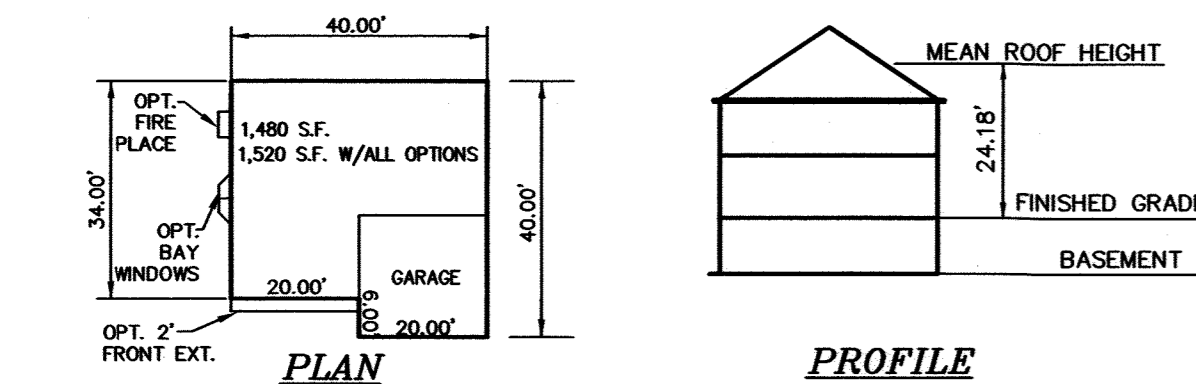
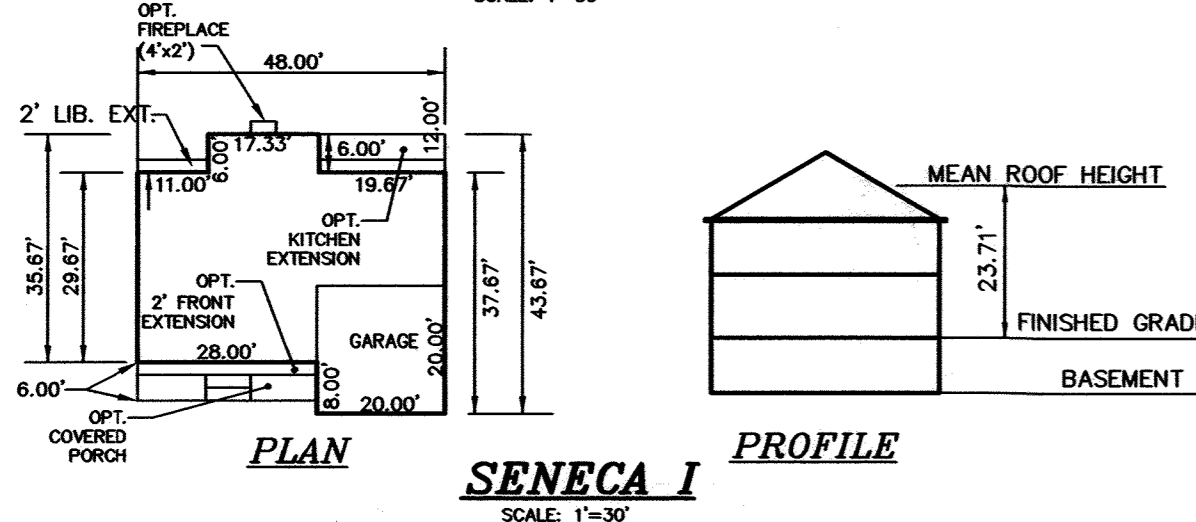


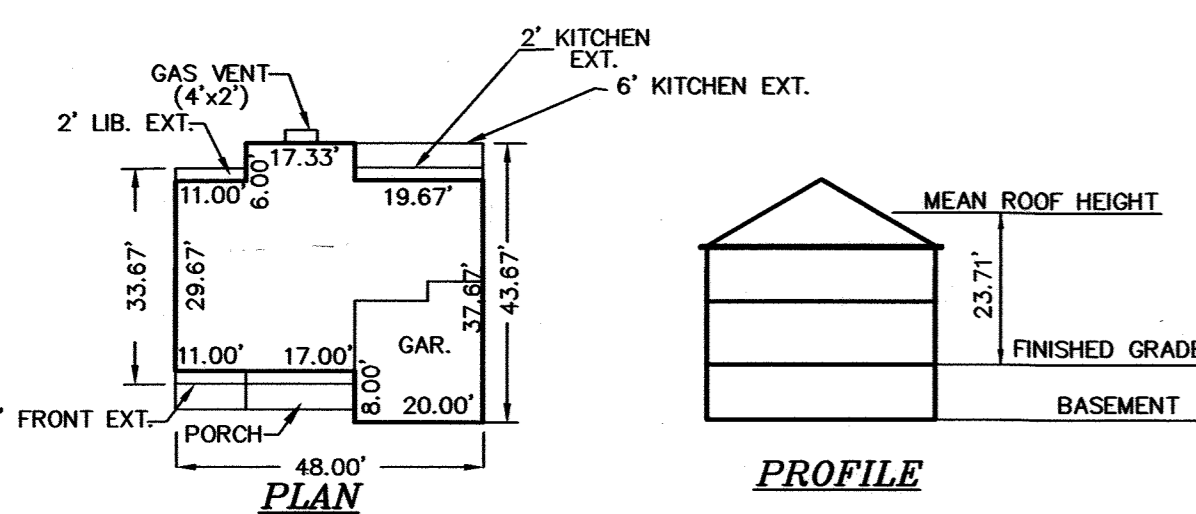
GENERIC BOXES
SCALE: 1"=30'



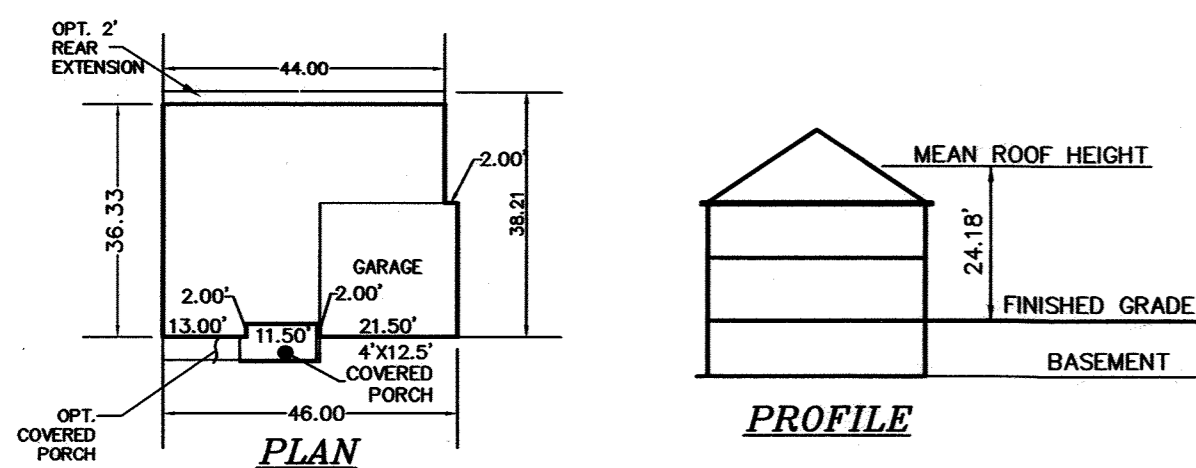
PATUXENT
SCALE: 1"=30'



SENECA I
SCALE: 1"=30'



SENECA II
SCALE: 1"=30'



THE SEVERN
SCALE: 1"=30'

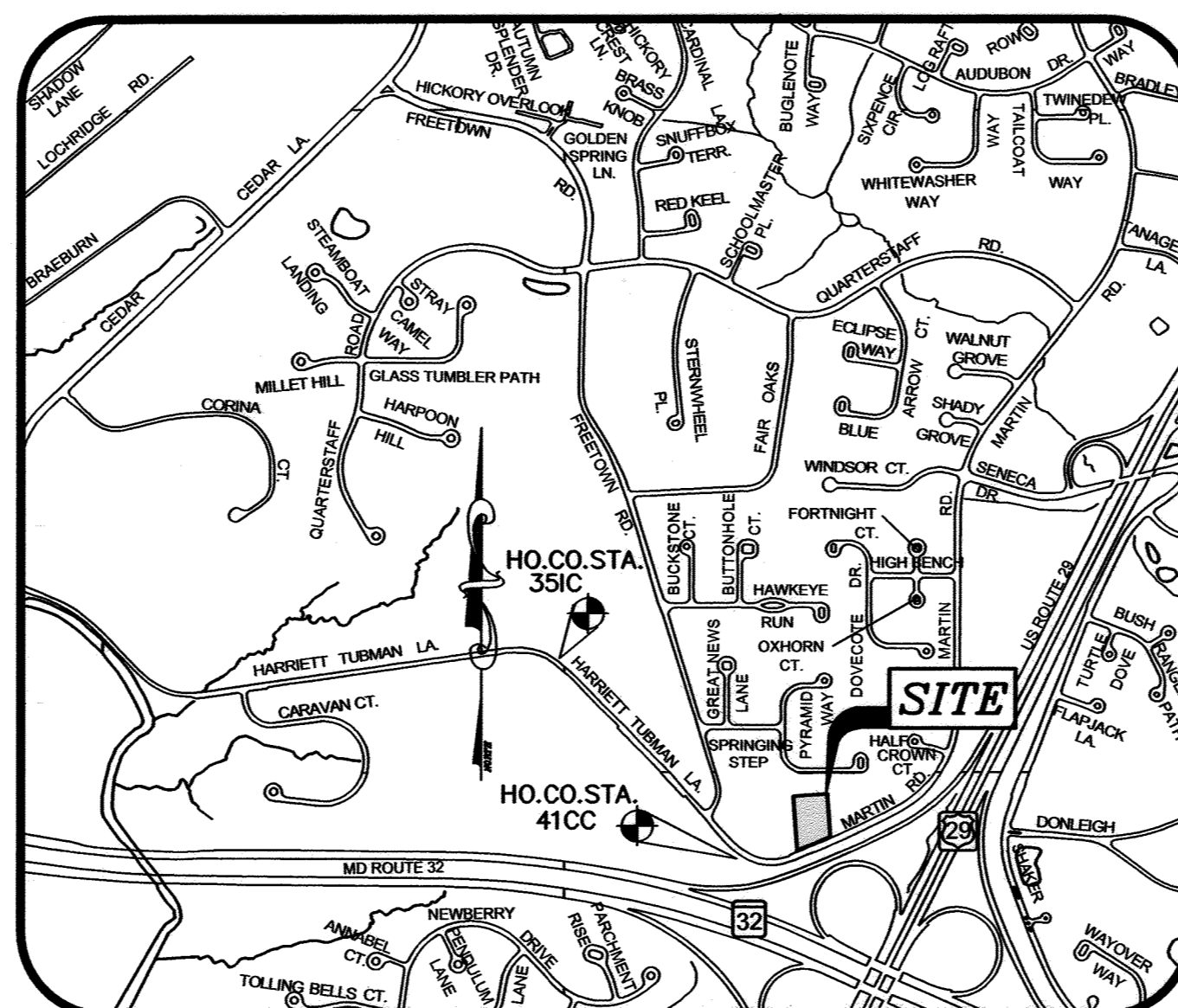
SITE DEVELOPMENT PLAN

ZUBAIRI PROPERTY

LOTS 1, 2 AND 3

5TH ELECTION DISTRICT

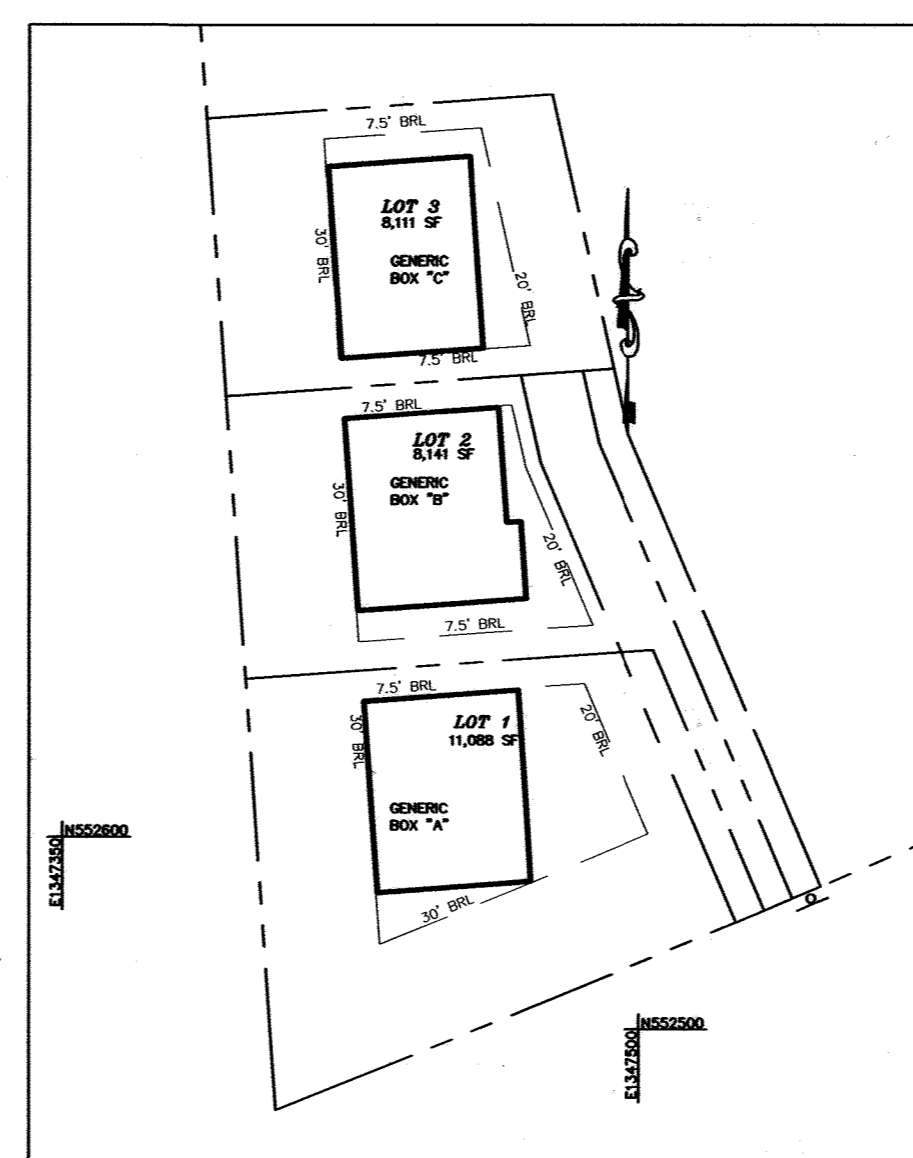
HOWARD COUNTY, MARYLAND



VICINITY MAP
SCALE: 1"=1000'
ADC MAP: 32, GRID F-5

LOT COVERAGE CHART

LOT NO.	AREA EXCLUSIVE OF PIPESTEM	R-SC 60% MAX COVERAGE	PROPOSED GENERIC BOX AREA
1	11,088 S.F.	6,653 S.F.	A 2,010 S.F.
2	7,550 S.F.	4,350 S.F.	B 2,085 S.F.
3	6,922 S.F.	4,153 S.F.	C 1,845 S.F.



GENERIC BOX LOCATION
SCALE: 1"=50'

MIHU ALLOCATIONS AND EXEMPTIONS TRACKING CHART

TOTAL NUMBER OF LOTS/UNITS	3
NUMBER OF MIHU REQUIRED	1
NUMBER OF MIHU PROVIDED ONSITE (EXEMPT FROM APFO ALLOCATIONS)	0
NUMBER OF APFO ALLOCATION REQUIRED (REMAINING LOTS/UNITS)	0
MIHU FEE-IN-LIEU (INDICATED LOT/UNIT NUMBERS)	1, 2 AND 3

ADDRESS CHART

LOT	ADDRESS
1	6815 MARTIN ROAD
2	6813 MARTIN ROAD
3	6811 MARTIN ROAD

LOTS 1, 2 & 3 IN THIS PROJECT ARE SUBJECT TO THE MODERATE INCOME HOUSING UNIT (MIHU) FEE-IN-LIEU REQUIREMENT THAT IS TO BE CALCULATED AND PAID BY THE PERMIT APPLICANT TO THE DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS AT THE TIME OF BUILDING PERMIT ISSUANCE.

GENERAL NOTES:

- IN ACCORDANCE WITH SECTION 128.0 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS, OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY NOT PROJECT MORE THAN 4 FEET INTO ANY SETBACKS, PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO A FRONT OR REAR YARD SETBACK.
- SUBJECT PROPERTY ZONED "R-SC" PER OCTOBER 6, 2013 COMPREHENSIVE ZONING REGULATIONS.
- DRIVEWAYS 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 MINIMUM REQUIREMENTS:
WIDTH - 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE).
SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2 INCH MINIMUM).
GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM OF 45-FOOT TURNING RADIUS.
STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING)
DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING OR NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAMS, OR THEIR REQUIRED BUFFERS, FLOODPLAIN, AND FOREST CONSERVATION EASEMENT AREAS.
- FLAG AND PIPESTEM LOTS; REFUSE COLLECTION, SNOW REMOVAL, AND MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND THE ROAD RIGHT-OF-WAY LINE AND NOT ONTO THE PIPESTEM LOT DRIVEWAY.
- A FOREST CONSERVATION EASEMENT HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION ACT. NO CLEARING, GRUBBING, OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
- LANDSCAPING NOTE: THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. FINANCIAL SURETY IN THE AMOUNT OF \$3,450 FOR 2 SHADE TREES, 9 EVERGREEN TREES, 10 SUBSTITUTION (2:1) TREES AND 0 SHRUBS WILL BE POSTED WITH THE GRADING PERMIT.
- THE 65 dba NOISE LINE IS ESTABLISHED BY HOWARD COUNTY TO ALERT DEVELOPERS, BUILDERS AND FUTURE RESIDENTS THAT AREAS BEYOND THIS THRESHOLD MAY EXCEED GENERALLY ACCEPTED NOISE LEVELS ESTABLISHED BY THE U.S. DEPT. OF HOUSING AND URBAN DEVELOPMENT.
- SITE ANALYSIS DATA:
LOCATION: TAX MAP: 41 PARCEL: 459 LOTS: 1, 2, & 3 GRID: 006 ELECTION DISTRICT: FIFTH
ADDRESS: 6815, 6813, 6811 MARTIN ROAD, SIMPSONVILLE, MD, 21050
ZONING: R-SC
TOTAL AREA: 0.628 AC.±, 27,337 S.F.±
AREA OF ROAD DEDICATION: 0
LIMIT OF DISTURBED AREA: 0.72 AC.±, 31,434 S.F.±
PROPOSED USE FOR SITE: SINGLE FAMILY RESIDENTIAL
TOTAL NUMBER OF UNITS: 1 PER LOT X 3 LOTS = 3 TOTAL SFD
TYPE OF PROPOSED UNIT: SFD
PARKING REQUIRED: 2.5 SP / DU. PARKING PROVIDED: 4 SP / DU.
COUNTY FILES: ECP-20-026, F-09-099, O'S ONLY F-21-001
- COORDINATES BASED ON NAD'83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS 351C AND 41CC.
STA. NO. 351C N 553,504.392, E 1,345,160.575, EL. 414.346
STA. NO. 41CC N 552,494.249, E 1,347,062.463, EL. 399.989
- THE EXISTING TOPOGRAPHY IS TAKEN FROM THE APPROVED SUPPLEMENTAL PLAT FOR THIS SUBDIVISION BY OTHERS AND VERIFIED AT THE RIGHT OF WAY BY A FIELD SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY MILDENBERG, BOENDER AND ASSOC. INC. PERFORMED ON OR ABOUT DECEMBER 2019.
- A DESIGN MANUAL WAIVER WAS REQUESTED AND APPROVED FOR CELLARS NOT SEWERED, LOTS 1, 2 & 3. DATE OF APPROVAL JUNE 26, 2020.
- FOREST CONSERVATION OBLIGATIONS UNDER SECTION 16.1200 OF THE HOWARD COUNTY CODE WERE MET FOR THIS LOT UNDER F-09-099.
- NO ENVIRONMENTAL FEATURES EXIST ON LOTS 1, 2 & 3. STREAM, WETLANDS AND THEIR BUFFERS EXIST ON THE OFFSITE OPEN SPACE LOT 4.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST 48 HOURS PRIOR TO EXCAVATION WORK BEING DONE.
MISS UTILITY (800)-257-7777
VERIZON TELEPHONE COMPANY (800)-837-4966
HOWARD COUNTY BUREAU OF UTILITIES (410)-313-4900
BALTIMORE GAS & ELECTRIC (410)-685-0123
STATE HIGHWAY ADMINISTRATION (410)-531-5533
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/CONSTRUCTION INSPECTIONS AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- EXISTING UTILITIES ARE BASED ON ACTUAL FIELD LOCATIONS, IN COMBINATION WITH EXISTING WATER AND SEWER CONTRACTS.
- ANY DAMAGE TO THE COUNTY RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- SEWER HOUSE CONNECTION ELEVATIONS SHOWN ARE LOCATED AT THE PROPERTY LINE.
- FOR DRIVEWAY ENTRANCE DETAILS, REFER TO HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL R-6.06.
- NO CEMETERIES OR HISTORIC STRUCTURES EXIST ON SITE.
- PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT. PUBLIC WATER AND SEWER WILL BE UTILIZED UNDER CONTRACT NUMBERS: 24-3265 (SEWER) AND 24-3951-D (WATER).
- STORMWATER MANAGEMENT IS PROVIDED VIA LANDSCAPE INFILTRATION (M-3), DRYWELLS (M-5), MICRO-BIORETENTION FACILITIES (M-6), AND SHEET FLOW TO CONSERVATION AREA (N-3) IN ACCORDANCE WITH THE 2000 MDE STORMWATER DESIGN MANUAL REVISED MAY 2009.
- ENVIRONMENTAL CONCEPT PLAN, ECP-20-026, FOR THIS SUBDIVISION WAS APPROVED ON MAY 12, 2020.
- 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 PLANTS MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
- AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS HEREWITH LISTED AND APPROVED FOR THIS SITE SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.
- SHOULD ANY TREE DESIGNATED FOR PRESERVATION, FOR WHICH LANDSCAPING CREDIT IS GIVEN, DIE PRIOR TO RELEASE OF BONDS, THE OWNER WILL BE REQUIRED TO REPLACE THE TREE WITH THE EQUIVALENT SPECIES OR WITH A TREE WHICH WILL OBTAIN THE SAME HEIGHT, SPREAD, AND GROWTH CHARACTERISTICS. THE REPLACEMENT TREE MUST BE A MINIMUM OF 2 1/2 TO 3 INCHES IN CALIPER AND INSTALLED AS REQUIRED IN THE LANDSCAPE MANUAL.
- PROTECTIVE COVENANTS INCLUDING COVENANTS GOVERNING THE MAINTENANCE OF COMMUNITY OWNED OPEN SPACE AND THE MAINTENANCE AND USE OF THE USE-IN-COMMON DRIVEWAYS, STREET TREES AND FOREST CONSERVATION AREAS ARE RECORDED IN THE COVENANTS AND RESTRICTIONS OF THE HOMEOWNER'S ASSOCIATION AND THE USE-IN-COMMON ACCESS AGREEMENT RECORDED CONCURRENTLY WITH THE PLAT IN LIBER 12999, FOLIO 494.
- A PRIVATE RANGE OF ADDRESSES SIGN ASSEMBLY SHALL BE FABRICATED AND INSTALLED BY HOWARD COUNTY BUREAU OF HIGHWAYS AT THE DEVELOPERS/OWNER'S EXPENSE FOR ALL THE USE-IN-COMMON DRIVEWAYS IN THIS DEVELOPMENT. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT 410-313-2430 FOR DETAILS AND COST ESTIMATE.

SHEET INDEX

NO	TITLE
1	SITE DEVELOPMENT PLAN
2	SITE DEVELOPMENT PLAN
3	STORMWATER MANAGEMENT PLAN AND DETAILS
4	SEDIMENT CONTROL NOTES AND DETAILS

PERMIT INFORMATION BLOCK

SUBDIVISION NAME: ZUBAIRI PROPERTY, LOTS 1, 2 AND 3		SECTION/AREA: N/A	PARCEL: 459
PLAT NO. 21491	BLOCK(S) ZONING R-SC	TAX MAP NO. 41	ELECTION DISTRICT FIFTH CENSUS TRACT 605602

DEVELOPERS CERTIFICATE
I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY 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 INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Tia Dula
SIGNATURE OF DEVELOPER
5/29/21
DATE

ENGINEER'S CERTIFICATE
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT 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.

M.G. Kretsch
SIGNATURE OF ENGINEER
5/29/21
DATE

MICHAEL G. KRETSCH, P.E.
PRINTED NAME OF ENGINEER

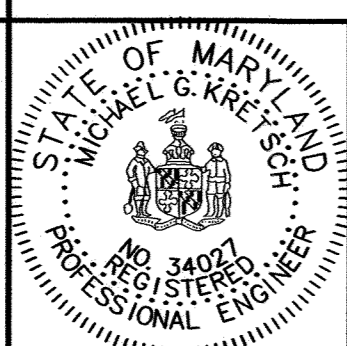
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Alexander Bratchi
HOWARD SOIL CONSERVATION DISTRICT
06/08/21
DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
[Signature]
CHIEF, DEVELOPMENT ENGINEERING DIVISION
6/17/21
DATE

[Signature]
CHIEF, DIVISION OF LAND DEVELOPMENT
6/30/21
DATE

OWNER/DEVELOPER
BURKARD HOMES LLC,
1511 RICHIE HWY, STE. 305
ARNOLD, MD 21012
240-375-1052



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. 34027, EXP. DATE 01/16/2023.

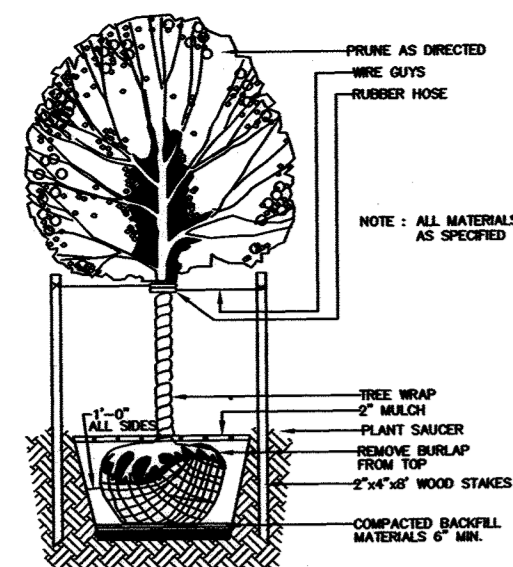
M.G. Kretsch
MICHAEL G. KRETSCH, P.E.
5/29/21
DATE

DATE: MAY 2021
PROJECT: 19-015
ENGINEERING: MGK
SCALE: 1"=30'
APPROVAL: SAA

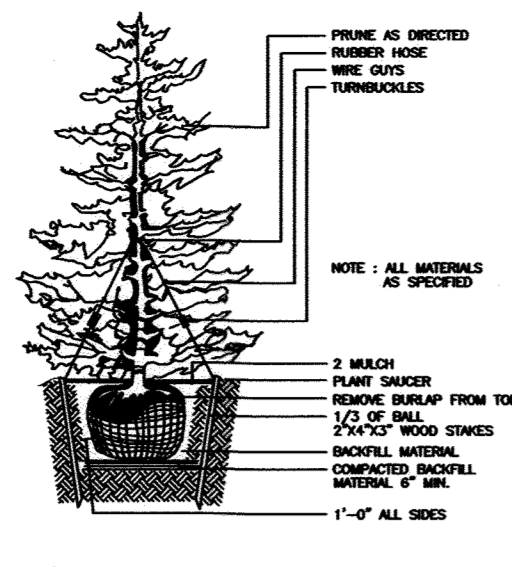
ZUBAIRI PROPERTY LOTS 1, 2 AND 3
TAX MAP: 41 - PARCEL: 459 - GRID 006
HOWARD COUNTY, MARYLAND
FIFTH ELECTION DISTRICT
SITE DEVELOPMENT PLAN

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
7950-B Grace Drive, Columbia, Maryland 21044
(410) 997-0296 Tel. (410) 997-0298 Fax.

1 OF 4
SDP-20-071



TYPICAL DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE



TYPICAL EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE

SCHEDULE A : PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO PERIMETER PROPERTIES				TOTAL
	A (PERIMETER 1)*	A (PERIMETER 2)*	A (PERIMETER 3)*	B (PERIMETER 4)	
LANDSCAPE TYPE	326.96 LF	205.50 LF	257.96 LF	216.79 LF	
CREDIT FOR EXISTING VEGETATION (NO, YES, LINEAR FEET)	YES, 58.22 LF	YES, 205.50 LF	YES, 236.41 LF	NO	
NUMBER OF PLANTS REQUIRED	4 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	1 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	4 SHADE TREES 5 EVERGREEN TREES 0 SHRUBS	9 SHADE TREES 5 EVERGREEN TREES 0 SHRUBS
NUMBER OF PLANTS PROVIDED	1 SHADE TREES 4 EVERGREEN TREES 2 OTHER TREES (2:1 SUBSTITUTION) 0 SHRUBS (10:1 SUBSTITUTION)	0 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	1 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	0 SHADE TREES 5 EVERGREEN TREES 8 SUBSTITUTION TREES 0 SHRUBS	2 SHADE TREES 9 EVERGREEN TREES 10 SUBSTITUTION TREES 0 SHRUBS

* EXISTING FOREST IN FOREST CONSERVATION EASEMENT

PERIMETER LANDSCAPE REQUIREMENT PLANTING SCHEDULE

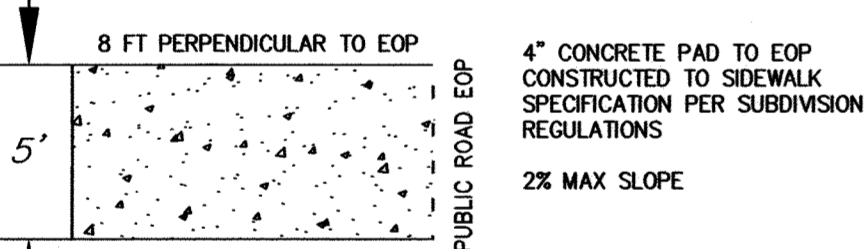
QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
1		RUBRUM 'RED SUNSET' OR EQUIVALENT AS OUTLINED IN THE HOWARD COUNTY LANDSCAPE MANUAL	RED SUNSET RED MAPLE	2.5"-3" CAL.
1		GLEDITSIA TRIACANTHOS INERMIS 'IMPERIAL' OR EQUIVALENT AS OUTLINED IN THE HOWARD COUNTY LANDSCAPE MANUAL	IMPERIAL THORNLESS HONEYLOCUST	2.5"-3" CAL.
10		CORNUS RACEMOSA OR EQUIVALENT AS OUTLINED IN THE HOWARD COUNTY LANDSCAPE MANUAL	GRAY DOGWOOD	2.5"-3" CAL.
9		CUPRESSOCYPARIS LEYLANDI OR EQUIVALENT AS OUTLINED IN THE HOWARD COUNTY LANDSCAPE MANUAL	LEYLAND CYPRESS	6'-8" HEIGHT
TOTAL				16 TREES (7 SHADE TREES, 9 EVERGREENS)

SOIL DESCRIPTION:

SYMBOL	RATING	NAME	K FACTOR	MAP NO.	COMMENTS
GfB	A	GLADSTONE URBAN LAND COMPLEX, 0-8 PERCENT SLOPES	0.20	23	
GmB	C/D	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES	0.37	23	HIGHLY ERODIBLE
UoF		UNDERTIGHTS, HIGHWAY, 0-65 PERCENT SLOPES		23	

SPECIMEN TREE LIST

SPECIMEN #	SPECIES	COMMON NAME	DBH (INCHES)	CONDITION	STATUS
1	LINDODENDRON TULIPIFORA	TULIP POPLAR	33	GOOD	TO BE REMOVED
2	LINDODENDRON TULIPIFORA	TULIP POPLAR	32	GOOD/MULTI-TRUNK	TO REMAIN
3	LINDODENDRON TULIPIFORA	TULIP POPLAR	30	GOOD	TO BE REMOVED



BUS PAD DETAIL

DRIVEWAY CULVERT

DRIVEWAY CULVERT ANALYSIS:
 #12 HDPE @ 1.0% SLOPE, n = 0.013
 ENTRANCE LOSS COEFFICIENT = 0.90
 Q 2 = 0.75 CFS
 Q 100 = 2.00 CFS
 DEPTH = 0.54 FT
 Aw = 0.43 S.F.
 Pw = 1.65 FT
 V 2 = 3.60 FPS
 V 100 = 4.66 FPS
 ENTRANCE LOSS = 0.30 FT
 TOTAL HEAD AT ENTRANCE = 0.84 FT (100 YR)
 UIC DOES NOT OVERTOP

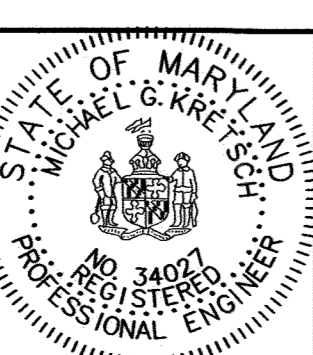
OWNER/DEVELOPER

BURKARD HOMES LLC,
 1511 RICHIE HWY, STE. 305
 ARNOLD, MD 21012
 240-375-1052

DEVELOPER'S/OWNER'S CERTIFICATE

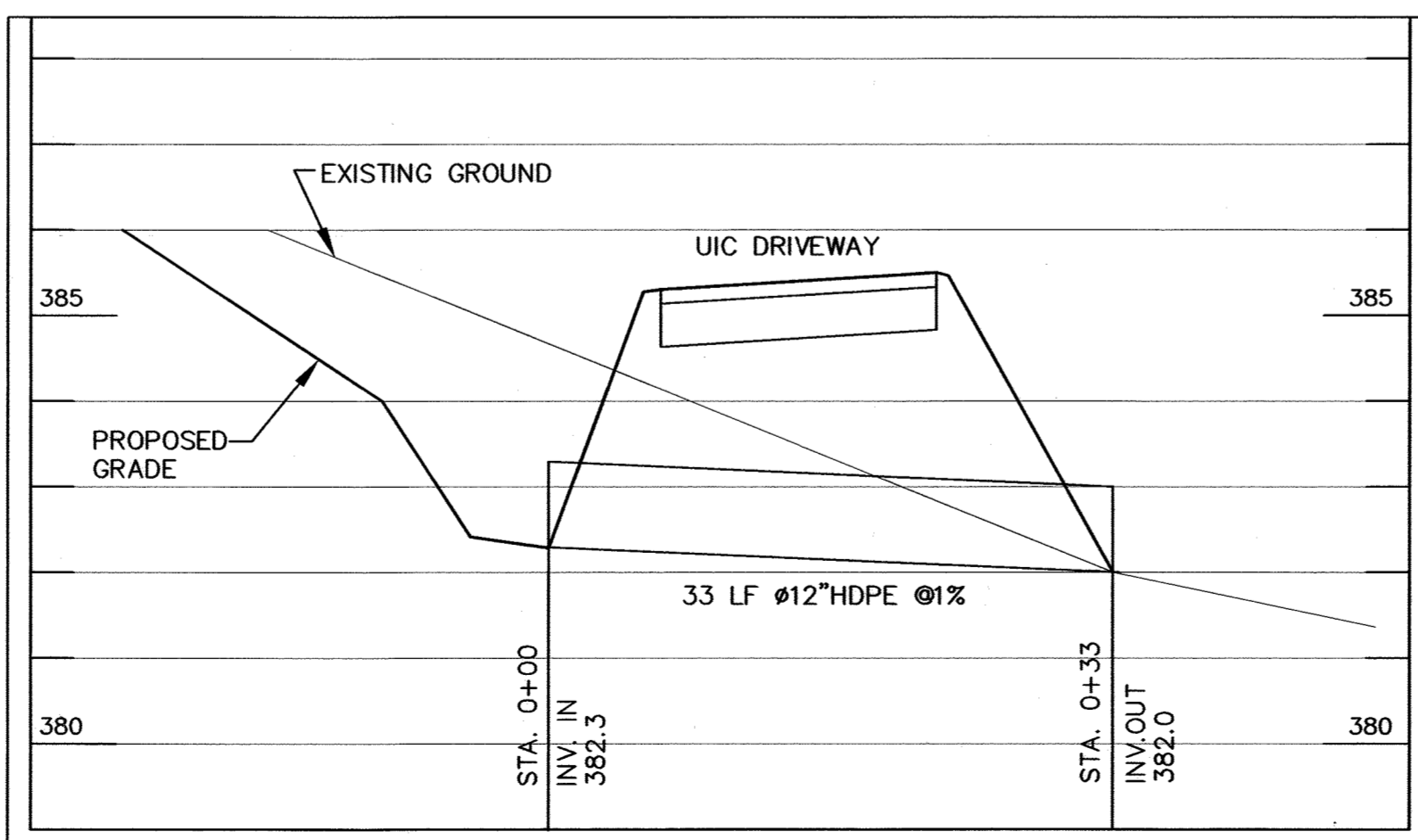
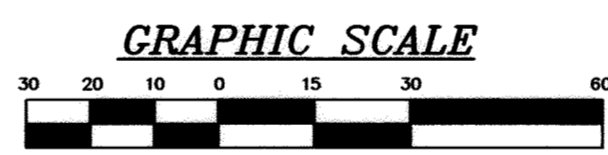
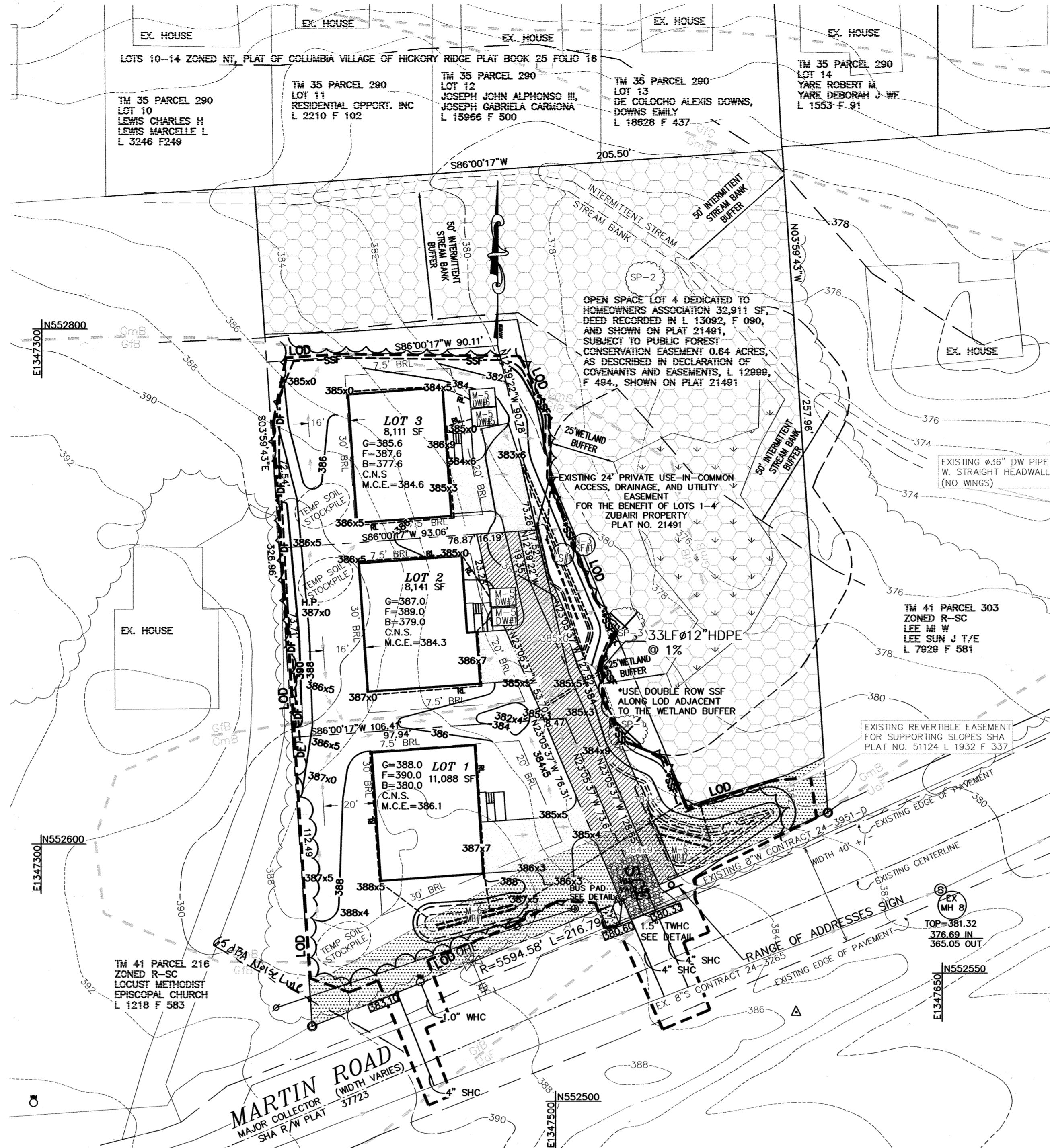
I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE, AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

[Signature] 5/24/21 DATE

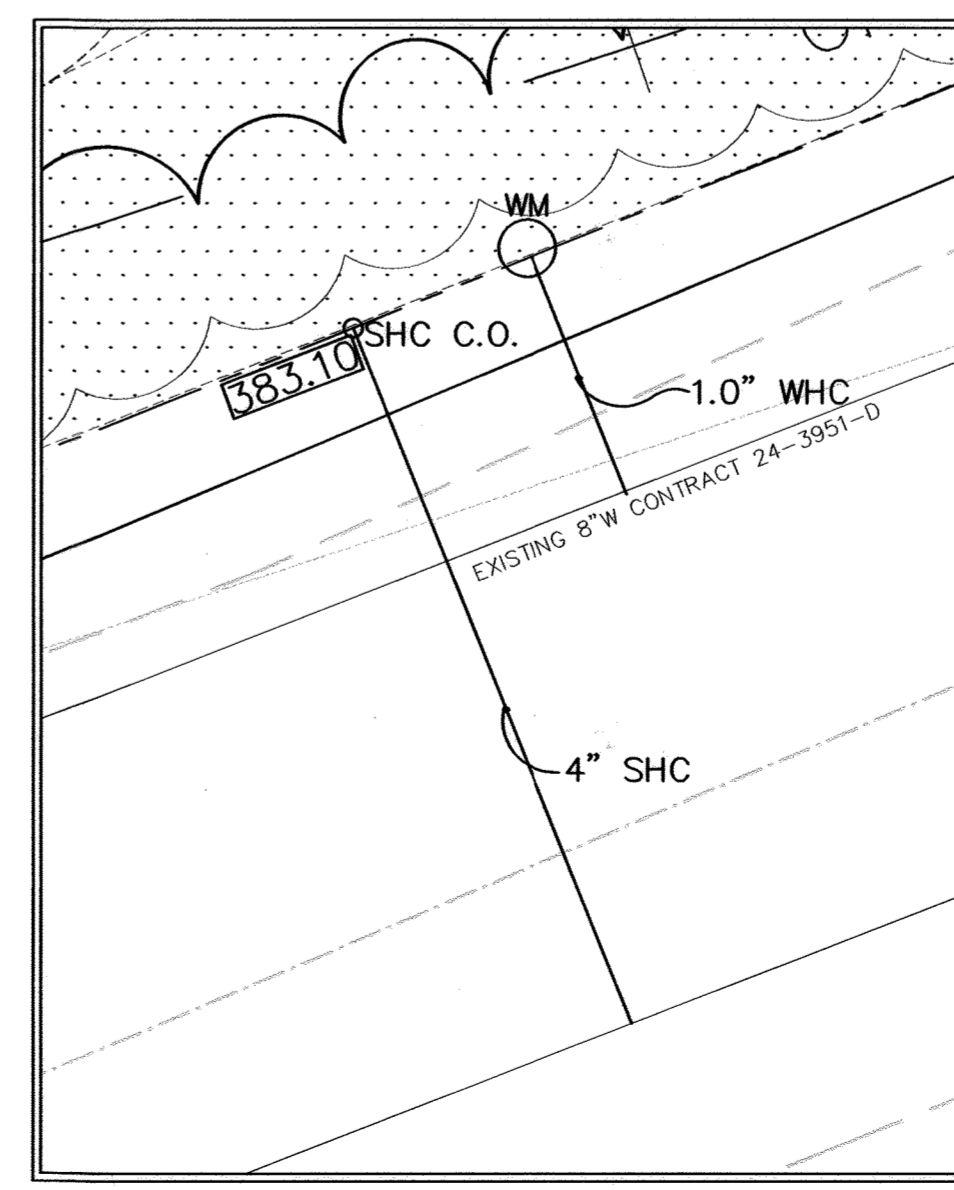


I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 34027, EXP DATE 01/16/2023

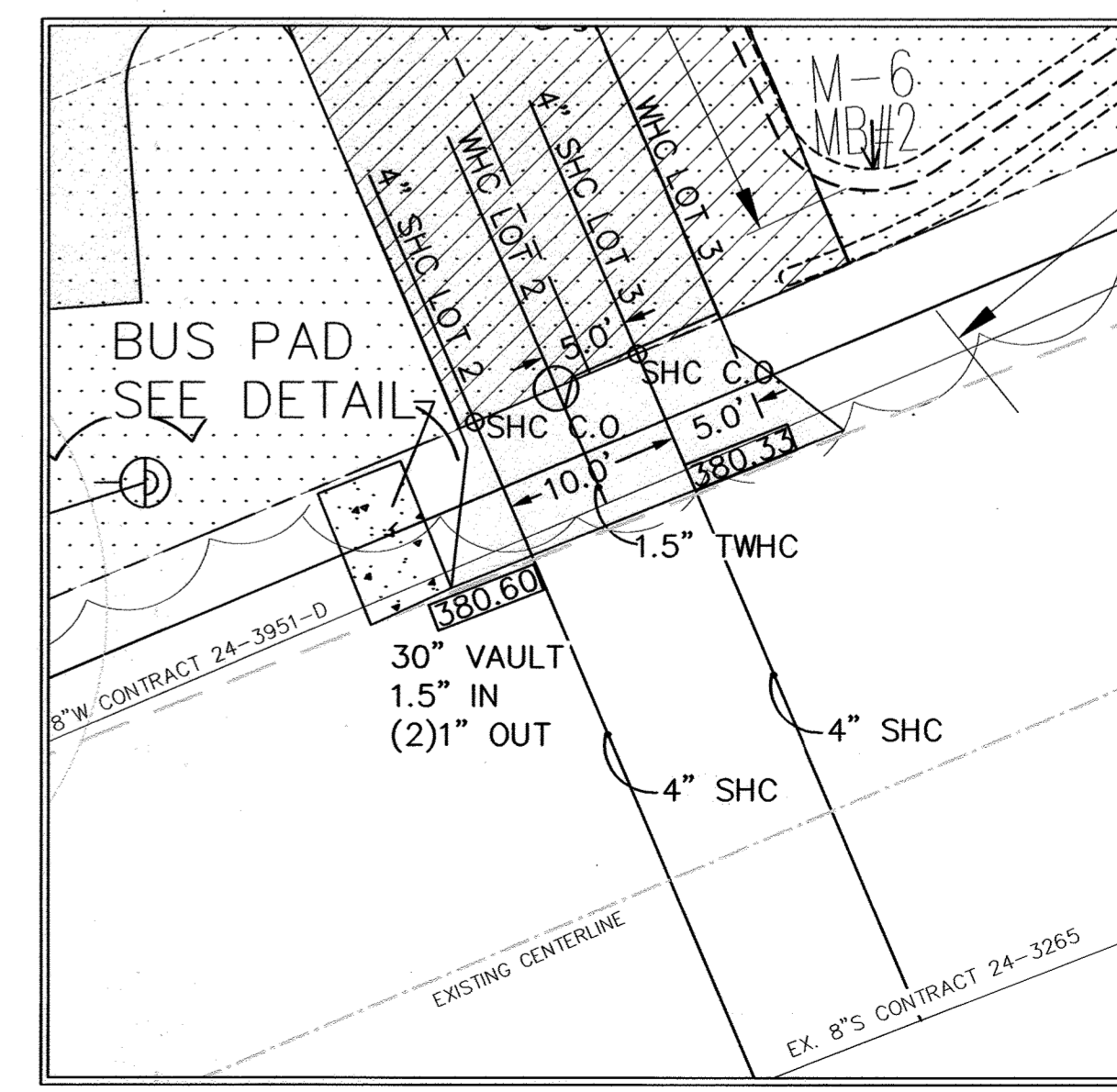
[Signature] 5/24/21 DATE



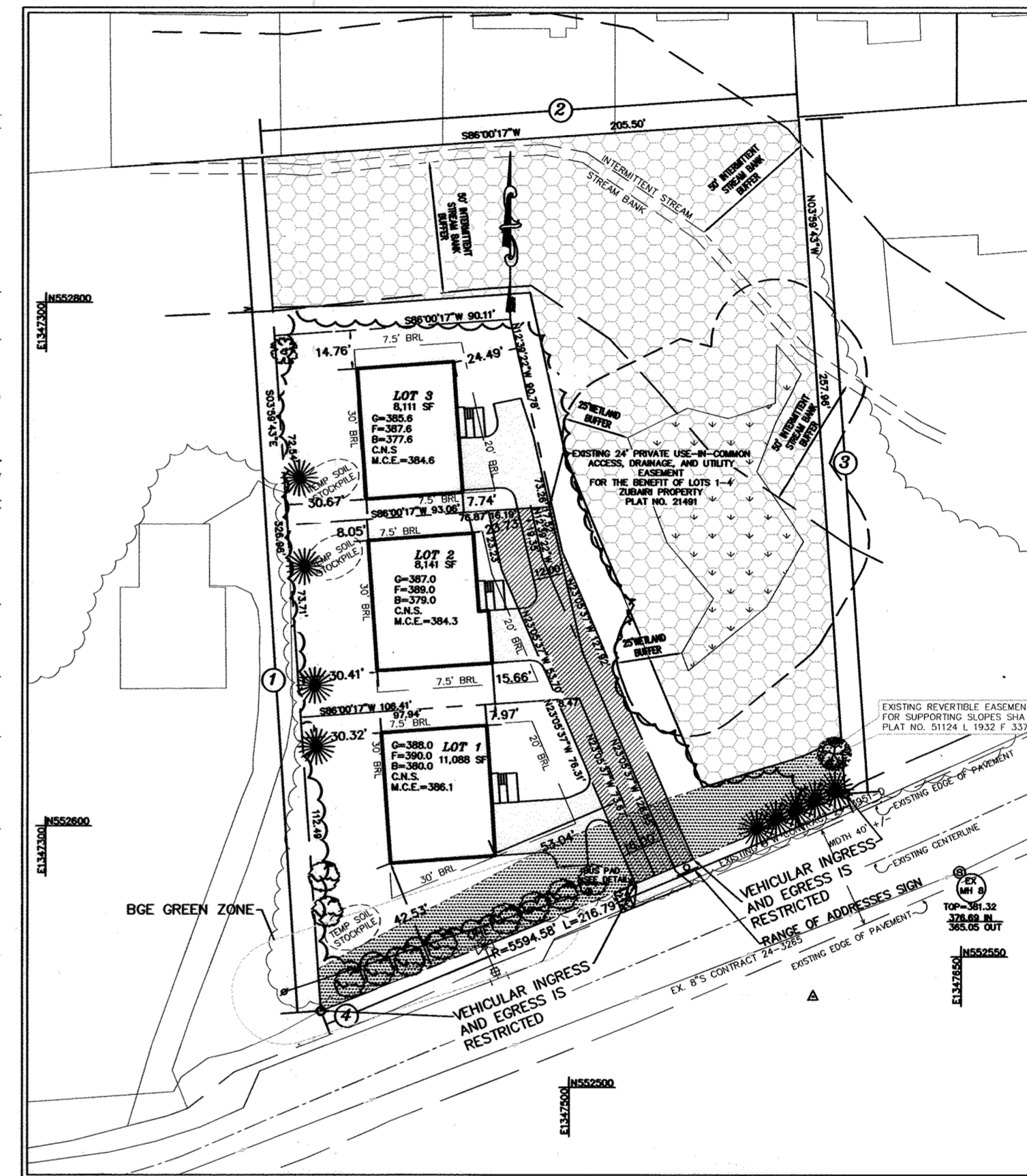
DRIVEWAY CULVERT PROFILE
1" = 2 FT VERTICAL, 1" = 10 FT HORIZONTAL



UTILITY CONNECTIONS LOT 1
1" = 10 FT



UTILITY CONNECTIONS AT ENTRANCE
1" = 10 FT



LANDSCAPING AND DIMENSIONS
1" = 50 FT

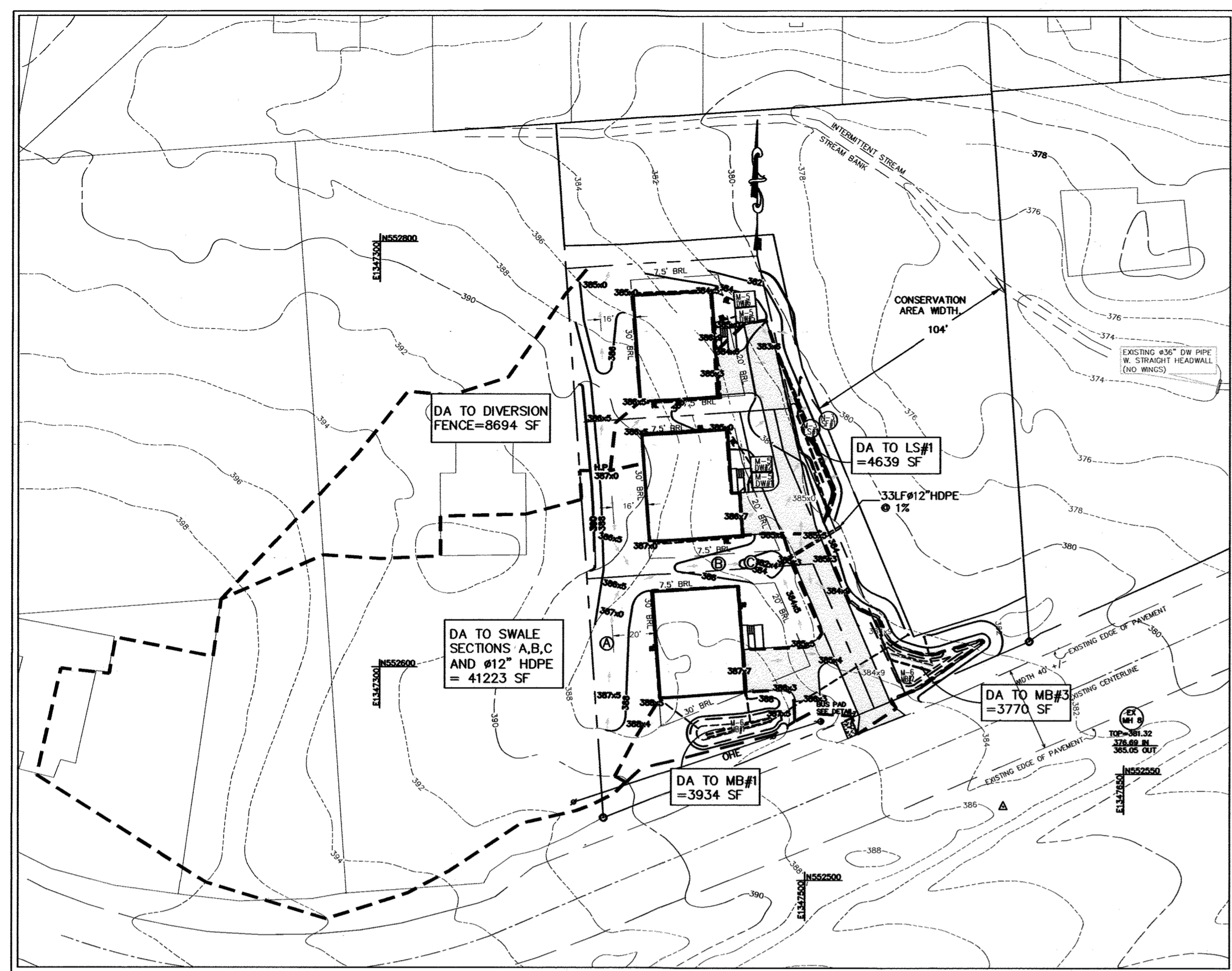
LEGEND

- M-B MICRO-BIORETENTION
- M-S DRY WELL
- M-3 LANDSCAPE INFILTRATION
- OUTLET PIPE
- DRIVEWAY CULVERT
- ROOF LEADER
- PROPOSED CONTOUR
- PROPOSED TREELINE
- EXISTING TREELINE
- EXISTING SPECIMEN TREE
- SSF SUPER SILT FENCE
- DF CLEAN WATER DIVERSION FENCE
- LIMIT OF DISTURBANCE
- FOREST CONSERVATION EASEMENT
- WETLANDS
- STABILIZED CONSTRUCTION ENTRANCE
- 24 FOOT UIC DW, STORM AND UTILITY EASEMENT
- CONCRETE BUS PAD
- SHA REVERSIBLE SLOPE EASEMENT
- SHC INV. ELEV. @ ROW

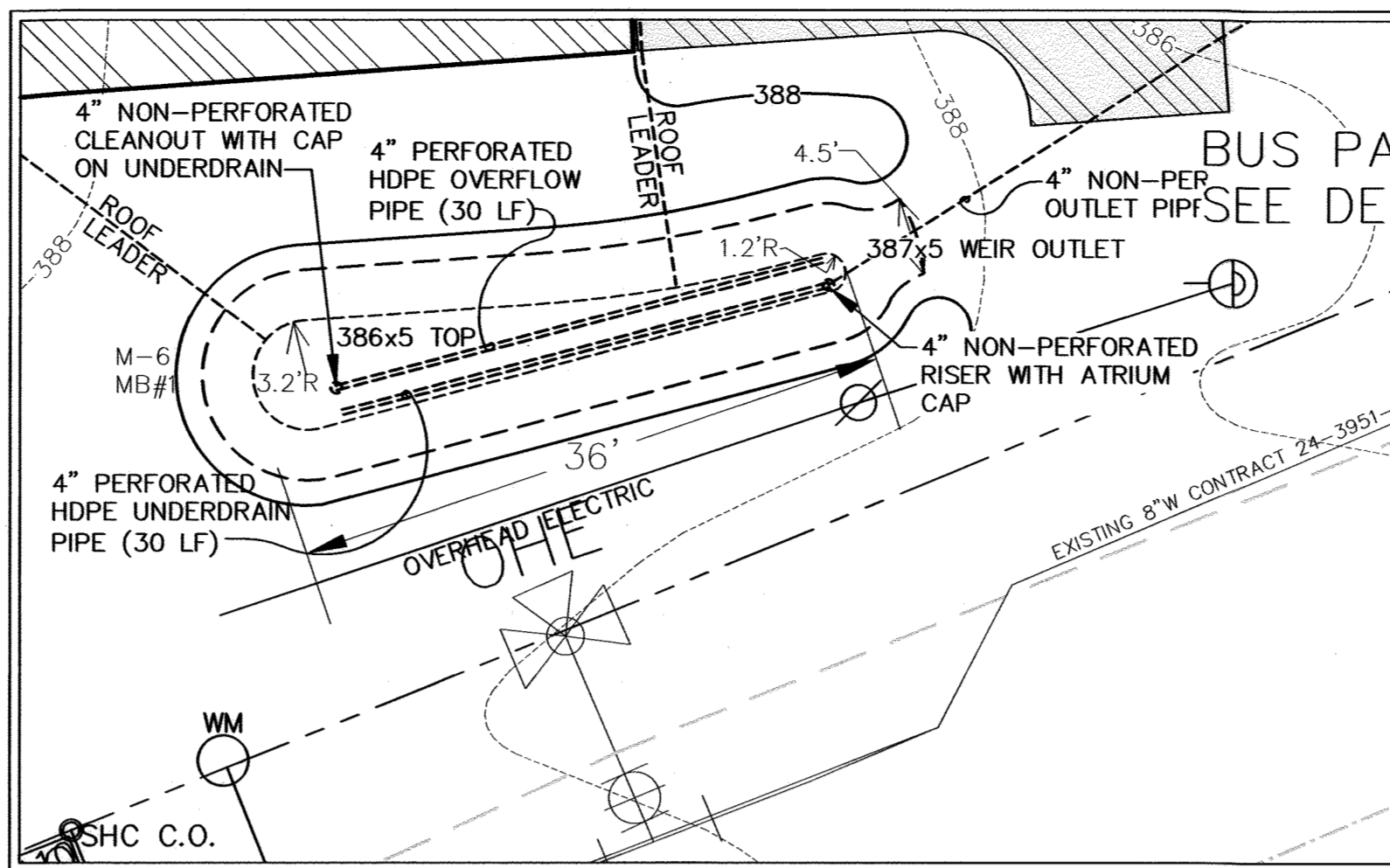
PROJECT: ZUBAIRI PROPERTY LOTS 1, 2 AND 3
 DATE: MAY 2021
 DRAWING: 19-015
 ENGINEER: MKG
 CHECKER: MKG
 APPROVAL: SAA

ZUBAIRI PROPERTY LOTS 1, 2 AND 3
 TAX MAP: 41 - PARCEL : 459 - GRID 006
 FIFTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SITE DEVELOPMENT PLAN

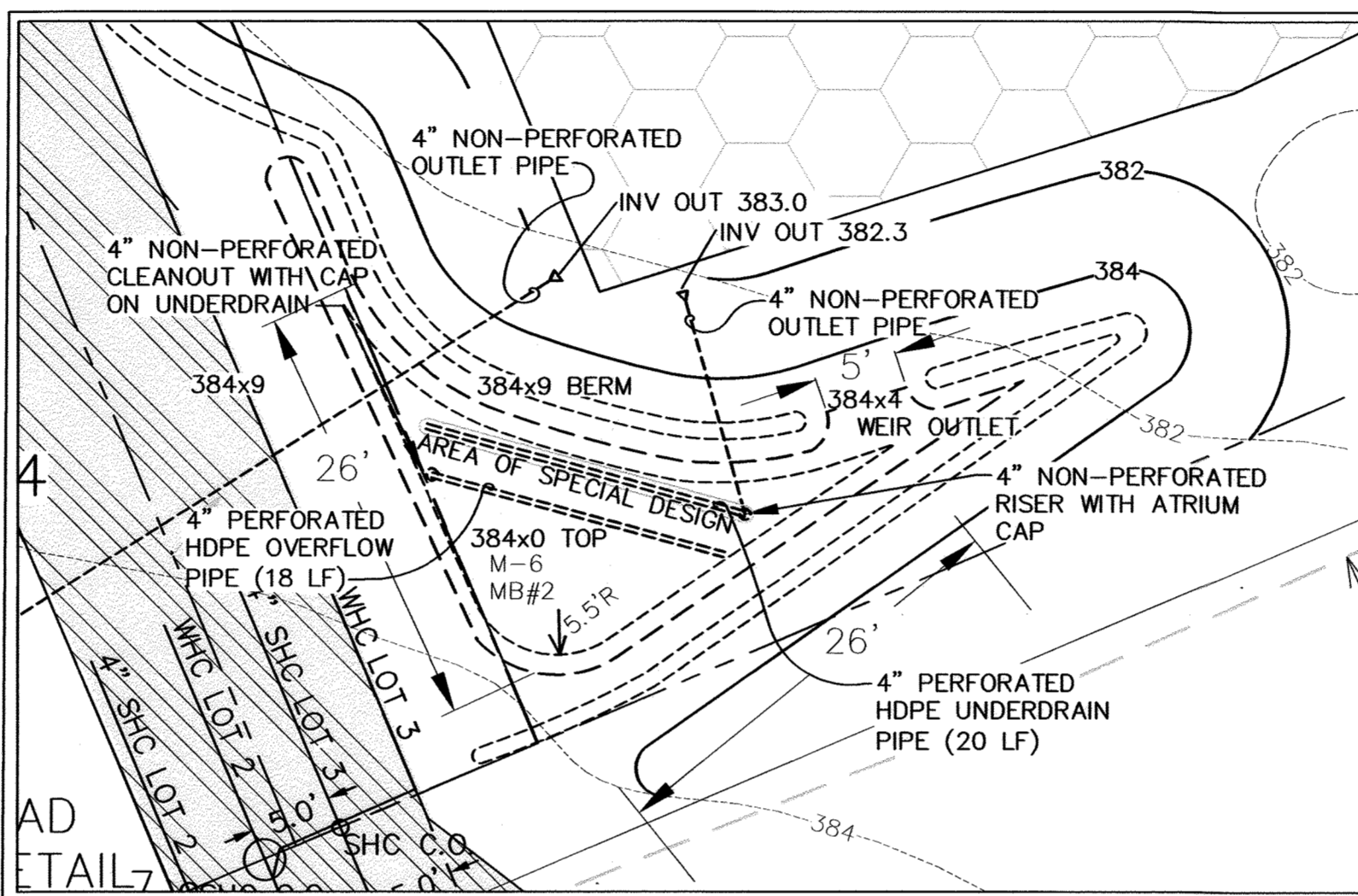
MILDENBERG, BOENDER & ASSOC., INC.
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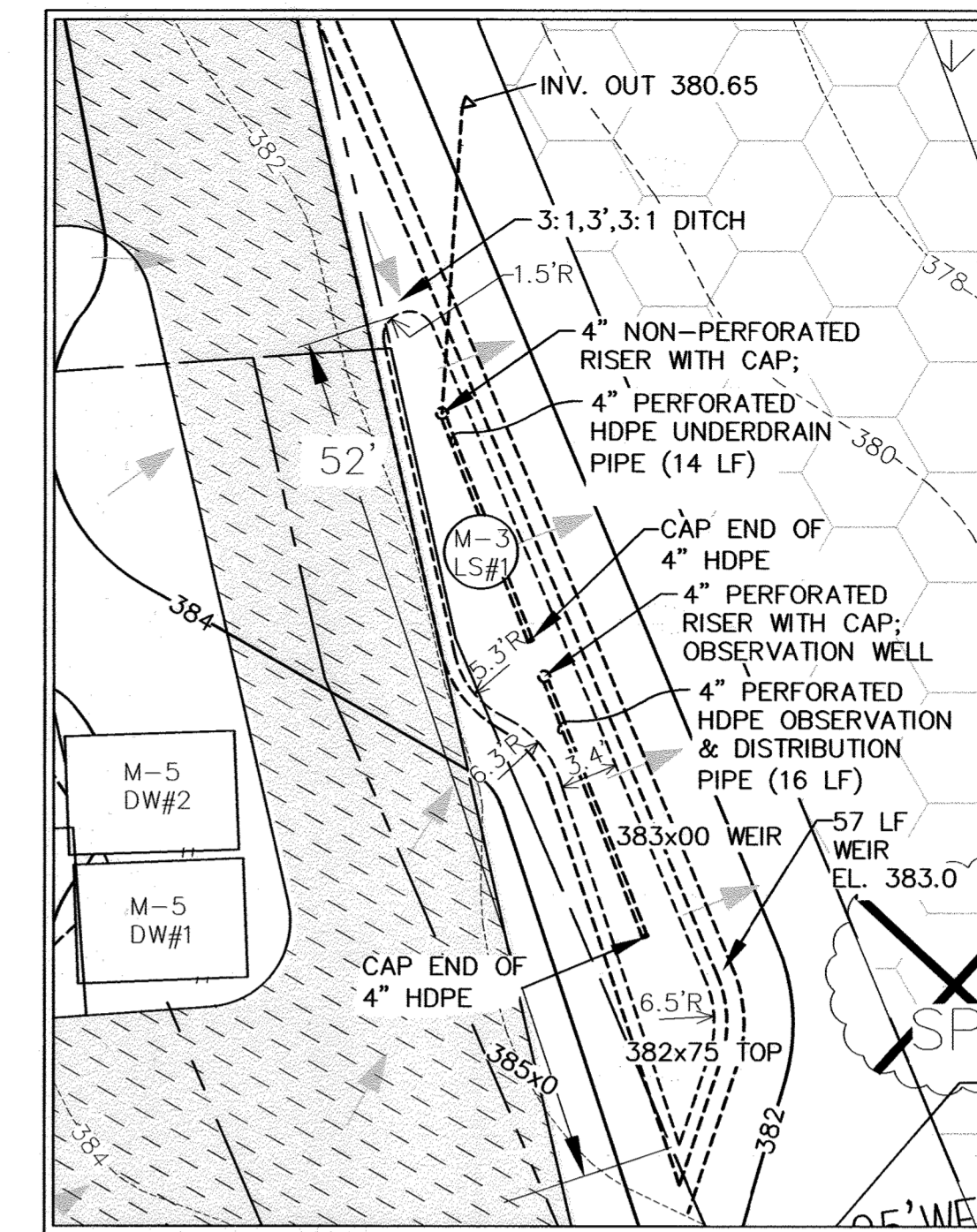
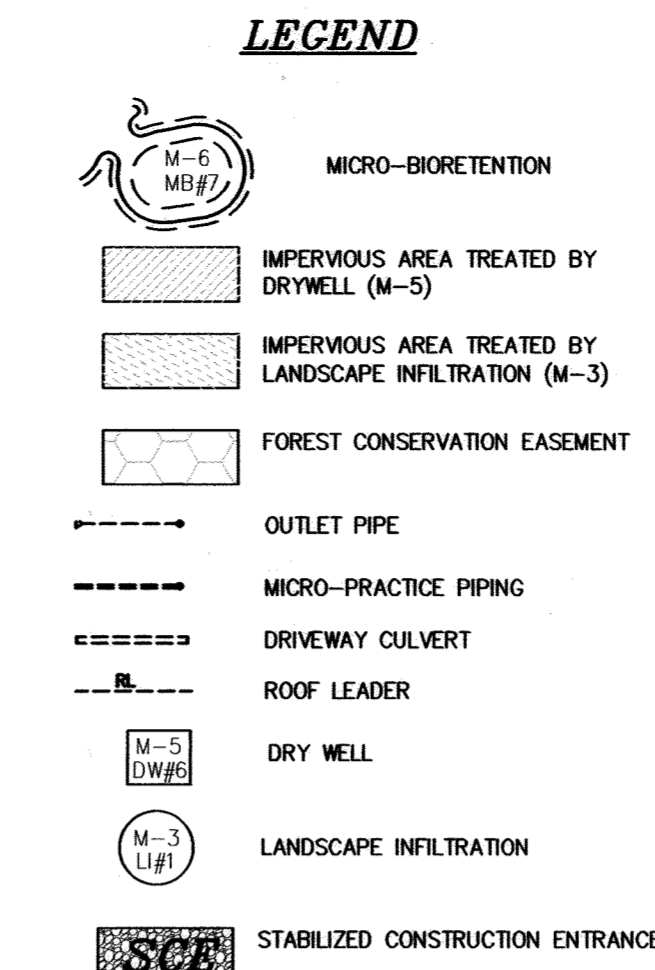
DRAINAGE AREA MAP
1" = 50 FT



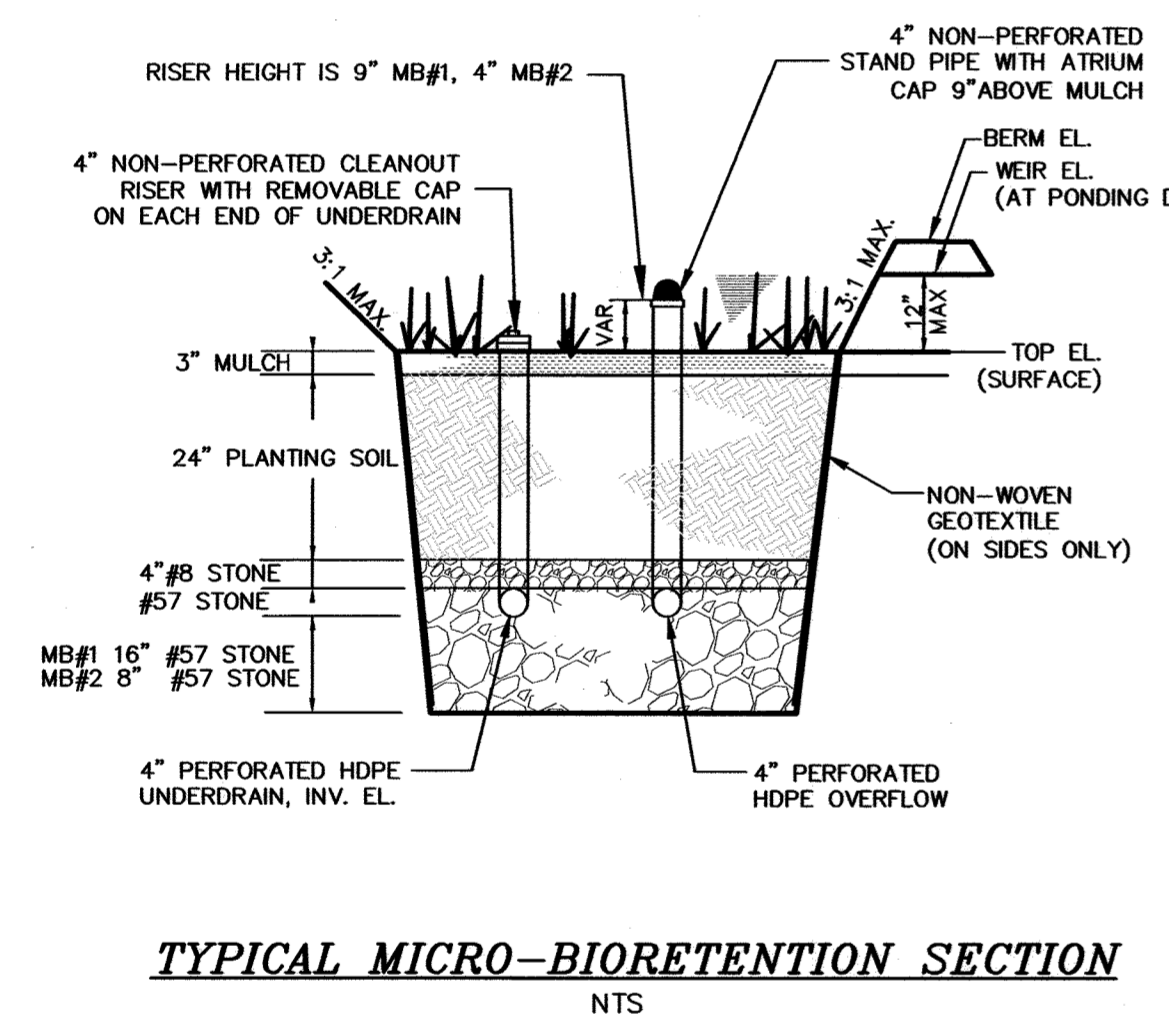
DETAIL MICRO-BIRETENTION #1
1" = 10 FT



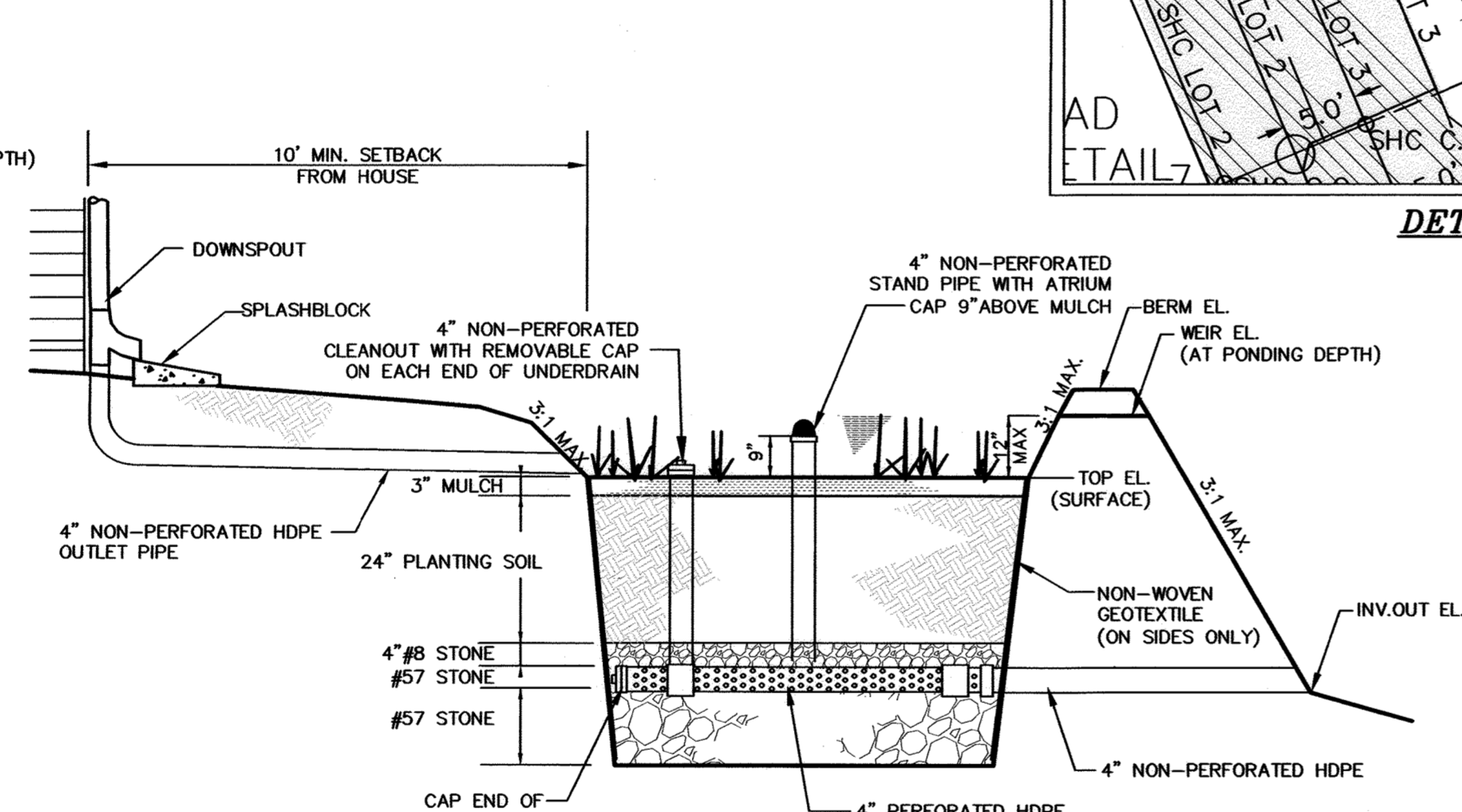
DETAIL MICRO-BIRETENTION #2
1" = 10 FT



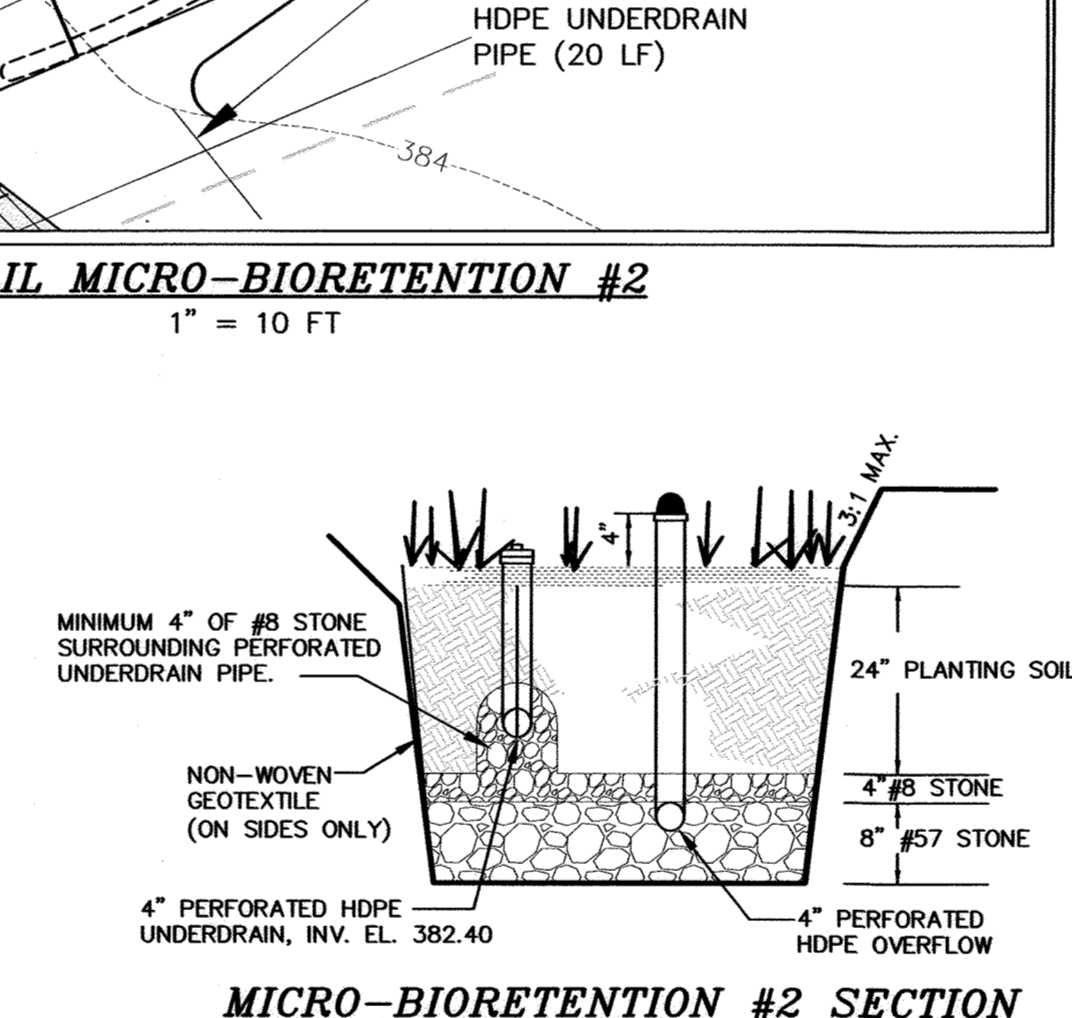
DETAIL LANDSCAPE INFILTRATION #1
1" = 10 FT



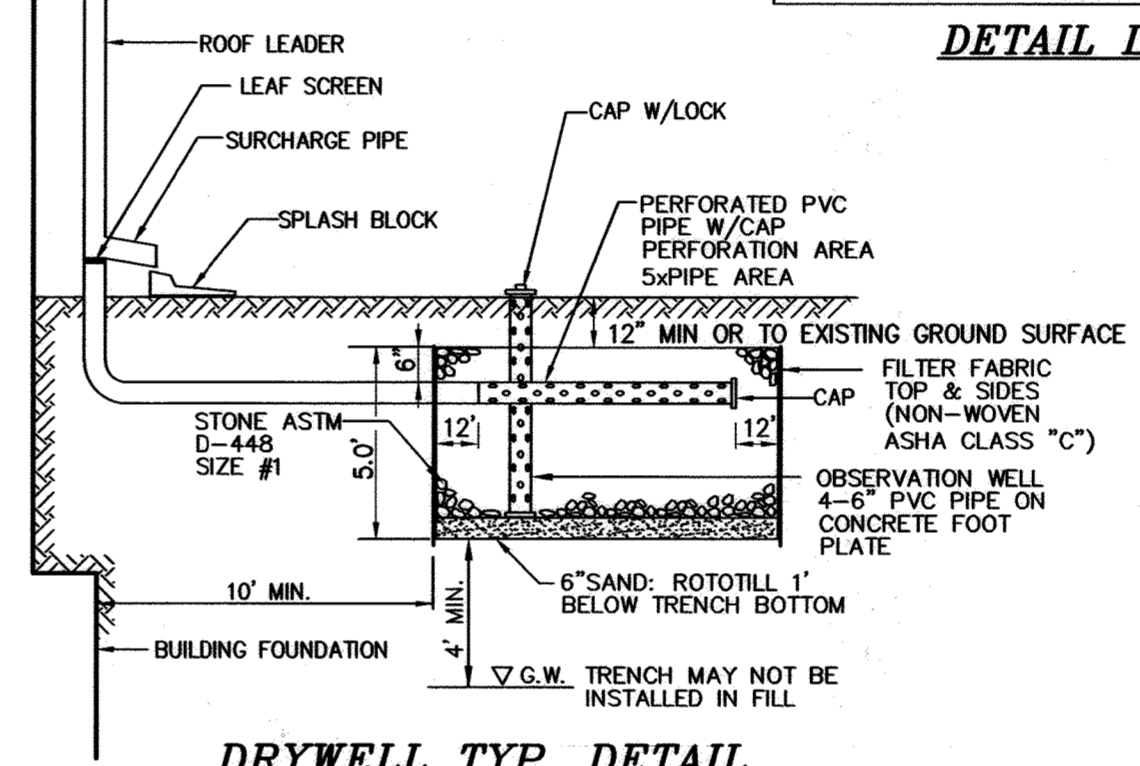
TYPICAL MICRO-BIRETENTION SECTION
NTS



TYPICAL MICRO-BIRETENTION PROFILE
NTS



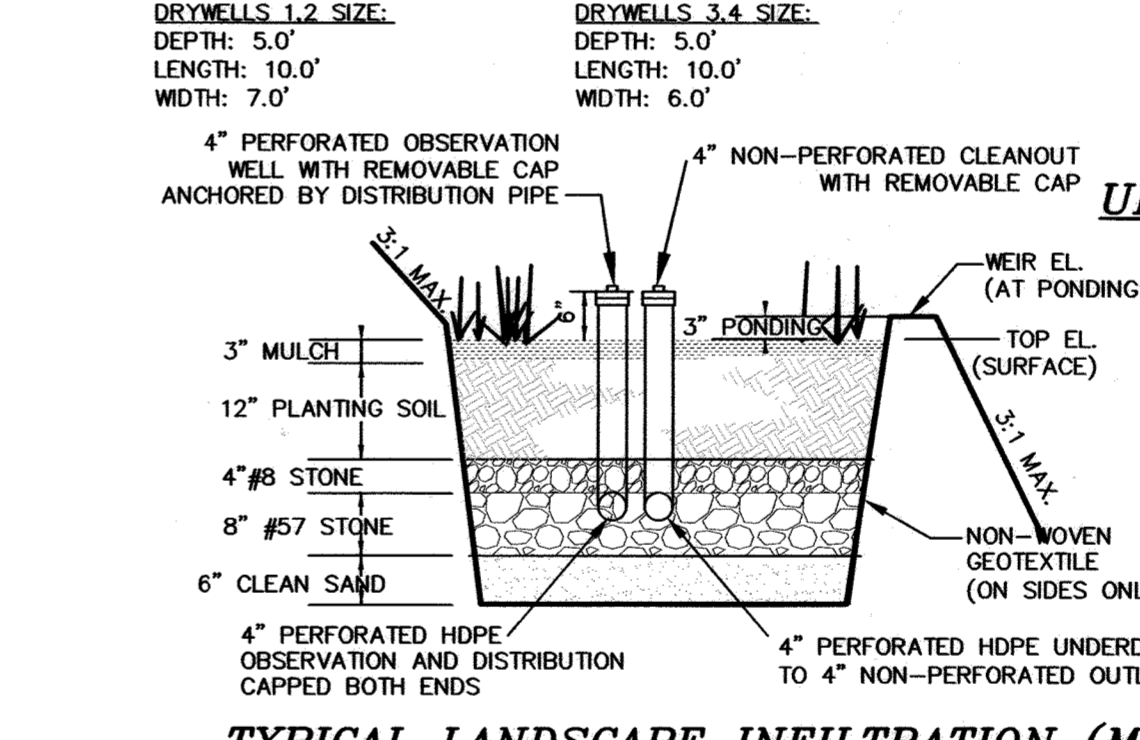
MICRO-BIRETENTION #2 SECTION SPECIAL DESIGN FOR OUTLET PIPE



DRYWELL TYP. DETAIL

SWM PRACTICES SCHEDULE

FACILITY#	AREA	REQUIRED ESDv	PROVIDED ESDv
MB #1 (M-6)	LOT 1 HOUSE	283 C.F.	335 C.F.
MB #2 (M-3)	LOT 1 DW, P/O UIC	335 C.F.	199 C.F.
DW #1,2 (M-5)	LOT 2 HOUSE	269 C.F.	280 C.F.
DW #3,4 (M-5)	LOT 3 HOUSE	232 C.F.	240 C.F.
LS #1 (M-3)	LOT 2, 3 DW, P/O UIC	301 C.F.	277 C.F.
SP #1 (M-3)	LOT 2, 3 DW, P/O UIC	0 C.F.	177 C.F.
TOTAL	ALL AREAS	1,422 C.F.	1,508 C.F.



TYPICAL LANDSCAPE INFILTRATION (M-3) SECTION

LANDSCAPE INFILTRATION UNDER-DRAIN SCHEDULE (M-3)

FACILITY	UNDRAIN INV. IN	UNDRAIN INV. OUT
LS-1/M-3	380.83	380.65

LANDSCAPE INFILTRATION SCHEDULE (M-3)

FACILITY	TOP EL. (SURFACE)	WEIR EL. (PONING)	BERM EL.	SURFACE AREA	PONDING AREA	PONDING DEPTH	VOLUME IN PONDING	VOLUME IN VOIDS	ESDv PROVIDED	ESDv REQUIRED
LS#1	382.75	383.00	LVL SPR*	213 S.F.	296 S.F.	0.25 FT.	64 CU.FT.	213 CU.FT.	277 CU.FT.	301 CU.FT.

MICRO-BIRETENTION SCHEDULE

FACILITY	TOP EL. (SURFACE)	WEIR EL. (PONING)	BERM EL.	UNDRAIN INV. IN	UNDRAIN INV. OUT	SURFACE AREA	PONDING AREA	PONDING DEPTH	GRAVEL DEPTH BELOW UNDERDRAIN
MB#1	386.75	387.50	388.00	383.83	383.07	135 S.F.	383 S.F.	12"	16"
MB#2*	384.00	384.4	384.9	382.40	382.27	210 S.F.	345 S.F.	5"	12"

SHEET FLOW TO CONSERVATION AREA

WIDTH OF CONSERVATION AREA: (SHORTEST DISTANCE, MEASURED PERPENDICULAR TO CONTOURS, ENDING AT STREAM BANK) >100 FT USE MAXIMUM CREDIT FOR THIS PRACTICE, 1".

SWALE INFORMATION

SWALE SECTION	BOTTOM WIDTH FT	SIDE SLOPE	LONGITUDINAL SLOPE FT/FT	Q10 CFS	V10 FPS	Q100 CFS	V100 FPS
A	4	6:1	0.01	1.15	0.50	1.99	0.60
B	4	3:1	0.03	1.15	0.71	1.99	0.84
C	4	3:1	0.07	1.15	0.95	1.99	1.14

DEVELOPERS CERTIFICATE
I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY 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: Tin Bukal
DATE: 5/24/21

ENGINEER'S CERTIFICATE
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT 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: Michael C. Kretsch, P.E.
DATE: 5/24/21

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

Signature: Alexander Butcher
DATE: 06/08/21

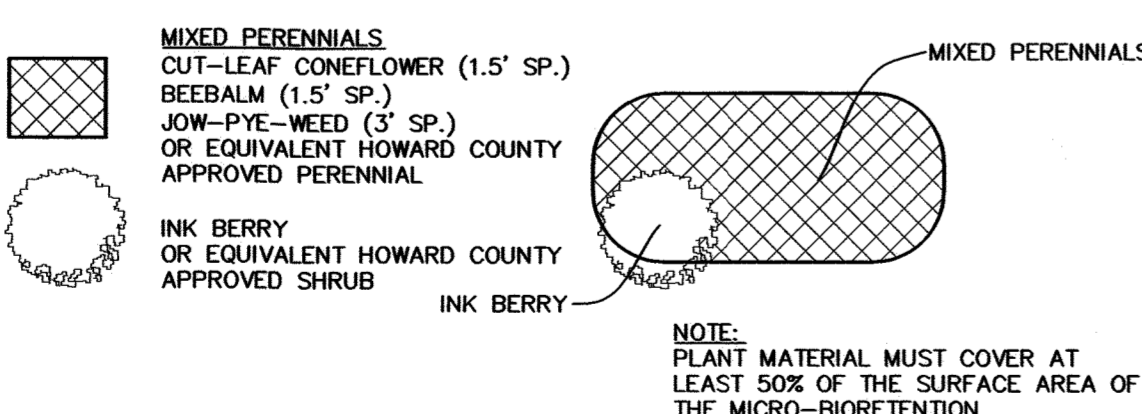
APPROVED: DEPARTMENT OF PLANNING AND ZONING
Signature: [Signature]
DATE: 6-17-21

Signature: [Signature]
DATE: 6/30/21

Signature: [Signature]
DATE: 6/30/21

TYPICAL MICRO-BIRETENTION PROFILE
SCALE: 1"=30"

MICRO-BIRETENTION (MB-3) PLAN
SCALE: 1"=30"



TYP. MICRO-BIRETENTION (M-6) DETAIL
SCALE: NTS

OPERATION AND MAINTENANCE SCHEDULE FOR MICRO-BIRETENTION (M-6) AND LANDSCAPE INFILTRATION (M-3)

- 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 AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, REPLACE DEAD PLANT MATERIAL WITH ACCEPTABLE REPLACEMENT PLANT MATERIAL, TREAT DISEASED TREES AND SHRUBS AND REPLACE ALL DEFICIENT STAKES AND WIRES.
- 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.

ADDRESS CHART

LOT	ADDRESS
1	6815 MARTIN ROAD
2	6813 MARTIN ROAD
3	6811 MARTIN ROAD

OWNER/DEVELOPER
BURKARD HOMES LLC.
1511 RICHIE HWY, STE. 305
ARNOLD, MD 21012
240-375-1052

project: 19-015
date: MAY 2021
illustration: MGK
scale: AS SHOWN
approval: SAA

description: ZUBAIRI PROPERTY LOTS 1,2 AND 3
revisions: [None]

ZUBAIRI PROPERTY LOTS 1,2 AND 3
TAX MAP: 41 - PARCEL: 459 - GRID 006
HOWARD COUNTY, MARYLAND
FIFTH ELECTION DISTRICT
STORM WATER MANAGEMENT DETAILS

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
7350-B Grace Drive, Columbia, Maryland 21044
(410) 997-0296 Tel. (410) 997-0298 Fax.

3 OF 4
SDP-20-071

STANDARD SEDIMENT CONTROL NOTES

- 1. A PRE-CONSTRUCTION MEETING MUST OCCUR WITH THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS, CONSTRUCTION INSPECTION DIVISION (CID), 410-313-1855 BEFORE THE FUTURE L.O.D. AND PROTECTED AREAS ARE MARKED CLEARLY IN THE FIELD...

Table with 2 columns: Category (e.g., AREA DISTURBED, TOTAL CUT) and Value (e.g., 0.628 ACRES, 1.200 CU. YDS.)

- 7. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.

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

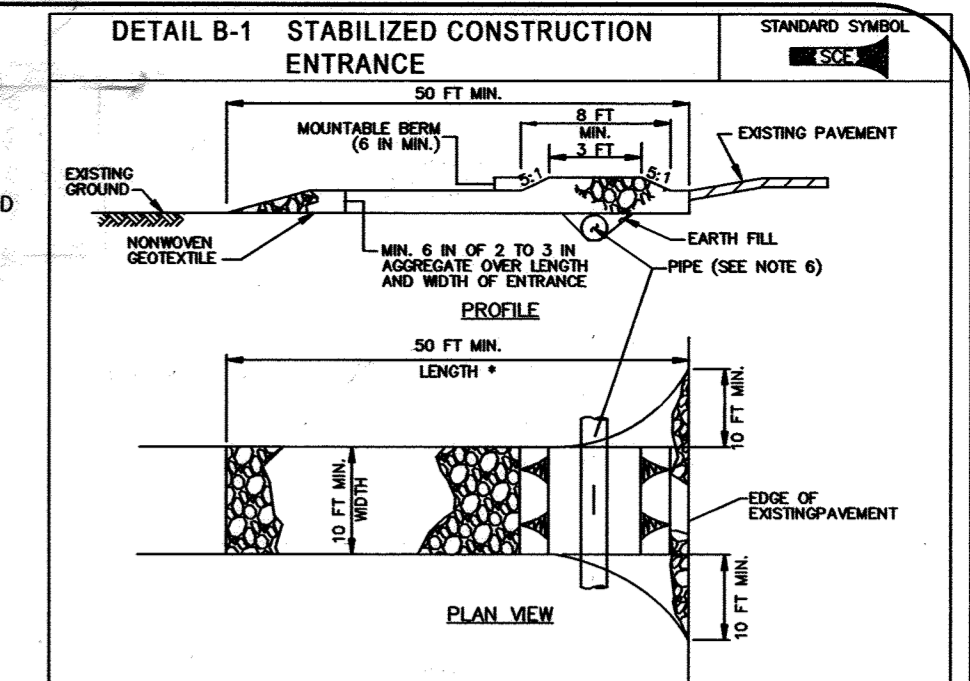
DEFINITION THE APPLICATION OF SOIL TO ESTABLISH VEGETATIVE COVER. PURPOSE TO STABILIZE DISTURBED SOIL WITH VEGETATION FOR UP TO 6 MONTHS.

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

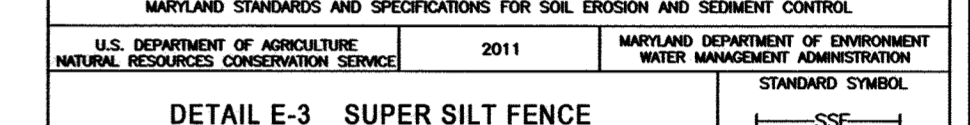
DEFINITION THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER. PURPOSE TO PROTECT DISTURBED SOILS FROM EROSION DURING AND AT THE END OF CONSTRUCTION.

(B-4-5) STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

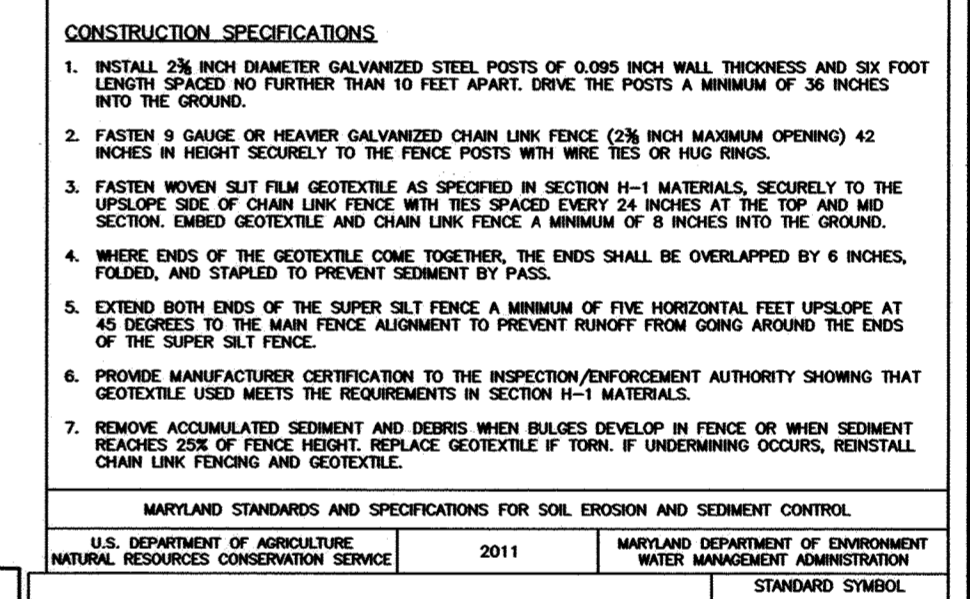
DEFINITION TO STABILIZE DISTURBED SOIL WITH PERMANENT VEGETATION. PURPOSE TO USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER OF DISTURBED AREAS WHERE GROUND COVER IS NEEDED FOR 6 MONTHS OR MORE.



CONSTRUCTION SPECIFICATIONS 1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SIZE...



CONSTRUCTION SPECIFICATIONS 1. INSTALL 2x4 WHEN MANUFACTURED GALVANIZED STEEL POSTS OF 0.600 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART...



CONSTRUCTION SPECIFICATIONS 1. USE 42 INCH HIGH, 5 GAUGE OR THICKER CHAIN LINK FENCING (2% MINIMUM OPENING).

DEVELOPERS CERTIFICATE I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN...

ENGINEER'S CERTIFICATE I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE...

DEPARTMENT OF PLANNING AND ZONING CHIEF, DEVELOPMENT ENGINEERING DIVISION 6-17-21 DATE

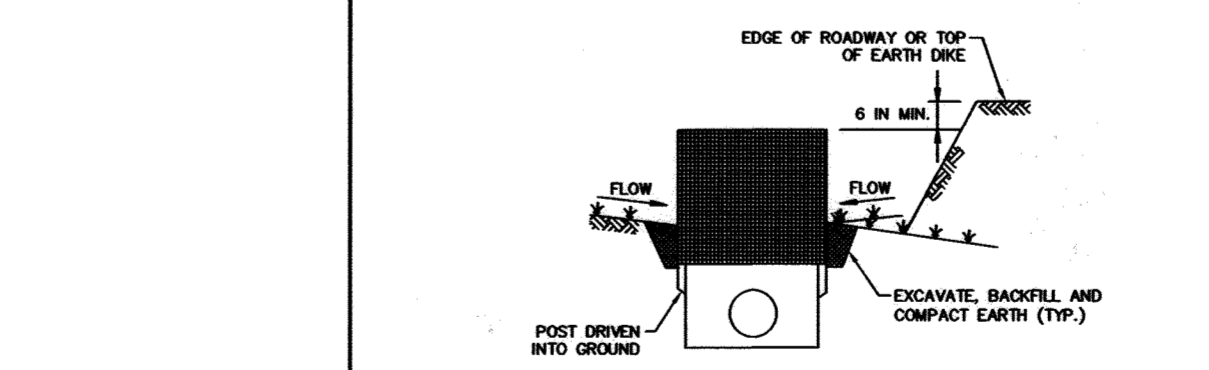
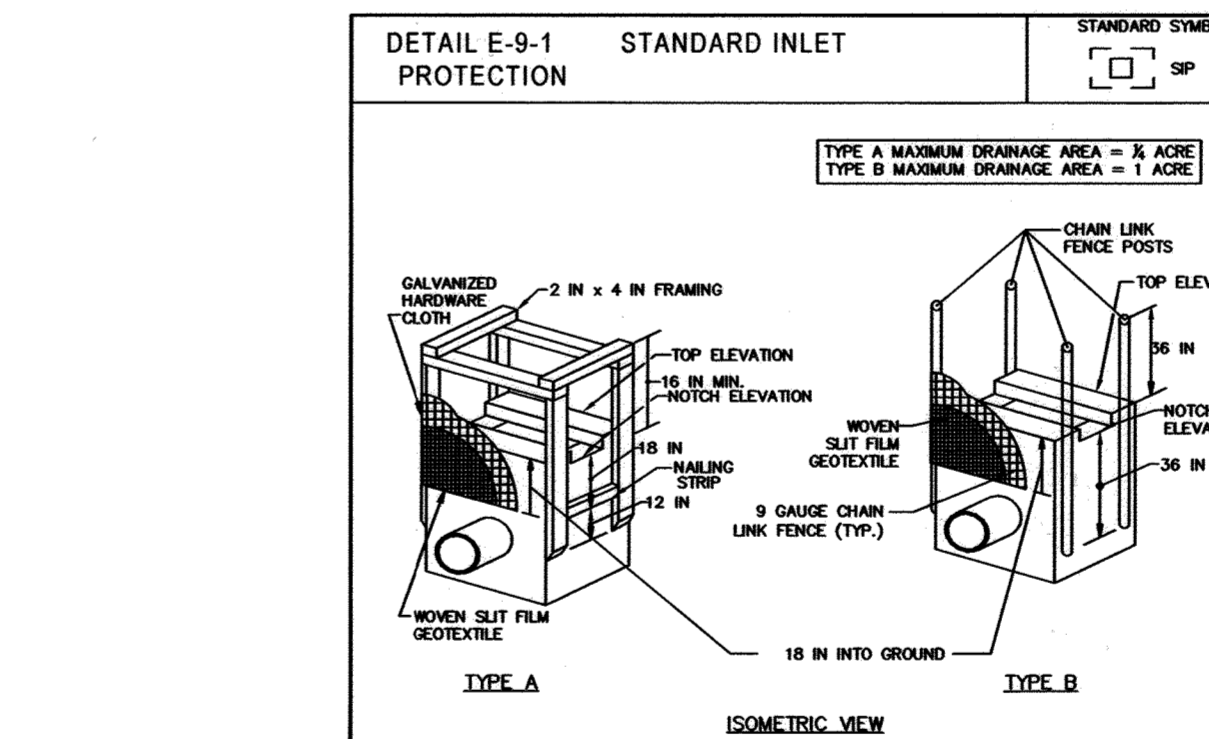
(B-4-8) STANDARDS AND SPECIFICATION FOR STOCKPILE AREA

DEFINITION TO PROVIDE A DESIGNATED LOCATION FOR THE TEMPORARY STORAGE OF SOIL THAT CONTROLS THE POTENTIAL FOR EROSION, SEDIMENTATION AND CHANGES TO DRAINAGE PATTERNS.

(B-4-4) STANDARDS AND SPECIFICATIONS FOR TEMPORARY STABILIZATION

DEFINITION TO STABILIZE DISTURBED SOIL WITH VEGETATION FOR UP TO 6 MONTHS.

TEMPORARY SEEDING FOR SITE STABILIZATION table with columns: PLANT SPECIES, SEEDING RATE, SEEDING DEPTH, RECOMMENDED SEEDING DATES.



PERMANENT SEEDING SUMMARY

PERMANENT SEEDING SUMMARY table with columns: NO., SPECIES, APPLICATION RATE, SEEDING DATES, SEEDING DEPTHS, N, P2O5, K2O, LIME RATE.

MILDENBERG, BOENDER & ASSOC., INC. ZUBAIRI PROPERTY LOTS 1, 2 AND 3 TAX MAP: 41 - PARCEL: 459 - GRID: 006 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND