

STORMWATER MANAGEMENT PLANS FOR LANDS OF MAGNOLIA 622, LLC



LEGEND:

- EXISTING CONTOUR 100
- EXISTING ZONING BOUNDARY
- EXISTING ZONING DESIGNATION **R2**
- EXISTING TREELINE
- 100 YEAR FLOOD PLAIN
- EXISTING WETLAND BUFFER
- EXISTING 75' NRD BOUNDARY
- PROPERTY LINE
- BUILDING SETBACK LINE
- EXISTING EASEMENT
- EXISTING GUARDRAIL
- EXISTING SOILS LINE
- EXISTING SOILS LABEL **BeB**
- FOREST CONSERVATION AREA
- EXISTING WETLANDS
- EXISTING GRAVEL AREA TO REMAIN
- EXISTING GRAVEL AREA TO BE REMOVED
- EXISTING PAVING TO BE REMOVED
- SLOPES 15-25%
- SLOPES >25%

LANDS OF STEPHEN R. YOUNG
119 MAGNOLIA ROAD
TAX ACCT. #: 01069888
DEED REF.: 2265618

LANDS OF KENNETH EUGENE ANDERSON & PEGGY ANN ANDERSON
117 MAGNOLIA ROAD
TAX ACCT. #: 01013335
DEED REF.: 2904528

LANDS OF DIANE NAGEL HANSON
TAX ACCT. #: 01042416
DEED REF.: 1275808

LANDS OF JEAN E. HANSON & DIANE NAGEL HANSON
TAX ACCT. #: 01380230
DEED REF.: 102089

LANDS OF THEODORE C. ANDERSON
120 MAGNOLIA ROAD
TAX ACCT. #: 01002007
DEED REF.: 716164

LANDS OF MICHAEL S. REBELLO & ERIN D. REBELLO
TAX ACCT. #: 01025538
DEED REF.: 13217436

LANDS OF MICHAEL S. REBELLO & ERIN D. REBELLO
114 MAGNOLIA ROAD
TAX ACCT. #: 01064286
DEED REF.: 11614406

LANDS OF RONALD R. HUBER & THERESA A. HUBER
TAX ACCT. #: 01348252
DEED REF.: 45317565

LANDS OF VICTORIA K. ZIDWICK & MARK A. ZIDWICK JR.
116 MAGNOLIA ROAD
TAX ACCT. #: 01080369
DEED REF.: 912258

LANDS OF MICHAEL S. REBELLO & ERIN D. REBELLO
110 MAGNOLIA ROAD
TAX ACCT. #: 01025546
DEED REF.: 13217436

LANDS OF BOARD OF EDUCATION
901 TRIMBLE ROAD
TAX ACCT. #: 01015060
DEED REF.: 908381

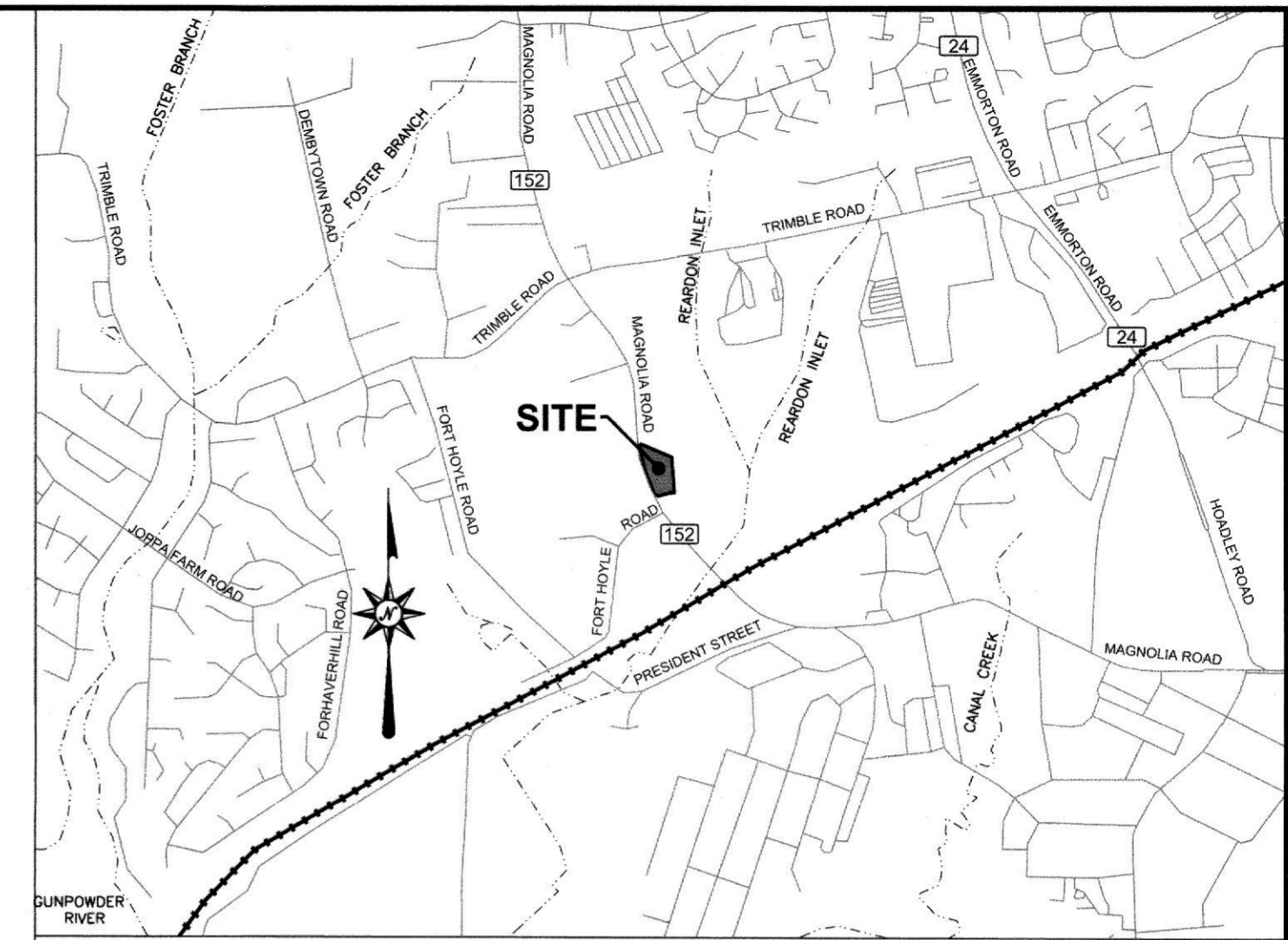
MAGNOLIA ROAD
PLAT: 3912
DEED REF: G.C.B. 261/297

MD ROUTE 152

PLAN VIEW
SCALE: 1"=40'

SHEET INDEX

- SHEET 1: TITLE SHEET
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- SHEET 3: STORMWATER MANAGEMENT & GRADING PLAN
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- SHEET 5: PROPOSED DRAINAGE AREA MAP
- SHEET 6: EROSION & SEDIMENT CONTROL OVERLAY PLAN
- SHEET 7: STORMWATER MANAGEMENT NOTES & DETAILS
- SHEET 8: STORMWATER MANAGEMENT DETAILS
- SHEET 9: CONSTRUCTION SPECIFICATIONS
- SHEET 10: EROSION AND SEDIMENT CONTROL NOTES & DETAILS
- SHEET 11: SUBMERGED GRAVEL WETLAND LANDSCAPING



VICINITY MAP

SCALE: 1" = 2000'

GENERAL NOTES:

1. LOT INFORMATION:
ADDRESS: 109 MAGNOLIA ROAD, JOPPA MD 21085
TAX ACCOUNT #: 01380206
DEED REF: /15734/00161
TAX MAP 69, GRID: 1D, PARCEL: 274
2. OWNER:
MAGNOLIA 622, LLC
5200 GLEN ARM ROAD, SUITE M
GLEN ARM, MD 21057
ATTN: CURTIS SANDBEK
PHONE: 410-977-8190
3. PROPERTY AREA: 167,222 S.F. / 3.839 AC.
4. ZONING: CI-COMMERCIAL INDUSTRIAL
5. CURRENT USE: FORESTED LAND
6. PROPOSED USE: COMMERCIAL, LANDSCAPE COMPANY
7. THIS SITE DOES NOT LIE WITHIN THE CHESAPEAKE BAY CRITICAL AREA
8. THERE ARE NON-TIDAL WETLANDS ON SITE. NTW WERE DELINEATED BY GTA IN FEB. 2023.
9. REQUESTS WERE SUBMITTED FOR RECORDS REGARDING THE NEIGHBORING SITES WELL SEPTIC SYSTEM INFORMATION AND NO PLANS SHOWING PRECISE LOCATIONS WERE FOUND.
10. ALL AREAS WITHIN THE NRD AND WETLANDS THAT FALL OUTSIDE THE LOD ARE TO BE PROTECTED DURING CONSTRUCTION WITH APPROVED EROSION AND SEDIMENT CONTROL MEASURES.
11. SWM OUTFALL WILL BE LOCATED IN AN AREA THAT IS STABILIZED.

HARFORD COUNTY STORMWATER MANAGEMENT BILLING #: 92096

THESE PLANS HAVE BEEN REVIEWED BY HARFORD COUNTY AND MEET THE TECHNICAL REQUIREMENTS FOR STORMWATER QUANTITY AND/OR QUALITY MANAGEMENT ONLY.

REVIEWED FOR TECHNICAL SUFFICIENCY

Michael B... 8/16/2025
STORMWATER MANAGEMENT

REVIEW AND APPROVAL RECOMMENDED

Robert E. Gibson 7-17-25
CHIEF ENGINEER

APPROVAL RECOMMENDED

Stacy... 7/21/25
DEPUTY DIRECTOR OF PUBLIC WORKS

APPROVED

Stacy... 7-22-25
DIRECTOR OF PUBLIC WORKS

FINAL STORMWATER MANAGEMENT PLAN TITLE SHEET FOR

LANDS OF MAGNOLIA 622, LLC

CONTRACT # SWMENG-000430/2023
SWM BILLING #: 92096

SITUATED IN: 1ST ELECTION DISTRICT, HARFORD COUNTY, MARYLAND

DEVELOPER'S/LANDOWNER'S CERTIFICATION
I/WE HEREBY CERTIFY THAT ALL PROPOSED WORK SHOWN ON THESE CONSTRUCTION DRAWING(S) WILL BE ACCOMPLISHED PURSUANT TO THESE PLANS. I/WE ALSO UNDERSTAND THAT IT IS MY/OUR RESPONSIBILITY TO HAVE THE CONSTRUCTION SUPERVISED AND CERTIFIED, INCLUDING THE SUBMITTAL OF "AS-BUILT" PLANS WITHIN 30 DAYS OF COMPLETION, BY A REGISTERED PROFESSIONAL ENGINEER.

Curtis Sandbek 7/8/25
NAME DATE
SIGNATURE

ENGINEER'S CERTIFICATION
I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED BY ME, OR UNDER MY SUPERVISION, AND MEETS THE MINIMUM STANDARDS OF THE HARFORD COUNTY DEPARTMENT OF PUBLIC WORKS AND/OR THE UNITED STATES DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, AND/OR THE MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER MANAGEMENT ADMINISTRATION.

JOHN B. GONZALEZ, P.E., CPSWQ 7/8/2025
NAME DATE
SIGNATURE 200450 P.E. NO.:

FIELD VERIFICATION CERTIFICATION
I HEREBY CERTIFY THAT I COMPLETED A FIELD VERIFICATION OF THE INFORMATION SHOWN ON THE PLANS ON (02/05/2023) AND THAT THE INFORMATION SHOWN ON THE PLANS IS IN AGREEMENT WITH THE ACTUAL FIELD CONDITIONS.

JOHN B. GONZALEZ, P.E., CPSWQ 7/8/2025
NAME DATE
SIGNATURE 200450 P.E. NO.:

AS-BUILT CERTIFICATION
I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

NAME DATE
SIGNATURE P.E. NO.:

SYMBOL	NAME	DRAINAGE CLASS	HYDRO GROUP	HYDRIC RATING	K FACTOR
BeB	BELTSVILLE SILT LOAM 2-5 PERCENT SLOPES	MODERATELY WELL DRAINED	C	NOT HYDRIC	0.37
HcA	HATBORO-CODORUS COMPLEX 0-3 PERCENT SLOPES	POORLY DRAINED	B/D	NOT HYDRIC	0.49

CRITERIA	VOLUME REQ.	VOLUME PROV.	UNITS
WQv	4078	4078	cf
F _{av}	510	510	cf
ESDv	6072	6072	cf
Q10	6360	6360	cf
EMBANKMENT TOP	xx	21,785	cf

ESDv ELEVATION: 41.01
ESDv + 10-YEAR STORAGE ELEVATION: 41.61
EMBANKMENT ELEVATION: 43
FREEBOARD HEIGHT = 1.39'
21,785cf + 6,072cf + 6,360cf = 9,353 cf ADDITIONAL STORAGE

SITE ANALYSIS

TOTAL SITE AREA: 167,222 S.F. / 3.839 AC.
TOTAL DISTURBED AREA: 89,366 S.F.
TOTAL IMPERVIOUS AREA: 49,402 S.F.
AREA TO BE STABILIZED: 38,293 S.F.

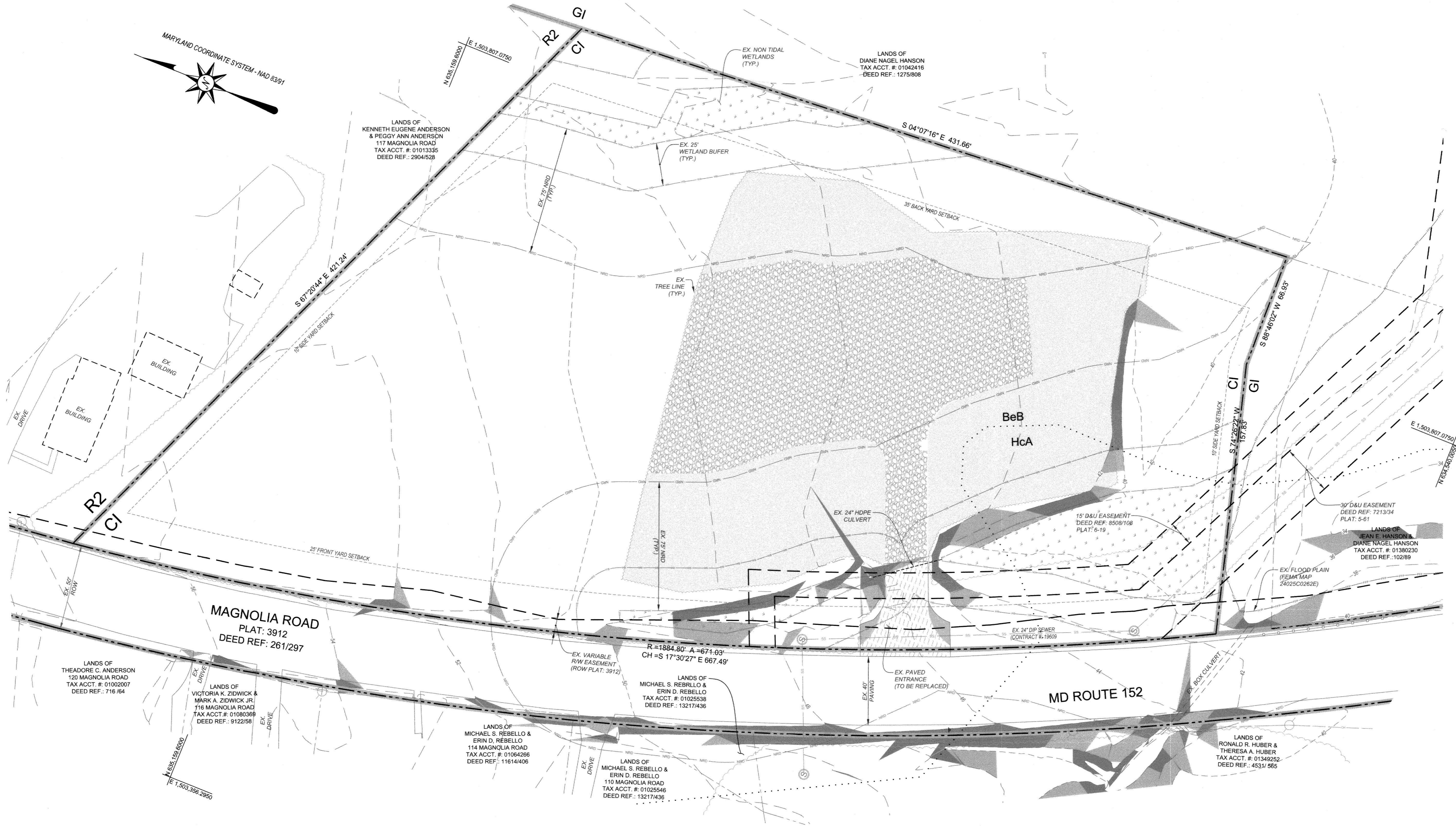
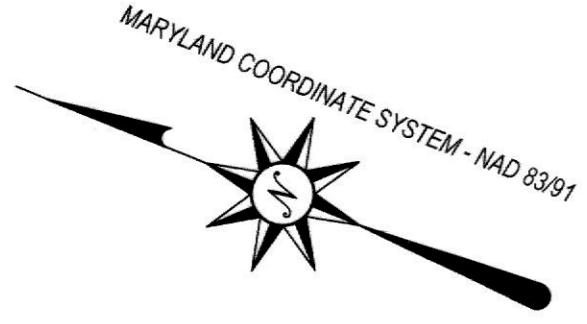
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FILL: 100 CY

NPDES ID POINT: N 634,636.6868 E 1,503,687.6190



250986

 866.850.4200 www.atwell.com 4692 MILLENNIUM DRIVE, SUITE 305 BELCAMP, MD 21017 410.612.9900		
OWNER/DEVELOPER: MAGNOLIA 622, LLC 5200 GLEN ARM ROAD, SUITE M GLEN ARM, MARYLAND 21057 ATTN: CURTIS SANDBEK PHONE: 410-977-8190		
PROPERTY ADDRESS: 109 MAGNOLIA ROAD JOPPA, MD 21085		SCALE: AS SHOWN SHEET: 1 OF 11 DRAWING NO.: 3320_D01
SURVEY BY: RTS		
DESIGNED BY: ASZ		
DRAWN BY: ASZ		
CHECKED BY: JBG		DATE: 07/01/2025



LEGEND:

- EXISTING GRAVEL TO BE REMOVED
- EXISTING GRAVEL TO REMAIN
- SLOPES 15-25%
- SLOPES > 25%
- EXISTING PAVING TO BE REPLACED
- EXISTING PAVING TO BE REMOVED

250987

**EXISTING CONDITIONS PLAN
FOR
LANDS OF MAGNOLIA 622, LLC**

CONTRACT # SWMENG-000430/2023
SWM BILLING #: 92096

SITUATED IN: 1ST ELECTION DISTRICT, HARFORD COUNTY, MARYLAND

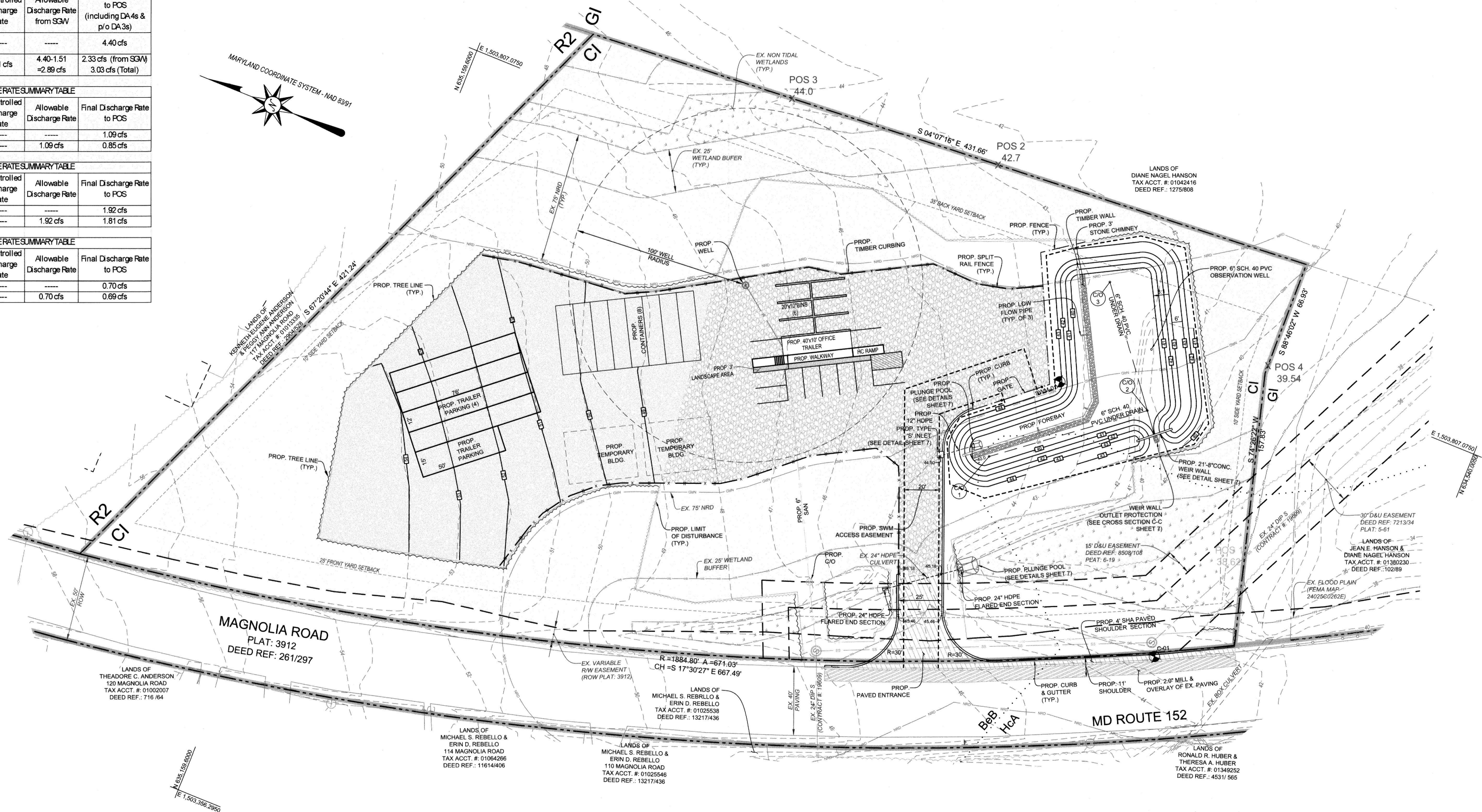
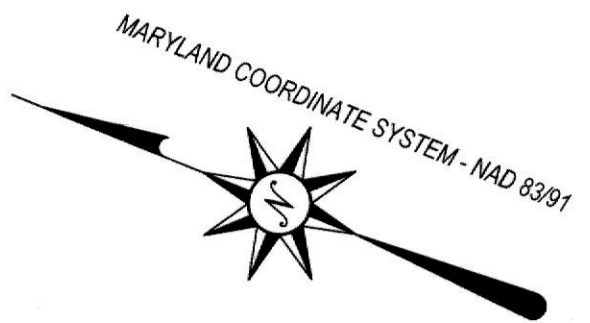
				866.850.4200 www.atwell.com 4692 MILLENNIUM DRIVE, SUITE 305 BELCAMP, MD 21017 410.612.9900			
				OWNER/DEVELOPER: MAGNOLIA 622 LLC 5200 GLEN ARM ROAD, SUITE M GLEN ARM, MARYLAND 21057 ATTN: CURTIS SANDREK PHONE: 410-977-8190			
				PROPERTY ADDRESS: 109 MAGNOLIA ROAD JOPPA, MD 21085			
SURVEY BY: RTS				SCALE: 1" = 30' 			
DESIGNED BY: ASZ				DATE: 07/01/2025			
DRAWN BY: ASZ				SHEET: 2 OF 11			
CHECKED BY: JBG				DRAWING NO.: 3320_D02			

Development Stage	Drainage Area to POS	Existing Discharge Rate	Uncontrolled Discharge Rate	Allowable Discharge Rate from SGW	Final Discharge Rate to POS (including DA4s & p/o DA3s)
Pre	2.40 ac.	4.40 cfs (to POS)	-----	-----	4.40 cfs
Post	2.73 ac.	3.77 cfs (to SGW)	1.51 cfs	4.40-1.51 = 2.89 cfs	2.33 cfs (from SGW) + 3.03 cfs (Total)

Development Stage	Drainage Area to POS	Existing Discharge Rate	Uncontrolled Discharge Rate	Allowable Discharge Rate	Final Discharge Rate to POS
Pre	0.454 ac.	1.09 cfs	-----	-----	1.09 cfs
Post	0.251 ac.	-----	-----	1.09 cfs	0.85 cfs

Development Stage	Drainage Area to POS	Existing Discharge Rate	Uncontrolled Discharge Rate	Allowable Discharge Rate	Final Discharge Rate to POS
Pre	0.767 ac.	1.92 cfs	-----	-----	1.92 cfs
Post	0.686 ac.	-----	-----	1.92 cfs	1.81 cfs

Development Stage	Drainage Area to POS	Existing Discharge Rate	Uncontrolled Discharge Rate	Allowable Discharge Rate	Final Discharge Rate to POS
Pre	0.262 ac.	0.70 cfs	-----	-----	0.70 cfs
Post	0.206 ac.	-----	-----	0.70 cfs	0.69 cfs



LEGEND:

- EXISTING CONTOUR 100
- EXISTING ZONING BOUNDARY
- EXISTING ZONING DESIGNATION **R2**
- EXISTING TREELINE
- PROPOSED TREELINE
- LIMIT OF DISTURBANCE
- PROPOSED CONTOUR 100
- PROPOSED FENCE
- PROPOSED SPLIT RAIL FENCE
- EXISTING WETLAND BUFFER
- EXISTING 75' NRD BOUNDARY
- BUILDING SETBACK LINE
- EXISTING SOILS LINE
- EXISTING SOILS LABEL **BeB**
- FOREST CONSERVATION AREA
- EXISTING WETLANDS
- PROPOSED GRAVEL
- EXISTING GRAVEL AREA TO REMAIN
- EXISTING GRAVEL TO BE REMOVED
- EXISTING PAVING TO BE REMOVED
- LIMITS OF 4" SHA PAVING REPLACEMENT & EXTENSION
- LIMITS OF PROPOSED 2" MILL & OVERLAY

DATA	AREA
SITE	167221 sf
LOD	89366 sf
EXISTING IMPERVIOUS	0 sf
PROPOSED IMPERVIOUS	49402 sf
TOTAL POST DEV. IMPERVIOUS	49402 sf
ONSITE DRAINAGE AREA TO SGW	1.922 ac.
OFFSITE DRAINAGE AREA TO SGW	0.1 ac.

DATA	TOTAL
DRAINAGE AREA	89,366
CLASSIFICATION	MICRO-SCALE PRACTICE
WEIR CREST ELEVATION (ESDW)	41.01
STORAGE AT WEIR CREST (ESDW)	6072 CF
10-YR ELEVATION	41.61
10-YEAR STORAGE	6630 CF
FREEBOARD	1.39'

STORMWATER MANAGEMENT & GRADING PLAN
FOR
LANDS OF MAGNOLIA 622, LLC

CONTRACT # SWMENG-000430/2023 SITUATED IN: 1ST ELECTION DISTRICT, HARFORD COUNTY, MARYLAND
SWM BILLING #: 92096

 ATWELL 866.850.4200 www.atwell.com 4692 MILLENNIUM DRIVE, SUITE 305 BELCAMP, MD 21017 410.612.9900	 OWNER/DEVELOPER: MAGNOLIA 622 LLC 5200 GLEN ARM ROAD, SUITE M GLEN ARM, MARYLAND 21057 ATTN: CURTIS SANIBEK PHONE: 410-977-8150
PROPERTY ADDRESS: 109 MAGNOLIA ROAD JOPPA, MD 21085	SCALE: 1" = 30' DESIGNED BY: ASZ DRAWN BY: ASZ CHECKED BY: JBG
SURVEY BY: RTS DATE: 07/01/2025	SHEET: 3 OF 11 DRAWING NO.: 3320_D03

250968

TIME OF CONCENTRATION - DA 1S

A-B: OVERLAND SHEET FLOW
 L= 100'
 S= 1.11%
 WOODS
 t= 19.4 MINUTES

B-C: SHALLOW CONCENTRATED FLOW
 L= 626'
 S= 2.70%
 WOODS
 t= 12.7 MINUTES

Tc= 32.1 MINUTES

TIME OF CONCENTRATION - DA 7S

A-B: OVERLAND SHEET FLOW
 L= 50'
 S= 2.8%
 WOODS
 t= 13.3 MINUTES

B-C: SHALLOW CONCENTRATED FLOW
 L= 245'
 S= 2.80%
 WOODS
 t= 4.9 MINUTES

Tc= 18.2 MINUTES

TIME OF CONCENTRATION - DA 8S

A-B: OVERLAND SHEET FLOW
 L= 50'
 S= 3.0%
 WOODS
 t= 13.0 MINUTES

B-C: SHALLOW CONCENTRATED FLOW
 L= 217'
 S= 3.60%
 WOODS
 t= 3.8 MINUTES

Tc= 16.8 MINUTES

TIME OF CONCENTRATION - DA 9S

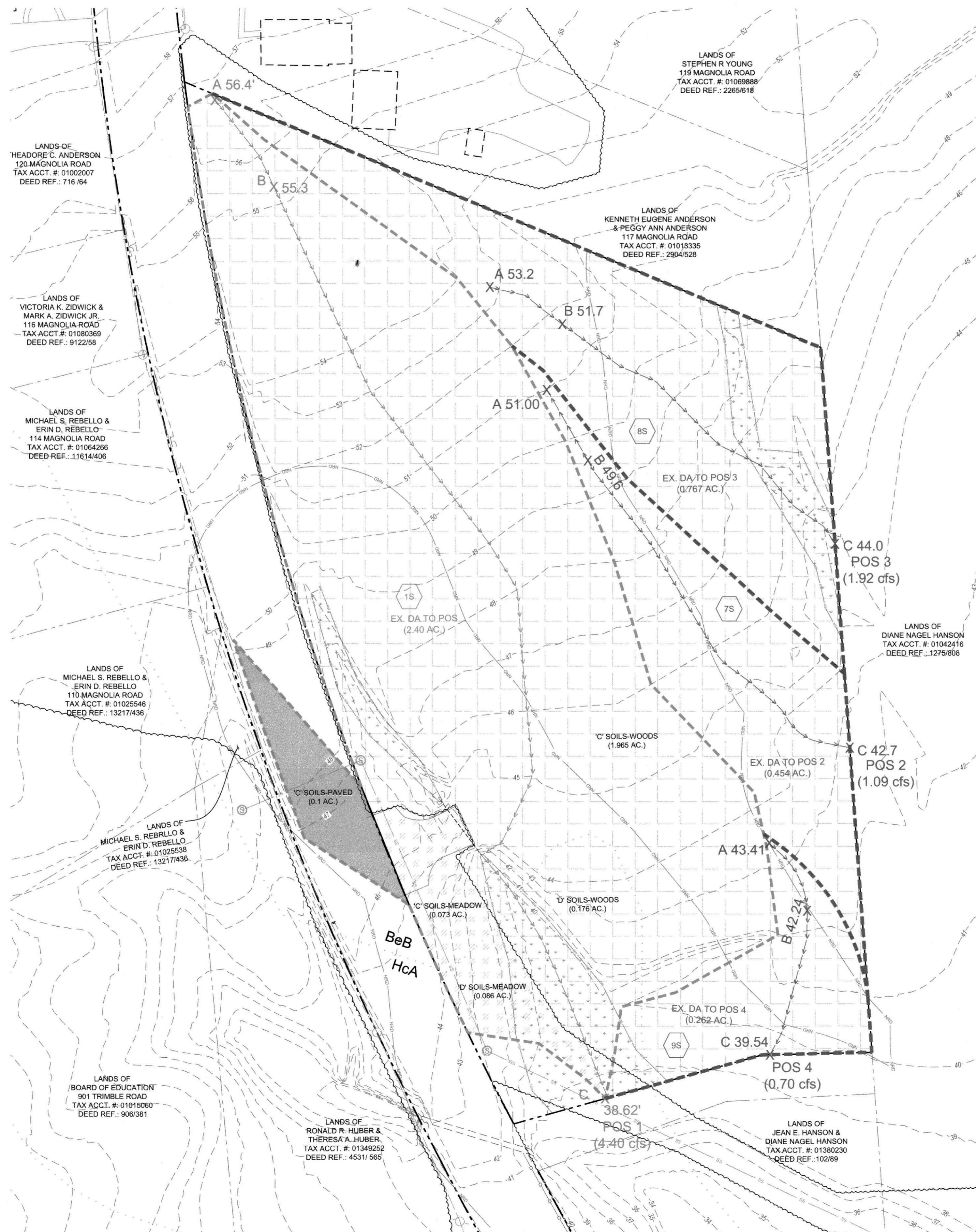
A-B: OVERLAND SHEET FLOW
 L= 50'
 S= 2.34%
 WOODS
 t= 14.3 MINUTES

B-C: SHALLOW CONCENTRATED FLOW
 L= 92'
 S= 2.83%
 WOODS
 t= 1.8 MINUTES

Tc= 16.1 MINUTES



MARYLAND COORDINATE SYSTEM - NAD 83/91



POS1 Q10 DISCHARGE RATE SUMMARY TABLE

Development Stage	Drainage Area to POS	Existing Discharge Rate	Uncontrolled Discharge Rate	Allowable Discharge Rate from SGW	Final Discharge Rate to POS (including DA 4s & p/o DA 3s)
Pre	2.40 ac.	4.40 cfs (to POS)	-----	-----	4.40 cfs
Post	2.73 ac.	3.77 cfs (to SGW)	1.51 cfs	4.40-1.51 = 2.89 cfs	2.33 cfs (from SGW) + 3.03 cfs (Total)

POS2 Q10 DISCHARGE RATE SUMMARY TABLE

Development Stage	Drainage Area to POS	Existing Discharge Rate	Uncontrolled Discharge Rate	Allowable Discharge Rate	Final Discharge Rate to POS
Pre	0.454 ac.	1.09 cfs	-----	-----	1.09 cfs
Post	0.251 ac.	-----	-----	1.09 cfs	0.85 cfs

POS3 Q10 DISCHARGE RATE SUMMARY TABLE

Development Stage	Drainage Area to POS	Existing Discharge Rate	Uncontrolled Discharge Rate	Allowable Discharge Rate	Final Discharge Rate to POS
Pre	0.767 ac.	1.92 cfs	-----	-----	1.92 cfs
Post	0.686 ac.	-----	-----	1.92 cfs	1.81 cfs

POS4 Q10 DISCHARGE RATE SUMMARY TABLE

Development Stage	Drainage Area to POS	Existing Discharge Rate	Uncontrolled Discharge Rate	Allowable Discharge Rate	Final Discharge Rate to POS
Pre	0.262 ac.	0.70 cfs	-----	-----	0.70 cfs
Post	0.206 ac.	-----	-----	0.70 cfs	0.69 cfs

LEGEND:

- EXISTING DRAINAGE AREA
- Tc PATH
- SOIL BOUNDARY
- EXISTING TREE LINE
- EXISTING DRAINAGE AREA
- Tc PATH
- MEADOW
- WOODS
- IMPERVIOUS

EXISTING DRAINAGE AREA MAP FOR LANDS OF MAGNOLIA 622, LLC

CONTRACT # SWMENG-000430/2023
 SWM BILLING #: 92096

SITUATED IN: 1ST ELECTION DISTRICT, HARFORD COUNTY, MARYLAND

 866.850.4200 www.atwell.com 4692 MILLENNIUM DRIVE, SUITE 305 BELCAMP, MD 21017 410.612.9900	 CURTIS SANDSEK PROFESSIONAL ENGINEER LICENSE NO. 102289
SURVEY BY: RTS DESIGNED BY: ASZ DRAWN BY: ASZ CHECKED BY: JBG	SCALE: 1" = 40' DATE: 07/01/2025 SHEET: 4 OF 11 DRAWING NO.: 3320_D04

250989

POS1 Q10 DISCHARGE RATES SUMMARY TABLE					
Development Stage	Drainage Area to POS	Existing Discharge Rate	Uncontrolled Discharge Rate	Allowable Discharge Rate from SGW	Final Discharge Rate to POS (including DA4s & p/o DA3s)
Pre	2.40 ac.	4.40 cfs (to POS)	-----	-----	4.40 cfs
Post	2.73 ac.	3.77 cfs (to SGW)	1.51 cfs	4.40-1.51 = 2.89 cfs	2.33 cfs (from SGW) 3.03 cfs (Total)

POS2 Q10 DISCHARGE RATES SUMMARY TABLE					
Development Stage	Drainage Area to POS	Existing Discharge Rate	Uncontrolled Discharge Rate	Allowable Discharge Rate	Final Discharge Rate to POS
Pre	0.454 ac.	1.09 cfs	-----	-----	1.09 cfs
Post	0.251 ac.	-----	-----	1.09 cfs	0.85 cfs

POS3 Q10 DISCHARGE RATES SUMMARY TABLE					
Development Stage	Drainage Area to POS	Existing Discharge Rate	Uncontrolled Discharge Rate	Allowable Discharge Rate	Final Discharge Rate to POS
Pre	0.767 ac.	1.92 cfs	-----	-----	1.92 cfs
Post	0.686 ac.	-----	-----	1.92 cfs	1.81 cfs

POS4 Q10 DISCHARGE RATES SUMMARY TABLE					
Development Stage	Drainage Area to POS	Existing Discharge Rate	Uncontrolled Discharge Rate	Allowable Discharge Rate	Final Discharge Rate to POS
Pre	0.262 ac.	0.70 cfs	-----	-----	0.70 cfs
Post	0.206 ac.	-----	-----	0.70 cfs	0.69 cfs

TIME OF CONCENTRATION - DA 2S

- A-B: OVERLAND SHEET FLOW
L= 100'
S= 1.80%
WOODS
t= 32.5 MINUTES
- B-C: SHALLOW CONCENTRATED FLOW
L= 307'
S= 2.80%
GRAVEL
t= 1.5 MINUTES
- C-D: SHALLOW CONCENTRATED FLOW
L= 67'
S= 2.50%
UNPAVED
t= 0.9 MINUTES
- D-E: SHALLOW CONCENTRATED FLOW
L= 77'
S= 3.57%
UNPAVED
t= 0.6 MINUTES
- Tc= 35.5 MINUTES

TIME OF CONCENTRATION - DA 5S

- A-B: OVERLAND SHEET FLOW
L= 100'
GRASS
S= 2.8%
t= 8.9 MINUTES
- B-C: SHALLOW CONCENTRATED FLOW
L= 23'
S= 3.0%
GRASS
t= 0.3 MINUTES
- C-D: SHALLOW CONCENTRATED FLOW
L= 58'
S= 3.0%
WOODS
t= 1.1 MINUTES
- Tc= 10.3 MINUTES

TIME OF CONCENTRATION - DA 3S

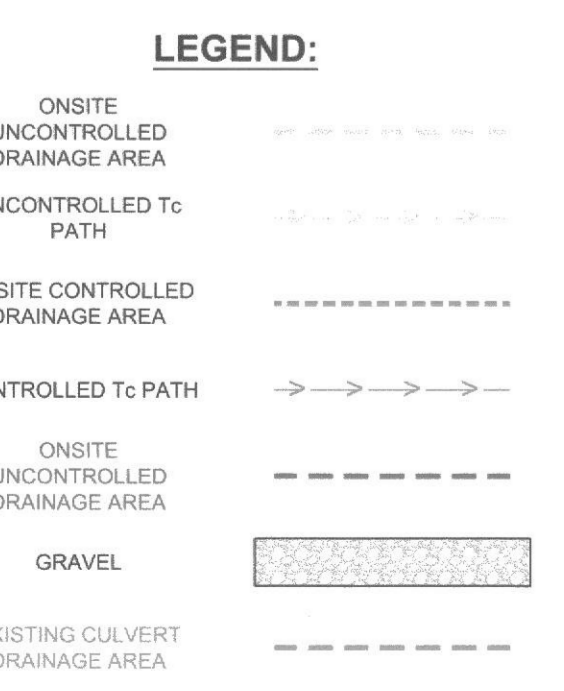
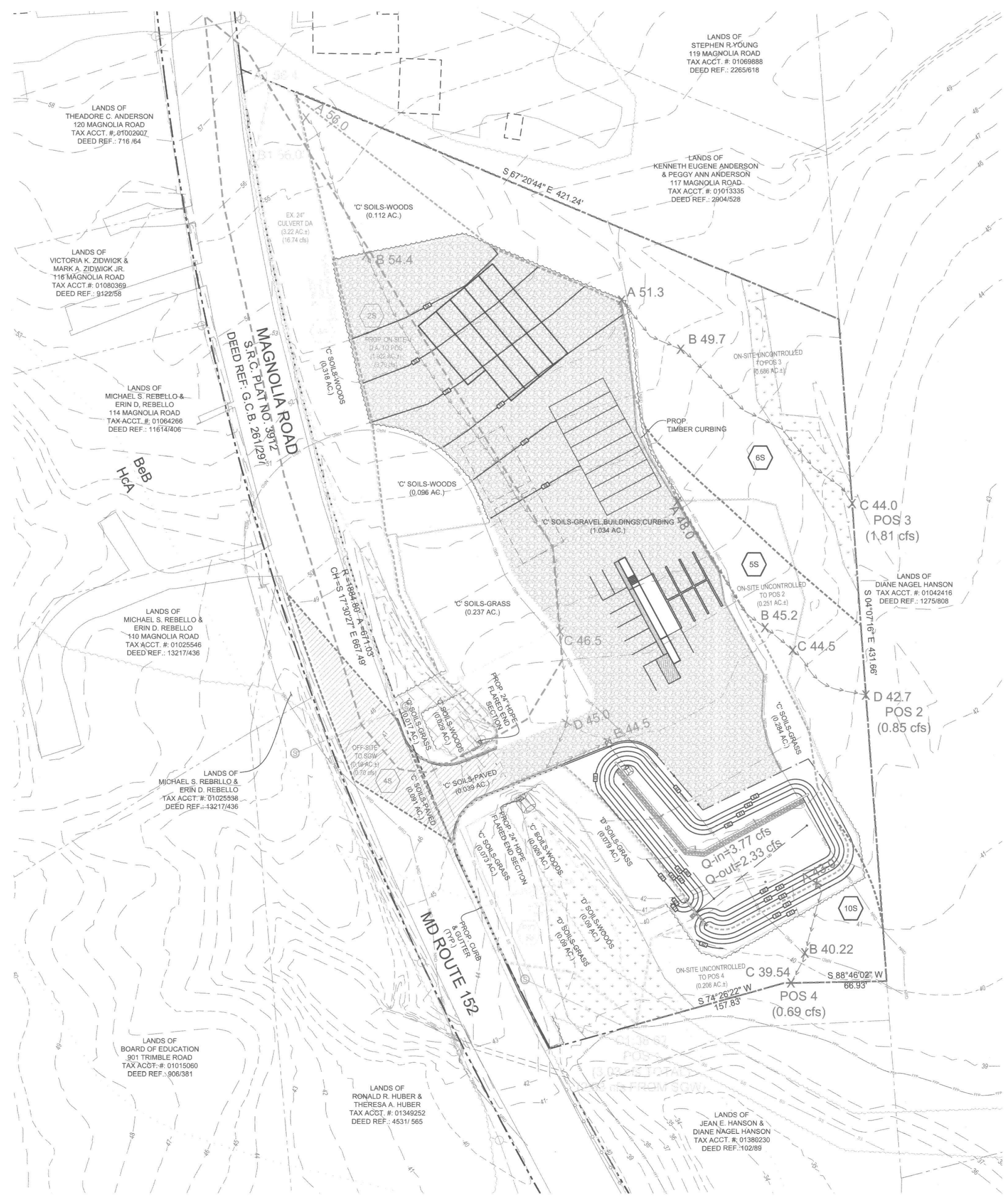
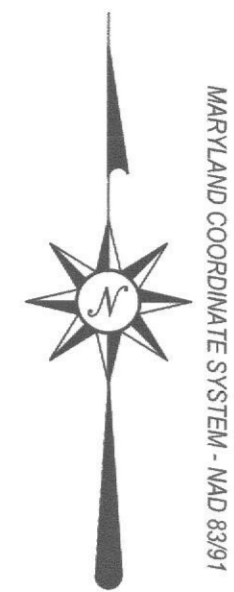
- A-B: OVERLAND SHEET FLOW
L= 50'
WOODS
S= 1.0%
t= 22.5 MINUTES
- B-C: SHALLOW CONCENTRATED FLOW
L= 626'
S= 2.8%
UNPAVED
t= 3.9 MINUTES
- C-D: SHALLOW CONCENTRATED FLOW
L= 55'
S= 1.0%
UNPAVED
t= 0.8 MINUTES
- Tc= 27 MINUTES

TIME OF CONCENTRATION - DA 6S

- A-B: OVERLAND SHEET FLOW
L= 50'
WOODS
S= 3.2%
t= 12.6 MINUTES
- B-C: SHALLOW CONCENTRATED FLOW
L= 152'
S= 3.8%
WOODS
t= 2.6 MINUTES
- Tc= 15.2 MINUTES

TIME OF CONCENTRATION - DA 10S

- A-B: OVERLAND SHEET FLOW
L= 50'
WOODS
S= 5.6%
t= 10.1 MINUTES
- B-C: SHALLOW CONCENTRATED FLOW
L= 22'
S= 3.1%
WOODS
t= 0.4 MINUTES
- Tc= 10.5 MINUTES



PROPOSED DRAINAGE AREA MAP FOR LANDS OF MAGNOLIA 622, LLC

CONTRACT #SWMENG-000430/2023
SWM BILLING #: 92096

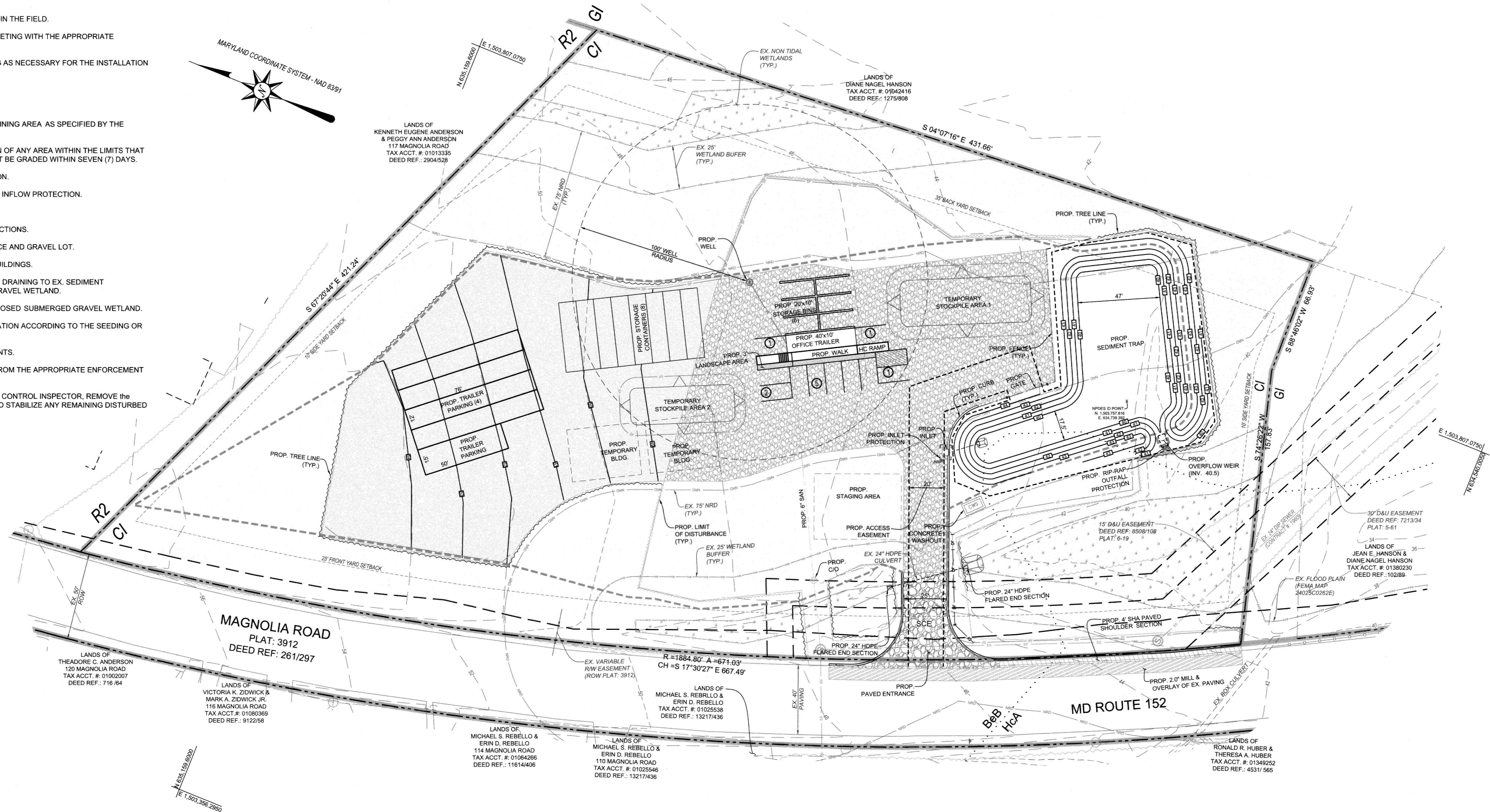
SITUATED IN: 1ST ELECTION DISTRICT, HARFORD COUNTY, MARYLAND

 ATWELL 866.850.4200 www.atwell.com 4692 MILLENNIUM DRIVE, SUITE 305 BEL CAMP, MD 21017 410.612.9900	OWNER/DEVELOPER: MAGNOLIA 622 LLC 5200 GLEN ARM ROAD, SUITE M GLEN ARM, MARYLAND 21057 ATTN: CURTIS SANDERK PHONE: 410-977-8180	PROPERTY ADDRESS: 109 MAGNOLIA ROAD JOPPA, MD 21085
	SURVEY BY: RTS DESIGNED BY: ASZ DRAWN BY: ASZ CHECKED BY: JBG	SCALE: 1" = 40'

250990

SEQUENCE OF CONSTRUCTION

1. OBTAIN ALL REQUIRED PERMITS
2. STAKE OUT LIMITS OF DISTURBANCE IN THE FIELD.
3. REQUEST A PRE-CONSTRUCTION MEETING WITH THE APPROPRIATE ENFORCEMENT AUTHORITIES.
4. PERFORM CLEARING AND GRUBBING AS NECESSARY FOR THE INSTALLATION OF PERIMETER CONTROLS ONLY.
5. INSTALL PERIMETER CONTROLS.
6. INSTALL SEDIMENT TRAP
7. CLEAR, GRUB AND GRADE THE REMAINING AREA AS SPECIFIED BY THE LIMITS OF DISTURBANCE.
8. PROVIDE TEMPORARY STABILIZATION OF ANY AREA WITHIN THE LIMITS THAT HAVE BEEN CLEARED THAT WILL NOT BE GRADED WITHIN SEVEN (7) DAYS.
9. INSTALL INLET AND INLET PROTECTION.
10. INSTALL STORM DRAIN AND RIP RAP INFLOW PROTECTION.
11. INSTALL PROPOSED WELL.
12. INSTALL PROPOSED UTILITY CONNECTIONS.
13. INSTALL BASE COURSE OF ENTRANCE AND GRAVEL LOT.
14. CONSTRUCT/INSTALL PROPOSED BUILDINGS.
15. PERMANENTLY STABILIZE THE AREA DRAINING TO EX. SEDIMENT TRAP/PROPOSED SUBMERGED GRAVEL WETLAND.
16. CONVERT SEDIMENT TRAP TO PROPOSED SUBMERGED GRAVEL WETLAND.
17. FINAL LANDSCAPING, AND STABILIZATION ACCORDING TO THE SEEDING OR SODDING SPECIFICATIONS.
18. COMPLETE SHOULDER IMPROVEMENTS.
19. RECEIVE APPROVAL OF THE SITE FROM THE APPROPRIATE ENFORCEMENT AUTHORITY.
20. WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, REMOVE THE SEDIMENT CONTROL PRACTICES AND STABILIZE ANY REMAINING DISTURBED AREAS.



EROSION & SEDIMENT CONTROL OVERLAY PLAN FOR LANDS OF MAGNOLIA 622, LLC

CONTRACT #: SWMENG-000430/2023
SWM BILLING #: 92096
SITUATED IN: 1ST ELECTION DISTRICT, HARFORD COUNTY, MARYLAND

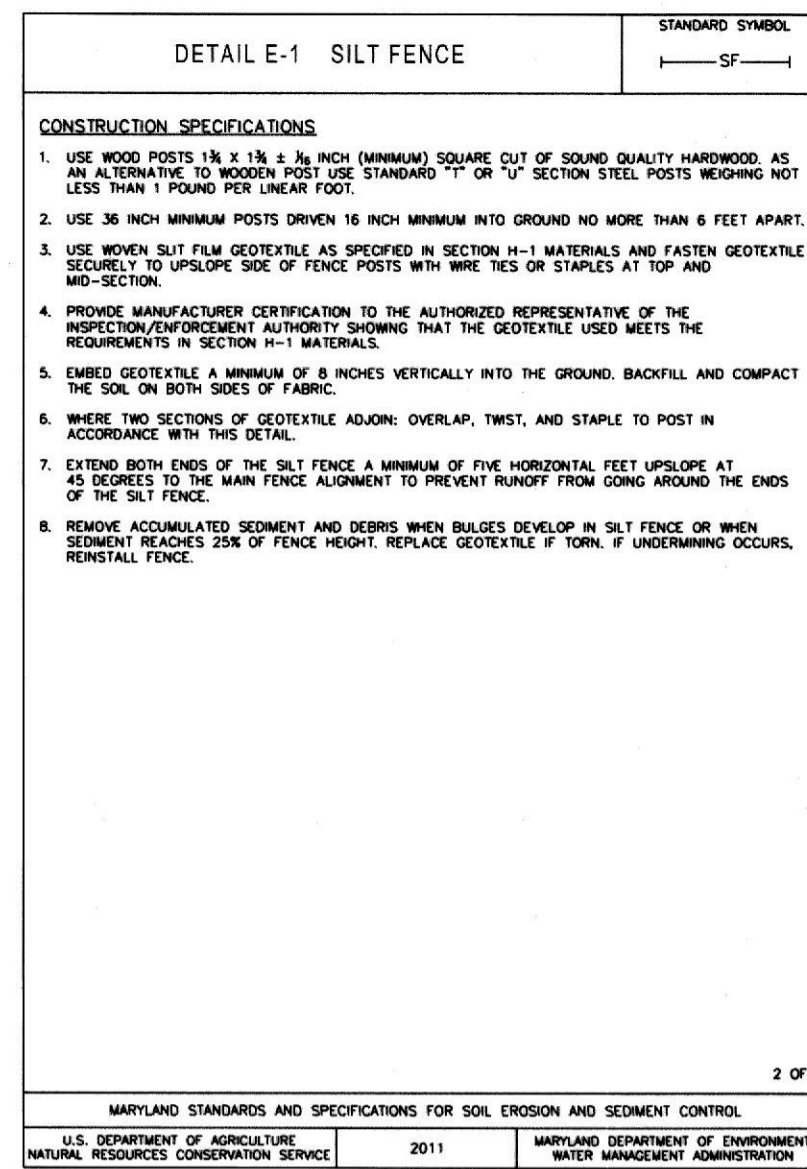
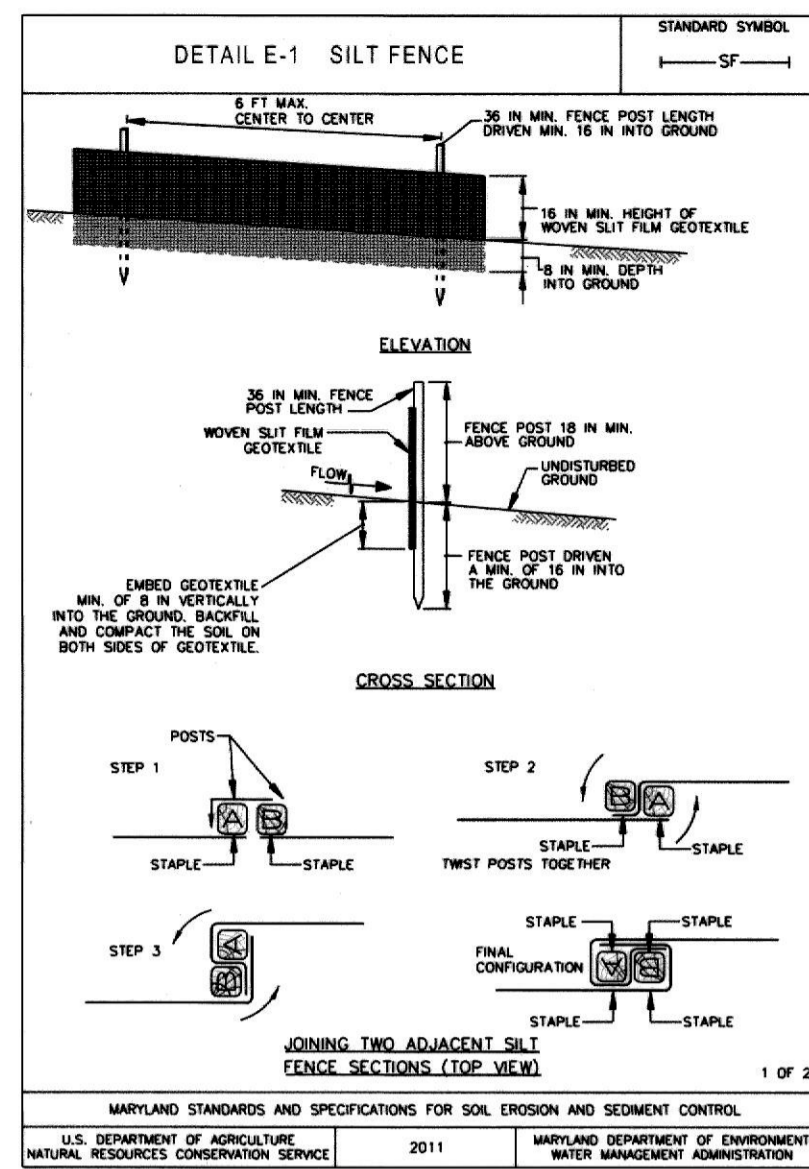
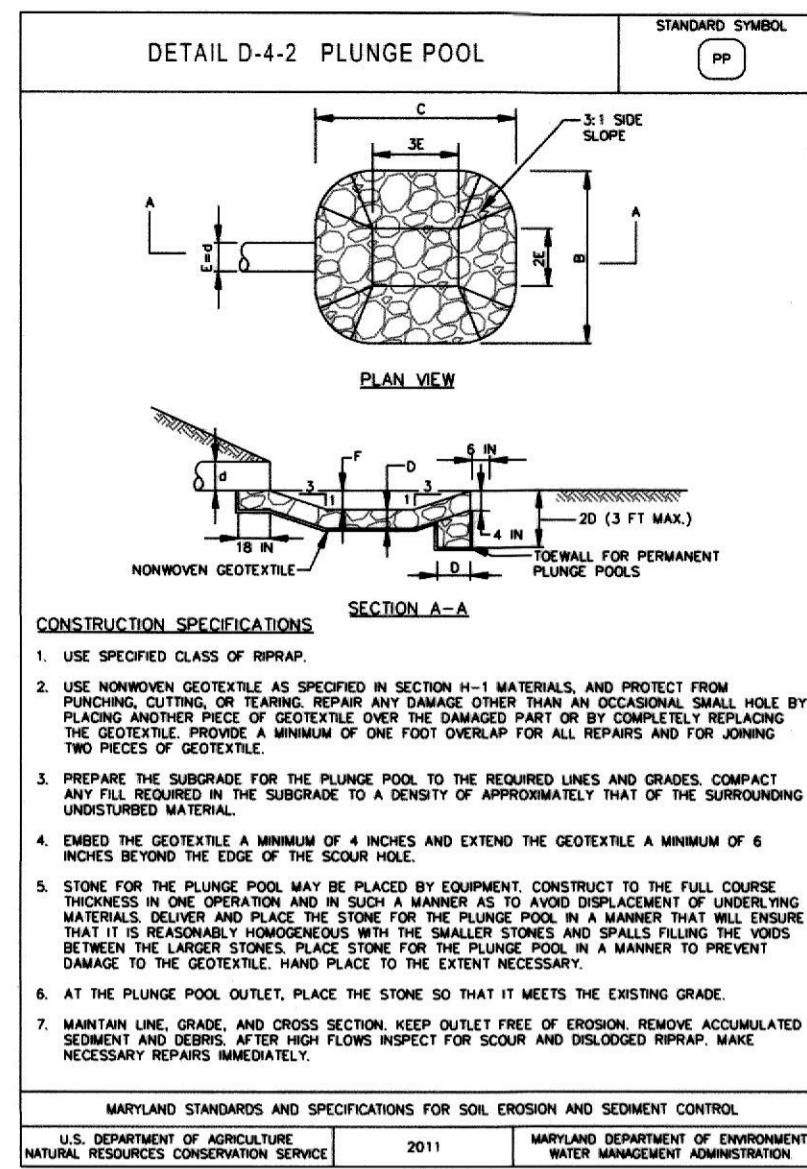
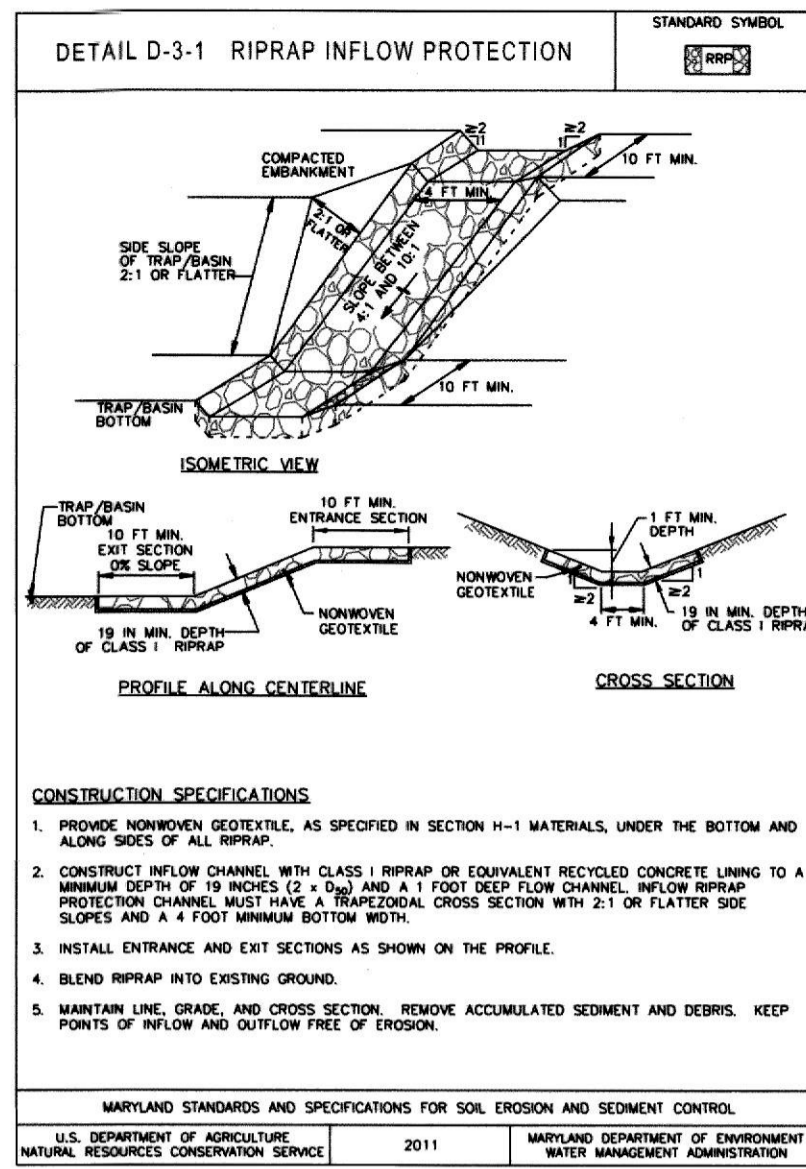
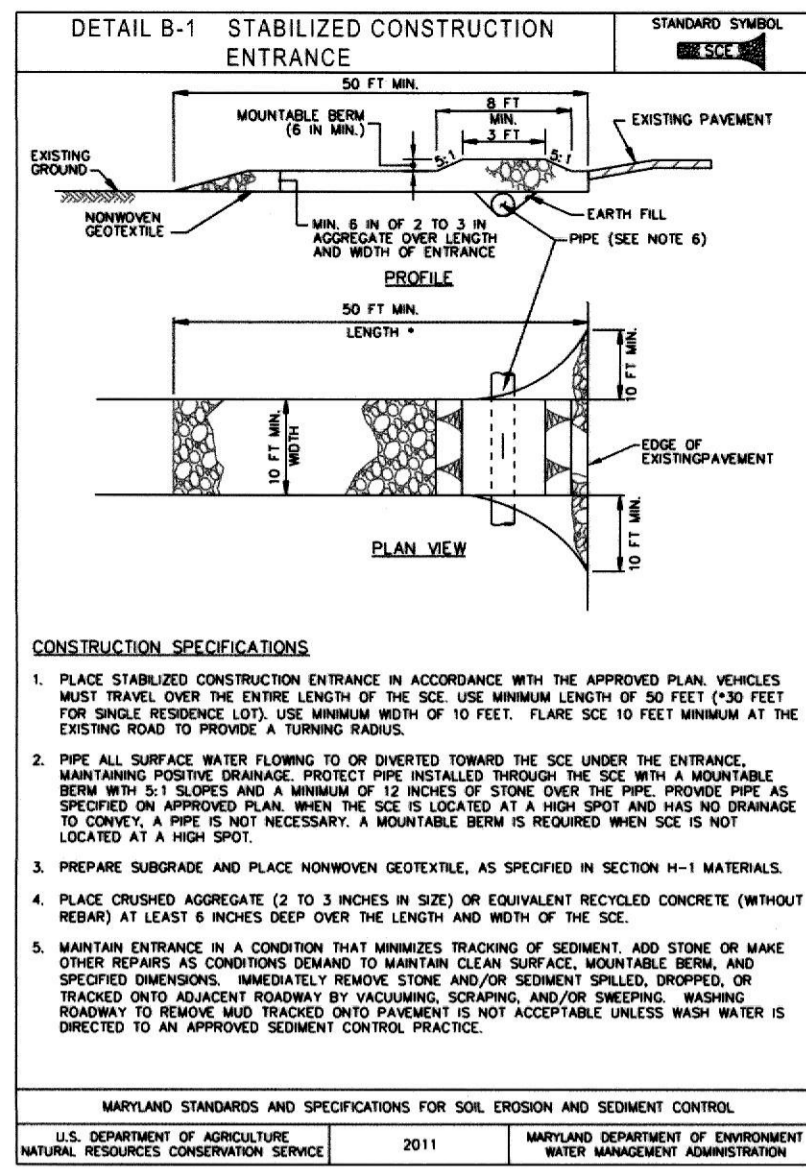
LEGEND:

PROPOSED SILT FENCE	
PROPOSED TRAP DRAINAGE AREA	
PROPOSED INLET PROTECTION	
PROPOSED CONCRETE WASHOUT STATION	

THIS PLAN SHALL BE USED FOR EROSION AND SEDIMENT CONTROL ONLY

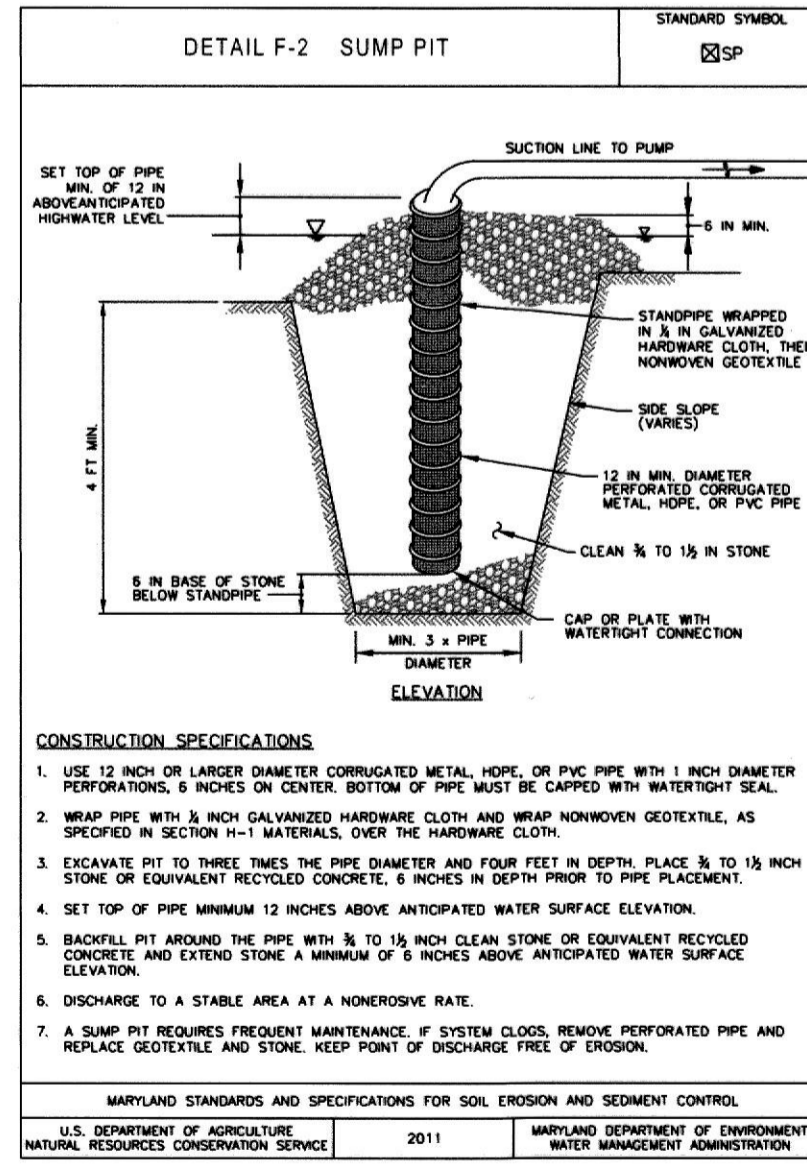
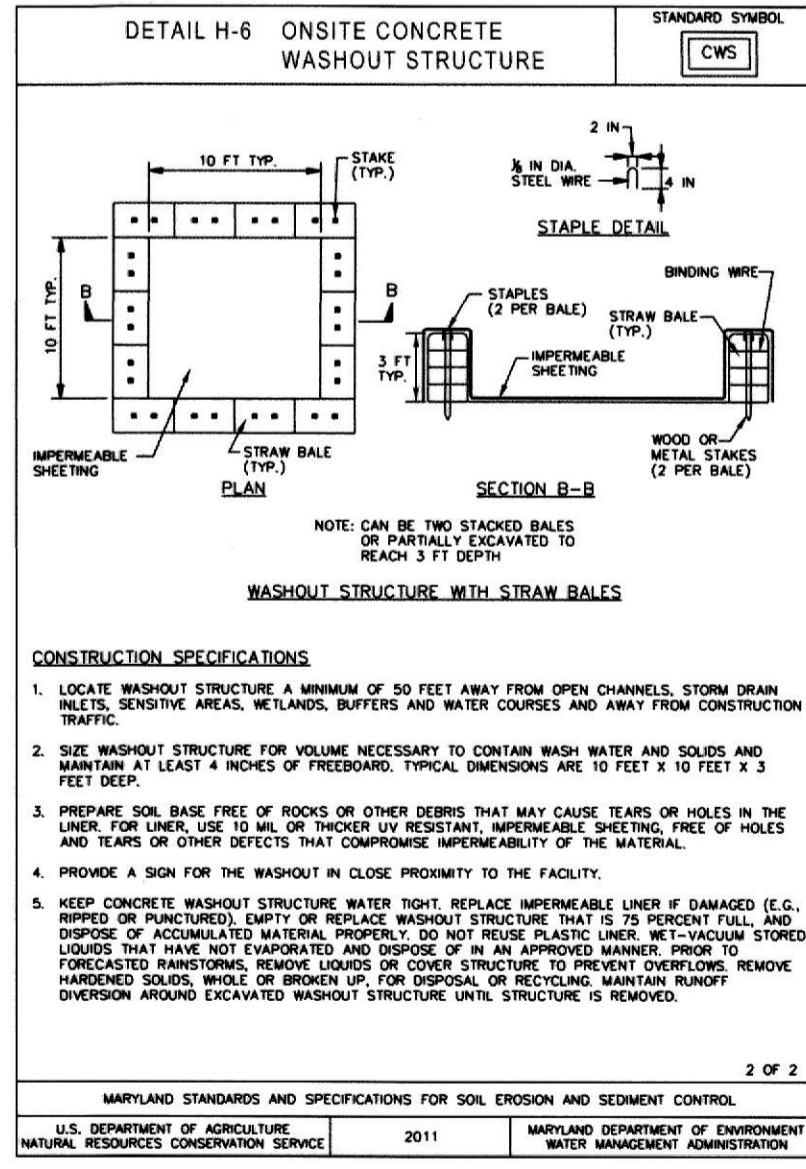
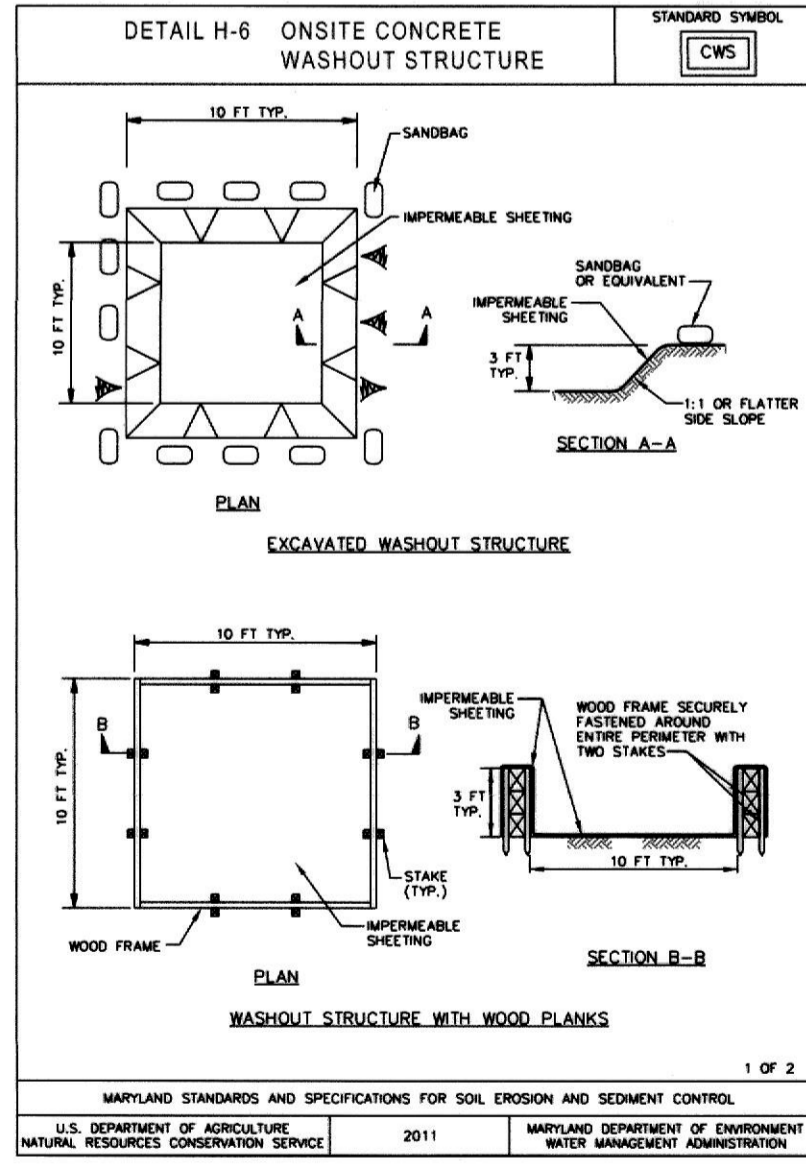
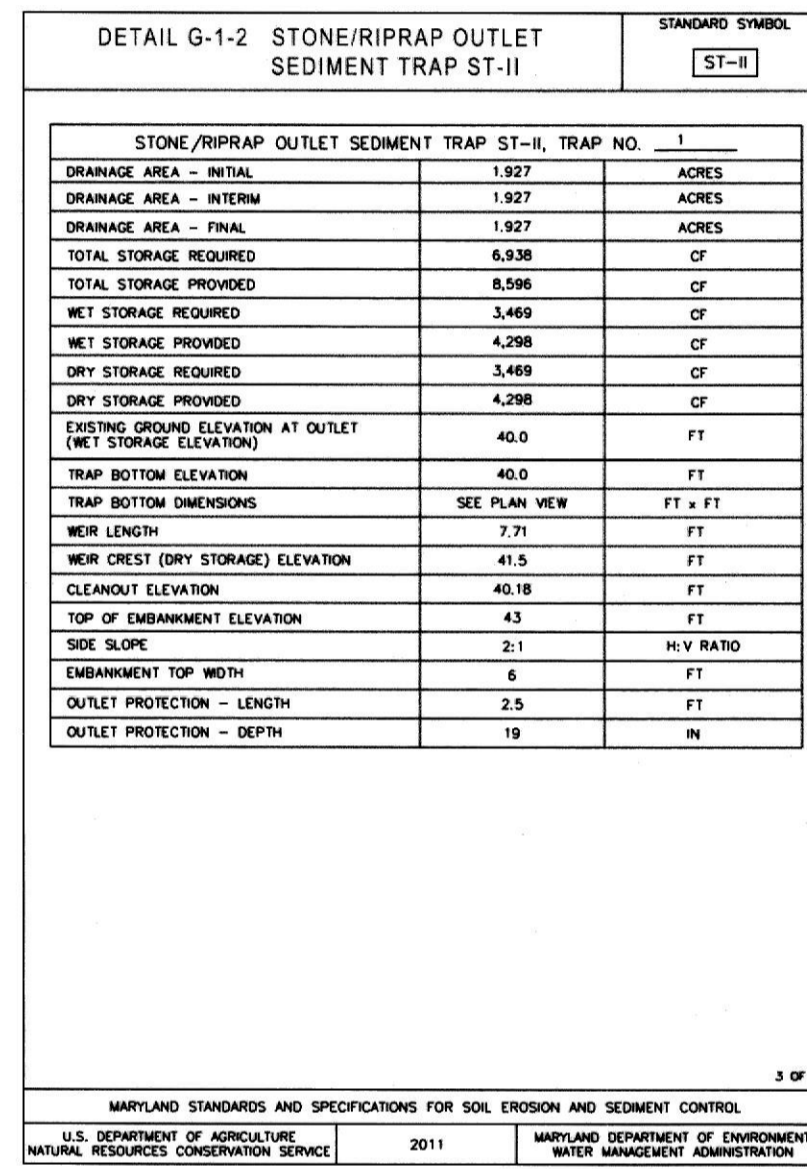
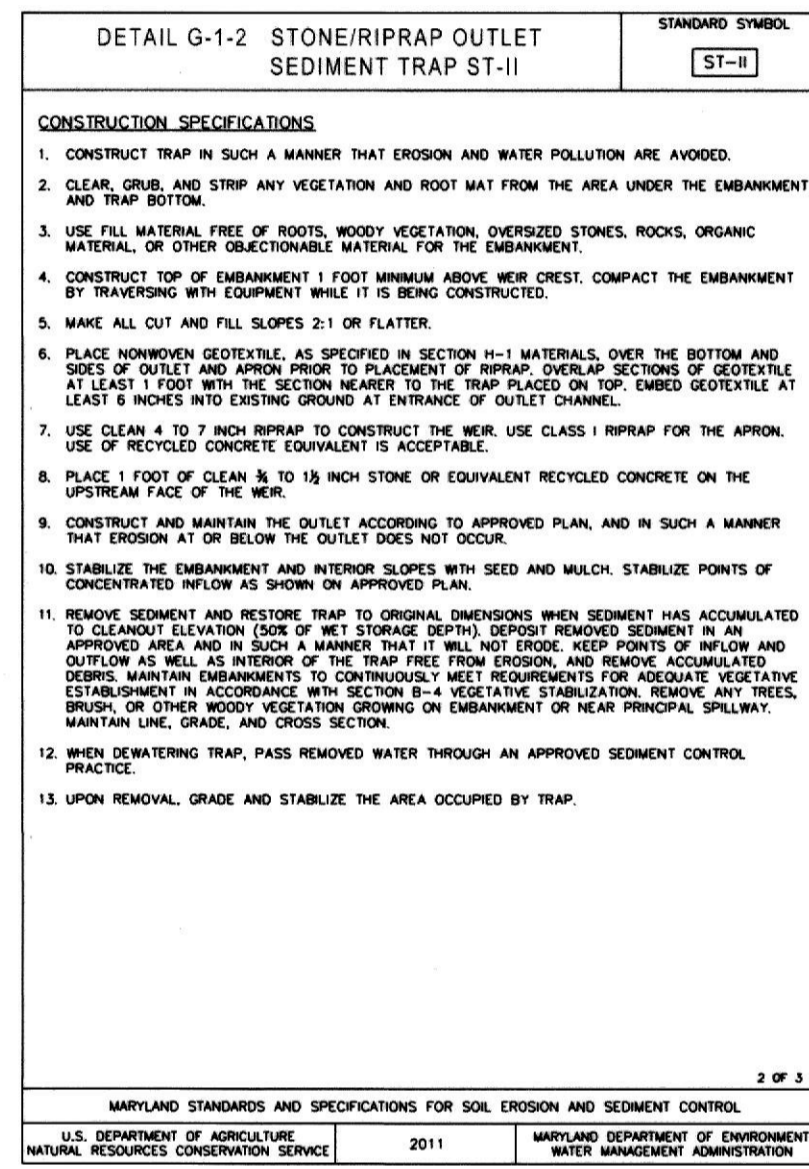
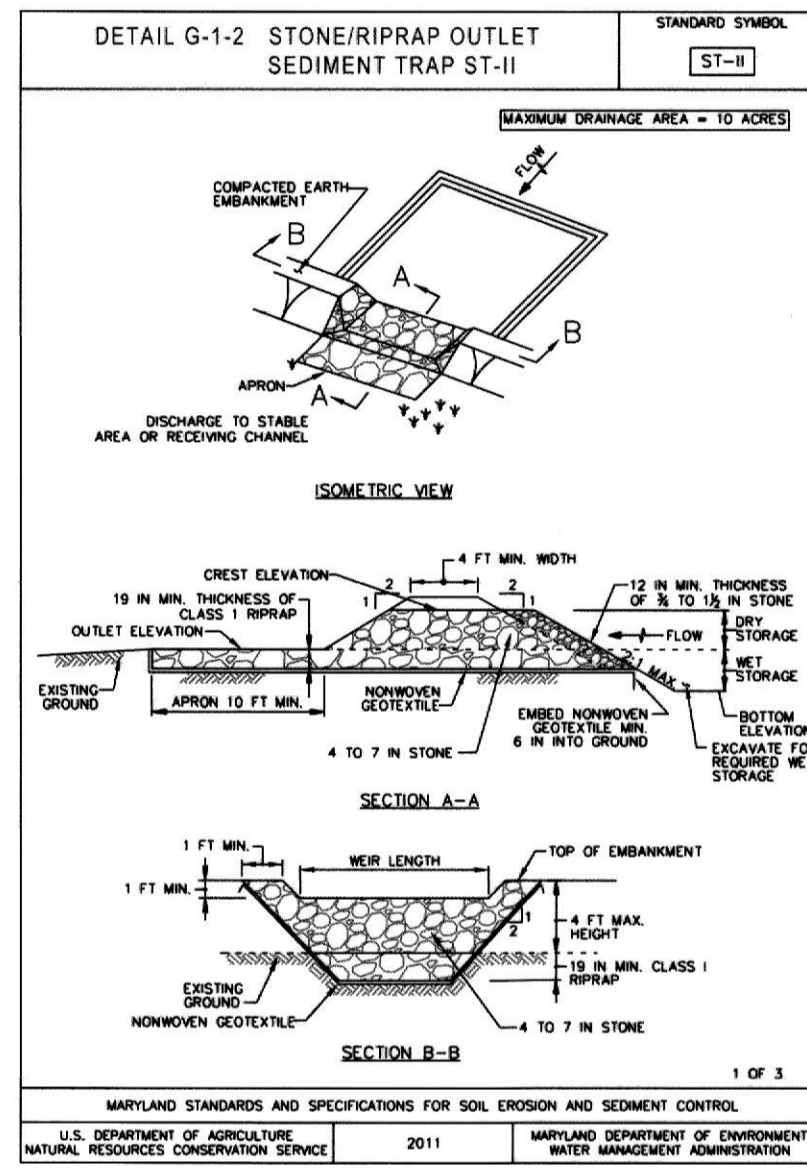
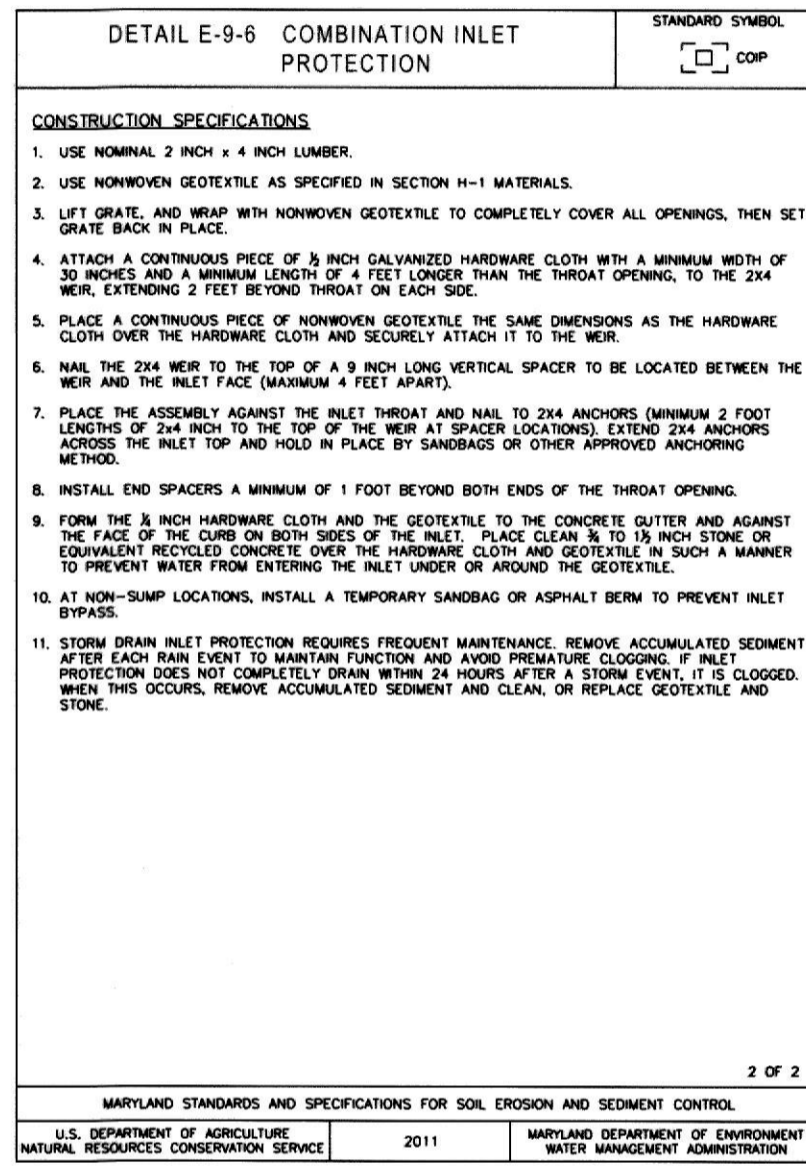
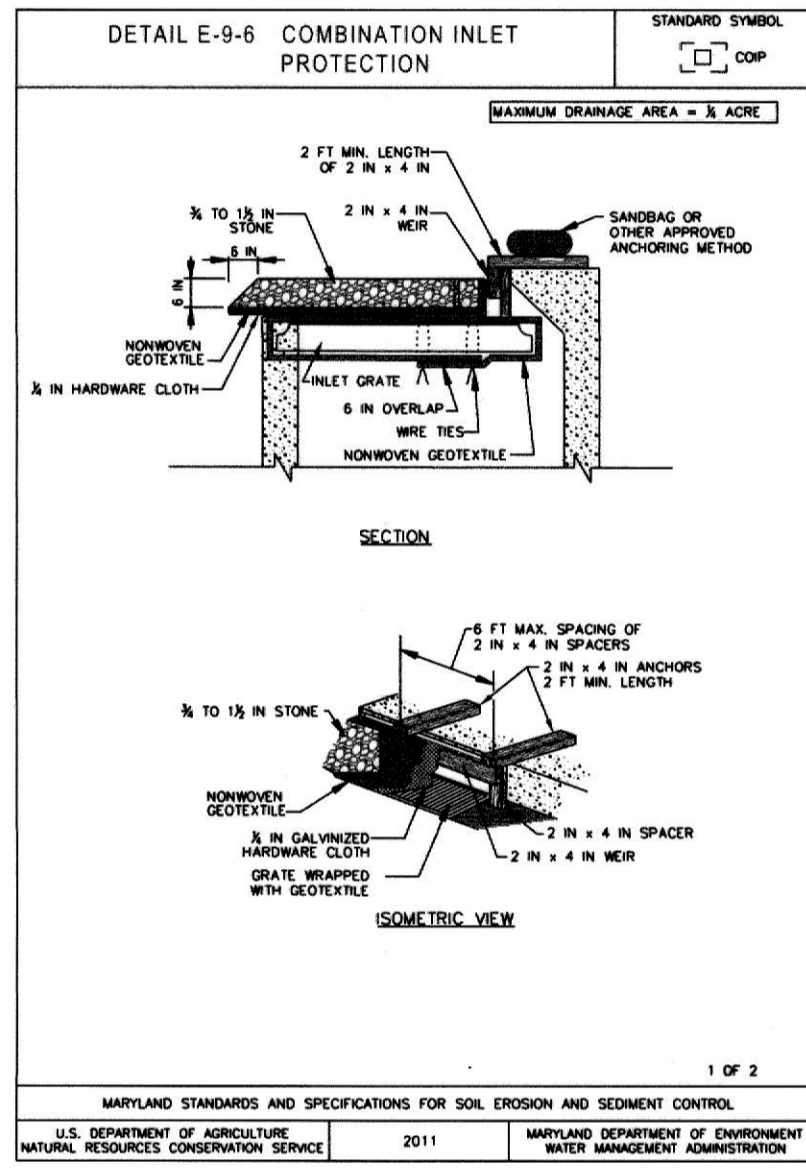
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<p>ATWELL 866.850.4200 www.atwell.com 4692 MILLENNIUM DRIVE, SUITE 305 BELCAMP, MD 21017 410.612.9900</p>									
		<p>OWNER/DEVELOPER: MAGNOLIA 622 LLC 5200 GLEN ARM ROAD, SUITE M GLEN ARM, MARYLAND 21057 ATTN: CURTIS SANDBERG PHONE: 410-977-8180</p>	<p>PROPERTY ADDRESS: 109 MAGNOLIA ROAD JOPPA, MD 21085</p>						
<p>revisions</p> <table border="1"> <tr> <td>SURVEY BY: RTS</td> <td>SCALE: 1" = 30'</td> </tr> <tr> <td>DESIGNED BY: ASZ</td> <td>DATE: 07/01/2025</td> </tr> <tr> <td>DRAWN BY: ASZ</td> <td>SHEET: 6 OF 11</td> </tr> <tr> <td>CHECKED BY: JBG</td> <td>DRAWING NO.: 3320_D06</td> </tr> </table>	SURVEY BY: RTS	SCALE: 1" = 30'	DESIGNED BY: ASZ	DATE: 07/01/2025	DRAWN BY: ASZ	SHEET: 6 OF 11	CHECKED BY: JBG	DRAWING NO.: 3320_D06	
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DESIGNED BY: ASZ	DATE: 07/01/2025								
DRAWN BY: ASZ	SHEET: 6 OF 11								
CHECKED BY: JBG	DRAWING NO.: 3320_D06								



HARFORD COUNTY SEDIMENT CONTROL NOTES

- A GRADING UNIT OF 20 ACRES IS THE MAXIMUM CONTIGUOUS AREA ALLOWED TO BE GRADED AT A GIVEN TIME.
- A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT AT A TIME. WORK MAY PROCEED TO A SUBSEQUENT GRADING UNIT WHEN AT LEAST 50 PERCENT OF THE DISTURBED AREA IN THE PROCEEDING GRADING UNIT HAS BEEN STABILIZED AND APPROVED BY DPW. NO MORE THAN THIRTY ACRES CUMULATIVELY MAY BE DISTURBED AT ANY GIVEN TIME.
- THE CONTRACTOR/OWNER IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS. FURTHER, NO CONSTRUCTION ACTIVITY SHALL TAKE PLACE UNTIL ALL REQUIRED PERMITS HAVE BEEN OBTAINED.
- THE LIMITS OF DISTURBANCE SHALL BE CLEARLY DELINEATED IN THE FIELD PRIOR TO GRADING OF THE SITE TO ENSURE COMPLIANCE WITH APPROVED PLANS. ALL FOREST RETENTION AREAS WILL BE DELINEATED WITH BLAZE ORANGE FENCE AS WELL AS ANY SWM INFILTRATION PRACTICE PRIOR TO ANY CLEARING. WORK BEYOND THE LIMITS OF DISTURBANCE AND IN ANY AREA INSIDE THE FOREST RETENTION AND SWM INFILTRATION AREA IS CONSIDERED TO BE A VIOLATION OF THIS PLAN.
- ALL SEDIMENT CONTROL PRACTICES MUST BE INSTALLED PRIOR TO ANY CONSTRUCTION ACTIVITY. UPON COMPLETION OF THE INSTALLATION OF PERIMETER SEDIMENT CONTROL PRACTICES THE SITE MUST BE INSPECTED BY THE DEPARTMENT OF PUBLIC WORKS (DPW). NO ADDITIONAL CONSTRUCTION ACTIVITY WILL BE AUTHORIZED WITHOUT THE APPROVAL FROM DPW.
- ALL POINTS OF INGRESS AND EGRESS SHALL BE PROTECTED TO PREVENT TRACKING OF MUD INTO PUBLIC WAYS. DURING CONSTRUCTION, EVERY MEANS WILL BE TAKEN TO CONTROL SOIL EROSION AND SILTATION. IF NECESSARY A WASH RACK MAY NEED TO BE ESTABLISHED.
- EARTH DIKES, SEDIMENT TRAPS, ETC. WILL BE LOCATED AS SHOWN ON THESE DRAWINGS. FIELD CHANGES AND MINOR ADJUSTMENTS ARE PERMISSIBLE AS LONG AS THE INSTALLATION FUNCTIONS AND CONFORMS TO SPECIFICATIONS. THE SITE INSPECTOR PRIOR TO INSTALLATION MUST APPROVE ALL SUCH CHANGES. MAJOR CHANGES TO THE APPROVED PLAN WILL REQUIRE RE-APPROVAL BY THE HARFORD SOIL CONSERVATION DISTRICT.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
 - THREE CALENDAR DAYS ON SLOPES GREATER THAN 3:1, ALL WATERWAYS AND TO THE SURFACE OF ALL PERIMETER CONTROLS.
 - SEVEN CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS OF THE PROJECT SITE.
- DUST CONTROL MUST BE MANAGED AS PART OF ALL SEDIMENT CONTROL PLANS. FAILURE TO DO SO IS A VIOLATION OF THIS PLAN.
- SEDIMENT BASINS MUST BE BUILT TO DESIGN SPECIFICATIONS SHOWN ON THE PLAN. IF THE BASIN IS TO BE USED AS A FUTURE SWM FACILITY, THE BASIN WILL BE BUILT IN ACCORDANCE WITH THE LATEST MD-378 STANDARDS AND SPECIFICATIONS. SPECIFIED MATERIALS MUST BE USED. NO CHANGES OR MODIFICATIONS WILL BE MADE WITHOUT WRITTEN AUTHORIZATION OF THE HARFORD SOIL CONSERVATION DISTRICT.
- TEMPORARY FENCING SHALL BE PLACED AROUND ALL SEDIMENT BASINS, TRAPS, AND PONDS DURING CONSTRUCTION AND SITE GRADING.
- AT THE END OF EACH WORKING DAY ALL SEDIMENT CONTROL PRACTICES WILL BE INSPECTED AND LEFT OPERATIONAL. A WEEKLY LOG WILL BE KEPT IN ACCORDANCE WITH NOI/NPDES REGULATIONS. A COPY OF THE APPROVED SEDIMENT CONTROL PLANS SHALL BE AVAILABLE AT THE SITE AT ALL TIMES.
- ENSURE POSITIVE DRAINAGE TO ALL ROAD INLETS DURING ALL PHASES OF ROAD CONSTRUCTION TO ENSURE POSITIVE FLOW TO TRAPS AND OR BASINS.
- CUT AND/OR FILL SHALL BE DONE IN CONFORMANCE WITH 2011 EROSION AND SEDIMENT CONTROL STANDARDS AND SPECIFICATIONS FOR LAND GRADING.
- SURFACE FLOWS OVER CUT AND FILL SLOPES SHALL BE CONTROLLED BY EITHER REDIRECTING FLOWS FROM TRAVERSING THE SLOPES OR BY INSTALLING MECHANICAL DEVICES TO SAFELY CONVEY WATER DOWN SLOPES WITHOUT CAUSING EROSION.
- OFF-SITE WASTE OR BORROW AREAS SHALL HAVE AN APPROVED EROSION AND SEDIMENT CONTROL PLAN PRIOR TO THE IMPORT OR EXPORT OF MATERIAL TO/FROM THE PROJECT SITE.
- ALL MATERIAL ORIGINATING FROM THE DEVELOPMENT OF THE PROPERTY AND DEPOSITED ON THE PUBLIC RIGHT-OF-WAY SHALL BE IMMEDIATELY REMOVED.
- STORM DRAIN INLETS AND OUTLETS SHALL BE PROTECTED PER 2011 EROSION AND SEDIMENT CONTROL STANDARDS AND SPECIFICATIONS.
- TOPSOIL, LIMING, FERTILIZING, SEEDING, MULCHING, SOD, ETC. ARE ALL ESSENTIAL PARTS OF THE SEDIMENT CONTROL PLAN AND MUST BE COMPLETED ALONG WITH ALL OTHER PRACTICES.
- TRAPS TO BE REMOVED SHALL BE DEWATERED AS PER THE 2011 EROSION AND SEDIMENT CONTROL STANDARDS AND SPECIFICATIONS.
- PRIOR TO REMOVAL OF TRAPS OR CONVERSION OF SEDIMENT BASINS TO SWM FACILITIES, THE STORM DRAINS WILL BE FLUSHED.
- SEDIMENT CONTROL PRACTICES WILL BE MAINTAINED UNTIL ALL DISTURBED AREAS FOR WHICH THE PRACTICES WERE INSTALLED HAVE BEEN STABILIZED. SEDIMENT CONTROL PRACTICES MAY BE REMOVED ONLY WITH THE AUTHORIZATION OF THE DPW INSPECTOR. ALL DISTURBED AREAS RESULTING FROM THE REMOVAL OF SEDIMENT CONTROL DEVICES SHALL BE STABILIZED IMMEDIATELY. REMOVAL PRIOR TO INSPECTOR'S APPROVAL CONSTITUTES A VIOLATION.



STANDARD STABILIZATION NOTE

FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:

- THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEPPER THAN 3' HORIZONTAL TO 1' VERTICAL (3:1); AND
- SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING

EROSION & SEDIMENT CONTROL NOTES & DETAILS FOR LANDS OF MAGNOLIA 622, LLC

SITUATED IN: 1ST ELECTION DISTRICT, HARFORD COUNTY, MARYLAND

DATE	07/01/2025	SCALE: N/A
	DESIGNED BY: ASZ	
DRAWN BY: ASZ	DATE: 07/01/2025	SHEET: 10 OF 11
	CHECKED BY: JBG	
DRAWING NO.: 3320_D10	<p>ATWELL 866.850.4200 www.atwell.com 4692 MILLENNIUM DRIVE, SUITE 305 BEL CAMP, MD 21017 410.612.9900</p>	
	<p>OWNER/DEVELOPER: MAGNOLIA 622 LLC 5200 GLEN ARM ROAD, SUITE</p>	

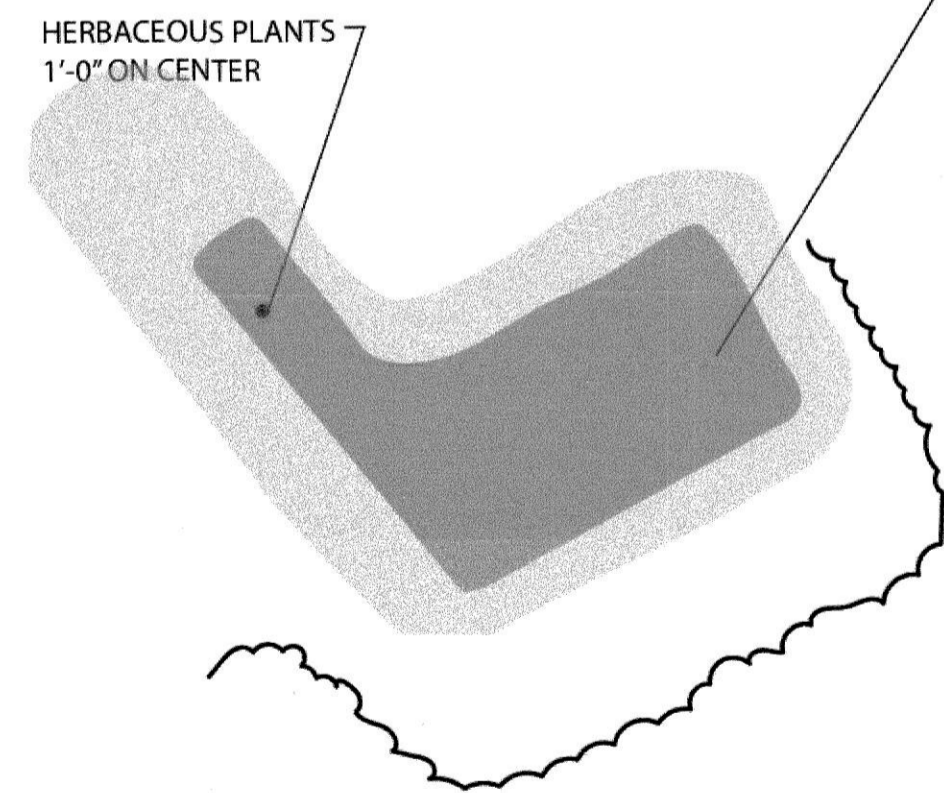
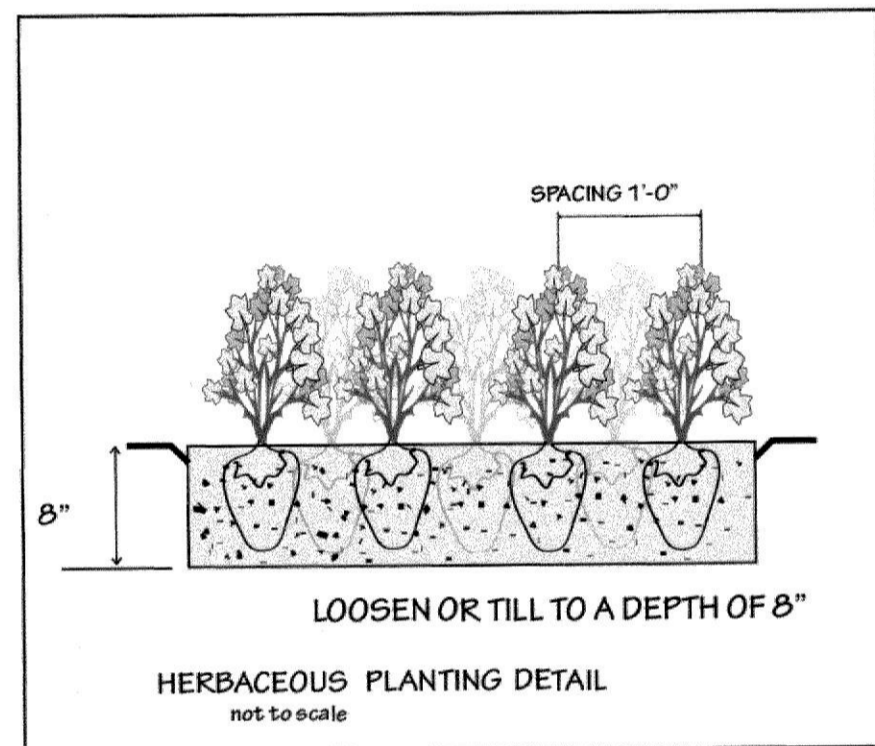
Gravel Submerged Wetlands

STORMWATER MANAGEMENT PLANTING SCHEDULE

NOTES:
 PLANT DIRECTLY IN THE SOIL FINAL GRADE.
 DO NOT FERTILIZE OR MIX IN ANY SOIL AMENDMENTS OR ADDITIONAL MULCHES OR MATERIALS.
 REMOVE ALL POTS, TIES, TAGS, BURLAP, TWINE ETC.
 PLANT EVEN WITH THE SOIL MIX GRADE AND WATER THROUGHLY IMMEDIATELY FOLLOWING PLANTING AND AGAIN THE FOLLOWING DAY.
 MONITOR FOR DROUGHT CONDITIONS DURING THE ESTABLISHMENT PERIOD AND WATER AS NEEDED.
 WARRANTY ALL PLANTS FOR A PERIOD OF ONE YEAR FROM OWNERS ACCEPTANCE.

WETLANDS PLANTINGS
 PLANTING MONTHS : MARCH, APRIL, MAY - SEPTEMBER, OCTOBER, NOVEMBER
 PLANT AT A SPACING OF 12" ON CENTER DIRECTLY INTO THE SOIL MIX LAYER
 DEWATER AS NEEDED AND TILL THE ENTIRE BOTTOM AREA TO A DEPTH OF 8"

PLANT RANDOMLY - THROUGHLY MIX SPECIES - LAYOUT PLUGS AND SPACE EVENLY PRIOR TO BEGINNING TO PLANT TO ENSURE EVEN DISTRIBUTION OF SPECIES.
 PLANT MATERIALS SHALL BE PROVIDED BY A LOCAL CERTIFIED SUPPLIER OF WETLANDS PLANTS
 SUBMIT SOURCES PRIOR TO ORDERING OR INSTALLING TO RESPONSIBLE AGENCY FOR REVIEW AND APPROVAL BASED ON FOR CURRENT APPROVED VENDORS.



WETLAND PLANTINGS 3600 HERBACEOUS PLUGS
 PLANTS SHALL BE INSTALLED USING HAND TOOLS ONLY, INCLUDING WHEEL-BARROWS AND SHOVELS. NO HEAVY MACHINERY CAN BE DRIVEN THROUGH OR WITHIN THE FINISHED GRADED EPHEMERAL WETLANDS

HERBACEOUS PLANTS - 1'-0" ON CENTER
 MINIMUM SIZE - 2" PLUGS X 4 - 5" DEEP

LOBELIA CARDINALIS - CARDINAL FLOWER	350
VERNONIA NOVEBORACENSIS - NEW YORK IRONWEED	350
ASCLEPIAS TUBEROSA - BUTTERFLY MILKWEED	350
JUNCUS EFFUSUS - SOFT RUSH	800
CAREX LURIDA - SHALLOW SEDGE	450
CAREX VULPINOIDEA - FOX SEDGE	350
SPARTINA PECTINATA - PRAIRIE CORD GRASS	350
PONDETARIA CORDATA - PICKERAL WEED	350
PANICUM VIRGATUM SWITCHGRASS	550
LEERSIA ORYZOIDES - RICE CUT GRASS	250
ACORUS AMERICANUS - AMERICAN SWEET FLAG	350
IRIS VERSICOLOR - BLUE IRIS	350
EUPATORIUM FISTULOSUM - JOE PYE WEED	600
SCRIPUS AMERICANUS - BULRUSH	450
SAGITTARIA LATTIFOLIA - DUCK POTATOE	200

6100 TOTAL (+ 1'-0" ON CENTER)

WETLAND AREA SIDE SLOPES - LOW MEADOW - MAINTAIN AT NO LESS THAN 8" CUT WITH STRING TRIMMERS OR BOOM SHEARS NO MORE THAN 4 TIMES PER YEAR.

Mix Composition
 34.0% Festuca rubra (Creeping Red Fescue)
 33.0% Festuca ovina, Variety Not Stated (Sheep Fescue, Variety Not Stated)
 10.0% Festuca brevipila, 'Beacon' (Hard Fescue, 'Beacon')
 5.0% Festuca ovina var. duriuscula, Gladiator (Hard Fescue, Gladiator)
 5.0% Festuca ovina var. glauca, Azure (Blue Fescue, Azure)
 5.0% Poa pratensis, 'Selway' (Kentucky Bluegrass, 'Selway')
 5.0% Poa pratensis, Appalachian (Kentucky Bluegrass, Appalachian)
 3.0% Agrostis perennans, Albany Pine Bush-NY Ecotype (Autumn Bentgrass, Albany Pine Bush-NY Ecotype)
 AVAILABLE FROM ERNST SEED CO
 Item Number: ERNMX-186-1

Height: 0.5 - 3.5 Ft
 Seeding Rate: 6 lb per 1,000 sq ft

1. WHEN HYDROSEEDING IS THE CHOSEN METHOD OF APPLICATION, THE TOTAL RATE OF SEED SHOULD BE INCREASED BY 25%
2. WINTER SEEDING REQUIRES 3 TONS PER ACRE OF STRAW MULCH. PLANTING DATES LISTED ABOVE AREA AVERAGE. THESE DATES MAY REQUIRE ADJUSTMENT TO REFLECT LOCAL CONDITIONS.
3. ALL SEED SHALL MEET THE MINIMUM PURITY AND MINIMUM GERMINATION PERCENTAGES RECOMMENDED BY THE MARYLAND DEPARTMENT OF AGRICULTURE. THE MAXIMUM % OF WEED SEEDS SHALL BE IN ACCORDANCE WITH STATE CODE.
4. COOL SEASON SPECIES MAY BE PLANTED THROUGHOUT THE SUMMER IF SOIL MOISTURE IS ADEQUATE OR SEEDED AREA CAN BE IRRIGATED.
5. ALL SUGMINOUS SEED MUST BE INOCULATED.
6. WARM SEASON GRASS MIX AND REED CANARY GRASS CANNOT BE MOWED MORE THAN 4 TIMES PER YEAR.
7. WARM SEASON GRASSES REQUIRE A SOIL TEMPERATURE OF AT LEAST 50 DEGREES IN ORDER TO GERMINATE AND WILL REMAIN DORMANT UNTIL THEN.

SUBMERGED GRAVEL WETLAND LANDSCAPE PLAN FOR

LANDS OF MAGNOLIA 622, LLC

CONTRACT #: SWMENG-000430/2023
 SWM BILLING #: 92096

SITUATED IN: 1ST ELECTION DISTRICT, HARFORD COUNTY, MARYLAND

LANDSCAPE PLAN
 PREPARED BY



PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A FULLY LICENSED REGISTERED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND

250996

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OWNER/DEVELOPER: MAGNOLIA 622 LLC 5200 GLEN ARM ROAD, SUITE M GLEN ARM, MARYLAND 21057 ATTN: CURTIS SANDBEK PHONE: 410-977-8190	PROPERTY ADDRESS: 109 MAGNOLIA ROAD JOPPA, MD 21085							
SURVEY BY: RTS	SCALE: N/A							
DESIGNED BY: ET DRAWN BY: ASZ CHECKED BY: ET	DATE: 07/01/2025 SHEET: 11 OF 11 DRAWING NO.: 3320_D11							