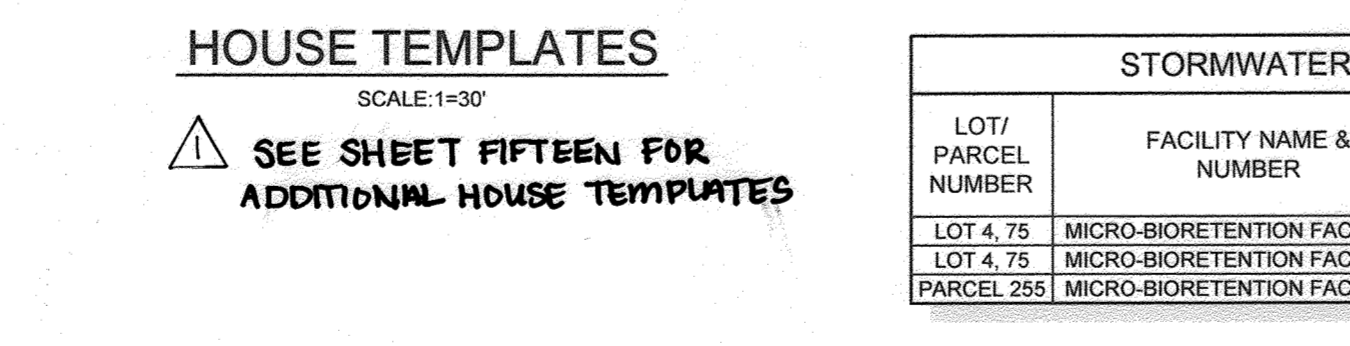
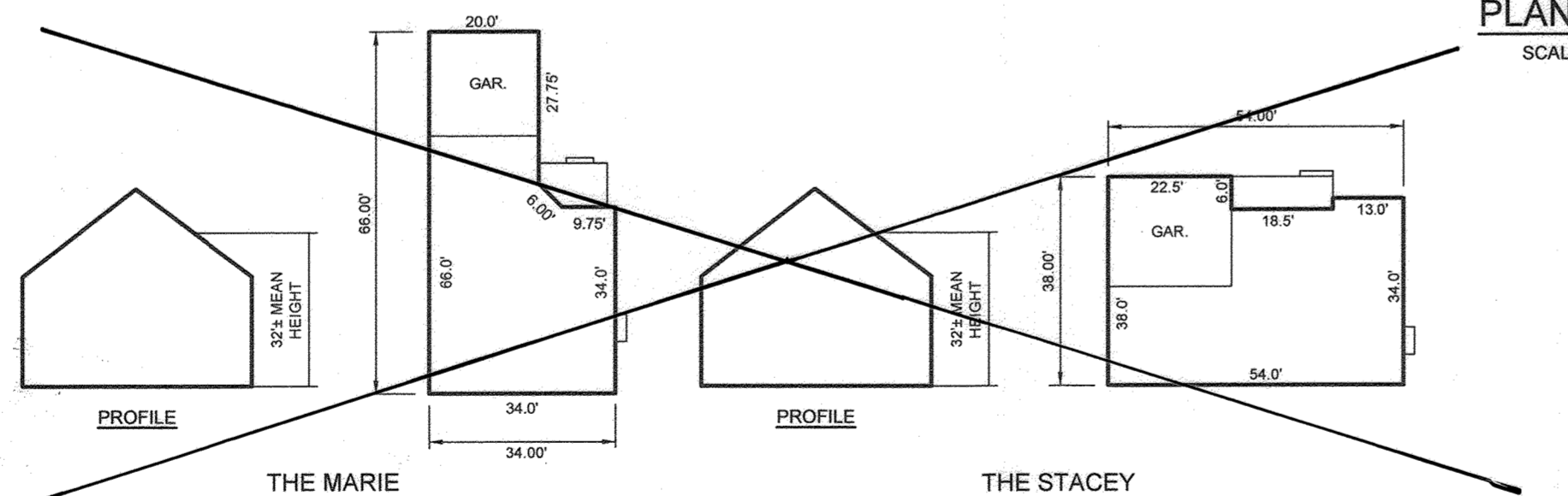
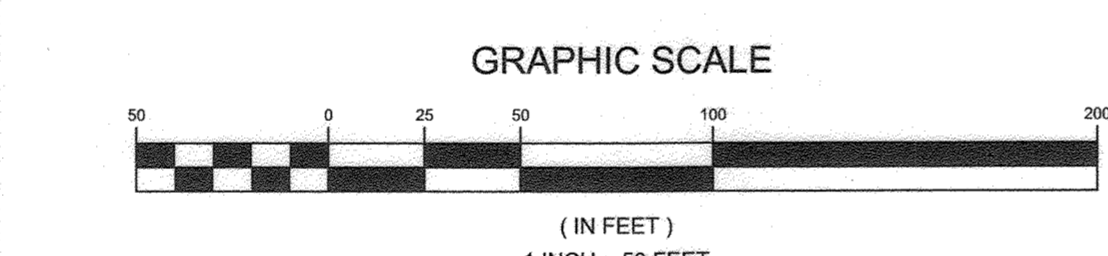
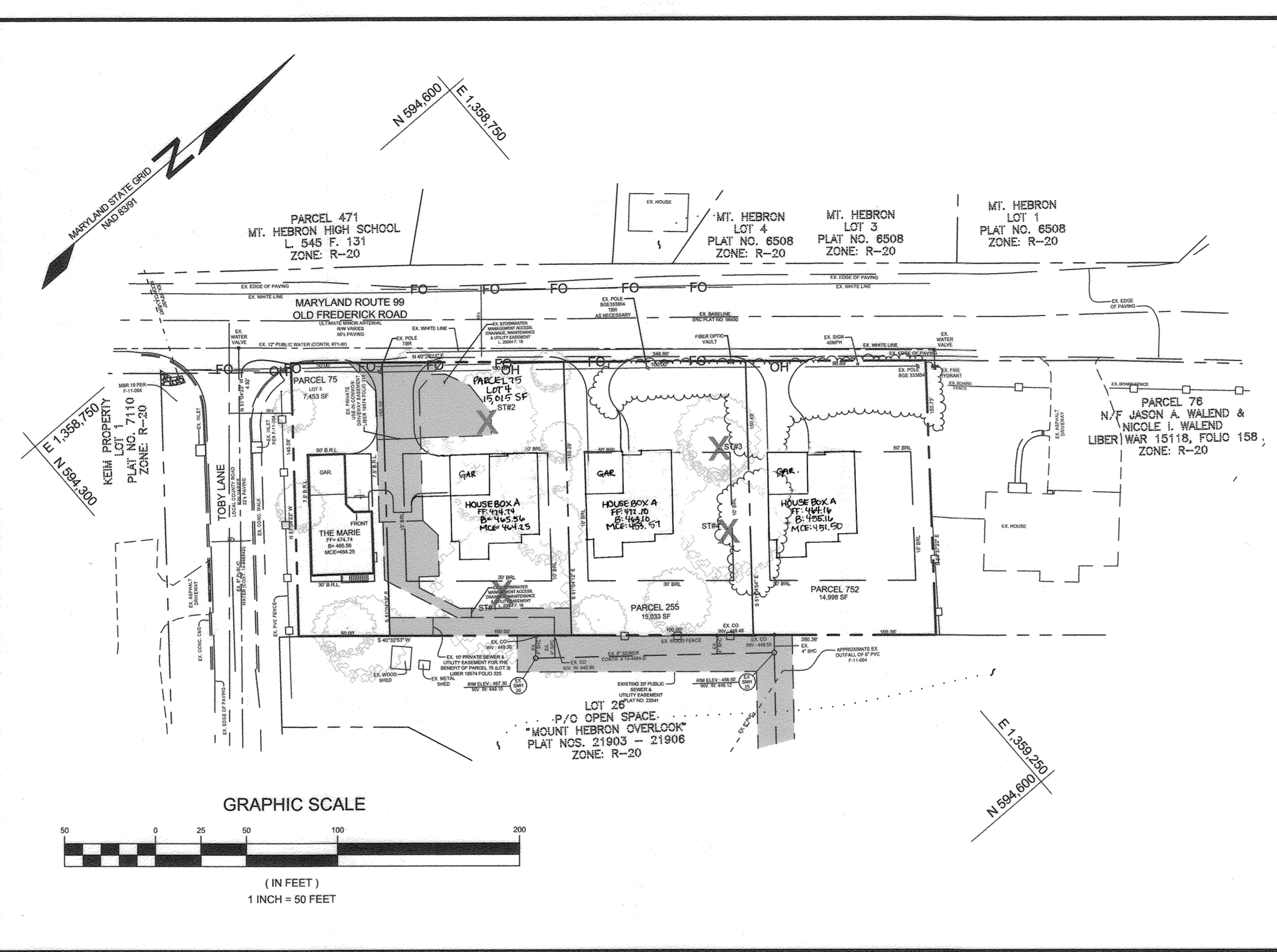


GENERAL NOTES

- 1. SUBJECT PROPERTY ZONED R-20 PER 10-06-2013 COMPREHENSIVE ZONING PLAN.
2. PROJECT ACREAGE: PARCEL 75, LOT 3: 7,453 SF...
3. PUBLIC WATER AND PUBLIC SEWER WILL BE USED WITHIN THIS SITE.
4. PREVIOUS HOWARD COUNTY FILE NUMBERS: F-11-064, BA-17-029V, WP-17-134, WP-20-123, CONTR 14-4684-D, CONTR. 71-W, CP S-6266, ECP-19-033, SDP-18-052.
5. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED ON THE PLANE COORDINATE SYSTEM, HOWARD COUNTY MONUMENTS NUMBER 17ED AND 17EF WERE USED FOR THIS PROJECT.
6. THE BOUNDARY SHOWN HEREON IS BASED ON A FIELD RUN BOUNDARY SURVEY PREPARED BY HANOVER LAND SERVICES, INC. ON 8/17/2017.
7. THE EXISTING TOPOGRAPHY IS TAKEN FROM A FIELD RUN SURVEY WITH TWO FOOT CONTOUR INTERVALS PREPARED BY HANOVER LAND SERVICES, INC. DATED 08/17/2017.
8. ENVIRONMENTAL FEATURES SUCH AS WETLANDS AND FLOODPLAINS, DO NOT EXIST ON-SITE. THERE ARE NO STEEP SLOPES AND NO CRITICAL HABITAT AREAS. THERE ARE NO HISTORIC RESOURCES OR CEMETERIES WITHIN THE BOUNDARY. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURAL FEATURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAMS OR THEIR REQUIRED BUFFERS, FLOODPLAIN AND FOREST CONSERVATION EASEMENT AREAS, UNLESS WAIVERS HAVE BEEN APPROVED OR ACTIVITIES HAVE BEEN DETERMINED ESSENTIAL BY THE DEPARTMENT OF PLANNING AND ZONING. A SIMPLIFIED FOREST STAND DELINEATION HAS BEEN APPROVED PER EOP-19-033 AND NO FOREST EXISTS FOR THIS SITE.
9. ON FEBRUARY 23, 2018 THE HOWARD COUNTY BOARD OF APPEALS HEARING EXAMINER GRANTED CASE BA-17-029V PERTAINING PARCEL 75 LOT 3, A PETITION FOR VARIANCES TO REDUCE THE 50-FOOT SETBACK FROM A PUBLIC STREET RIGHT-OF-WAY TO 7.5 AND THE REQUIRED 10-FOOT SIDE LOT LINE SETBACK TO 7.5 FEET FOR A NEW SINGLE-FAMILY DETACHED DWELLING IN AN R-20 ZONING DISTRICT. ON AUGUST 3, 2017 A REQUEST FOR ALTERNATIVE COMPLIANCE TO SECTION 16.147 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, TO FINAL SUBDIVISION PLAN AND FINAL PLAT, WAS APPROVED BY THE DIRECTOR OF PLANNING AND ZONING SUBJECT TO THE FOLLOWING CONDITIONS: REFER TO ALTERNATIVE COMPLIANCE NUMBER WP-17-134.
THE ALTERNATIVE COMPLIANCE REQUEST APPROVAL FROM THE FINAL SUBDIVISION PLAN REQUIREMENTS IN THIS CASE IS ONLY A MECHANISM FOR DEPARTMENT OF PLANNING AND ZONING TO RECOGNIZE THE PRESENT PROPERTY CONFIGURATION FOR PARCEL NO. 752, LOT 4 0.341 ACRES AS A SEPARATE BUILDING LOT.
A SITE DEVELOPMENT PLAN WILL BE REQUIRED FOR BUILDING A SINGLE-FAMILY DWELLING.
11. 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) 410.787.9068
MISS UTILITY 800.257.7777
COLONIAL PIPELINE COMPANY 410.785.1300
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 800.743.0033/410.224.9210
12. THERE ARE NO CEMETERIES WITHIN THE PROJECT BOUNDARY.
13. THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
14. ANY DAMAGE TO THE COUNTY'S PUBLIC RIGHT-OF-WAYS, PAVING OR EXISTING UTILITIES WILL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
15. 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.
16. THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP, WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
17. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY IN ADDITION TO THE STANDARDS AND SPECIFICATIONS APPLICABLE TO THE PROJECT IS IN CONFORMANCE WITH THE CURRENT HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
18. ALL HOPE PIPE SPECIFICATIONS, AND INSTALLATIONS SHALL MEET AASHTO M-252 TYPE S, M-294 TYPE S AND ASTM D2521, RESPECTIVELY.
19. 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-1 PAVING SECTION. (SEE DETAIL SHEET), GEOTECHNICAL ENGINEER TO CONFIRM ACCESSIBILITY OF PROPOSED PAVING SECTION, BASED ON SOIL TEST, PRIOR TO CONSTRUCTION.
20. ALL TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNALING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
21. EXISTING UTILITIES ARE TO BE LOCATED BY THE USE OF ANY OR ALL OF THE FOLLOWING: ROAD CONSTRUCTION PLANS, FIELD SURVEYS, PUBLIC WATER AND SEWER PLANS 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 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 DEVELOPER'S EXPENSE.
22. IN ACCORDANCE WITH SECTION 126 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NO MORE THAN 16 FEET IN WIDTH, PROJECT MORE THAN 4 FEET INTO ANY SETBACK, PORCH OR DECK, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK.
23. DRIVEWAY(S) SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING REQUIREMENTS AT THE DEVELOPER'S EXPENSE:
1) WIDTH - 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE);
2) SURFACE - SIX (6") INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2" MINIMUM);
3) GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND 45-FOOT TURNING RADIUS;
4) STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25-LOADING);
5) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
6) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
FOR DRIVEWAY ENTRANCE DETAILS REFER TO THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL R-6.06. THIS DETAIL CAN BE FOUND ON SHEET 7, SEDIMENT AND EROSION CONTROL DETAILS.
24. STORMWATER MANAGEMENT OBLIGATIONS FOR THIS SITE WILL BE MET BY THREE BIRETENTION FACILITIES (M-6) AND THIRTEEN DRYWELLS (M-5) ON LOT FACILITIES SHALL BE OWNED AND MAINTAINED BY THE LOT OWNER.
25. A PRIVATE RANGE OF ADDRESS SIGN ASSEMBLY SHALL BE FABRICATED AND INSTALLED BY HOWARD COUNTY BUREAU OF HIGHWAYS AT THE DEVELOPER'S/OWNER'S EXPENSE. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT 410.313.5752 FOR DETAILS AND COST ESTIMATES.
26. PER SECTION 16.1200 OF THE HOWARD COUNTY CODE, THIS PLAN IS SUBJECT TO FOREST CONSERVATION OBLIGATIONS. FOR THIS PROJECT, THE REFORESTATION/FORESTATION NET TRACT AREA OBLIGATION IS BASED ON THE HOWARD COUNTY FOREST CONSERVATION WORKSHEET AND WILL BE 0.20 ACRES OR 8,712 SQ FT. THIS OBLIGATION HAS BEEN MET BY OFFSITE FOREST RETENTION OUTSIDE THE 12 DIGIT WATERSHED, AS THERE ARE NO BANKS WITHIN THE WATERSHED. THE MILLERS MOUNT PROPERTY, SDP-18-052 HAS BEEN USED. A REDLINE REVISION WAS SUBMITTED AND APPROVED FOR THE OFFSITE BANK IN MAY OF 2021.
27. PURSUANT TO SECTION 16.1216, THE DIRECTOR OF THE DEPARTMENT OF PLANNING AND ZONING, DIRECTOR OF THE DEPARTMENT OF RECREATION AND PARKS AND THE ADMINISTRATOR OF THE OFFICE OF COMMUNITY SUSTAINABILITY, CONSIDERED AND APPROVED THE REQUEST FOR VARIANCE WITH RESPECT TO SECTION 16.1206(a)(3) OF THE FOREST CONSERVATION REGULATIONS. THE PURPOSE IS TO ALLOW THE REMOVAL OF FOUR (4) SPECIMEN TREES. PURSUANT TO SECTION 16.104, THE DIRECTOR OF THE DEPARTMENT OF PLANNING AND ZONING CONSIDERED AND APPROVED THE REQUEST FOR ALTERNATIVE COMPLIANCE WITH RESPECT TO SECTION 134(a)(1) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. THE PURPOSE IS TO PROVIDE A FEE-IN-LIEU SIDEWALK CONSTRUCTION ALONG OLD FREDERICK ROAD. THE DIRECTORS DELIBERATED AND APPROVED THE APPLICATION IN A MEETING ON JUNE 24, 2021. APPROVAL OF THESE ALTERNATIVE COMPLIANCES IS SUBJECT TO THE FOLLOWING CONDITIONS:
COMPLIANCE WITH THE ATTACHED DEVELOPMENT ENGINEERING DIVISION COMMENTS AND SUBJECT TO A FEE-IN-LIEU PAYMENT FOR SIDEWALKS. THE FEE-IN-LIEU WILL BE ASSESSED AND MUST BE PAID DURING THE SITE DEVELOPMENT PLAN REVIEW PROCESS.
THE REMOVAL OF THE FOUR (4) SPECIMEN TREES WILL REQUIRE THE PLANTING OF EIGHT (8) NATIVE SHADE TREES ON-SITE. THE TREES SHALL BE A MINIMUM OF 3" DIAMETER AT GREATEST HEIGHT AND SHALL BE SHOWN ON THE LANDSCAPING AND FOREST CONSERVATION PLAN SHEETS AS PART OF THE SITE DEVELOPMENT PLANS. THE TREES WILL BE BONDED ALONG WITH THE PERIMETER LANDSCAPING REQUIREMENTS.
A FUTURE SIDEWALK PROJECT IS PLANNED FOR THIS SECTION OF ROAD ALONG MARYLAND ROUTE 99. SEE ELEVATIONS SHOWN AND LOCATED AT THE PROPERTY LINE.
28. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISION OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY WILL BE POSTED AS PART OF THE DWP DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$6,000.00, FOR THE REQUIRED PERIMETER LANDSCAPING TREES, (6) REQUIRED MITIGATION TREES PER WP-20-123 FOR A TOTAL OF FOUR (4) EVERGREEN TREES AND TWENTY (20) SHADE TREES. EVERGREEN TREES AT \$150.00 EACH, 4 X \$150.00 = \$600.00, AND SHADE TREES AT \$300.00 EACH, 20 X \$300.00 = \$6,000.00

SITE DEVELOPMENT PLAN
KEIM PROPERTY
HOWARD COUNTY, MARYLAND



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

STORMWATER MANAGEMENT NOTES & DESIGN NARRATIVE

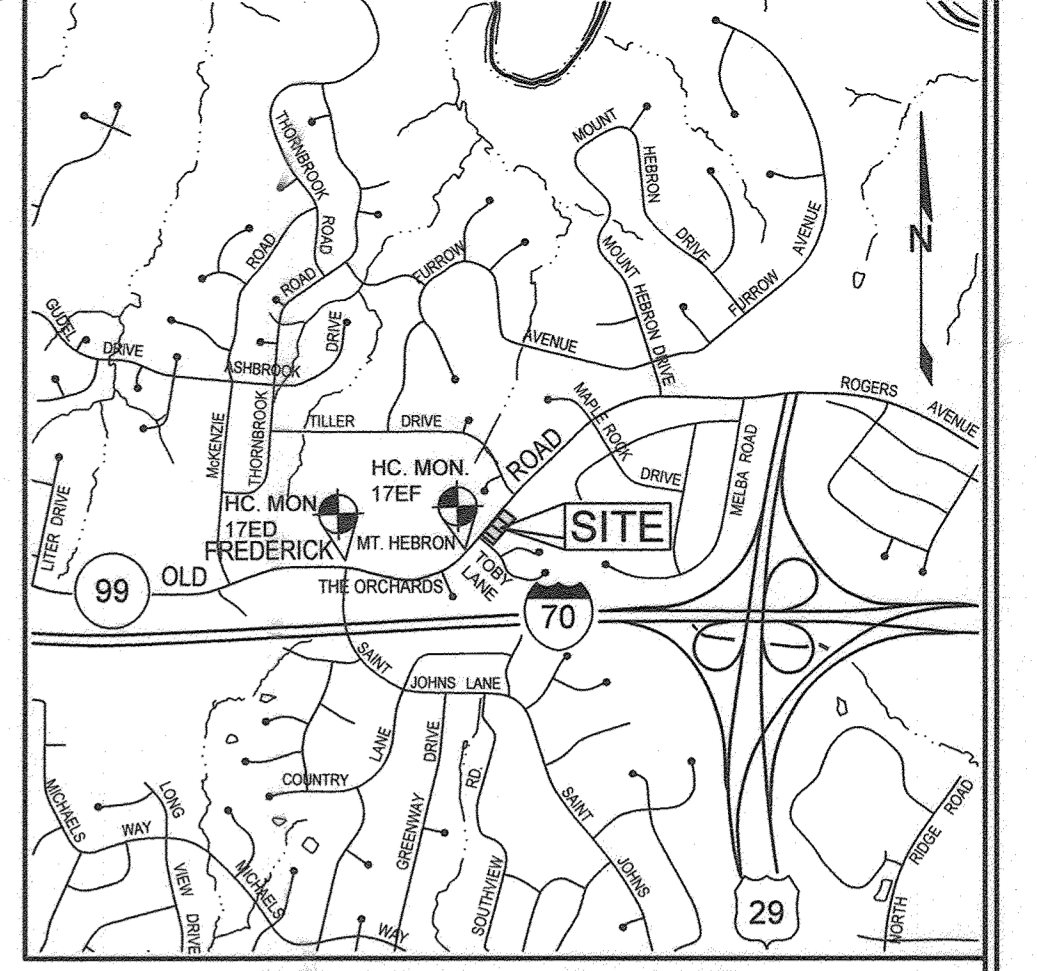
BELOW IS A LIST TO DESCRIBE THE STORMWATER MANAGEMENT REQUIREMENTS AND ACHIEVEMENTS FOR THE SITE PER THE 2000 MARYLAND STORMWATER DESIGN MANUAL, VOLUMES I AND II, AS AMENDED BY THE STORMWATER MANAGEMENT ACT OF 2007.

- 1. ENVIRONMENTALLY SENSITIVE AREAS HAVE BEEN AVOIDED WHERE POSSIBLE. THE SITE WAS DESIGNED TO DISTURB AREAS OF STEEP SLOPES ONLY WHEN NECESSARY. THE LIMIT OF DISTURBANCE AND ALL DEVELOPMENT ACTIVITY IS OVER 140' AWAY FROM THE 100 YEAR FLOODPLAIN ON-SITE. NO STREAMS OR WETLANDS EXIST ON-SITE AND NO FOREST EXISTS WITHIN THE PROJECT AREA.
2. TO THE GREATEST EXTENT PRACTICABLE THE NATURAL FLOW PATTERNS OF THE SITE HAVE BEEN MAINTAINED. IMPERVIOUS AREAS HAVE BEEN REDUCED BY POSITIONING THE BUILDING AS CLOSE TO THE STREET AS THE SETBACKS AND GRADES ALLOW.
3. A STABILIZED CONSTRUCTION ENTRANCE, SILT FENCES, AND SUPER SILT FENCES ARE USED AS SEDIMENT AND EROSION CONTROL MEASURES.
4. THE STORMWATER MANAGEMENT OBLIGATIONS FOR THESE PARCELS WILL BE MET BY THE USE OF DRYWELLS (M-5) AND MICRO-BIORETENTION FACILITIES (M-6).
5. ACCORDING TO THE DEFINITION IN THE HOWARD COUNTY CONSERVATION MANUAL, JUNE 1999, NO FOREST EXISTS ON THIS SITE.

PERMIT INFORMATION CHART table with columns: PROJECT NAME, SECTION, PARCEL #, LIBER/FOLIO, GRID #, ZONING, TAX MAP #, ELEC. DIS., CENSUS TRACT, WATER CODE, SEWER CODE, CONTRACT #.

LEGEND

- EXISTING TREELINE
PROPOSED TREELINE
SOIL BOUNDARY
SWM BORING LOCATION
EXISTING SPECIMEN TREE
EXISTING SPECIMEN TREE TO BE REMOVED
EXISTING WELL
MODERATE SLOPES 15% - 24.9%
EXISTING AND PROPOSED EASEMENTS
OVERHEAD WIRES FIBER OPTIC CABLE
EXISTING GAS MAIN
TO BE RELOCATED
TO BE ABANDONED



BENCHMARKS table with columns: NUMBER, NORTHING, EASTING, ELEVATION, DESCRIPTION.

ADDRESS CHART table with columns: PARCEL, STREET ADDRESS.

SITE ANALYSIS DATA SHEET table with columns: ENVIRONMENTAL AREA, SIZE OR USE.

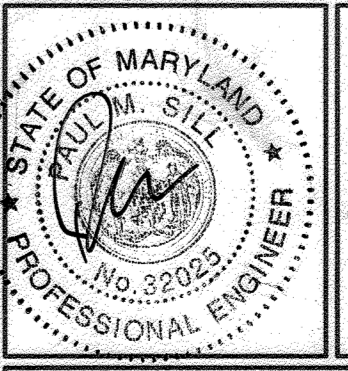
SHEET INDEX table with columns: SHEET NO., DESCRIPTION.

STORMWATER MANAGEMENT PRACTICES table with columns: LOT/ PARCEL NUMBER, FACILITY NAME & NUMBER, PRACTICE TYPE, PUBLIC, PRIVATE, PRIVATE, JOINTLY MAINTAINS.

COVER SHEET
KEIM PROPERTY
ZONED: R-20 SINGLE FAMILY DETACHED

TAX MAP 17 GRID 18
2ND ELECTION DISTRICT

PARCELS 75 (LOTS 3 & 4), 255 & 752
HOWARD COUNTY, MARYLAND



OWNER/DEVELOPER
BURKHARD HOMES, LLC
1511 RTCHIE HIGHWAY, STE 305
ARNOLD, MD 21012
910 TIM BURKHARD
TIME BURKHARD HOMES, LLC
443-325-5611

DESIGN BY: PS
DRAWN BY: TB
CHECKED BY: PS
SCALE: AS SHOWN
DATE: NOVEMBER 5, 2021
PROJECT #: 16-017
SHEET #: 1 of 15

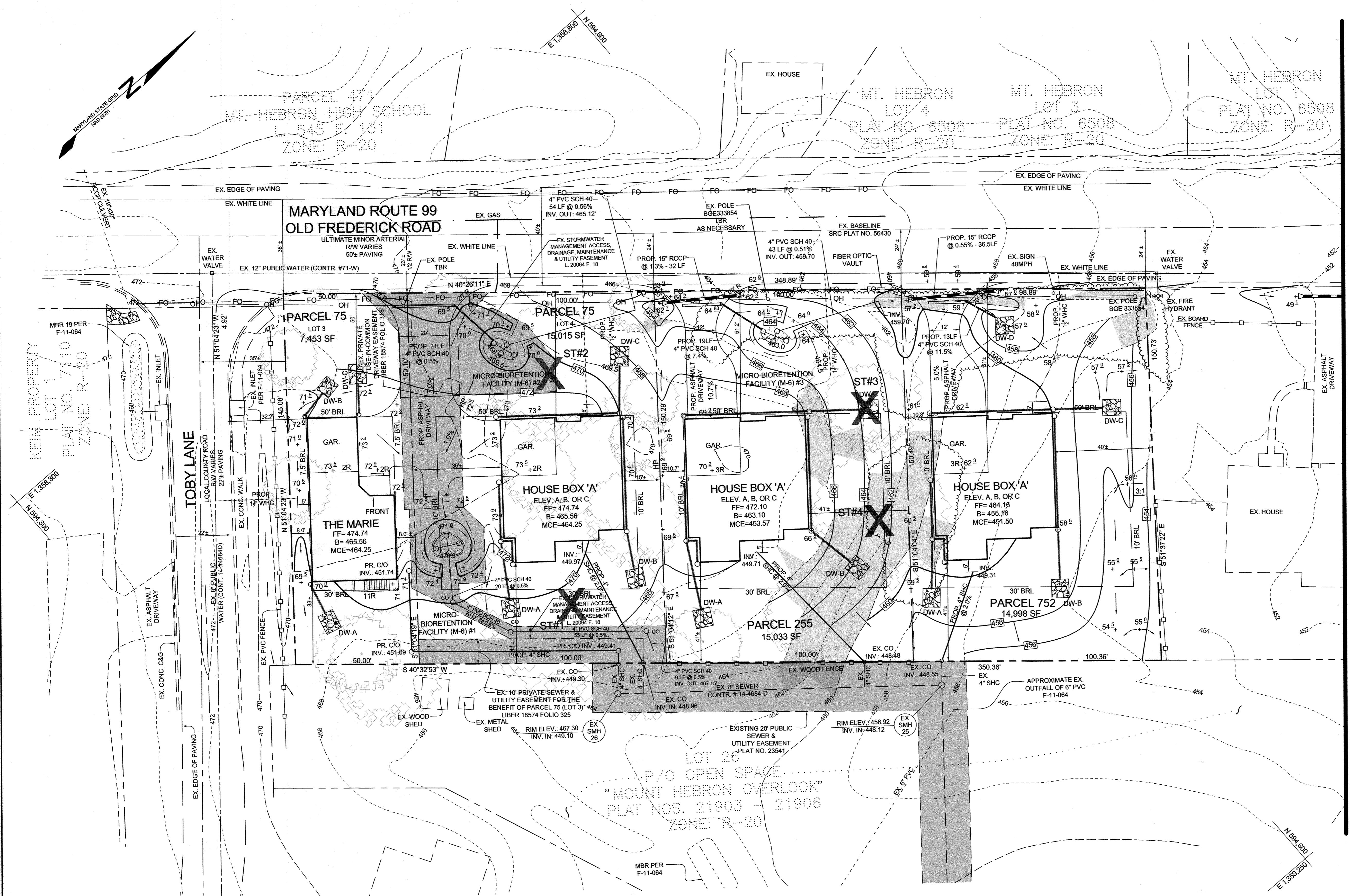
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division
Chief, Division of Land Development
Director

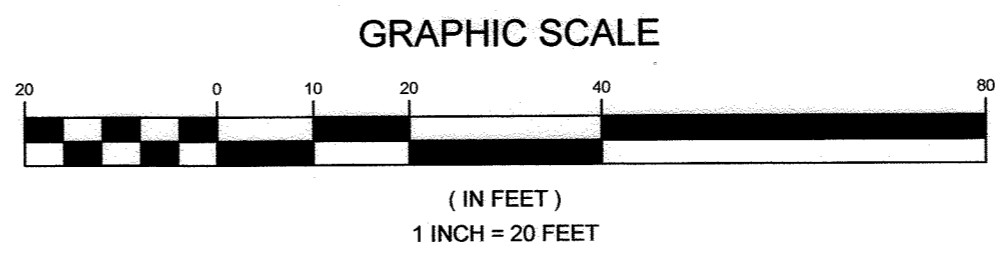
REVISIONS table with columns: NO., DESCRIPTION, DATE.

**LEGEND**

- EXISTING CONTOUR GIS - 382
- EXISTING CONTOUR FIELD RUN - 382
- PROPOSED CONTOUR - 382
- EXISTING SPOT ELEVATION + 82.53
- DIRECTION OF FLOW + 82.53
- EXISTING TREELINE + 82.53
- PROPOSED TREELINE + 82.53
- SWM BORING LOCATION + 82.53
- EXISTING WELL + 82.53
- EXISTING AND PROPOSED EASEMENTS
- MODERATE SLOPES 15% - 24.9%
- OVERHEAD WIRES OH
- FIBER OPTIC CABLE FO
- EXISTING GAS MAIN FO



**PLAN VIEW**  
SCALE: 1"=20'



NOTE:  
SEE SHEET 7 FOR THE DETAILED PROPOSED AND EXISTING EASEMENT PLAN VIEW.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*Ral Olsen*  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE: 5-21-22

NO.	DESCRIPTION	DATE
1	REVISION TO THE HOUSES, DRYWELLS, GRADING, DRIVEWAYS AND SHC & WHC ON PARCEL 75 LOT 4, PARCEL 255, & PARCEL 752. REVISION TO THE TITLE THIS SHEET.	02/25/2022

**OWNER/DEVELOPER**  
 BURKARD HOMES, LLC  
 C/O TIM BURKARD  
 1511 RITCHIE HIGHWAY, STE 305  
 ARNOLD, MD 21012  
 443-325-5617  
 TIM@BURKARDHOMES.COM

**REVISED GRADING PLAN**

**KEIM PROPERTY**

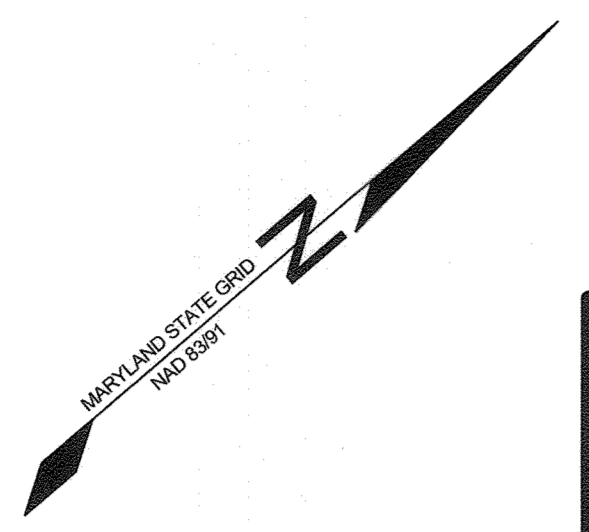
ZONED: R-20 SINGLE FAMILY DETACHED

TAX MAP 17 GRID 16      PARCELS 75 (LOTS 3 & 4), 255 & 752  
 2ND ELECTION DISTRICT      HOWARD COUNTY, MARYLAND

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

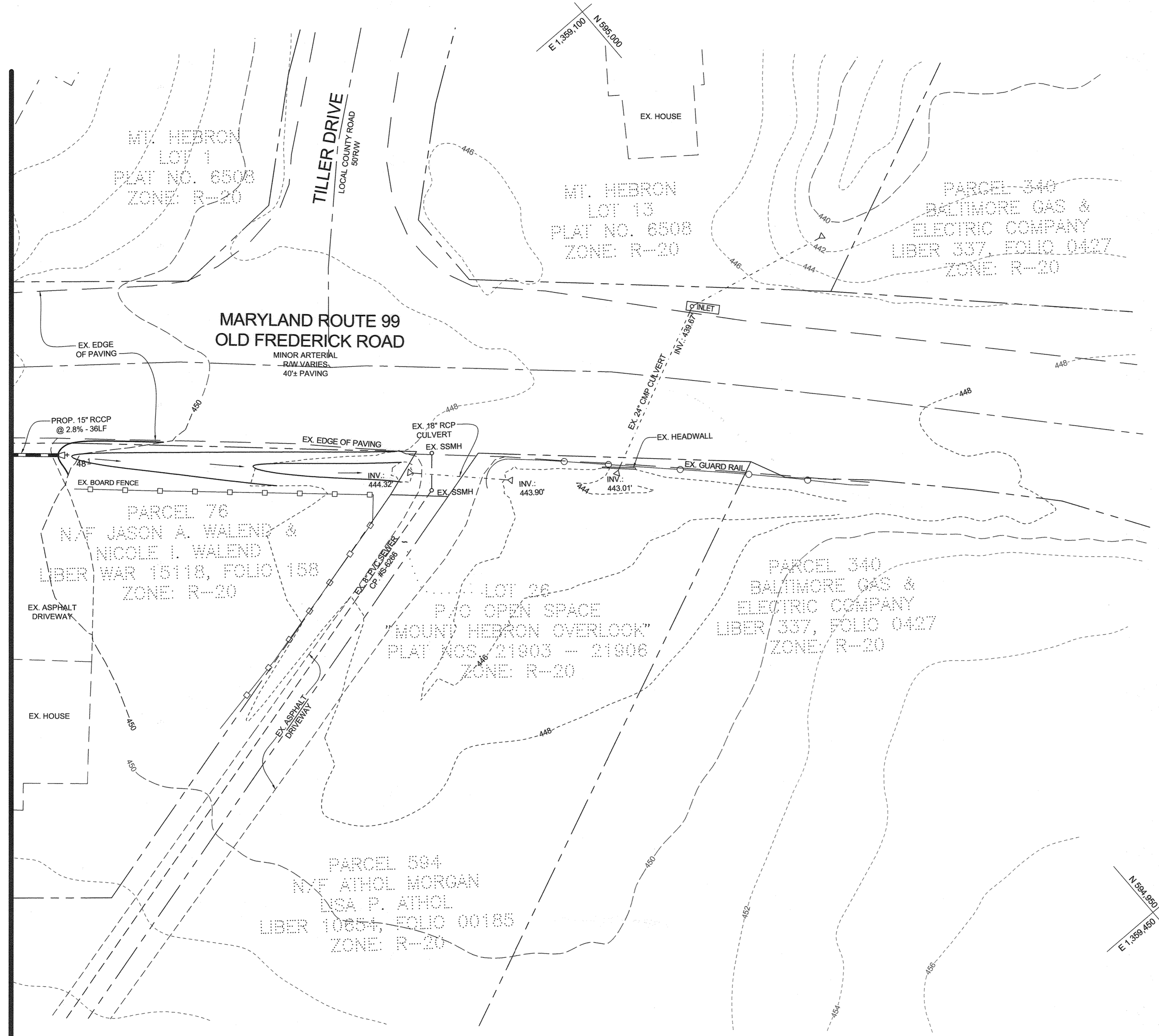
DESIGN BY: PS  
 DRAWN BY: TB  
 CHECKED BY: PS  
 SCALE: AS SHOWN  
 DATE: APRIL 18, 2022  
 PROJECT #: 16-017  
 SHEET #: 2 of 15

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. 32023, EXPIRATION DATE: JUNE 20, 2023.

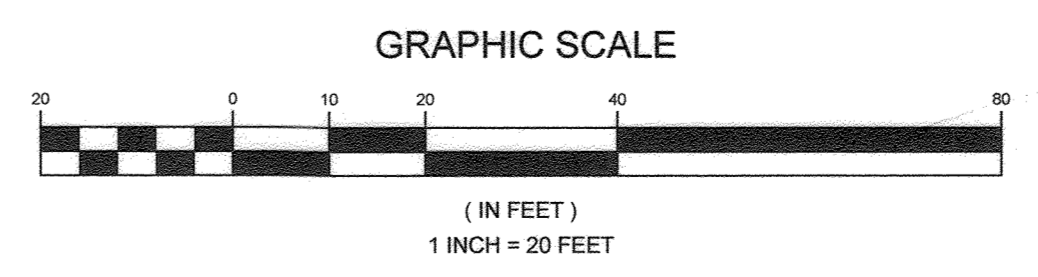


LEGEND	
EXISTING CONTOUR GIS	--- 382 ---
EXISTING CONTOUR FIELD RUN	--- 382 ---
PROPOSED CONTOUR	--- 382 ---
EXISTING SPOT ELEVATION	382.3
PROPOSED SPOT ELEVATION	+82.53
DIRECTION OF FLOW	→
EXISTING TREELINE	~~~~~
PROPOSED TREELINE	~~~~~
SWM BORING LOCATION	⊕ SWM #1
MODERATE SLOPES 15% - 24.9%	[Shaded Area]
OVERHEAD WIRES	OH
FIBER OPTIC CABLE	FO

MATCHLINE SEE SHEET TWO



PLAN VIEW  
SCALE: 1"=20'



**OWNER/DEVELOPER**  
**BURKARD HOMES, LLC**  
 1511 RITCHIE HIGHWAY, STE 305  
 ARNOLD, MD 21012  
 c/o TIM BURKARD  
 TIMEBURKHOMES.COM  
 443-325-5117

**GRADING PLAN**  
**KEIM PROPERTY**  
 ZONED: R-20 SINGLE FAMILY DETACHED

TAX MAP 17 GRID 16 2ND ELECTION DISTRICT PARCELS 75 (LOTS 3 & 4), 255 & 752 HOWARD COUNTY, MARYLAND

	DESIGN BY: PS
	DRAWN BY: TB
	CHECKED BY: PS
	SCALE: AS SHOWN
	DATE: NOVEMBER 4, 2021
PROJECT #: 16-017	
SHEET #: 3 of 15	

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, 2023

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 [Signature]  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE: 12.9.21

[Signature]  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE: 12/16/21

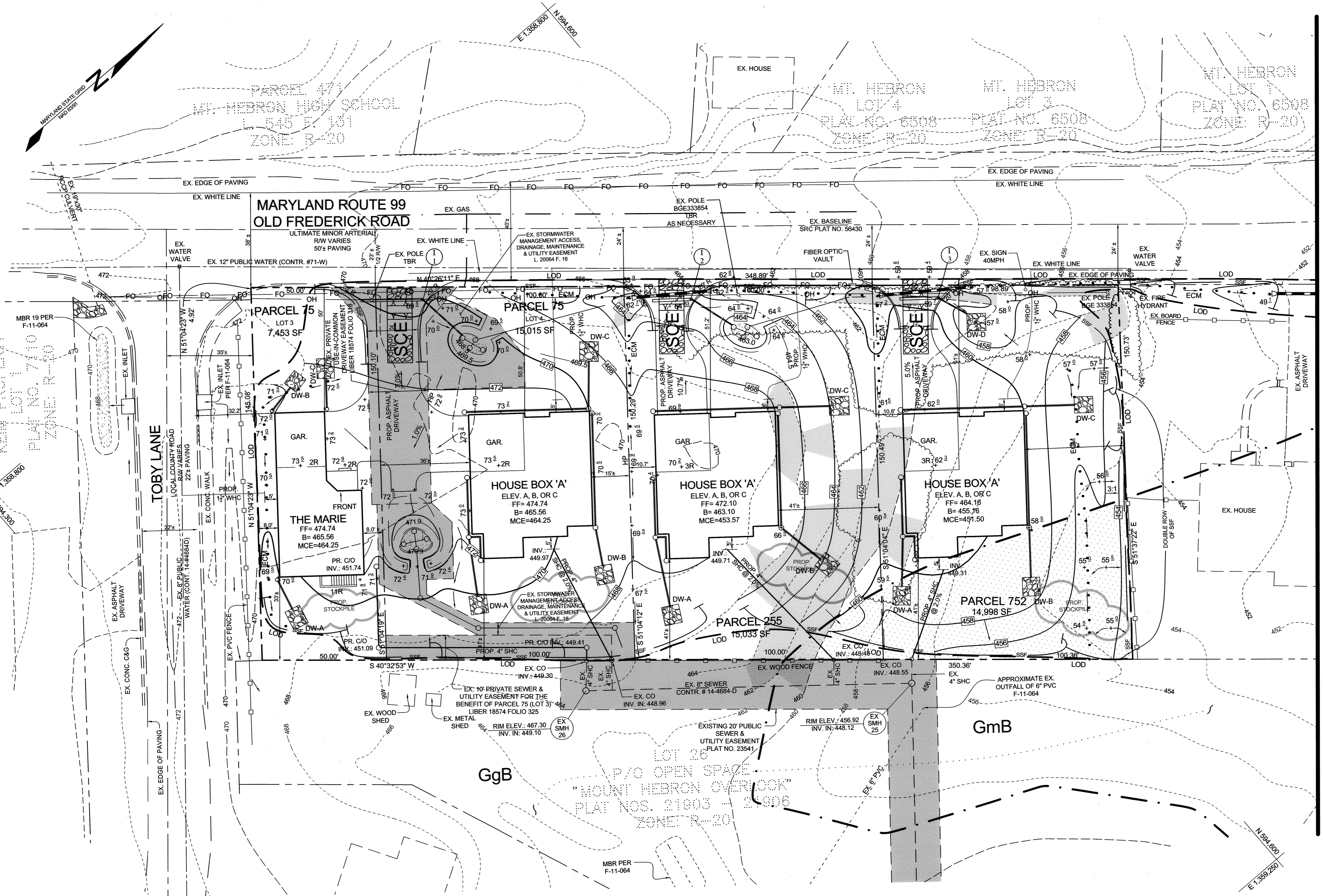
[Signature]  
 DIRECTOR  
 DATE: 12-17-21

NO.	REVISIONS	DATE
1	REVISE TOTAL SHEET NUMBER TO 15	4/27/2022
	DESCRIPTION	DATE

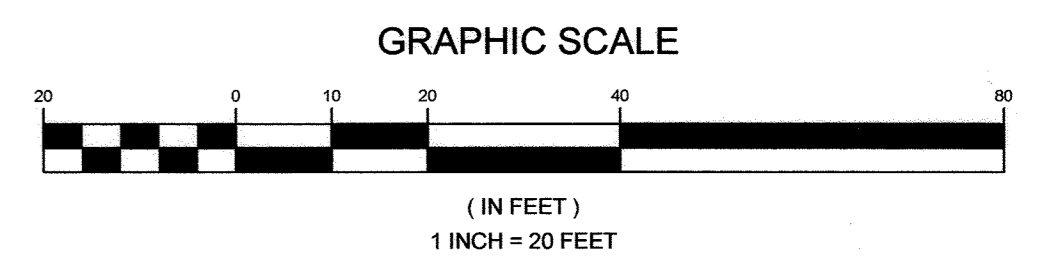
SOILS LEGEND			
SYMBOL	NAME / DESCRIPTION	GROUP	'K' FACTOR
GgB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	B	0.37
GmB	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES	C/D	0.55

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 CONTOUR FIELD RUN	---
PROPOSED CONTOUR	---
EXISTING SPOT ELEVATION	+82.53
PROPOSED SPOT ELEVATION	+82.53
DIRECTION OF FLOW	→
EXISTING TREELINE	---
PROPOSED TREELINE	---
SOIL BOUNDARY	---
SWM BORING LOCATION	⊕ SWM #1
EXISTING WELL	⊕
EXISTING AND PROPOSED EASEMENTS	---
MODERATE SLOPES	15% - 24.9%
'C/D' SOIL	---
STABILIZED CONSTRUCTION ENTRANCE	---
SUPER SILT FENCE	SSF
LIMIT OF DISTURBANCE	LOD
OVERHEAD WIRES	OH
FIBER OPTIC CABLE	FO
EXISTING GAS MAIN	ECM
EROSION CONTROL MATTING	ECM



MATCHLINE SEE SHEET FIVE



PLAN VIEW  
 SCALE: 1"=20'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 CHIEF DEVELOPMENT ENGINEERING DIVISION  
 DATE: 5/27/22

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT  
 DATE: 05/18/22

ENGINEER'S CERTIFICATE  
 I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.  
 SIGNATURE OF ENGINEER: [Signature]  
 DATE: 5/27/22

DEVELOPER'S CERTIFICATE  
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.  
 SIGNATURE OF DEVELOPER: [Signature]  
 DATE: 5/27/22

NO.	DESCRIPTION	DATE
1	REVISION TO THE HOUSES, DRYWELLS, GRADINGS, DRIVEWAYS AND SHC & WHC ON PARCEL 75, LOT 4, PARCEL 255, & PARCEL 752. REVISION TO THE TITLE THIS SHEET.	02/25/2022

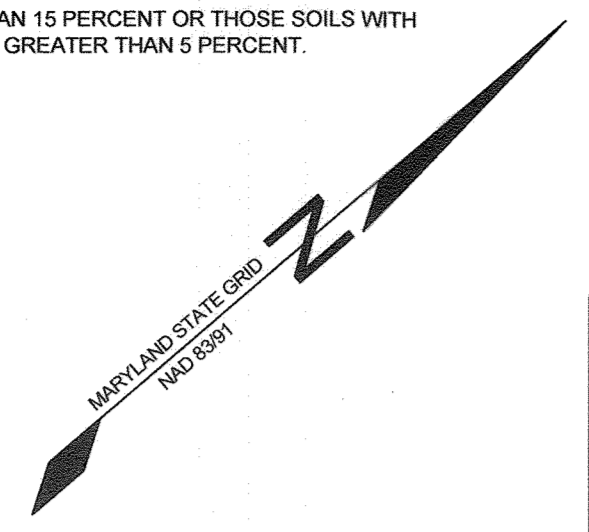
OWNER/DEVELOPER  
 BURKARD HOMES, LLC  
 C/O TIM BURKARD  
 1511 RITCHIE HIGHWAY, STE 305  
 ARNOLD, MD 21012  
 443-325-5617  
 TIM@BURKARDHOMES.COM

REVISED SEDIMENT AND EROSION CONTROL PLAN  
 KEIM PROPERTY  
 ZONED: R-20 SINGLE FAMILY DETACHED  
 TAX MAP 17 GRID 16  
 2ND ELECTION DISTRICT  
 PARCELS 75 (LOTS 3 & 4), 255 & 752  
 HOWARD COUNTY, MARYLAND

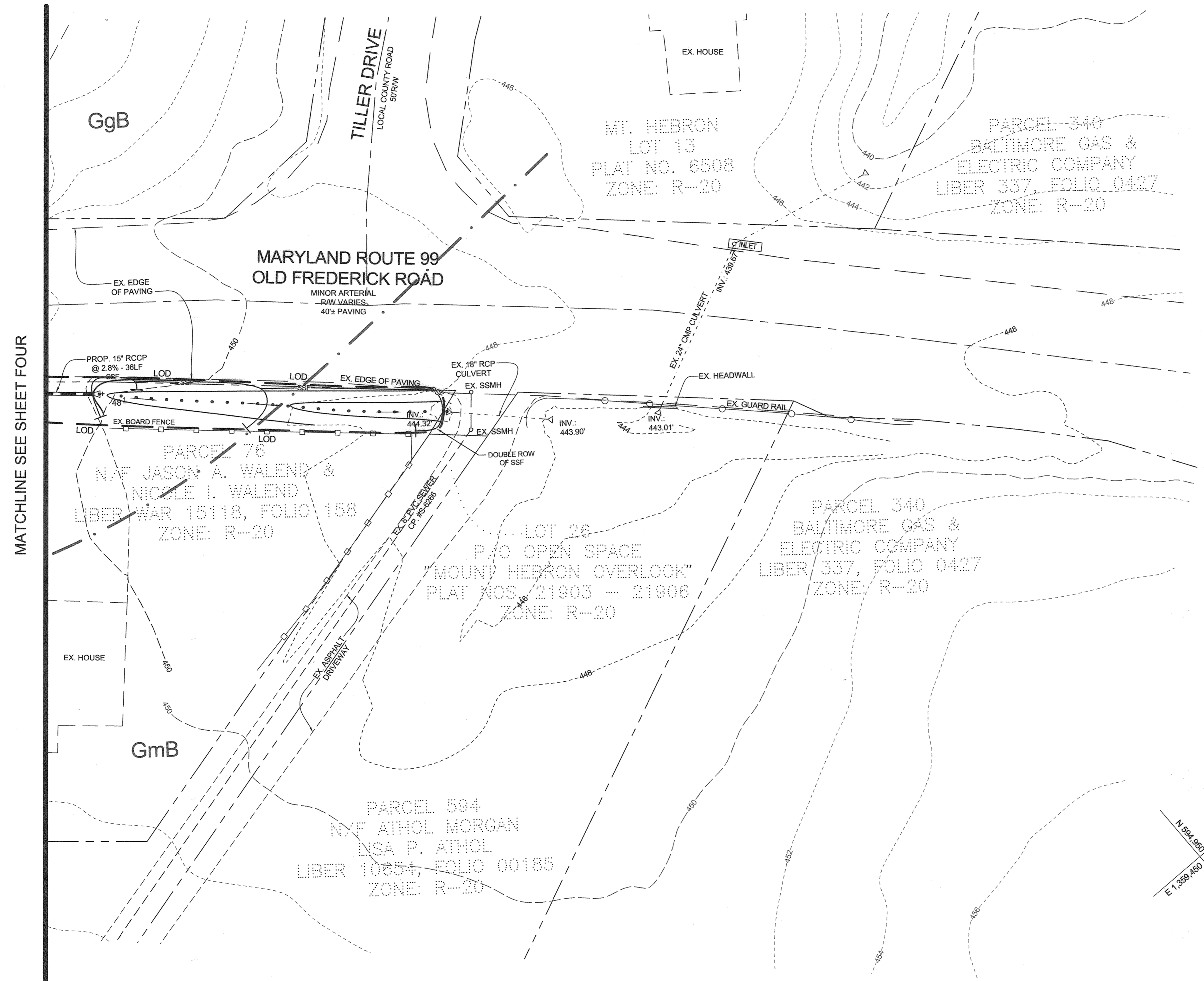
		DESIGN BY: PS
	16005 Frederick Road, 2nd Floor Woodlawn, Maryland 21797 Phone: 443.325.5076 Fax: 410.696.2022 Email: info@sillengineering.com Civil Engineering for Land Development	DRAWN BY: TB
	PROFESSIONAL ENGINEER	CHECKED BY: PS
	PROJECT # 16-017	SCALE: AS SHOWN
	SHEET # 4 of 15	DATE: APRIL 18, 2022

SOILS LEGEND			
SYMBOL	NAME / DESCRIPTION	GROUP	'K' FACTOR
GgB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	B	0.37
GmB	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES	C/D	0.55

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.

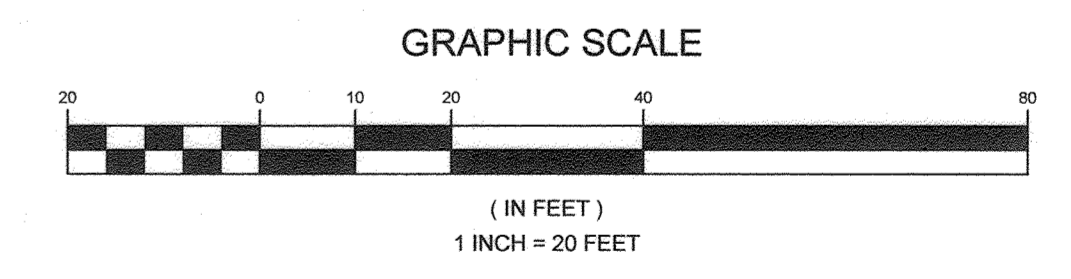


LEGEND	
EXISTING CONTOUR GIS	--- 382 ---
EXISTING CONTOUR FIELD RUN	--- 382 ---
PROPOSED CONTOUR	--- 382 ---
EXISTING SPOT ELEVATION	92.3
PROPOSED SPOT ELEVATION	+82.53
DIRECTION OF FLOW	→
EXISTING TREELINE	~ ~ ~ ~ ~
PROPOSED TREELINE	~ ~ ~ ~ ~
SOIL BOUNDARY	---
SWM BORING LOCATION	⊕ SWM #1
EXISTING TREE	⊙
EXISTING WELL	⊙
SUPER SILT FENCE	SSF
LIMIT OF DISTURBANCE	LOD
EROSION CONTROL MATTING	ECM



MATCHLINE SEE SHEET FOUR

PLAN VIEW  
SCALE: 1"=20'



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION NY DATE 12-9-21  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE 12/16/21  
 DIRECTOR DATE 12-17-21

NO.	REVISIONS	DATE
1	REVISE TOTAL SHEET NUMBER TO 15	4/21/2022

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT  
 SIGNATURE OF ENGINEER: Alexander Bostchii DATE: 12/06/21  
 HOWARD SCD

ENGINEER'S CERTIFICATE  
 "I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."  
 SIGNATURE OF ENGINEER: [Signature] DATE: 11/4/21  
 PAUL M. SILL, P.E.

DEVELOPER'S CERTIFICATE  
 "I WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."  
 SIGNATURE OF DEVELOPER: [Signature] DATE: 11/5/21

OWNER/DEVELOPER  
 BURKARD HOMES, LLC  
 1511 RITCHIE HIGHWAY, STE 305  
 ARNOLD, MD 21012  
 C/O TIM BURKARD  
 TIME BURKARD HOMES.COM  
 443-325-5117

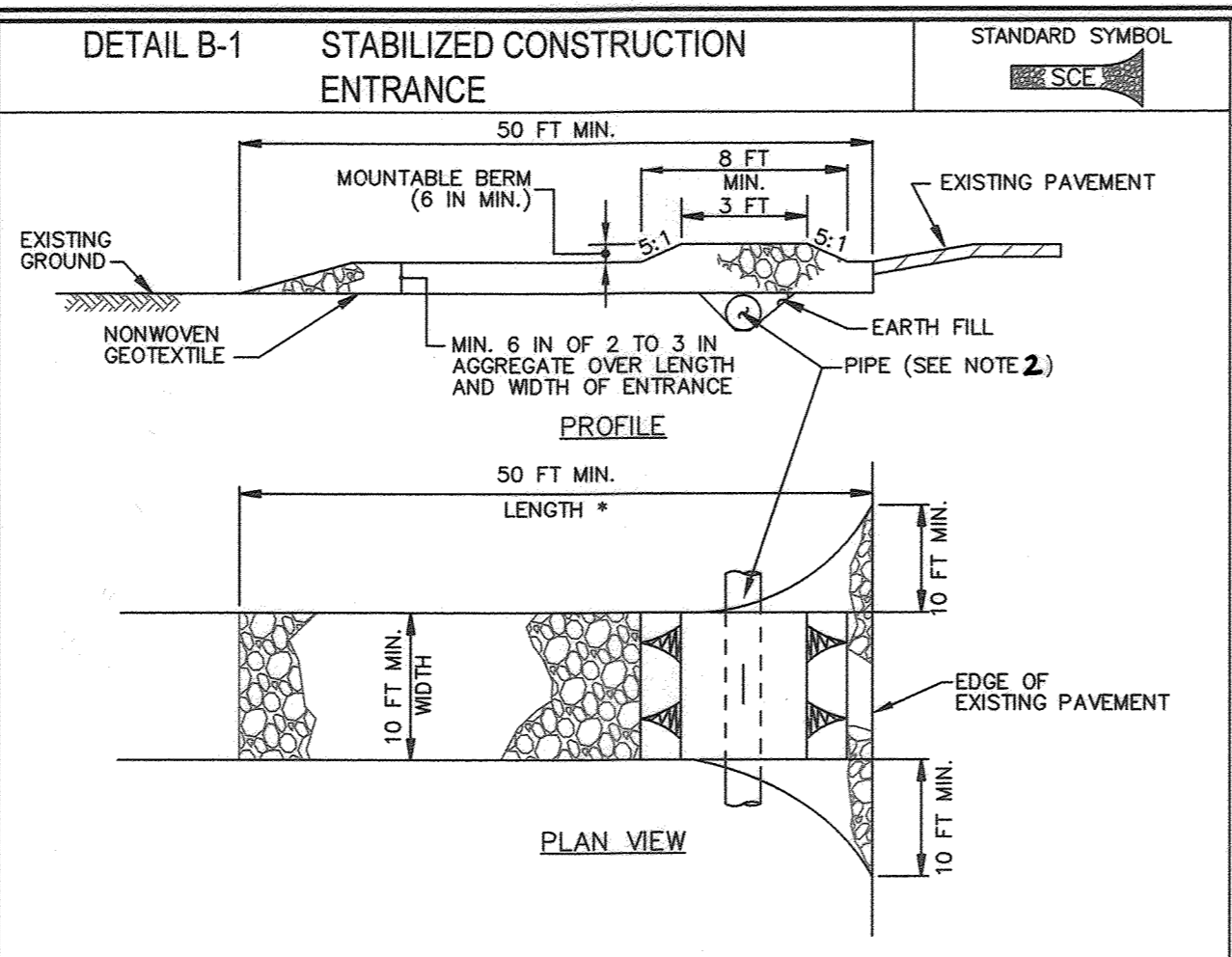
SEDIMENT AND EROSION CONTROL PLAN  
 KEIM PROPERTY  
 ZONED: R-20 SINGLE FAMILY DETACHED  
 TAX MAP 17 GRID 16 PARCELS 75 (LOTS 3 & 4), 255 & 752  
 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

DESIGN BY: PS  
 DRAWN BY: TB  
 CHECKED BY: PS  
 SCALE: AS SHOWN  
 DATE: NOVEMBER 4, 2021  
 PROJECT #: 16-017  
 SHEET #: 5 of 15

STATE OF MARYLAND PROFESSIONAL ENGINEER  
 SILL ENGINEERING GROUP, LLC  
 16005 Frederick Road, 2nd Floor  
 Woodbine, Maryland 21797  
 Phone: 443.325.5076  
 Fax: 410.696.2022  
 Email: info@sillengineering.com  
 Civil Engineering for Land Development

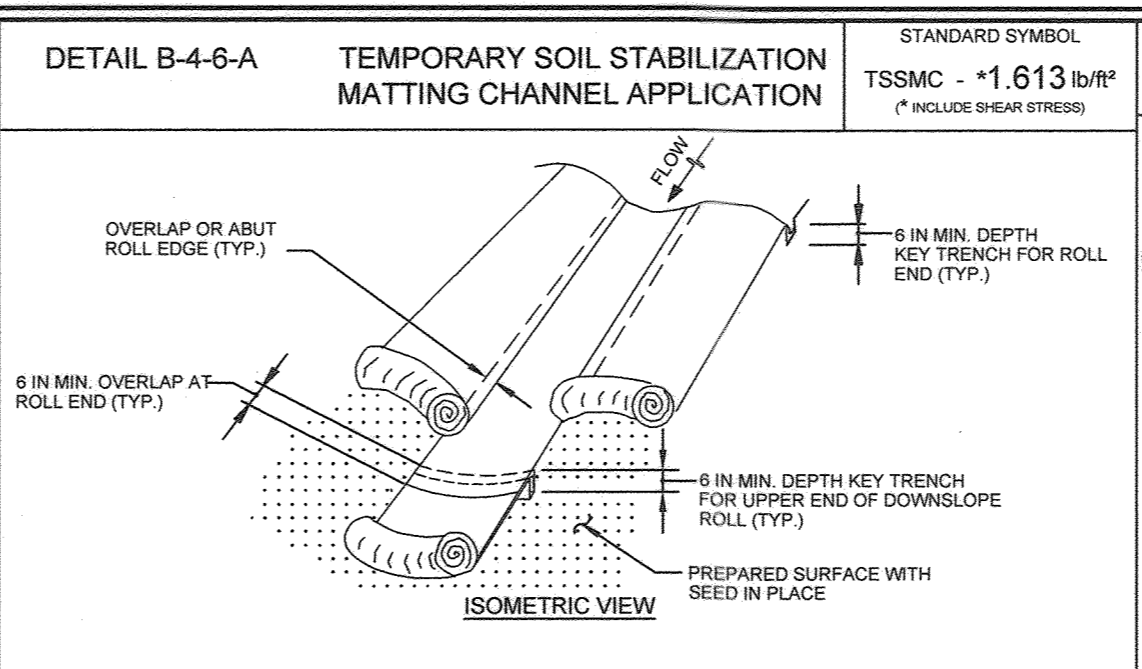
PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32025, EXPIRATION DATE: JUNE 20, 2023.





- CONSTRUCTION SPECIFICATIONS**
- PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (\*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO 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.

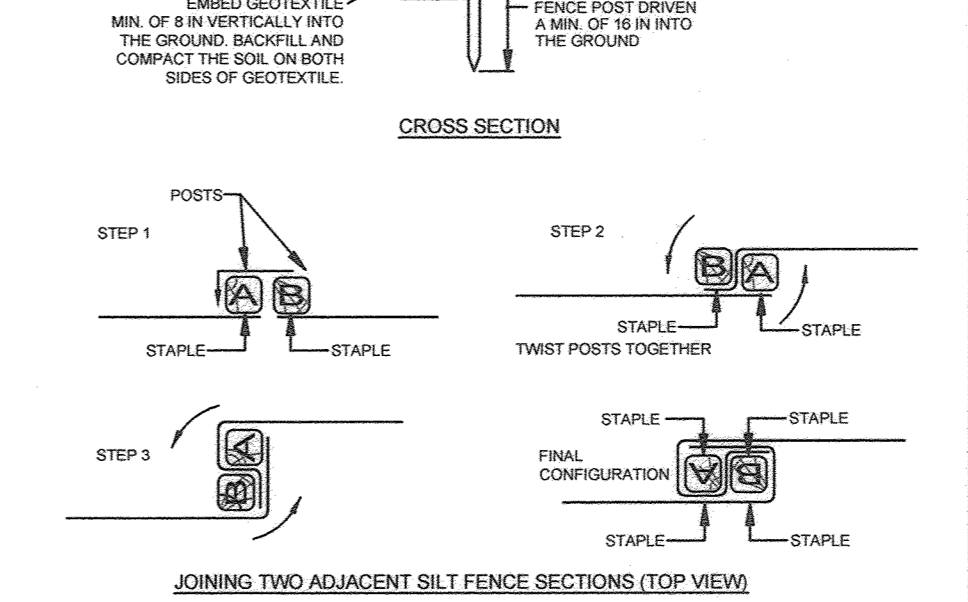
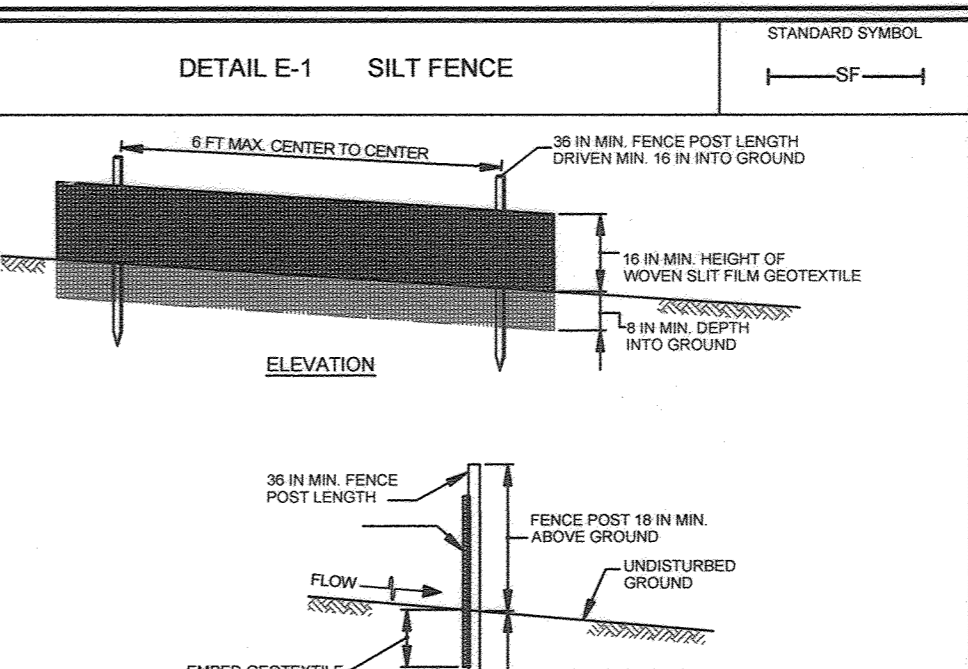
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL  
 U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



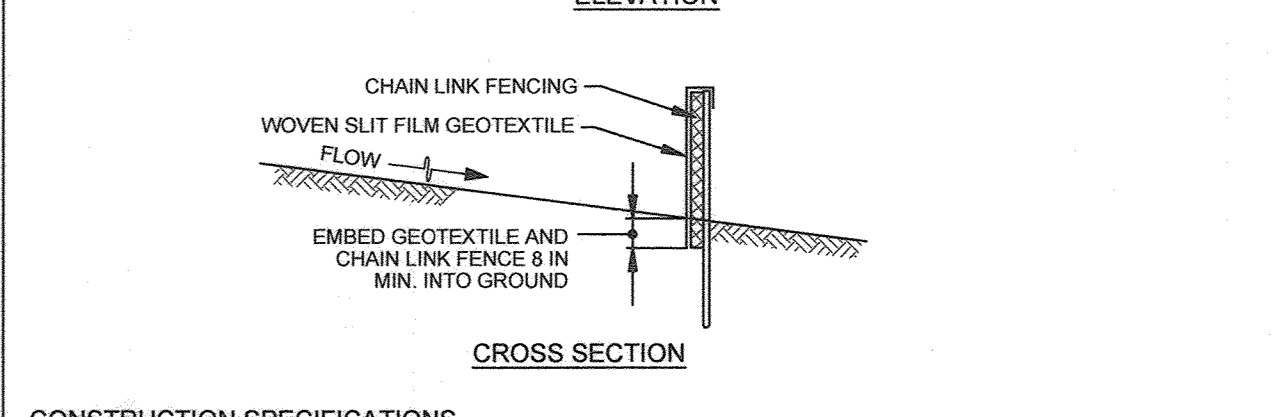
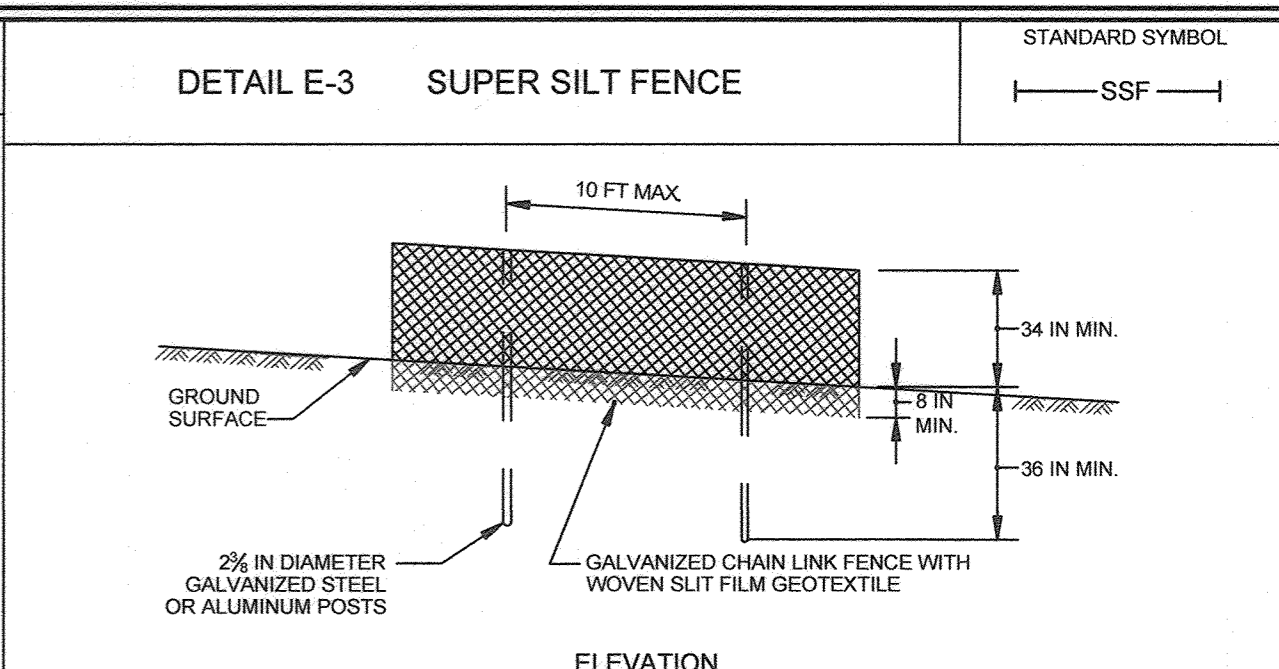
- CONSTRUCTION SPECIFICATIONS**
- USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS DESIGNATED ON APPROVED PLANS.
  - USE TEMPORARY SOIL STABILIZATION MATTING MADE OF DEGRADABLE (LASTS 6 MONTHS MINIMUM) NATURAL OR MAN-MADE FIBERS (MOSTLY ORGANIC). MAT MUST HAVE UNIFORM THICKNESS AND DISTRIBUTION OF FIBERS THROUGHOUT AND BE SMOLDER RESISTANT. CHEMICALS USED IN THE MAT MUST BE NON-LEACHING AND NON-TOXIC TO VEGETATION AND SEED GERMINATION AND NON-INJURIOUS TO THE SKIN. IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF 2/32 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT MATERIAL.
  - SECURE MATTING USING STEEL STAPLES, WOOD STAPLES, OR BIODEGRADABLE EQUIVALENT. STAPLES MUST BE "U" OR "T" SHAPED STEEL WIRE HAVING A MINIMUM GAGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO 1/2 INCHES WIDE AND BE A MINIMUM OF 8 INCHES LONG. "T" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 1 INCH SECONDARY LEG, AND A MINIMUM 4 INCH HEAD. WOOD STAPLES MUST BE ROUGH-SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH, 1 1/2 INCH IN CROSS SECTION, AND WEDGE SHAPED AT THE BOTTOM.
  - PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDING PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
  - UNROLL MATTING IN DIRECTION OF WATER FLOW, CENTERING THE FIRST ROLL ON THE CHANNEL CENTERLINE. WORK FROM CENTER OF CHANNEL OUTWARD WHEN PLACING ROLLS. LAY MAT SMOOTHLY AND FIRMLY ON THE SEEDING SURFACE. AVOID STRETCHING THE MATTING.
  - KEY-IN UPSTREAM END OF EACH MAT ROLL BY DIGGING A 6 INCH (MINIMUM) TRENCH AT THE UPSTREAM END OF THE MATTING. PLACING THE ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL, AND TAMING TO SECURE THE MAT END.
  - OVERLAP OR ABUT THE ROLL EDGES PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSTREAM MAT OVERLAPPING ON TOP OF THE NEXT DOWNSTREAM MAT.
  - STAPLE/TAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS.
  - ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.

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

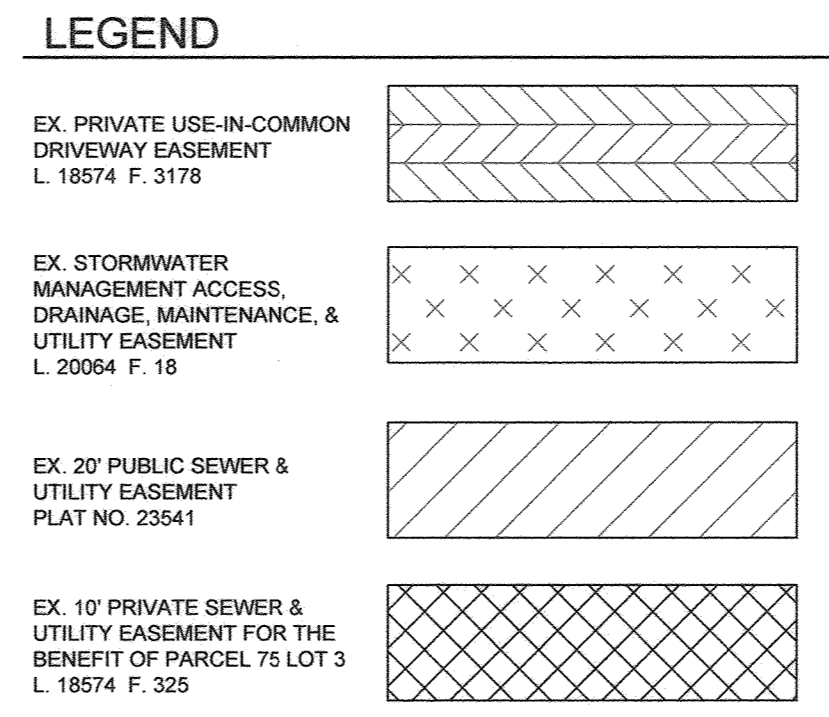
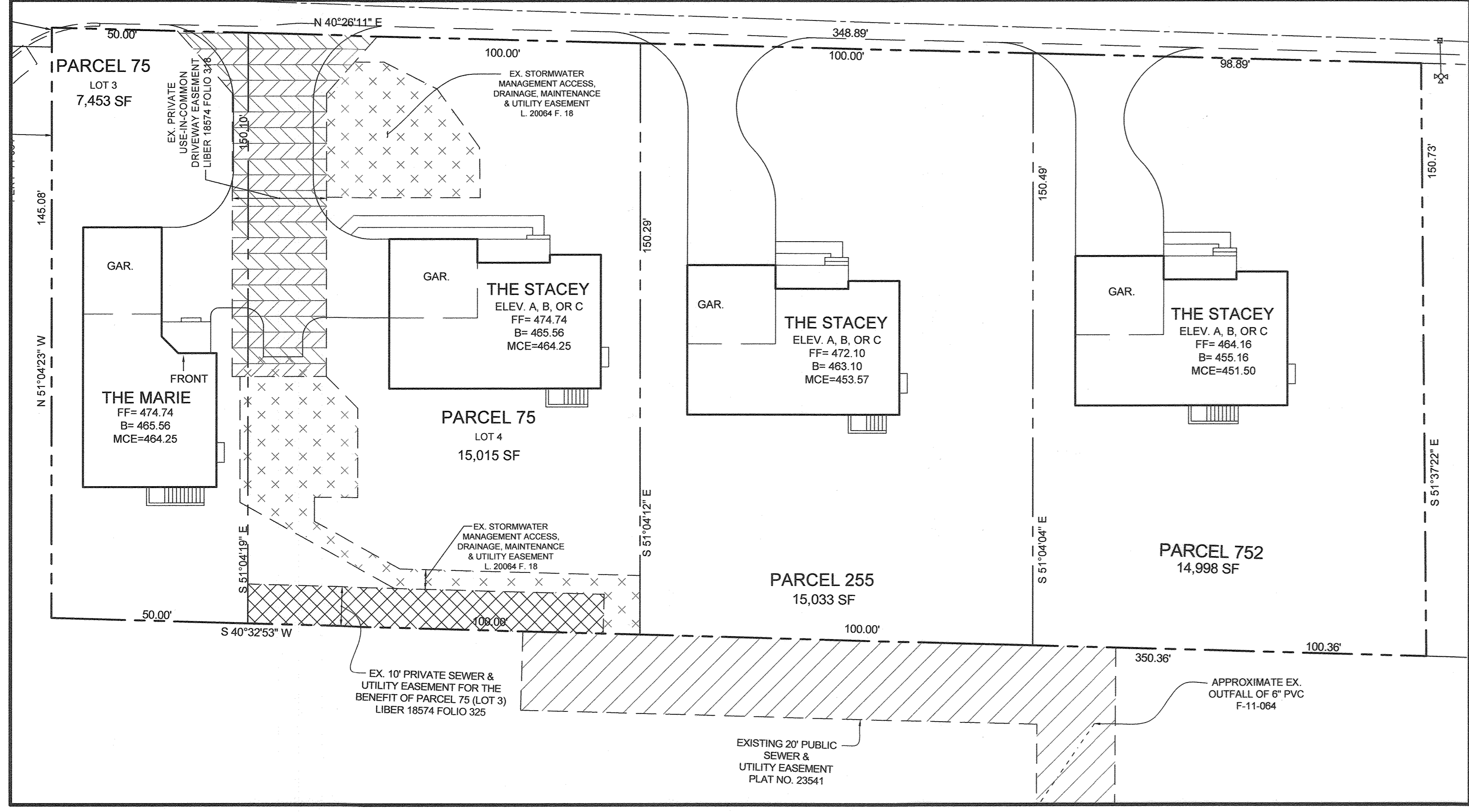
NOTE: TEMPORARY SOIL STABILIZATION MATTING WILL BE USED FOR OUR PERMANENT SWALES SINCE THE AVERAGE VELOCITY IS 4.862 FT/SEC, WHICH IS LESS THAN THE MAXIMUM ALLOWABLE 6 FT/SEC FOR TEMPORARY SOIL STABILIZATION MATTING ON PERMANENT SWALES.



- CONSTRUCTION SPECIFICATIONS**
- USE WOOD POSTS (2 X 4, 3/4 X 4, 1/2 X 4, 1/2 X 4, 1/2 X 4) 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 3/8 INCH MINIMUM POSTS DRIVEN 16 INCH MINIMUM INTO GROUND AND NO MORE THAN 6 FEET APART.
  - USE WOVEN SILT 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 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 8 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 SILT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS. SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACING 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  
 U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



APPROVER: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 CHIEF DEVELOPMENT ENGINEERING DIVISION  
 DATE: 12-9-21  
 DATE: 12-16-21  
 DATE: 12-17-21

NO.	REVISION DESCRIPTION	DATE
1	REVISE TOTAL SHEET NUMBER TO 15	

DEVELOPER'S CERTIFICATE  
 I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. (ALSO AUTHORIZED PERSONNEL SPECIFIC TO THE HOWARD SOIL CONSERVATION DISTRICT)  
 SIGNATURE OF DEVELOPER: [Signature]  
 DATE: 11/18/21

ENGINEER'S CERTIFICATE  
 I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.  
 SIGNATURE OF ENGINEER: [Signature]  
 DATE: 11/18/21  
 PULL M. SILL, P.E.

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
 SIGNATURE OF DISTRICT: [Signature]  
 DATE: 12/06/21  
 HOWARD SCD

OWNER/DEVELOPER  
 BURKARD HOMES, LLC.  
 1511 KILBIE HIGHWAY, STE 305  
 AENOLD, MD 21012  
 C/O TIM BURKARD  
 TIM@BURKARD-HOMES.COM  
 443-325-5617

SEDIMENT AND EROSION CONTROL DETAILS  
 KEIM PROPERTY  
 ZONED: R-20 SINGLE FAMILY DETACHED

TAX MAP 17 GRID 16 PARCELS 75 (LOTS 3 & 4), 255 & 752  
 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

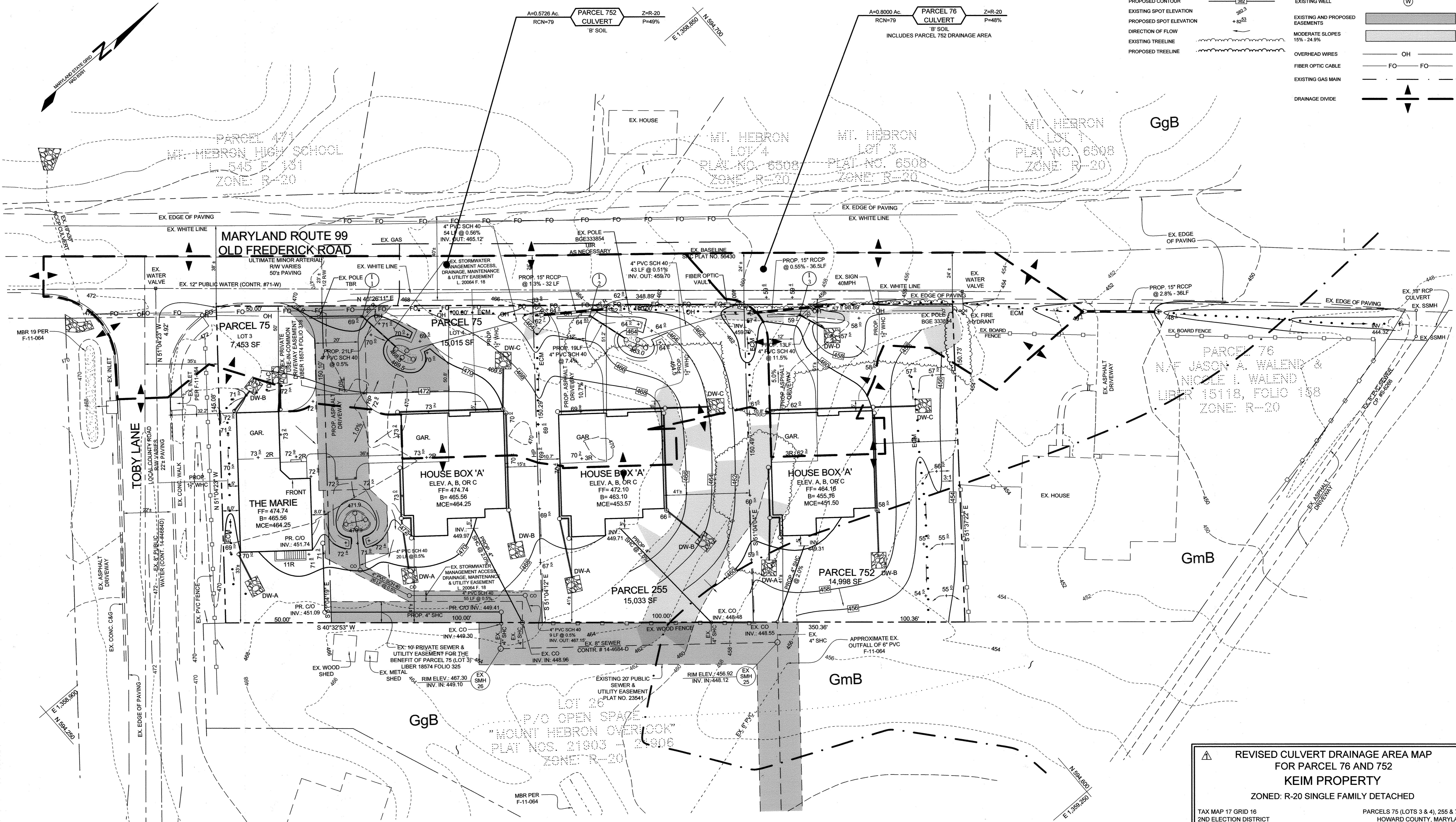
DESIGN BY: PS  
 DRAWN BY: TB  
 CHECKED BY: PS  
 SCALE: AS SHOWN  
 DATE: NOVEMBER 4, 2021  
 PROJECT #: 16-017  
 SHEET #: 7 of 15

STATE OF MARYLAND  
 PROFESSIONAL ENGINEER  
 No. 22025  
 SILL ENGINEERING GROUP, LLC  
 16005 Frederick Road, 2nd Floor  
 Woodbine, Maryland 21797  
 Phone: 443.325.5076  
 Fax: 410.696.2022  
 Email: info@sillengineering.com  
 Civil Engineering for Land Development

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32025, EXPIRATION DATE: JUNE 20, 2023

**LEGEND**

EXISTING CONTOUR GIS	---	382	SWM BORING LOCATION	SWM #1
EXISTING CONTOUR FIELD RUN	---	382	EXISTING WELL	W
PROPOSED CONTOUR	---	382	EXISTING AND PROPOSED EASEMENTS	[Shaded Area]
EXISTING SPOT ELEVATION	382.3		DIRECTION OF FLOW	[Arrow]
PROPOSED SPOT ELEVATION	+82.53		MODERATE SLOPES	15% - 24.9%
EXISTING TREELINE	[Wavy Line]		OVERHEAD WIRES	OH
PROPOSED TREELINE	[Wavy Line]		FIBER OPTIC CABLE	FO
			EXISTING GAS MAIN	[Line]
			DRAINAGE DIVIDE	[Line]

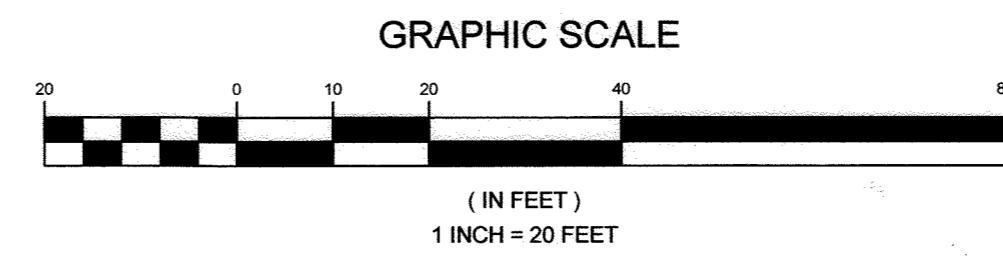


APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 [Signature]  
 CHIEF, DEVELOPMENT/ENGINEERING DIVISION  
 DATE: 5/27/22

CHIEF, DIVISION OF LAND DEVELOPMENT  
 [Signature]  
 DATE: 6/27/22

NO.	DESCRIPTION	DATE
1	REVISION TO THE HOUSES, DRYWELLS, GRADING, DRIVEWAYS AND SHC & WHC ON PARCEL 75 LOT 4, PARCEL 255, & PARCEL 752. REVISION TO THE TITLE THIS SHEET.	02/25/2022

**PLAN VIEW**  
SCALE: 1"=20'



**OWNER/DEVELOPER**  
 BURKARD HOMES, LLC  
 C/O TIM BURKARD  
 1511 RITCHIE HIGHWAY, STE 305  
 ARNOLD, MD 21012  
 443-325-5617  
 TIM@BURKARDHOMES.COM

**REVISED CULVERT DRAINAGE AREA MAP FOR PARCEL 76 AND 752 KEIM PROPERTY**  
 ZONED: R-20 SINGLE FAMILY DETACHED

TAX MAP 17 GRID 18  
 2ND ELECTION DISTRICT

PARCELS 75 (LOTS 3 & 4), 255 & 752  
 HOWARD COUNTY, MARYLAND

DESIGN BY: PS  
 DRAWN BY: TB  
 CHECKED BY: PS  
 SCALE: AS SHOWN  
 DATE: APRIL 18, 2022  
 PROJECT #: 16-017  
 SHEET #: 8 of 15

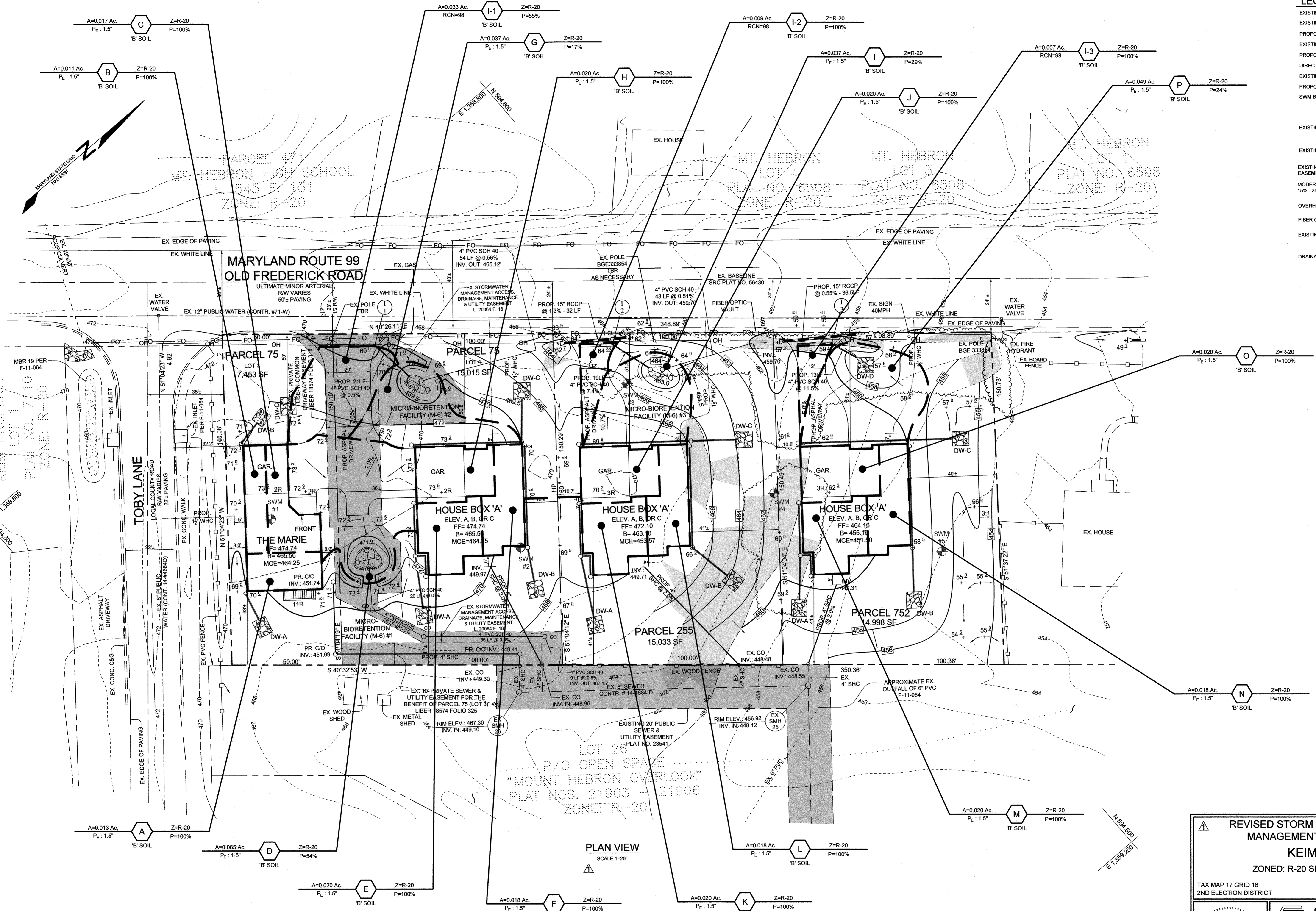
**SILL ENGINEERING GROUP, LLC**  
 16005 Frederick Road, 2nd Floor  
 Woodbine, Maryland 21797  
 Phone: 443.325.5076  
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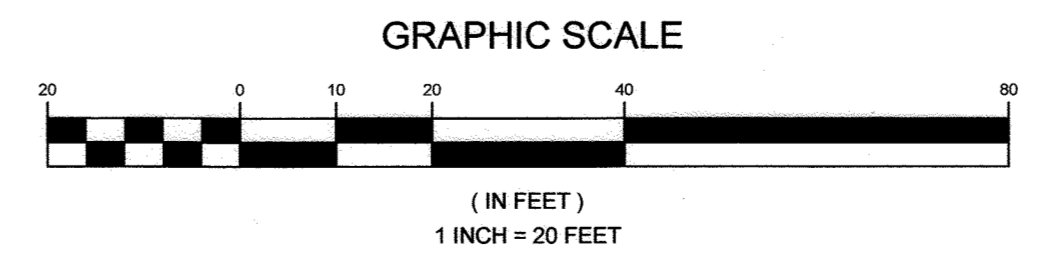


**LEGEND**

- EXISTING CONTOUR GIS - 382
- EXISTING CONTOUR FIELD RUN - 382
- PROPOSED CONTOUR - 382
- EXISTING SPOT ELEVATION + 82.53
- PROPOSED SPOT ELEVATION + 82.53
- DIRECTION OF FLOW →
- EXISTING TREELINE ~ ~ ~
- PROPOSED TREELINE ~ ~ ~
- SWM BORING LOCATION ⊕ SWM #1
- EXISTING TREE ⊙
- EXISTING WELL ⊙ W
- EXISTING AND PROPOSED EASEMENTS ▬
- MODERATE SLOPES ▬
- OVERHEAD WIRES — OH —
- FIBER OPTIC CABLE — FO —
- EXISTING GAS MAIN —
- DRAINAGE DIVIDE ↑ ↓



**PLAN VIEW**  
SCALE: 1"=20'



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 Chief, Development Engineering Division  
 Chief, Division of Land Development  
 Director

NO.	DESCRIPTION	DATE
1	REVISION TO THE HOUSES, DRYWELLS, GRADING, DRIVEWAYS AND SHC & WHC, DRAINAGE AREA AND NUMBERS FOR PARCEL 75 LOT 4, PARCEL 255, & PARCEL 752 REVISION TO THE TITLE THIS SHEET.	02/25/2022

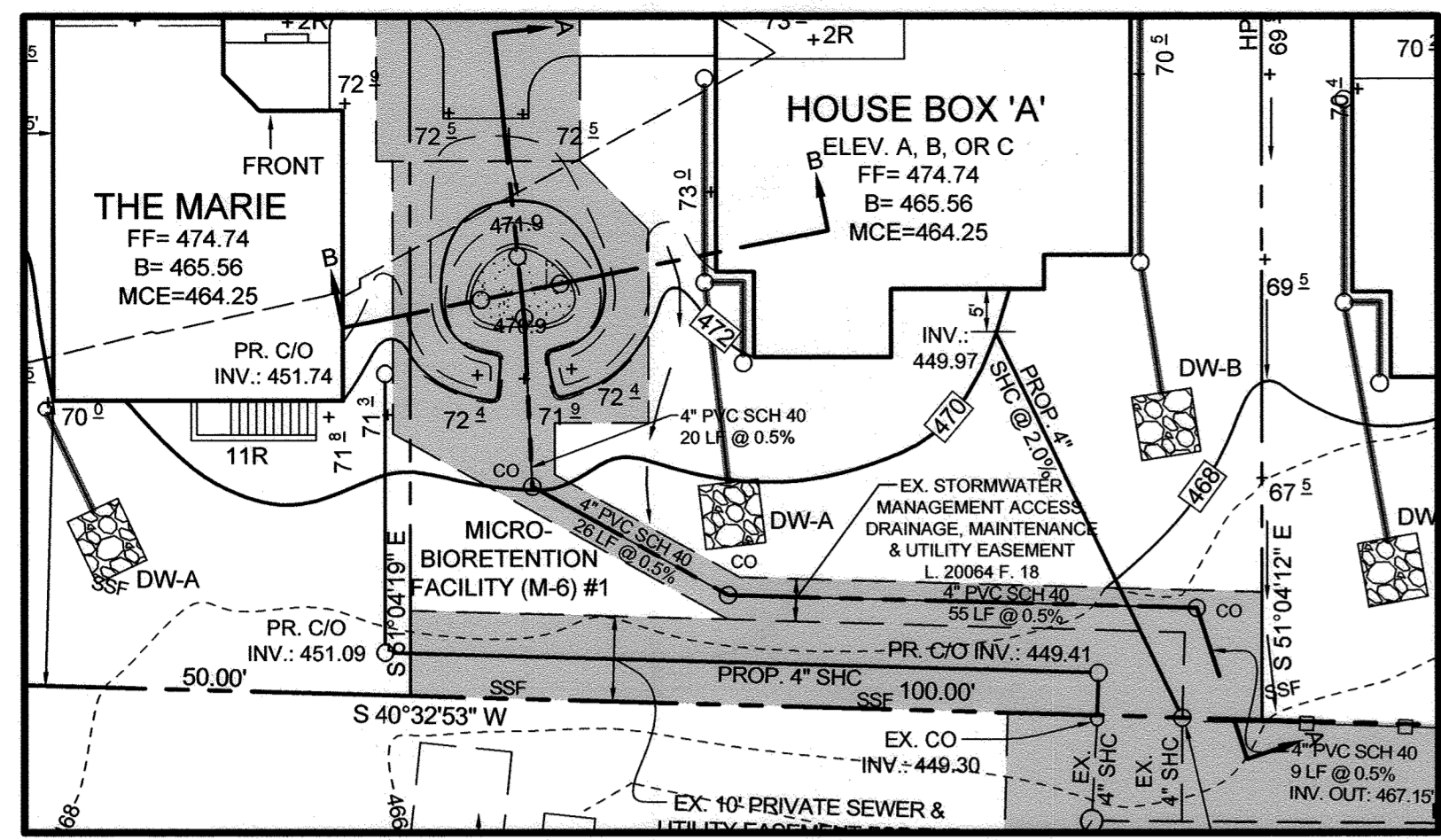
**REVISED STORM DRAIN AND STORMWATER MANAGEMENT DRAINAGE AREA MAP**  
**KEIM PROPERTY**  
 ZONED: R-20 SINGLE FAMILY DETACHED  
 TAX MAP 17 GRID 16  
 2ND ELECTION DISTRICT  
 PARCELS 75 (LOTS 3 & 4), 255 & 752  
 HOWARD COUNTY, MARYLAND

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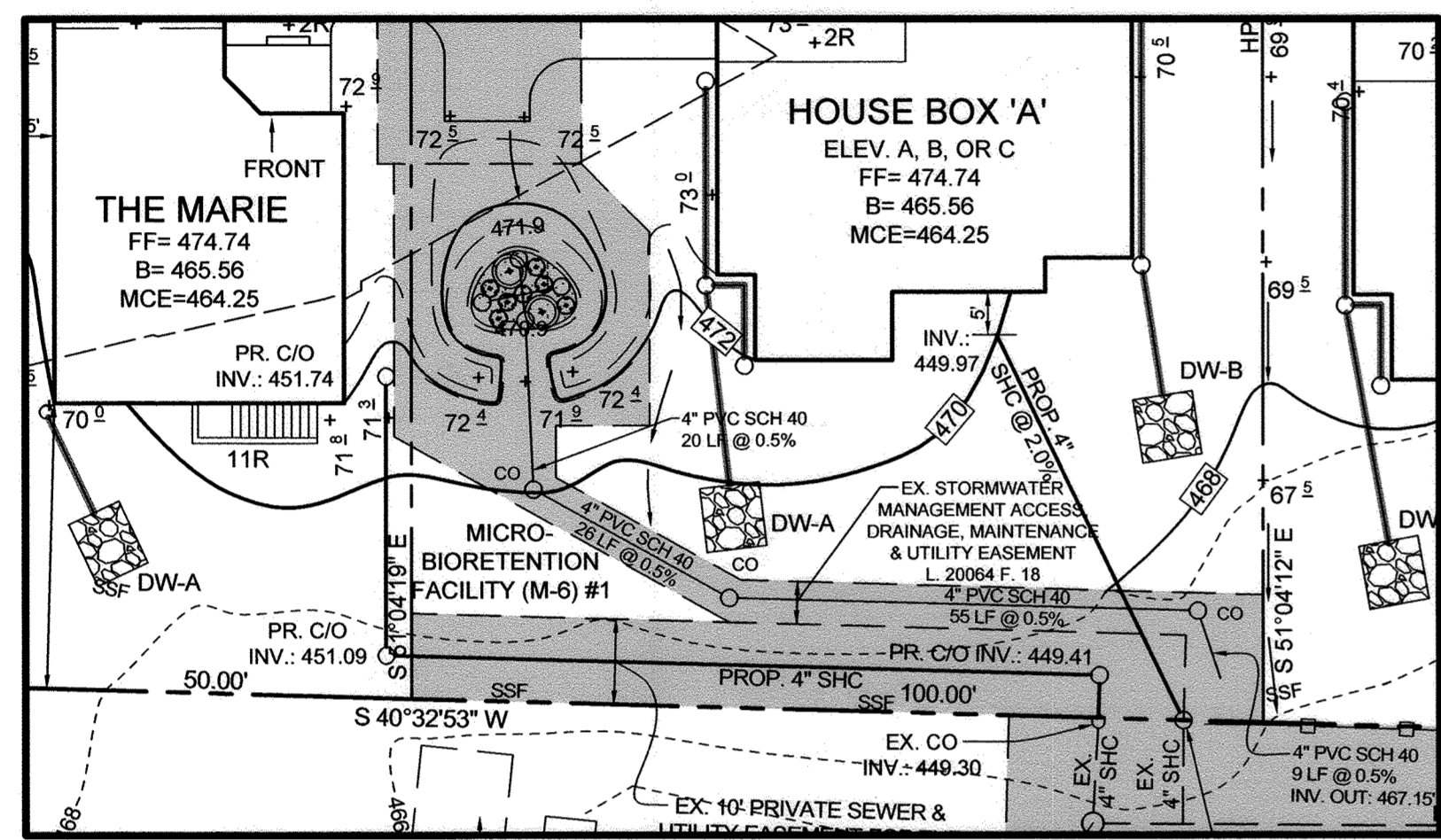
DESIGN BY: PS  
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 CHECKED BY: PS  
 SCALE: AS SHOWN  
 DATE: APRIL 18, 2022  
 PROJECT #: 16-017  
 SHEET #: 9 of 15

**OWNER/DEVELOPER**  
 BURKARD HOMES, LLC  
 C/O TIM BURKARD  
 1511 RITCHIE HIGHWAY, STE 305  
 ARNOLD, MD 21012  
 443-325-5617  
 TIM@BURKARDHOMES.COM

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, 2023

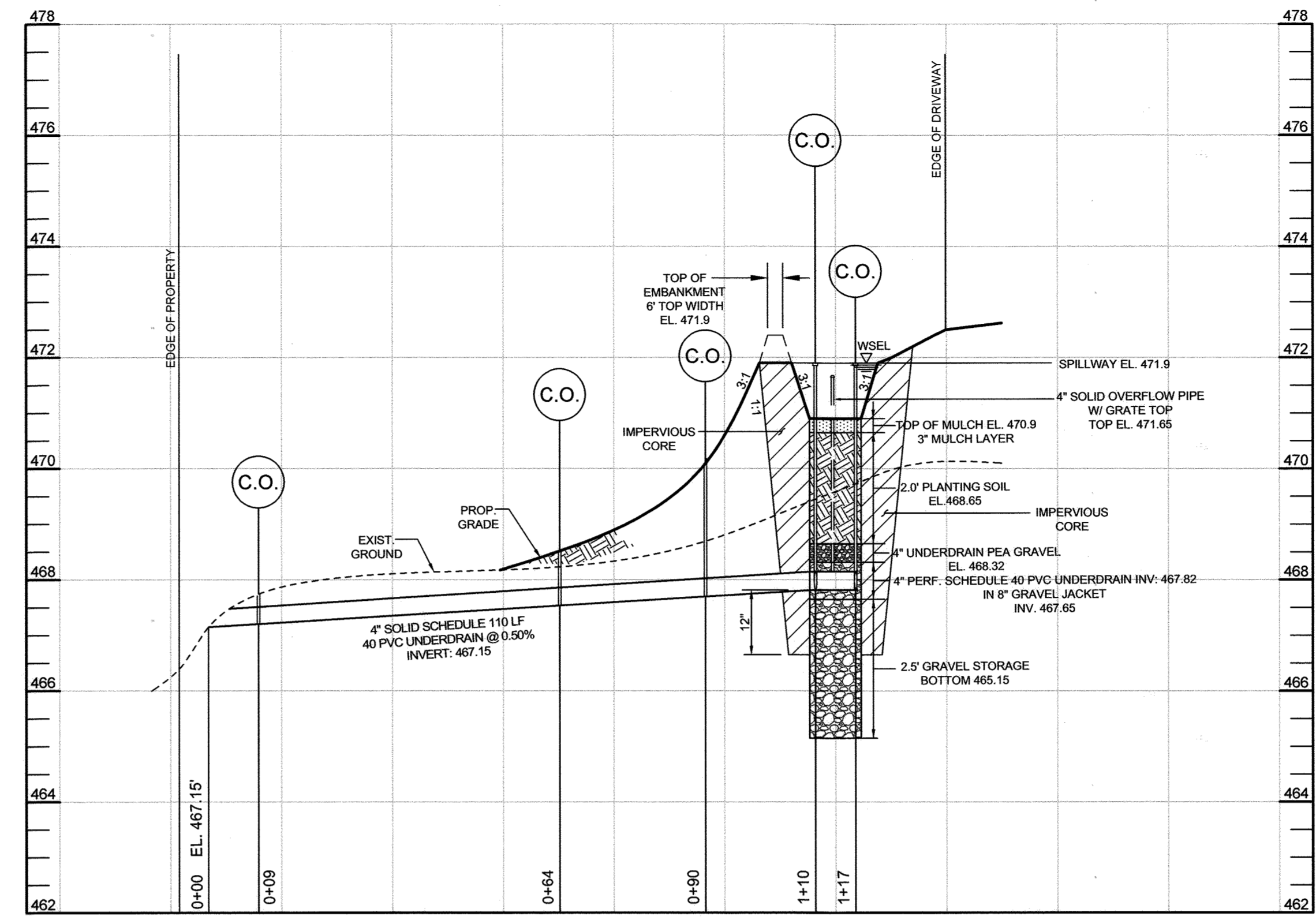


PLAN VIEW - MICRO-BIORETENTION FACILITY #1  
SCALE: 1"=20'

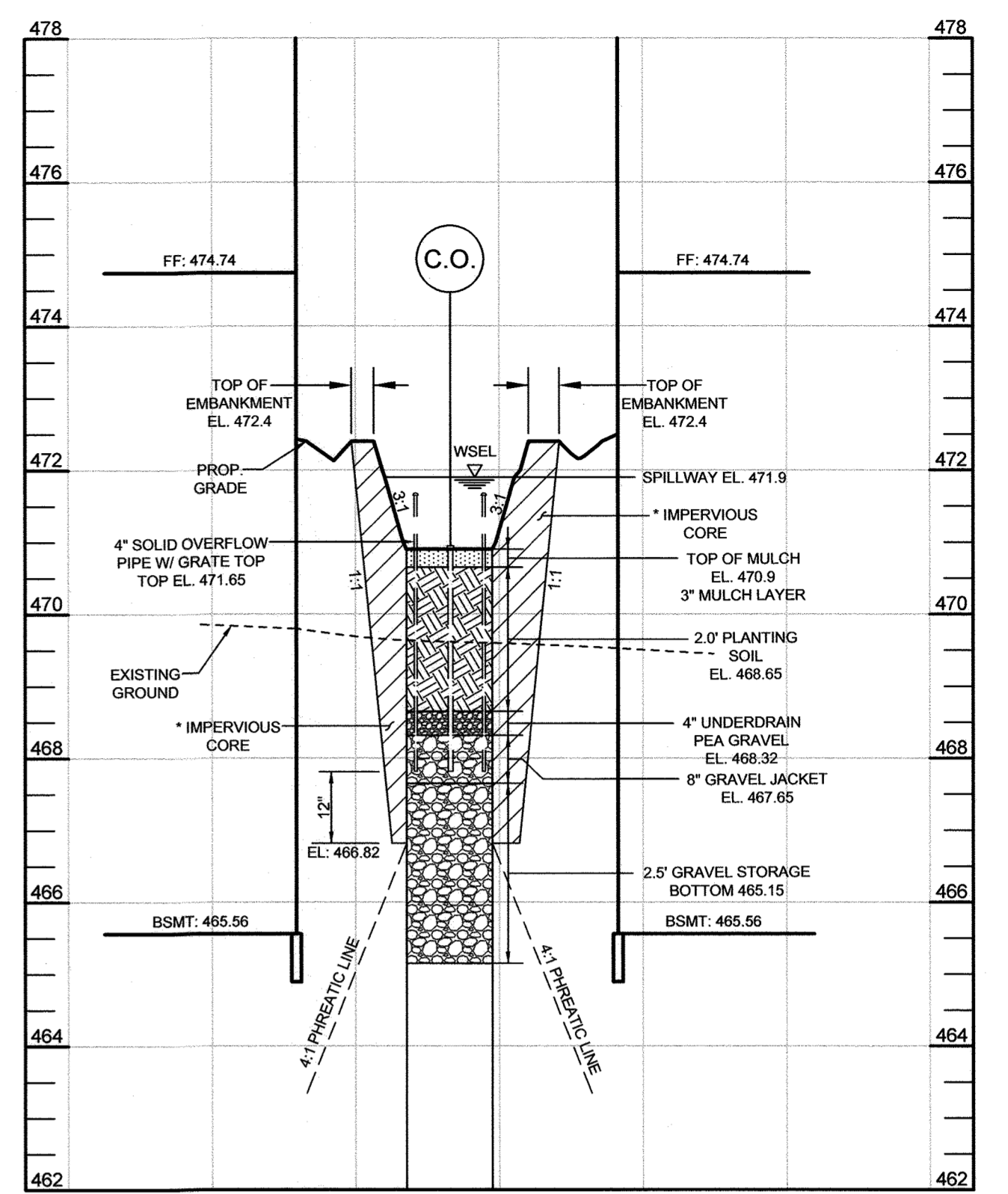


MICRO-BIORETENTION FACILITY (M-6) #1 LANDSCAPE PLAN  
SCALE: 1"=20'

NOTE: FOR LANDSCAPE DETAILS SEE SHEET 11

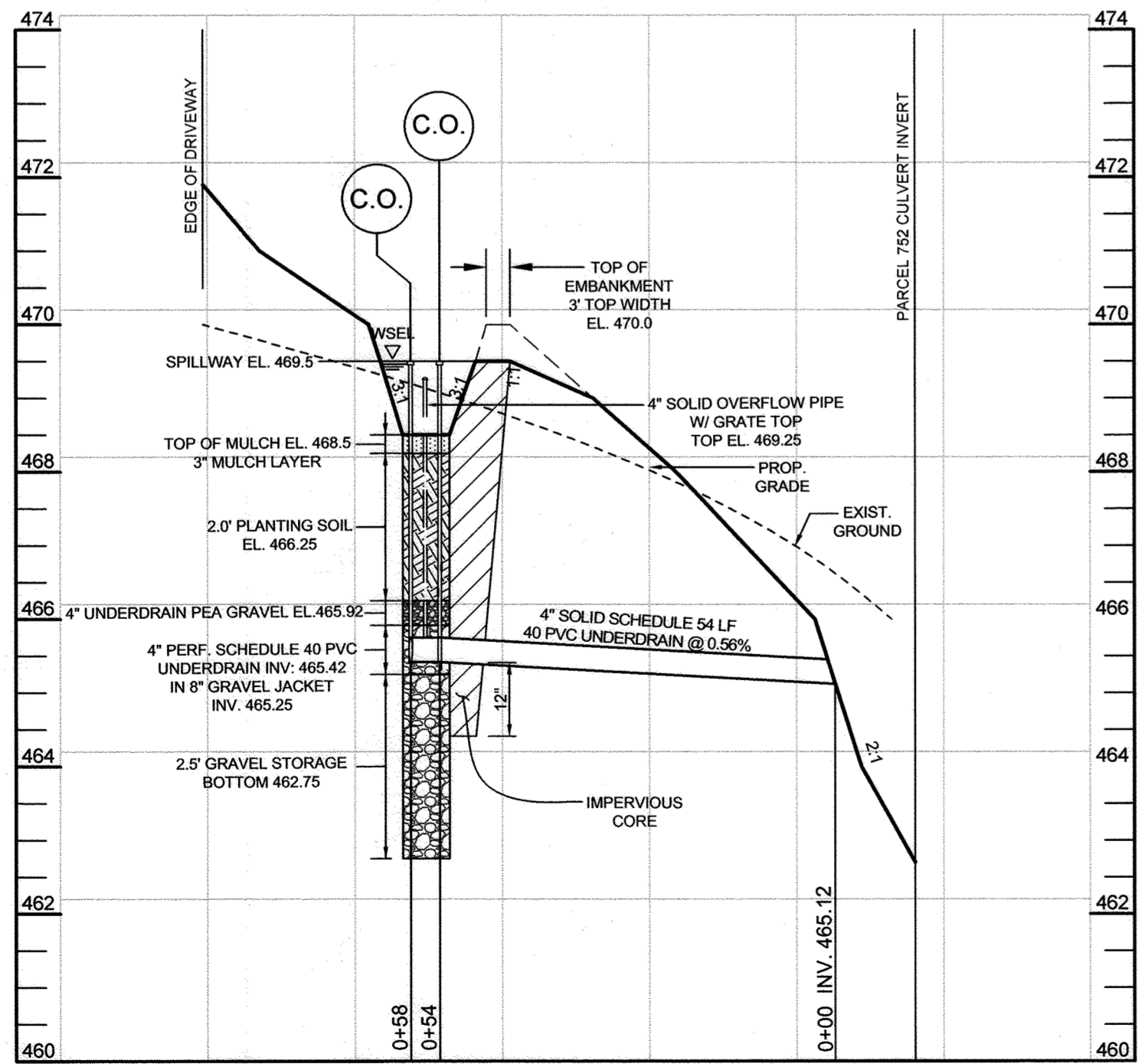


MICRO-BIORETENTION FACILITY #1 (M-6) PROFILE (A-A)  
HORIZONTAL SCALE: 1"=20'  
VERTICAL SCALE: 1"=20'

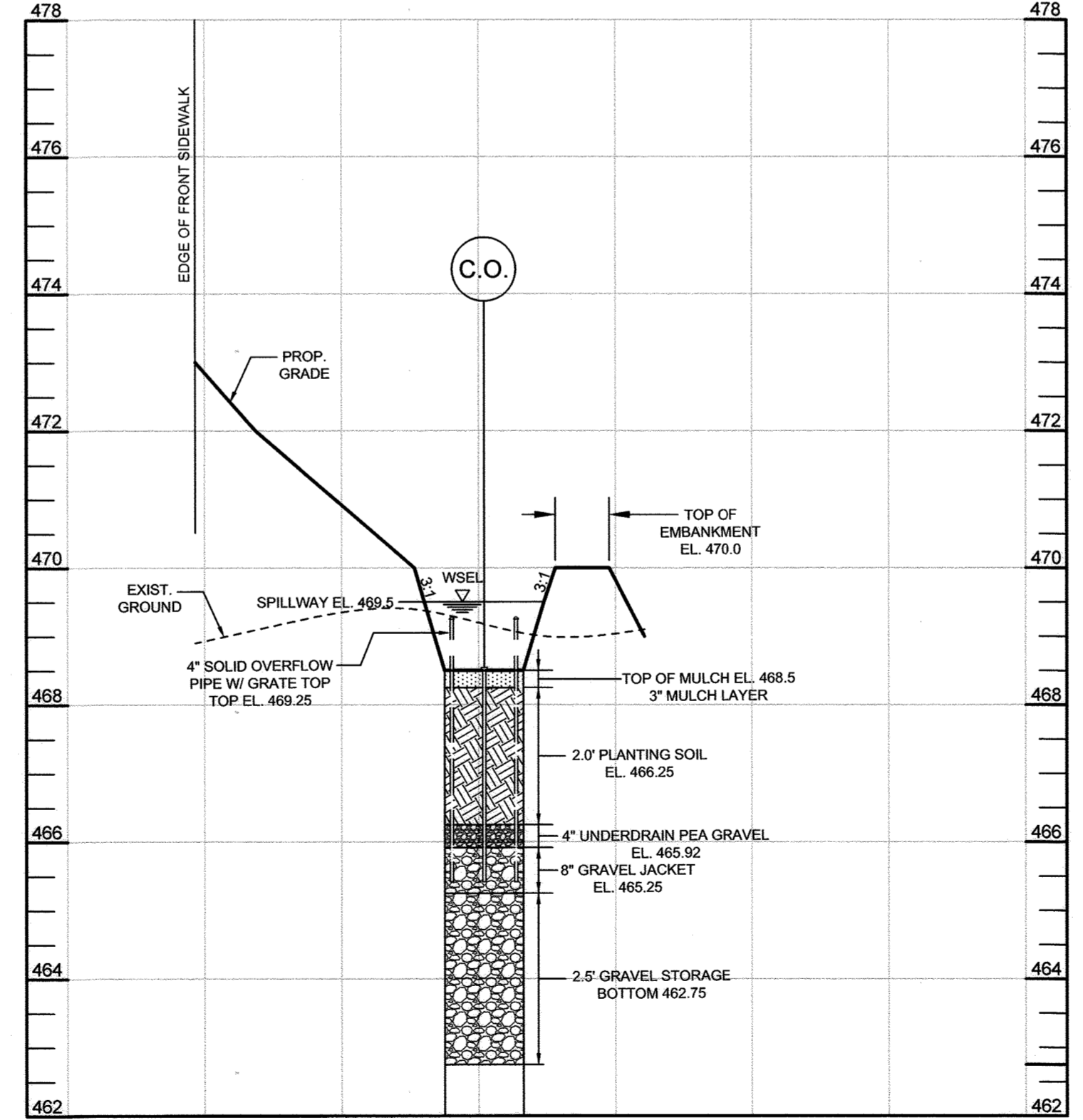


MICRO-BIORETENTION FACILITY #1 (M-6) PROFILE (B-B)  
HORIZONTAL SCALE: 1"=20'  
VERTICAL SCALE: 1"=20'

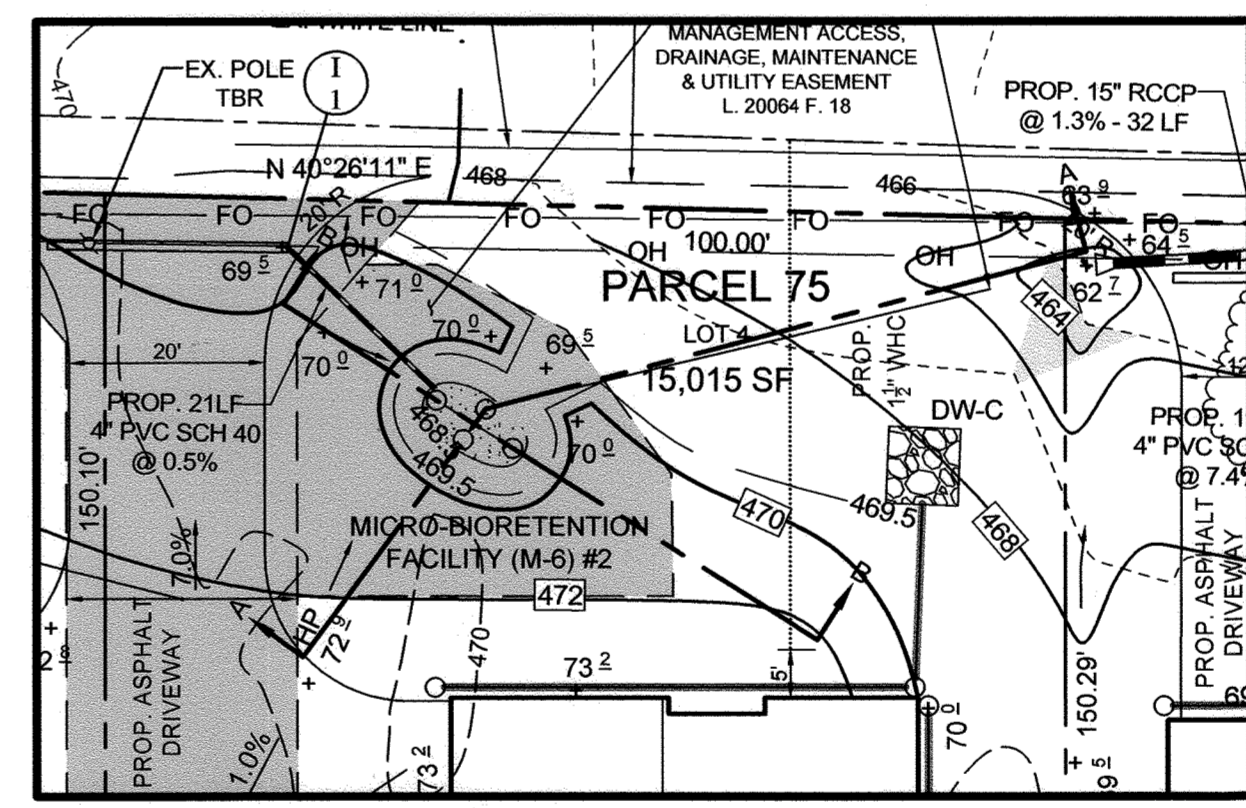
\* IMPERVIOUS CORE: THE HEIGHT SHALL EXTEND UP TO AT LEAST DESIGN WATER ELEVATION OR AS SHOWN ON THE PLANS. THE SIDE SLOPES SHALL BE 1 TO 1 OR FLATTER. CORE TRENCH FILL SHALL HAVE HIGH CLAY CONTENT WITH NO ORGANIC MATERIAL. THE CORE SHALL BE COMPACTED WITH CONSTRUCTION EQUIPMENT, ROLLERS, OR HAND TAMPERS TO ASSURE MAXIMUM PERMEABILITY. IN ADDITION, THE CORE SHALL BE PLACED CONCURRENTLY WITH THE OUTER SHELL OF THE EMBANKMENT IN 4 INCH LIFTS.



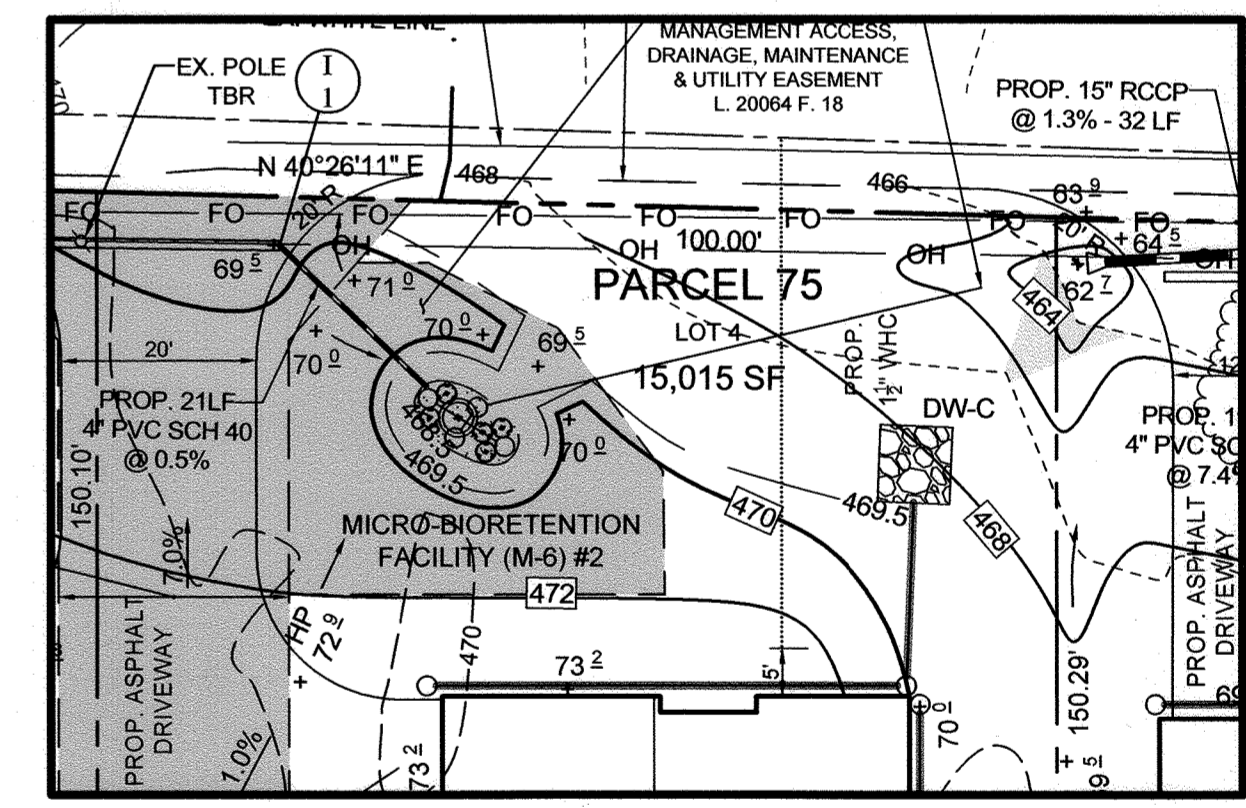
MICRO-BIORETENTION FACILITY #2 (M-6) PROFILE (A-A)  
HORIZONTAL SCALE: 1"=20'  
VERTICAL SCALE: 1"=20'



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



PLAN VIEW - MICRO-BIORETENTION FACILITY #2  
SCALE: 1"=20'



MICRO-BIORETENTION FACILITY (M-6) #2 LANDSCAPE PLAN  
SCALE: 1"=20'

NOTE: FOR LANDSCAPE DETAILS SEE SHEET 11

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 [Signature]  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE: 5/27/22

NO.	DESCRIPTION	DATE
1	REVISION TO THE HOUSE DRYWELLS, GRADING, DRIVEWAYS AND SHC & WHC ON PARCEL 75 LOT 4 AND PARCEL 255. REVISION TO THE TITLE THIS SHEET.	02/25/2022

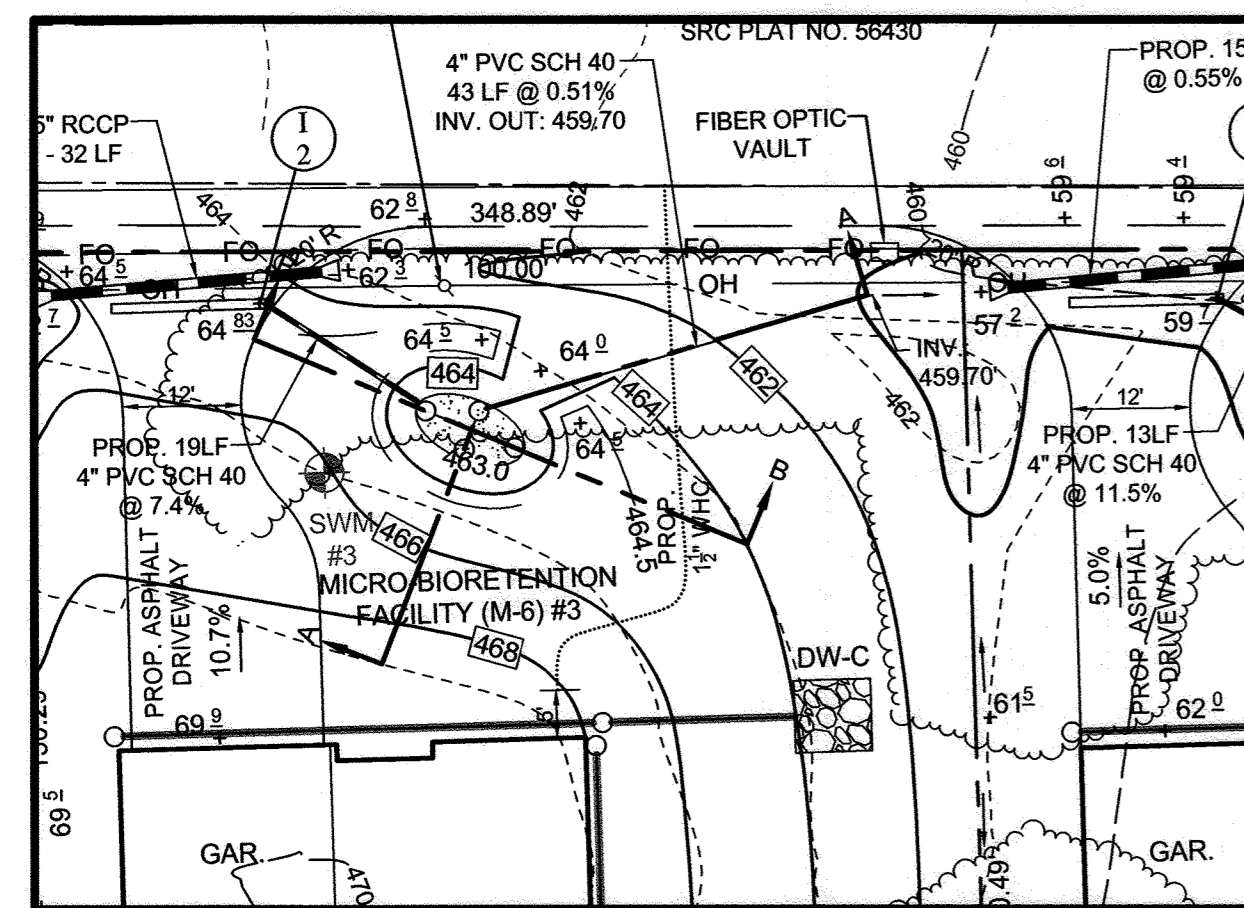
OWNER/DEVELOPER  
 BURKARD HOMES, LLC  
 C/O TIM BURKARD  
 1511 RITCHIE HIGHWAY, STE 305  
 ARNOLD, MD 21012  
 443-325-5617  
 TIM@BURKARDHOMES.COM

REVISED STORMWATER MANAGEMENT PROFILES  
 KEIM PROPERTY  
 ZONED: R-20 SINGLE FAMILY DETACHED  
 TAX MAP 17 GRID 16  
 2ND ELECTION DISTRICT  
 PARCELS 75 (LOTS 3 & 4), 255 & 752  
 HOWARD COUNTY, MARYLAND

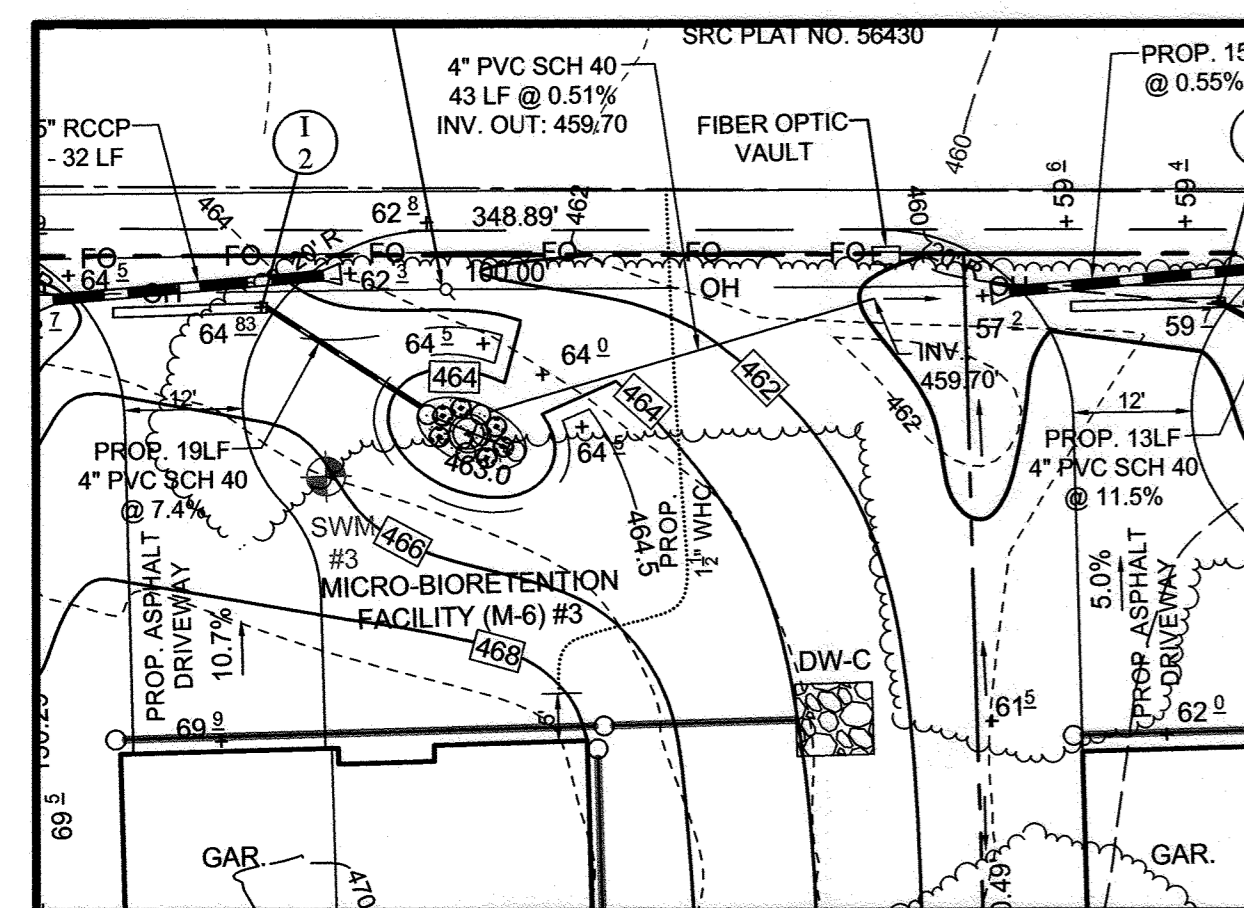
DESIGN BY: PS  
 DRAWN BY: TB  
 CHECKED BY: PS  
 SCALE: AS SHOWN  
 DATE: APRIL 18, 2022  
 PROJECT#: 16-017  
 SHEET#: 10 of 15

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

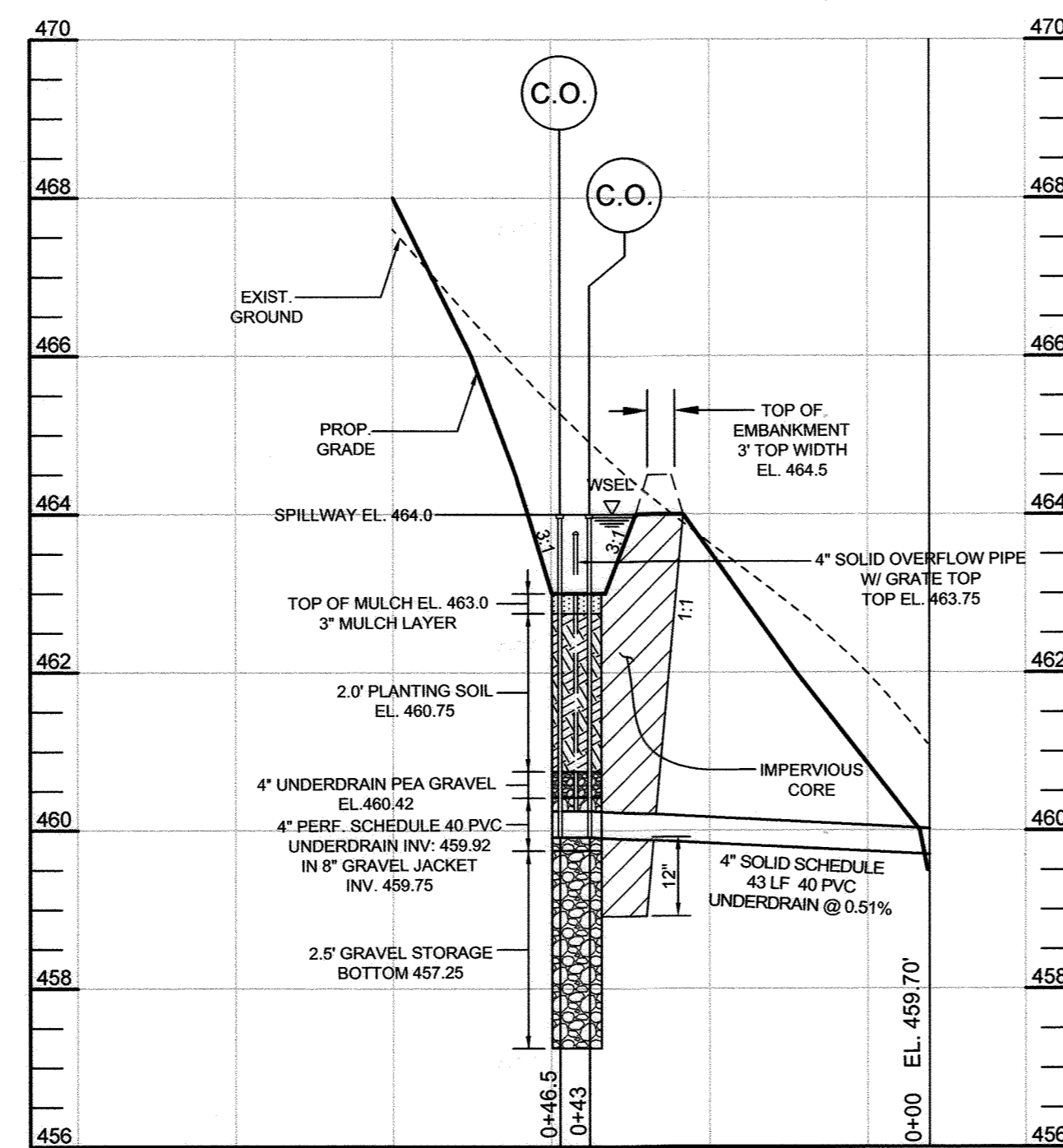
PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32025, EXPIRATION DATE: JUNE 20, 2023



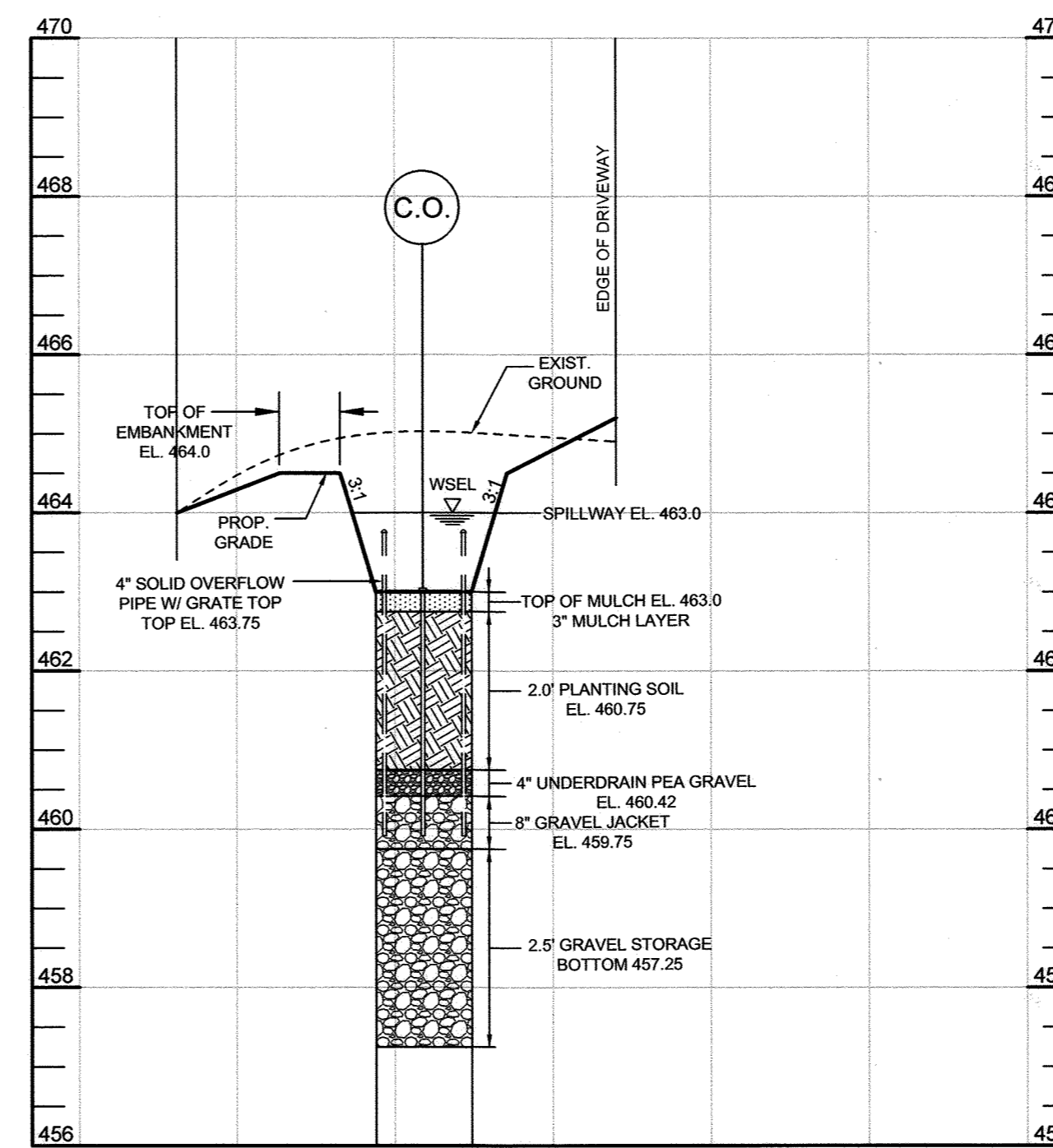
PLAN VIEW - MICRO-BIORETENTION FACILITY #3  
SCALE: 1"=20'



MICRO-BIORETENTION FACILITY (M-6) #3 LANDSCAPE PLAN  
SCALE: 1"=20'



MICRO-BIORETENTION FACILITY #3 (M-6) PROFILE (A-A)  
HORIZONTAL SCALE: 1"=20'  
VERTICAL SCALE: 1"=20'

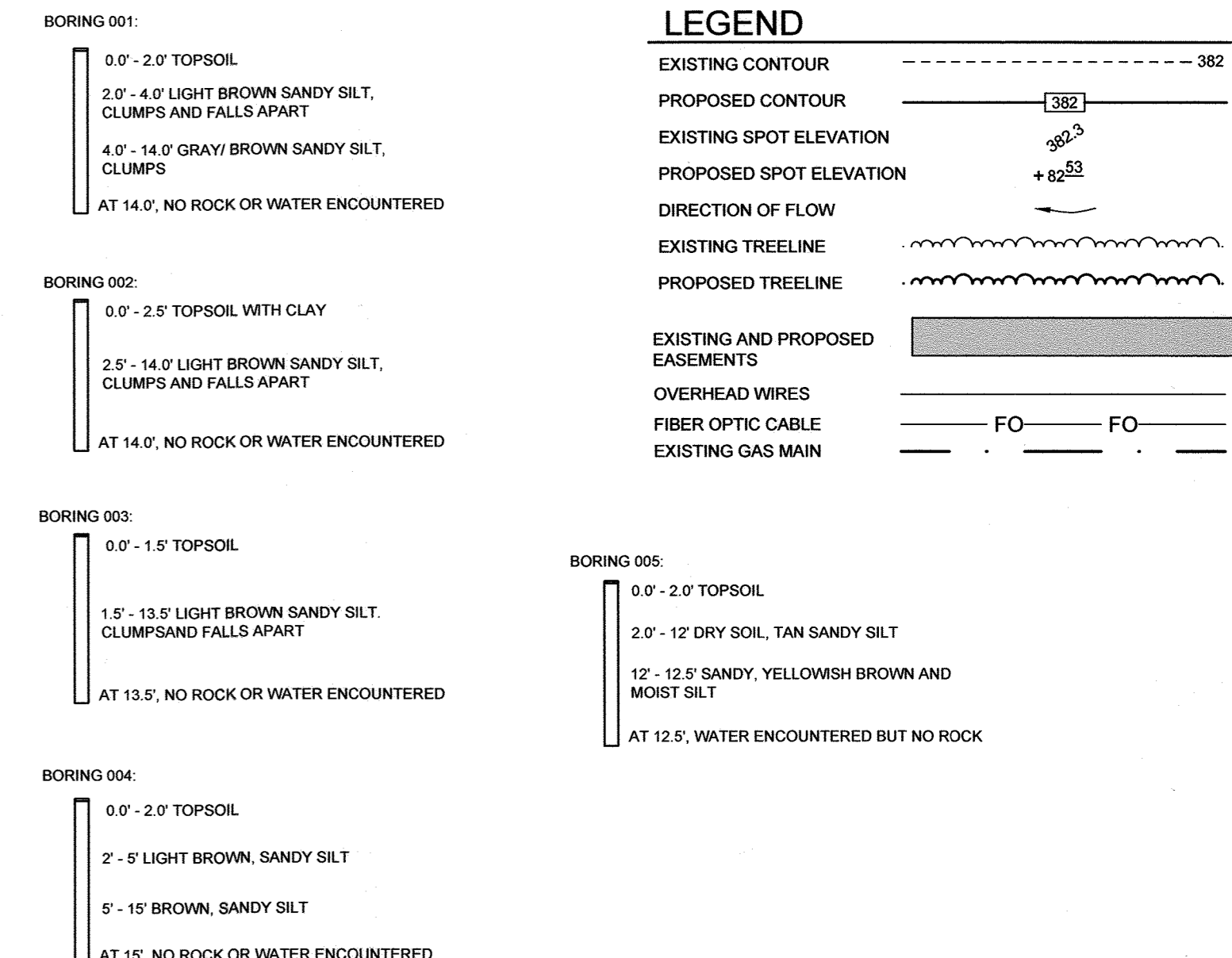


MICRO-BIORETENTION FACILITY #3 (M-6) PROFILE (B-B)  
HORIZONTAL SCALE: 1"=20'  
VERTICAL SCALE: 1"=20'

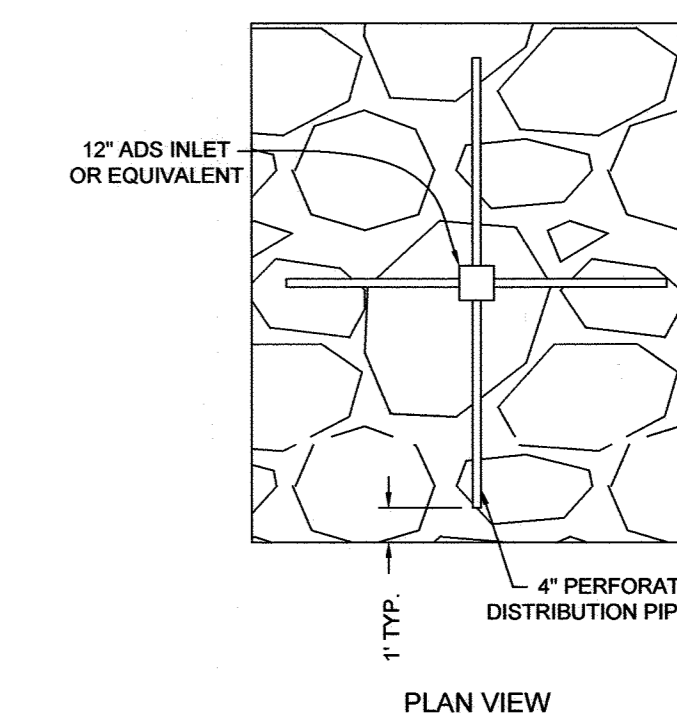
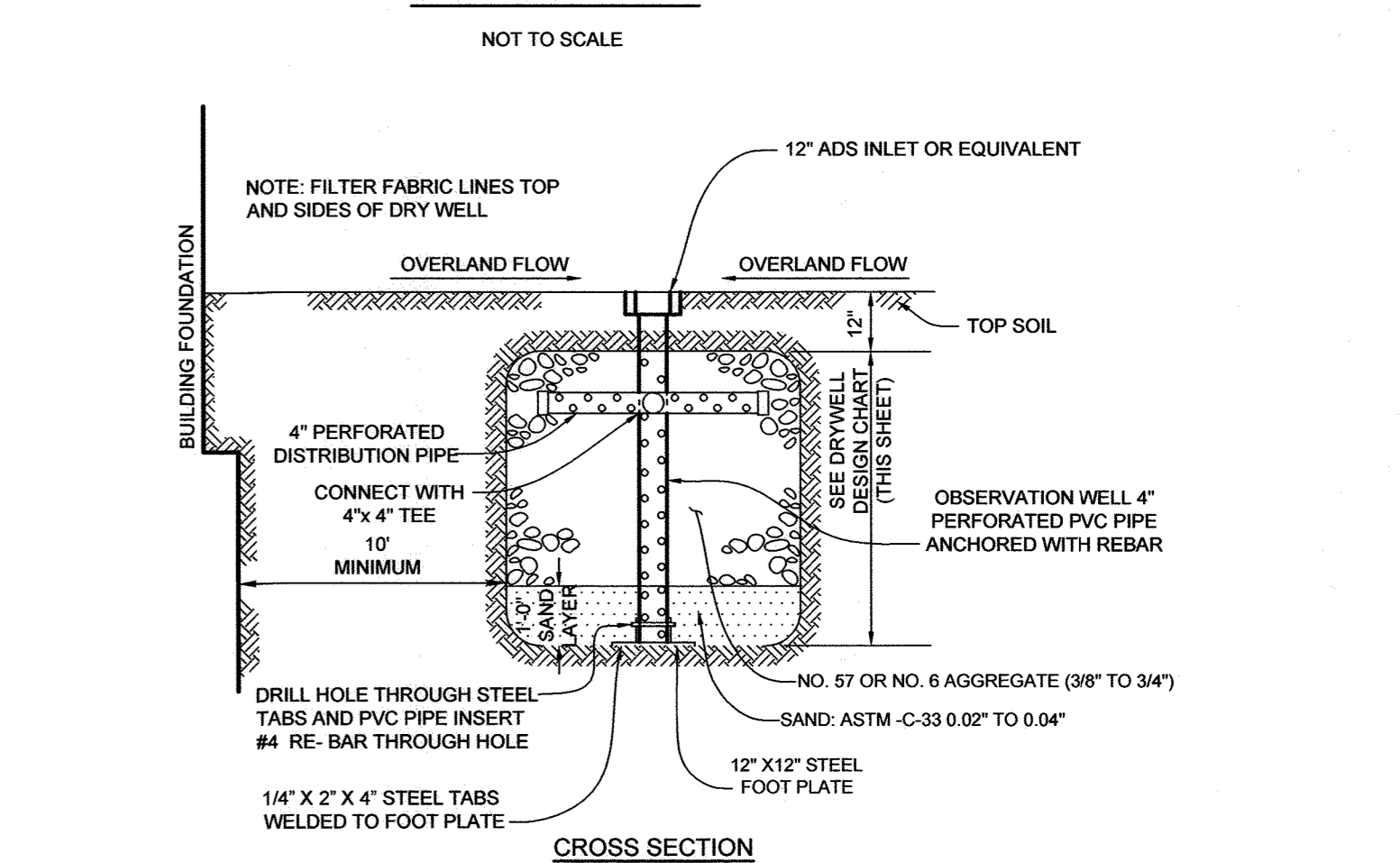
BIORETENTION PLANT LIST								
SHRUBS AND PERENNIALS								
LEGEND	BOTANICAL NAME	COMMON NAME	SPACING	SIZE	REMARKS	QTY. BIO 1	QTY. BIO 2	QTY. BIO 3
⊙	ILEX GLABRA	INK BERRY	AS SHOWN* (MIN. 4' O.C.)	24"-36" HT.	-	2	1	1
⊙	RUDBECKIA	BLACK-EYED SUSAN	AS SHOWN* (MIN. 2' O.C.)	1 GALLON	-	7	5	6

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

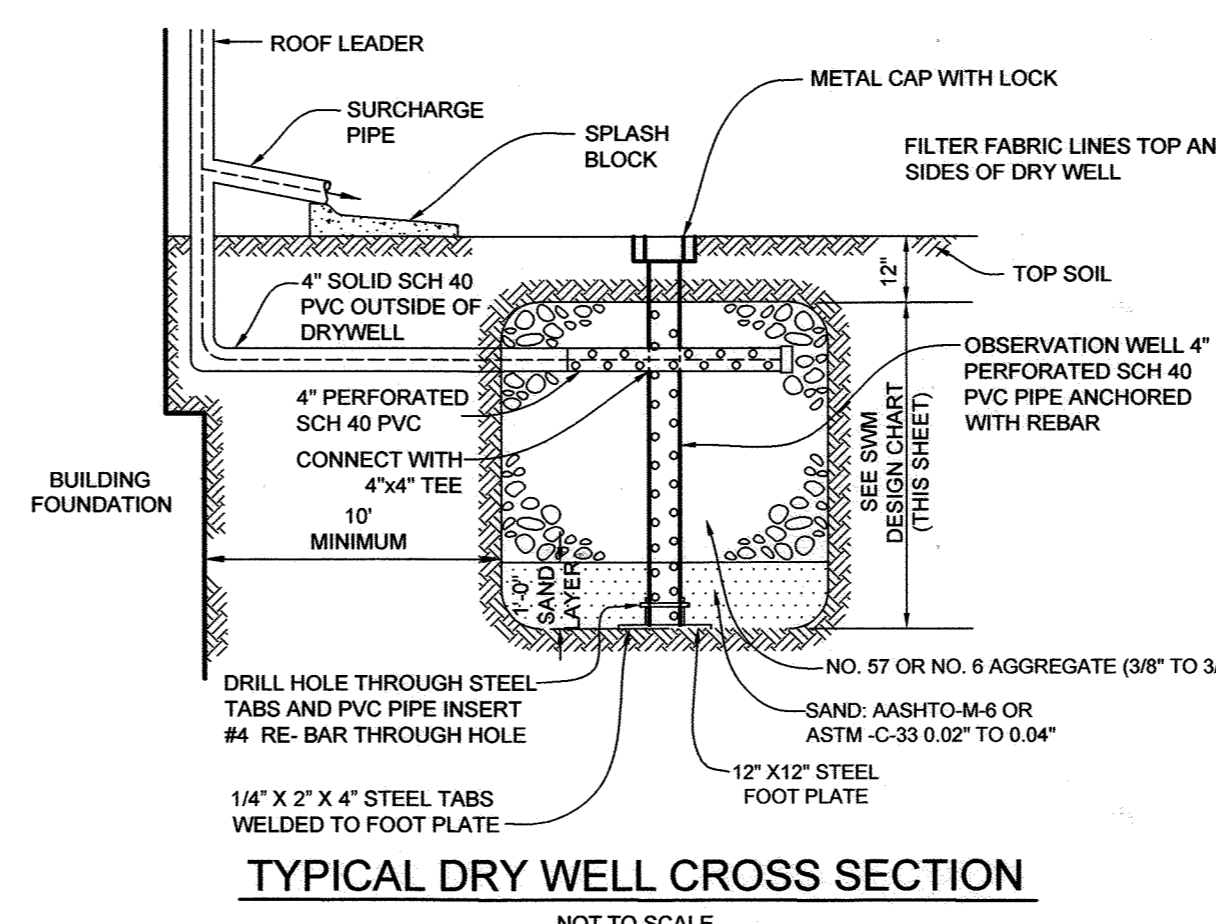
BIO 1 - BIORETENTION AREA = 88 S.F. OR 0.0020 AC. PROVIDED: 2 SHRUBS AND 7 PERENNIALS  
BIO 2 - BIORETENTION AREA = 54 S.F. OR 0.0012 AC. PROVIDED: 1 SHRUB AND 5 PERENNIALS  
BIO 3 - BIORETENTION AREA = 60 S.F. OR 0.0013 AC. PROVIDED: 1 SHRUB AND 6 PERENNIALS



STORMWATER MANAGEMENT TEST BORINGS



DRY WELL PARCEL 752 DRY WELL DW-D



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.

DRYWELL (M-5) DESIGN CHART

PARCEL/ LOT	DRYWELL #	VOLUME REQUIRED	VOLUME PROVIDED	WELL SIZE
PARCEL 75 LOT 3	DW A	84 CF	104 CF	8.0' X 6.5' X 5.0' DEEP
PARCEL 75 LOT 3	DW B	53 CF	78 CF	6.0' X 6.5' X 5.0' DEEP
PARCEL 75 LOT 3	DW C	96 CF	112 CF	8.0' X 7.0' X 5.0' DEEP
DW A-C TOTAL:		233 CF	294 CF	
PARCEL 75 LOT 4	DW A	100 CF	105 CF	7.5' X 7.0' X 5.0' DEEP
PARCEL 75 LOT 4	DW B	91 CF	105 CF	7.5' X 7.0' X 5.0' DEEP
PARCEL 75 LOT 4	DW C	100 CF	120 CF	8.0' X 7.5' X 5.0' DEEP
DW A-C TOTAL:		291 CF	330 CF	
PARCEL 255	DW A	100 CF	105 CF	7.5' X 7.0' X 5.0' DEEP
PARCEL 255	DW B	91 CF	105 CF	7.5' X 7.0' X 5.0' DEEP
PARCEL 255	DW C	100 CF	120 CF	8.0' X 7.5' X 5.0' DEEP
DW A-C TOTAL:		291 CF	330 CF	
PARCEL 752	DW A	83 CF	105 CF	7.5' X 7.0' X 5.0' DEEP
PARCEL 752	DW B	74 CF	105 CF	7.5' X 7.0' X 5.0' DEEP
PARCEL 752	DW C	91 CF	97.5 CF	7.5' X 6.5' X 5.0' DEEP
PARCEL 752	DW D	105 CF	105 CF	7.5' X 7.0' X 5.0' DEEP
DW A-D TOTAL:		353 CF	412.5 CF	

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

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

OWNER/DEVELOPER

BURKARD HOMES, LLC  
C/O TIM BURKARD  
1511 RITCHIE HIGHWAY, STE 305  
ARNOOLD, MD 21012  
443-325-5617  
TIM@BURKARDHOMES.COM

REVISED STORMWATER MANAGEMENT PROFILE, NOTES, & DETAILS  
KEIM PROPERTY  
ZONED: R-20 SINGLE FAMILY DETACHED  
TAX MAP 17 GRID 18 2ND ELECTION DISTRICT  
PARCELS 75 (LOTS 3 & 4), 255 & 752 HOWARD COUNTY, MARYLAND

DESIGN BY: PS  
DRAWN BY: TB  
CHECKED BY: PS  
SCALE: AS SHOWN  
DATE: APRIL 18, 2022  
PROJECT #: 16-017  
SHEET #: 11 of 15

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

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APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
CHIEF, DIVISION OF LAND DEVELOPMENT  
DIRECTOR

NO.	DESCRIPTION	DATE
1	REVISION TO THE HOUSE, DRYWELLS, GRADING, DRIVEWAYS AND SHC & WHC ON PARCEL 752. REVISION TO THE DRYWELL DESIGN CHART. REVISION TO THE TITLE THIS SHEET.	02/25/2022

**GENERAL NOTES**

- IT IS 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.ACOORANUS.COM](http://WWW.ACOORANUS.COM).
- 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 TRENCH DESIGN PARAMETERS PROVIDED TO ACO, INC. TECHNICAL SERVICES DEPARTMENT.

**REQUIRED FABRICATIONS**

(A) SHORTENED CHANNELS

ALL DRAWINGS ARE AS ACCURATE AS THE INFORMATION SUPPLIED. ALL REASONABLE CARE HAS BEEN TAKEN IN COMPLYING THE INFORMATION WITHIN. PLEASE REVIEW THIS INFORMATION FOR ACCURACY.

APPROVED  REVISION AND RESUBMIT   
 APPROVED AS NOTED  REJECTED

SIGNED: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 COMMENTS: \_\_\_\_\_

MATERIAL LIST		
K100		
PART #	DESCRIPTION	QTY
74001	1 SLOPING CHANNEL	2
74002	2 SLOPING CHANNEL	2
74003	3 SLOPING CHANNEL	2
74004	4 SLOPING CHANNEL	2
74005	5 SLOPING CHANNEL	2
74014	14 SLOPING CHANNEL	1
74015	15 SLOPING CHANNEL	1
74016	16 SLOPING CHANNEL	1
74017	17 SLOPING CHANNEL	1
74018	18 SLOPING CHANNEL	1
74019	19 SLOPING CHANNEL	1
74020	20 SLOPING CHANNEL	1
74048	0203 12" NEUTRAL CHANNEL	1
TOTAL 14" CHANNELS		17
TOTAL 16" CHANNELS		1
98822	UNIVERSAL CLOSING/INLET/OUTLET CAP	8
12610	4000 GALV SLOTTED GRATE 30" (7.62m)	17
12611	4210 GALV SLOTTED GRATE 19.69" (0.5m)	1

**SHEET INDEX**

SHEET NO.	DESCRIPTION
1	NOTES & MATERIAL LIST
2	TRENCH DRAIN LAYOUT

**LEGEND**

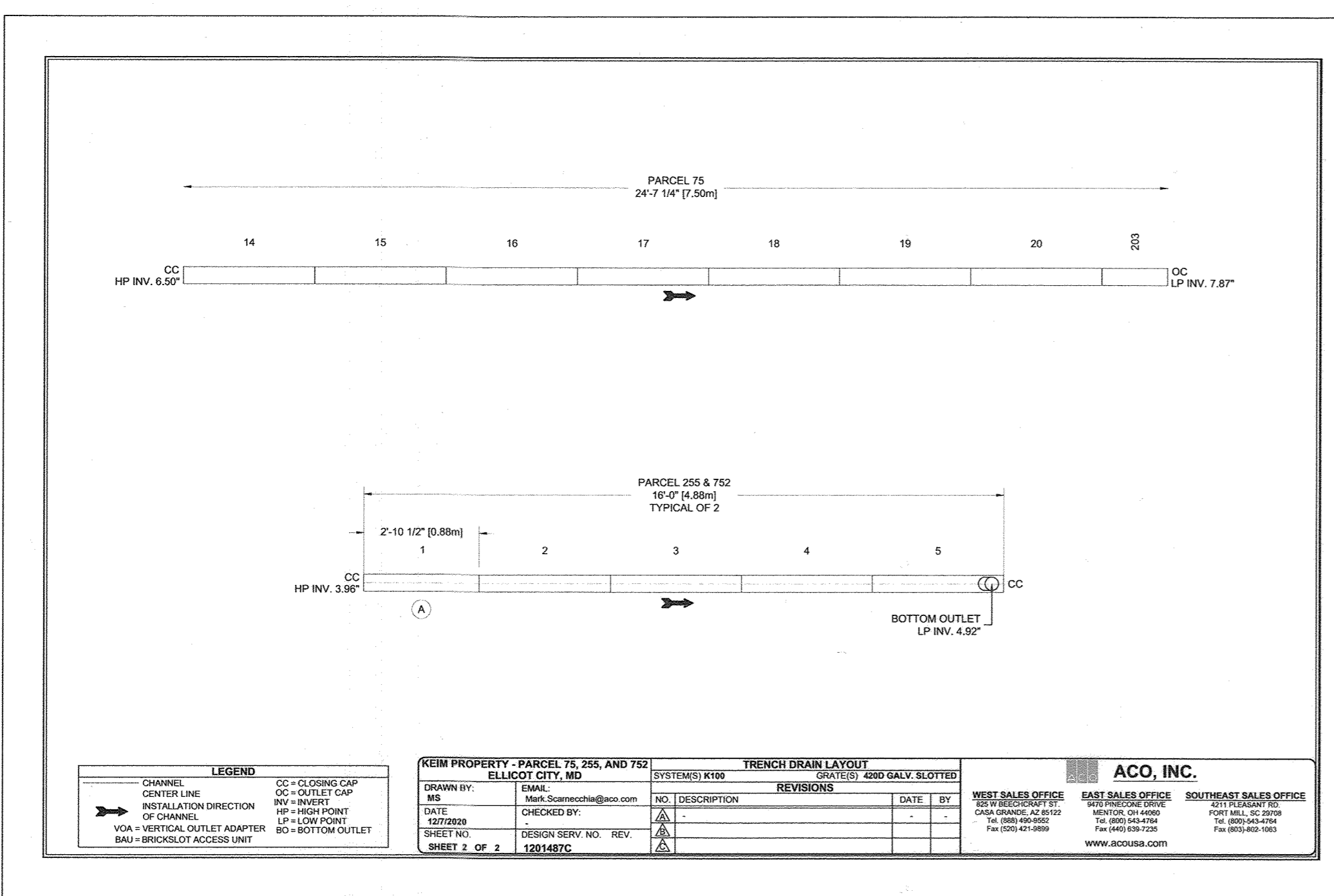
CHANNEL: CC = CLOSING CAP  
 CENTER LINE: OC = OUTLET CAP  
 INSTALLATION DIRECTION OF CHANNEL: HP = HIGH POINT, LP = LOW POINT  
 VOA = VERTICAL OUTLET ADAPTER  
 BAU = BRICKSLOT ACCESS UNIT

**KEIM PROPERTY - PARCEL 75, 255, AND 752**  
 ELKLOFT CITY, MD  
 DRAWN BY: ME  
 DATE: 12/29/21  
 SHEET NO.: 12/29/21  
 SHEET 1 OF 2 1201487C

**SYSTEMS: K100**  
**REVISIONS**

NO.	DESCRIPTION	DATE	BY
1	REVISED		

**ACO, INC.**  
 WEST SALES OFFICE: 205 W. BROADWAY ST. #100, CHARLOTTE, NC 28202  
 EAST SALES OFFICE: 1000 W. BROADWAY ST. #100, CHARLOTTE, NC 28202  
 SOUTHEAST SALES OFFICE: 1000 W. BROADWAY ST. #100, CHARLOTTE, NC 28202



STRUCTURE SCHEDULE						
NO.	TYPE & OWNERSHIP	LOCATION	TOP ELEV.	INV. IN	INV. OUT	REMARKS
I-1	KLASSIK DRAIN - K100	N 594,485.88 E 1,358,855.53	469.50	-	468.84	SEE DETAIL THIS SHEET
I-2	KLASSIK DRAIN - K100	N 594,567.63 E 1,331,342.08	464.83	-	464.42	SEE DETAIL THIS SHEET
I-3	KLASSIK DRAIN - K100	N 594,643.70 E 1,358,990.01	459.70	-	459.30	SEE DETAIL THIS SHEET

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*[Signature]*  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE: 12-9-21

*[Signature]*  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE: 12/16/21

*[Signature]*  
 DIRECTOR  
 DATE: 12-17-21

NO.	DESCRIPTION	DATE
1	REVISE TOTAL SHEET NUMBER TO 15	

**REVISIONS**

**OWNER/DEVELOPER**  
 BURKARD HOMES, LLC.  
 1511 BITCHIE HIGHWAY, STE 305  
 ARNOLD, MD 21012  
 C/O TIM BURKARD  
 TIM@BURKARDHOMES.COM  
 443-325-5117

**TRENCH DRAIN SCHEDULE AND DETAILS**

**KEIM PROPERTY**  
 ZONED: R-20 SINGLE FAMILY DETACHED

TAX MAP 17 GRID 16 PARCELS 75 (LOTS 3 & 4), 255 & 752  
 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**OWNER/DEVELOPER**  
 BURKARD HOMES, LLC.  
 1511 BITCHIE HIGHWAY, STE 305  
 ARNOLD, MD 21012  
 C/O TIM BURKARD  
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 Phone: 443.325.5076  
 Fax: 410.696.2022  
 Email: info@sillengineering.com  
 Civil Engineering for Land Development

DESIGN BY: PS  
 DRAWN BY: TB  
 CHECKED BY: PS  
 SCALE: AS SHOWN  
 DATE: NOVEMBER 4, 2021  
 PROJECT #: 16-017  
 SHEET #: 12 of 15

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32028, EXPIRATION DATE: JUNE 30, 2023

SPECIMEN TREE TABLE						
KEY	DBH	SPECIES	CRZ (FEET)	AGE (YEARS)	REMARKS/CONDITION	RETAINED/REMOVED
ST-1	50"	RED MAPLE	75	122+/-	FAIR	TO BE REMOVED
ST-2	36"	RED MAPLE	54	96+/-	FAIR	TO BE REMOVED
ST-3	42"	RED MAPLE	63	105+/-	FAIR	TO BE REMOVED
ST-4	60"	RED MAPLE	90	150+/-	FAIR	TO BE REMOVED

LEGEND	
EXISTING CONTOUR GIS	--- 382
EXISTING CONTOUR FIELD RUN	--- 382
PROPOSED CONTOUR	--- 382
EXISTING SPOT ELEVATION	382.5
PROPOSED SPOT ELEVATION	+82.53
DIRECTION OF FLOW	→
EXISTING TREELINE	~
PROPOSED TREELINE	~
SWM BORING LOCATION	⊕ SWM #1
EXISTING TREE	⊙
SPECIMEN TREE TO BE REMOVED	⊗ ST#1 TBR
EXISTING WELL	⊕
EXISTING AND PROPOSED EASEMENTS	▭
MODERATE SLOPES	15% - 24.9%
OVERHEAD WIRES	OH
FIBER OPTIC CABLE	FO
EXISTING GAS MAIN	FO

FOREST CONSERVATION WORKSHEET FOR			
Net Tract Area			
A. Total (Gross) Tract Area	A = 1.30		
B. Area within 100-year Floodplain	B = 0.00		
C. Other Dedications (Identify)	C = 0.00		
D. Net Tract Area	D = 1.30		
Land Use Category			
Insert the number "1" under the appropriate land use (limit to only one entry)			
Rural RD	Rural MD	Suburban	Inst./Mixed Use/Office
1	1	1	1
E. Afforestation Threshold (Net Tract Area x 15%)			
F. Reforestation Threshold (Net Tract Area x 20%)	F = 0.30		
Existing Forest Cover			
G. Existing Forest Cover within the Net Tract Area	G = 0.00		
H. Area of Forest above Afforestation Threshold	H = 0.00		
I. Area of Forest above Reforestation Threshold	I = 0.00		
Break Even Point			
J. Break Even Point	J = 0.00		
K. Forest Clearing Permitted without Mitigation	K = 0.00		
Proposed Forest Clearing			
L. Total Area of Forest to be Cleared	L = 0.00		
M. Total Area of Forest to be Retained	M = 0.00		
Planting Requirements Inside Watershed			
N. Reforestation for Clearing above the Reforestation Threshold	N = 0.00		
P. Reforestation for Clearing below the Reforestation Threshold	P = 0.00		
Q. Credit for Retention above the Reforestation Threshold	Q = 0.00		
R. Total Reforestation Required	R = 0.00		
S. Total Afforestation Required	S = 0.20		
T. Total Reforestation and Afforestation Requirement	T = 0.20		
U. 75% of Total Obligation (Retention + Planting)	U = 0.15		
V. Planting Required Onsite to meet 75% Obligation	V = 0.20		
Planting Requirements Outside Watershed			
W. Total Planting within Development Site Watershed	W = 0.00		
X. Total Afforestation Required	X = 0.20		
Y. Remaining Planting within Watershed for Reforestation Credit	Y = 0.00		
Z. Reforestation for Clearing above the Reforestation Threshold	Z = 0.00		
AA. Reforestation for Clearing below the Reforestation Threshold	AA = 0.00		
BB. Credit for Retention above the Reforestation Threshold	BB = 0.00		
CC. Total Reforestation Required	CC = 0.00		
DD. Total Afforestation and Reforestation Requirement	DD = 0.20		
Date: _____			

- ### FOREST CONSERVATION NOTES
- 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 0.20 ACRES OR 8,712 SQ FT. THE REQUIREMENT OF MEETING A MINIMUM OF 75% OF THE OBLIGATION ON SITE CANNOT BE MET BECAUSE OF THE SIZE OF THE INDIVIDUAL LOTS AND BECAUSE OF THE SMALL AMOUNT OF THE REQUIREMENT, WHICH WOULD BE BETTER POOLED WITH OTHER SUCH OBLIGATIONS. THE OBLIGATION WILL BE MET BY OFF SITE FOREST RETENTION OUTSIDE THE 12 DIGIT WATERSHED, AS THERE ARE NO BANKS WITHIN THE WATERSHED. THE MILLERS MILL PROPERTY, SDP-18-052 WILL BE USED A STANDARD PLAN REVISION HAS BEEN APPROVED FOR THE OFFSITE RETENTION.
  - A SIMPLIFIED FOREST STAND DELINEATION HAS BEEN COMPLETED AND NO FOREST EXIST FOR THIS SITE.
  - THE SITE IS NOT LOCATED IN A 100-YEAR FLOODPLAIN, AND THERE ARE NO STREAMS, WETLANDS OR STREAM BUFFERS ON SITE.
  - THERE ARE NO STEEP SLOPES AND NO CRITICAL HABITAT AREAS.
  - THERE ARE NO NON-TIDAL OR TIDAL WETLANDS ON SITE.
  - NO RARE, THREATENED OR ENDANGERED SPECIES, OR THEIR HABITATS, WERE OBSERVED ON THE PROPERTY.
  - NO HISTORIC ELEMENTS OR CEMETERIES ARE KNOWN TO OCCUR ON THE PROPERTY. SURROUNDING LAND USE IS PRIMARILY MEDIUM DENSITY RESIDENTIAL DEVELOPMENT.
  - THE SITE IS LOCATED IN THE PATAPSCO RIVER WATERSHED.
  - NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAMS, OR OTHER REQUIRED BUFFERS, FLOODPLAIN AND FOREST CONSERVATION EASEMENT AREAS, UNLESS ALTERNATIVE COMPLIANCE HAVE BEEN APPROVED OR ACTIVITIES HAVE BEEN DETERMINED ESSENTIAL BY THE DEPARTMENT OF PLANNING AND ZONING.
  - THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION OR DISTURBANCE OF VEGETATION WITH AREAS DEFINED AS FOREST CONSERVATION EASEMENTS.
  - NO STOCKPILES, PARKING AREAS, EQUIPMENT CLEANING AREAS, ETC. SHALL OCCUR WITHIN AREAS DESIGNATED AS NON-DISTURBANCE AREAS.

## REVISED FOREST CONSERVATION PLAN

### KEIM PROPERTY

ZONED: R-20 SINGLE FAMILY DETACHED

TAX MAP 17 GRID 18  
2ND ELECTION DISTRICT

PARCELS 75 (LOTS 3 & 4), 255 & 752  
HOWARD COUNTY, MARYLAND

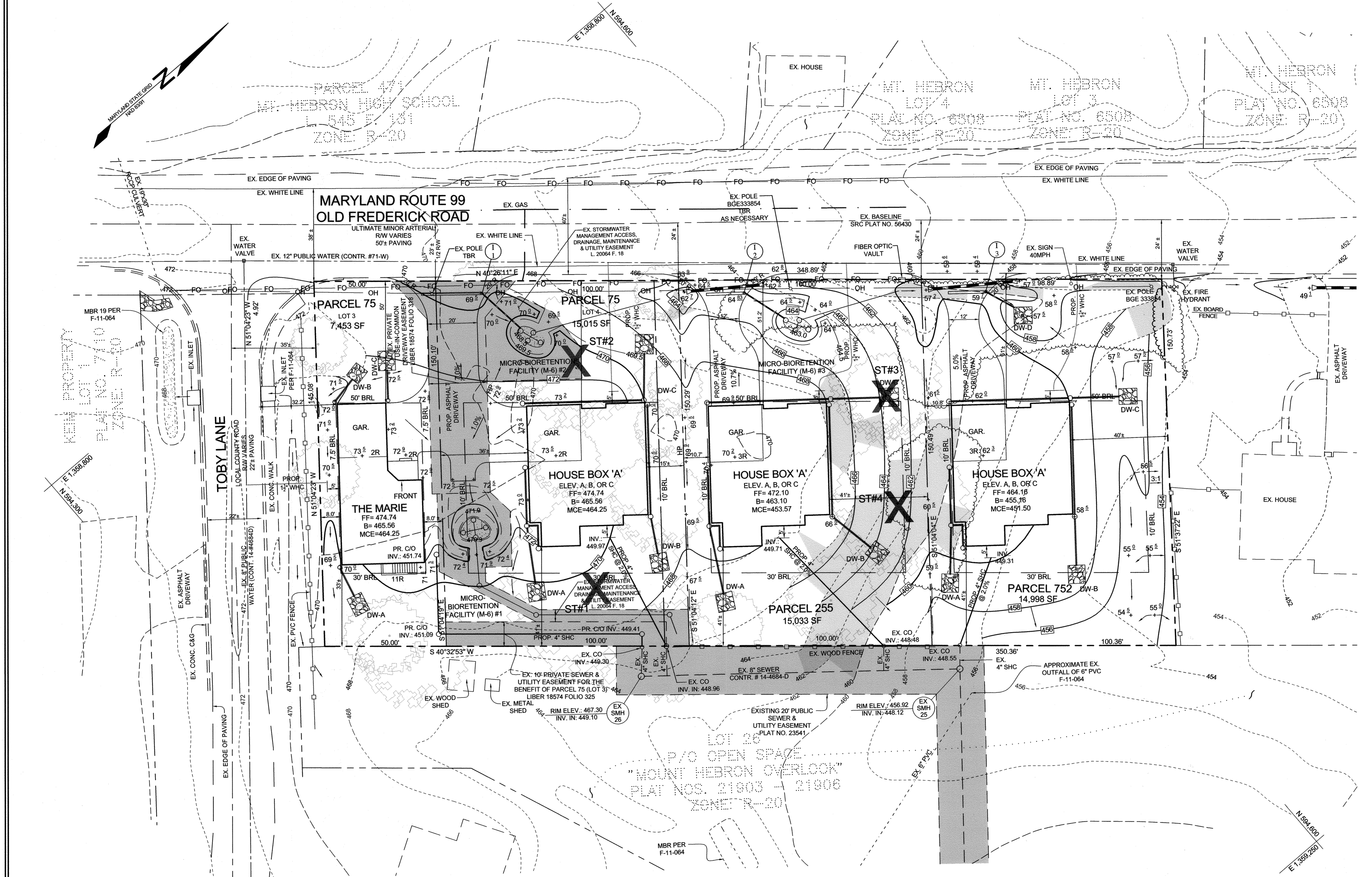
**SILL ENGINEERING GROUP, LLC**  
16005 Frederick Road, 2nd Floor  
Woodsboro, MD 21797  
Phone: 443.325.5076  
Fax: 410.696.2022  
Email: info@sillengineering.com  
Civil Engineering for Land Development

**OWNER/DEVELOPER**

BURKARD HOMES, LLC  
C/O TIM BURKARD  
1511 RITCHIE HIGHWAY, STE 305  
ARNOLD, MD 21012  
443-325-5617  
TIM@BURKARDHOMES.COM

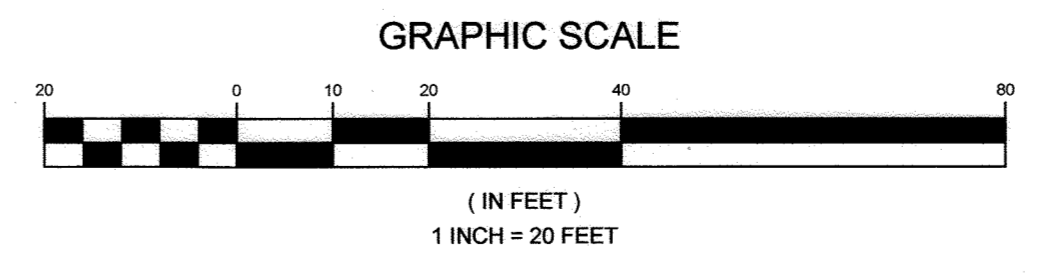
DESIGN BY: PS  
DRAWN BY: TB  
CHECKED BY: PS  
SCALE: AS SHOWN  
DATE: APRIL 18, 2022  
PROJECT #: 16-017  
SHEET #: 13 of 15

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, 2023



**PLAN VIEW**  
SCALE: 1"=20'

JOANNE CAREY, RLA #148  
MD DNR QUALIFIED PROFESSIONAL



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION  
CHIEF, DIVISION OF LAND DEVELOPMENT  
DIRECTOR

DATE: 6/27/22  
DATE: 6/27/22  
DATE: 6/27/22

NO.	DESCRIPTION	DATE
1	REVISION TO THE HOUSES, DRYWELLS, GRADING, DRIVEWAYS AND SHC & WHC ON PARCEL 75 LOT 4, PARCEL 255, & PARCEL 752. REVISION TO THE TITLE THIS SHEET.	02/25/2022

NOTE:  
SEE SHEET 7 FOR THE DETAILED PROPOSED AND EXISTING EASEMENT PLAN VIEW.



KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	NOTE
PA	4	PLATANUS x ACERIFOLIA 'COLUMBIA'	COLUMBIA LONDON PLANE	3" CAL.	B & B FULL HEAD
NS	12	NYSSA SYLVATICA	BLACK TUPELO	3" CAL.	B & B
QR	4	QUERCUS RUBRA	NORTHERN RED OAK	3" CAL.	B & B
MG	4	MAGNOLIA GRANDIFOLIA	SOUTHERN MAGNOLIA	6-8 FT.	B & B

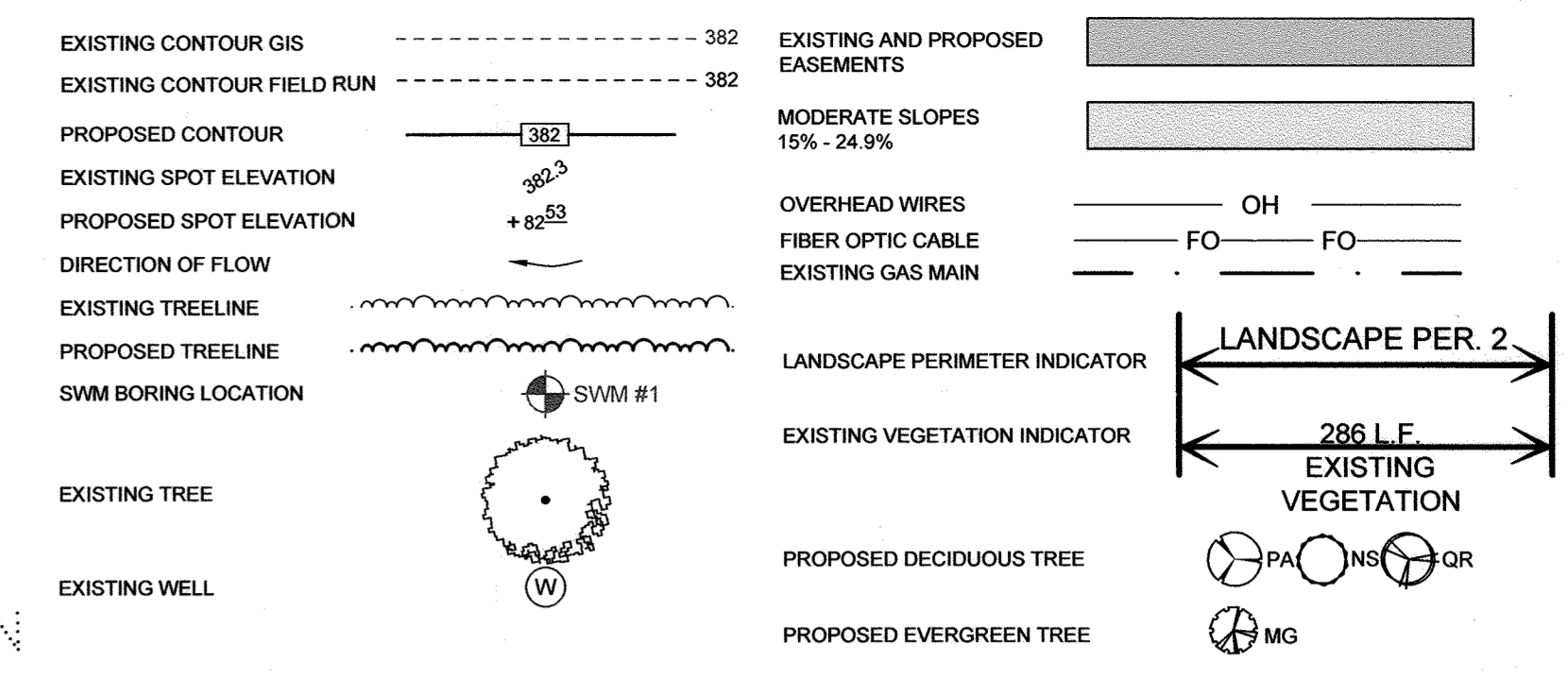
NOTE:  
PER WP-20-123, EIGHT (8) TREES WILL BE PROVIDED AS MITIGATION FOR THE REMOVAL OF FOUR (4) SPECIMEN TREES (ST-1 THROUGH ST-4) FROM THE PROPERTIES. THESE SHADE TREES HAVE BEEN INCLUDED IN THE LANDSCAPE PLANT LIST AND SURETY REQUIREMENT.

CATEGORY	ADJACENT TO ROADWAYS		ADJACENT TO PERIMETER PROPERTIES	
	1	4	2	3
PERIMETER FRONTAGE DESIGNATION				
LANDSCAPE TYPE				
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	348.89(NA)	150.00(B)	150.73(A)	350.36(A)
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	NO	NO	NO	NO
REMAINING PERIMETER LENGTH CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET)	NO	NO	NO	NO
REMAINING PERIMETER LENGTH NUMBER OF PLANTS REQUIRED				
SHADE TREES	1:50=3	1:60=3	1:60=6	1:60=6
EVERGREEN TREES	1:50=3	1:60=3	1:60=3	1:60=3
SHRUBS	1:50=3	1:60=3	1:60=3	1:60=3

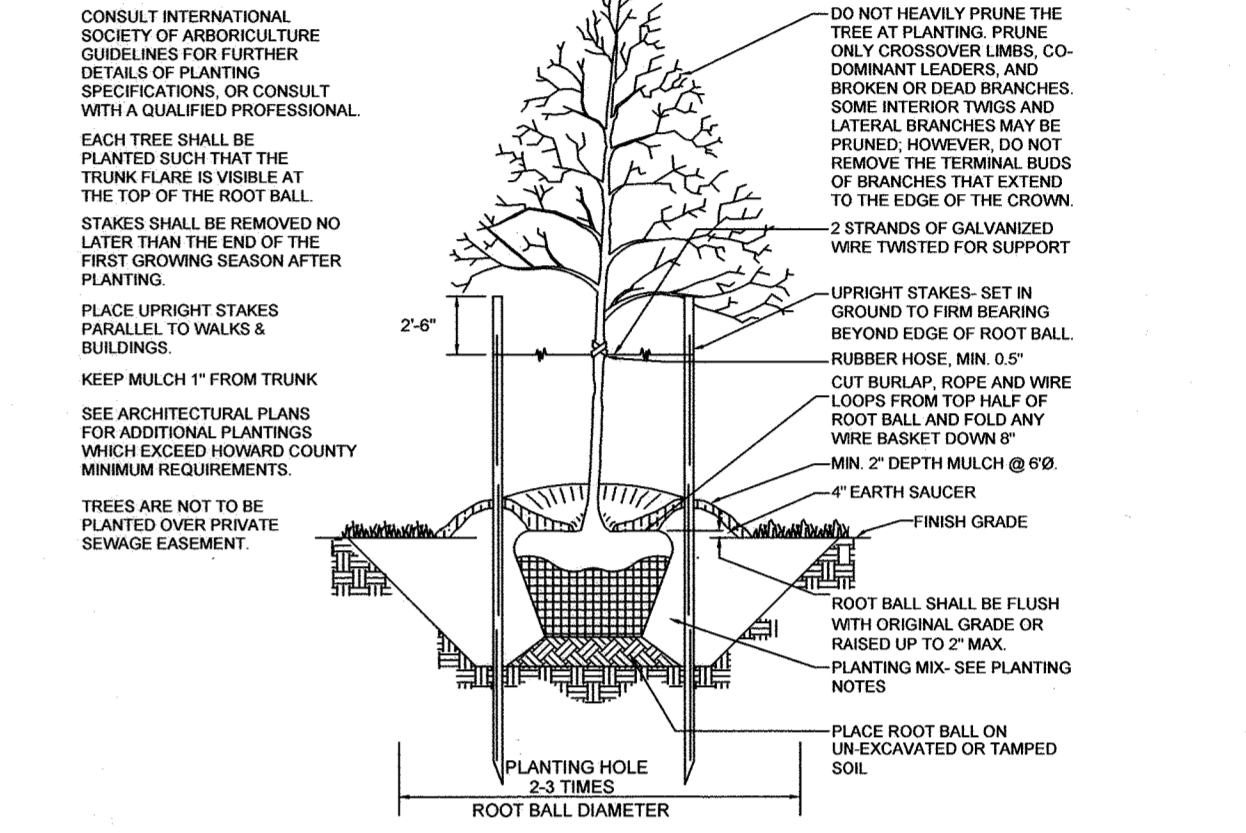
### LANDSCAPE NOTES

- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISION OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY WILL BE POSTED AS PART OF THE DPW DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$6,600.00 FOR THE REQUIRED PERIMETER LANDSCAPING TREES, AND FOR THE EIGHT (8) REQUIRED MITIGATION TREES PER WP-20-123, FOR A TOTAL OF FOUR (4) EVERGREEN TREES AND TWENTY (20) SHADE TREES. EVERGREEN TREES AT \$150.00 EACH, 4 X \$150.00 = \$600.00. AND SHADE TREES AT \$300.00 EACH, 20 X \$300.00 = \$6,000.00.
- 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.
- 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.

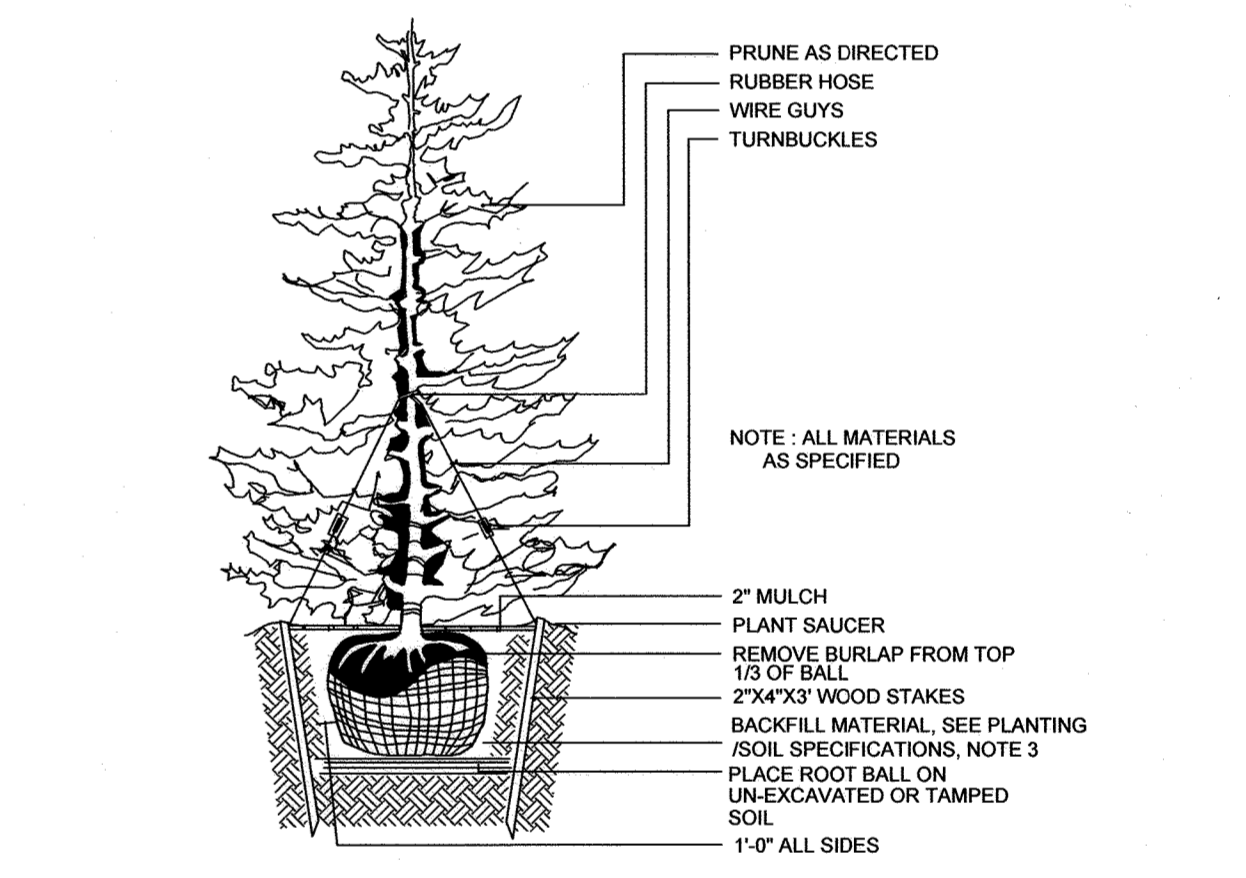
### LEGEND



### NOTES



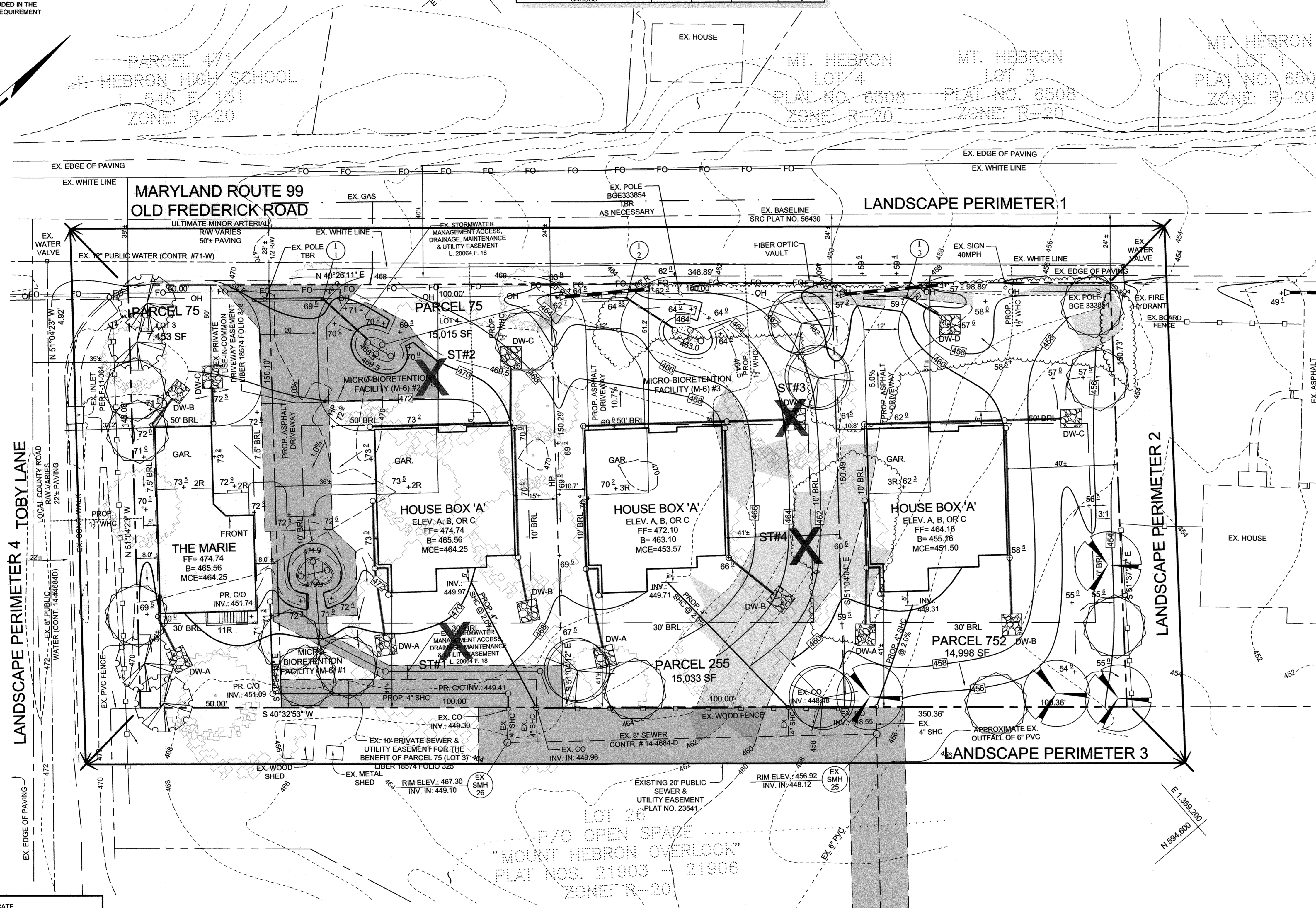
TYPICAL TREE PLANTING AND STAKING  
DECIDUOUS TREES UP TO 2-1/2" CALIPER NOT TO SCALE



TYPICAL EVERGREEN TREE PLANTING DETAIL  
NOT TO SCALE

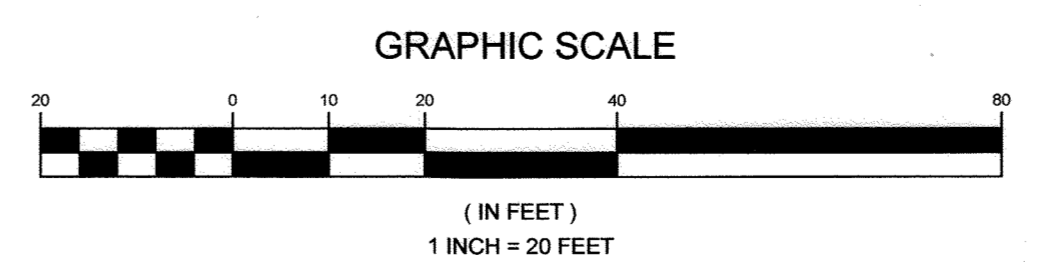
### PLANTING/SOIL SPECIFICATIONS

- INSTALLATION OF B&B / CONTAINER STOCK SHALL BE PERFORMED MARCH 15 - MAY 30 OR SEPTEMBER 15 - NOVEMBER 15
- DISTURBED AREAS SHALL BE SEEDDED 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.



### PLAN VIEW

SCALE: 1"=20'



NOTE:  
SEE SHEET 7 FOR THE DETAILED PROPOSED AND EXISTING EASEMENT PLAN VIEW.

DEVELOPER'S CERTIFICATE  
"I WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."  
SIGNATURE OF DEVELOPER: [Signature]  
DATE: 4/25/22

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
CHIEF, DEVELOPMENT/ENGINEERING DIVISION: [Signature]  
CHIEF, DIVISION OF LAND DEVELOPMENT: [Signature]  
DIRECTOR: [Signature]

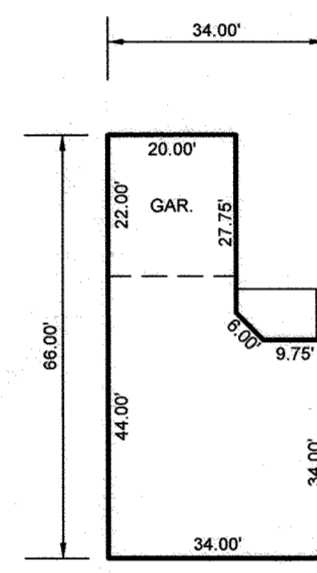
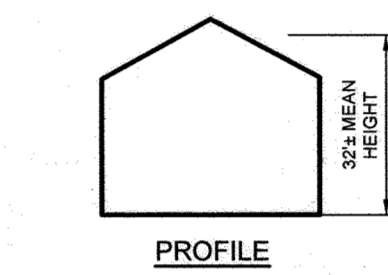
NO.	DESCRIPTION	DATE
1	REVISION TO THE HOUSES, DRYWELLS, GRADING, DRIVEWAYS AND SHC & WHC ON PARCEL 75 LOT 4, PARCEL 255, & PARCEL 752. REVISION TO THE TITLE THIS SHEET.	02/25/2022

REVISED LANDSCAPING PLAN  
KEIM PROPERTY  
ZONED: R-20 SINGLE FAMILY DETACHED  
TAX MAP 17 GRID 16  
2ND ELECTION DISTRICT  
PARCELS 75 (LOTS 3 & 4), 255 & 752  
HOWARD COUNTY, MARYLAND

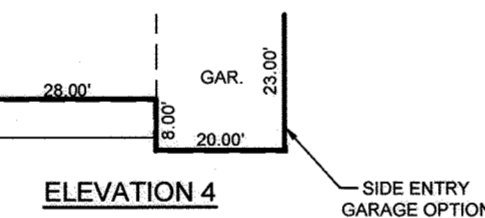
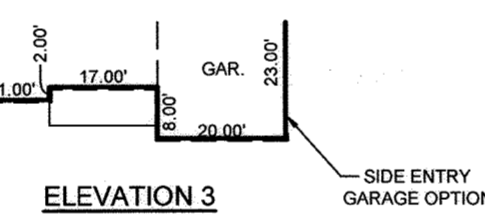
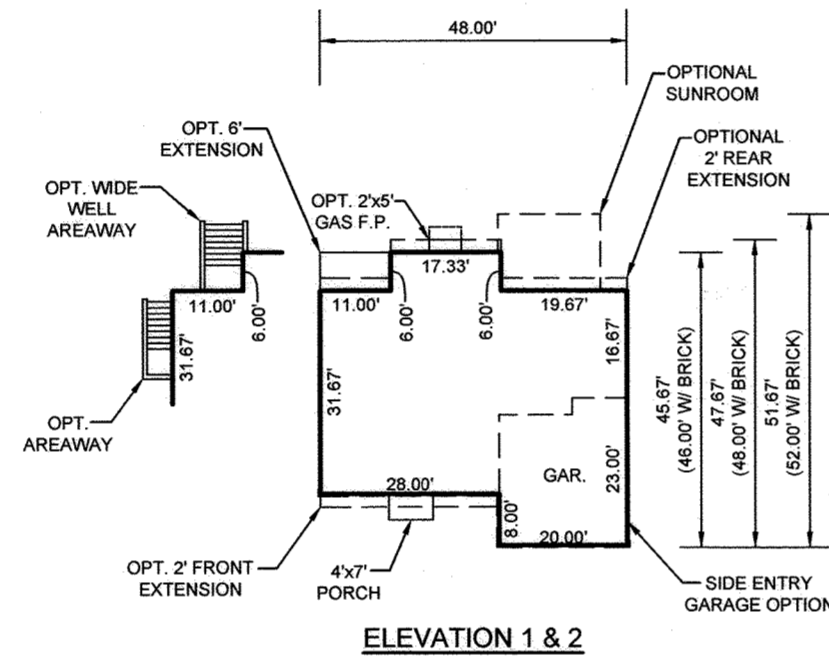
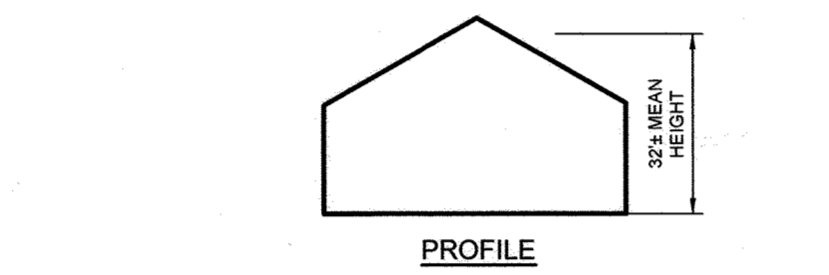
OWNER/DEVELOPER  
BURKARD HOMES, LLC  
1511 RITCHIE HIGHWAY, STE 305  
ARNO, MD 21012  
443-325-5617  
TIM@BURKARDHOMES.COM

DESIGN BY: PS  
DRAWN BY: TB  
CHECKED BY: PS  
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DATE: APRIL 18, 2022  
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SHEET #: 14 OF 15

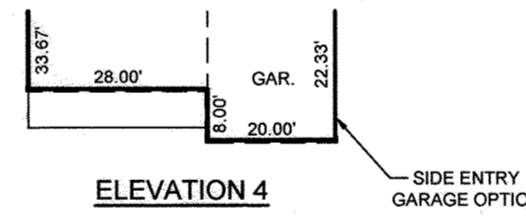
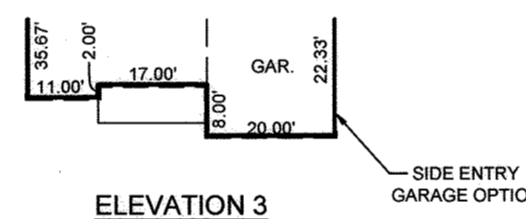
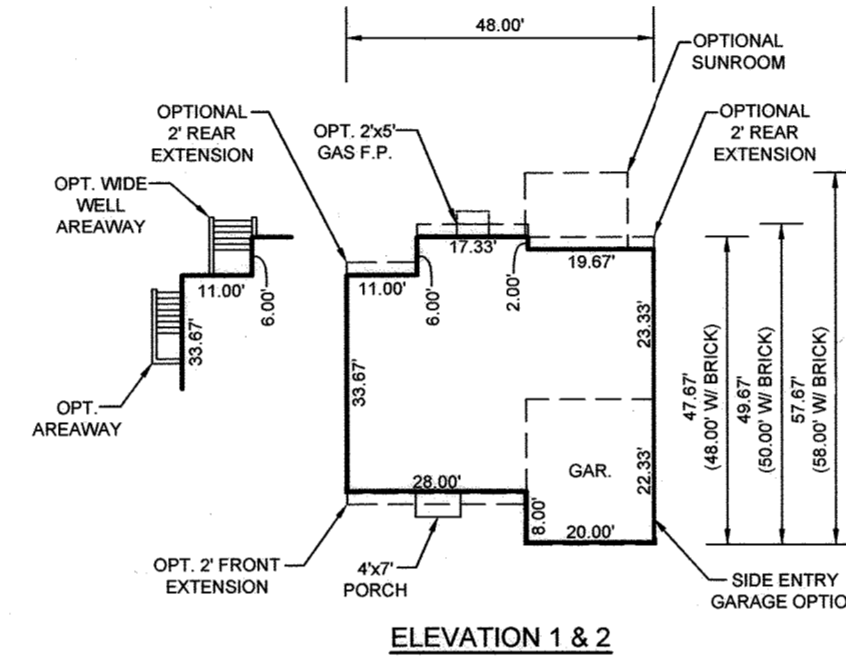
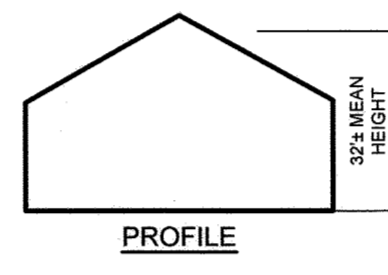
PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32025, EXPIRATION DATE: JUNE 20, 2023



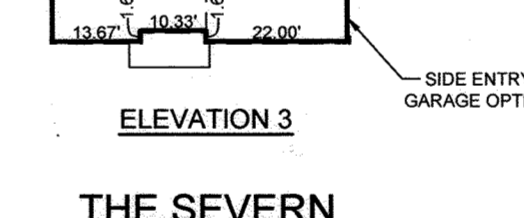
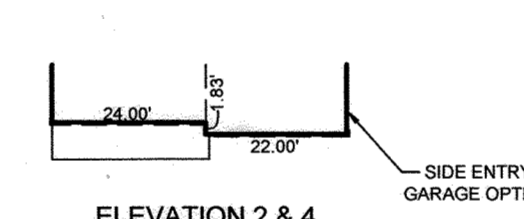
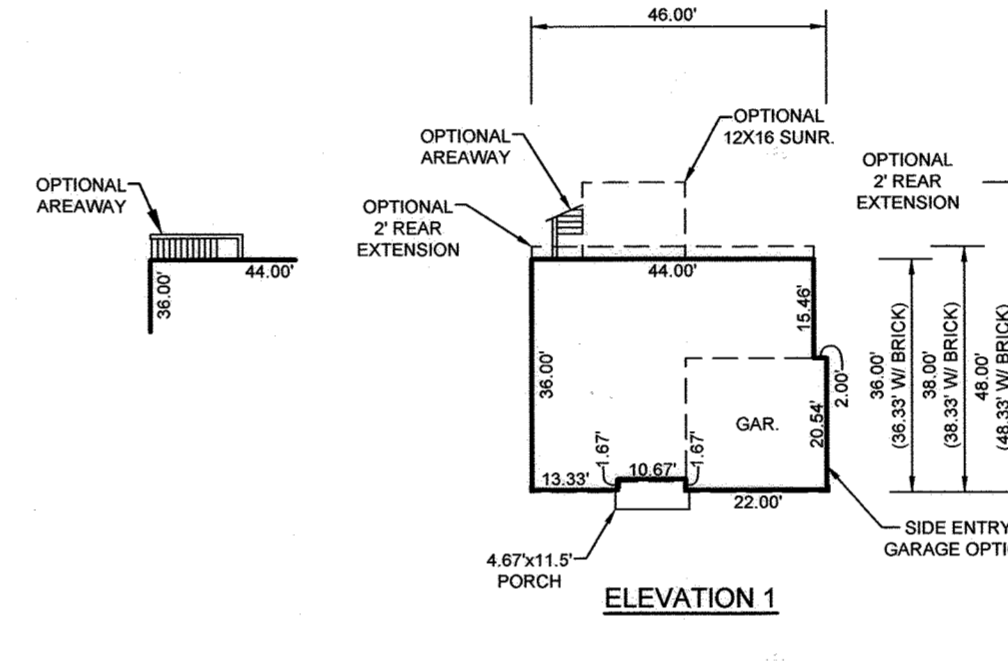
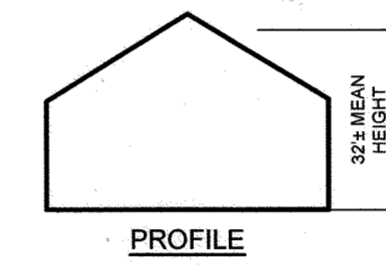
**THE MARIE**  
SCALE: 1"=30'



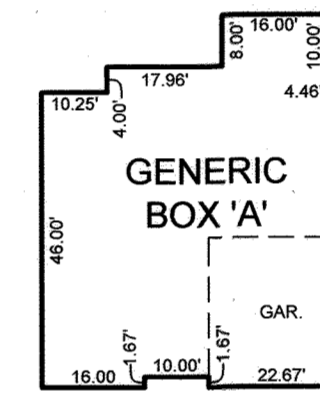
**SENECA I**  
SCALE: 1"=30'



**SENECA II**  
SCALE: 1"=30'



**THE SEVERN**  
SCALE: 1"=30'



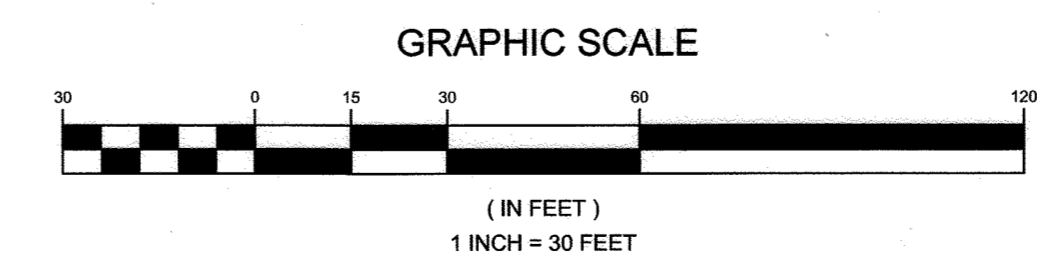
- SENECA I**  
ALL ELEVATIONS AND OPTIONS
- SENECA II**  
ALL ELEVATIONS AND OPTIONS
- SEVERN**  
ALL ELEVATIONS AND OPTIONS
- MARIE**  
DOES NOT FIT

**GENERIC HOUSE MODEL BOXES**  
SCALE: 1"=30'

THE PURPOSE OF THIS SHEET IS TO ADD  
THE GENERIC HOUSE MODEL BOXES

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 [Signature] DATE: 5/21/22  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 [Signature] DATE: 6/23/22  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 [Signature] DATE: 6/27/22  
 DIRECTOR

NO.	DESCRIPTION	REVISIONS



**OWNER/DEVELOPER**  
 BURKARD HOMES, LLC  
 C/O TIM BURKARD  
 1511 RITCHIE HIGHWAY, STE 305  
 ARNOLD, MD 21012  
 443-325-5617  
 TIM@BURKARDHOMES.COM

**HOUSE MODEL TEMPLATES**  
**KEIM PROPERTY**  
 ZONED: R-20 SINGLE FAMILY DETACHED

TAX MAP 17 GRID 16 PARCELS 75 (LOTS 3 & 4), 255 & 752  
 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

DESIGN BY: PS  
 DRAWN BY: TB  
 CHECKED BY: PS  
 SCALE: AS SHOWN  
 DATE: APRIL 18, 2022  
 PROJECT #: 16-017  
 SHEET #: 15 of 15

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

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