

GENERAL NOTES

- 1. SUBJECT PROPERTY ZONED RR-DEO PER 10/06/2013 COMPREHENSIVE ZONING PLAN. SUBJECT PROPERTY ZONED BR. BUSINESS RURAL PER 01/04/2018 AND 03/14/2018 ZONING CASE ZB-1117M.
2. PROPERTY ADDRESS: 12064 HALL SHOP ROAD
3. TOTAL AREA OF PROPERTY: 1.04 AC ±
4. REFERENCE L 11653 F. 284
5. PREVIOUS HOWARD COUNTY FILE NUMBERS: ECP-20-013, ZB-1117M, WP-24-052
6. PRIVATE WATER AND PRIVATE SEWER WILL BE USED WITHIN THIS SITE; THE SITE IS NOT LOCATED WITHIN THE PLANNED SERVICE AREA
7. THIS AREA DESIGNATES A PRIVATE SEWAGE AREA, AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL (COMAR 26.04.03). IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS AREA SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE AREA RECORDATION OF A MODIFIED SEWAGE AREA SHALL NOT BE NECESSARY.
8. THE BOUNDARY SHOWN HEREON IS BASED ON A FIELD RUN SURVEY PERFORMED BY SHANABERGER & LANE IN MAY 2016. ADJOINING PROPERTY INFORMATION AND PROPERTY LINES WERE UPDATED BY SHANABERGER & LANE IN OCTOBER, 2020.
9. THE TOPOGRAPHY SHOWN HEREON IS AT TWO FOOT INTERVALS AND IS BASED ON A FIELD RUN TOPOGRAPHY SURVEY PREPARED BY SHANABERGER & LANE IN MAY 2016. OFFSITE TOPOGRAPHY IS BASED ON HOWARD COUNTY AERIAL TOPOGRAPHY FLOWN IN 2004.
10. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED ON MARYLAND STATE PLAN COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NUMBERS 41AC AND 35GMA WERE USED FOR THIS PROJECT.
11. THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP, WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
12. ALL EXISTING WELLS, SEPTIC SYSTEMS AND SEWAGE DISPOSAL AREAS WITHIN 100 FEET OF THE PROPERTY BOUNDARIES AND ALL EXISTING AND PROPOSED WELLS THAT ARE LOCATED WITHIN 200 FEET DOWN GRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS AND SEWAGE DISPOSAL EASEMENTS HAVE BEEN FIELD LOCATED.
13. NO FLOODPLAINS, WETLANDS, NOR WETLAND BUFFERS ARE PRESENT ON SITE. A STREAM PASSES THROUGH AN EXISTING 24' RCCP ON THE NARROW PIPESTEM PORTION OF OUR PROPERTY. THE ASSOCIATED STREAM BUFFER IS LOCATED ON OUR PROPERTY BUT NEITHER THE STREAM OR ITS BUFFER ARE LOCATED WITHIN OUR AREA OF DEVELOPMENT.
14. THE PROPOSED BUILDING IS A COMMERCIAL OFFICE BUILDING, TWO SHEDS FOR STORAGE SPACE, AND PARKING FOR THE BUSINESS'S COMMERCIAL VEHICLES. THE OFFICE BUILDING WILL HOUSE SIX EMPLOYEES AND ONE BATHROOM. THE MAJORITY OF THE EMPLOYEES WORK OFF-SITE DURING THE DAY. THESE PROPOSED COVERED STRUCTURES MAKE UP 2.7% OF THE PROPERTY.
15. PROPOSED COMMERCIAL SPACE IS NOT RETAIL AND WILL NOT HAVE CUSTOMERS ON SITE.
16. PARKING:
REQUIRED:
GENERAL OFFICE: 3.3 SPACES PER 1,000 SF OF OFFICE SPACE (880 SF)
TOTAL REQUIRED: 3
PROVIDED: 5 PARKING SPACES (INCLUDING 1 HANDICAP SPACE) AND 3 COMMERCIAL VEHICLE PARKING SPACES
THIS PROPERTY IS SUBJECT TO THE HOWARD COUNTY ZONING CASE ZB-1117M TO ALLOW THE USE OF THE BUSINESS RURAL ZONING DISTRICT AND WAS APPROVED ON JANUARY 4, 2018 AND MARCH 14, 2018 WITH THE FOLLOWING CONDITIONS:
THAT PARKING AND STORAGE OF VEHICLES AND EQUIPMENT USED IN CONNECTION WITH THE USE SHALL BE CONFINED TO THE PAVED AREAS, AS INDICATED ON THE PDP, AND
THAT THE NORMAL BUSINESS HOURS OF THE USE UNDER THE BR ZONING SHALL BE MONDAY THROUGH FRIDAY, 7AM TO 7PM; AND
THAT THE HEIGHT LIMIT OF THE PROPOSED 2-STORY OFFICE BUILDING AS SHOWN ON THE PDP SHALL BE UP TO 34 FEET.

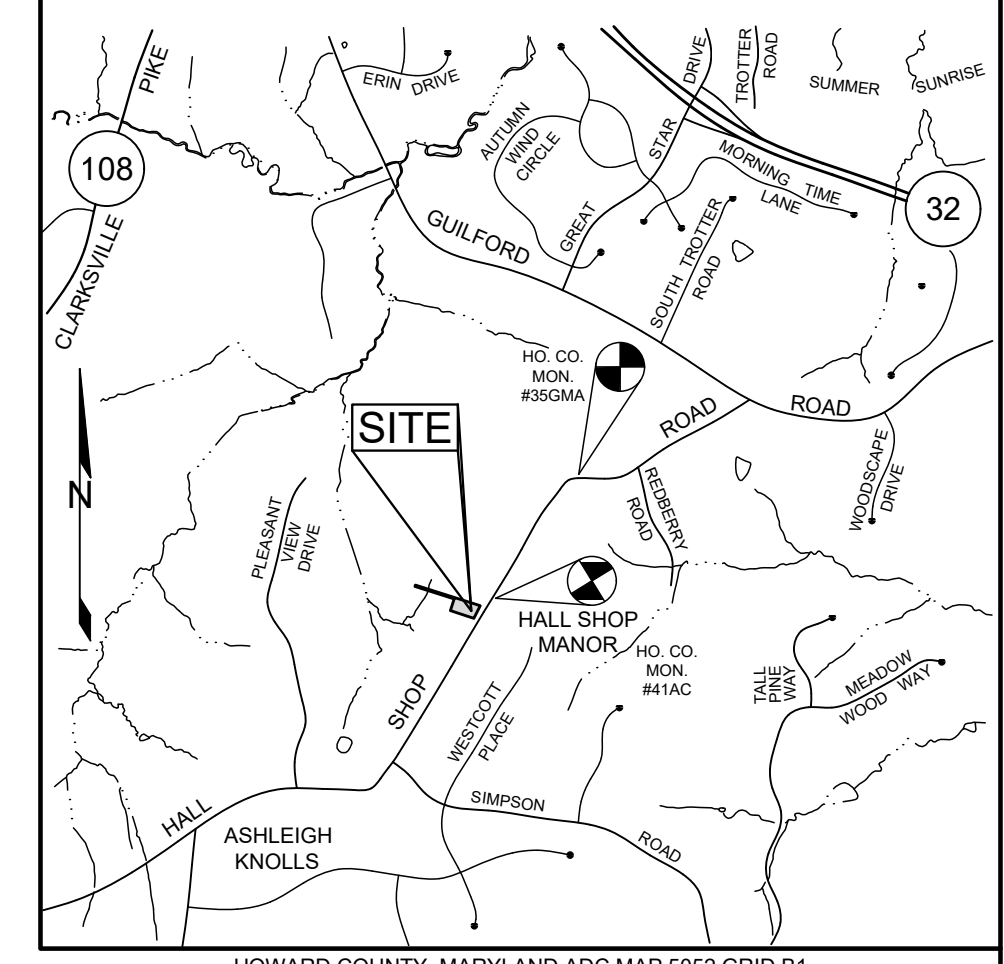
- 18. THE CONTRACTORS SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
STATE HIGHWAY ADMINISTRATION 410.531.5533
BGE (CONTRACTOR SERVICES) 410.850.4620
BGE (UNDERGROUND DAMAGE CONTROL) 410.787.9008
MISS UTILITY 800.257.7777
COLOANAL PIPELINE COMPANY 410.785.1390
HOWARD COUNTY, DEPT. OF PUBLIC WORKS, BUREAU OF UTILITIES 410.313.4900
HOWARD COUNTY HEALTH DEPARTMENT 410.313.2640
AT&T 800.252.1133
VERIZON 800.743.0333/410.224.9210
19. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO CEMETERIES WITHIN THE PROJECT BOUNDARY.
20. THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
21. ANY DAMAGE TO PUBLIC RIGHT-OF-WAYS, PAVING OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
22. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING CONSTRUCTION INSPECTION DIVISION AT 410-313-1880 AT LEAST FIVE (5) DAYS PRIOR TO THE START OF WORK.
23. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY IN ADDITION TO MSHA STANDARDS AND SPECIFICATIONS IF CONSTRUCTION USED IN CONNECTION WITH THE USE SHALL BE CONFINED TO THE PAVED AREAS, AS INDICATED ON THE PDP, AND
24. THE PROJECT IS IN CONFORMANCE WITH THE CURRENT HOWARD COUNTY STANDARDS. NO WAIVERS HAVE BEEN SUBMITTED OR APPROVED UNDER THIS PLAN.
25. ALL HDPE PIPE SPECIFICATIONS, AND INSTALLATIONS SHALL MEET AASHTO M-252 TYPE S, M-294 TYPE S AND ASTM D2321, RESPECTIVELY.
26. SOIL COMPACTION SPECIFICATIONS, REQUIREMENTS, METHODS AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL ENGINEER. DRIVEWAY PAVING TO BE HOWARD COUNTY STANDARD P-2 PAVING SECTION. (SEE COVER SHEET). GEOTECHNICAL ENGINEER TO CONFIRM ACCESSIBILITY OF PROPOSED PAVING SECTION, BASED ON SOIL TEST REPORT.
27. ALL TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
28. EXISTING UTILITIES ARE LOCATED BY THE USE OF ANY OR ALL OF THE FOLLOWING: ROAD CONSTRUCTION PLANS, FIELD SURVEYS, AND OTHER AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF THE EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTORS INFORMATION. CONTRACTORS SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO THE CONTRACTORS OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
29. STORMWATER MANAGEMENT OBLIGATIONS FOR THIS SITE WILL BE MET BY ONE BIORETENTION FACILITY (M-6) FOR THE TREATMENT OF THE PARKING AREA AND PROPOSED BUILDINGS.
30. 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.
31. A FOREST STAND DELINEATION WAS COMPLETED ON APRIL 24, 2020 AND WAS APPROVED UNDER ECP-20-013.
32. PER SECTION 16.1200 OF THE HOWARD COUNTY CODE, THIS PLAN IS SUBJECT TO FOREST CONSERVATION OBLIGATIONS. FOR THIS PROJECT, THE REFORESTATION/AFFORESTATION NET TRACT AREA OBLIGATION IS BASED ON THE HOWARD COUNTY FOREST CONSERVATION WORKSHEET AND WILL BE 0.10 ACRES OR 4,356 SQ. FT. THE OBLIGATION HAS BEEN MET BY OFFSITE FOREST AFFORESTATION OUTSIDE THE 12-DIGIT WATERSHED, AS THERE ARE NO BANKS WITHIN THE WATERSHED. THE ROSHAN PROPERTY, SDP-16-041 (S1) HAS BEEN USED. A REDLINE REQUEST WAS SUBMITTED AND APPROVED FOR THE OFFSITE BANK IN FEBRUARY 2022.
33. FIELD OBSERVATIONS FOR THIS SITE WERE COMPLETED IN APRIL 2017, NOVEMBER 2017, AND OCTOBER 2020 AND NO WETLANDS WERE FOUND ONSITE. A STREAM CROSSES THE NORTH-WESTERN PORTION OF THE PIPESTEM AND IS SHOWN ON THE PLANS. NO PROPOSED DEVELOPMENT WILL IMPACT THE STREAM AND ITS BUFFER.
34. APPROVAL OF THIS SDP DOES NOT CHANGE OR REMOVE LEGAL ACCESS FROM ANY ADJACENT PARCELS OR LOTS.
35. THE WELL MUST BE DRILLED, AND COMPLETION REPORT APPROVED BY THE HEALTH DEPARTMENT PRIOR TO HEALTH DEPARTMENT APPROVAL OF THE BUILDING PERMIT.
36. A GROUNDWATER APPROPRIATIONS PERMIT MUST BE APPROVED BY THE MARYLAND DEPARTMENT OF ENVIRONMENTAL PRIOR TO HEALTH DEPARTMENT ISSUANCE OF A WELL PERMIT.
37. MARYLAND DEPARTMENT OF THE ENVIRONMENT HAS APPROVED A VARIANCE PER CODE OF MARYLAND ANNOTATED REGULATIONS (COMAR, 26.04.02.05 B.(2)) TO ALLOW THE ONSITE SEWAGE DISPOSAL SYSTEM PROPOSED ON THIS PLAN TO BE UPGRADIENT OF THE WELL ZONE PROPOSED ON THIS PLAN SUBJECT TO THE FOLLOWING CONDITIONS:
AN ADVANCED PRE-TREATMENT UNIT (A BAT UNIT) MUST BE INCLUDED AS A COMPONENT IN THE SEPTIC SYSTEM FOR THE PROPOSED NEW STRUCTURE ON PARCEL 254.
THE OWNER OF THE BAT UNIT ON PARCEL 254 MUST HAVE A SERVICE CONTRACT FOR THE BAT UNIT WITH A MDE CERTIFIED SERVICE PROVIDER.
THE WELL MUST BE AT LEAST 200 FEET DISTANCE FROM ANY UPGRADIENT SEPTIC SYSTEM TRENCH, DRY WELL, OR SAND MOUND.
THE WELL MUST BE INSTALLED TO MINIMUM DEPTH OF 50 FEET, OR AT LEAST 10 FEET INTO COMPETENT BEDROCK, WHICHEVER IS DEEPER.
THE WELL MUST BE INSTALLED AS STEEL CASING.

- 38. THE OFFSITE EASEMENT AGREEMENT BETWEEN THE PROPERTY OWNERS GRANTING EXCLUSIVE RIGHTS TO THE EASEMENT AREA FOR WELL DEVELOPMENT, MAINTENANCE, AND REPAIR MUST BE SIGNED BY BOTH OWNERS AND LAND RECORDS OF BOTH PROPERTIES PRIOR TO HEALTH DEPARTMENT ISSUANCE OF A WELL PERMIT.
39. AN OPERATIONS AND MAINTENANCE AGREEMENT FOR THE BAT UNIT MUST BE SIGNED BY THE OWNER AND THE HEALTH DEPARTMENT AND RECORDED IN LAND RECORDS OF THE PROPERTY PRIOR TO HEALTH DEPARTMENT ISSUANCE OF THE SEPTIC PERMIT.
40. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISION OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. THE DEVELOPER SHALL PLAN THE REQUIRED PERIMETER LANDSCAPING TREES AND THE ONE REQUIRED PARKING LOT TREE: EIGHTEEN (18) SHADE TREES, TWENTY THREE (23) EVERGREEN TREES, AND SEVENTY (70) SHRUBS, 18 X \$300.00, 2X \$150.00 AND 70 X \$30.00. ADDITIONALLY, ONE (1) PARKING LOT TREE SHALL BE LIMITED TO 0.1 FOOT CANDLES. ALL LIGHT FIXTURES WILL BE MOUNTED TO THE BUILDING CORNERS. SEE SHED AND BUILDING TEMPLATE FOR LOCATIONS.
41. IN MAY OF 2022, A DESIGN MANUAL WAIVER WAS APPROVED TO WAIVE DESIGN MANUAL, VOLUME IV, STANDARD DETAIL R-1.11 WHICH PROVIDES THE TYPICAL SECTION FOR A COUNTRY ROAD. IN LIEU OF PROVIDING THE TYPICAL SECTION ALONG THE FRONTAGE OF THE PROPERTY THE REQUEST IS TO PAY A FEE OF \$19,800.00.
42. ON JANUARY 24, 2024 THE DEPARTMENT OF PLANNING AND ZONING CONSIDERED AND APPROVED ALTERNATIVE COMPLIANCE WP-24-052 WITH RESPECT TO SECTION 16.156(i) AND SECTION 16.156(m) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS TO REACTIVATE THE PROJECT FOR THE COMPLETION OF THE DEVELOPER'S AGREEMENT, PAYMENT OF FEES, AND SUBMISSION OF THE SITE DEVELOPMENT PLAN MYLAR ORIGINALS.

SITE DEVELOPMENT PLAN
BOOSALIS PROPERTY
HOWARD COUNTY, MARYLAND

LEGEND

- EXISTING CONTOUR
EXISTING TREELINE
SOIL BOUNDARY
EXISTING PRIVACY FENCE
EXISTING SPLIT RAIL FENCE
STREAM BUFFER
EXISTING WELL AREA
EXISTING OVERHEAD WIRES
ROAD CENTERLINE
EXISTING UTILITY POLE
EXISTING RW
EXISTING TREE
EXISTING WELL
EXISTING PASSED TEST BORING
EXISTING FAILED TEST BORING
PROPOSED SOILS TEST BORING
TO BE REMOVED

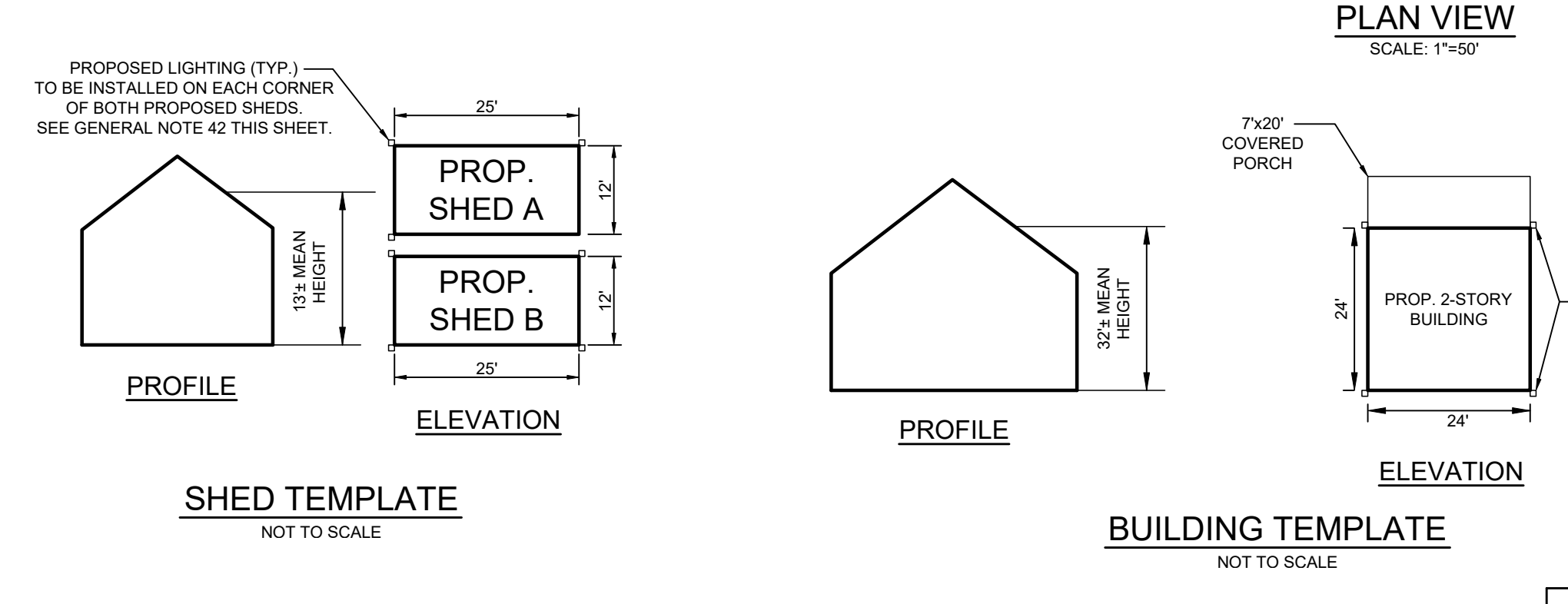
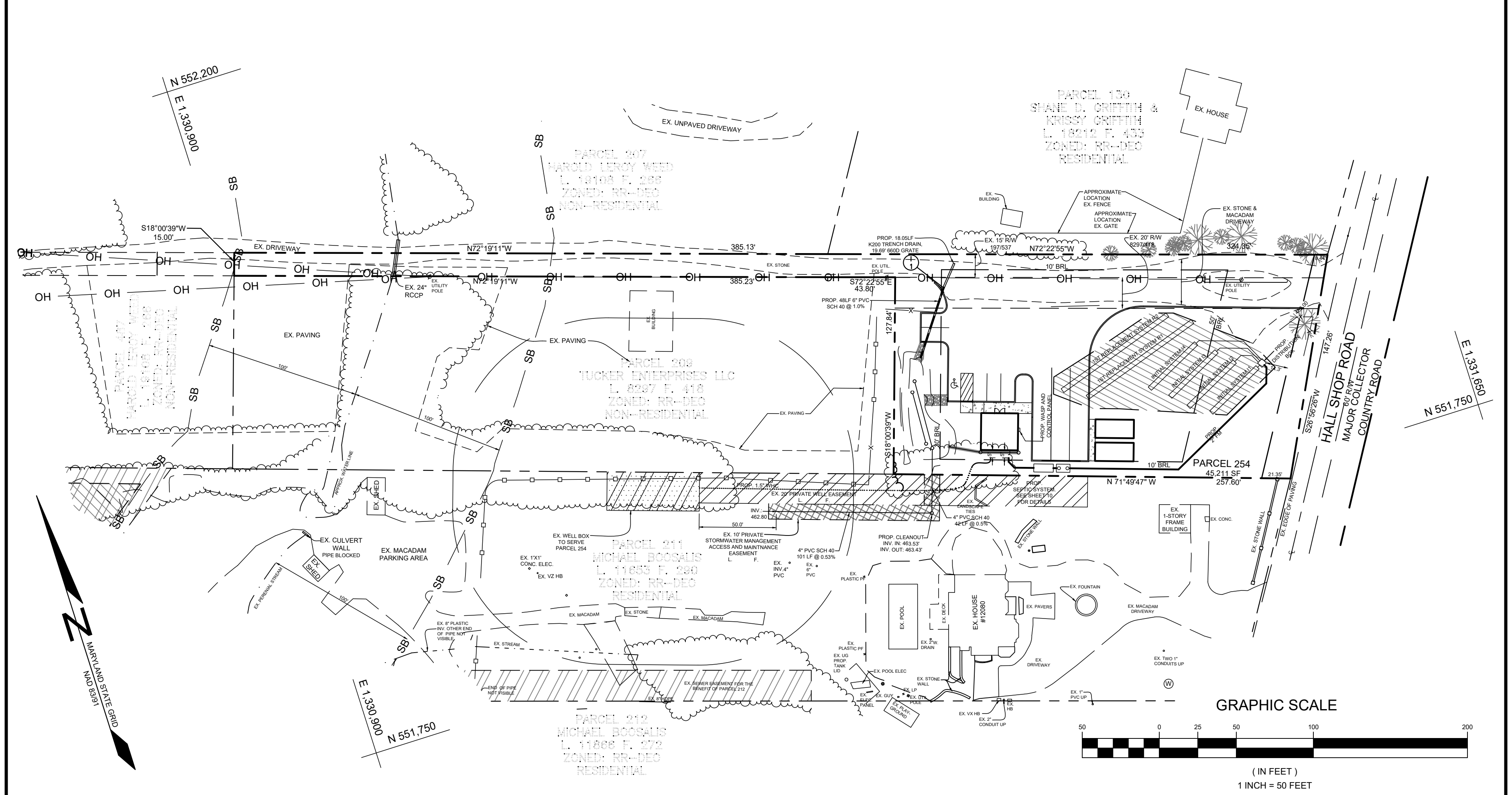


BENCHMARKS table with columns: NUMBER, NORTHING, EASTING, ELEVATION, DESCRIPTION. Includes data for 41AC and 35GMA benchmarks.

SITE ANALYSIS DATA SHEET

Table with columns: ENVIRONMENTAL AREA, SIZE OR USE. Lists various areas like TOTAL PROJECT AREA, ROW TO BE DEDICATED, etc.

- \* NOTES:
1) SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE; WEBER SOIL SURVEY
2) HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR 'K' GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT.
3) AREA OF LOT INSIDE STREAM BUFFER



STORMWATER MANAGEMENT INFORMATION table with columns: PARCEL NUMBER, FACILITY NAME & NUMBER, PRACTICE TYPE, PUBLIC, PRIVATE, HOA MAINTAINS.

STORMWATER MANAGEMENT PRACTICES table with columns: PARCEL, ADDRESS, MICRO-BIORETENTION M-6 (NUMBER).

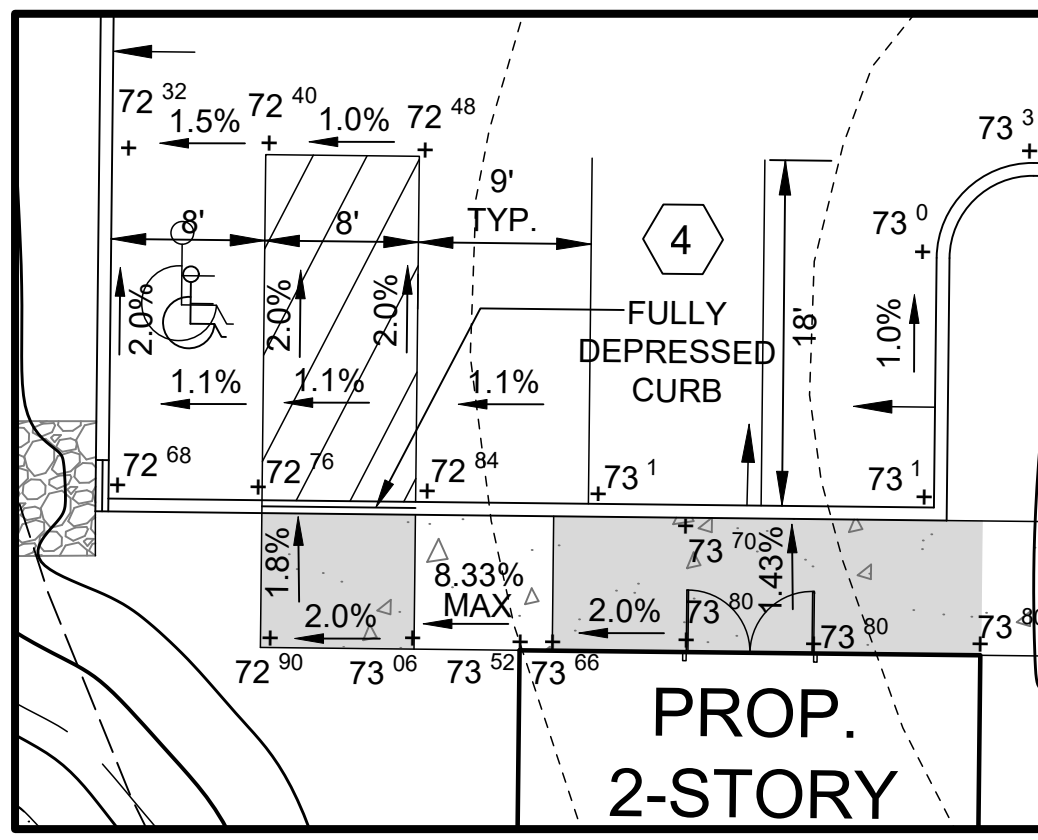
OWNER: MICHAEL BOOSALIS, 12080 HALL SHOP ROAD, CLARKSVILLE, MARYLAND 21029

DEVELOPER: DIVERSIFIED APPLICATIONS, C/O JESSICA HIRNERMAN, 14818 N. FRANKLINVILLE ROAD, THURMONT, MARYLAND 21788

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING. Includes signatures and dates for Chief Development Engineering Division and County Health Officer.

REVISIONS table with columns: NO., DESCRIPTION, DATE.

COVER SHEET for BOOSALIS PROPERTY, 12064 HALL SHOP ROAD, ZONED: BR. Includes contact information for SILL ENGINEERING GROUP, LLC and design details.

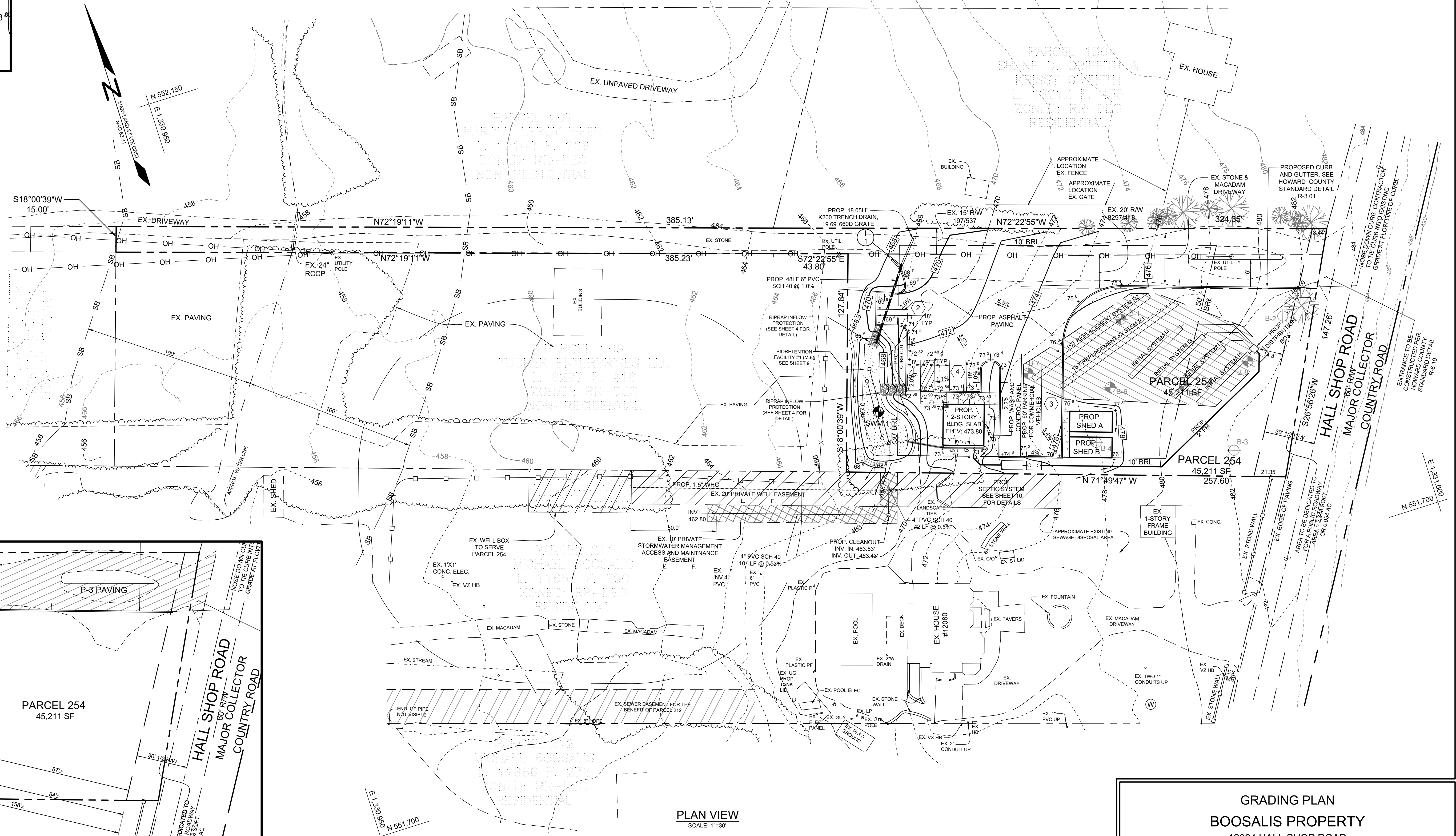
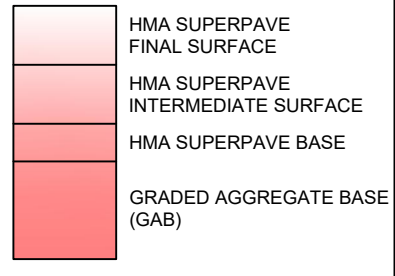


PROP. 2-STORY ADA ACCESS BLOW-UP

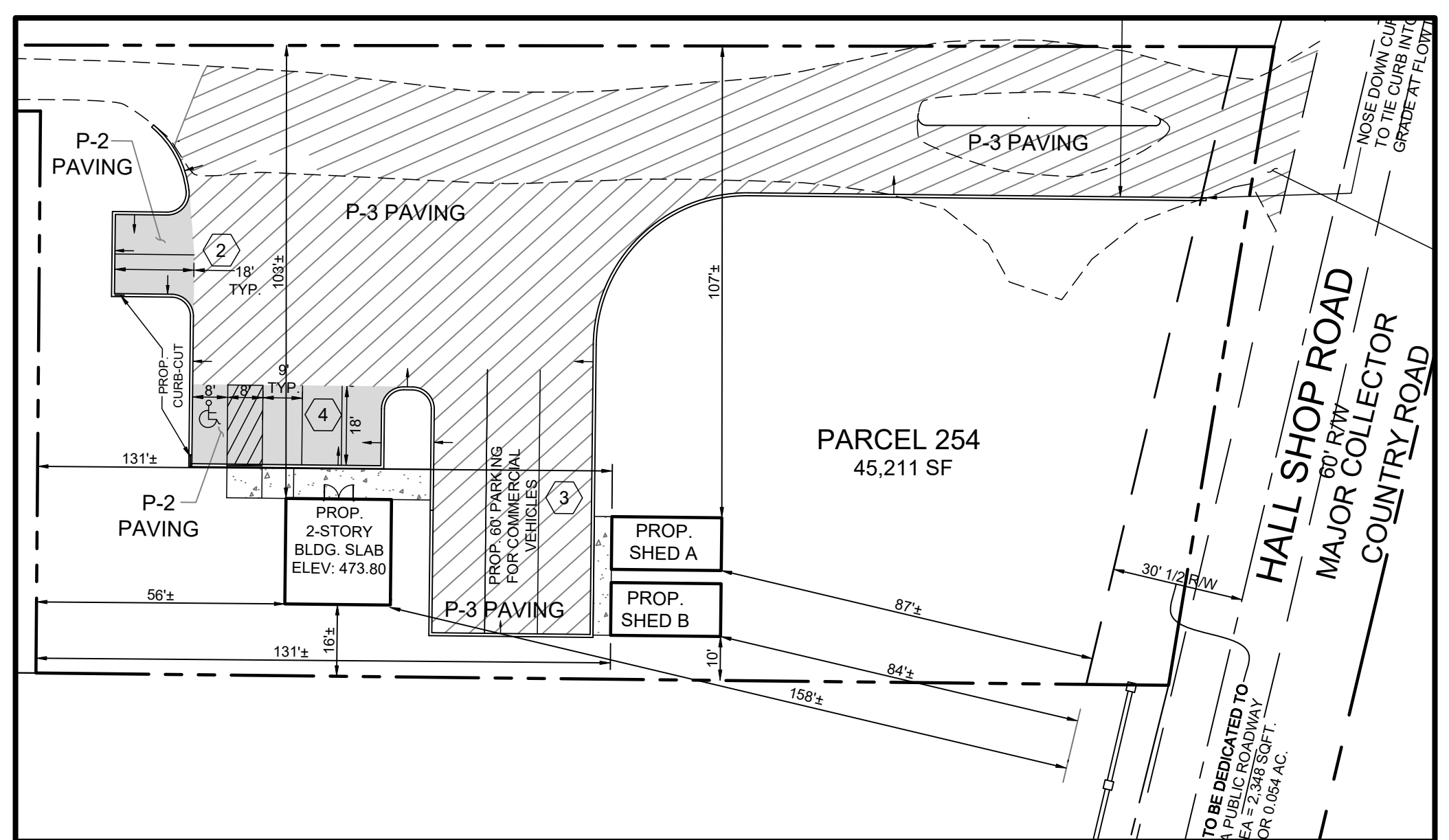
SCALE: 1"=10'

PROPOSED LEVEL AREA

PAVING SECTIONS						
SEC. NO.	ROAD AND STREET CLASSIFICATION	CALIFORNIA BEARING RATIO (CBR)	3 TO <5 TO <7	5 TO <5 TO <7	27	27
P-2	PARKING DRIVE AISLES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY	HMA SUPERPAVE FINAL SURFACE 9.5 MM, PG 64-22, LEVEL 1 (ESAL)	1.5	1.5	1.5	1.5
	LOCAL ROADS: ACCESS PLACE, ACCESS STREET	HMA SUPERPAVE INTERMEDIATE SURFACE 9.5 MM, PG 64-22, LEVEL 1 (ESAL)	1.0	1.0	1.0	1.0
	CUL-DE-SACS: RESIDENTIAL	HMA SUPERPAVE BASE 19.0 MM, PG 64-22, LEVEL 1 (ESAL)	2.0	2.0	2.0	2.0
P-3	PARKING DRIVE AISLES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY	HMA SUPERPAVE FINAL SURFACE 9.5 MM, PG 64-22, LEVEL 1 (ESAL)	1.5	1.5	1.5	1.5
	LOCAL ROADS: ACCESS PLACE, ACCESS STREET	HMA SUPERPAVE INTERMEDIATE SURFACE 9.5 MM, PG 64-22, LEVEL 1 (ESAL)	1.0	1.0	1.0	1.0
	CUL-DE-SACS: NON-RESIDENTIAL, MINOR COLLECTORS: RESIDENTIAL	HMA SUPERPAVE BASE 19.0 MM, PG 64-22, LEVEL 1 (ESAL)	3.0	3.0	3.0	3.0
NOTES:		<p>1. HEAVY TRUCKS ARE DEFINED AS THOSE WITH SIX (6) WHEELS OR MORE INCLUDING GARBAGE TRUCKS.</p> <p>2. HMA SUPERPAVE LAYERS SHALL BE PLACED IN APPROPRIATE COMPACTED LIFT THICKNESS: 19.0 MM BASE (2.0" MIN TO 4.0" MAX), 12.5 MM SURFACE (1.5" MIN TO 3.0" MAX), AND 9.5 MM SURFACE (1.0" MIN TO 2.0" MAX).</p> <p>3. GRADED AGGREGATE BASE (GAB) TO BE PLACED AND COMPACTED IN MAX COMPACTED THICKNESS LAYERS.</p> <p>4. THE INTERMEDIATE SURFACE COURSE LAYER MUST BE PLACED WITHIN 2 WEEKS OF PLACEMENT OF BASE COURSE, AND IS REQUIRED PRIOR TO SUBSTANTIAL COMPLETION INSPECTION AND BOND REDUCTION.</p> <p>5. IN LIEU OF PLACING THE INTERMEDIATE SURFACE COURSE LAYER FOR COMMERCIAL/INDUSTRIAL ENTRANCE APRONS WITHIN THE COUNTY RIGHT-OF-WAY WHERE AUXILIARY LANES ARE NOT REQUIRED, THE THICKNESS OF THE INTERMEDIATE PAVEMENT LAYER CAN BE ADDED TO THE REQUIRED THICKNESS OF THE ASPHALT LAYER.</p> <p>6. THE CONSTRUCTION DRAWINGS SHALL SHOW THE PAVING SECTION, ROAD CLASSIFICATION AND CRB VALUE FOR EACH ROADWAY.</p>				



PLAN VIEW SCALE: 1"=30'

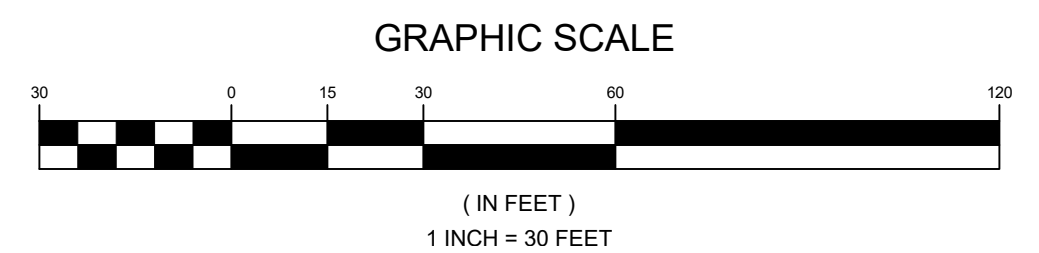


LAYOUT PLAN SCALE: 1"=30'

LEGEND			
EXISTING CONTOUR GIS	---	EXISTING UTILITY POLE LOCATION	Ø
EXISTING CONTOUR FIELD RUN	---	EXISTING RW	▭
PROPOSED CONTOUR	---	EXISTING TREE	⊗
EXISTING SPOT ELEVATION	382.5	ROAD CENTERLINE	— —
PROPOSED SPOT ELEVATION	+82.53	EXTENDED OVERHEAD WIRES	OH
EXISTING TREELINE	---	STREAM BUFFER	SB
PROPOSED TREELINE	---	STREAM BUFFER	SB
EXISTING PRIVACY FENCE	---	EXISTING WELL AREA	⊗
EXISTING SPLIT RAIL FENCE	X	PROPOSED SOIL TEST BORING	⊕
PROPOSED DOOR	M	EXISTING PASSED SOIL TEST BORING	B-1
		EXISTING FAILED SOIL TEST BORING	B-1

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 5/14/2024	APPROVED: FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS IN ACCORDANCE WITH THE MASTER PLAN OF HOWARD COUNTY COUNTY HEALTH OFFICER DATE: 5/23/2024
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NO.	DESCRIPTION	DATE



**OWNER**  
MICHAEL BOOSALIS  
12080 HALL SHOP ROAD  
CLARKSVILLE, MARYLAND 21029  
301-854-1006

**DEVELOPER**  
DIVERSIFIED APPLICATIONS  
C/O JESSICA HIRERMAN  
14818 N. FRANKLINVILLE ROAD  
THURMONT, MARYLAND 21788  
ACCOUNTS@DIVERSIFIEDAPP.COM  
301-798-6241

**GRADING PLAN**  
**BOOSALIS PROPERTY**  
12064 HALL SHOP ROAD  
ZONED: BR

TAX MAP 41 GRID 1  
5TH ELECTION DISTRICT

PARCEL 254  
HOWARD COUNTY, MARYLAND

**SILL ENGINEERING GROUP, LLC**  
16005 Frederick Rd, 2nd Floor  
Woodbine, MD 21797  
Phone: 443.325.5076  
Fax: 410.696.2022  
Email: info@sillengineering.com  
Civil Engineering & Surveying for Land Development

DESIGN BY: PS  
DRAWN BY: TB  
CHECKED BY: PS  
SCALE: AS SHOWN  
DATE: APRIL 15, 2024  
PROJECT #: 15-043  
SHEET #: 2 of 11

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32025, EXPIRATION DATE: JUNE 20, 2025.

### FOREST CONSERVATION WORKSHEET FOR BOOSALIS

Net Tract Area		A = 0.8
A. Total (Gross) Tract Area		B = 0.0
B. Area within 100-year Floodplain		C = 0.0
C. Other Exclusions		D = 0.8
D. Net Tract Area		

Land Use Category		
Insert the number "1" under the appropriate land use (limit to only one entry)		
Revised	Revised	Revised
Runoff ID	Runoff ID	Runoff ID
1	2	3

E. Afforestation Threshold (Net Tract Area x 15%)	E = 0.1
F. Reforestation Threshold (Net Tract Area x 15%)	F = 0.1

Existing Forest Cover		G = 0.0
G. Existing Forest Cover within the Net Tract Area		H = 0.0
H. Area of Forest above Afforestation Threshold		I = 0.0
I. Area of Forest above Reforestation Threshold		

Break Even Point		J = 0.0
J. Break Even Point		K = 0.0
K. Forest Clearing Permitted without Mitigation		

Proposed Forest Clearing		L = 0.0
L. Total Area of Forest to be Cleared		M = 0.0
M. Total Area of Forest to be Retained		

Planting Requirements Inside Watershed		N = 0.0
N. Reforestation for Clearing above the Reforestation Threshold		O = 0.0
O. Reforestation for Clearing below the Reforestation Threshold		P = 0.0
P. Credit for Retention above the Reforestation Threshold		Q = 0.0
Q. Total Reforestation Required		R = 0.0
R. Total Afforestation Required		S = 0.1
S. Total Afforestation Required		T = 0.1
T. Total Reforestation and Afforestation Requirement		U = 0.1
U. 75% of Total Obligation (Retention + Planting)		V = 0.1
V. Planting Required Outside to meet 75% Obligation		

Planting Requirements Outside Watershed		W = 0.0
W. Total Planting within Development Site Watershed		X = 0.1
X. Total Afforestation Required		Y = 0.0
Y. Remaining Planting within Watershed for Reforestation Credit		Z = 0.0
Z. Reforestation for Clearing above the Reforestation Threshold		AA = 0.0
AA. Reforestation for Clearing below the Reforestation Threshold		AB = 0.0
AB. Credit for Retention above the Reforestation Threshold		AC = 0.0
AC. Total Reforestation Required		AD = 0.1
AD. Total Afforestation and Reforestation Requirement		

Date: 5/05/21

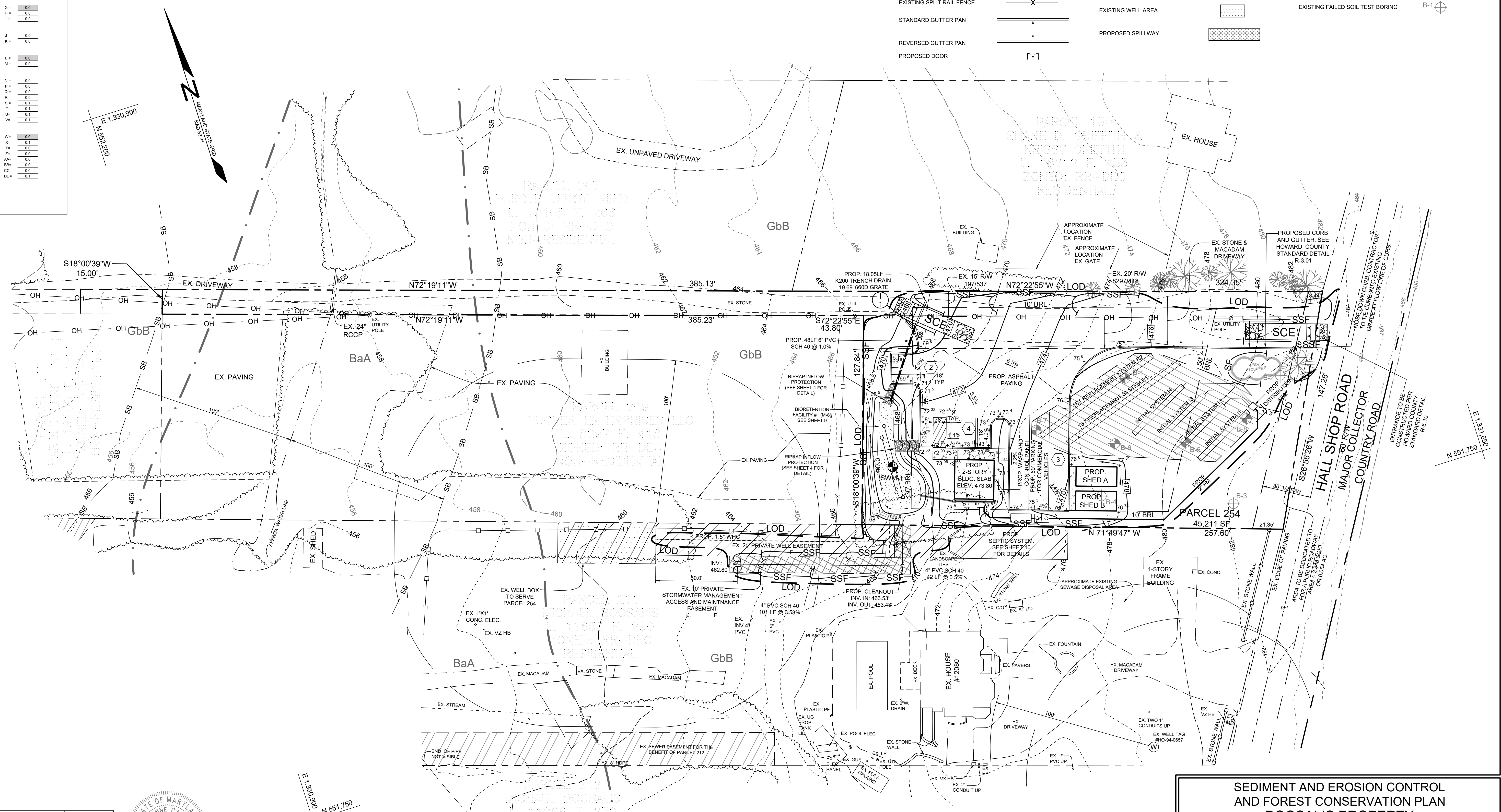
### SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP	'K' FACTOR
BaA	BAILE SILT LOAM, 0 TO 3 PERCENT SLOPES	CD	0.49
GbB	GLADSTONE LOAM, 3 TO 8 PERCENT SLOPES	A	0.32

NOTES:  
 1) SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, WEB SOIL SURVEY.  
 2) HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR 'K' GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT.

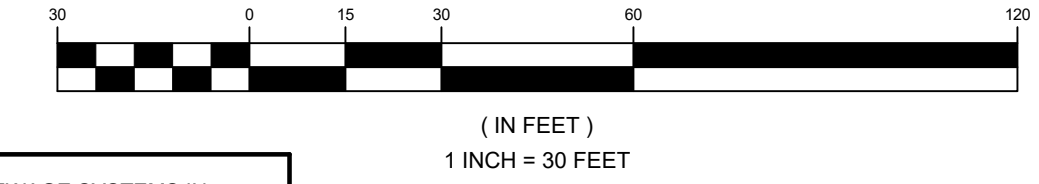
### LEGEND

EXISTING CONTOUR GIS	---	EXISTING UTILITY POLE	Ø
EXISTING CONTOUR FIELD RUN	---	EXISTING RW	▬
PROPOSED CONTOUR	---	EXISTING TREE	⊗
EXISTING SPOT ELEVATION	382.3	ROAD CENTERLINE	—+—
PROPOSED SPOT ELEVATION	+82.53	EXTENDED OVERHEAD WIRES	—OH—
EXISTING TREELINE	---	STREAM BUFFER	—SB—
SOIL BOUNDARY	---	EXISTING WELL AREA	▨
EXISTING PRIVACY FENCE	—X—	PROPOSED SPILLWAY	▨
EXISTING SPLIT RAIL FENCE	—X—		
STANDARD GUTTER PAN	—M—		
REVERSED GUTTER PAN	—M—		
PROPOSED DOOR	—M—		



PLAN VIEW  
SCALE: 1"=30'

GRAPHIC SCALE



NO.	DESCRIPTION	DATE

### REVISIONS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	5/14/2024
CHIEF, DEVELOPMENT ENGINEERING DIVISION	5/15/2024
CHIEF, DIVISION OF LAND DEVELOPMENT	5/23/2024
DIRECTOR	

Joanne Carey  
 Joanne Carey (May 7, 2024 09:11 EDT)  
 JOANNE CAREY, RLA 4148  
 MD DNR QUALIFIED PROFESSIONAL

DESIGNED BY	5/15/2024
HOWARD SCD	DATE

### DESIGN CERTIFICATE

"I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT 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 CONSERVATION DISTRICT."

DESIGNER'S SIGNATURE  
 PAUL M. SILL  
 PRINTED NAME

DATE  
 05/07/2024  
 32025  
 MD REGISTRATION NO.  
 P.E.

### OWNER/DEVELOPER'S CERTIFICATE

"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 THE RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF TRAINING AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO THE BEGINNING OF THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND/OR MDE."

OWNER'S SIGNATURE  
 MICHAEL BOOSALIS  
 PRINTED NAME

DATE  
 05/07/2024  
 301-854-1006  
 SIGNATURE OF DEVELOPER

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS IN ACCORDANCE WITH THE MASTER PLAN OF HOWARD COUNTY

OWNER'S SIGNATURE  
 MICHAEL BOOSALIS  
 PRINTED NAME

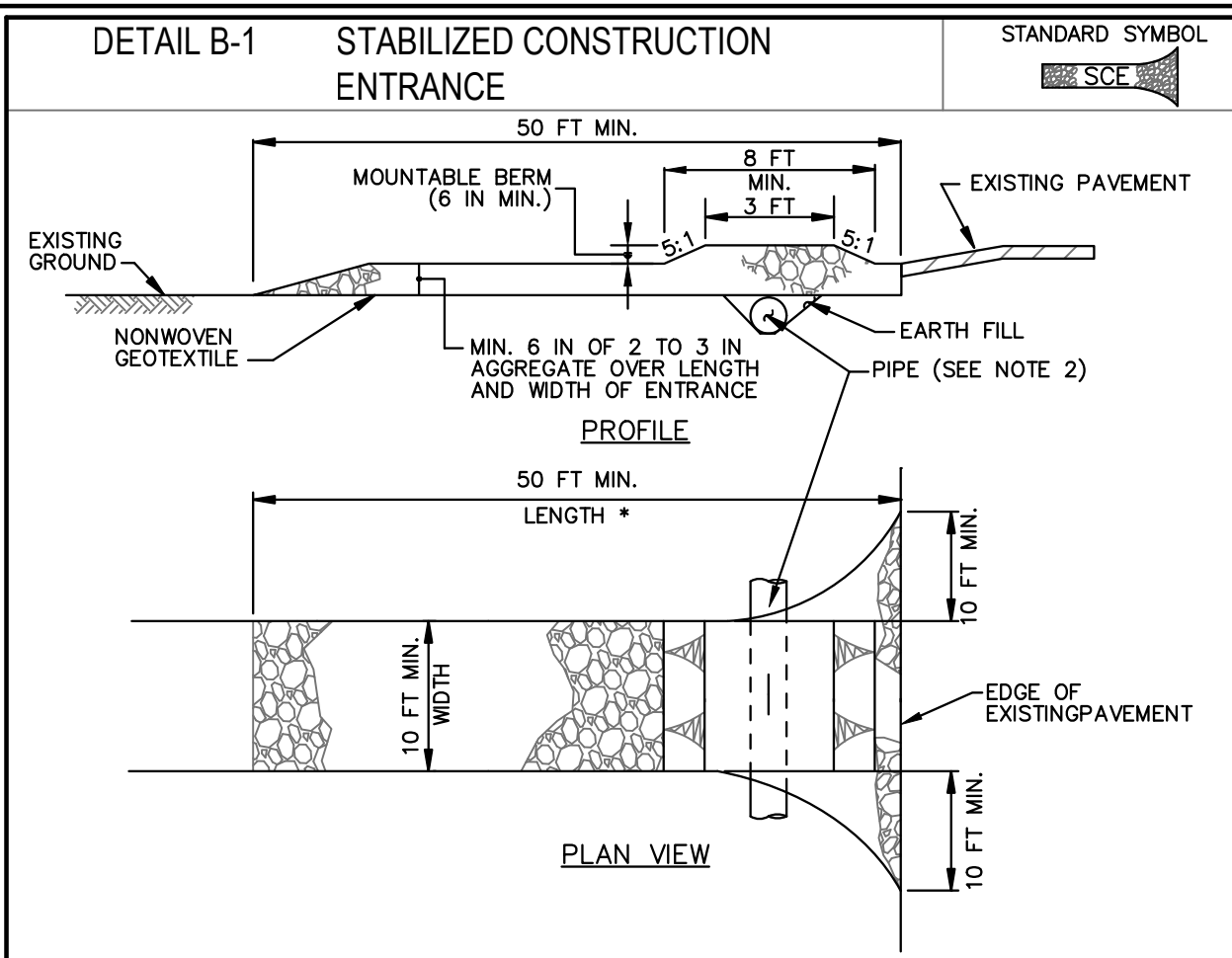
DATE  
 5/23/2024  
 COUNTY HEALTH OFFICER  
 HOWARD COUNTY HEALTH DEPARTMENT

<b>OWNER</b>	<b>DEVELOPER</b>
MICHAEL BOOSALIS 12080 HALL SHOP ROAD CLARKSVILLE, MARYLAND 21029 301-854-1006	DIVERSIFIED APPLICATIONS C/O JESSICA HINERMAN 14818 N. FRANKLINVILLE ROAD THURMONT, MARYLAND 21788 ACCOUNTS@DIVERSIFIEDAPP.COM 301-798-6241

### SEDIMENT AND EROSION CONTROL AND FOREST CONSERVATION PLAN BOOSALIS PROPERTY

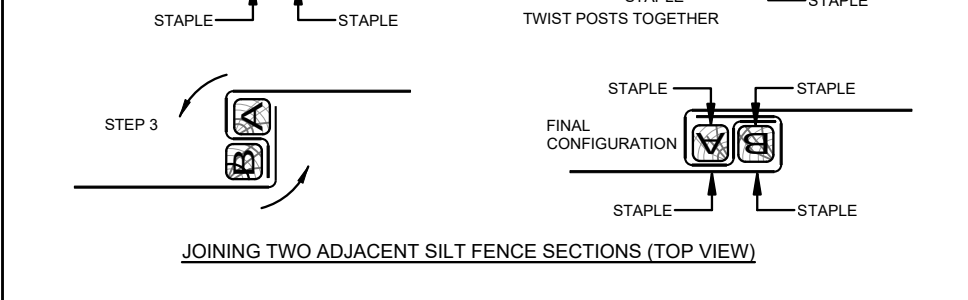
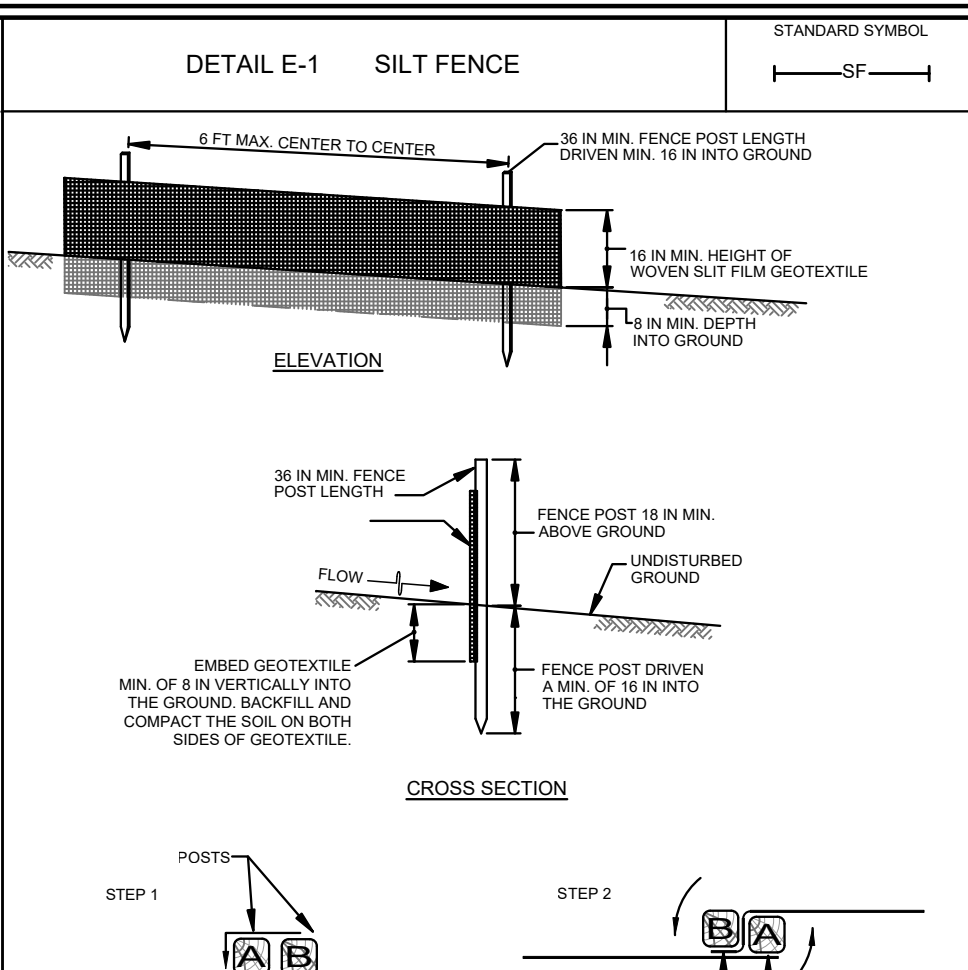
12064 HALL SHOP ROAD  
 ZONED: BR  
 TAX MAP 41 GRID 1  
 5TH ELECTION DISTRICT  
 PARCEL 254  
 HOWARD COUNTY, MARYLAND

<p>SILL ENGINEERING GROUP, LLC          16005 Frederick Rd, 2nd Floor          Woodbine, MD 21797          Phone: 443.325.5076          Fax: 410.696.2022          Email: info@sillengineering.com          Civil Engineering &amp; Surveying for Land Development</p>	DESIGN BY: PS DRAWN BY: TB CHECKED BY: PS SCALE: AS SHOWN DATE: APRIL 15, 2024 PROJECT #: 15-043 SHEET #: 3 of 11	
	PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32025, EXPIRATION DATE: JUNE 20, 2025.	SDP-21-004



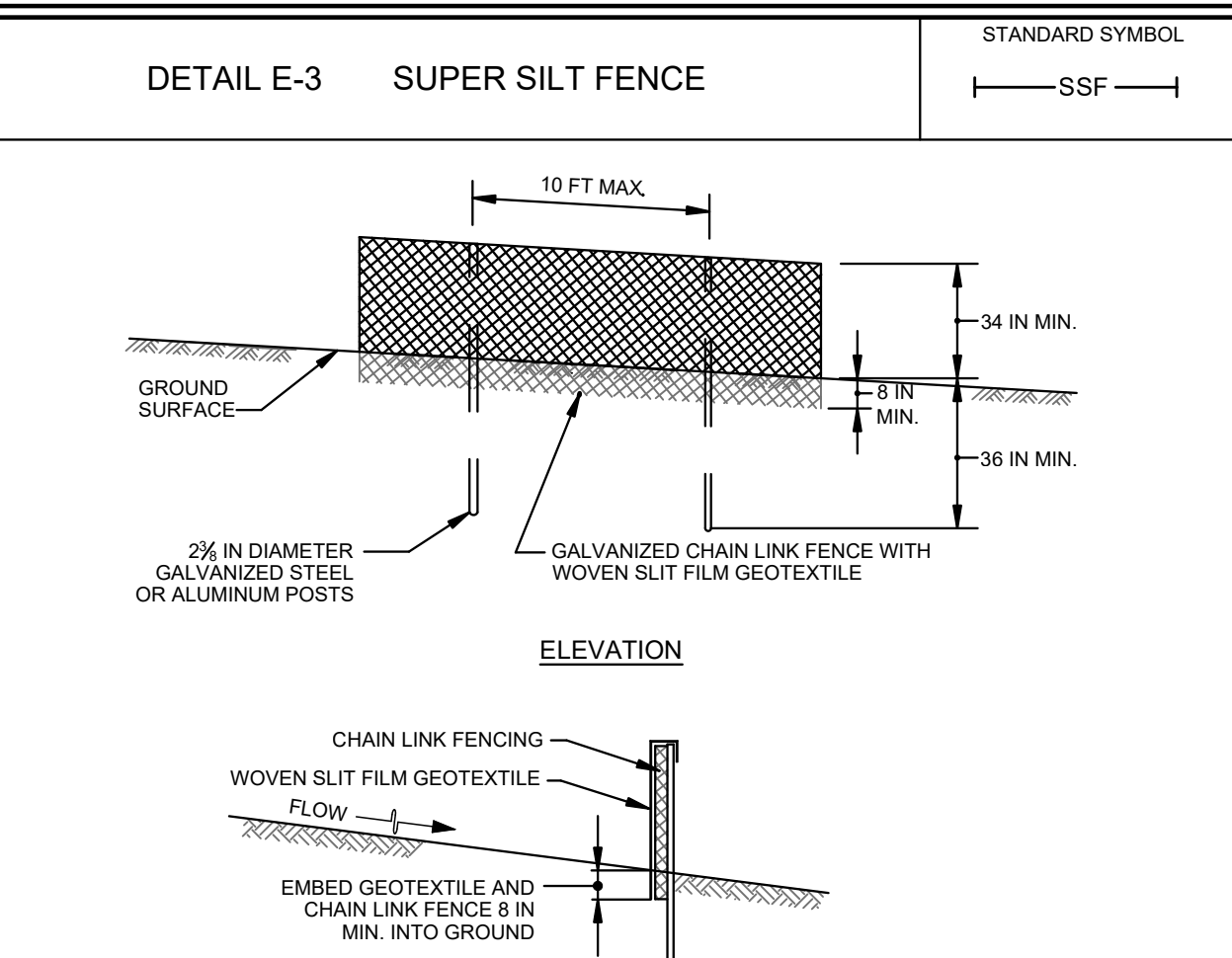
- CONSTRUCTION SPECIFICATIONS**
- PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (450 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
  - PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.
  - PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
  - PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
  - MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING 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 EROSION AND SEDIMENT CONTROL		
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



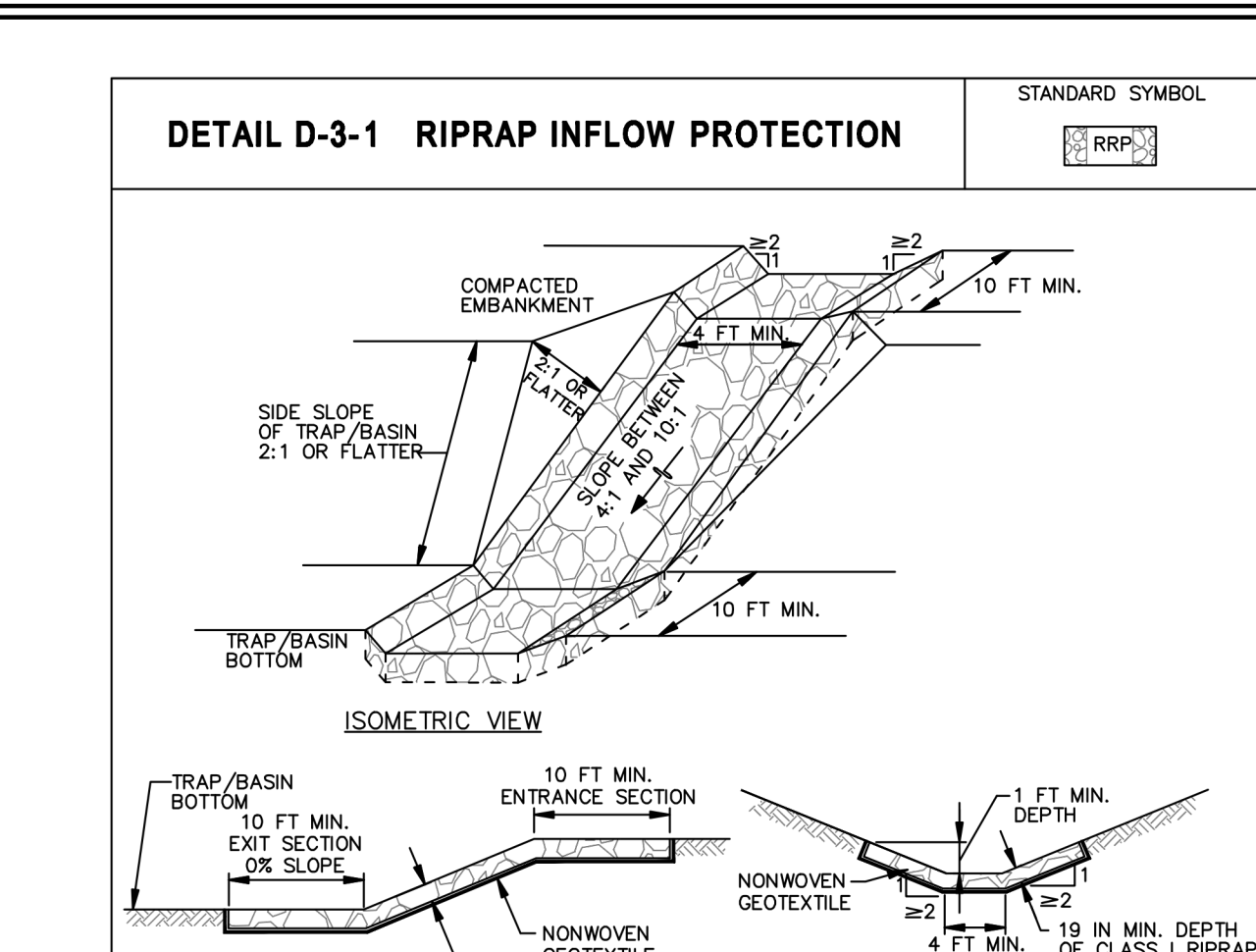
- CONSTRUCTION SPECIFICATIONS**
- USE WOOD POSTS 1 1/2 x 1 1/2 INCH MINIMUM SQUARE CUT OF SOUND QUALITY HARDWOOD. AS AN ALTERNATIVE TO WOODEN POST USE STANDARD 1" OR 1 1/2" SECTION STEEL POSTS WEIGHING NOT LESS THAN 1 POUND PER LINEAR FOOT.
  - USE 3/8 INCH MINIMUM POSTS DRIVEN 18 INCH MINIMUM INTO GROUND NO MORE THAN 4 FEET APART.
  - 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.
  - 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.
  - EMBED GEOTEXTILE A MINIMUM OF 8 INCHES VERTICALLY INTO THE GROUND. BACKFILL AND COMPACT THE SOIL ON BOTH SIDES OF FABRIC.
  - WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN, OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL.
  - 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 EROSION AND SEDIMENT CONTROL		
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



- CONSTRUCTION SPECIFICATIONS**
- INSTALL 2 1/2 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.
  - FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2 1/2 INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.
  - FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND.
  - WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 8 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		
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



- CONSTRUCTION SPECIFICATIONS**
- PROVIDE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, UNDER THE BOTTOM AND ALONG SIDES OF ALL RIPRAP.
  - CONSTRUCT INFLOW CHANNEL WITH CLASS 1 RIPRAP OR EQUIVALENT RECYCLED CONCRETE LINING TO A MINIMUM DEPTH OF 19 INCHES (2 x D<sub>90</sub>) AND A 1 FOOT DEEP FLOW CHANNEL. INFLOW RIPRAP PROTECTION CHANNEL MUST HAVE A TRAPEZOIDAL CROSS SECTION WITH 2:1 OR FLATTER SIDE SLOPES AND A 4 FOOT MINIMUM BOTTOM WIDTH.
  - INSTALL ENTRANCE AND EXIT SECTIONS AS SHOWN ON THE PROFILE.
  - BLEND RIPRAP INTO EXISTING GROUND.
  - MAINTAIN LINE, GRADE, AND CROSS SECTION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. KEEP POINTS OF INFLOW AND OUTFLOW FREE OF EROSION.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL		
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

NO.	DESCRIPTION	DATE

**REVISIONS**

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	
Chief, Development Engineering Division	5/14/2024
Chief, Division of Land Development	5/15/2024
Director	5/23/2024

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

Designed by: Alexander Bratovic	5/15/2024
HOWARD SCD	DATE

**DESIGN CERTIFICATE**

"I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT 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 CONSERVATION DISTRICT."

DESIGNER'S SIGNATURE	DATE
PAUL M. SILL	3/20/25
PRINTED NAME	MD REGISTRATION NO.
	P.E.

**OWNER/DEVELOPER'S CERTIFICATE**

"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 THE RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF TRAINING AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL OF EROSION AND SEDIMENT PRIOR TO THE BEGINNING OF THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND/OR MDE."

Signature of Developer: Silvia Trabasso	DATE: 04/19/2024
SIGNATURE OF DEVELOPER	DATE

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS IN ACCORDANCE WITH THE MASTER PLAN OF HOWARD COUNTY

County Health Officer: Michael Davis	DATE: 5/23/2024
COUNTY HEALTH OFFICER	DATE
HOWARD COUNTY HEALTH DEPARTMENT	

<b>OWNER</b>	<b>DEVELOPER</b>
MICHAEL BOOSALIS 12080 HALL SHOP ROAD CLARKSVILLE, MARYLAND 21029 301-854-1006	DIVERSIFIED APPLICATIONS C/O JESSICA HINERMAN 14818 N. FRANKLINVILLE ROAD THURMONT, MARYLAND 21788 ACCOUNTS@DIVERSIFIEDAPP.COM 301-798-6241

**SEDIMENT AND EROSION CONTROL DETAILS**  
**BOOSALIS PROPERTY**  
 12064 HALL SHOP ROAD  
 ZONED: BR

TAX MAP 41 GRID 1  
 5TH ELECTION DISTRICT

PARCEL 254  
 HOWARD COUNTY, MARYLAND

DESIGN BY: PS	DRAWN BY: TB
CHECKED BY: PS	SCALE: AS SHOWN
DATE: APRIL 15, 2024	PROJECT #: 15-043
SHEET #: 4 of 11	

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32025, EXPIRATION DATE: JUNE 20, 2025.

TABLE B.1: TEMPORARY SEEDING FOR SITE STABILIZATION

Table with columns: PLANT SPECIES, SEEDING RATE (LB/AC, LB/1000 FT²), SEEDING DEPTH (INCHES), RECOMMENDED SEEDING DATES BY PLANT HARDINESS ZONE (5b & 6a, 6b, 7a & 7b). Rows include COOL-SEASON GRASSES (Annual Ryegrass, Orchardgrass, Oats, Barley), WHEAT, CEREAL RYE, and WARM-SEASON GRASSES (Foxtail Millet, Pearl Millet).

FERTILIZER RATE (10-0-20): 436 LB/AC (10LB/1000SF) LIME RATE: 2 TONS/AC (90LB/1000SF)

- NOTES: SEEDING RATES FOR THE WARM-SEASON GRASSES ARE IN POUNDS OF PURE LIVE SEED (PLS). ACTUAL PLANTING RATES SHALL BE ADJUSTED TO REFLECT PERCENT SEED GERMINATION AND PURITY, AS TESTED. ADJUSTMENTS ARE USUALLY NOT NEEDED FOR THE COOL-SEASON GRASSES. SEEDING RATES LISTED ABOVE ARE FOR TEMPORARY SEEDINGS...

TABLE B.5: RECOMMENDED PLANTING DATES FOR PERMANENT COVER IN MARYLAND

Table with columns: TYPE OF PLANT MATERIAL, PLANT HARDINESS ZONES (5b & 6a, 6b, 7a & 7b). Rows include SEEDS-COOL-SEASON GRASSES, SEEDS-WARM-SEASON GRASSES, SOD-COOL-SEASON, UNROOTED WOODY MATERIALS, and CONTAINERIZED STOCK.

STANDARDS AND SPECIFICATIONS FOR TEMPORARY STABILIZATION

- 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...

STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

- TO STABILIZE DISTURBED SOILS WITH PERMANENT VEGETATION. PURPOSE: TO USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER ON DISTURBED SOILS. CONDITIONS WHERE PRACTICE APPLIES: EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR 6 MONTHS OR MORE...

SEDIMENT CONTROL NOTES

- 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: PRIOR TO THE START OF EARTH DISTURBANCE...

Table with columns: CATEGORY (TOTAL AREA, AREA DISTURBED, AREA TO BE ROOFED OR PAVED, AREA TO BE VEGETATIVELY STABILIZED, TOTAL CUT, TOTAL FILL, OFFSITE WASTE/BORROW AREA LOCATION) and VALUE.

- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED THE SAME DAY OF DISRUPTION. ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE CID, THE SITE AND ALL CONTROLS SHALL BE INSPECTED BY THE CONTRACTOR WEEKLY...

B-4-8 STANDARDS AND SPECIFICATIONS FOR STOCKPILE AREA

- A MOUND OR PILE OF SOIL PROTECTED BY APPROPRIATELY DESIGNED EROSION AND SEDIMENT CONTROL MEASURES. PURPOSE: TO PROVIDE A DESIGNATED LOCATION FOR THE TEMPORARY STORAGE OF SOIL THAT CONTROLS THE POTENTIAL FOR EROSION, SEDIMENTATION, AND CHANGES TO DRAINAGE PATTERNS...

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. CONDITIONS WHERE PRACTICE APPLIES: WHERE VEGETATIVE STABILIZATION IS TO BE ESTABLISHED...

- 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...

SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT. NOTIFY HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS, (410)-313-1880, AT LESAT 48 HOURS BEFORE STARTING WORK. INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE AND SUPER SILT FENCE...

SEDIMENT AND EROSION CONTROL NOTES BOOSALIS PROPERTY 12064 HALL SHOP ROAD ZONED: BR PARCEL 254 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

Table with columns: NO., DESCRIPTION, DATE. Contains revision entries for APPROVED, CHIEF DEVELOPER, and DIRECTOR.

REVISIONS section with columns: APPROVED, CHIEF DEVELOPER, CHIEF DIVISION OF LAND DEVELOPMENT, DIRECTOR. Includes dates and signatures.

DESIGN CERTIFICATE section with columns: DESIGNER'S SIGNATURE, PRINTED NAME, DATE, MO REGISTRATION NO., P.E. Includes signature of Paul M. Sill and date 04/19/2024.

OWNER/DEVELOPER'S CERTIFICATE section with columns: APPROVED, DATE, SIGNATURE OF DEVELOPER. Includes signature of Michael Boosalis and date 04/19/2024.

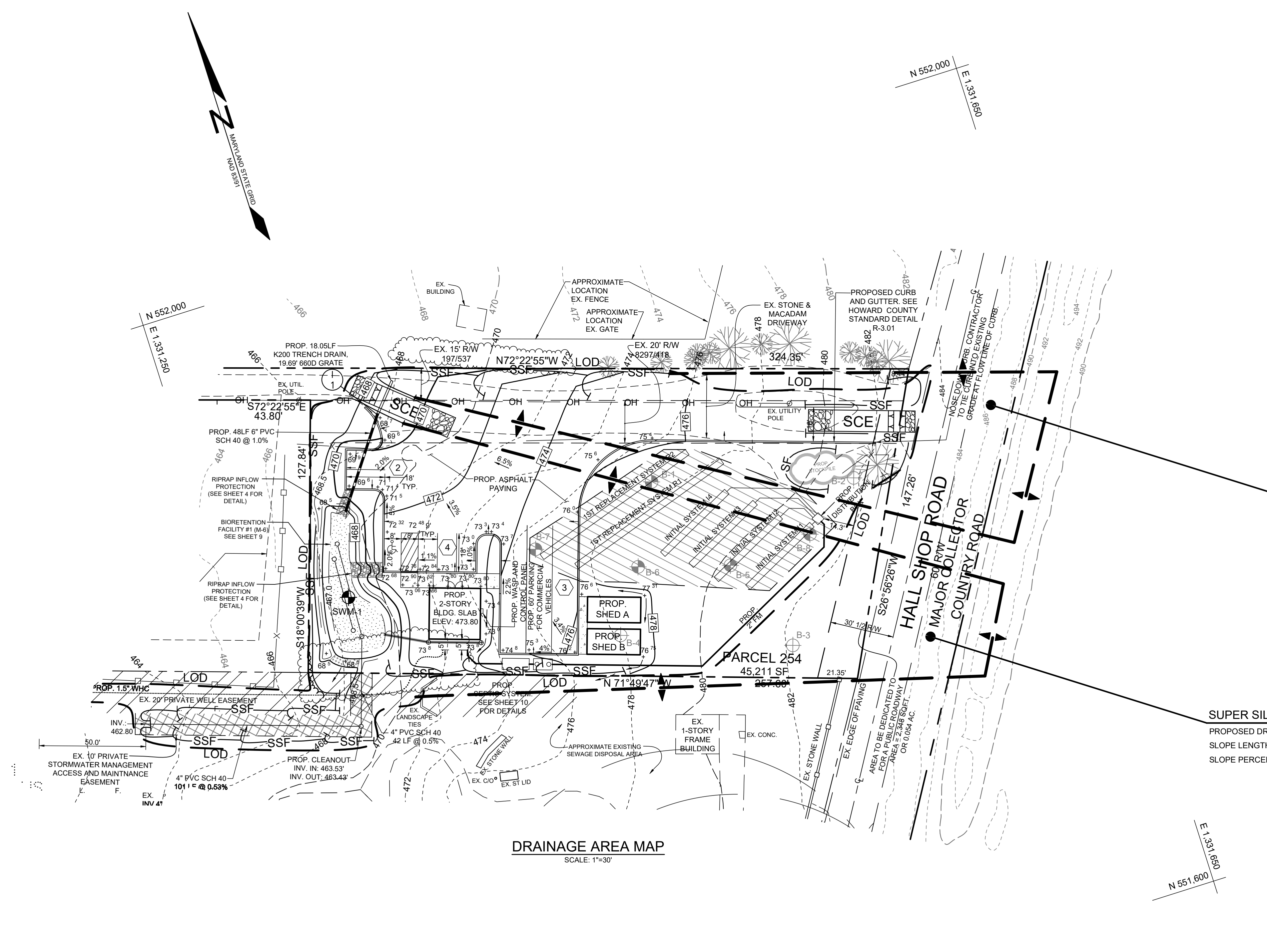
OWNER section with columns: OWNER, ADDRESS, CITY, STATE, ZIP. Includes name Michael Boosalis and address 12080 Hall Shop Road.

DEVELOPER section with columns: DEVELOPER, ADDRESS, CITY, STATE, ZIP, PHONE, FAX, EMAIL. Includes name Sill Engineering Group, LLC and address 16005 Frederick Rd.

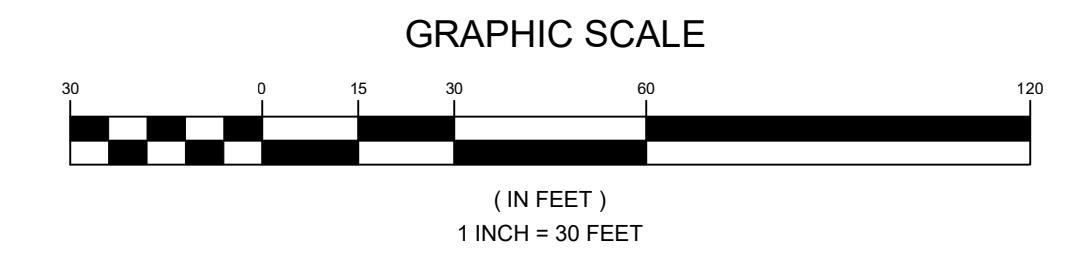
SOILS LEGEND			
SYMBOL	NAME / DESCRIPTION	GROUP	'K' FACTOR
BaA	BAILE SILT LOAM, 0 TO 3 PERCENT SLOPES	C/D	0.49
GbB	GLADSTONE LOAM, 3 TO 8 PERCENT SLOPES	A	0.32

NOTES:  
 1) SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE; NATURAL RESOURCES CONSERVATION SERVICE; WEB SOIL SURVEY.  
 2) HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR 'K' GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT.

LEGEND			
EXISTING CONTOUR GIS		EXISTING UTILITY POLE	
EXISTING CONTOUR FIELD RUN		EXISTING RW	
PROPOSED CONTOUR		EXISTING TREE	
EXISTING SPOT ELEVATION		ROAD CENTERLINE	
PROPOSED SPOT ELEVATION		EXTENDED OVERHEAD WIRES	
EXISTING TREELINE		STREAM BUFFER	
SOIL BOUNDARY		EXISTING WELL AREA	
EXISTING PRIVACY FENCE		PROPOSED SPILLWAY	
EXISTING SPLIT RAIL FENCE		PROPOSED SOIL TEST BORING	
STABILIZED CONSTRUCTION ENTRANCE		EXISTING PASSED SOIL TEST BORING	
SILT FENCE		EXISTING FAILED SOIL TEST BORING	
SUPER SILT FENCE		STANDARD GUTTER PAN	
LIMIT OF DISTURBANCE		REVERSED GUTTER PAN	
PROPOSED DRAINAGE DIVIDE		PROPOSED DOOR	



**DRAINAGE AREA MAP**  
SCALE: 1"=30'



NO.	DESCRIPTION	DATE
REVISIONS		

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 Chief, Development Engineering Division: *Chad Edmondson* 5/14/2024  
 Chief, Division of Land Development: *Linda Eschenberg* 5/23/2024  
 Director: \_\_\_\_\_

DESIGN CERTIFICATE  
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT  
 Designer: *Alexander Bratko* 5/15/2024  
 Director: \_\_\_\_\_

OWNER/DEVELOPER'S CERTIFICATE  
 I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT 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 CONSERVATION DISTRICT.  
 Designer's Signature: \_\_\_\_\_ DATE: 04/16/2024  
 Printed Name: PAUL M. SILL DATE: 3/20/25  
 MD REGISTRATION NO. \_\_\_\_\_ P.E.

OWNER/DEVELOPER'S CERTIFICATE  
 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 THE RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF TRAINING AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO THE BEGINNING OF THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND/OR MDE.  
 Signature of Developer: *Jessica Hoyerman* DATE: 04/19/2024

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS IN ACCORDANCE WITH THE MASTER PLAN OF HOWARD COUNTY  
 County Health Officer: *Michael Davis* DATE: 5/23/2024  
 Director: \_\_\_\_\_

OWNER  
 MICHAEL BOOSALIS  
 12080 HALL SHOP ROAD  
 CLARKSVILLE, MARYLAND 21029  
 301-854-1006

DEVELOPER  
 DIVERSIFIED APPLICATIONS  
 C/O JESSICA HIRNERMAN  
 14818 N. FRANKLINVILLE ROAD  
 THURMONT, MARYLAND 21788  
 ACCOUNTS@DIVERSIFIEDAPP.COM  
 301-798-6241

**SEDIMENT AND EROSION CONTROL  
 DRAINAGE AREA MAP  
 BOOSALIS PROPERTY**  
 12064 HALL SHOP ROAD  
 ZONED: BR

TAX MAP 41 GRID 1  
 5TH ELECTION DISTRICT

PARCEL 254  
 HOWARD COUNTY, MARYLAND

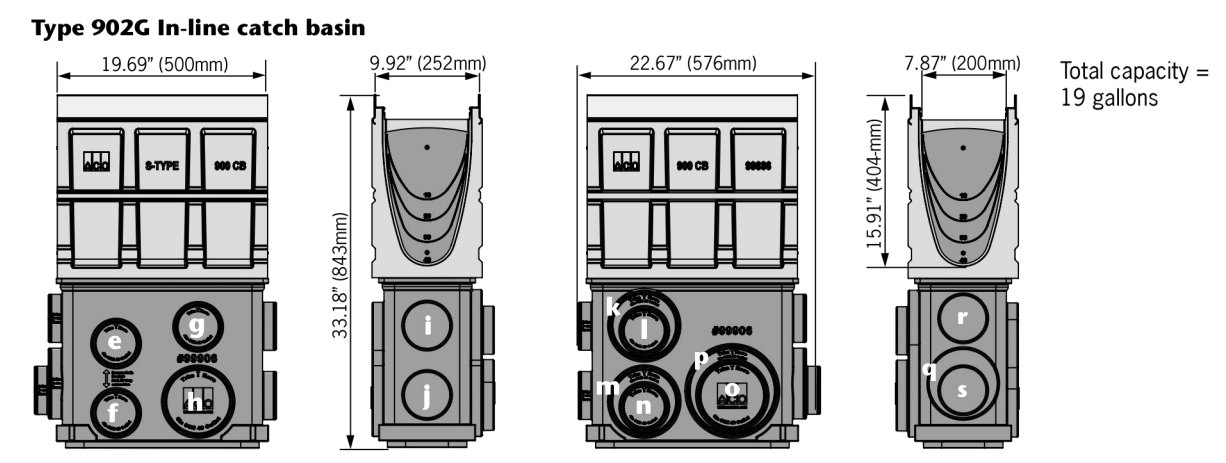
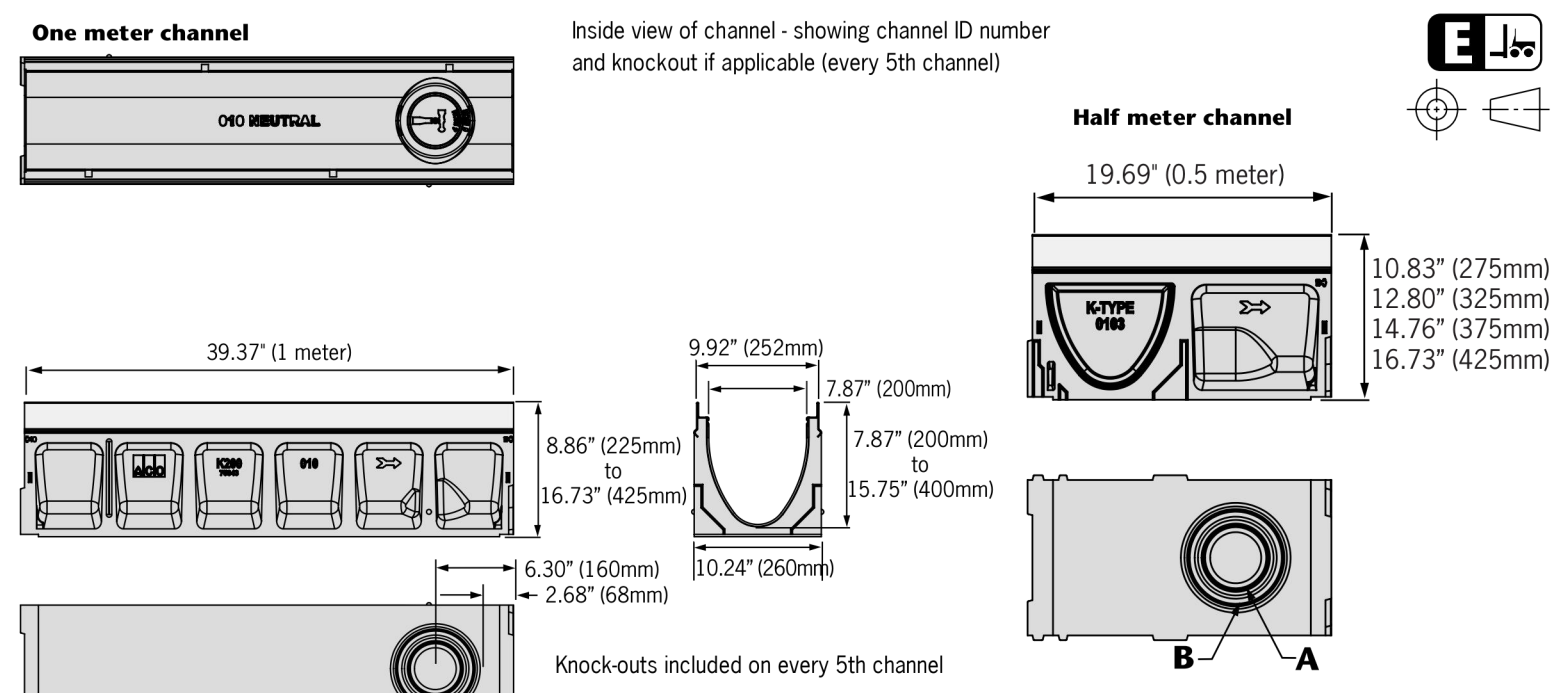
**SILL ENGINEERING GROUP, LLC**

16005 Frederick Rd, 2nd Floor  
 Woodbine, MD 21797  
 Phone: 443.325.5076  
 Fax: 410.696.2022  
 Email: info@sillengineering.com  
 Civil Engineering & Surveying for Land Development

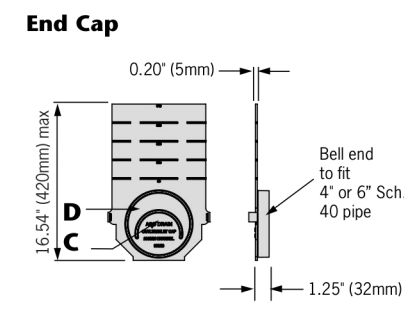
DESIGN BY: PS  
 DRAWN BY: TB  
 CHECKED BY: PS  
 SCALE: AS SHOWN  
 DATE: APRIL 15, 2024  
 PROJECT #: 15-043  
 SHEET #: 6 of 11

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 35025, EXPIRATION DATE: JUNE 20, 2025.

**ACO DRAIN**  
**KlassikDrain - K200 Galvanized steel edge rail channel system**



Outlet	Product	Outlet size (Sch. 40)	Invert Depth	GPM	CFS
A	Bottom outlet - K2-00	4" round	7.87'	153	0.31
A	Bottom outlet - K2-040	4" round	15.75'	216	0.48
B	Bottom outlet - K2-00	6" round	7.87'	344	0.77
B	Bottom outlet - K2-040	6" round	15.75'	486	1.08
C	End outlet - K2-00	4" round	7.87'	132	0.29
C	End outlet - K2-40	4" round	15.75'	202	0.45
D	End outlet - K2-10	6" round	9.94'	320	0.71
D	End outlet - K2-40	6" round	15.75'	437	0.97
E	Type K2-902G	4" round	25.33'	263	0.59
F	Type K2-902G	4" round	31.83'	297	0.66
G	Type K2-902G	4" round	23.76'	254	0.57
H	Type K2-902G	6" round	31.83'	658	1.47
I	Type K2-902G	4" round	23.91'	255	0.57
J	Type K2-902G	4" round	30.40'	290	0.65
K	Type K2-902G	6" round	24.68'	570	1.27
L	Type K2-902G	4" round	24.13'	256	0.57
M	Type K2-902G	6" round	31.82'	658	1.47
N	Type K2-902G	4" round	31.26'	294	0.66
O	Type K2-902G	6" round	31.26'	651	1.45
P	Type K2-902G	8" round	31.82'	1149	2.56
Q	Type K2-902G	6" round	30.32'	640	1.43
R	Type K2-902G	4" round	23.19'	251	0.56
S	Type K2-902G	4" round	23.90'	288	0.64



April 2018 [www.ACODrain.us](http://www.ACODrain.us)

ACO Specification Information

**GENERAL NOTES**

- IT IS THE CUSTOMER'S RESPONSIBILITY TO ENSURE THAT EACH PRODUCT IS FIT FOR ITS INTENDED PURPOSE AND THAT THE ACTUAL CONDITIONS ARE SUITABLE.
- IT IS THE CUSTOMER'S RESPONSIBILITY TO FOLLOW ACO, INC. INSTALLATION INSTRUCTIONS FOR EACH PRODUCT. SEEK ENGINEERING ADVICE FOR INSTALLATIONS NOT ILLUSTRATED IN THE INSTALLATION GUIDELINES.
- FOR FURTHER PRODUCT INFORMATION, CUT SHEETS, SPECIFICATIONS AND INSTALLATION INSTRUCTIONS, PLEASE VISIT US AT OUR WEBSITE: [WWW.ACODRAIN.US](http://WWW.ACODRAIN.US).
- ACO IS NOT RESPONSIBLE TO ENSURE PROPER FLOW TO SYSTEMS OUTLETS OR CATCH BASINS. REFER TO GRADING PLANS. ALL TRENCH DRAIN LAYOUTS ARE DESIGNED AT 0.0% LONGITUDINAL PAVEMENT SLOPE UNLESS OTHERWISE NOTED.
- THIS TRENCH DRAIN LAYOUT DRAWING IS ONLY INTENDED TO BE USED AS A GUIDELINE. REFERENCE CONSTRUCTION DOCUMENTS FOR FURTHER INFORMATION.

**TRENCH NOTES**

- ALL FABRICATIONS TO BE COMPLETED BY INSTALLING CONTRACTOR.
- DIMENSIONS ARE FROM CENTERLINE.
- INSTALLING CONTRACTOR TO VERIFY ENTIRE SCOPE OF TRENCH DRAIN HAS BEEN PROVIDED FOR THIS PROJECT BY ACO, INC.
- LAYOUT IS BASED ON GRADING PLAN AND TRENCH DESIGN PARAMETERS PROVIDED TO ACO, INC. TECHNICAL SERVICES DEPARTMENT.

**MATERIAL LIST**

PART #	DESCRIPTION	QTY
K200		
75016	16 SLOPING CHANNEL	1
75017	17 SLOPING CHANNEL	1
75018	18 SLOPING CHANNEL	1
75019	19 SLOPING CHANNEL	1
75020	20 SLOPING CHANNEL	1
75048	0200 1/2m NEUTRAL CHANNEL	1
TOTAL 1m CHANNELS		5
TOTAL 1/2m CHANNELS		1
14177	6000 IRON SLOTTED GRATE 18.89" (0.5m)	11
98821	UNIVERSAL CLOSING/INLET/OUTLET CAP	2

**LEGEND**

- CC - CLOSING CAP
- OC - OUTLET CAP
- RV - INVERT
- HP - HIGH POINT
- LP - LOW POINT
- BO - BOTTOM OUTLET

**BOOSALIS PROPERTY CLARKSVILLE, MD**

NOTES: MATERIAL LIST & TRENCH DRAIN LAYOUT DRAWING: REED SLOTTED D1

DESIGNED BY: [Signature] DATE: 11-6-20 MS

CHECKED BY: [Signature] DATE: 11-6-20 MS

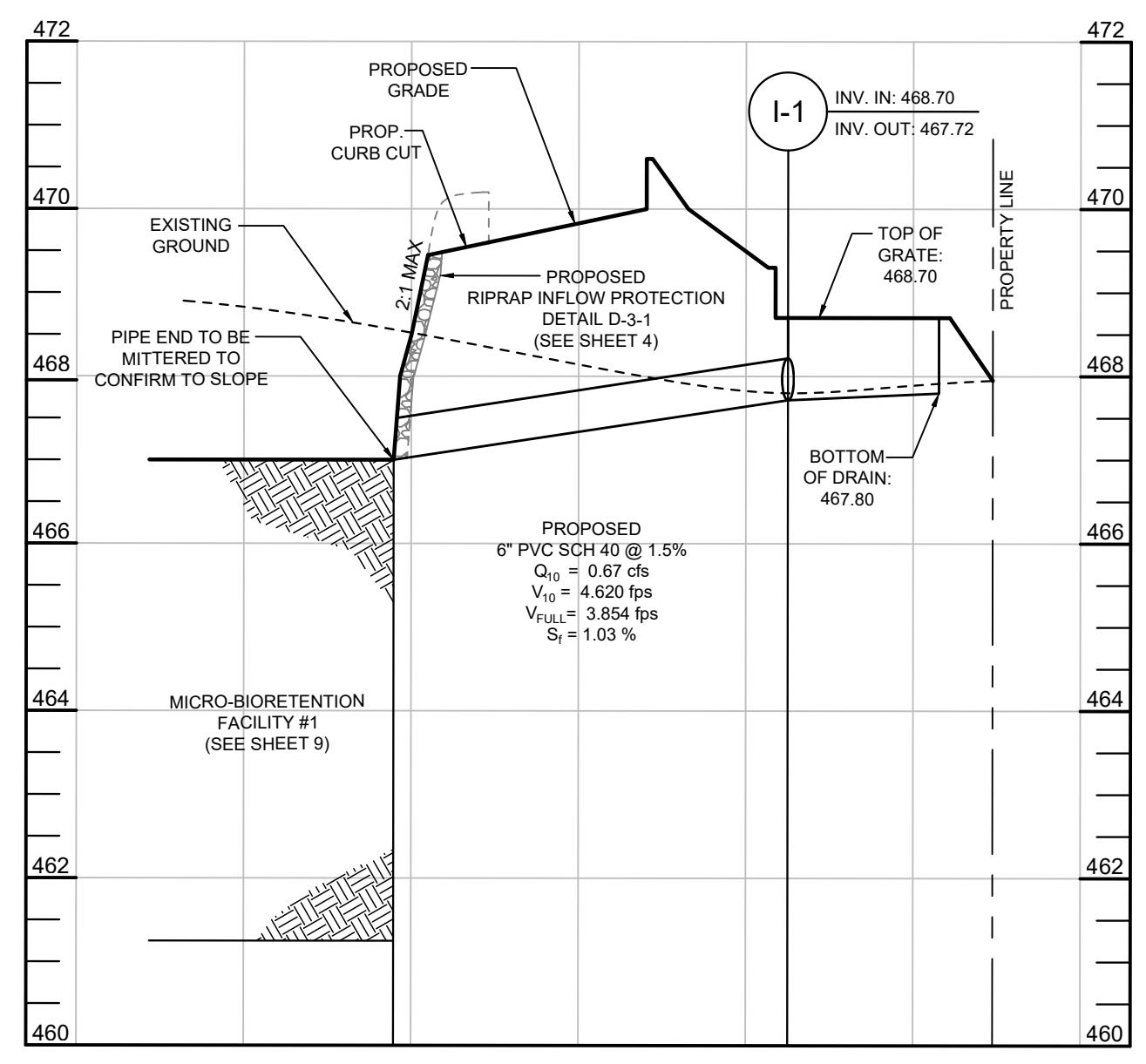
DESIGN SERV. NO.: REV. 1201316C

**ACO, INC.**

WEST SALES OFFICE: 1515 WOODBINE RD, CLARKSVILLE, MD 21029, TEL: 301-584-4200, FAX: 301-584-4202, WWW.ACOSUS.COM

EAST SALES OFFICE: 1000 WOODBINE RD, FORT MILL, SC 29504, TEL: 803-547-1100, FAX: 803-547-1101

SOUTHEAST SALES OFFICE: 2115 WOODBINE RD, FORT MILL, SC 29504, TEL: 803-547-1100, FAX: 803-547-1101



**STORMDRAIN PROFILE I-1 to MICRO-BIORETENTION FACILITY #1 (M-6)**  
 HORIZONTAL SCALE: 1" = 20'  
 VERTICAL SCALE: 1" = 2'

STRUCTURE SCHEDULE						
NO.	TYPE & OWNERSHIP	LOCATION	TOP ELEV.	INV. IN	INV. OUT	REMARKS
I-1	KLASSIK DRAIN - K200	N 551,926.9 E 1,331,342.08	468.70	-	467.72	SEE DETAIL THIS SHEET

REQUIRED Q: 0.67 CFS  
 CAPACITY: 0.80 CFS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	Developed by: [Signature]	5/14/2024
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE	5/15/2024
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE	5/23/2024
DIRECTOR	DATE	

NO.	DESCRIPTION	DATE

NOTE: SEE MANUFACTURER FOR DESIGN SPECIFICATIONS

**OWNER**  
 MICHAEL BOOSALIS  
 12080 HALL SHOP ROAD  
 CLARKSVILLE, MARYLAND 21029  
 301-854-1006

**DEVELOPER**  
 DIVERSIFIED APPLICATIONS  
 C/O JESSICA HINERMAN  
 14818 N. FRANKLINVILLE ROAD  
 THURMONT, MARYLAND 21788  
 ACCOUNTS@DIVERSIFIEDAPP.COM  
 301-798-6241

**STORM DRAIN PROFILE AND DETAILS**  
**BOOSALIS PROPERTY**  
 12064 HALL SHOP ROAD  
 ZONED: BR

TAX MAP 41 GRID 1  
 5TH ELECTION DISTRICT

PARCEL 254  
 HOWARD COUNTY, MARYLAND

**SILL ENGINEERING GROUP, LLC**  
 16005 Frederick Rd, 2nd Floor  
 Woodbine, MD 21797  
 Phone: 443.323.5076  
 Fax: 410.696.2022  
 Email: info@sillengineering.com  
 Civil Engineering & Surveying for Land Development

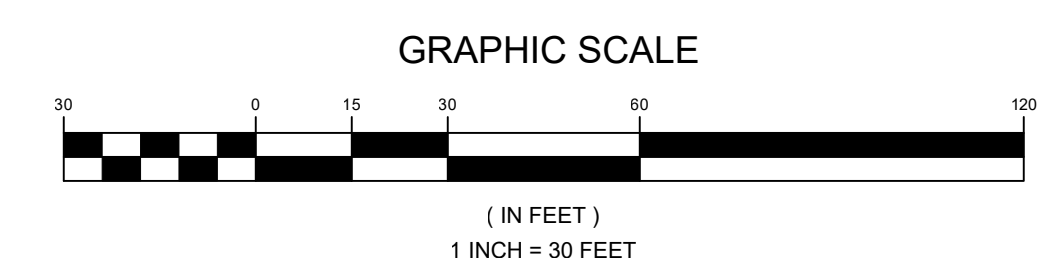
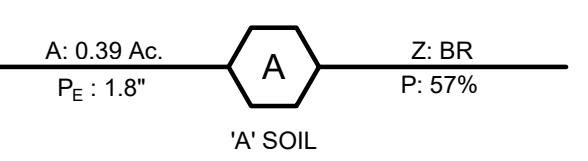
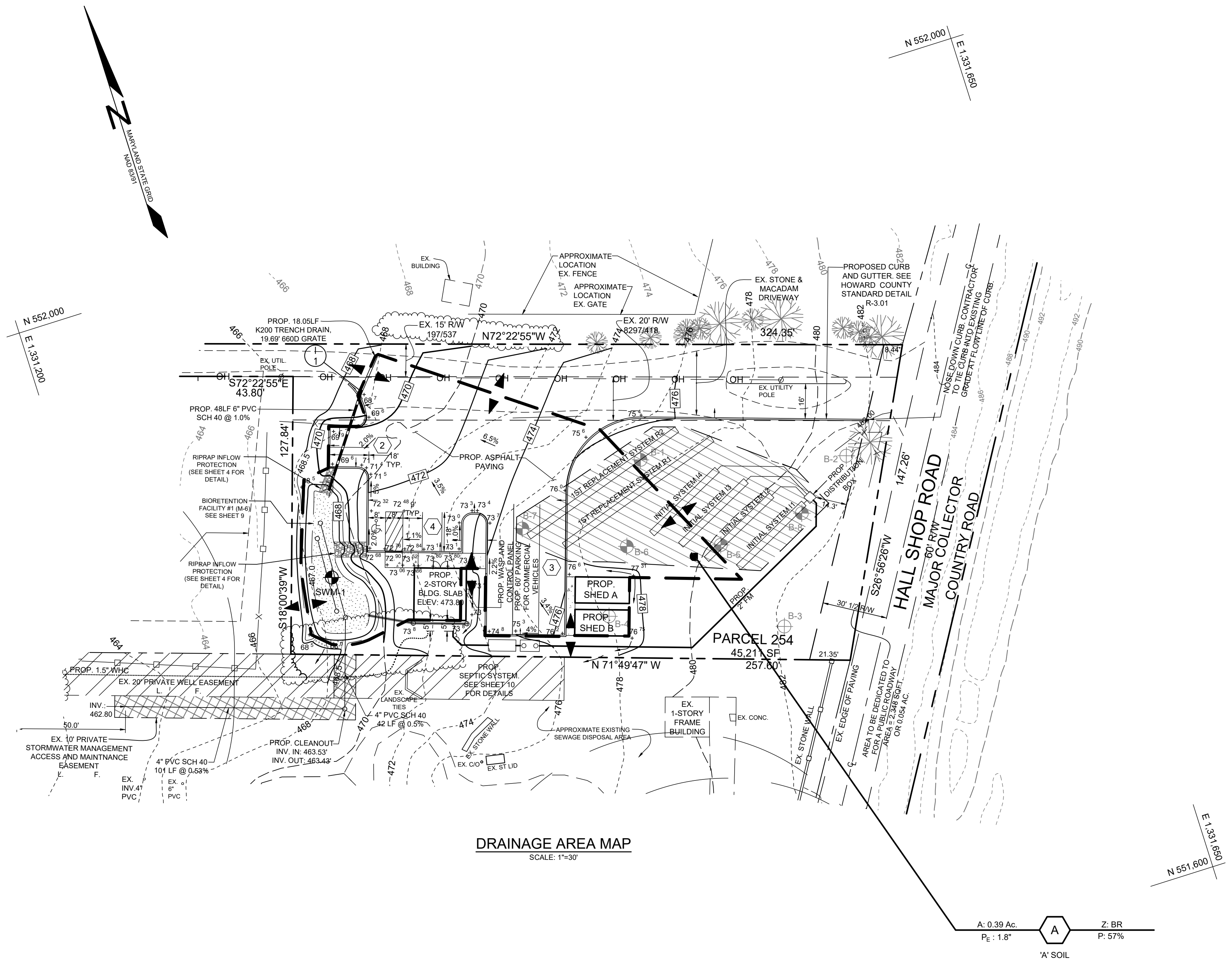
DESIGN BY: PS  
 DRAWN BY: TB  
 CHECKED BY: PS  
 SCALE: AS SHOWN  
 DATE: APRIL 15, 2024  
 PROJECT #: 15-043  
 SHEET #: 7 of 11

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32025, EXPIRATION DATE: JUNE 20, 2025.

SOILS LEGEND			
SYMBOL	NAME / DESCRIPTION	GROUP	'K' FACTOR
B5A	BAILE SILT LOAM, 0 TO 3 PERCENT SLOPES	C/D	0.49
G5B	GLADSTONE LOAM, 3 TO 8 PERCENT SLOPES	A	0.32

NOTES:  
 1) SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE; NATURAL RESOURCES CONSERVATION SERVICE; WEB SOIL SURVEY.  
 2) HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR 'K' GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT.

LEGEND			
EXISTING CONTOUR GIS	--- 382	EXISTING UTILITY POLE	⊗
EXISTING CONTOUR FIELD RUN	--- 382	EXISTING R/W	▬
PROPOSED CONTOUR	--- 382	EXISTING TREE	⊗
EXISTING SPOT ELEVATION	382.3	ROAD CENTERLINE	—C—
PROPOSED SPOT ELEVATION	+82.53	EXTENDED OVERHEAD WIRES	—OH—
EXISTING TREELINE	~ ~ ~	PROPOSED SPILLWAY	▨
SOIL BOUNDARY	—+—+—+—	PROPOSED DRAINAGE DIVIDE	⬆
EXISTING PRIVACY FENCE	—□—	STANDARD GUTTER PAN	—G—
EXISTING SPLIT RAIL FENCE	—X—	REVERSED GUTTER PAN	—G—
PROPOSED SOIL TEST BORING	⊗ SWM-1	PROPOSED DOOR	⌈
EXISTING PASSED SOIL TEST BORING	⊗ B-1		
EXISTING FAILED SOIL TEST BORING	⊗ B-1		



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 THURMONT, MARYLAND 21788  
 ACCOUNTS@DIVERSIFIEDAPP.COM  
 301-798-6241

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS IN ACCORDANCE WITH THE MASTER PLAN OF HOWARD COUNTY

Approved by: Michael Davis 5/23/2024  
 COUNTY HEALTH OFFICER  
 HOWARD COUNTY HEALTH DEPARTMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 Approved by: Chad Edmondson 5/14/2024  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE: 5/15/2024  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE: 5/23/2024  
 DIRECTOR

NO.	DESCRIPTION	DATE

**STORMWATER MANAGEMENT DRAINAGE AREA MAP**  
**BOOSALIS PROPERTY**  
 12064 HALL SHOP ROAD  
 ZONED: BR

TAX MAP 41 GRID 1  
 5TH ELECTION DISTRICT

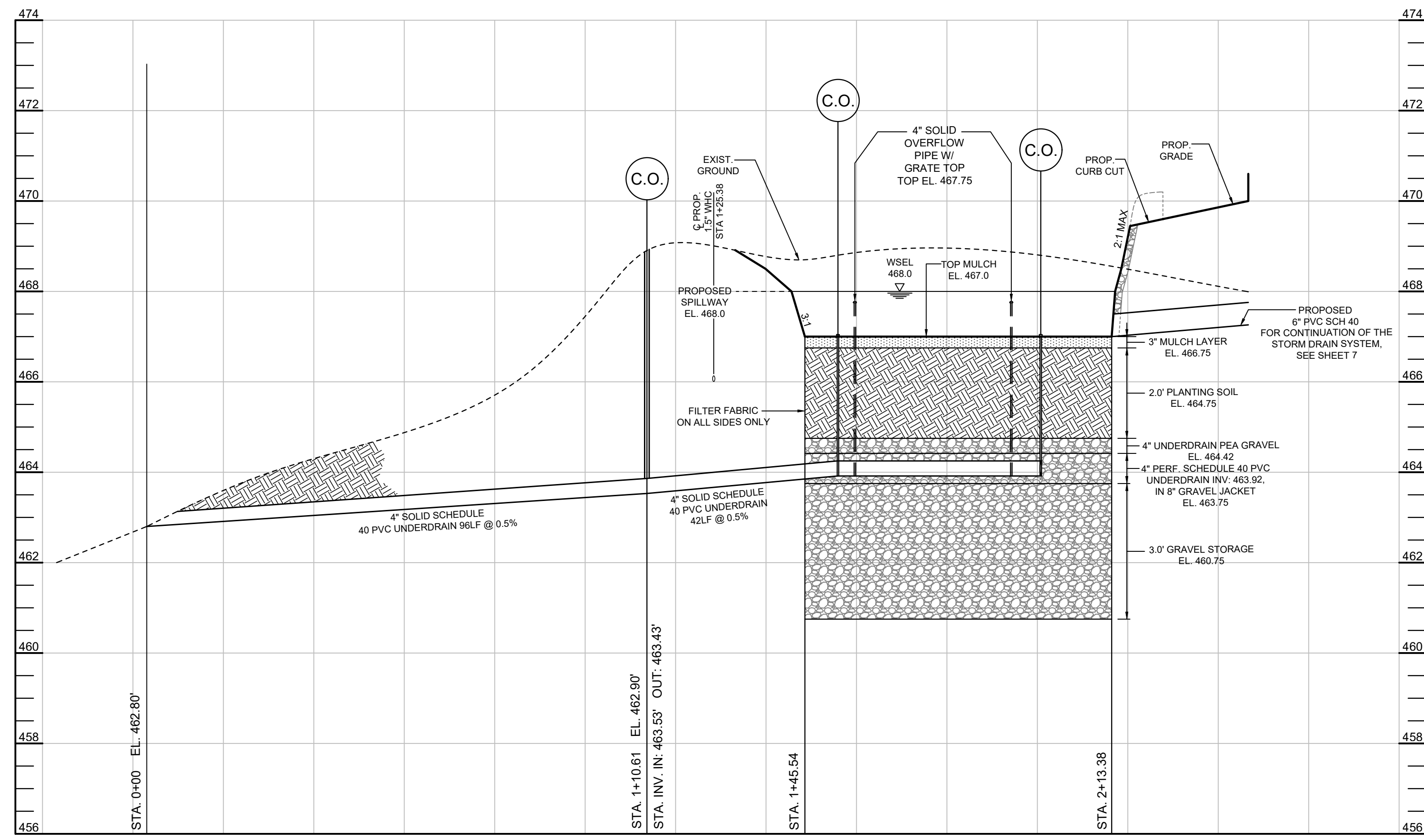
PARCEL 254  
 HOWARD COUNTY, MARYLAND

**SILL ENGINEERING GROUP, LLC**  
 16005 Frederick Rd, 2nd Floor  
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 Phone: 443.325.5076  
 Fax: 410.696.2022  
 Email: info@sillengineering.com  
 Civil Engineering & Surveying for Land Development

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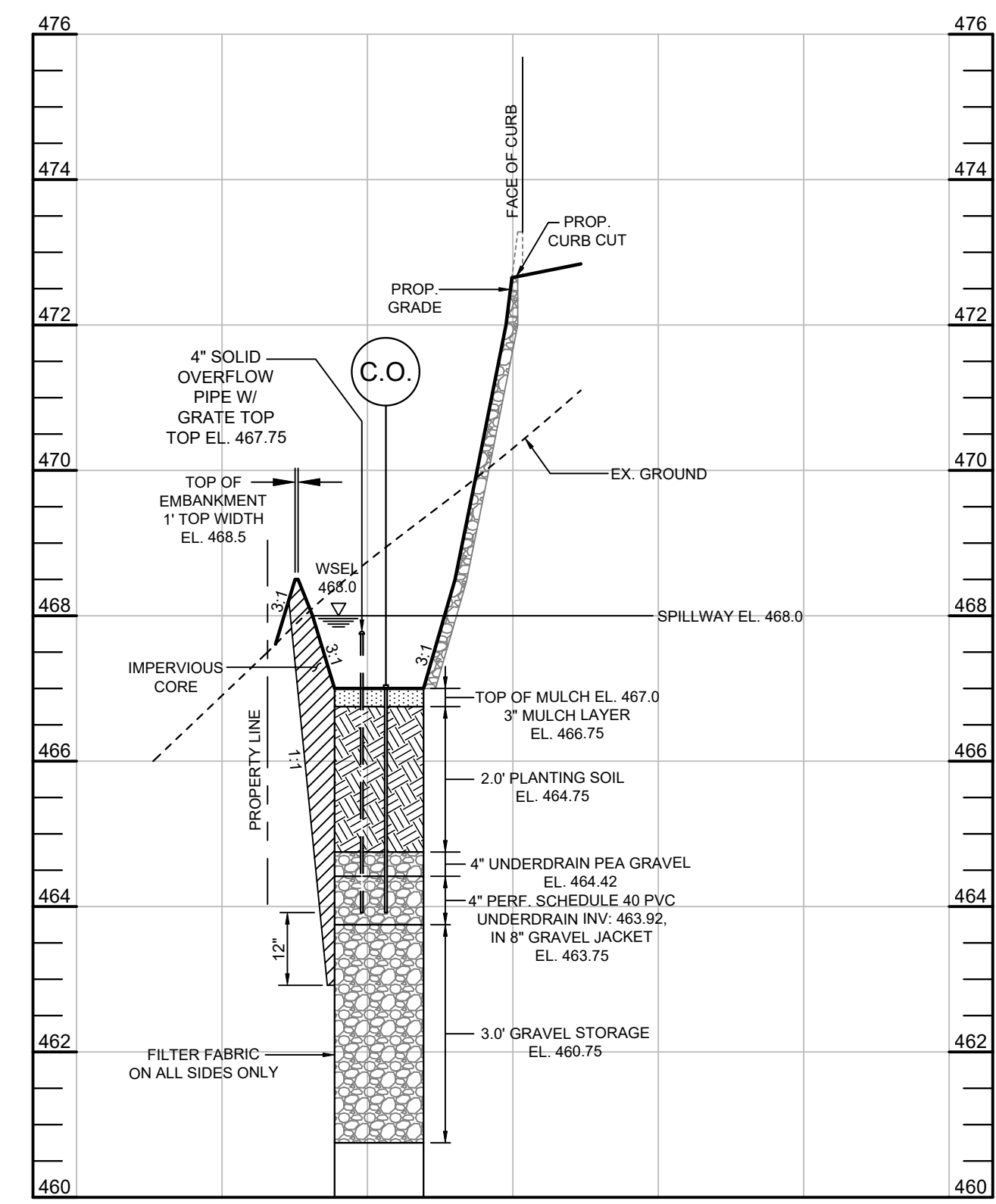
PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32025, EXPIRATION DATE: JUNE 20, 2025.





MICRO-BIORETENTION FACILITY #1 (M-6) PROFILE (A-A)

HORIZONTAL SCALE: 1"=20'  
VERTICAL SCALE: 1"=20'



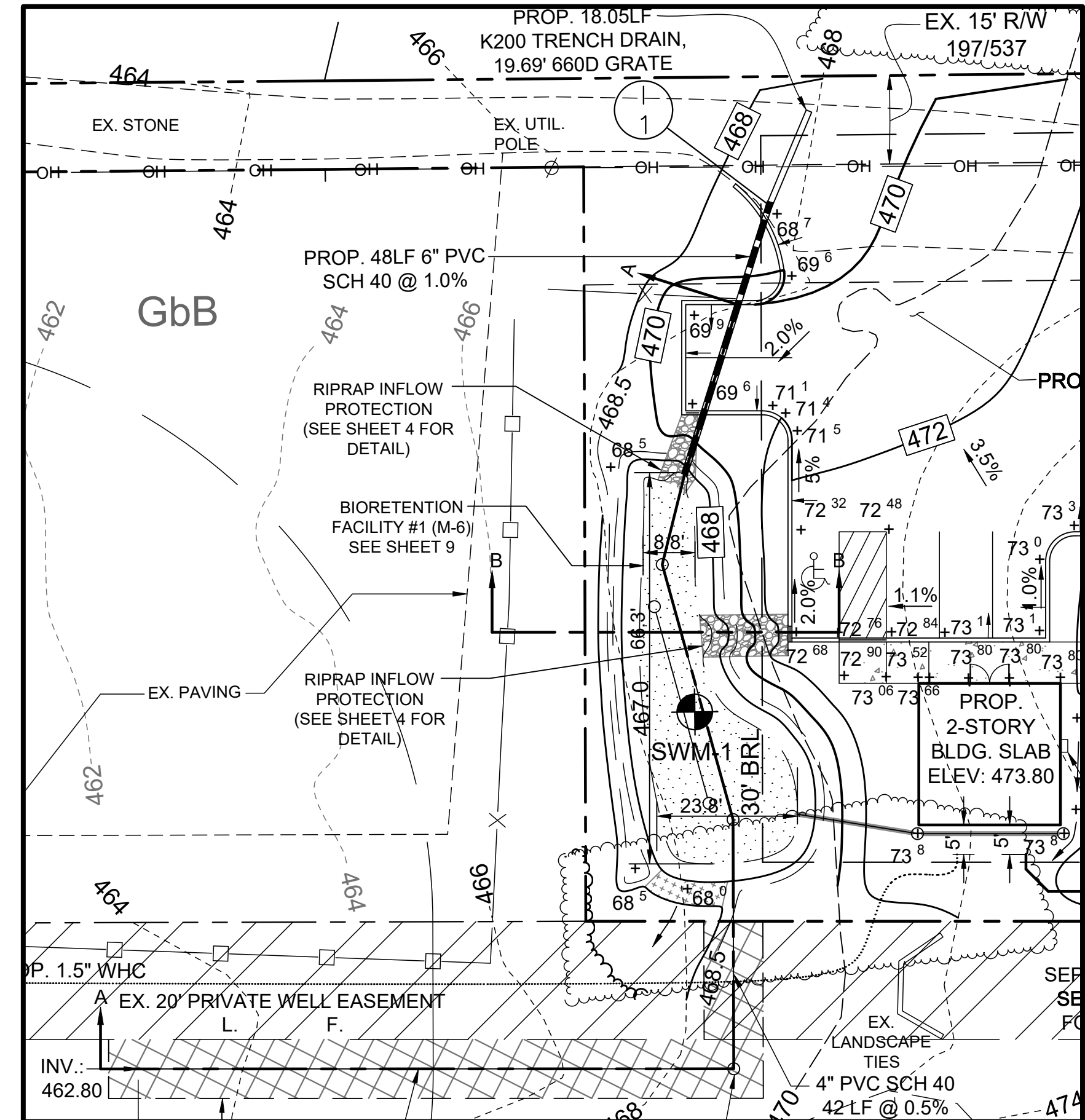
MICRO-BIORETENTION FACILITY #1 (M-6) PROFILE (B-B)

HORIZONTAL SCALE: 1"=20'  
VERTICAL SCALE: 1"=20'

- STORMWATER MANAGEMENT SOIL TEST BORING 001:
- 0.0' - 0.5' TOPSOIL
  - 0.5' - 2.0', RED SOIL, CLAY-LIKE, CLUMPED TOGETHER
  - 2.0' - 6.0', ORANGE SOIL, CLAY-LIKE, CLUMPS FALL APART
  - 6.0' - 6.5', THIN LAYER OF GRAY SOIL, CLAY-LIKE, CLUMPS FALL APART
  - 6.5' - 9.0', ORANGE SOIL, CLAY-LIKE WITH MINERALS, CLUMPS FALL APART
  - 9.0' - 10.0', DEEP RED SOIL, CLAY-LIKE WITH MINERALS, CLUMPS FALL APART
  - AT 10.0' NO ROCK OR WATER ENCOUNTERED

STORMWATER MANAGEMENT BORING LOG #1

NOT TO SCALE



PLAN VIEW  
SCALE: 1"=20'

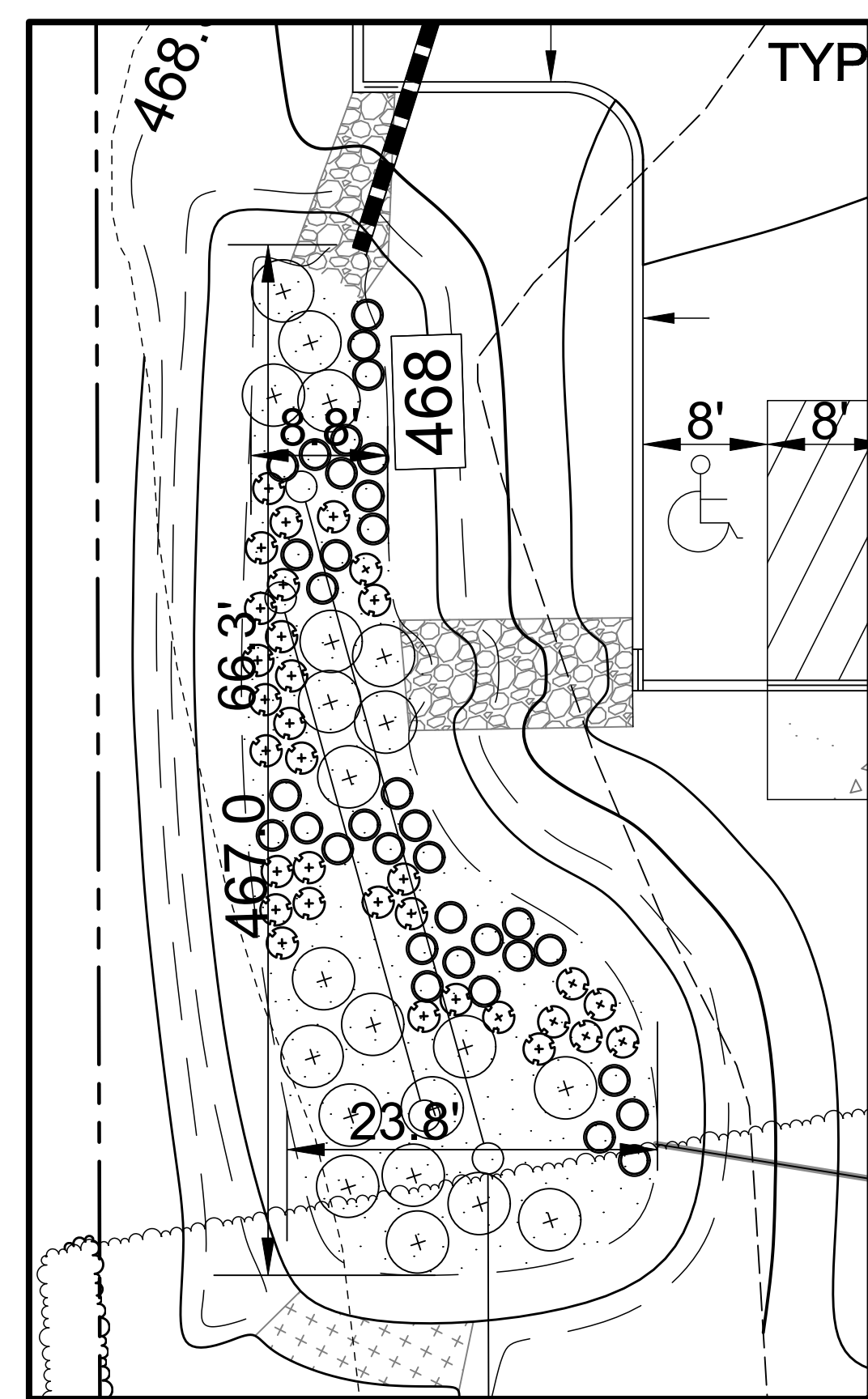
OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED MICRO-BIORETENTION FACILITIES (M-6)

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

M-6 MICRO-BIORETENTION PLANT LIST

SHRUBS						
LEGEND	BOTANICAL NAME	COMMON NAME	SPACING	SIZE	REMARKS	QTY. BIO 1
(+)	ILEX GLABRA "SHAMROCK"	INKBERRY	AS SHOWN (MIN. 4' O.C.)	24" - 36" HT.		21
PERENNIALS						
LEGEND	BOTANICAL NAME	COMMON NAME	SPACING	SIZE	REMARKS	QTY. BIO 1
(*)	ECHINACEA PURPLE CONEFLOWER	RUDEBECKIA BLACK EYED SUSAN	AS SHOWN (MIN. 2' O.C.)	1 GAL		32
(o)	RUDEBECKIA LACINIATA	TALL CONEFLOWER BLACK EYED SUSAN	AS SHOWN (MIN. 2' O.C.)	1 GAL		35

NOTE: PLANT MATERIAL MUST COVER 50% OF THE MULCH AREA AT MATURE GROWTH.

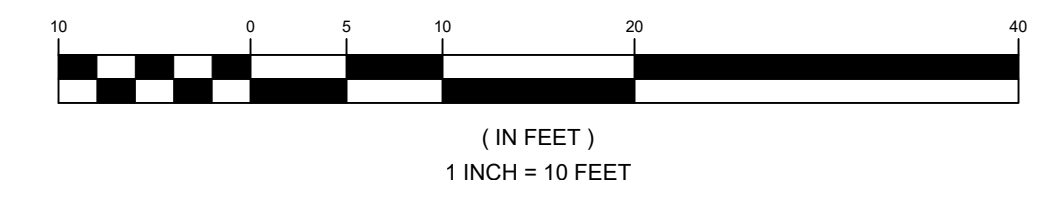


MICRO-BIORETENTION FACILITY #1 DETAIL LANDSCAPING PLAN  
SCALE: 1"=10'

MATERIALS SPECIFICATIONS FOR MICRO-BIORETENTION, RAIN GARDEN & LANDSCAPE INFILTRATION

MATERIAL	SPECIFICATION	SIZE	NOTES
PLANTINGS	SEE PLANT LIST THIS SHEET	N/A	PLANTINGS ARE SITE-SPECIFIC. SEE PLANT LIST THIS SHEET
PLANTING SOIL (2'-4" TO 4' DEEP)	LOAMY SAND (60% - 65%) & COMPOST (35%-40%) OR SANDY LOAM (30%), COARSE SAND (30%) & COMPOST (40%)	N/A	USDA SOIL TYPES LOAMY SAND OR SANDY LOAM; CLAY CONTENT < 5%
ORGANIC CONTENT	MIN. 10% BY DRY WEIGHT (ASTM-D-2974)		AGED 6 MONTHS, MINIMUM; NO PINE OR WOOD CHIPS
MULCH	SHREDDED HARDWOOD		
PEA GRAVEL DIAPHRAGM	PEA GRAVEL: ASTM-D-448	NO. 8 OR NO. 9 (1/8" TO 3/8")	
CURTAIN DRAIN (IF REQUIRED)	ORNAMENTAL STONE: WASHED COBBLES	STONE: 2" TO 5"	
GEOTEXTILE		N/A	PE TYPE 1 NONWOVEN
UNDERDRAIN GRAVEL	AASHTO M-43	NO. 57 OR NO. 6 AGGREGATE (3/8" TO 3/4")	
UNDERDRAIN PIPING	F 758, TYPE PS 28 OR AASHTO M-278	4" TO 6" RIGID SCHEDULE 40 PVC OR SDR35	SLOTTED OR PERFORATED PIPE, 3/8" PERF. @ 6" ON CENTER, 4 HOLES PER ROW; MINIMUM OF 3" OF GRAVEL OVER PIPES. NOT NECESSARY UNDERNEATH PIPES. PERFORATED PIPE SHALL BE WRAPPED WITH 1/4" GALVANIZED HARDWARE CLOTH.
POURED IN PLACE CONCRETE (IF REQUIRED)	MSHA MX NO. 3; F <sub>cr</sub> = 3500 PSI @ 28 DAYS, NORMAL WEIGHT, AIR-ENTRAINED; REINFORCING TO MEET ASTM-615-60	N/A	ON-SITE TESTING OF POURED-IN-PLACE CONCRETE REQUIRED: 28 DAY STRENGTH AND SLUMP TEST; ALL CONCRETE DESIGN (CAST-IN-PLACE OR PRE-CAST) NOT USING PREVIOUSLY APPROVED STATE OR LOCAL STANDARDS REQUIRES DESIGN DRAWINGS SEALED AND APPROVED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF MARYLAND. DESIGN TO INCLUDE MEETING ACI CODE 309 R18; VERTICAL LOADING (H-10 OR H-20); ALLOWABLE HORIZONTAL LOADING (BASED ON SOIL PRESSURES); AND ANALYSIS OF POTENTIAL CRACKING.
SAND	AASHTO-M-6 OR ASTM-C-33	0.02" TO 0.04"	SAND SUBSTITUTIONS SUCH AS DIABASE AND GRAYSTONE (ASHSTO #10) ARE NOT ACCEPTABLE. NO CALCIUM CARBONATED OR DOLOMITIC SAND SUBSTITUTIONS ARE ACCEPTABLE. NO "ROCK DUST" CAN BE USED FOR SAND.

GRAPHIC SCALE



STORMWATER MANAGEMENT PLAN, PROFILE AND NOTES  
BOOSALIS PROPERTY  
12064 HALL SHOP ROAD  
ZONED: BR

TAX MAP 41 GRID 1  
5TH ELECTION DISTRICT

PARCEL 254  
HOWARD COUNTY, MARYLAND

DESIGN BY: PS  
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DATE: APRIL 15, 2024  
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SHEET #: 9 of 11

OWNER: MICHAEL BOOSALIS  
12080 HALL SHOP ROAD  
CLARKSVILLE, MARYLAND 21029  
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DEVELOPER: DIVERSIFIED APPLICATIONS  
C/O JESSICA HINERMAN  
14818 N. FRANKLINVILLE ROAD  
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Civil Engineering & Surveying for Land Development

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
5/14/2024

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS IN ACCORDANCE WITH THE MASTER PLAN OF HOWARD COUNTY  
5/23/2024

CHIEF, DEVELOPMENT ENGINEERING DIVISION  
DATE: 5/15/2024

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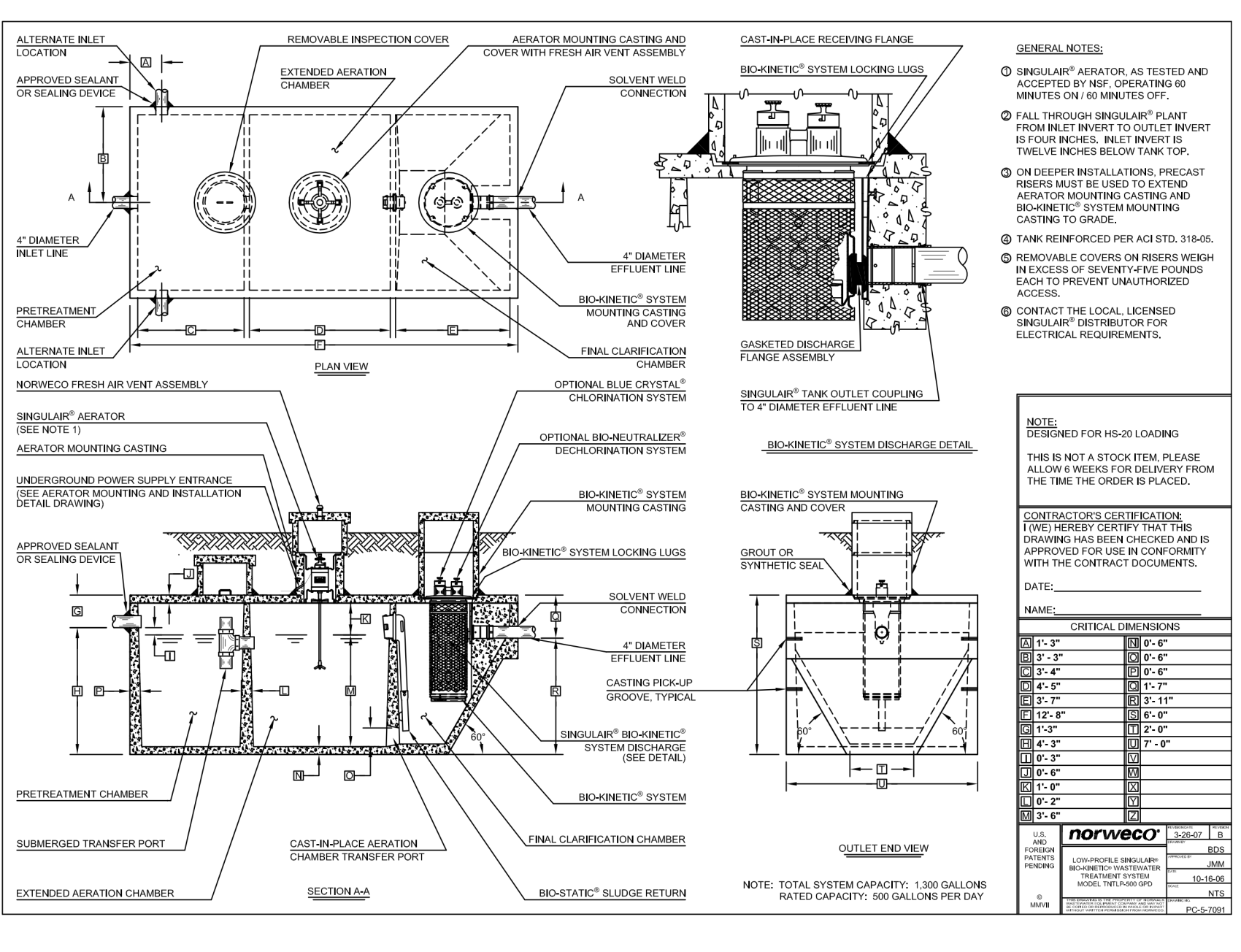
DIRECTOR

COUNTY HEALTH OFFICER  
HOWARD COUNTY HEALTH DEPARTMENT

NO.	DESCRIPTION	DATE

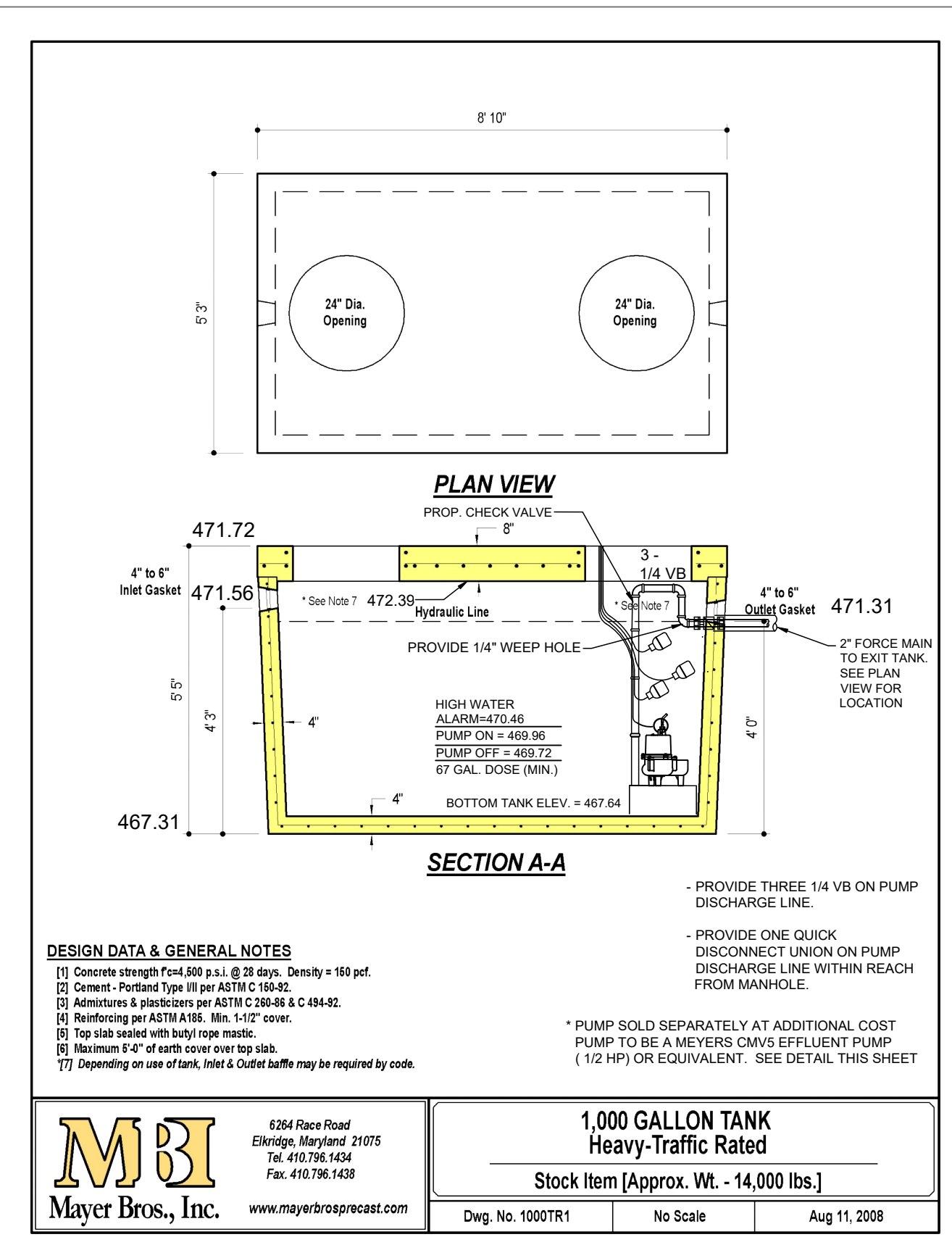
SOILS LEGEND			
SYMBOL	NAME / DESCRIPTION	GROUP	K' FACTOR
BaA	BAILE SILT LOAM, 0 TO 3 PERCENT SLOPES	C/D	0.49
GbB	GLADSTONE LOAM, 3 TO 8 PERCENT SLOPES	A	0.32

- NOTES:
- SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, WEB SOIL SURVEY.
  - HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR 'K' GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT.



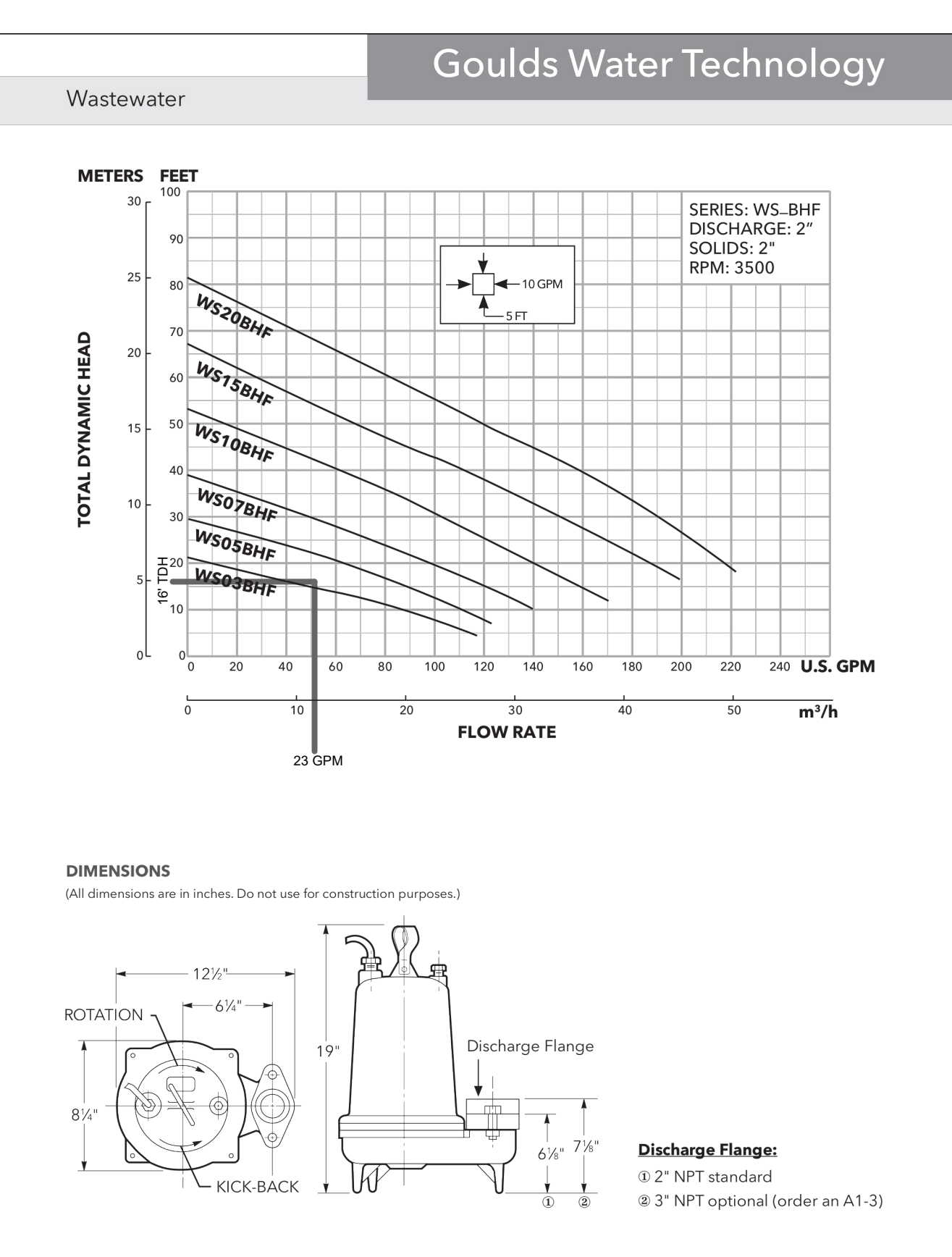
PROPOSED NORWECO MODEL TNTLP-500 GALLON DETAIL

NOT TO SCALE



PROPOSED PUMP TANK DETAIL

NOT TO SCALE



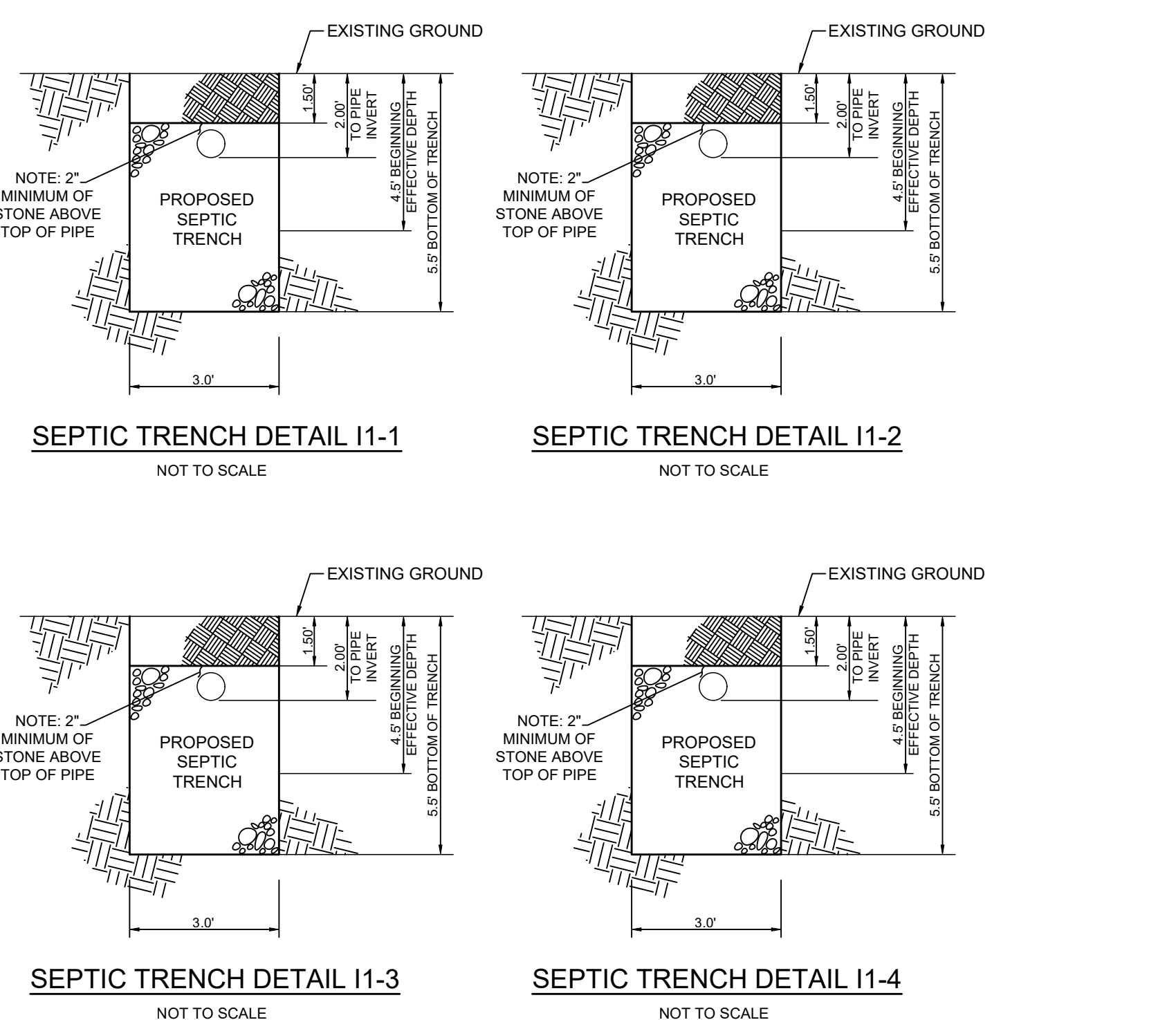
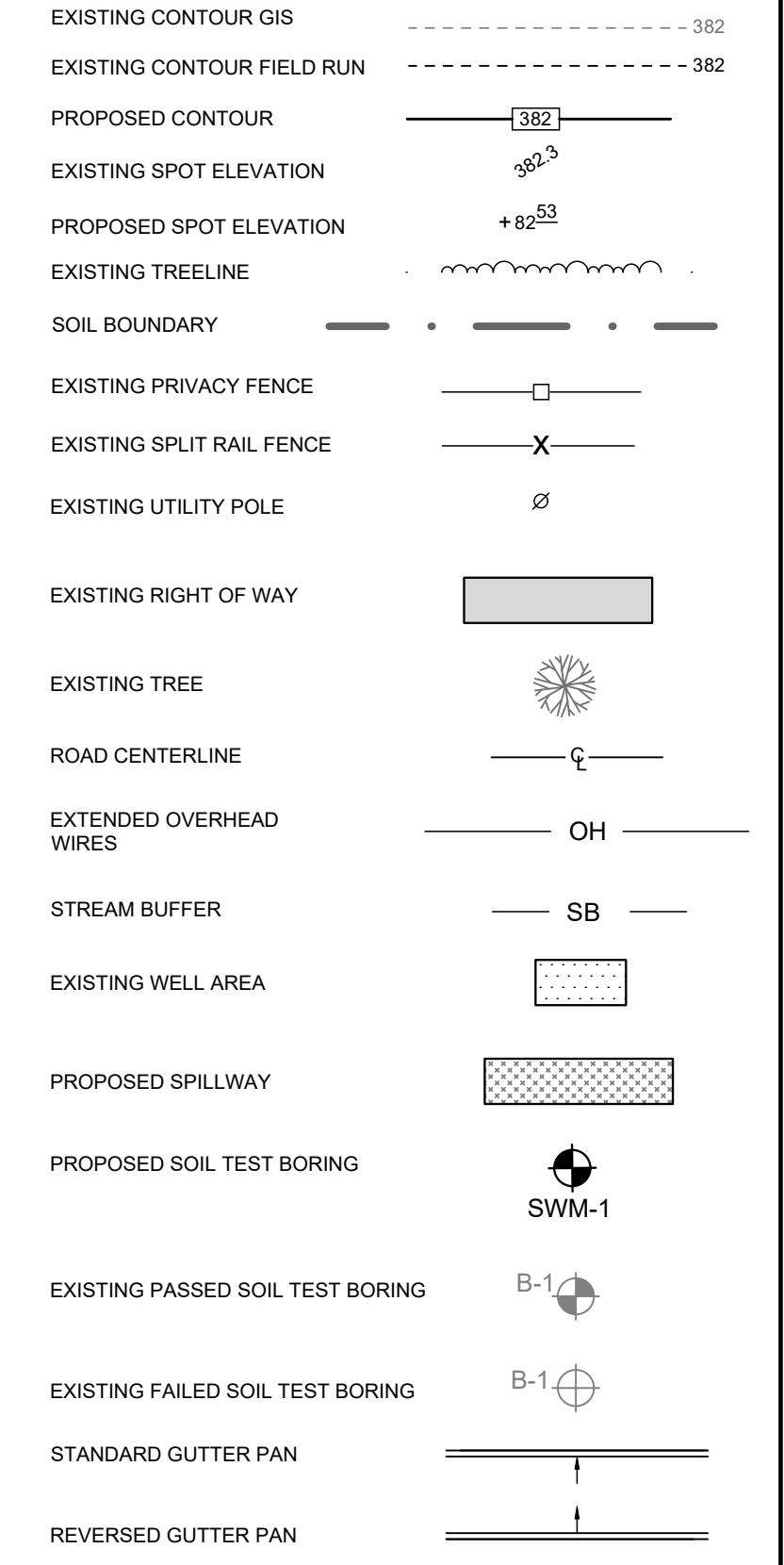
BAT NOTES

- ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED BAT SITE PLAN MAY BE REQUIRED.
- THE MAXIMUM DEPTH OF THE BAT PER THE MANUFACTURER'S SPECIFICATION IS 3 FEET.
- THE BLOWER MAY NOT BE LOCATED MORE THAN 50 FEET FROM THE TANK BASED ON THE MANUFACTURER'S SPECIFICATIONS.
- THE BAT SYSTEM SHALL BE MAINTAINED AND OPERATED FOR THE LIFE OF THE SYSTEM.
- THE BAT SHALL BE OPERATED BY AND MAINTAINED BY A CERTIFIED SERVICE PROVIDER.
- WITHIN ONE MONTH OF INSTALLATION, A PERSON INSTALLING THE BAT SYSTEM SHALL REPORT TO THE MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) IN A MANNER ACCEPTABLE TO MDE, THE ADDRESS AND DATE OF COMPLETION OF THE BAT INSTALLATION AND THE TYPE OF BAT INSTALLED.
- ELECTRICAL WORK FOR THE BAT INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
- AN AGREEMENT AND EASEMENT MUST BE COMPLETED AND SIGNED BY ALL APPLICABLE PARTIES, AND RECORDED IN THE LAND RECORDS OF HOWARD COUNTY.
- THE HEALTH DEPARTMENT REQUIRES DOCUMENTATION FOR THE START-UP CERTIFICATION FROM THE MANUFACTURER PRIOR TO FINAL APPROVAL OF THE INSTALLATION.
- DOSE TO BE 67 GALLONS ON A PUMP RUN TIME OF 3.0 MINUTES ON DEMAND.
- PUMP TO BE A GOULDS WS03BHF SERIES OR EQUIVALENT.
- BAT SYSTEM TO BE A NORWECO SINGULAR MODEL TNTLP-500 OR EQUIVALENT.
- TOTAL DYNAMIC HEAD (TDM) CALCULATION:  
TDM = STATIC HEAD + DISTAL HEAD + FRICTION HEAD  
FACTOR = 10.90' + 2.5' + 2.15' = 15.55' USE 16'

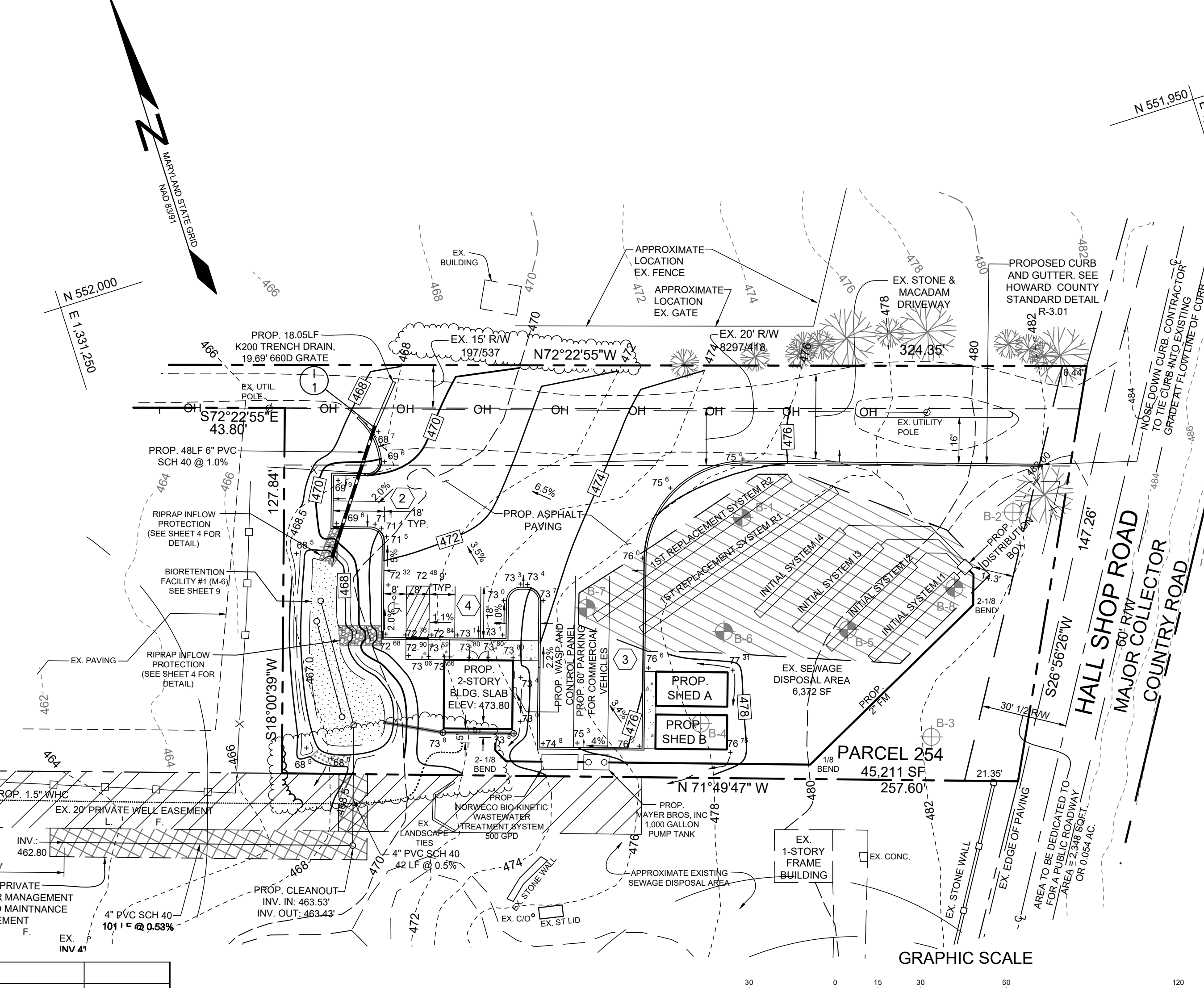
SEPTIC SYSTEM TRENCH DESIGN SPECIFICATIONS

- INITIAL SYSTEM SYSTEM:**
  - APPLICATION RATE: 0.4
  - EFFECTIVE AREA BEGINNING DEPTH: 4.5'
  - BOTTOM MAXIMUM DEPTH: 5.5'
- DESIGN FLOW:**
  - 880 SF OF OFFICE USE @ 0.09 GALLON PER DAY (GPD) / SQUARE FEET (SF)
  - 880SF X 0.09 GPD/SF = 79.2 GPD. USE 400 GPD MINIMUM
- DESIGN FOOTAGE OF DRAIN FIELD REQUIRED:**
  - DESIGN FLOW (400 GPD) / APPLICATION RATE (0.4) = 1000 SF
- SIDEWALL REDUCTION CREDIT:**
  - TRENCH WIDTH (W) = 3.0'
  - TRENCH EFFECTIVE DEPTH (D) = 3.0'
  - (W+2) / (W+1+2D) X 100 = 50%
- LINEAR LENGTH OF TRENCH REQUIRED:**
  - DRAIN FIELD SQUARE FOOTAGE (1000) X SIDEWALL REDUCTION CREDIT (50%) / TRENCH WIDTH (3.0') = 166.7'
- EXISTING GROUND:**
  - TRENCH I-1: 480.9
  - TRENCH I-1-1: 478.9
  - TRENCH I-1-2: 480.3
  - TRENCH I-1-2: 478.3
  - TRENCH I-1-3: 479.6
  - TRENCH I-1-3: 477.6
  - TRENCH I-1-4: 479.0
  - TRENCH I-1-4: 477.0
- REPLACEMENT SYSTEM:**
  - APPLICATION RATE: 0.8
  - EFFECTIVE AREA BEGINNING DEPTH: 4.0'
  - BOTTOM MAXIMUM DEPTH: 4.0'
- DESIGN FLOW:**
  - 880 SF OF OFFICE USE @ 0.09 GALLON PER DAY (GPD) / SQUARE FEET (SF)
  - 880SF X 0.09 GPD/SF = 79.2 GPD. USE 400GPD MINIMUM
- DESIGN FOOTAGE OF DRAIN FIELD REQUIRED:**
  - DESIGN FLOW (400 GPD) / APPLICATION RATE (0.8) = 500 SF
- SIDEWALL REDUCTION CREDIT:**
  - TRENCH WIDTH (W) = 3.0'
  - TRENCH EFFECTIVE DEPTH (D) = 0.0'
  - (W+2) / (W+1+2D) X 100 = 50%
- LINEAR LENGTH OF TRENCH REQUIRED:**
  - DRAIN FIELD SQUARE FOOTAGE (500) / TRENCH WIDTH (3.0') = 166.7'
- EXISTING GROUND:**
  - TRENCH R1: 478.2
  - TRENCH R1: 478.2
  - TRENCH R2: 474.6
  - TRENCH R2: 472.6

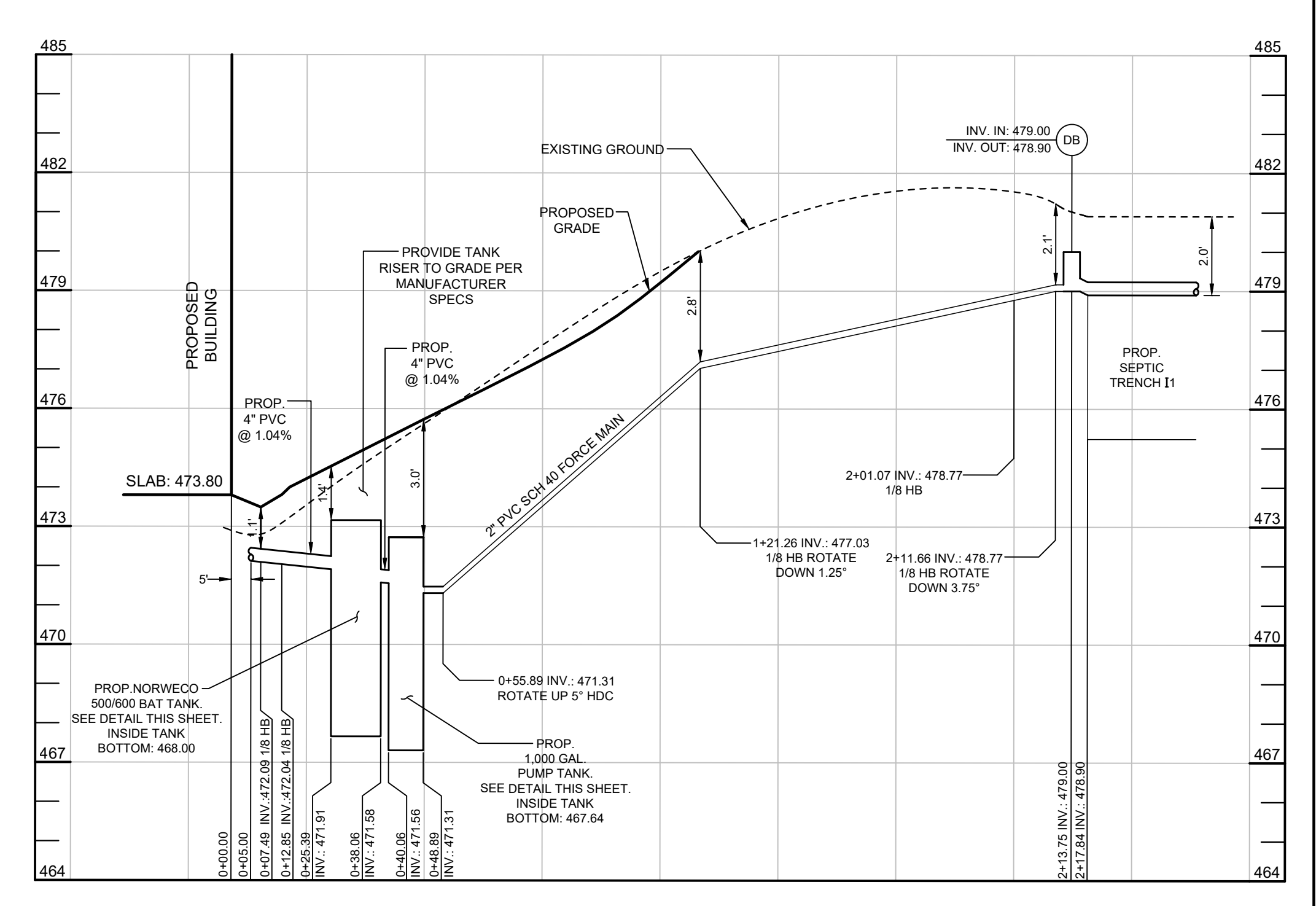
LEGEND



SEPTIC TRENCH DETAIL I1-1 to I1-4



PLAN VIEW SCALE: 1"=30'



APPROVED: FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS IN ACCORDANCE WITH THE MASTER PLAN OF HOWARD COUNTY

Designed by: **Michael Davis** 5/23/2024  
COUNTY HEALTH OFFICER  
HOWARD COUNTY HEALTH DEPARTMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
Chief, Development Engineering Division  
DATE: 5/14/2024

Chief, Division of Land Development  
DATE: 5/15/2024

DIRECTOR

NO.	DESCRIPTION	DATE

REVISIONS

**OWNER**  
MICHAEL BOOSALIS  
12080 HALL SHOP ROAD  
CLARKSVILLE, MARYLAND 21029  
301-854-1006

**DEVELOPER**  
DIVERSIFIED APPLICATIONS  
C/O JESSICA HIRERMAN  
14818 N. FRANKLINVILLE ROAD  
THURMONT, MARYLAND 21788  
ACCOUNTS@DIVERSIFIEDAPP.COM  
301-798-6241

**ONSITE SEWAGE DISPOSAL SYSTEM PLAN & PROFILE BOOSALIS PROPERTY**  
12064 HALL SHOP ROAD  
ZONED: BR

TAX MAP 41 GRID 1  
5TH ELECTION DISTRICT

PARCEL 254  
HOWARD COUNTY, MARYLAND

**SILL ENGINEERING GROUP, LLC**  
16005 Frederick Rd, 2nd Floor  
Woodbine, MD 21797  
Phone: 443.325.5076  
Fax: 410.696.2022  
Email: info@sillengineering.com  
Civil Engineering & Surveying for Land Development

DESIGN BY: PS  
DRAWN BY: TB  
CHECKED BY: PS  
SCALE: AS SHOWN  
DATE: APRIL 15, 2024  
PROJECT #: 15-043  
SHEET #: 10 of 11

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 30205, EXPIRATION DATE: JUNE 20, 2025.

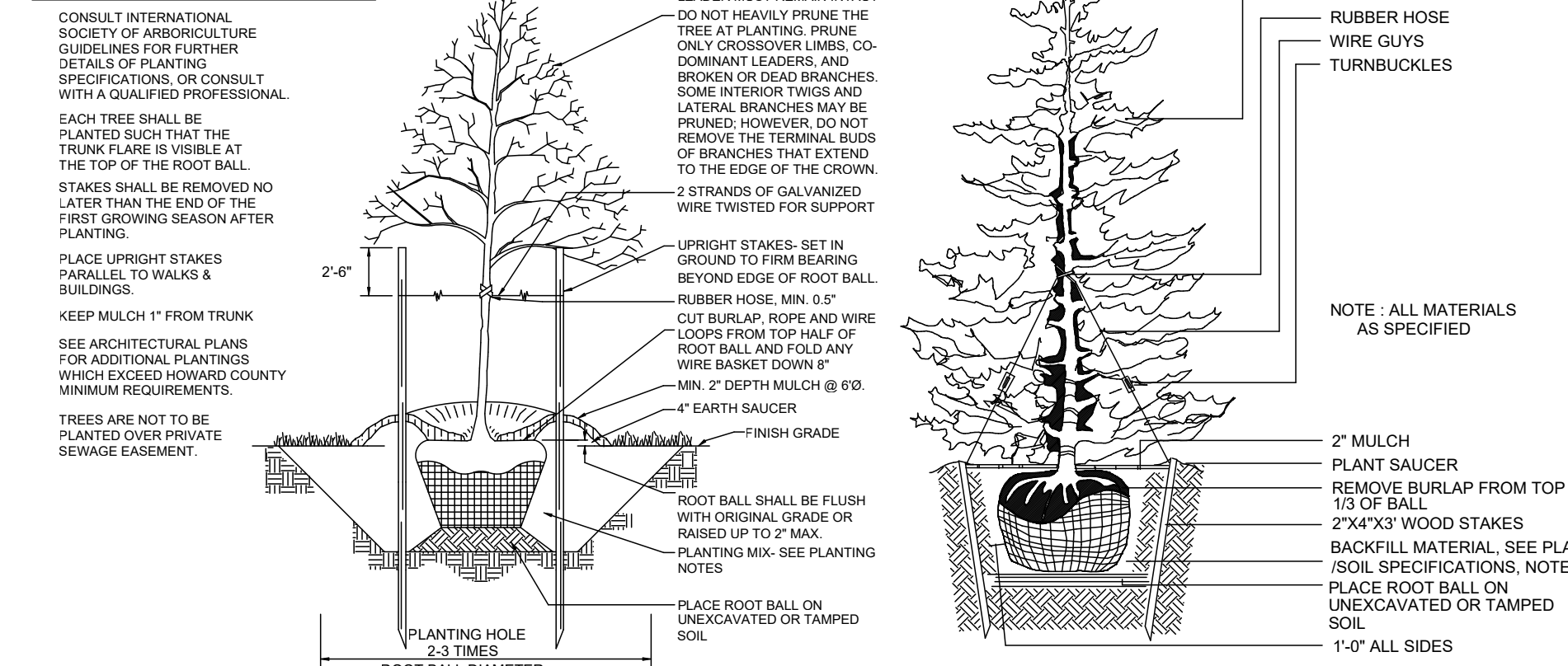
SOILS LEGEND			
SYMBOL	NAME / DESCRIPTION	GROUP	K' FACTOR
BaA	BAILE SILT LOAM, 0 TO 3 PERCENT SLOPES	C/D	0.49
GbB	GLADSTONE LOAM, 3 TO 8 PERCENT SLOPES	A	0.32

NOTES:  
 1) SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, WEB SOIL SURVEY.  
 2) HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR 'K' GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT.

**LANDSCAPE PLAN NOTES**

1. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISION OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. THE DEVELOPER SHALL PLANT THE REQUIRED PERIMETER LANDSCAPING TREES AND THE ONE REQUIRED PARKING LOT TREE, EIGHTEEN (18) SHADE TREES, TWENTY THREE (23) EVERGREEN TREES, AND SEVENTY (70) SHRUBS, 18 X \$300.00, 23 X \$150.00 AND 70 X \$30.00. ADDITIONALLY, ONE (1) PARKING LOT TREE SHALL BE INCLUDED AT \$300.00. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING WILL BE POSTED AS PART OF THE DPW DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$11,250.00.  
 2. AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTING HEREWITH LISTED AND APPROVED FOR THE SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPING 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 SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.  
 3. THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS 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.

**NOTES**



**TYPICAL TREE PLANTING AND STAKING**  
 DECIDUOUS TREES UP TO 2-1/2" CALIPER NOT TO SCALE

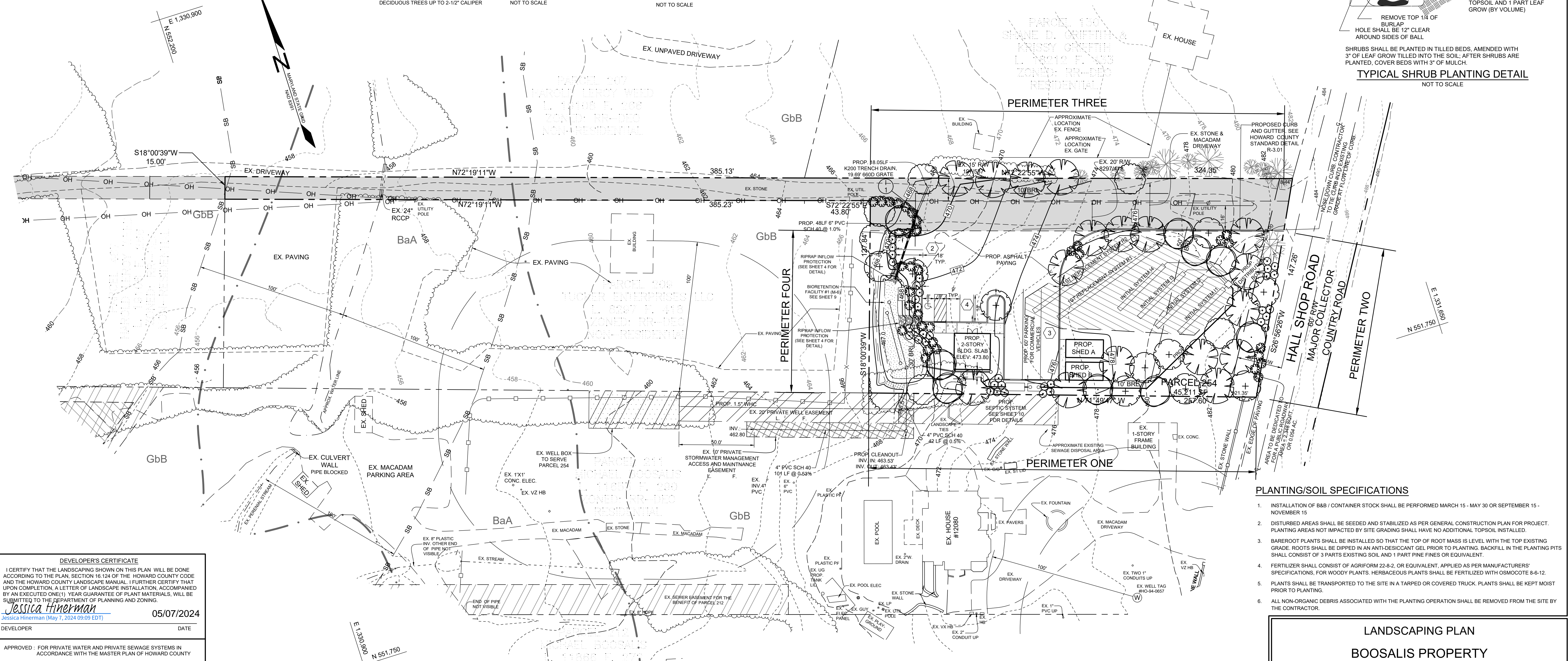
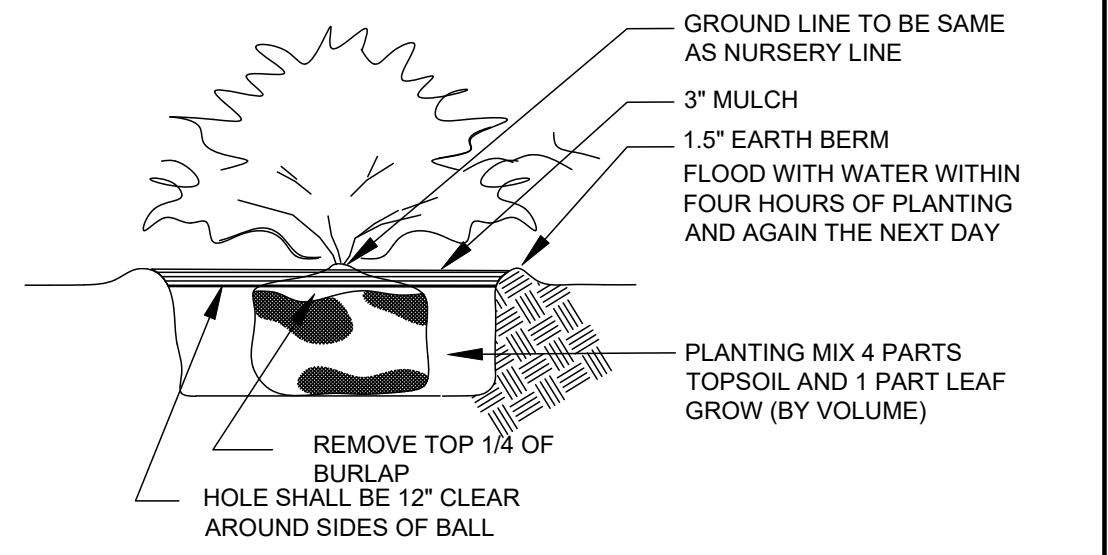
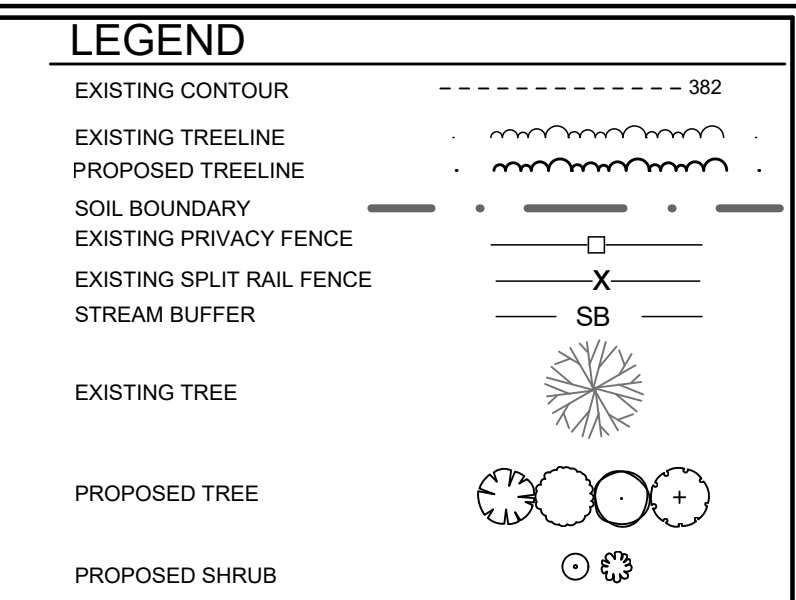
**TYPICAL EVERGREEN TREE PLANTING DETAIL**  
 NOT TO SCALE

CATEGORY	ADJACENT TO ROADWAYS		ADJACENT TO PERIMETER PROPERTIES		TOTAL
	TWO	ONE	THREE	FOUR	
PERIMETER/FRONTAGE DESIGNATION	111(B)	258 (C)	275 (C)	108 (A)	
LANDSCAPE TYPE					
FRONTAGE PERIMETER	NO	NO	NO	NO	
CREDIT FOR EXISTING PLANTATION (YES, NO, LINEAR FEET)	0LF	0LF	0LF	0LF	
REMAINING PERIMETER LENGTH CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET)	111LF	258LF	275LF	108LF	
REMAINING PERIMETER LENGTH	NO	NO	NO	NO	
NUMBER OF PLANTS REQUIRED					
SHADE TREES	1:50=3	1:40=7	1:40=7	1:60=2	19
EVERGREEN TREES	1:40=3	1:20=13	1:20=14	-	30
SHRUBS	-	-	-	-	0
NUMBER OF PLANTS PROVIDED	SEE NOTE 1	SEE NOTE 3	SEE NOTE 2	1:60=2	18
SHADE TREES	1:50=2	1:40=7	1:40=7	-	23
EVERGREEN TREES	1:40=3	1:20=13	1:20=12	-	28
SHRUBS	15	10	20	25	70

- CREDIT TAKEN FOR EXISTING DUAL TRUNK, 15" & 22" DBH ACER RUBRUM.
- TREES PLACED ON BOTH SIDES OF DRIVE AISLE DUE TO PLANTING CONSTRAINTS AT PROPERTY BOUNDARY. 1 EVERGREEN TREE MOVED TO PERIMETER 4, 10 SHRUBS SUBSTITUTED FOR 1 EVERGREEN AND ANOTHER 10 SHRUBS SUBSTITUTED FOR 1 EVERGREEN AND MOVED TO PERIMETER 4.
- 50 SHRUBS SUBSTITUTED FOR 5 EVERGREEN TREES. 40 SHRUBS MOVED TO PERIMETERS 2, 3 AND 4.
- ALL REQUIRED PLANTING FROM ZONING HEARING ZB-1177M ARE SHOWN AS APPROVED.

LANDSCAPE PLANT LIST				
KEY	QUANTITY	BOTANICAL NAME	SIZE	NOTE
+	10	PLATANUS X ACERIFOLIA 'COLUMBIA' COLUMBIA LONDON PLANE	2.5'-3' CAL.	B & B
o	9	FAGUS GRANDIFOLIA AMERICAN BEECH	2.5'-3' CAL.	B & B
o	6	ILEX OPACA AMERICAN HOLLY	5'-6' HIGH	B & B
o	17	CUPRESSOCYPRIS LEYLANDI LEYLAND CYPRESS	5'-6' HIGH	B & B
o	36	CLETHRA ALNIFOLIA SUMMER SWEET CLETHRA	2.5'-3' HIGH	-
o	34	VIBURNUM CARLESII 'SPICE BABY' KOREANSPICE VIBURNUM	2.5'-3' HIGH	-

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING	
NUMBER OF PARKING SPACES	9
NUMBER OF TREES REQUIRED	1
NUMBER OF TREES PROVIDED	1
SHADE TREES OTHER TREES (2:1 SUBSTITUTION)	1



- PLANTING/SOIL SPECIFICATIONS**
- INSTALLATION OF B&B / CONTAINER STOCK SHALL BE PERFORMED MARCH 15 - MAY 30 OR SEPTEMBER 15 - NOVEMBER 15
  - DISTURBED AREAS SHALL BE SEEDED AND STABILIZED AS PER GENERAL CONSTRUCTION PLAN FOR PROJECT. PLANTING AREAS NOT IMPACTED BY SITE GRADING SHALL HAVE NO ADDITIONAL TOPSOIL INSTALLED.
  - BARERoot PLANTS SHALL BE INSTALLED SO THAT THE TOP OF ROOT MASS IS LEVEL WITH THE TOP EXISTING GRADE. ROOTS SHALL BE DIPPED IN AN ANTI-DESICCANT GEL PRIOR TO PLANTING. BACKFILL IN THE PLANTING PITS SHALL CONSIST OF 3 PARTS EXISTING SOIL AND 1 PART PINE FINES OR EQUIVALENT.
  - FERTILIZER SHALL CONSIST OF AGRIFORM 22-8-2, OR EQUIVALENT, APPLIED AS PER MANUFACTURERS' SPECIFICATIONS. FOR WOODY PLANTS, HERBACEOUS PLANTS SHALL BE FERTILIZED WITH OSMOCOTE 8-6-12.
  - PLANTS SHALL BE TRANSPORTED TO THE SITE IN A TARPED OR COVERED TRUCK. PLANTS SHALL BE KEPT MOIST PRIOR TO PLANTING.
  - ALL NON-ORGANIC DEBRIS ASSOCIATED WITH THE PLANTING OPERATION SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.

**DEVELOPER'S CERTIFICATE**  
 I CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I FURTHER CERTIFY THAT UPON COMPLETION, A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE(1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.  
 Jessica Hinerman  
 Jessica Hinerman (May 1, 2024 09:09 EDT) 05/07/2024  
 DEVELOPER DATE

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS IN ACCORDANCE WITH THE MASTER PLAN OF HOWARD COUNTY  
 Michael Davis  
 COUNTY HEALTH OFFICER  
 HOWARD COUNTY HEALTH DEPARTMENT  
 5/23/2024

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 Chad Edmondson  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE 5/15/2024  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE 5/23/2024  
 Director

NO.	DESCRIPTION	DATE

**LANDSCAPING PLAN**  
**BOOSALIS PROPERTY**  
 12064 HALL SHOP ROAD  
 ZONED: BR  
 TAX MAP 41 GRID 1  
 5TH ELECTION DISTRICT  
 PARCEL 254  
 HOWARD COUNTY, MARYLAND

**OWNER**  
 MICHAEL BOOSALIS  
 12080 HALL SHOP ROAD  
 CLARKSVILLE, MARYLAND 21029  
 301-854-1006

**DEVELOPER**  
 DIVERSIFIED APPLICATIONS  
 C/O JESSICA HINERMAN  
 14818 N. FRANKLINVILLE ROAD  
 THURMONT, MARYLAND 21788  
 ACCOUNTS@DIVERSIFIEDAPP.COM  
 301-798-6241

**SILL ENGINEERING GROUP, LLC**  
 16005 Frederick Rd, 2nd Floor  
 Woodbine, MD 21797  
 Phone: 443.325.5076  
 Fax: 410.696.2022  
 Email: info@sillengineering.com  
 Civil Engineering & Surveying for Land Development

DESIGN BY: PS  
 DRAWN BY: TB  
 CHECKED BY: PS  
 SCALE: AS SHOWN  
 DATE: APRIL 15, 2024  
 PROJECT #: 15-043  
 SHEET #: 11 of 11

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32025, EXPIRATION DATE: JUNE 20, 2025.

**Certificate Of Completion**

Envelope Id: E2F99E1EB5F9483587131731570CFB0F  
 Subject: Complete with DocuSign: SDP-21-004  
 Source Envelope:  
 Document Pages: 11  
 Certificate Pages: 6  
 AutoNav: Enabled  
 Enveloped Stamping: Enabled  
 Time Zone: (UTC-05:00) Eastern Time (US & Canada)

Status: Completed  
 Envelope Originator:  
 Ashley Barbagallo  
 Ellicott City, MD 21043  
 abarbagallo@howardcountymd.gov  
 IP Address: 167.102.191.18

**Record Tracking**

Status: Original  
 5/14/2024 12:38:15 PM

Holder: Ashley Barbagallo  
 abarbagallo@howardcountymd.gov

Location: DocuSign

**Signer Events**

Alexander Bratchie  
 abratchie@howardcountymd.gov  
 Security Level: Email, Account Authentication (None)

**Signature**

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**Timestamp**

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 Signed: 5/15/2024 9:00:39 AM

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Anthony Cataldo  
 acataldo@howardcountymd.gov  
 Division Chief  
 Howard County Government  
 Security Level: Email, Account Authentication (None)


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Signature Adoption: Uploaded Signature Image  
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**Electronic Record and Signature Disclosure:**  
 Not Offered via DocuSign

CHAD Edmondson  
 cedmondson@howardcountymd.gov  
 Security Level: Email, Account Authentication (None)


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 Using IP Address: 167.102.191.18

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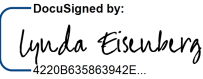
Michael Davis  
 mjdavis@howardcountymd.gov  
 Security Level: Email, Account Authentication (None)

DocuSigned by:  
  
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Sent: 5/14/2024 12:55:23 PM  
 Viewed: 5/22/2024 12:28:23 PM  
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 Using IP Address: 68.134.222.19

**Electronic Record and Signature Disclosure:**  
 Accepted: 3/11/2021 12:32:49 PM  
 ID: 79e1587f-bd09-4569-8db7-512e1ce58a17

Signer Events	Signature	Timestamp
<p>Lynda Eisenberg  leisenberg@howardcountymd.gov  Security Level: Email, Account Authentication (None)</p>	<p>DocuSigned by:    4220B635863942E...</p> <p>Signature Adoption: Pre-selected Style  Using IP Address: 167.102.191.18</p>	<p>Sent: 5/23/2024 8:01:42 AM  Viewed: 5/23/2024 9:46:25 AM  Signed: 5/23/2024 9:46:44 AM</p>

**Electronic Record and Signature Disclosure:**  
Accepted: 6/26/2023 1:54:38 PM  
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In Person Signer Events	Signature	Timestamp
Editor Delivery Events	Status	Timestamp
Agent Delivery Events	Status	Timestamp
Intermediary Delivery Events	Status	Timestamp
Certified Delivery Events	Status	Timestamp
Carbon Copy Events	Status	Timestamp

<p>Carrie Vogel  Cvogel@howardcountymd.gov  Security Level: Email, Account Authentication (None)</p>	<div style="border: 2px solid blue; padding: 5px; font-weight: bold; color: blue; font-size: 1.2em;">COPIED</div>	<p>Sent: 5/23/2024 9:46:51 AM</p>
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**Electronic Record and Signature Disclosure:**  
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<p>Dave Dell  ddell@howardcountymd.gov  Security Level: Email, Account Authentication (None)</p>	<div style="border: 2px solid blue; padding: 5px; font-weight: bold; color: blue; font-size: 1.2em;">COPIED</div>	<p>Sent: 5/23/2024 9:46:52 AM</p>
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**Electronic Record and Signature Disclosure:**  
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<p>Kathryn Bolton  kbolton@howardcountymd.gov  Security Level: Email, Account Authentication (None)</p>	<div style="border: 2px solid blue; padding: 5px; font-weight: bold; color: blue; font-size: 1.2em;">COPIED</div>	<p>Sent: 5/23/2024 9:46:52 AM</p>
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Accepted: 11/20/2023 9:36:28 AM  
ID: 5cf541f1-7f35-45d0-80e2-e3cc99176cdb

<p>Lisa Kenney  lkenney@howardcountymd.gov  Planning Support Tech II  Howard County government  Security Level: Email, Account Authentication (None)</p>	<div style="border: 2px solid blue; padding: 5px; font-weight: bold; color: blue; font-size: 1.2em;">COPIED</div>	<p>Sent: 5/23/2024 9:46:52 AM  Viewed: 5/23/2024 10:09:02 AM</p>
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**Electronic Record and Signature Disclosure:**  
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<p>Terry Bromery  tbromery@howardcountymd.gov  Security Level: Email, Account Authentication (None)</p>	<div style="border: 2px solid blue; padding: 5px; font-weight: bold; color: blue; font-size: 1.2em;">COPIED</div>	<p>Sent: 5/23/2024 9:46:51 AM</p>
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**Electronic Record and Signature Disclosure:**  
Not Offered via DocuSign

<b>Witness Events</b>	<b>Signature</b>	<b>Timestamp</b>
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<b>Notary Events</b>	<b>Signature</b>	<b>Timestamp</b>
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<b>Envelope Summary Events</b>	<b>Status</b>	<b>Timestamps</b>
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Signing Complete	Security Checked	5/23/2024 9:46:44 AM
Completed	Security Checked	5/23/2024 9:46:52 AM

<b>Payment Events</b>	<b>Status</b>	<b>Timestamps</b>
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<b>Electronic Record and Signature Disclosure</b>
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## **CONSUMER DISCLOSURE**

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At any time, you may request from us a paper copy of any record provided or made available electronically to you by us. You will have the ability to download and print documents we send to you through the DocuSign system during and immediately after signing session and, if you elect to create a DocuSign signer account, you may access them for a limited period of time (usually 30 days) after such documents are first sent to you. After such time, if you wish for us to send you paper copies of any such documents from our office to you, you will be charged a \$0.00 per-page fee. You may request delivery of such paper copies from us by following the procedure described below.

### **Withdrawing your consent**

If you decide to receive notices and disclosures from us electronically, you may at any time change your mind and tell us that thereafter you want to receive required notices and disclosures only in paper format. How you must inform us of your decision to receive future notices and disclosure in paper format and withdraw your consent to receive notices and disclosures electronically is described below.

### **Consequences of changing your mind**

If you elect to receive required notices and disclosures only in paper format, it will slow the speed at which we can complete certain steps in transactions with you and delivering services to you because we will need first to send the required notices or disclosures to you in paper format, and then wait until we receive back from you your acknowledgment of your receipt of such paper notices or disclosures. To indicate to us that you are changing your mind, you must withdraw your consent using the DocuSign 'Withdraw Consent' form on the signing page of a DocuSign envelope instead of signing it. This will indicate to us that you have withdrawn your consent to receive required notices and disclosures electronically from us and you will no longer be able to use the DocuSign system to receive required notices and consents electronically from us or to sign electronically documents from us.

### **All notices and disclosures will be sent to you electronically**

Unless you tell us otherwise in accordance with the procedures described herein, we will provide electronically to you through the DocuSign system all required notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you during the course of our relationship with you. To reduce the chance of you inadvertently not receiving any notice or disclosure, we prefer to provide all of the required notices and disclosures to you by the same method and to the same address that you have given us. Thus, you can receive all the disclosures and notices electronically or in paper format through the paper mail delivery system. If you do not agree with this process, please let us know as described below. Please also see the paragraph immediately above that describes the consequences of your electing not to receive delivery of the notices and disclosures

electronically from us.

**How to contact Howard County Government:**

You may contact us to let us know of your changes as to how we may contact you electronically, to request paper copies of certain information from us, and to withdraw your prior consent to receive notices and disclosures electronically as follows:

To contact us by email send messages to: [glovelace@howardcountymd.gov](mailto:glovelace@howardcountymd.gov)

**To advise Howard County Government of your new e-mail address**

To let us know of a change in your e-mail address where we should send notices and disclosures electronically to you, you must send an email message to us at [glovelace@howardcountymd.gov](mailto:glovelace@howardcountymd.gov) and in the body of such request you must state: your previous e-mail address, your new e-mail address. We do not require any other information from you to change your email address..

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Screen Resolution:	800 x 600 minimum
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