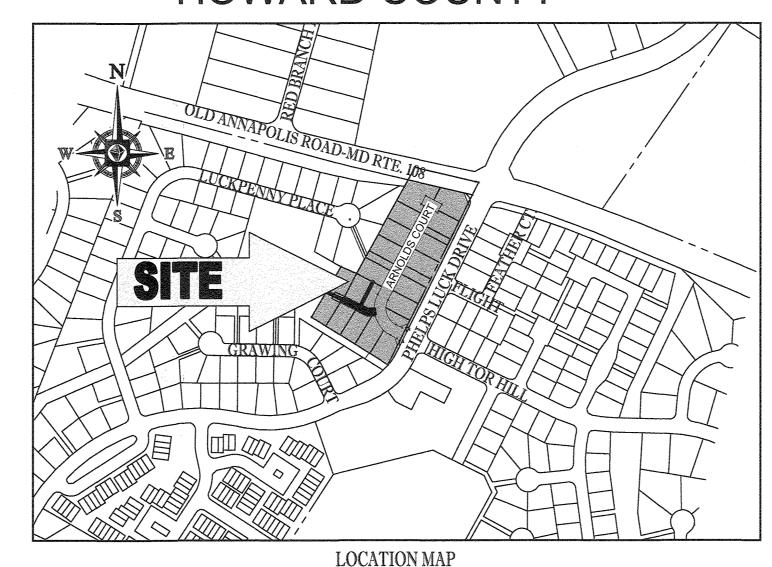
STANDARD DRAWING LEGEND FOR ENTIRE PLAN SET (NOT TO SCALE)			STANDARD DRAWING LE FOR ENTIRE PLAN SET (NOT TO SCALE)			
EXISTING NOTE	TYPICAL NOTE TEXT ONSITE PROPERTY LINE / R.O.W. LINE	PROPOSED NOTE	EXISTING N	OTE	TYPICAL NO	
	NEIGHBORING PROPERTY LINE / INTERIOR PARCEL LINE		***************************************		WETLAND	BUFFER
	EASEMENT LINE		MONTHS MATERIA GUARRIE RESEARCH MONTHAL MONTHS AND	COMMITTED TO STATE OF THE STATE	STREAM E	UFFER
	SETBACK LINE		~~~~~	~~~~	TREEL	INE ~~
	·		(TBR)		TO BE REI	MOVED
	CONCRETE CURB &	CURB AND GUTTER				
	GUTTER	DEPRESSED CURB AND GUTTER			YARD/OVE INLE	
	UTILITY POLE WITH LIGHT	-	***	ionide and a second	PERENNIAL	STREAM
•	POLE LIGHT	E	CONTROL DE	company and considered PHASING ESSENSION PARTICIPATION OF THE CONTROL OF THE CONT	INTERMIT STREA	
0	UTILITY POLE	0		000000000	LIMIT OF FIE RUN SURVE	
\$	STREET LIGHT	\$			WATER QI FACILITY DE ARE	RAINAGE
	TYPICAL SIGN					
	CONTOUR LINE	<u>190</u> 187				
	SANITARY SEWER LATERAL	SL				
W	UNDERGROUND WATER LINE	w				
E	UNDERGROUND ELECTRIC LINE	Е				
G	UNDERGROUND GAS LINE		ROA	DWAY	INFOF	RMATION
ОН	OVERHEAD WIRE	OH	ROAD NAME	CLASSIFIC	CATION	DESIGN SPEED
	UNDERGROUND TELEPHONE LINE	T	ARNOLDS COURT	PUBLIC ACCE	SS PLACE	25 MPH
	UNDERGROUND CABLE LINE	C		FSDS	T YMM 2	ARY TABI
	STORM		"SITE AREA"		CIVILVIA	5.06 AC.
	SEWER SANITARY		ESDv			EQUIRED), 13,837 C
~	SEWER MAIN HYDRANT	~	CPv		1,895 C.F. (R	EQUIRED), 1,941 C.I INCLUDED IN ESD
<u> </u>	SANITARY		QP10 POLA			1.73 CFS, PROP. 10.
	MANHOLE STORM		QP10 POI B QP10 POI C			2.58 CFS, PROP. 12. 0.98 CFS, PROP 0.10
⊗WM	MANHOLE WATER					
wv ×	METER WATER					
	VALVE TYPICAL END					INDEX
	SECTION HEADWALL OR		COVER SHEET	SHEET	IIILE	
	ENDWALL	Jor	SOILS MAP, EXISTIN		& DEMO PLA	N
	INLET		GRADING, STORMV CONTROL PLAN	ATER MANAGE	MENT & EROS	SION & SEDIMENT
<u>0</u>	CURB INLET	<u>©</u>	LANDSCAPE PLAN	& DETAILS		
0	CLEAN OUT	0	ROAD PLAN & PROF			
<u>(E)</u>	ELECTRIC MANHOLE	Ē				
<u>(7)</u>	TELEPHONE MANHOLE	(
EB	ELECTRIC BOX	EB				
EP	ELECTRIC PEDESTAL	EP				GEN
	MONITORING WELL					40. TRASH P
	BENCHMARK	•		•		APPLICA DEPART
	BORING	+				41. A LANDS 42. HIGHLY
+ + + + + + + + + + + + + + + + + + +	FLOODPLAIN					43. ALL STR PERMITS
	STEEP SLOPES (>25%)					44. "NO PAR COUNTY 14-17.
	STEEP SLOPES (15%-25%)					45. A CERTI LANDSC
	IMPERVIOUS AREA					46. THIS SUI CONSER PRELIMI
	MICROBIORETENTION FACILITY NUMBER	(1)				BEFORE 47. A SIGHT
	LIMIT OF DISTURBANCE	LOD				ASSOCIA 48. A DESIG
,	L	1	l			FURTHE

PRELIMINARY PLAN FOR ARNOLD'S

LOTS 1-18 & OPEN SPACE LOTS 19-23

LOCATION OF SITE

5320 PHELPS LUCK DRIVE COLUMBIA, MD 6TH ELECTION DISTRICT TAX MAP 30, GRID 24, PARCELS N, O, & OPEN SPACE 462 VILLAGE OF LONG REACH, SECTION 1, AREA 1 HOWARD COUNTY



GENERAL NOTES (cont.)

STRUCTURE CLEARANCES - MINIMUM 12 FEET

G. MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE

A. WIDTH - 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE)

B. SURFACE - SIX (6") INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING

STRUCTURES (CULVERTS/BRIDGES) CAPABLE OF SUPPORTING 25 GROSS TONS (H 25 LOADING)

STREAMS OR THE THEIR REQUIRED BUFFERS, FLOODPLAIN AND FOREST CONSERVATION EASEMENT AREA.

DISTURBANCE GREATER THAN 5,000 SF WAS APPROVED ON MAY 21, 2019 WITH THE FOLLOWING CONDITIONS:

INCLUDE THE SUBMITTED EXHIBIT AS PART OF THE APPLICATION AND REFERENCE WP-19-101.

PIPESTEM AND ROAD RIGHT-OF-WAY LINE AND NOT ONTO THE PIPESTEM LOT DRIVEWAY.

2.) NOTE ALTERNATIVE COMPLIANCE ON ALL FUTURE PLAN SUBMISSIONS.

39. SITE IS LOCATED IN NT DISTRICT, OPEN SPACE IS NOT REQUIRED.

GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM OF 45 TURNING RADIUS

FOLLOWING (MINIMUM) REQUIREMENTS:

33. DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE

DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.

34. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS,

35. FOR FLAG OR PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR

37. AN ALTERNATIVE COMPLIANCE REQUEST (WP-19-101) IN ACCORDANCE WITH SECTION 16.155(a)(l)(ii), WHICH REQUIRES SITE DEVELOPMENT PLANS FOR SITE

38. THE SHARED DRIVEWAY ACCESS AND MAINTENANCE OBLIGATION AGREEMENTS FOR THE 16' DRIVEWAY WHICH SERVE LOTS 3-7 & ACCESS BY ARNOLDS

COURT. WILL BE RECORDED IN THE LAND RECORDS OF HOWARD COUNTY SIMULTANEOUSLY WITH THE RECORDATION OF THE SUBDIVISION PLA

1.) SUBMIT A STANDARD GRADING PLAN AND PERMIT WITH THE DEPARTMENT OF INSPECTION LICENSES AND PERMITS FOR PROCESSING AND APPROVAL.

36. WATER AND SEWER SERVICE TO THESE LOTS WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 18.122.B OF THE HOWARD COUNTY CODE.

OPEN SPACE CHART					
LOT No.	OWNER	PURPOSE			
19	TO BE DEDICATED TO ARNOLDS CORNER HOA	OPEN SPACE			
20	TO BE DEDICATED TO ARNOLDS CORNER HOA	OPEN SPACE			
21	TO BE DEDICATED TO ARNOLDS CORNER HOA	OPEN SPACE			
22	TO BE DEDICATED TO ARNOLDS CORNER HOA	OPEN SPACE			
23	TO BE DEDICATED TO ARNOLDS CORNER HOA	OPEN SPACE			

LOT 1

LOT 2

LOT 3

LOT 4

LOT 5

LOT 6

LOT 7

LOT 8

LOT 9

LOT 10

LOT 11

LOT 12

LOT 13

LOT 14

LOT 15

LOT 16

LOT 17

LOT 18

MINIMUM LOT SIZE CHART **PROPERTY LINE** COORDINATE TABLES Area PIPE STEM AREA MIN. LOT SIZE 9.320 S.F. Northing Easting 9,489 S.F. 51 S.F. 567191.5838 1363773.7817 384 S.F. 9.083 S.F 9.467 S.F. 567390.9427 1363454,465 714 S.F. 1363576.9694 567600.5838 9.689 S.F. 678 S.F. 9.011 S.F 9,327 S.F. 299 S.F. 1363641.7349 567572.0563 9.035 S.F. 567934.2568 1363843.2065 9,014 S.F. 1363858.3838 567961.5422 9,010 S.F. 9,009 S.F. 1363887.3720 568013.6565 13.162 S.F 1364141.1466 567954.1411 1364151.8960 567951.2552 9.017 S.F. 10 567899.7858 1364126.2779 9.006 S.F. 567872.1703 1364112.5327 9,012 S.F. 567344.0251 1363849.6569 9,129 S.F. 1363833.8066 174,123 S.F OR 3.997 AC. 567346.1963 567359.3617 1363807.3556 14 15 567461.3459 1363774.3587 567831.3407 1363968.4549 567825.3015 1363979.9670 1363998.5490 18 567860.7234 19 567896.0292 1363931.2474 20 1363912.6654 567860.6074 1363924.1775 567854.5682 567484.5734 1363730.0813 1363785.0763 567314.5998 1363811.641 567301.3777 567290.1842 1363822.8585

VICINITY MAP COPYRIGHT ADC THE MAP PEOPLE

PERMIT USE NO. 20602153-5 SCALE: 1"=2000' ADC MAP COORDINATES: 4935-J5

- 1. THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS ALTERNATE COMPLIANCE REQUESTS HAVE BEEN
- 2. THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD TUN SURVEY WITH ONE (1) FOOT CONTOUR INTERVALS PREPARED BY BOHLER ENGINEERING, DATED 04/30/19.
- WATER IS PUBLIC, CONT. # 343 W & S. 424-D-W&S
- EXISTING UTILITIES ARE BASED ON FIELD RUN SURVEY PERFORMED BY BOHLER ENGINEERING, DATED 12-27-18.
- THE STORMWATER MANAGEMENT SYSTEMS SHOWN ON THESE PLANS ARE AN APPROXIMATION OF THE SIZE, SHAPE AND LOCATION. STORMWATER MANAGEMENT WILL BE PROVIDED IN ACCORDANCE WITH HOWARD COUNTY SPECIFICATIONS. WATER QUALITY AND RECHARGE VOLUMES WILL BE PROVIDED BY MICRO-BIORETENTION FACILITIES AND DRY WELLS TO MEET MDE REQUIREMENTS.
- 9. SUBJECT PROPERTY ZONED NT-SFMD PER THE 10/06/13 COMPREHENSIVE ZONING REGULATIONS.
- 10 PROPERTY INFORMATION
 - GROSS AREA OF TRACT = 5.609 AC.

 AREA OF PROPOSED R/W DEDICATION = 1.141 AC. (0.745 AC. PROP. ROAD "A") (0.356 AC. MD RTE.108)

 AREA OF PROPOSED LOTS = 3.997 AC. (LOTS), 0.471 AC. (OPEN SPACE LOTS)

 NUMBER OF LOTS/PARCELS PROPOSED: 23 (TOTAL)
- 11. NO WETLANDS EXIST ON SITE BASED UPON THE WETLAND CERTIFICATION PREPARED BY EXPLORATION RESEARCH, INC. DATED 5/3/18
- 12. PER FEMA (FIRM MAP) 24027CO155D NO FEMA DELINEATED FLOODPLAIN EXISTS ON OR SURROUNDING THE SUBJECT PROPERTY
- 13. THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY THE TRAFFIC GROUP, DATED 2/13/18, AND APPROVED ON: 6/7/18. 14. THERE ARE NO KNOWN CEMETERIES ON THE SUBJECT PROPERT
- 15. THIS PROPERTY IS LOCATED INSIDE OF THE METROPOLITAN DISTRICT
- 16. THERE IS A HISTORIC HOUSE ON-SITE THAT DATES BACK TO APPROXIMATELY 1890-1910. THIS HOUSE HAS BEEN HEAVILY ALTERED AND WILL BE REMOVED. THIS HOUSE AND ALL OUTBUILDINGS HAVE BEEN REVIEWED AND DOCUMENTED BY THE COUNTY'S ARCHITECTURAL HISTORIAN AND HAVE BEEN APPROVED FOR DEMOLITION BY DPZ STAFF.
- 17. THE PROPERTY IS SUBJECT TO FDP-77-A-IV AMENDMENT TO ALLOW THE FOLLOWING:
- (1.) CHANGE THE PERMITTED LAND USE OF PARCEL 'O' FROM COMMERCIAL TO SINGLE FAMILY MEDIUM DENSITY.
- (2.) INCREASE THE DENSITY OF THE NT DISTRICT FROM ITS CURRENT DENSITY OF 2.3800 UNITS PER GROSS ACRES TO 2.3809 UNITS PER GROSS ACRE TO PERMIT 20 ADDITIONAL DWELLING UNITS TO BE ASSIGNED TO TWO SPECIFIC PROPERTIES. 19 UNITS TO 5320 PHELPS LUCK DRIVE, GRANDFATHER'S GARDEN CENTER AND 1 UNIT TO 11608 LITTLE PATUXENT PARKWAY, POPLAR GLEN APARTMENTS. APPROVED BY THE ZONING BOARD IN ITS DECISION AND ORDER DATED NOVEMBER 6, 2017 IN ZONING BOARD CASE NUMBER 1112M.
- (3.) PROVIDE THAT NO IMPROVEMENTS TO PARCELS 'N' AND 'O' MAY BE MADE EXCEPT IN ACCORDANCE WITH A SITE DEVELOPMENT PLAN APPROVED
- (4.) CORRECT THE PREVIOUS ERROR OF CREDITED AND NON-CREDITED OPEN SPACE AREAS.
- NOTE: FDP-77-A-IV WAS APPROVED BY THE PLANNING BOARD ON 12/7/17 AND RECORDED IN THE LAND RECORDS ON 1/12/18 AS PLAT NUMBER'S 18. AN ALTERNATIVE COMPLIANCE REQUEST (WP-19-083) IN ACCORDANCE WITH SECTION 16.134(a) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS TO NOT CONSTRUCT CURB AND GUTTER AND SIDEWALK ALONG MD ROUTE 108 WAS APPROVED ON MAY 9, 2019 WITH THE FOLLOWING
- (1.) POST A FEE-IN-LIEU FOR SIDEWALK CONSTRUCTION FOR THE PROPERTY FRONTAGE ALONG MD ROUTE 108. COORDINATE WITH DED, DPW AND SHA REGARDING THE PROPER AGENCY AND PROCESS TO PAY FEE-IN-LIEU. (2.) COORDINATE WITH SHA AND THE COUNTY REGARDING MAKING ANY IMPROVEMENTS, IF NECESSARY, TO THE RAMPS, SIGNALS OR CROSSWALK OR ACROSS ROUTE 108 TO ENSURE THAT PEDESTRIANS CAN SAFELY ACCESS THE SIDEWALK ON THE NORTH SIDE OF ROUTE 108.
- 19. THE EXISTING WELL WILL BE ABANDONED ACCORDING TO HEALTH DEPARTMENT REQUIREMENTS PRIOR TO RECORDATION OF THE PLAT.
- 20. A NOISE STUDY HAS BEEN PERFORMED BY THE WILSON T BALLARD COMPANY DATED MAY 2019 AND A NOISE BARRIER PROVIDED FOR NOISE MITIGATION. THIS SUBDIVISION IS NOT LOCATED WITHIN THE BWI HEIGHT AND NOISE ZONE (ANZ).
- 21. A GEOTECHNICAL REPORT FOR THIS PROJECT WAS PREPARED BY GTA, DATED MAY 15, 2019.
- 22. TRAFFIC CONTROL DEVICES: A) THE R1-1 ("STOP") SIGN AND THE STREET NAME SIGN (SNS) ASSEMBLY FOR THIS DEVELOPMENT MUST BE INSTALLED BEFORE THE BASE PAVING IS COMPLETED.
- B) THE TRAFFIC CONTROL DEVICE LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MUST BE FIELD APPROVED BY HOWARD COUNTY TRAFFIC DIVISION (410-313-2430) PRIOR TO THE INSTALLATION OF ANY OF THE TRAFFIC CONTROL DEVICES.
- C) ALL TRAFFIC CONTROL DEVICES AND THEIR LOCATIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MDMUTCD).
- D) ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED ("QUICK PUNCH"), SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) 3' LONG. THE ANCHOR SHALL NOT EXTEND MORE THAN TWO "QUICK PUNCH" HOLES ABOVE GROUND LEVEL. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
- 23. STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURES AND POLES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III (2006), SECTION 5.5.A. A MINIMUM OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
- 24. ONE (1) PUBLIC STREET NAME SIGN AND ONE (1) PRIVATE RANGE OF ADDRESS SIGN ASSEMBLY SHALL BE FABRICATED AND INSTALLED BY HOWARD COUNTY BUREAU OF HIGHWAYS AT THE DEVELOPERS/OWNERS EXPENSE. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT 410-313-2430 FOR DETAILS AND COST ESTIMATES.
- 25. ALL TRAFFIC CONTROL SIGNS SHALL BE PLACED IN FRONT OF TREE LOCATIONS FOR MAXIMUM SIGHT VISIBILITY. NO TREE CAN BE INSTALLED WITHIN 30' OF ANY STOP SIGN (APPROACH DIRECTION). WHERE SIGNS NEED TO BE PLACED BEHIND THE SIDEWALK, ADDITIONAL SPACING BETWEEN TREES MAY BE REQUIRED AT THOSE LOCATIONS.
- 26. LAND DEDICATED TO HOWARD COUNTY, MARYLAND AND MDSHA FOR PURPOSES OF THE PUBLIC ACCESS PLACE AND MD RTE 108 (1.141 ACRES).
- 27. PRIOR CASE NUMBERS ASSOCIATED WITH THIS PROJECT INCLUDE WP-19-068, S-18-006, ECP-18-052, ZB1112, FDP-77-A-IV, PB 18 F 44 (F-70-068c).
- 28. THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS PER COUNCIL BILL NO. 45-2003
 AND THE AMENDED ZONING REGULATIONS PER COUNCIL BILL NO. 75-2003. DEVELOPMENT OR CONSTRUCTION ON THIS PROPERTY MUST COMPLY
 WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION APPLICATION
 OR BUILDING/GRADING PERMIT APPLICATIONS.
- 29. A PRE-SUBMISSION COMMUNITY MEETING FOR THIS PROJECT WAS HELD ON 6/9/16.
- 30. OPEN SPACE LOTS TO BE DEDICATED PER OPEN SPACE CHART.
- 31. ALL LOTS WILL BE ENCUMBERED BY COLUMBIA ASSOCIATION COVENANTS
- 32. SITE IS UNDERGOING THE MDE VOLUNTARY REMEDIATION PROGRAM, HEALTH DEPARTMENT WILL NEED TO SEE DOCUMENTATION FROM MDE THAT THE PROPERTY HAS COMPLETED THE VOLUNTARY PROGRAM BEFORE PLAT SIGNATURE AND FORWARD WELL ABANDONMENT REPORT.

BENCHMARK GEODETIC SURVEY CONTROL - 30IB ELEV. 526.108 N 566,937,964 E 1,366,270.807 GEODETIC SURVEY CONTROL - 30IF ELEV. 473.359 N 568,033,070

E 1,363,934.332

OWNER/DEVELOPER: SUBDIVISION NAME: ARNOLD'S CORNER SECTION/AREA: N/A DEED # 18527/263 PREVIOUS FILE No. WP-19-068 S-18-006. FDP-77-A-IV ECP-18-052 ZB1112, PB 18 F 44 (F-70-068c)

308 MAGOTHY ROAD SEVERNA PARK, MD 21146 CONTACT: DAVID WOESSNER PHONE: (240) 319-1735 GRID: 24 PARCELS: N, O & 462, PUBLIC USE PARCELS 6TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND I, BRANDON R. ROWE, 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. 40808. EXPIRATION DATE: 7/3/2019

REV	DATE	COMMENT	BY
-			

REVISIONS



BEFORE YOU DIG It's fast. It's free. It's the law.

NOT APPROVED FOR CONSTRUCTION

DRAWN BY: CHECKED BY: AS SHOWN SCALE:

PROJECT PRELIMINARY

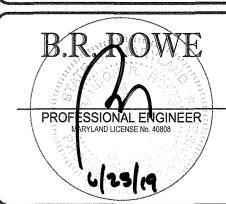
06/21/10

LOTS 1-18 & OPEN SPACE LOTS 19-23 A RESUBDIVISION OF PARCELS N & O OF THE VILLAGE OF LONG REACH, SECTION 1, AREA : LOCATION OF SITE 5320 PHELPS LUCK DRIVE COLUMBIA, MD

6TH ELECTION DISTRICT TAX MAP 30, GRID 24, PARCELS N, O, & OPEN SPACE 462 VILLAGE OF LONG REACH, SECTION 1, AREA 1 HOWARD COUNTY



901 DULANEY VALLEY ROAD, SUITE 80 TOWSON, MARYLAND 21204 Phone: (410) 821-7900 (410) 821-7987 MD@BohlerEng.com



SHEET TITLE:

COVER SHEET

SHEET NUMBER:

P-19-001

H:\18\MD182086\DRAWINGS\PLAN SETS\PRELIMINARY PLAN\MD182086-SDP-2.DWG PRINTED BY: AGAMBOA 6.25.19 @ 1:41 PM LAST SAVED BY: AGAMBOA

TENTATIVELY APPROVED DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY

SINGLE FAMILY DETACHED PARKING ANALYSIS NUMBER OF SINGLE DETACHED LOTS FOR THIS SKETCH PLAN = 18

STANDARD DRAWING LEGEND

ROADWAY INFORMATION CHART

ESD SUMMARY TABLE

13,130 C.F. (REQUIRED), 13,837 C.F. (PROVIDED)

1,895 C.F. (REQUIRED), 1,941 C.F. (PROVIDED)

EX. 11.73 CFS, PROP. 10.74 CFS

EX. 12.58 CFS, PROP. 12.52 CFS

EX. 0.98 CFS, PROP 0.16 CFS

PROPOSED NOTE

R/W WIDTH

50 FT.

SHEET NUMBER

GENERAL NOTES (cont.)

BEFORE DECEMBER 31, 1992

DEPARTMENT OF PUBLIC WORKS WILL NOT BE RESPONSIBLE FOR UPKEEP

PERMITS. EXISTING STRUCTURES WERE BUILT CIRCA 1937 OR LATER.

40. TRASH PAD MAINTENANCE AND LANDSCAPE SCREENING SHALL BE THE RESPONSIBILITY OF THE LOT OWNERS WHICH ACCESS ONTO THE

43. ALL STRUCTURES WILL BE REMOVED PRIOR TO FINAL RECORDATION OF THE FINAL PLAT AND BEFORE THE RELEASE OF ANY BUILDING

COUNTY'S DISCRETION, "NO PARKING" RESTRICTION MAY BE REQUIRED BETWEEN STA 13+00 TO 16+50 DIRECTLY ADJACENT TO LOTS

44 "NO PARKING" RESTRICTION REQUIRED ALONG ARNOLDS COURT AT STA 10+00 TO STA 13+00 ON BOTH SIDE OF THE STREET. AT THI

45. A CERTIFIED LANDSCAPE PLAN WILL BE PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE

46. THIS SUBDIVISION IS EXEMPT FROM THE REQUIREMENTS OF SECTION 16.1202(b)(I)(IV) OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION AND SPECIMEN TREES, BECAUSE THE SUBJECT PROPERTY IS PART OF A PLANNED UNIT DEVELOPMENT WHICH HAS

47. A SIGHT DISTANCE ANALYSIS FOR THE PROPOSED PUBLIC ROAD INTERSECTION WITH PHELPS LUCK ROAD PREPARED BY FSH

PRELIMINARY DEVELOPMENT PLAN APPROVAL AND 50% OR MORE OF THE LAND IS RECORDED AND SUBSTANTIALLY DEVELOPED

48. A DESIGN MANUAL WAVIER WAS APPROVED ON MARCH 25 2019 TO ALLOW A HORIZONTAL CURVE WITH A MINIMUM RADIUS OF 100 FEET.

FURTHER MORE, THE REQUEST TO PROVIDE A ROADWAY WIDTH OF 28 FEET WITHIN THE CURVE WITH A TRANSITION OF 12:1 FROM A 28

FOOT WIDTH ROAD TO A 24 FOOT WIDTH ROAD WAS APPROVED. PARKING TO BE RESTRICTED ON BOTH SIDES OF THE STREET THROUGH

41. A LANDSCAPING SURETY WILL BE REQUIRED AS PART OF THE DEVELOPER'S AGREEMENT AT FINAL PLAN STAGE.

42. HIGHLY ERODABLE SOILS EXIST ON SITE. SEDIMENT CONTROL PLANS WILL ADDRESS THE EROSION CONCERNS.

REQUIRED PARKING (@ 2.5 SPACES PER SFD UNIT) = 45 PER SECTION 133.0 D.2.A OF THE ZONING REGULATIONS TOTAL REQUIRED SPACES = 45 SPACES

18 SPACES/UNIT (2 GARAGE & 2 DRIVEWAY SPACES) = 72 SPACES

901 DULANEY VALLEY ROAD, SUITE 801 **TOWSON, MARYLAND 21204** (410) 821-7900

PREPARED BY

www.BohlerEngineering.com CONTACT: BRANDON ROWE, P.E.

SOILS TABLE SOILS NAME SOILS DESCRIPTION HYDROLOGIC SOILS GROUP HIGHLY ERODIBLE SOIL K FACTOR GLENELG-URBAN LAND COMPLEX, 0 TO 8 PERCENT SLOPES GLENVILLE-BAILE SILT LOAMS, 0 TO 8 PERCENT SLOPES URBAN LAND-UDORTHENTS COMPLEX, 0 TO 15 PERCENT SLOPES UND COMPLEX, 0 TO 15 PERCENT D NO 0.24	OLD ANNAPOLIS ROAD-MD RTE-108 WASSEL SOUTH FROM THE FORM FOR PUBLIC USE WASSEL SOUTH FROM THE FORM FOR PUBLIC USE WASSEL SOUTH FORM FOR PUBLIC USE WASSEL SOUTH FOR PUBLIC USE WASSEL SOUTH FORM FOR PUBLIC USE WASSEL SOUTH FOR PUBLIC USE WASSEL S	NGINERANDER RITTING SERVICES ANARCHENENNS SURBENS SHALE UTILIZED SHOOTS SHALLE UTILIZED SHOOTS
	ST/910TE 275.39 ST/910TE 2	REVISIONS REV DATE COMMENT BY
	LUCKRENNY PLACE DESCRIPTION OF THE PLACE OF	KNOW WHAT'S BELOW ALWAYS CALL 811
	LANDS OF SUPERIOR STATE OF SUPERIOR SUP	ALWAYS CALL 811 BEFORE YOU DIG It's fast. It's free. It's the law. NOT APPROVED FOR CONSTRUCTION PROJECT No.: MD182086 DRAWN BY: AVG CHECKED BY: BRR DATE: 06/21/19 SCALE: 1" = 50' CAD I.D.: SS0 PROJECT: PRELIMINARY PLAN FOR
	COLOMBIA VILLAGE OF LONGREACH PARCEL O COLUMBIA STORE BUL STOR	ARNOLD'S CORNER LOTS 1-18 & OPEN SPACE LOTS 19-23 A RESUBDIVISION OF PARCELS N & O OF THE VILLAGE OF LONG REACH, SECTION 1, AREA 1 LOCATION OF SITE 5320 PHELPS LUCK DRIVE COLUMBIA, MD 6TH ELECTION DISTRICT TAX MAP 30, GRID 24, PARCELS N, O, & OPEN SPACE 462 VILLAGE OF LONG REACH, SECTION 1, AREA 1 HOWARD COUNTY BOHLER
	CRAWING COURS 12 1990 STORE 12	PROFESSIONAL ENGINEER PROFESSIONAL ENGINEER MARY AND LICENSE NO. 40808

EX. 30' DRAINAGE,
WATER & SEWER
EASEMENT PLATFIR 44

GRAWING COURT

TENTATIVELY APPROVED DEPARTMENT OF PLANNING AND ZONING

H:\18\MD182086\DRAWINGS\PLAN SETS\PRELIMINARY PLANMD182086-SSP-2.DWG PRINTED BY: AGAMBOA 6.25.19 @ 1:34 PM LAST SAVED BY: AGAMBOA

DATE

SHEET TITLE:

SOILS MAP, EXISTING & DEMO PLAN

TAX MAP: 30 GRID: 24 ZONED: NT PARCELS: N, O & 462, PUBLIC USE PARCELS 6TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

ARNOLD'S CORNER, LLC 308 MAGOTHY ROAD SEVERNA PARK, MD 21146 CONTACT: DAVID WOESSNER

PHONE: (240) 319-1735

OWNER/DEVELOPER:

SUBDIVISION NAME: ARNOLD'S CORNER SECTION/AREA: N/A DEED # 18527/263

WP-19-068

FDP-77-A-IV, PB 18 F 44 (F-70-068c)

PREVIOUS FILE No.

S-18-006,

ECP-18-052, ZB1112,

RIM=448.46 INV A=444.46 INV B=443.61

SAN. MH Y B RIM=447.50/ | INV A=436.25 | J

SPACE LOT 559

PHEDES CHARLES F SE CO TRUSTEE

PHELPS SUSAN G CO TRUSTEE STV

S325 PHELPS LUCK DR

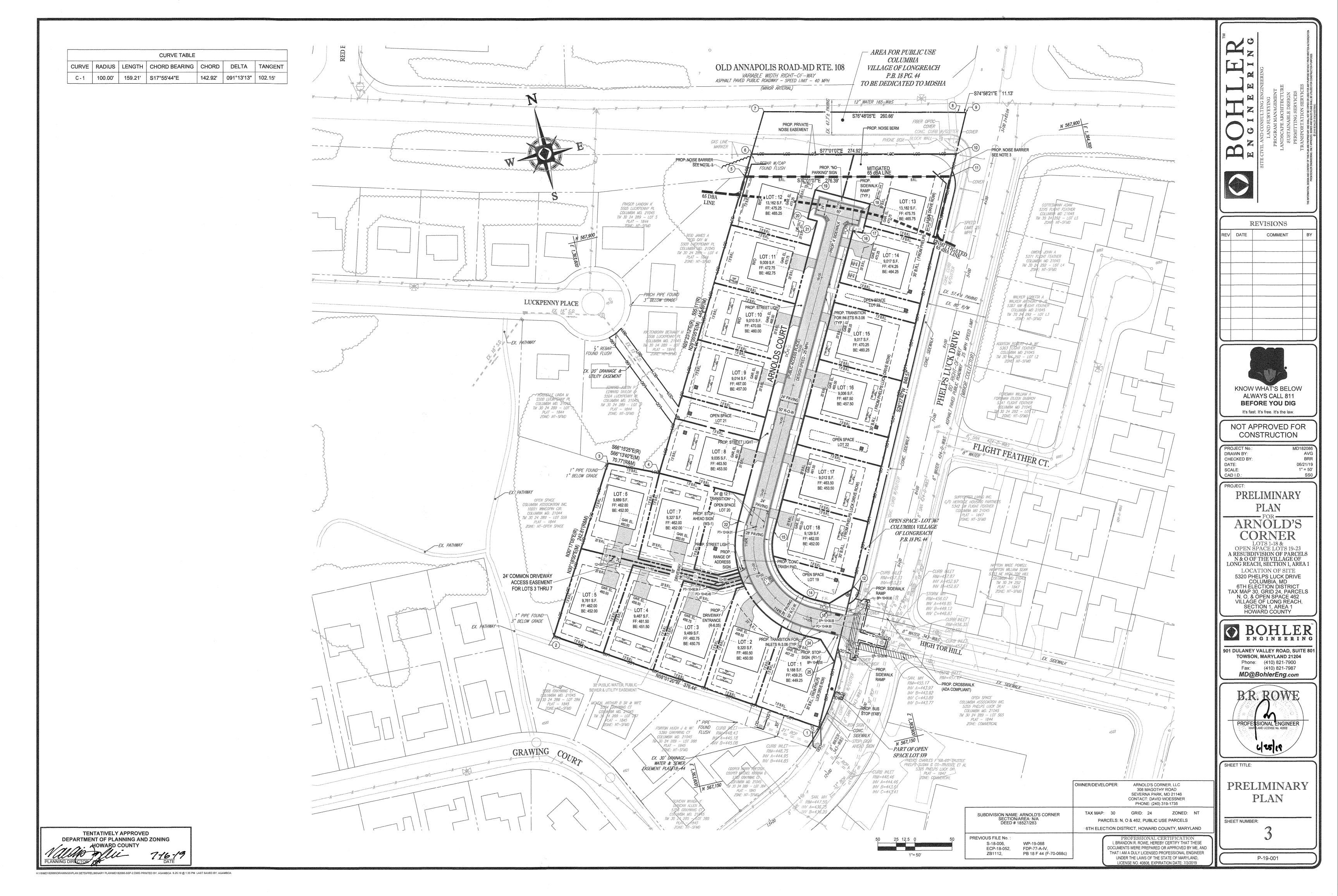
PLAT - 1849

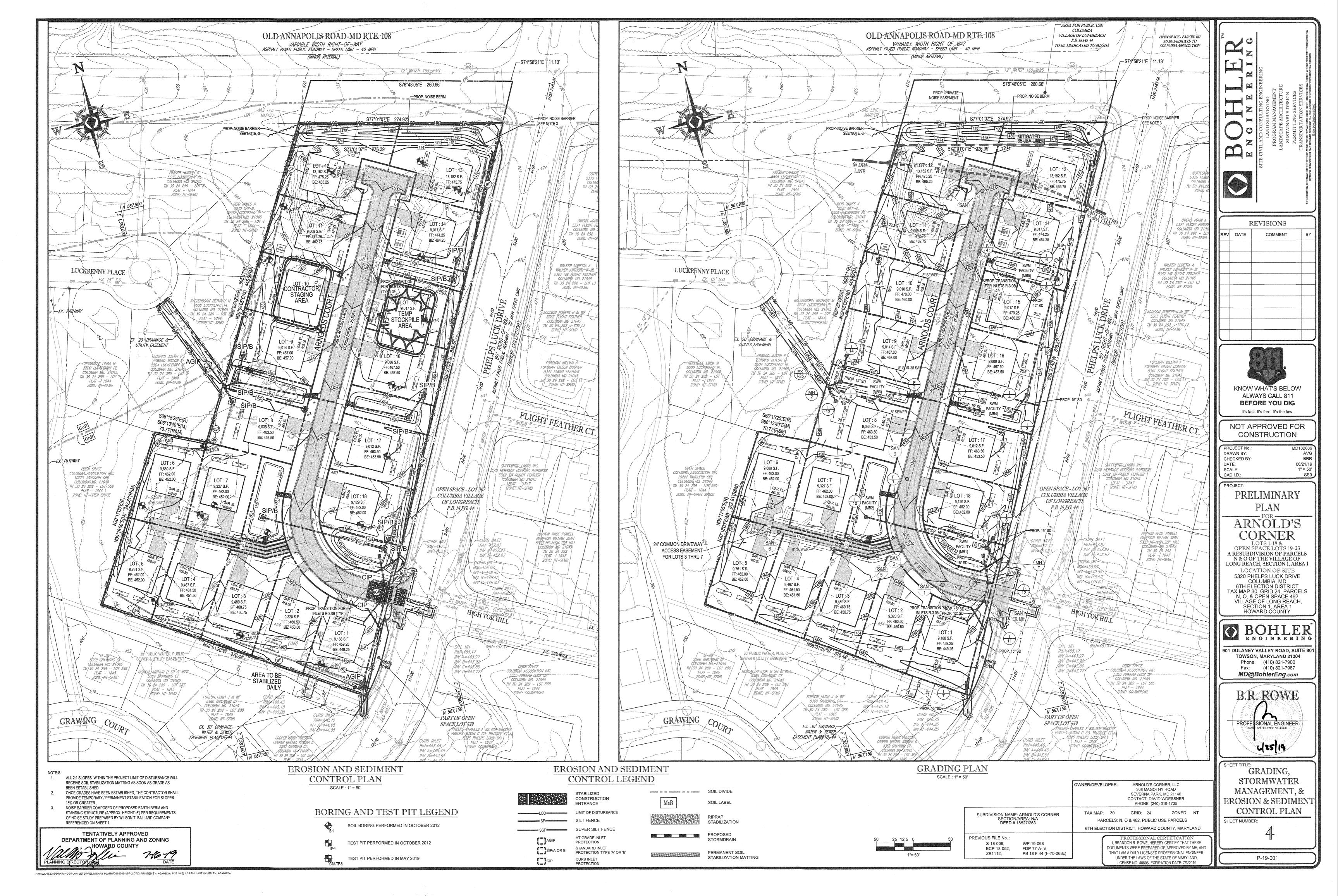
ZONE: COMMERCENT

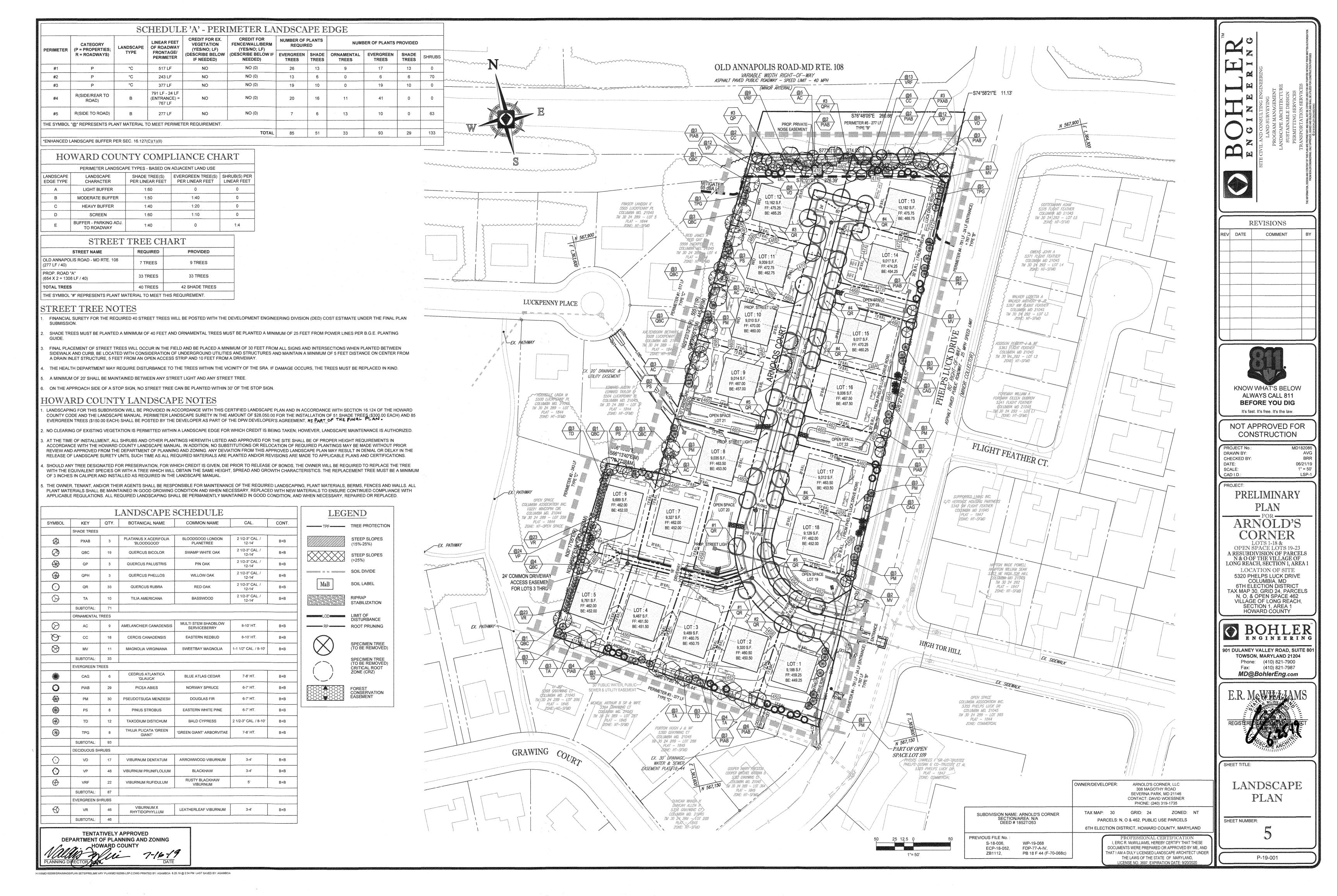
I, BRANDON R. ROWE, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 40808, EXPIRATION DATE: 7/3/2019

SHEET NUMBER:

P-19-001







LANDSCAPE SPECIFICATIONS HE LANDSCAPE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION, PERMANENT SEEDING OR SODDING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE GENERAL CONTRACTOR.

- A. GENERAL ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF
- 3. TOPSOIL NATURAL, FRIABLE, LOAMY SILT SOIL HAVING AN ORGANIC CONTENT NOT LESS THAN 5%, A PH RANGE BETWEEN 4.5-7.0. IT SHALL BE FREE OF DEBRIS, ROCKS LARGER THAN ONE INCH (1"), WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLODS.
- 2. LAWN ALL DISTURBED AREAS ARE TO BE TREATED WITH A MINIMUM SIX INCH (6") THICK LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, AND SEEDED OR SODDED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED WITHIN THE SOIL EROSION AND SEDIMENT CONTROL NOTES. 1.1. LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED.
- 1.2. SOD SHALL BE STRONGLY ROOTED, WEED AND DISEASE/PEST FREE WITH A UNIFORM THICKNESS. 1.3. SOD INSTALLED ON SLOPES GREATER THAN 4:1 SHALL BE PEGGED TO HOLD SOD IN PLACE.
- . MULCH THE MULCH AROUND THE PERIMETER OF THE BUILDING SHALL BE A 3" LAYER OF DOUBLE SHREDDED BLACK CEDAR MULCH ONLY. ALL OTHER AREAS SHALL BE MULCHED WITH A 3" LAYER OF DOUBLE SHREDDED DARK BROWN HARDWOOD BARK MULCH, UNLESS OTHERWISE STATED ON THE LANDSCAPE PLAN
- FERTILIZER 1.1. FERTILIZER SHALL BE DELIVERED TO THE SITE MIXED AS SPECIFIED IN THE ORIGINAL UNOPENED STANDARD BAGS SHOWING WEIGHT
- ANALYSIS AND NAME OF MANUFACTURER. FERTILIZER SHALL BE STORED IN A WEATHERPROOF PLACE SO THAT IT CAN BE KEPT DRY 1.2. FOR THE PURPOSE OF BIDDING, ASSUME THAT FERTILIZER SHALL BE 10% NITROGEN, 6% PHOSPHORUS AND 4% POTASSIUM BY WEIGHT.
- A FERTILIZER SHOULD NOT BE SELECTED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATORY.
- PLANT MATERIAL 1.1. ALL PLANTS SHALL IN ALL CASES CONFORM TO THE REQUIREMENTS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1). LATEST EDITION, AS PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION
- 1.2. IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ANY AND ALL PLANT MATERIAL 1.3. PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION. 1.4. TREES WITH ABRASION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 11/4", WHICH HAVE NOT BEEN
- COMPLETELY CALLUSED, SHALL BE REJECTED.PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES. 1.5. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH: WELL DEVELOPED
- BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE OF DISEASE, INSECTS, PESTS, EGGS OR LARVAE. 1.6. CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6") ABOVE THE
- NATURAL GRADE FOR TREES UP TO AND INCLUDING A FOUR INCH (4") CALIPER SIZE. IF THE CALIPER AT SIX INCHES (6") ABOVE THE GROUND EXCEEDS FOUR INCHES (4") IN CALIPER. THE CALIPER SHOULD BE MEASURED AT A POINT 12" ABOVE THE NATURAL GRADE.
- . SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND NOT TO THE LONGEST BRANCH. TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL

GENERAL WORK PROCEDURES

RANSPORTATION'S SPECIFICATIONS

- CONTRACTOR TO UTILIZE WORKMANLIKE INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEBRIS, MATERIALS AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR
- WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED INCLUDING ORGANIC MATERIALS, BUT SHALL BE REMOVED COMPLETELY FROM THE SITE.

SITE PREPARATIONS

- A. BEFORE AND DURING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES OUTLINED HEREIN.
- ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE TRUNK, CONTRACTOR SHALL ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT. ANY EXPOSED ROOTS SHALL BE CLIT BACK WITH CLEAN, SHARP TOOLS AND TOPSOIL SHALL BE PLACED AROUND THE REMAINDER OF THE ROOTS. EXISTING TREES SHALL BE MONITORED ON A REGULAR BASIS FOR ADDITIONAL ROOT OR BRANCH DAMAGE AS A RESULT OF CONSTRUCTION. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO PREVENT SHOCK OR DECLINE.
- CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE-OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIAL. UTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS PRIOR TO THE BEGINNING OF WORK.

- CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE DRIP LINE OR 15 FEET FROM THE TRUNK OR AT THE LIMIT OF CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER. LOCAL STANDARDS THAT MAY REQUIRE A MORE STRICT TREE PROTECTION ZONE SHALL BE HONORED.
- S. A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY 'VISI-FENCE', OR APPROVED EQUAL, MOUNTED ON STEEL POSTS SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED WITHIN THE TREE PROTECTION DETAIL.
- WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION, GRADING, TREE CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.
-). AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.

. SOIL MODIFICATIONS

- A. CONTRACTOR SHALL ATTAIN A SOIL TEST FOR ALL AREAS OF THE SITE PRIOR TO CONDUCTING ANY PLANTING. SOIL TESTS SHALL BE PERFORMED BY A CERTIFIED SOIL LABORATORY
- : LANDSCAPE CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL. SOIL MODIFICATIONS, AS SPECIFIED HEREIN, MAY NEED TO BE CONDUCTED BY THE LANDSCAPE CONTRACTOR DEPENDING ON
- . THE FOLLOWING AMENDMENTS AND QUANTITIES ARE APPROXIMATE AND ARE FOR BIDDING PURPOSES ONLY. COMPOSITION OF AMENDMENTS SHOULD BE REVISED DEPENDING ON THE OUTCOME OF A TOPSOIL ANALYSIS PERFORMED BY A CERTIFIED SOIL LABORATORY TO INCREASE A SANDY SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS, THOROUGHLY TILL ORGANIC MATTER INTO THE TOP 6-12". USE COMPOSTED BARK, COMPOSTED LEAF MULCH OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.5.
- 1.2. TO INCREASE DRAINAGE, MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR AGRICULTURAL GYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX. SUBSURFACE DRAINAGE LINES MAY NEED TO BE ADDED TO INCREASE DRAINAGE. 1.3. MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF

- UNLESS OTHERWISE CONTRACTED, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBANCE AREA OF THE SITE.
- LANDSCAPE CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE SITE MUST MEET THE FINISHED GRADE LESS THE REQUIRED TOPSOIL THICKNESS (1"±).
- ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER OR LANDSCAPE
- ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER IN AND AROUND THE PLANTING BEDS. STANDING WATER SHALL NOT BE PERMITTED IN PLANTING BEDS.

A. CONTRACTOR SHALL PROVIDE A SIX INCH (6") THICK MINIMUM LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, IN

- ALL PLANTING AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED . ON-SITE TOPSOIL MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT
- BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION. CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOPSOIL TO BE UTILIZED IN ALL PLANTING AREAS. THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGH SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE
- ALL PLANTING AND LAWN AREAS ARE TO BE CULTIVATED TO A DEPTH OF SIX INCHES (6"). ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES SECTION ABOVE. THE FOLLOWING SHALL BE TILLED INTO THE TOP FOUR INCHES (4") IN TWO DIRECTIONS (QUANTITIES BASED ON A 1,000 SQUARE FOOT AREA):
- 1.1. 20 POUNDS 'GROW POWER' OR APPROVED EQUAL 1.2. 20 POUNDS NITRO-FORM (COURSE) 38-0-0 BLUE CHIP

REQUIRED LEVELS AS SPECIFIED IN THE MATERIALS SECTION ABOVE.

E. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS

- A. INSOFAR THAT IT IS FEASIBLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, LANDSCAPE CONTRACTOR SHALL PROTECT UNINSTALLED PLANT MATERIAL. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MUI CH TO HELP PRESERVE ROOT MOISTURE.
- B. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR
- . ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHING SHALL BE REMOVED.
- ALL PLANTING CONTAINERS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL
- FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO BACKFILLING E. POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE
- F. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE PLAN, MUST BE INSTALLED, INSPECTED AND APPROVED BY THE APPROVING AGENCY. THE APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS. THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING SEASONS:
- 1.1. PLANTS: MARCH 15 TO DECEMBER 15 1.2. LAWN: MARCH 15 TO JUNE 15 OR SEPT. 1 TO DECEMBER 1

ARCHITECT PRIOR TO EXCAVATING PITS. MAKING NECESSARY ADJUSTMENTS AS DIRECTED

- G. PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL SUBSTITUTIONS.
- H. FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPLANT SHOCK AND THE SEASONAL LACK OF NITROGEN AVAILABILITY. THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS NOT RECOMMENDED THAT THESE SPECIES BE PLANTED DURING THE FALL PLANTING SEASON ACER RUBRUM PLATANUS X ACERIFOLIA

BETULA VARIETIES POPULOUS VARIETIES CARPINUS VARIETIES PRUNUS VARIETIES CRATAEGUS VARIETIES PYRUS VARIETIES QUERCUS VARIETIES KOELREUTERIA LIQUIDAMBER STYRACIFLUA TILIA TOMENTOSA LIRIODENDRON TULIPIFERA ZELKOVA VARIETIES

- I. PLANTING PITS SHALL BE DUG WITH LEVEL BOTTOMS, WITH THE WIDTH TWICE THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY: 1 PART PEAT MOSS • 1 PART COMPOSTED COW MANURE BY VOLUME
- 3 PARTS TOPSOIL BY VOLUME 21 GRAMS 'AGRIFORM' PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS:
 - A) 2 TABLETS PER 1 GALLON PLANT B) 3 TABLETS PER 5 GALLON PLANT
 - C) 4 TABLETS PER 15 GALLON PLANT D) LARGER PLANTS: 2 TABLETS PER 1/2" CALIPER OF TRUNK
- J. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER THOROUGHLY.
- K. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT GROUND LEVEL AND IN THE CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF THE ROOT BALL.
- L. ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A MINIMUM BRANCHING
- M. GROUND COVER AREAS SHALL RECEIVE A 1/" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING. ALL GROUND COVER AREAS SHALL BE WEEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION
- N. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING STRUCTURES AND
- O. ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR SAUCER. NO MULCH IS TO TOUCH THE TRUNK OF THE TREE OR SHRUB.
- P. ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING SPECIFICATIONS AS LISTED HEREIN.

ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT.

- B. IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND.
- C. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10 AND JUNE 30.
- D. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE. E. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN
- F. IF TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES
- (6") DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES.

A. NEW PLANTINGS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED

- TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE ESTABLISHED. B. SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE, CONTRACTOR SHALL
- SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY PLANTED TREES. C. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE. IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE
- OF THE SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS.

A. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE

- B. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF PLANT MATERIAL SHALL BE CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT
- C. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND THROUGHOUT THE 90 DAY MAINTENANCE PERIOD AS SPECIFIED HEREIN. CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE
- D. LAWNS SHALL BE MAINTAINED THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING REGARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS.

- A. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEANED.
- B. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE

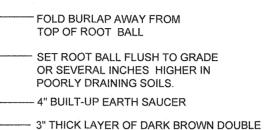
ONLY TREES WITH ONE MAIN LEADER SHALL BE PURCHASED, DO NOT PRUNE TREE AT PLANTING UNLESS DIRECTED TO BY PROJECT LANDSCAPE DO NOT STAKE OR-FOLD BURLAP AWAY FROM TOP OF WRAP TRUNK PREPARE WIDTH OF -PLANTING HOLE 6 FT OR TWICE THE WIDTH OF THE ROOT BALL WHICHEVER IS PREPARED SOIL FOR TREES 1 PART PEAT MOSS 1 PART COW MANURE 3 PARTS TOPSOIL UNDISTURBED-SUBGRADE DIG WIDE, SHALLOW HOLE-WITH TAMPED SIDES TAMP SOIL SOLIDLY AROUND-BASE OF ROOT BALL REFERENCE: ARCHITECTURAL GRAPHIC STANDARDS 1998 CUMULATIVE SUPPLEMENT

ROOT BALL SET ROOT BALL FLUSH TO GRADE OR SEVERAL INCHES HIGHER IN POORLY DRAINING SOILS. - 4" BUILT-UP EARTH SAUCER 3" THICK LAYER OF DARK **BROWN DOUBLE SHREDDED** HARDWOOD MULCH BEFORE PLANTING ADD 3 TO 4" OF WELL-COMPOSTED LEAVES OR RECYCLED YARD WASTE TO BED AND TILL INTO TOP 6" OF

PREPARED SOIL. 4-6" DEEPER THAN ROOT BALL REMOVE THE TOP 1/3 OF THE WIRE BASKET IF PRESENT. ANY AND ALL TWINE SHALL BE REMOVED FROM THE TREE BEFORE BACKFILLING. BURLAP SHALL BE FOLDED BACK INTO PLANTING HOLE SET ROOT BALL ON FIRM

EVERGREEN TREE PLANTING DETAIL

ONLY TREES WITH ONE MAIN LEADER SHALL BE PURCHASED. DO NOT PRUNE TREE AT PLANTING UNLESS DIRECTED TO BY PROJECT LANDSCAPE ARCHITECT



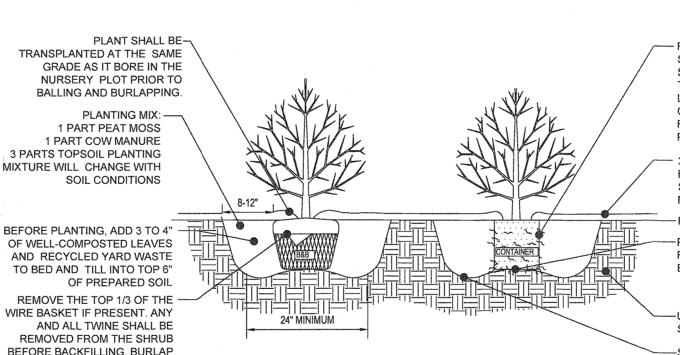
SHREDDED HARDWOOD MULCH BEFORE PLANTING ADD 3 TO 4" OF WELL-COMPOSTED LEAVES OR RECYCLED YARD WASTE TO BED AND TILL INTO TOP 6" OF

PREPARED SOIL

4-6" DEEPER THAN ROOT BALL REMOVE THE TOP 1/3 OF THE WIRE BASKET IF PRESENT. ANY AND ALL TWINE SHALL BE REMOVED FROM THE TREE BEFORE

BACKFILLING. BURLAP SHALL BE FOLDED BACK INTO PLANTING HOLE -SET ROOT BALL ON FIRM PAD IN BOTTOM OF HOLI

REFERENCE: ARCHITECTURAL GRAPHIC STANDARDS 1998 CUMULATIVE SUPPLEMENT. DECIDUOUS TREE PLANTING DETAIL

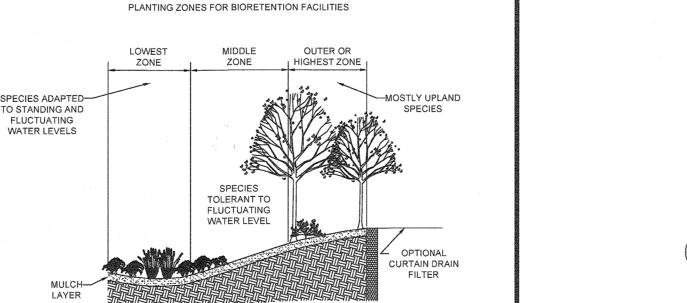


- FOR CONTAINER-GROWN SHRUBS USE FINGER OR SMALL HAND TOOLS TO PULL THE ROOTS OUT OF THE OUTE LAYER OF POTTING SOIL; THEN CUT OR PULL APART ANY ROOTS THAT CIRCLE THE PERIMETER OF THE CONTAINE 3" THICK LAYER OF DARK **BROWN DOUBLE**

SHREDDED HARDWOOD -FINISHED GRADE -PLACE SHRUB ON FIRM SOIL IN **BOTTOM OF HOLE**

-UNDISTURBED -SOIL SURFACE ROUGHENED TO BIND WITH NEW SOIL.

REFERENCE: ARCHITECTURAL GRAPHIC STANDARDS 1998 CUMULATIVE SUPPLEMENT DECIDUOUS AND EVERGREEN SHRUB PLANTING DETAIL NOT TO SCALE



SHALL BE FOLDED BACK INTO

DO NOT STAKE

OR WRAP TRUNK

PREPARE WIDTH OF-

PLANTING HOLE 6 FT OR

WHICHEVER IS GREATER

PREPARED SOIL FOR TREES-

UNDISTURBED

DIG WIDE, SHALLOW HOLE-

TAMP SOIL SOLIDLY-

AROUND BASE OF

WITH TAMPED SIDES

ROOT BALL

SUBGRADE

TWICE THE WIDTH OF

1 PART PEAT MOSS

3 PARTS TOPSOIL

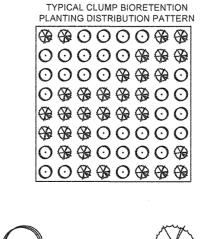
1 PART COW MANURE

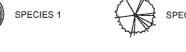
THE ROOT BALL

AREA TO BE PLANTED WITH MIXED PERENNIALS LISTED IN BIORETENTION AREAS PLANTING SCHEDULE

HERBACEOUS PERENNIALS TO BE PLANTED 18" O.C. IN GROUPS BETWEEN 15 TO 20 PLUGS LANDSCAPE CONTRACTOR TO GROUP LIKE PLANTS TOGETHER IN EACH BED AS SHOWN IN PLANTING DISTRIBUTION ALL BIORETENTION AREAS ARE TO BE MULCHED WITH A 4" LAYER OF DOUBLE SHREDDED HARDWOOD BARK MULCH PLACEMENT OF THE PLANTING SOIL SHOULD BE IN 12" TO 18" LIFTS THAT ARE LOOSELY COMPACTED (TAMPED LIGHTLY WITH A BACKHOE BUCKET OR TRAVERSED BY DOZER TRACKS.

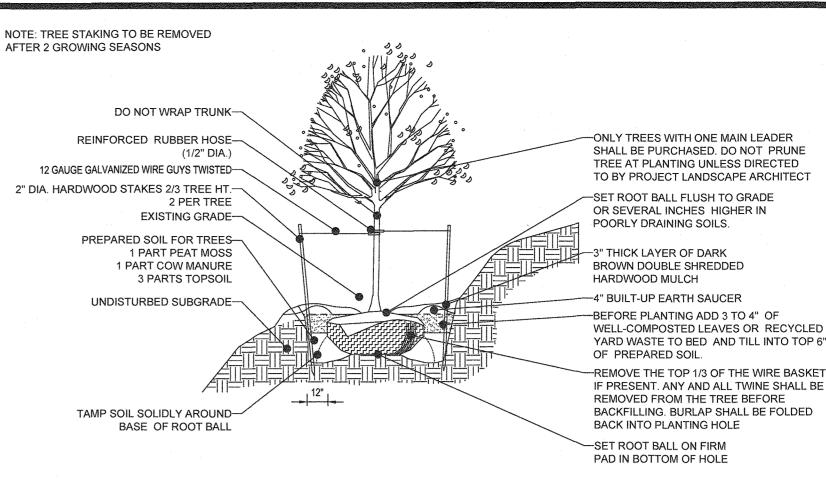
TYPICAL PLANTING FOR





NATURALLY OCCURRING POPULATIONS TEND TO BE FOUND IN INFORMAL GROUPINGS. A CLUSTER OF PLANTS IS REALLY A MOSAIC OF DIFFERENT SPECIES GROUPS. THE OBJECTIVE IS TO SELECT THE APPROPRIATE SPECIES AND DISTRIBUTION PATTERN FOR A CHOSEN SITE THAT

PLANTING DISTRIBUTION PATTERN



TREE PLANTING ON SLOPE DETAIL

SEEDING SPECIFICATIONS

- PRIOR TO SEEDING, AREA IS TO BE TOPSOILED, FINE GRADED, AND RAKED OF ALL DEBRIS LARGER THAN 2" DIAMETER.
- PRIOR TO SEEDING, CONSULT MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS.
- SEEDING RATES PERENNIAL RYEGRASS KENTUCKY BLUEGRASS RED FESCUE SPREADING FESCUE

FERTILIZER (20:10:10)

1/2 LB/1.000 SQ FT 1 LB/1.000 SQ FT 1 1/2 LBS/1,000 SQ F 1 1/2 LBS/1,000 SQ FT 14 LBS/1,000 SQ FT 90 LBS/1,000 SQ FT

GERMINATION RATES WILL VARY AS TO TIME OF YEAR FOR SOWING. CONTRACTOR TO IRRIGATE SEEDED AREA UNTIL AN ACCEPTABLE STAND OF COVER IS ESTABLISHED BY OWNER.

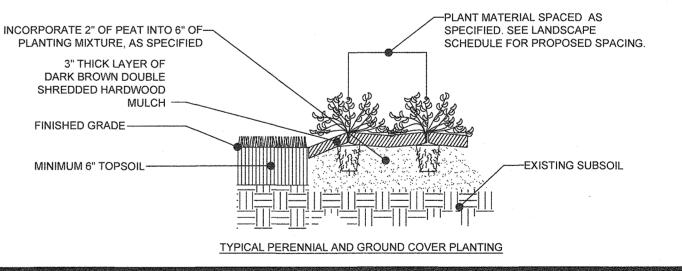
OWNER MAINTENANCE RESPONSIBILITIES

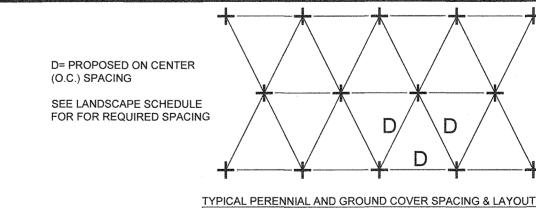
UPON OWNER'S (OR OWNER CONTRACTOR'S) COMPLETION OF LANDSCAPING WORK, THE OWNER IS FULLY RESPONSIBLE FOR ALL FUTURE MAINTENANCE, CARE, UPKEEP, WATERING, AND TRIMMING OF ALL INSTALLED VEGETATION, PLANTS, TREE, BUSHES, SHRUBS, GRASSES, GRASS, ORNAMENTAL PLANTS AND FLOWERS, FLOWERS, GROUND COVER, AND LANDSCAPING, INCLUDING ALL LANDSCAPE ISLANDS AND AREAS ADJACENT OR PART OF THE LANDSCAPED AREAS. THIS RESPONSIBILITY INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING

- TREES ADJACENT TO WALKWAYS AND AREAS OF PEDESTRIAN TRAFFIC MUST BE MAINTAINED TO ASSURE THAT ANY BRANCHES MUST BE LIMBED UP TO A CLEARANCE HEIGHT OF 7 FT. (FROM ALL PEDESTRIAN SURFACES) OR PRUNED BACK TO AVOID ANY INTERFERENCE WITH THE TYPICAL PATH
- TREES WITHIN VEHICULAR SIGHT LINES, AS ILLUSTRATED ON THE LANDSCAPE PLAN, ARE TO BE TRIMMED TO A CLEARANCE HEIGHT OF 7 FT. (FROM ALL PAVED, TRAVELED SURFACES), OR AS OTHERWISE INDICATED ON THE PLANS VEGETATIVE GROUND COVER, SHRUBS AND ORNAMENTAL PLANTS AND GRASSES MUST BE TRIMMED
- SO THAT NO PORTION OF THE PLANT EXCEEDS 30 INCHES ABOVE GRADE (OF ALL PAVED, TRAVEL SURFACES) ALONG AND WITHIN THE SIGHT LINES OF PARKING LOTS AND INGRESS-EGRESS WAYS FALLEN PLANT FLOWERS, FRUIT, SEEDS AND DEBRIS DROPPINGS ARE TO BE REMOVED IMMEDIATELY

FROM VEHICULAR AND PEDESTRIAN TRAFFIC AREAS TO PREVENT TRIPPING, SLIPPING OR ANY

THESE REQUIREMENTS DO NOT AFFECT THE PLANT LIFE GUARANTEES THE LANDSCAPE CONTRACTOR IS REQUIRED TO PROVIDE.





PREVIOUS FILE No.

S-18-006.

ZB1112.

ECP-18-052,

WP-19-068

FDP-77-A-IV,

PB 18 F 44 (F-70-068c)

PERENNIAL/GROUND COVER PLANTING DETAIL NOT TO SCALE

OWNER/DEVELOPER: ARNOLD'S CORNER, LLC 308 MAGOTHY ROAD SEVERNA PARK, MD 21146 CONTACT: DAVID WOESSNER PHONE: (240) 319-1735

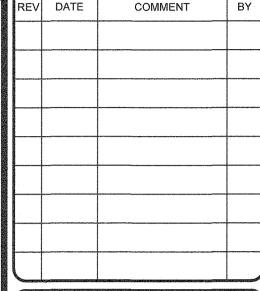
GRID: 24 SUBDIVISION NAME: ARNOLD'S CORNER SECTION/AREA: N/A DEED # 18527/263 PARCELS: N, O & 462, PUBLIC USE PARCELS 6TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

I. ERIC R. McWILLIAMS, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 3697, EXPIRATION DATE: 9/20/202

ZONED: NT

REVISIONS

DATE





BEFORE YOU DIG It's fast. It's free. It's the law.

NOT APPROVED FOR CONSTRUCTION

DRAWN BY: CHECKED BY: SCALE CAD I.D.

PRELIMINARY

AS SHOWN

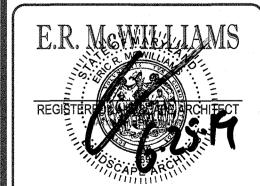
OPEN SPACE LOTS 19-23

A RESUBDIVISION OF PARCELS N & O OF THE VILLAGE OF LONG REACH, SECTION 1, AREA 1 LOCATION OF SITE 5320 PHELPS LUCK DRIVE COLUMBIA, MD 6TH ELECTION DISTRICT TAX MAP 30, GRID 24, PARCELS N. O. & OPEN SPACE 462 VILLAGE OF LONG REACH,

SECTION 1, AREA 1

HOWARD COUNTY

901 DULANEY VALLEY ROAD, SUITE 80 **TOWSON, MARYLAND 21204** Phone: (410) 821-7900 Fax: (410) 821-7987 MD@BohlerEng.com



LANDSCAPE NOTES & DETAILS

SHEET NUMBER

P-19-001

GSIPLAN SETSIPRELIMINARY PLANIMD182086-SDP-2,DWG PRINTED BY: AGAMBOA 6.25.19 @ 1:35 PM LAST SAVED BY: AGAMBO/

DEPARTMENT OF PLANNING AND ZONING

DEVELOPER'S/OWNER'S LANDSCAPE CERTIFICATE

HE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL WE FURTHER CERTIFY THAT UPON COMPLETION A LETTER OF LANDSCAPE INSTALLATION

