requirements of the Howard Soil

Muchan Jahr 05/1
Signature of Engineer [print_name below signature] Date

"I/We certify that all development and construction will be done according to this plan of development for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic onsite inspections by the Howard Soil Conservation District."

Brongwyn Palmer 05/17/.
Signature of Developer [print name below signature] Date

HYDROLOGIC SOIL GROUP MAP UNIT RATING K-VALUE SYMBOL NAME 0.43 Chillium Loam, 5%-10% slope Croom and Evesboro soils, 10%-15% CrD0.32 Evesboro Loamy Sand, 2%-10% EbC 0.02 Russett and Beltsville soils, 2%-5% 0.28 Russett and Beltsville soils, 5%-10% 0.28

LEGENDS

PROPOSED CONTOUR

LIMIT OF DISTURBANCE

STABILIZED CONSTRUCTION ENTRNACE

SUPER SILT FENCE

SILT FENCE

CE — LOD — LOD — LOTION ENTRNACE — SSF — LOSS — LOS

0 30 60 15 45 1"=30' 120 SCALE IN FEET

PROPOSED SEDIMENT AND EROSION CONTROL PLAN - I NORDAU, SECTION E-2, LOTS 11-12 A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8

OWNED/DEVI

PERMIT INFORMATION CHART

OWNER/DEVELOPER

LYN MYRICK CARASSA LIAMES RORI

No.
LYN MYRICK CABASSA, JAMES ROBERT HUNT
MIGUEL A. CABASSA JR. SHANNON M. HUNT
8001 JONES ROAD 7915 HAZEL WAY
JESSUP MD, 20794
HOWARD COUNTY HOWARD COUNTY
ATTN:lyncaba@gmail.com

PHONE:(301)725-3960

DANIEL CONSULTANTS INC.
CONSULTING, ENGINEERS AND PLANNERS
8950 ROUTE 108 E., SUITE 229
COLUMBIA, MD 21043
TEL: 410-995-0090 FAX: 410-992-7038

APPROVED HOWARDOUS GOLD TO PUBLIC WORKS

6/8/2023

CHIEF, BUREAU OF HIGHWAYS

DATE

APPROVED: HOWARD USG RELIANTY DEPARTMENT OF PLANING AND ZONING

(HID Edmondson

70635754EF41499...

CHIEF, DEVELO MEDICUSION 6/8/Z023

CHIEF, DIVISION OF LAND DEVELOPMENT

ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT
CONTROL LAWS, REGULATIONS AND STANDARDS, THAT IT REPRESENTS A
PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE
OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE
REQUIREMENTS OF THE HOWARD SOIL CONSERRVATION DISTRICT."

10/27/2022
DESIGN SIGNATURE
DATE

MD REGISTRATION NO. <u>15222</u>

(P.E.), R.L.S., OR R.L.A. (circle one)

HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN

DESIGN CERTIFICATION:

RICHARD SOBBOTT

PRINTED NAME

OWNER/DEVELOPER CERTIFICATION:

"I/WE CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR
DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION
AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING
CONTROLS, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE
CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A
MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING
PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO
BEGINNING THE PROJECT. I CERTIFY RIGHT—OF—ENTRY FOR PERIODIC
ON—SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL
CONSERVATION DISTRICT AND/OR MDE."

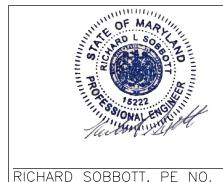
CONSERVATION DISTRICT AND/OR MDE."

Brongwyn Palmar Day Lunden, President, Timberlake Building and Renovations, LLC

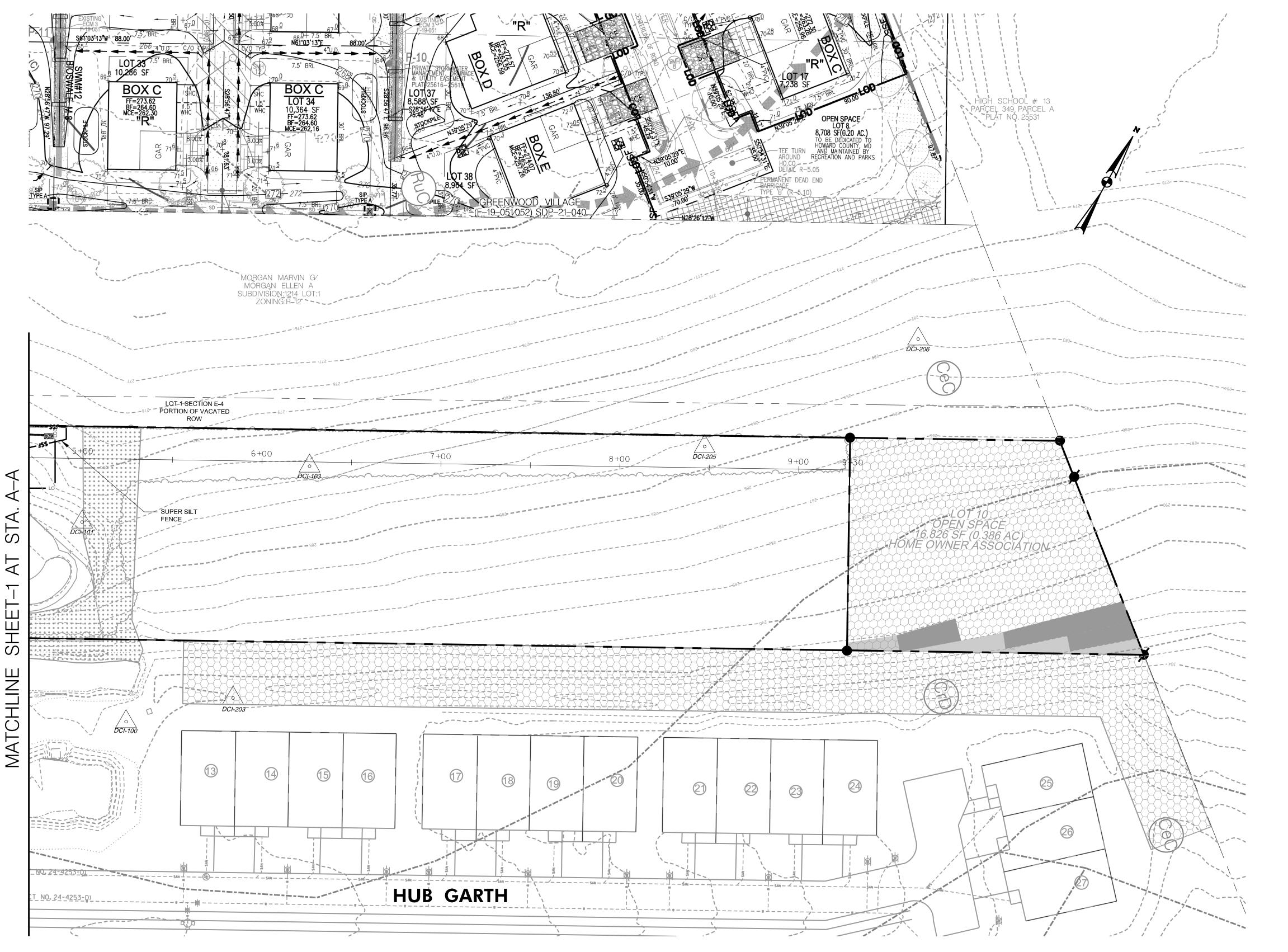
PRINTED NAME & TITLE



Richard Sobbott



	Subdivision N	Name:		Section/Area		Lot No.	Parcel No.	LYN M
	NORDAU			E-6		8,9,10	142	MIGUEL 8001
	Plat #	Grid	Zoning	Tax Map No.	Elect. District	Census Tract	,	JESSUF HOWAR
	20317	0024	R-12	0042	SIXTH	606901		
	Water Code			Sewer Code				
15222								



	HYDROLOGIC SOIL	GROUP	
MAP UNIT SYMBOL	MAP UNIT NAME	RATING	K-VALUE
CeC	Chillium Loam, 5%-10% slope	С	0.43
CrD	Croom and Evesboro soils, 10%-15% slopes	С	0.32
EbC	Evesboro Loamy Sand, 2%-10% slopes	А	0.02
RuB	Russett and Beltsville soils, 2%—5% slopes	С	0.28
RuC	Russett and Beltsville soils, 5%—10% slopes	С	0.28

LEGENDS PROPOSED CONTOUR STABILIZED CONSTRUCTION ENTRNACE SUPER SILT FENCE SILT FENCE

DEVELOPMENT SHOWN IN GREY AFTER STA 4+10 IS THE FUTURE EXTENSION WILL BE DEVELOPED IN PHASE 2.



ENGINEER'S CERTIFICATE practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District." Nichard Saltet Signature of Engineer [print name below signature] Date DEVELOPER'S CERTIFICATE "I/We certify that all development and construction will be done according to this plan of development for sediment and erosion control, and that all responsible

personnel involved in the construction project will have a Certificate of Attendance at a Department of Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on site inspections by the Howard Soil Conservation District."

Brongwyn Palmer 05/1

Signature of Developer [print name below signature] Date

APPROVED HOWARD DEPARTMENT OF PUBLIC WORKS CHIEF, BUREAU OF HIGHWAYS

APPROVED: HOWABOUSGOLUNITY DEPARTMENT OF PLANING AND ZONING

CHIEF, DEVELOPMENTONNEERING DIVISION 6/8/2023

REQUIREMENTS OF THE HOWARD SOIL CONSERRVATION DISTRICT." DESIGN SIGNATURE RICHARD SOBBOTT MD REGISTRATION NO. 15222 CHIEF, DIVISION OF LAND DEVELOPMENT (P.E.), R.L.S., OR R.L.A. (circle one) PRINTED NAME

DESIGN CERTIFICATION:

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN

ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT

CONTROL LAWS, REGULATIONS AND STANDARDS, THAT IT REPRESENTS A

PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE

OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE

OWNER/DEVELOPER CERTIFICATION: "I/WE CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL

CONSERVATION DISTRICT AND/OR MDE." 10/12/2022 OWNER/DEVELOPER SIGNATURE David P. Lunden, President, Timberlake Building and Renovations, LLC

PRINTED NAME & TITLE



RICHARD SOBBOTT, PE NO. 15222



8,9,10

606901

Subdivision Name: NORDAU E-6Tax Map No. | Elect. District | Census Tract 0042

OWNER/DEVELOPER LYN MYRICK CABASSA. LJAMES ROBERT HUNT MIGUEL A. CABASSA JR. SHANNON M. HUNT

8001 JONES ROAD 7915 HAZEL WAY JESSUP MD, 20794 JESSUP MD, 20794 HOWARD COUNTY HOWARD COUNTY ATTN:lyncaba@gmail.com PHONÉ:(301)725-3960

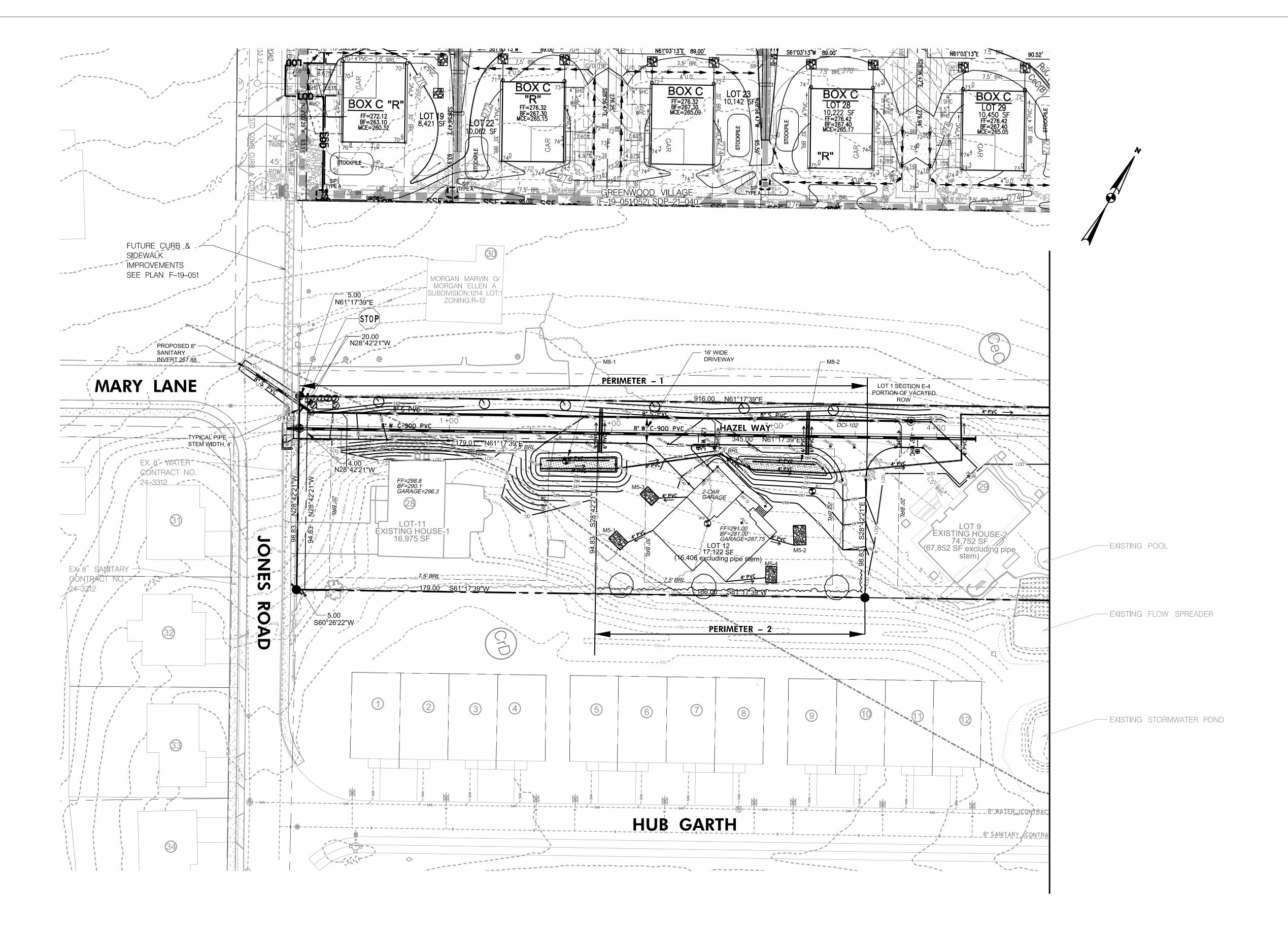


TEL: 410-995-0090 FAX: 410-992-7038

PROPOSED SEDIMENT AND EROSION CONTROL PLAN - II

NORDAU, SECTION E-2, LOTS 11-12 A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8

design by ____BW drawn by BW CHECKED BY RLS SCALE: AS SHOWN DATE: 11/01/2022 W. O. No. :_____ SHEET No. <u>15</u> OF <u>18</u>



LANDSCAPE NOTES:

1. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH TH PROVISION OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL.

2. STREET TREE LOCATIONS:

A. WHEN THE DISTANCE BETWEEN THE CURB AND SIDEWALK IS 6 FEET OR GREATER, THE TREES SHALL BE LOCATED WITHIN THE RIGHT-OF-WAY AND SHALL BE CENTERED BETWEEN THE CURB AND SIDEWALK.

B. WHEN THE DISTANCE BETWEEN THE CURB AND SIDEWALK IS LESS THAN 6 FEET, TREES MAY BE PLANTED 3 FEET FROM THE SIDEWALK IN THE DIRECTION AWAY FROM THE ROAD. A 10-FOOT WIDE TREE MAINTENANCE EASEMENT SHALL BE REQUIRED IF THE RIGHT-OF-WAY IS LIMITED.

C. TREES SHALL BE PLANTED 6 FEET BEHIND CURB WHEN THERE ARE NO SIDEWALKS. D. TREES TO BE PLANTED MINIMUM 30 FEET FROM SIGNS AND INTERSECTIONS WHEN PLANTED BETWEEN SIDEWALK AND CURB. TREES MAY NOT BE PLANTED WITHIN 5 FEET OF A STORM DRAIN INLET, OPEN SPACE ACCESS STRIP, OR 10 FEET OF A DRIVEWAY.

3. AT THE TIME OF INSTALLMENT, 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 RELOCATION 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 RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATIONS. 4. THE OWNER, TENANTS AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING INCLUDING BOTH PLANT MATERIAL AND BERMS, 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.

5. THE LANDSCAPE PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED 9 SHADE TREES AND 6 SHRUBS, THE AMOUNT OF \$2,880.00, SHALL BE POSTED AS PART OF THE BUILDERS GRADING PERMIT WITH THE FUTURE SITE DEVELOPMENT PLAN FOR SUBDIVISION.

SCHEDULE A PERIMETER LANDSCAPE EDGE								
CATEGORY	ADJACENT TO PER	IMETER PROPERTIES						
PERIMETER/FRONTAGE DESIGNATION LANDSCAPE TYPE	1 A	2 A						
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	350'	166'						
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) REMAINING PERIMETER LENGTH	NO	NO						
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) REMAINING PERIMETER LENGTH	NO	NO						
NUMBER OF PLANTS REQUIRED: SHADE TREES EVERGREEN TREES SHRUBS	1:60 6	1:60 3						
NUMBER OF PLANTS PROVIDED: SHADE TREES EVERGREEN TREES OTHER TREES (2:1 SUBSTITUTION) SHRUBS (10:1 SUBSTITUTION) (DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED) OTHERS	1:60 6 - - -	1:60 3 - - -						

	<u>Plant list chart</u>								
KEY	REQUIRED BOTANICAL NAME SIZE ROO								
	6	ACRER RUBRUM RED MAPLE	$2\frac{1}{2}$ "-3" CAL.	B & B					
$\overline{}$	3	QUERCUS RUBRA RED OAK	$2\frac{1}{2}$ "-3" CAL.	В & В					
	6	ILEX GLABRA INKBERRY	#2	CONTAINER GROWN					

LANDSCAPE PLAN-1 NORDAU, SECTION E-2, LOTS 11-12 A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8

APPROVED HOWARD CORPORATION OF PUBLIC WORKS CHIEF, BUREAU OF HIGHWAYS

APPROVED: HOWARDUSGREUDY:TY DEPARTMENT OF PLANING AND ZONING 6/6/2023 CHAD Edmondson

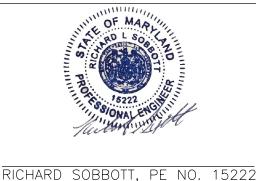
CHIEF, DEVELOPMENT DATE 6/8/2023

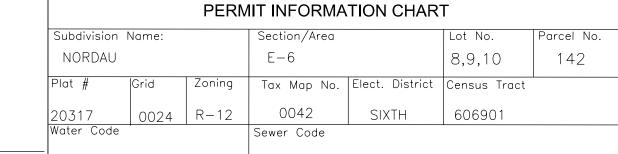
CHIEF, DIVISION OF LAND DEVELOPMENT

— DocuSigned by:

Richard Sobbott







SCALE IN FEET

OWNER/DEVELOPER LYN MYRICK CABASSA, JAMES ROBERT HUNT MIGUEL A. CABASSA JR. SHANNON M. HUNT 8001 JONES ROAD 7915 HAZEL WAY JESSUP MD, 20794 JESSUP MD, 20794 HOWARD COUNTY HOWARD COUNTY ATTN:lyncaba@gmail.com

PHONÉ:(301)725-3960



design by ____BW drawn by BW CHECKED BY___RLS scale: <u>AS SHOWN</u> DATE: 11/01/2022 W. O. No. :_____ SHEET No. <u>16</u> OF <u>18</u>

APPENDIX B.4.C SPECIFICATIONS FOR MICRO-BIORETENTION, RAIN GARDEN, LANDSCAPE INFILTRATION & INFILTRATION BERMS

THE ALLOWABLE MATERIALS TO BE USED IN THESE PRACTICES ARE DETAILED IN TABLE B.4.1.

2. FILTERING MEDIA OR PLANTING SOIL

THE SOIL SHALL BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES. NO OTHER MATERIALS OR SUBSTANCES SHALL BE MIXED OR DUMPED WITHIN THE MICRO-BIORETENTION PRACTICE THAT MAY BE HARMFUL TO PLANT GROWTH, OR PROVE A HINDRANCE TO THE PLANTING OR MAINTENANCE OPERATIONS. THE PLANTING SOIL SHALL BE FREE OF BERMUDA GRASS, QUACKGRASS, JOHNSON GRASS,OR OTHER NOXIOUS WEEDS AS SPECIFIED UNDER COMAR 15.08.01.05.

THE PLANTING SOIL SHALL BE TESTED AND SHALL MEET THE FOLLOWING CRITERIA:

* SOIL COMPONENT - LOAMY SAND OR SANDY LOAM (USDA SOIL TEXTURAL CLASSIFICATION).

* ORGANIC CONTEN - MINIMUM 10% BY DRY WEIGHT (ASTM D 2974). IN GENERAL, THIS CAN BE MET WITH A MIXTURE OF LOAMY SAND(60%-65%) AND COMPOST (35% TO 40%) OR SANDY LOAM (30%), COARSE SAND (30%), AND COMPOST (40%). * CLAY CONTENT - MEDIA SHALL HAVE A CLAY CONTENT OF LESS THAN 5%.

* PH RANGE - SHOULD BE BETWEEN 5.5 - 7.0. AMENDMENTS (E.G., LIME, IRON SULFATE PLUS SULFUR) MAY BE MIXED IN TO THE SOIL TO INCREASE OR DECREASE PH. THERE SHALL BE AT LEAST ONE SOIL TEST PER PROJECT. EACH TEST SHALL CONSIST OF BOTH THE STANDARD SOIL TEST FOR PH, AND ADDITIONAL TESTS OF ORGANIC MATTER, AND SOLUBLE SALTS. A TEXTURAL ANALYSIS IS REQUIRED FROM THE SITE STOCKPILED TOPSOIL. IF TOPSOIL IS IMPORTED, THEN A TEXTURE ANALYSIS SHALL BE PERFORMED FOR EACH LOCATION WHERE THE TOPSOIL WAS EXCAVATED.

3. COMPACTION

IT IS VERY IMPORTANT TO MINIMIZE COMPACTION OF BOTH THE BASE OF BIORETENTION PRACTICES AND THE REQUIRED BACKFILL. WHEN POSSIBLE, USE EXCAVATION HOES TO REMOVE ORIGINAL SOIL. IF PRACTICES ARE EXCAVATED USING LOADER, THE CONTRACTOR SHOULD USE WIDE TRACK OR MARSH TRACK EQUIPMENT, OR LIGHT EQUIPMENT WITH TURF TYPE TIRES. USE OF EQUIPMENT WITH NARROW TRACKS OR NARROW TIRES, RUBBER TIRES WITH LARGE LUGS, OR HIGH-PRESSURE TIRES WILL CAUSE EXCESSIVE COMPACTION RESULTING IN REDUCED INFILTRATION RATES AND IS NOT ACCEPTABLE. COMPACTION WILL SIGNIFICANTLY CONTRIBUTE TO DESIGN FAILURE.

COMPACTION CAN BE ALLEVIATED AT THE BASE OF THE BIORETENTION FACILITY BY USING A PRIMARY TILLING OPERATION SUCH AS CHISEL PLOW, RIPPER, OR SUBSOILER. THESE TILLING OPERATIONS ARE TO REFRACTURE THE SOIL PROFILE THROUGH THE 12 INCH COMPACTION ZONE. SUBSTITUTE METHODS MUST BE APPROVED BY THE ENGINEER. ROTOTILLERS TYPICALLY DO NOT TILL DEEP ENOUGH TO REDUCE THE EFFECTS OF COMPACTION FROM HEAVY EQUIPMENT.

ROTOTILL 2 TO 3 INCHES OF SAND INTO THE BASE OF THE BIORETENION FACILITY BEFORE BACKFILLING THE OPTIONAL SAND LAYER. PUMP ANY PONDED WATER BEFORE PREPARING (ROTOTILLING) BASE.

WHEN BACKFILLING THE TOPSOIL OVER THE SAND LAYER, FIRST PLACE 3 TO 4 INCHES OF TOPSOIL OVER THE SAND, THEN ROTOTILL THE SAND/TOPSOIL TO CREATE A GRADATION ZONE. BACKFILL THE REMAINDER OF THE TOPSOIL TO FINAL GRADE. WHEN BACKFILLING THE BIORETENTION FACILITY, PLACE SOIL IN LIFTS 12" TO 18". DO NOT USE HEAVY EQUIPMENT WITHIN THE HEAVY EQUIPMENT CAN BE USED AROUND THE PERIMETER OF THE BASIN TO SUPPLY SOILS AND SAND. GRADE BIORETENTION

MATERIALS WITH LIGHT EQUIPMENT SUCH AS A COMPACT LOADER OR A DOZER/LOADER WITH MARSH TRACKS.

RECOMMENDED PLANT MATERIAL FOR MICRO-BIORETENTION PRACTICES CAN BE FOUND IN APPENDIX A, SECTION A.2.3.

COMPOST IS A BETTER ORGANIC MATERIAL SOURCE, IS LESS LIKELY TO FLOAT, AND SHOULD BE PLACED IN THE INVERT AND OTHER LOW AREAS. MULCH SHOULD BE PLACED IN SURROUNDING TO A UNIFORM THICKNESS OF 2" TO 3". SHREDDED OR CHIPPED HARDWOOD MULCH IS THE ONLY ACCEPTED MULCH. PINE MULCH AND WOOD CHIPS WILL FLOAT AND MOVE TO THE PERIMETER OF THE BIORETENTION AREA DURING A STORM EVENT AND ARE NOT ACCEPTABLE. SHREDDED MULCH MUST BE WELL AGED (6 TO 12 MONTHS) FOR ACCEPTANCE.

ROOTSTOCK OF THE PLANT MATERIAL SHALL BE KEPT MOIST DURING TRANSPORT AND ON-SITE STORAGE. THE PLANT ROOT BALL SHOULD BE PLANTED SO 1/8TH OF THE BALL IS ABOVE FINAL GRADE SURFACE. THE DIAMETER OF THE PLANTING PIT SHALL BE AT LEAST SIX INCHES LARGER THAN THE DIAMETER OF THE PLANTING BALL. SET AND MAINTAIN THE PLANT STRAIGHT DURING THE ENTIRE PLANTING PROCESS. THOROUGHLY WATER GROUND BED COVER AFTER INSTALLATION.

TREES SHALL BE BRACED USING 2" BY 2" STAKES ONLY AS NECESSARY AND FOR THE FIRST GROWING SEASON ONLY. STAKES ARE TO BE EQUALLY SPACED ON THE OUTSIDE OF THE TREE BALL.

GRASSES AND LEGUME SEED SHOULD BE DRILLED INTO THE SOIL TO A DEPTH OF AT LEAST ONE INCH. GRASS AND LEGUME PLUGS SHALL BE PLANTED FOLLOWING THE NON-GRASS GROUND COVER PLANTING SPECIFICATIONS. THE TOPSOIL SPECIFICATIONS PROVIDE ENOUGH ORGANIC MATERIAL TO ADEQUATELY SUPPLY NUTRIENTS FROM NATURAL CYCLING. THE PRIMARY FUNCTION OF THE BIORETENTION STRUCTURE IS TO IMPROVE WATER QUALITY, ADDING FERTILIZERS DEFEATS, OR AT A MINIMUM, IMPEDES THIS GOAL. ONLY ADD FERTILIZER IF WOOD CHIPS OR MULCH ARE USED TO AMEND THE SOIL. ROTOTILL UREA FERTILIZER AT A RATE OF 2 POUNDS PER 1000 SQUARE FEET.

UNDERDRAIN

UNDERDRAINS SHOULD MEET THE FOLLOWING CRITERIA:

* PIPE - SHOULD BE 4" TO 6" DIAMETER, SLOTTED OR PERFORATED RIGID PLASTIC PIPE (ASTMF 758, TYPE PS 28, OR AASHTO-M-278) IN A GRAVEL LAYER. THE PREFERRED MATERIAL IS SLOTTED, 4" RIGID PIPE (E.G., PVC OF HDPE). * PERFORATIONS - IF PERFORATED PIPE IS USED, PERFORATIONS SHOULD BE 3/8" DIAMETER LOCATED 6" ON CENTER WITH A MINIMUM OF FOUR HOLES PER ROW. PIPE SHALL BE WRAPPED WITH A 1/4" (NO. 4 OR 4x4) GALVANIZED HARDWARE CLOTH. * GRAVEL - THE GRAVEL LAYER (NO. 57 STONE PREFERRED) SHALL BE AT LEAST 3" THICK ABOVE AND BELOW THE

UNDERDRAIN. * THE MAIN COLLECTOR PIPE SHALL BE AT A MINIMUM 0.5% SLOPE.

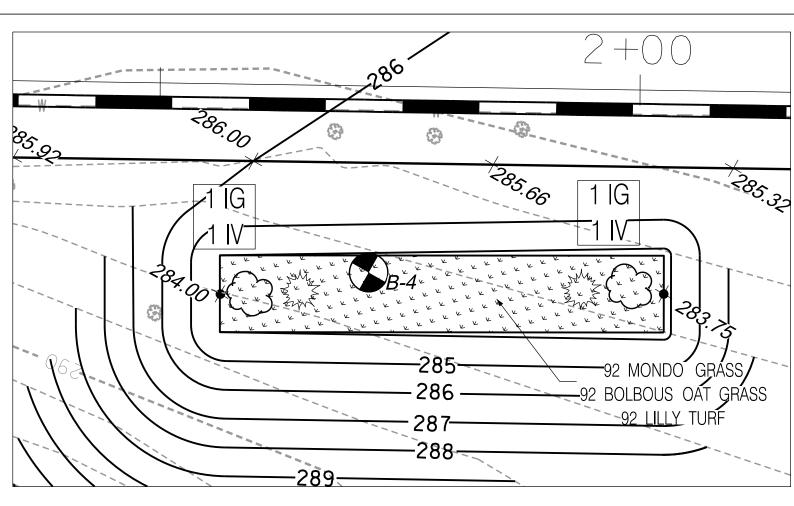
* A RIGID, NON-PERFORATED OBSERVATION WELL MUST BE PROVIDED (ONE PER EVERY 1,0000 SQUARE FEET) TO PROVIDE A CLEAN-OUT PORT AND MONITOR PERFORMANCE OF THE FILTER.

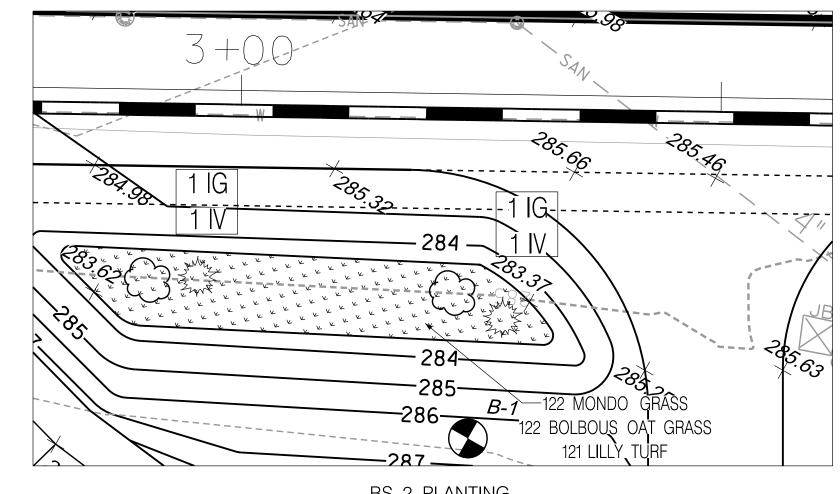
* A 4" LAYER OF PEA GRAVEL (1/8" TO 3/8" STONE) SHALL BE LOCATED BETWEEN THE FILTER MEDIA AND UNDERDRAIN TO PREVENT MIGRATION OF FINES IN TO THE UNDERDRAIN. THIS LAYER MAY BE CONSIDERED PART OF THE FILTER BED WHEN BED THICKNESS EXCEEDS 24".

THIS MAIN COLLECTOR PIPE FOR UNDERDRAIN SYSTEMS SHALL BE CONSTRUCTED AT A MINIMUM SLOPE OF 0.5%. OBSERVATION WELLS AND/OR CLEAN-OUT PIPES MUST BE PROVIDED (ONE MINIMUM PER EVERY 1000 SQUARE FEET OF SURFACE AREA).

7. MISCELLANEOUS

THESE PRACTICES MAY NOT BE CONSTRUCTED UNTIL ALL CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.





BS-2 PLANTING

PROJECT: Palmer Subdivision

PAGE 01 OF 01

1365782.26, 540856.50

STRATA SAMPLE

DEPTH DEPTH

0 TO 0 75 F

0.75-2.5 FT

2.5-5.0 FT

METHOD GROUND

HSA

285.93

LOCATION: Howard County, Maryland

HSA-HOLLOW STEM

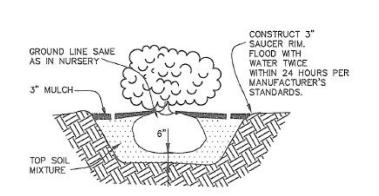
SSA- SOLID STEM AUGERS

DC DRIVING

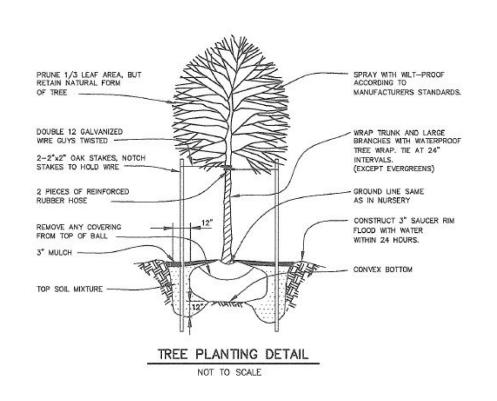
MD- MUD DRILLING

NO. BLOWS/6" TYPE/SIZE REC/ATT

DC-CASING



SHRUB PLANTING DETAIL



PLANTING SCHEDULE (SHRUB/ORNIMENTAL GRASSES)									
LEGEND/KEY QTY		BOTANICAL NAME/COMMON NAME	SIZE	REMARKS					
	4	ILEX GLABRA "SHAMROCK" INKBERRY HOLLEY	1 GALLON	-					
My IV	4	ITEA VIRGINICA 'HENRY'S GARNETT' VIRGINIA SWEETSPIRE	1 GALLON	_					

BIO – SWALE FACILITY PLANTING SCHEDULE (SHRUB/ORNIMENTAL GRASSES) SWALE FACILITY MULCH FOOTPRINT PLANTING OR EQUAL SUBSTITUTION MONDO GRASS BULBOUS OAT GRASS LILY TURF # SF NUMBER SF SF M8-1 276 92 92 92 M8-2 365 122 122 121 TOTAL 641 214 214 214 213												
SWALE FACILITY MULCH FOOTPRINT PLANTING OR EQUAL SUBSTITUTION # SF MONDO GRASS BULBOUS OAT GRASS LILY TURF # SF NUMBER SF SF M8-1 276 92 92 92 M8-2 365 122 122 121	BIO-SWALE FACILITY											
FACILITY FOOTPRINT MONDO GRASS BULBOUS OAT GRASS LILY TURF # SF NUMBER SF SF M8-1 276 92 92 92 M8-2 365 122 122 121	PLANTING SCHEDULE (SHRUB/ORNIMENTAL GRASSES)											
# SF NUMBER SF SF SF M8-1 276 92 92 92 92 121												
M8-1 276 92 92 92 M8-2 365 122 122 121	FACILITY	FOOTPRINT	MONDO GRASS	BULBOUS OAT GRASS	LILY TURF							
M8-2 365 122 122 121	#	SF	NUMBER	SF	SF							
	M8-1	276	92	92 92								
TOTAL 641 214 214 213	M8-2	365	122	122								
211 211	TOTAL	641	214	214	213							

BIO-SWALE PLANTING SCHEDULE									
BOTANICAL NAME/ COMMON NAME	SIZE	REMARKS							
MONDO GRASS (OPHIOPOGON JAPONICUS)	3" POT	1' O.C.							
BULBOUS OAT GRASS (ARRHENATHERUM EALTIUS BULBOSUM)	3" POT	1' O.C.							
LIRIOPE MUSCARI 'MAJESTIC' MAJESTIC LILY TURF	3" POT	1' O.C.							

					9.2					
10 FT.					10.0					
				•	I					
					BORIN	NG LOG				
PROJECT:	Palmer Subdivis				DOM	TO EOG	COMMISION	2		
PROJECT:	Paimer Subdivis	sion					NO:	2		
OCATION:	Howard County	Mamiland					DATE	3/22/202	2	
LOCATION:	Thoward County	, iviai yiaiid					DATE:	3/22/202	<u> </u>	
BORING NO.	B-2		BORI	NG METHOD		SAN	APLER TYPE		GROUNI	WATER DEPT
PAGE	01 OF 01		HSA-	HOLLOW STEM		DS-	DRIVEN SPLIT		AT	DRY
BORING	01 01 01		- 115/1	AUGERS SOLID STEM			SPOON PRESSED	_	COMPLETION	
METHOD	HSA		SSA-	AUGERS		PT-	SHELBY TUBE		AFTER	24 HRS.
GROUND	288.15		DC-	DRIVING		D-	DENISON		AFTER	HRS.
ELE.				CASING		D-	DENISON	_	AFTER	TIKS.
COORDINATI 1365735.92, 540			MD-	MUD DRILLING		P-	PITCHER		CAVED DEPTH	N/A I
1303733.72, 340	0007.44								1	
STRATA	SAMPLE			SAMPLE				D	ESCRIPTION	
DEPTH	DEPTH	NO.	BLOWS/6"	TYPE/SIZE	REC/ATT		(COLOR, DI	ENSITY, N	MOISTURE, PROPOR	TION, ETC.)
	0-0.75 FT				0.4	Dark brow	n silt with large amo	ount of orga	anic matter.	
	0.75-3 FT				0.8	1.2				
	0.75-51-1				1.6					
2 FT.						-1	own silt with coarse	sand and 1	/2" rounded quartz grave	:1.
					2.4					
					2.8					
	3-4 FT				3.2		own medium sand a	nd 1/2" rou	nded quartz gravel	
4 FT.	3-411				4.0		own inecium sand a	nu 1/2 10u	nded quartz graver.	
	4.0-5.3 FT				4.4					
					4.8	Yellow bro	own medium sand a	nd lens of v	vhite lean clav.	
		_			5.2]				
6 FT.	5.3-6.8 FT				5.6	-1				
011.	3.5 0.611						te silt with veins of	yellow brov	wn fine sand.	
					6.8			•		
	6.8-7.8 FT				7.2		own silt with coarse	sand and 1	/2" rounded quartz grave	1.
0.777	1kL				7.6					
8 FT.	-				8.0 8.4	•				
					8.8	4				
					9.2	4				
					9.6	-				
10 FT.					10.0					

					BORING	G LOG					
PROJECT:	Palmer Subdivis	ion				COMMISION 2 NO:					
LOCATION:	Howard County	, Maryland					DATE:	0/28/2022			
BORING NO.	B-4		BORING	G METHOD		SAN	IPLER TYPE	GROUNI	WATER DEPTH		
PAGE	01 OF 01			HOLLOW STEM AUGERS		DS-	DRIVEN SPLIT SPOON	AT COMPLETION	DRY FT.		
BORING METHOD	HSA			SOLID STEM AUGERS		PT-	PRESSED SHELBY TUBE	AFTER	24 HRS. 9 FT.		
GROUND ELE.	287.28		DC-	DRIVING CASING		D-	DENISON	AFTER	HRS. FT.		
COORDINAT 1365640.91, 5				MUD DRILLING		P-	PITCHER	CAVED DEPTH	N/A FT.		
STRATA	SAMPLE		SA	AMPLE				DESCRIPTION			
DEPTH	DEPTH	NO.	BLOWS/6"	TYPE/SIZE	REC/ATT		(COLOR, DENS	ITY, MOISTURE, PROPO	RTION, ETC.)		
	0-0.85 FT				0.4	Dark brown silt with large amount of organic matter					
					1.2						
					1.6		_				
2 FT.	0.05.2.7.ET				2.0						
	0.85-2.7 FT				2.4						
					3.2						
					3.6						
4 FT.					4.0	-					
					4.4						
					4.8 5.2						
							Y	ellowish coarse sand with silt			
6 FT.					5.6						
011.	6.0										
					6.8						
	2.7-7.4 FT				7.2						
					7.6						
8 FT.					8.0						
	7.4-9.1 FT				8.4 8.8		Y ellowis	n coarse sand with lens of wh	nte sut		
	/. 4- 9.1 f 1				9.2						
					9.6			****			
10 FT.	9.1-10 FT				10.0	I joht vellowish moist sand					

BMP LANDSCAPE PLAN & BORING LOGS NORDAU, SECTION E-2, LOTS 11-12 A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8

COMMISION

DRIVEN SPLIT

Dark brown silt with 1/2" rounded quartz gravel.

2.0 Yellow brown silt with coarse sand and 1/2" rounded quartz gravel.

oist red brown sandy silt with fine sand and some pea gravel.

GROUND WATER DEPTH

COMPLETION

CAVED DEPTH

AFTER

(COLOR, DENSITY, MOISTURE, PROPORTION, ETC.)

DRY FT.

24 HRS. DRY FT.

N/A FT.

HRS. FT.

24 HRS. 5.8 FT

HRS. FT

DATE:

SPOON
PRESSED

D- DENISON

P- PITCHER

PT- SHELBY TUBE

APPROVED HOWARD DEPARTMENT OF PUBLIC WORKS CHIEF, BUREAU OF HIGHWAYS

APPROVED: HOWABOUSGALUNITY DEPARTMENT OF PLANING AND ZONING 6/6/2023 (HD) Edmondson

CHIEF, DEVELOPMENTUSIENTONNEERING DIVISION 6/8/2023

CHIEF, DIVISION OF LAND DEVELOPMENT



—DocuSigned by: Richard Sobbott

RICHARD SOBBOTT, PE NO. 15222

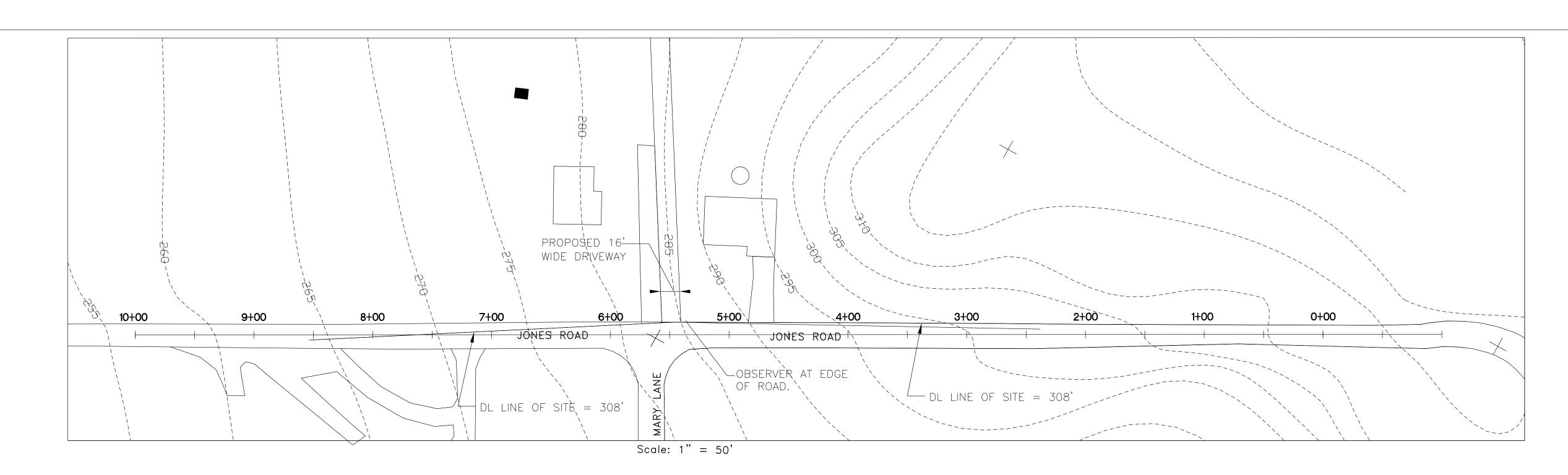
		PERM	IIT INFORMA	TION CHAR	Т	
Subdivision Nam	e:		Section/Area		Lot No.	Parcel No.
NORDAU			E-6		8,9,10	142
Plat # Grid		Zoning	Tax Map No.	Elect. District	Census Tract	
20317 00	24	R-12	0042	SIXTH	606901	
Water Code			Sewer Code			

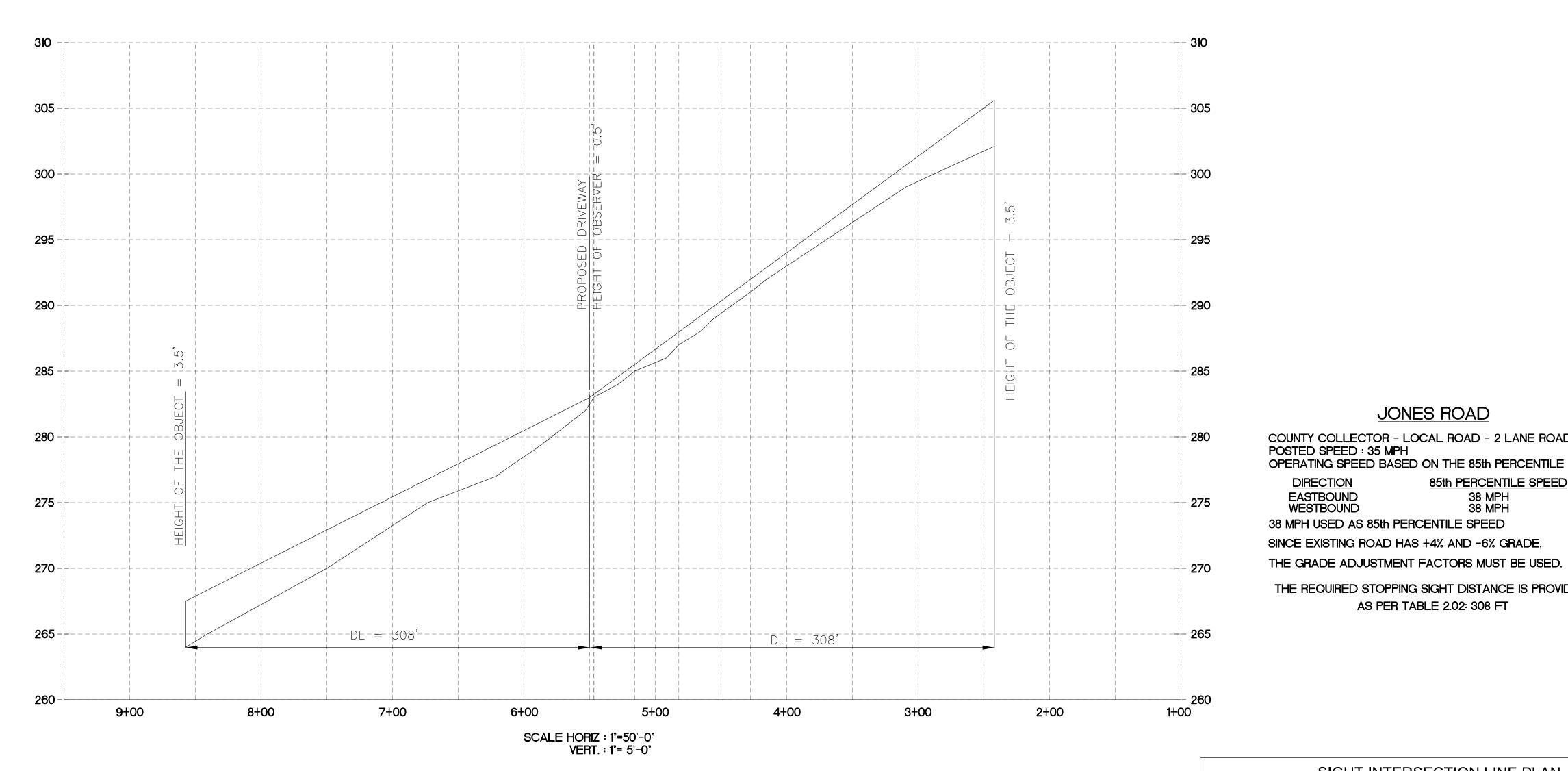
MYRICK CABASSA, JAMES ROBERT HUNT UEL A. CABASSA JR. SHANNON M. HUNT JONES ROAD 7915 HAZEL WAY SUP MD, 20794 JESSUP MD, 20794 'ARD COUNTY | HOWARD COUNTY ATTN:lyncaba@gmail.com PHONE:(301)725-3960

OWNER/DEVELOPER



DESIGN BY BW drawn by <u>BW</u> CHECKED BY RLS SCALE: AS SHOWN DATE: 1/01/2022 W. O. No. :_____ SHEET No. <u>17</u> OF <u>18</u>





JONES ROAD

COUNTY COLLECTOR - LOCAL ROAD - 2 LANE ROAD POSTED SPEED: 35 MPH OPERATING SPEED BASED ON THE 85th PERCENTILE SPEED 85th PERCENTILE SPEED **DIRECTION**

EASTBOUND 38 MPH 38 MPH WESTBOUND 38 MPH USED AS 85th PERCENTILE SPEED SINCE EXISTING ROAD HAS +4% AND -6% GRADE,

THE REQUIRED STOPPING SIGHT DISTANCE IS PROVIDED: AS PER TABLE 2.02: 308 FT

SIGHT INTERSECTION LINE PLAN

NORDAU, SECTION E-2, LOTS 11-12 A RESUBDIVISION OF NORDAU, SECTION E-2, LOT 8

APPROVED HOWARD SOUND Y DEPARTMENT OF PUBLIC WORKS CHIEF, BUREAU OF HIGHWAYS

APPROVED: HOWABOUS GOLDING TY DEPARTMENT OF PLANING AND ZONING CHAD Edmondson

CHIEF, DEVELOPMENTO DIVISION 6/8/2023

CHIEF, DIVISION OF LAND DEVELOPMENT

DocuSigned by:

Richard Sobbott

OF MARY	PERMIT INFORMATION CHART								
6 5 6 7	Subdivision	Name:		Section/Area		Lot No.	Parcel No.	L	
P T T	NORDAU			E-6		8,9,10	142	۱ <u> </u>	
15222 1000 X	Plat #	Grid	Zoning	Tax Map No.	Elect. District	Census Tract		† J F	
facting yelf	20317	0024	R-12	0042	SIXTH	606901			
	Water Code	•		Sewer Code					
RICHARD SOBBOTT, PE NO. 15222									

OWNER/DEVELOPER LYN MYRICK CABASSA, | JAMES ROBERT HUNT MIGUEL A. CABASSA JR. SHANNON M. HUNT 8001 JONES ROAD 7915 HAZEL WAY JESSUP MD, 20794 JESSUP MD, 20794 HOWARD COUNTY HOWARD COUNTY ATTN:lyncaba@gmail.com PHONÉ:(301)725-3960



DESIGN BY ____BW DRAWN BY BW CHECKED BY RLS SCALE: AS SHOWN DATE: 1<u>1/01/202</u>2 W. O. No. :_____ SHEET No. <u>18</u> OF <u>18</u>