

| SITE PLAN NOTES |  |
|-----------------|--|
| #               | DESCRIPTION  |
| 1               | THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF: COLLINSON, OLIFF AND ASSOCIATES, INC.  |
| 2               | IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MEET ALL OF THE REQUIREMENTS OF THE FEDERAL, STATE, AND LOCAL AUTHORITIES, HEALTH DEPARTMENT AND UTILITY COMPANIES, IN ADDITION TO THE INFORMATION STATED ON THESE PLANS.  |
| 3               | IN CASE OF CONFLICT BETWEEN ANY PART OF THESE PLANS AND SPECIFICATIONS, OR IF ANY ERRORS OR OMISSIONS ARE DISCOVERED IN THE LINES, GRADES AND DIMENSIONS, THE CONTRACTOR SHALL NOTIFY THE SITE CONSULTANT IMMEDIATELY AND SHALL REQUEST A WRITTEN DETERMINATION PRIOR TO PROCEEDING WITH THE WORK INVOLVED. IF THE WORK PROCEEDS WITH THE KNOWLEDGE OF THE ERROR OR OMISSION, AND WITHOUT A WRITTEN DETERMINATION, SUCH WORK WILL NOT BE CONSIDERED IN COMPLIANCE WITH THESE PLANS AND SPECIFICATIONS. |
| 4               | PRIOR TO CONSTRUCTION, CONTACT: THE ENFORCEMENT DIVISION, DEPARTMENT OF THE ENVIRONMENT, SEDIMENT AND STORMWATER MANAGEMENT ADMINISTRATION 1800 WASHINGTON BLVD, BALTIMORE, MARYLAND 21220 PHONE: (410) 537-3000   |
| 5               | NOTIFY THE CALVERT COUNTY DEPARTMENT OF INSPECTIONS AND PERMITS, (410) 535-2155, THE CALVERT COUNTY SOIL CONSERVATION DISTRICT, (410) 535-1521, AND MISS UTILITY, (800) 257-7777, 3 DAYS PRIOR TO THE START OF ANY WORK ON THIS SITE.  |
| 6               | OWNER(S): BD OF COMMISSIONERS OF CALVERT COUNTY<br>CALVERT COUNTY TREASURER<br>175 MAIN ST<br>PRINCE FREDERICK, MD 20678<br>PHONE: 410-326-4640  |
| 7               | DEVELOPER: KOENIG PRIVATE FOUNDATION<br>STACEY HANN-RUFF<br>13480 DOWELL RD<br>DOWELL, MD 20629<br>PHONE: 410-326-4640   |
| 8               | IT SHALL BE DISTINCTLY UNDERSTOOD THAT FAILURE TO MENTION SPECIFICALLY ANY WORK WHICH WOULD NATURALLY BE REQUIRED TO COMPLETE THIS PROJECT SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO COMPLETE SUCH WORK.   |
| 9               | AS CONSTRUCTION PROCEEDS, ADDITIONAL MEASURES MAY BE EMPLOYED WITH THE ENGINEER'S APPROVAL, IF CONDITIONS WARRANT, TO ENSURE EFFECTIVE STORMWATER DRAINAGE AND SEDIMENT CONTROL.   |
| 10              | SEDIMENT CONTROL MEASURES AND PROPOSED TREE LINE REPRESENTS LIMIT OF WORK UNLESS OTHERWISE STATED.   |
| 11              | ALL ELEVATIONS SHOWN HEREON ARE IN REFERENCE TO BENCH MARKS AND MUST BE FIELD VERIFIED BY THE GENERAL CONTRACTOR PRIOR TO CONSTRUCTION.  |
| 12              | ALL EXTERIOR LIGHTING PROPOSED FOR THIS SITE SHALL BE PERMANENTLY INSTALLED AND MOUNTED IN ACCORDANCE WITH THE IESNA LIGHTING HANDBOOK & RECOMMENDED PRACTICES AS DESCRIBED IN THE C.C.Z.O. ARTICLE 6-6.01. FIXTURES SHALL MEET FULL CUTOFF CRITERIA.  |
| 13              | EXISTING ELEVATIONS SHOWN HEREON ARE FROM A FIELD RUN SURVEY BY C.O.A., INC. DATED 7/2/18 AND SUPPLEMENTED WITH CALVERT COUNTY AERIAL TOPOGRAPHY REFERENCED TO N.A.V.D. 88. EXISTING UTILITIES SHOWN ARE TAKEN FROM FIELD INFORMATION AND THE BEST AVAILABLE PLANS OF THE EXISTING UTILITIES.  |
| 14              | NO PROPERTY LINE SURVEY PERFORMED BY C.O.A., FOR THE PREPARATION OF THESE PLANS. THE BEARINGS SHOWN HEREON ARE REFERENCED TO N.A.D. 83.  |
| 15              | THIS PLAN WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT. THIS PLAT IS NOT A BOUNDARY SURVEY AND DOES NOT MEET THE MINIMUM STANDARDS FOR A BOUNDARY SURVEY AS DEFINED BY COMAR REGULATION.   |
| 16              | NO NON-TIDAL WETLANDS DELINEATION PERFORMED FOR THE PREPERATION OF THESE PLANS. A NON-TIDAL WETLAND WAIVER REQUEST WAS GRANTED.  |
| 17              | NO FOREST STAND DELINEATION PERFORMED FOR THE PREPARATION OF THESE PLANS. THE PROJECT IS EXEMPT FROM FOREST CONSERVATION REQUIRMENTS PER SECTION 8-3.02.B OF THE CALVERT COUNTY ZONING ORDINANCE.  |
| 18              | THERE ARE NOT ANY FLOOD PLAINS (FIRM PANEL #24009C0252G, DATED 11/19/14), THAT IMPACT THIS SITE WITHIN THE LIMIT OF DISTURBANCE.   |

# ANNMARIE GARDENS ~ SPR 2018 - 282

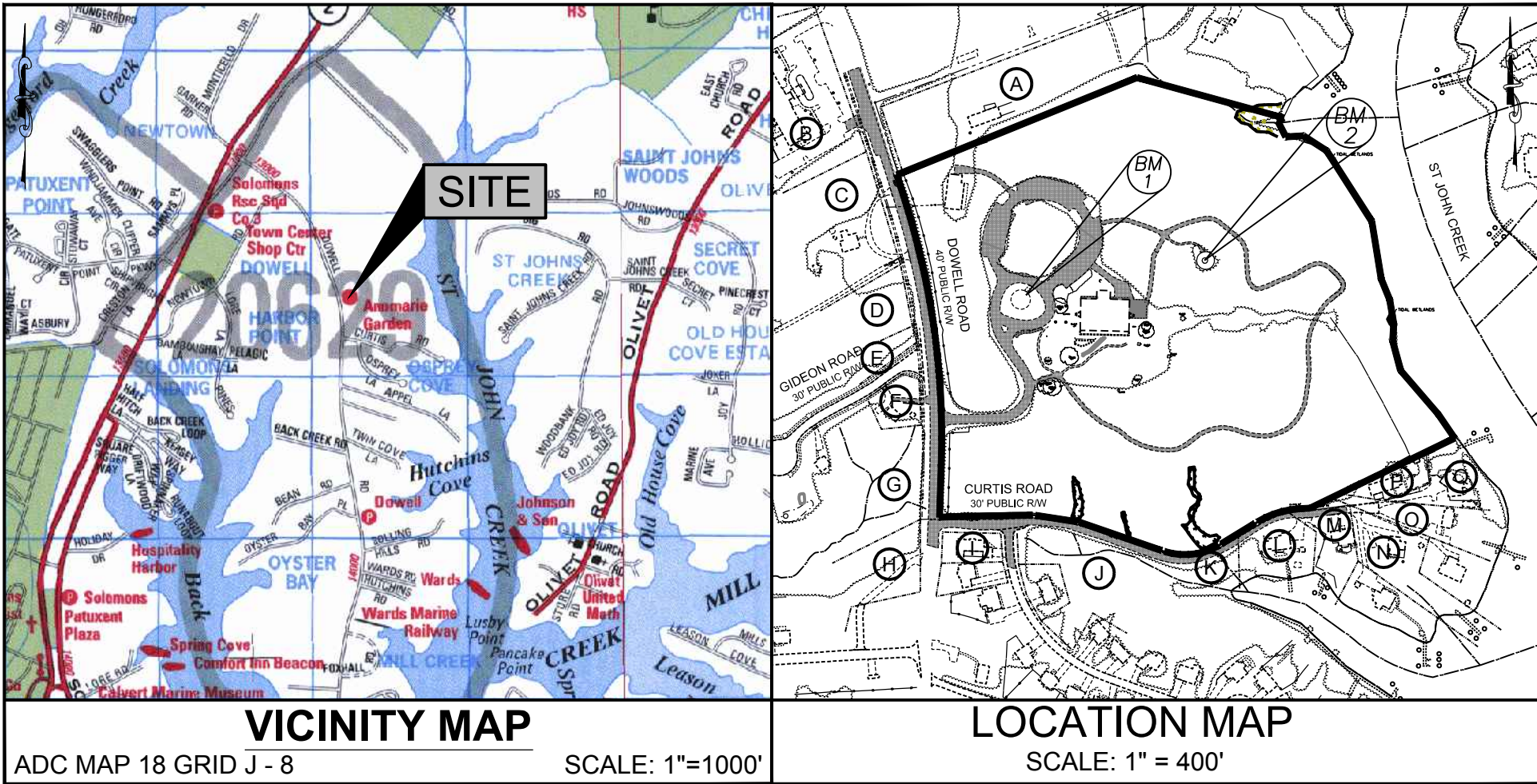
## WILDFLOWER MEADOW & PATIO

### TM 44 GRID 11 PARCEL 389 ~ 13480 DOWELL RD

### FIRST DISTRICT, CALVERT COUNTY

### DOWELL, MARYLAND 20629

### FOR: KOENIG PRIVATE FOUNDATION



| ADJACENT PROPERTIES INFORMATION |          |   |                   |
|---------------------------------|----------|---|-------------------|
|                                 | PARCEL # | OWNER   | DEED REFERENCE    |
| (A)                             | 566      | KOENIG PRIVATE FOUNDATION INC                 | K.P.S. 1331 / 471 |
| (B)                             | 50       | SOLOMONS NURSING CENTER INC                   | A.B.E. 500 / 147  |
| (C)                             | 40       | BRECKENRIDGE FAMILY TRUST                     | A.B.E. 4086 / 241 |
| (D)                             | 490      | MENCIA JUAN M                                 | A.B.E. 369 / 758  |
| (E)                             | 695      | BD OF COMMISSIONERS CALVERT CO                | 5120 / 190        |
| (F)                             | 695      | LANCASTER JEANNE V                            | K.P.S. 4287 / 308 |
| (G)                             | 696      | BD OF COMMISSIONERS CALVERT CO                | K.P.S. 3490 / 163 |
| (H)                             | 687      | KORTOKRAX ANTHONY EARL<br>KORTOKRAX KATIE LYN | K.P.S. 4185 / 194 |
| (I)                             | 611      | LANGLEY JAMES F                               | K.P.S. 2027 / 182 |
| (J)                             | 611      | HOMEOWNERS ASSOCIATION OF OSPREY COVE INC     | K.P.S. 2111 / 740 |
| (K)                             | 389      | BD OF COMMISSIONERS CALVERT CO                | A.B.E. 597 / 434  |
| (L)                             | 243      | KLA BAI<br>COLEMAN-KLA JUDY                   | K.P.S. 4105 / 202 |
| (M)                             | 385      | LANE TIM M &<br>REECE LAURA J                 | K.P.S. 3700 / 01  |
| (N)                             | 127      | HENDERSHOT ROBERT<br>LUNDGREN KAREN           | A.B.E. 5231 / 389 |
| (O)                             | 126      | HUTCHINS CORA<br>ELIZABETH TRUSTEES           | K.P.S. 1371 / 690 |
| (P)                             | 125      | 970 CURTIS RD<br>DOWELL 20629-0000            | K.P.S. 1537 / 243 |
| (Q)                             | 124      | HIGGINS THOMAS L<br>WOODFIN FLOYD L           | K.P.S. 4742 / 431 |

| SITE DATA BLOCK                |    |      |    |   |       |         |           |         |           |
|--------------------------------|----|------|----|---|-------|---------|-----------|---------|-----------|
| TAX MAP #                      | 44 | GRID | 11 | PARCEL  | 389   | DEED    | 591 / 434 | TAX ID# | 01-015656 |
| TAX MAP #                      | -  | GRID | -  | PARCEL  | -     | DEED    | -         | TAX ID# | -         |
| PARCEL AREA                    |    |      |    | 28.89 AC ±  |       |         |           |         |           |
| ZONING                         |    |      |    | RESIDENTIAL DISTRICT (RD); LIMITED DEV AREA (LDA) |       |         |           |         |           |
| BUILDING RESTRICTION LINES: FT |    |      |    | FRONT   | 35    | SIDE    | 35        | REAR    | 35        |
| PARKING RESTRICTION LINES: FT  |    |      |    | FRONT   | 20    | SIDE    | 20        | REAR    | 20        |
| LAND USE                       |    |      |    | PUBLIC NON PROFIT PARK                            |       |         |           |         |           |
| EXISTING                       |    |      |    | PUBLIC NON PROFIT PARK                            |       |         |           |         |           |
| PROPOSED                       |    |      |    | PUBLIC NON PROFIT PARK                            |       |         |           |         |           |
| EXISTING SF±                   |    |      |    | 18,146  |       |         |           |         |           |
| PROPOSED SF±                   |    |      |    | 0   |       |         |           |         |           |
| TOTAL SF±                      |    |      |    | 18,146  |       |         |           |         |           |
| F.A.R.                         |    |      |    | 0.02  |       |         |           |         |           |
| WATER                          |    |      |    | W - 1 : PUBLIC WATER                              |       |         |           |         |           |
| SEWER                          |    |      |    | S - 1 : PUBLIC SEWER                              |       |         |           |         |           |
| UTILITIES                      |    |      |    |   |       |         |           |         |           |
| SOIL SYMBOL - SOIL NAME (HSG)  |    |      |    | HYDRIC  |       | K VALUE |           |         |           |
| DeA - DODON-CROSIADORE COMPLEX |    |      |    | NO  |       | 0.24    |           |         |           |
| PcB - PICCOWAXEN LOAM          |    |      |    | NO  |       | 0.37    |           |         |           |
| POWER                          |    |      |    | ELECTRIC  |       |         |           |         |           |
| WASTE                          |    |      |    | STANDARD REFUSE: ON-SITE TRASH ENCLOSURE          |       |         |           |         |           |
| LAND COVERAGE (LOD)            |    |      |    | IMPERVIOUS  | GREEN | FOREST  | OTHER     | TOTAL   |           |
| EXISTING SITE AC ±             |    |      |    | 0.07  | 0.47  | 0.00    | 0.00      | 0.54    |           |
| PROPOSED SITE AC ±             |    |      |    | 0.20  | 0.34  | 0.00    | 0.00      | 0.54    |           |

| LEGEND                       |          |          |
|------------------------------|----------|----------|
| DESCRIPTION                  | EXISTING | PROPOSED |
| BENCHMARK                    |          |          |
| BUILDING                     |          |          |
| CURB                         |          |          |
| DOWNSPOUT                    |          |          |
| ELEVATION - CONTOUR          |          |          |
| ELEVATION - SPOT             |          |          |
| FENCE - SCREENING            |          |          |
| FENCE - SECURITY             |          |          |
| FLOW ARROW                   |          |          |
| GUARD RAIL                   |          |          |
| LIGHT - BUILDING MOUNTED     |          |          |
| LIGHT - PARKING LOT / STREET |          |          |
| LIGHT - BOLLARD              |          |          |
| LIMIT OF DISTURBANCE         |          |          |
| PAVEMENT - GRAVEL            |          |          |
| PAVEMENT - SHA / COUNTY      |          |          |
| PAVEMENT - SITE              |          |          |
| PIPE FOUND/IRON ROD FOUND    |          |          |
| PROPERTY LINE OR R/W LINE    |          |          |
| RETAINING WALL               |          |          |
| SIDEWALK - BRICK             |          |          |
| SIDEWALK - CONCRETE          |          |          |
| SIGN                         |          |          |
| 15% STEEP SLOPES             |          |          |
| 25% STEEP SLOPES             |          |          |
| SURGE STONE / RIP-RAP        |          |          |
| TO BE REMOVED                |          |          |
| TREE LINE                    |          |          |
| UTILITY - GAS LINE           |          |          |
| UTILITY - OVER HEAD WIRES    |          |          |
| UTILITY - POLE               |          |          |
| UTILITY - SEWER LINE         |          |          |
| UTILITY - STORMDRAIN         |          |          |
| UTILITY - STORMDRAIN INLET   |          |          |
| UTILITY - WATER LINE         |          |          |
| UTILITY - WELL               |          |          |

| LIST OF ABBREVIATIONS |                              |
|-----------------------|------------------------------|
| ABBREV                | DESCRIPTION                  |
| ASP-2                 | ALUMINIZED STEEL PIPE-TYPE 2 |
| BRL                   | BUILDING RESTRICTION LINE    |
| BW                    | BOTTOM OF WALL               |
| CONC                  | CONCRETE                     |
| COTG                  | CLEANOUT TO GRADE            |
| EL                    | ELEVATION                    |
| ELEC                  | ELECTRIC                     |
| ES                    | END SECTION                  |
| EX                    | EXISTING                     |
| FFE                   | FINISHED FLOOR ELEVATION     |
| FH                    | FIRE HYDRANT                 |
| FM                    | FORCE MAIN                   |
| HB                    | HORIZONTAL BEND              |
| HC                    | HANDICAP                     |
| I                     | INLET                        |
| L                     | LENGTH                       |
| LOD                   | LIMIT OF DISTURBANCE         |
| MH                    | MANHOLE                      |
| OAE                   | OR APPROVED EQUAL            |
| PC                    | POINT OF CURVATURE           |
| PRL                   | PARKING RESTRICTION LINE     |
| PT                    | POINT OF TANGENCY            |
| PVC                   | POLYVINYL CHLORIDE           |
| R                     | RADIUS                       |
| R/W                   | RIGHT-OF-WAY                 |
| S                     | SANITARY SEWER               |
| SHC                   | SEWER HOUSE CONNECTION       |
| STA                   | STATION                      |
| TBR                   | TO BE REMOVED                |
| TC                    | TOP OF CURB                  |
| TRANS                 | TRANSFORMER                  |
| TS&V                  | TAPPING SLEEVE & VALVE       |
| TW                    | TOP OF WALL                  |
| VHC                   | VAN HANDICAP                 |
| W                     | WATERLINE                    |
| WHC                   | WATER HOUSE CONNNECTION      |
| WM                    | WATER METER                  |
| WV                    | WATER VALVE                  |
| YC                    | YELLOW CURB                  |

SURVEYOR'S / ENGINEER'S CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAN OF EROSION AND SEDIMENT CONTROL MEETS THE REQUIREMENTS, STANDARDS AND SPECIFICATIONS OF THE CALVERT COUNTY SOIL CONSERVATION DISTRICT.

BY: JOSEPH J. KADJESKI MD PE #31181

DATE: 1/16/19

OWNER'S / DEVELOPER'S CERTIFICATE

I HEREBY CERTIFY THAT ALL CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I HEREBY AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY STATE OF MARYLAND, DEPARTMENT OF THE ENVIRONMENT, COMPLIANCE INSPECTORS.

BY: FOR: KOENIG PRIVATE FOUNDATION

DATE: 1/16/19

INDEX OF DRAWINGS

| SHEET NAME   | SHEET #       | OF | TOTAL # |
|--|---------------|----|---------|
| COVER SHEET  | C 1.0         | OF | 11      |
| SPECIFICATIONS                                     | C 1.1         | OF | 11      |
| PRE AND POST DEVELOPMENT DRAINAGE MAPS             | C 1.2 - C 1.3 | OF | 11      |
| SEDIMENT & EROSION CONTROL AND DEMO PLAN           | C 2.0         | OF | 11      |
| GRADING PLAN                                       | C 3.0         | OF | 11      |
| STORMWATER MANAGEMENT PLAN & DETAILS               | C 4.0 - C 4.1 | OF | 11      |
| SITE & LAYOUT PLAN                                 | C 5.0         | OF | 11      |
| SEDIMENT & EROSION CONTROL AND STORM DRAIN DETAILS | C 6.0         | OF | 11      |
| SITE DETAILS                                       | C 6.1         | OF | 11      |

COLLINSON, OLIFF & ASSOCIATES, INC.

SURVEYORS & ENGINEERS

LAND PLANNERS

P.O. BOX 2209 ~ 110 MAIN STREET

PRINCE FREDERICK, MARYLAND 20678

410-535-3101 • 301-855-1599

FAX: 410-535-3103 • EMAIL: INFO@COAINC.COM

COA

1/16/19

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. 31181, EXPIRATION DATE: 11/3/2021

JOSEPH J. KADJESKI MD PE # 31181

SCALE AS SHOWN

DATE OCT. 2018

JOB NO. 1-12812

DRAWN BY MAE

APPROVED JJK

CASE NO. SPR 2018-282

COVER SHEET

ANNMARIE GARDENS ~ SPR 2018 - 282

WILDFLOWER MEADOW & PATIO

TM 44 GRID 11 PARCEL 389 ~ 13480 DOWELL RD

FIRST DISTRICT, CALVERT COUNTY

DOWELL, MARYLAND 20629

FOR: KOENIG PRIVATE FOUNDATION

DEPT. OF PUBLIC WORKS STATEMENT

DPW APPROVAL SIGNIFIES A FINDING OF COMPLIANCE TO THE CALVERT COUNTY ROAD AND STORMWATER MANAGEMENT ORDINANCES. REGARDLESS OF SUCH APPROVAL, THE DESIGN PROFESSIONAL, DEVELOPER, AND CONTRACTOR REMAIN SOLELY RESPONSIBLE FOR THE DESIGN AND FOR CORRECTING ANY AND ALL ERRORS, PROBLEMS, AND CODE VIOLATIONS PRIOR TO ANY ACCEPTANCE OF A FACILITY OR STRUCTURE BY THE COUNTY. THE APPROVAL OF DPW IS NOT A WAIVER OR RELEASE FOR DEFECTS OR DEVIATION IN DESIGN OR CONSTRUCTION.

BP#: SPR#: 2018-282

GP#: PLAN#: 3

C 1.0

FILE #: B - 57 - 3

THIS STAMP IN RED COLOR INDICATES ORIGINAL

| BENCHMARK INFORMATION ~ NAD 83 & NAVD 88 |   |                  |                 |       |
|--|---|------------------|-----------------|-------|
| BM #                                     | DESCRIPTION   | NORTH COORDINATE | EAST COORDINATE | ELEV. |
| 1  | LETTER "F" OF "FRANCIS KOENIG" ON EDGE OF WATERMAIN | 247678.51        | 1469203.31      | 30.93 |
| 2  | CENTER POINT OF CENTER CIRCLE OF COUNCIL RING       | 247771.54        | 1469670.99      | 30.42 |

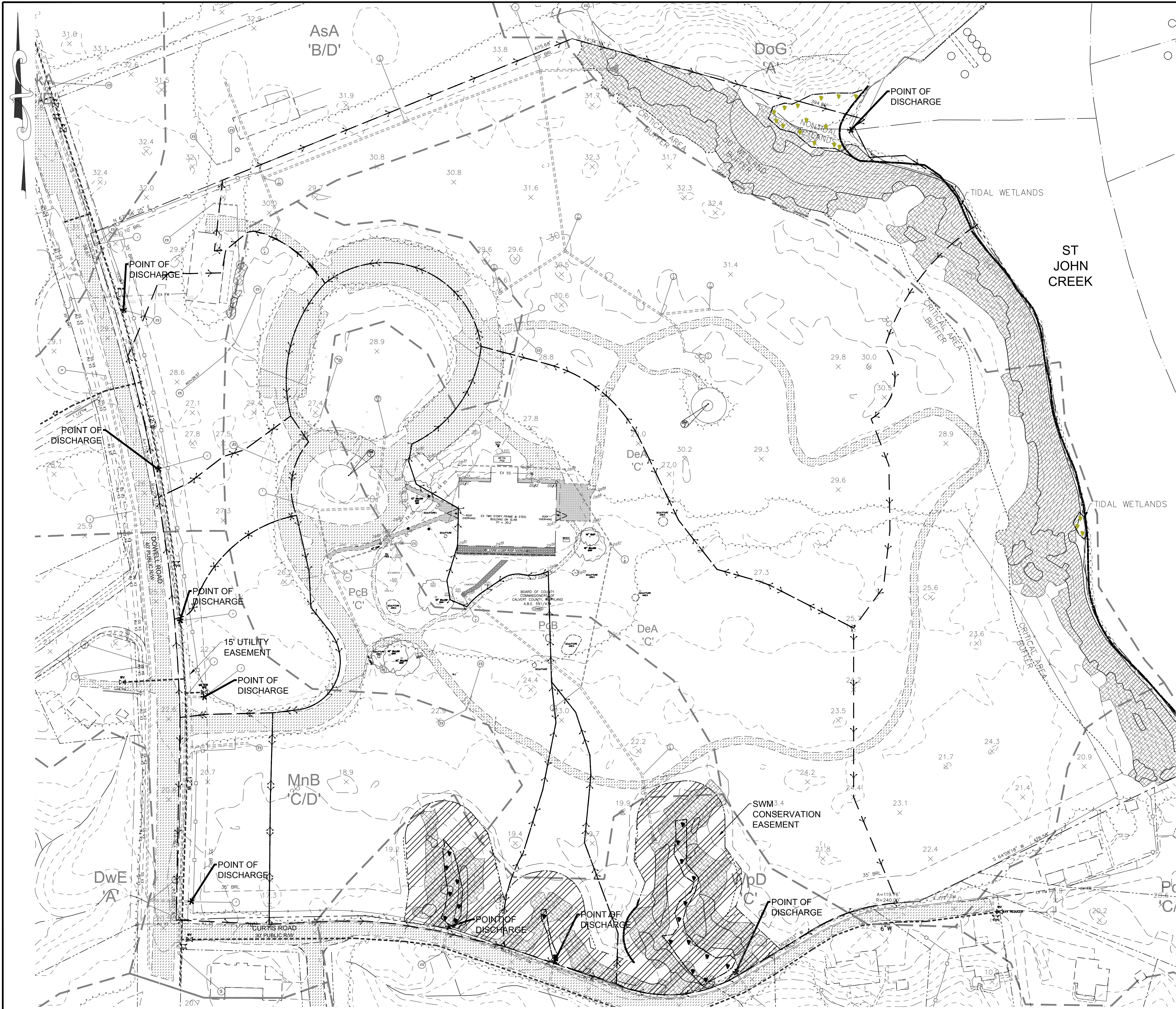
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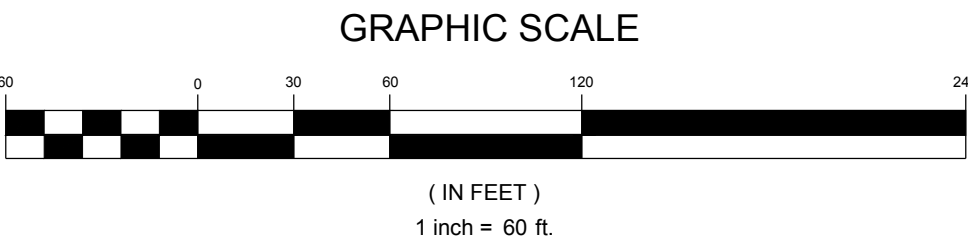
|  |  |   |  |  |  |
|--|--|---|--|--|--|
| SITE WORK SPECIFICATIONS   |  | SITE WORK SPECIFICATIONS (CONT.)  |  | SITE WORK SPECIFICATIONS (CONT.)   |  |
| 1) CLEARING:<br><br>THE EXISTING VEGETATION AND ROOTMAT IS TO BE CLEARED AND GRUBBED FROM THE SITE WITHIN THE LIMIT OF WORK UNLESS NOTED OTHERWISE. BURNING IS BY PERMIT ONLY.   |  | 2) EARTHWORK: (CONT)<br><br>G) FIELD QUALITY CONTROL:<br><br>2) IF, IN THE OPINION OF THE OWNER OR OWNER'S REPRESENTATIVE, BASED ON TESTING, MATERIALS AND/ OR PLACEMENT OF MATERIALS ARE SUBSTANDARD, THE CONTRACTOR IS TO PROVIDE NEW MATERIALS, CONSTRUCTED AND TESTED, AT NO ADDITIONAL EXPENSE TO THE OWNER.   |  | 8) SIGNAGE<br><br>A) ALL SITE SIGNAGE IS TO BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" DATED 1988 OR AS CURRENTLY AMENDED.<br><br>B) ALL HANDICAP SPACES AND SIGNAGE ARE TO BE IN ACCORDANCE WITH THE AMERICAN DISABILITIES ACT (ADA) STANDARDS AS ADOPTED BY CALVERT COUNTY DATED SEPTEMBER 6, 1991.   |  |
| 2) EARTHWORK:<br><br>A) GENERAL:<br><br>1. ALL TREES, STUMPS, RUBBISH, DEBRIS, ROOTMAT AND ORGANIC MATERIAL SHALL BE REMOVED FROM THE LIMITS OF THE GRADING.<br>2. FILLING MAY BE ACCOMPLISHED AFTER DEMOLITION, CLEARING AND GRUBBING IS COMPLETED AND UNSUITABLE SOILS HAVE BEEN REMOVED.<br>3. NO FILL IS TO BE PLACED ON FROZEN GROUND.<br>4. NO SLOPES ARE TO BE GREATER THAN 2:1 WITHOUT MECHANICAL STABILIZATION.<br>5. ALL FILL SLOPES SHALL BE STABILIZED IMMEDIATELY AFTER COMPLETION OF GRADING SAID SLOPES.<br>6. TOPSOIL SHALL BE REMOVED PRIOR TO PLACING ANY CONTROLLED FILLS.<br>7. ALL AREAS TO BE SEEDED AND MULCHED ARE TO RECEIVE A MINIMUM 4 INCHES OF TOPSOIL.<br><br>B) SITE CONSTRUCTION STATED ON THESE PLANS SHALL BE IN ACCORDANCE WITH THE MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED 2008, AS AMENDED. THE CONSTRUCTION SHALL ALSO BE GOVERNED BY THE STATE OF MARYLAND DEPARTMENT OF THE ENVIRONMENT PERMITS, U.S. ARMY CORPS OF ENGINEER PERMITS, AND THE MARYLAND STATE HIGHWAY AND COUNTY ROAD, GRADING AND BUILDING PERMITS, WHERE APPLICABLE.<br><br>C) COMPACTION:<br><br>1) GENERAL: CONTROL SOIL COMPACTION DURING CONSTRUCTION PROVIDING MINIMUM PERCENTAGE OF DENSITY SPECIFIED FOR EACH AREA CLASSIFICATION INDICATED BELOW. IF COMPACTION AS INDICATED CANNOT BE ACHIEVED, REMOVE UNSUITABLE SOIL TO DEPTH REQUIRED, FILL AND COMPACT SOIL TO MEET REQUIREMENTS OR AS DIRECTED BY THE OWNERS REPRESENTATIVE.<br><br>2) PERCENTAGE OF MAXIMUM DENSITY REQUIREMENTS: COMPACT SOIL TO NOT LESS THAN THE FOLLOWING PERCENTAGES OF MAXIMUM DENSITY FOR SOILS WHICH EXHIBIT A WELL-DEFINED MOISTURE RELATIONSHIP DETERMINED IN ACCORDANCE WITH ASTM D 698.<br><br>a) AREAS OF PROPOSED CONCRETE SLAB AND PARKING SPACES: COMPACT TOP 12" OF EXISTING SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL AT 95%. COMPACT THE TOP 6" OF SUBGRADE AND BASE COURSE PAVEMENT MATERIAL TO AT LEAST 100% MAXIMUM DENSITY.<br><br>b) LAWN OR UNPAVED AREAS: COMPACT EACH LAYER OF BACKFILL OR FILL MATERIAL AT 90%.<br><br>c) WALKWAYS: COMPACT EACH LAYER OF BACKFILL OR FILL MATERIAL AT 95% MAXIMUM DENSITY.<br><br>d) BACKFILL: COMPACT EACH LAYER AT 95%.<br><br>3) MOISTURE CONTROL:<br><br>a) WHERE SUBGRADE OR LAYER OF SOIL MATERIAL MUST BE MOISTURE CONDITIONED BEFORE COMPACTION, UNIFORMLY APPLY WATER TO SURFACE OF SUBGRADE, OR LAYER OF SOIL MATERIAL. APPLY WATER IN MANNER TO PREVENT FREE WATER APPEARING ON SURFACE DURING OR SUBSEQUENT TO COMPACTION OPERATIONS. MOISTURE CONTENT SHALL BE WITH- IN 3 PERCENT OF OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D 698.<br><br>b) IF SOILS ARE FOUND TO EXCEED THE OPTIMUM MOISTURE CONTENT RANGE OF -1 TO +4 PERCENT, THEN THE SOILS SHALL BE SCARIFIED TO BE BROUGHT INTO COMPLIANCE.<br><br>D) BACKFILL AND FILL:<br><br>1) USE SATISFACTORY ONSITE SOIL MATERIAL, APPROVED FOR USE BY THE OWNER OR THEIR REPRESENTATIVE.<br><br>2) GENERAL: PLACE ACCEPTABLE SOIL MATERIAL IN LAYERS TO REQUIRED SUBGRADE ELEVATIONS FOR EACH AREA CLASSIFICATION LISTED BELOW.<br><br>a) UNDER EXCAVATIONS AND BACKFILL, USE SATISFACTORY EXCAVATED OR BORROW MATERIAL.<br><br>b) UNDER GRASSED AREAS, USE SATISFACTORY EXCAVATED OR BORROW MATERIAL.<br><br>c) UNDER WALKS, PARKING AREA, AND CONCRETE SLAB AREAS, USE SUBBASE MATERIAL, OR SATISFACTORY EXCAVATED OR BORROW MATERIAL, OR COMBINATION OF BOTH AS INDICATED ON THESE PLANS.<br><br>d) UNDER PIPING AND CONDUIT, USE SUBBASE MATERIAL WHERE SUBBASE IS INDICATED UNDER PIPING OR CONDUIT; SHAPE TO FIT BOTTOM 90 DEGREES OF CYLINDER.<br><br>3) PLACEMENT AND COMPACTION: a) PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8" IN LOOSE DEPTH PER LAYER FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4" IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND- OPERATED TAMPERS. |  | H) MAINTENANCE:<br><br>1) PROTECTION OF GRADED AREAS:<br><br>a) PROTECT NEWLY GRADED AREAS FROM TRAFFIC AND EROSION. KEEP FREE OF TRASH AND DEBRIS.<br><br>b) REPAIR AND REESTABLISH GRADES IN SETTLED ERODED, AND RUTTED AREAS TO SPECIFIED TOLERANCES.<br><br>I) DISPOSAL OF EXCESS AND WASTE MATERIALS (IF REQUIRED):<br><br>1) REMOVE EXCESS EXCAVATED MATERIAL, TRASH, DEBRIS AND WASTE MATERIALS AND DISPOSE OF IT OFF OWNER'S PROPERTY IN A MANNER CONSISTENT WITH LOCAL, STATE AND FEDERAL AGENCIES.<br><br>J) DEWATERING:<br><br>1) THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY DRAINAGE AND KEEP THE SAME OPERATING UNTIL PERMANENT DRAINAGE HAS BEEN COMPLETED. IF WATER IS ENCOUNTERED IN EXCAVATING AND UTILITY CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN PUMPS OF SUFFICIENT CAPACITY TO REMOVE THE WATER WHILE THE EXCAVATIONS ARE BEING MADE AND UNTIL THE CONCRETE FOOTINGS HAVE BEEN POURED THE FOUNDATION WALLS OR OTHER STRUCTURES ERECTED UP TO GRADE, AND THE EXCAVATION HAS BEEN BACKFILLED.<br><br>K) BRACING OR SHEETING:<br><br>1) THE CONTRACTOR SHALL SUPPORT THE SIDES AND ENDS OF ALL EXCAVATIONS WHEREVER NECESSARY OR DIRECTED WITH BRACES, SHEETING, SHORES OR STRINGS OF THE QUALITY AND CHARACTER REQUIRED TO PROVIDE ADEQUATE SUPPORT, AS GOVERNED BY LOCAL, STATE, AND FEDERAL REGULATIONS.<br><br>3) SEEDING: PERMANENT AND TEMPORARY SEEDING:<br><br>A) SEED PREPARATION: APPLY 100 POUNDS PER 1000 SQUARE FEET OF PULVERIZED LIMESTONE AND 12 POUNDS PER 1000 SQUARE FEET OF 10-20-20 EQUIVALENT FERTILIZER, HARROW OR DISC ON THE CONTOUR INTO THE SOIL TO A DEPTH OF 3 TO 4 INCHES, CONTINUE TILLAGE UNTIL A REASONABLY FINE SEEDBED HAS BEEN PREPARED.<br><br>B) SEEDING: USE KENTUCKY 31, TALL FESCUE AT THE RATE OF 5 TO 7 POUNDS PER 1000 SQUARE FEET ON A MOIST SEEDBED, MINIMUM COVERAGE 1/4 INCH. STABILIZE BY MULCHING WITH UNWEATHERED, UNCHOPPED, SMALL GRAIN STRAW SPREAD AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE. MULCH IS TO BE ANCHORED BY ASPHALT TIE- DOWN METHOD (OAE). SEEDING IS TO BE DONE ONLY BETWEEN FEBRUARY 1 AND APRIL 15 OR AUGUST 15 TO OCTOBER 15.<br><br>C) TEMPORARY SEEDING TO BE DONE ON COMPLETION OF CONSTRUCTION SODDING: TO BE ROOTED KENTUCKY 31 TALL FESCUE. SOD SHALL BE TRANSPLANTED WITHIN 36 HOURS OF HARVESTING. EACH STRIP OF SOD TO BE PLANTED WITH AT LEAST 2 STAKES SPACED NOT MORE THAN 2 FEET APART.<br><br>D) VEGETATIVE STABILIZATION:<br><br>ALL VEGETATIVE STABILIZATION PREPARATIONS, PROCEDURES, AND MATERIALS ARE TO BE IN COMPLIANCE WITH SECTION B GRADING AND STABILIZATION SUB-SECTION B-4 OF THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MANUAL PREPARED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT WATER MANAGEMENT ADMINISTRATION IN ASSOCIATION WITH THE NATURAL RESOURCES CONSERVATION SERVICE AND THE MARYLAND ASSOCIATION OF SOIL CONSERVATION DISTRICTS, AS AMENDED. FOLLOWING THE INITIAL DISTURBANCE OR RE-DISTRUBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:<br><br>1) THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS (SUCH AS DIKES, SWALES, DITCHES), AND SLOPES STEEPER THAN 3H TO 1V (3:1) AND:<br><br>2) SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED AREAS ON THE PROJECT SITE.<br><br>E) THE REQUIREMENTS OF .08 05 01 06 (B)(E)(IV) DO NOT APPLY TO THOSE AREAS WHICH ARE SHOWN ON THE PLAN AND ARE CURRENTLY BEING USED FOR MATERIAL STORAGE, OR FOR THOSE OF A SURFACE MINE SITE, WHERE THE STABILIZATION MATERIAL WOULD CONTAMINATE THE RECOVERABLE RESOURCE. MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO ENSURE THAT THE STABILIZED AREAS CONTINUOUSLY MEET THE APPROPRIATE REQUIREMENTS OF THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS" (2011), WHICH IS INCORPORATED BY REFERENCE IN REGULATION .08 05 01 10. |  | 9) BOUNDARY INFORMATION<br><br>A) THIS PLAT IS A SPECIAL PURPOSE SURVEY PER SECTION 09.13.06.10 OF COMAR REGULATIONS.<br><br>B) THE PROPERTY LINES SHOWN HEREON ARE BASED ON FIELD WORK PERFORMED BY C.O.A., INC.<br><br>C) THIS PLAT IS NOT A BOUNDARY SURVEY AND DOES NOT MEET THE MINIMUM STANDARDS FOR A BOUNDARY SURVEY AS DEFINED BY COMAR REGULATION.<br><br>10) STORMWATER MANAGEMENT:<br><br>THE CONSTRUCTION OF THE STORMWATER MANAGEMENT SYSTEM(S). SYSTEM(S) IS TO BE IN ACCORDANCE WITH THE CALVERT COUNTY STORMWATER MANAGEMENT ORDINANCE, MAY 4, 2010 WHICH INCORPORATES BY REFERENCE THE MARYLAND DEPT. OF THE ENVIRONMENT "2000 MARYLAND STORMWATER DESIGN MANUAL, VOLUMES I & II AND THE USDA NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD POND CODE 378 ALL AS CURRENTLY AMENDED."<br><br>11) ARCHAEOLOGICAL AND HISTORICAL RESOURCES:<br><br>CONTRACTORS WORKING ON THIS PROJECT ARE HEREBY INFORMED THAT THERE IS A POSSIBILITY THAT ARCHAEOLOGICAL ARTIFACTS WILL BE ACCIDENTALLY DISCOVERED DURING ANY GROUND-DISTURBING ACTIVITIES, INCLUDING GRADING AND EXCAVATION. ARTIFACTS COULD INCLUDE STONE TOOLS (ARROWHEADS, FOR EXAMPLE), POTTERY, METALS, BRICKS, GLASS, BONE, ETC. IF ARTIFACTS ARE DISCOVERED, THE CONTRACTOR OR APPLICANT MUST CEASE WORK AND CONTACT THE DEPARTMENT OF PLANNING & ZONING, HISTORIC PRESERVATION PLANNER AT 410-535-2348 FOR PROMPT EVALUATION OF THE OBJECTS AND TO AVOID DELAYS TO THE PROJECT. BY LAW, ALL ARTIFACTS BELONG TO THE PROPERTY OWNER, UNLESS THEY ARE HUMAN REMAINS WHICH CANNOT BE DISTURBED WITHOUT WRITTEN AUTHORIZATION FROM THE STATES ATTORNEY. EVALUATION IN THE INTEREST OF DOCUMENTING THE HERITAGE AND UNDERSTAND THE PAST OF CALVERT COUNTY.<br><br>12) ENVIRONMENTAL FEATURES: (IF SHOWN ON PLANS)<br><br>A) THE ISSUANCE OF COUNTY PERMITS OR APPROVALS IS A LOCAL PROCESS AND DOES NOT IMPLY THAT THE APPLICANT HAS MET STATE AND FEDERAL REQUIREMENTS FOR WETLANDS UNDER COMAR,THE FEDERAL WATER POLLUTION CONTROL ACT, OR THE RIVERS AND HARBORS ACT.<br><br>B) A BUFFER ZONE OF 50-FOOT ADJACENT TO NON-TIDAL WETLANDS AND A 100-FOOT ADJACENT TO TIDAL WETLANDS SHALL BE MAINTAINED AND THE FOLLOWING ADDITIONAL REQUIREMENTS SHALL BE MET.<br><br>C) ANY BUFFER AREAS SHOWN ON THESE PLANS ARE TO BE LEFT UNDISTURBED IN PERPETUITY AND TO SERVE FOR WATER QUALITY BENEFITS.<br><br>D) PROTECTIVE SNOW FENCING SHALL BE INSTALLED ALONG THE 50 FT WETLAND BUFFER WITHIN 100-FT OF THE LIMITS OF DISTURBANCE AND INSPECTED PRIOR TO ISSUANCE OF ANY BUILDING OR GRADING PERMITS FOR THE PROJECT.<br><br>E) A 10-FOOT SETBACK SHALL BE MAINTAINED FROM THE EDGE OF THE WETLAND BUFFER.<br><br>F) FOREST RETENTION AREAS (FRA'S) ARE TO BE LEFT UNDISTURBED UNLESS APPROPRIATE APPROVALS OR PERMITS HAVE BEEN OBTAINED FOR THE REMOVAL OF TREES AND/OR UNDER STORY VEGETATION. TIMBER HARVESTS MAY OCCUR WITHIN (FRA'S) WITH AN APPROVED FORESTS HARVEST PLAN AND OTHER APPROPRIATE APPROVALS AND/OR PERMITS. OTHER THAN TIMBER HARVESTS, PERMITS MAY ONLY BE ISSUED FOR THE REMOVAL OF TREES OR UNDER STORY VEGETATION IF THEY ARE A THREAT TO STRUCTURES OR TO PROHIBIT THE SPREAD OF PLANT DISEASES. PERMITS MAY ALSO BE ISSUED FOR THE REMOVAL OF UNDER STORY PLANTS COMPOSED OF INVASIVE OR NOXIOUS PLANTS OR WEEDS. OTHERWISE, NO EQUIPMENT, MACHINERY, MOTOR VEHICLES, MATERIALS, STOCKPILING, DUMPING OF TRASH OR STRUCTURES ARE ALLOWED WITHIN THE FOREST RETENTION AREA. HIKING, NATURE OBSERVATION AND STUDY, AND WILDLIFE MANAGEMENT ACTIVITIES MAY OCCUR IN THE FOREST RETENTION AREAS.<br><br>G) FOREST PROTECTION MEASURES ARE TO BE IN PLACE AND INSPECTED ON EACH LOT PRIOR TO ISSUANCE OF ANY BUILDING OR GRADING PERMITS FOR EACH LOT. STAKING, FLAGGING, FENCING AND POSTING SIGNS SHALL MARK THE BOUNDARY OF THE (FRA). ALL PROTECTIVE MEASURES SHALL BE MAINTAINED THROUGHOUT THE PROJECT.<br><br>13) STATE HIGHWAY ADMINISTRATION (S.H.A.) NOTE: (IF REQUIRED)<br><br>ALL CONSTRUCTION WITHIN THE PUBLIC S.H.A. RIGHT-OF-WAY (IF REQUIRED) SHALL BE IN ACCORDANCE WITH THE S.H.A. ENGINEERING ACCESS AND UTILITY PERMITS TO BE ISSUED FOR THIS SITE.<br><br>14) CALVERT COUNTY DEPARTMENT OF PUBLIC WORKS (DPW) NOTE: (IF REQUIRED)<br><br>ALL CONSTRUCTION WITHIN THE PUBLIC COUNTY RIGHT-OF-WAY (IF REQUIRED) SHALL BE IN ACCORDANCE WITH THE COUNTY ACCESS AND UTILITY PERMITS TO BE ISSUED FOR THIS SITE.<br><br>15) SITE PLAN NOTES<br><br>A) ALL EXISTING FEATURES ARE TO REMAIN UNLESS NOTED OTHERWISE.<br><br>B) EXISTING PAVED SURFACES WHICH ARE PROPOSED TO BE LANDSCAPED GREEN AREAS SHALL HAVE ALL PAVEMENT, GRAVEL SUB GRADE MATERIAL REMOVED AND REPLACED WITH TOPSOIL TO THE EXTENT REQUIRED TO PROVIDE SUITABLE SOILS FOR THE ESTABLISHMENT OF LANDSCAPE MATERIALS.<br><br>C) IN LOCATIONS WHERE PROPOSED PAVEMENT IS TO MEET EXISTING PAVEMENT, THE EXISTING PAVEMENT SHALL BE SAW CUT TO PROVIDE A NEAT AND CLEAN EDGE TO CONSTRUCT THE IMPROVEMENTS SHOWN HEREON.<br><br>D) SEE ARCHITECTURAL PLANS FOR INFORMATION RELATED TO BUILDING, FOUNDATION AND UTILITY COORDINATION. |  |
| 1) PARKING SURFACE:<br><br>1) GENERAL: SUBBASE COURSE IS TO CONSIST OF PLACING SUBBASE MATERIAL IN LAYERS OF SPECIFIED THICKNESS, OVER SUBGRADE SURFACE TO SUPPORT A PAVEMENT BASE AND SURFACE COURSE.<br><br>2) GRADE CONTROL: DURING CONSTRUCTION, MAINTAIN LINES AND GRADES INCLUDING CROWN AND CROSS- SLOPE OF SUBBASE COURSE.<br><br>3) MATERIALS AND INSTALLATION: GRAVEL AND BITUMINOUS CONCRETE MATERIALS AND INSTALLATION ARE TO BE IN ACCORDANCE WITH THE MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION (SHA) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED 1993, AS AMENDED, AND INSTALLED AS SHOWN ON PLANS.<br><br>G) FIELD QUALITY CONTROL:<br><br>1) QUALITY CONTROL TESTING DURING CONSTRUCTION: THE CONTRACTOR SHALL RETAIN A QUALIFIED THIRD PARTY TESTING SERVICE TO INSPECT AND CERTIFY THE SITEWORK CONSTRUCTION. CERTIFICATIONS SHALL INCLUDE SUBGRADE COMPACTION, FILL/BACKFILL MATERIAL AND COMPACTION, SUBBASE MATERIAL AND COMPACTION, AND CONCRETE MATERIALS.   |  | 4) SEDIMENT AND EROSION CONTROL:<br><br>SEDIMENT AND EROSION CONTROL MEASURES ARE TO BE INSTALLED PER THE "MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" MARYLAND DEPARTMENT OF THE ENVIRONMENT (2011) AS CURRENTLY AMENDED AND AS DETAILS STATED PER THESE PLANS.<br><br>5) FIRE PROTECTION:<br><br>A) FIRE DEPARTMENT VEHICULAR ACCESS TO ALL STRUCTURES UNDER CONSTRUCTION SHALL BE PROVIDED AT ALL TIMES. IN AREAS WHERE GROUND SURFACES ARE SOFT OR LIKELY TO BECOME SOFT, HARD ALL-WEATHER SURFACE ACCESS ROADS SHALL BE PROVIDED.<br><br>B) TRASH AND DEBRIS SHALL BE REMOVED FROM THE CONSTRUCTION SITE AS OFTEN AS NECESSARY TO MAINTAIN A FIRE-SAFE CONSTRUCTION SITE.<br><br>C) AS-BUILT DRAWINGS SHOWING BUILDING FLOOR PLANS, FIRE PROTECTION SYSTEMS, AND ITEMS OF FIRE SUPPRESSION INTEREST SUCH AS STANDPIPE CONNECTIONS, SPRINKLER CONNECTIONS, HYDRANTS, ETC. SHALL BE SUBMITTED TO THIS OFFICE PRIOR TO ISSUANCE OF USE AND OCCUPANCY PERMIT UPON COMPLETION OF THE PROJECT.<br><br>D) FIRE SUPPRESSION TANK (IF REQUIRED) TO BE FILLED WITH WATER PRIOR TO USE AND OCCUPANCY.<br><br>6) SOIL TESTS:<br><br>NO SITE SOIL BORINGS FOR EARTHWORK OPERATIONS PERFORMED FOR THE PREPARATION OF THESE PLANS.<br><br>7) WATER & SEWER / WELL & SEPTIC SYSTEM:<br><br>PUBLIC WATER & SEWER AND/OR PRIVATE WELL & SEPTIC SYSTEMS ARE TO BE CONSTRUCTED OR UTILIZED IN ACCORDANCE WITH ALL COUNTY AND STATE SPECIFICATIONS AND PERMITS.  |  |  |  |
| 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. 31181. EXPIRATION DATE: 11/3/2021   |  | 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. 31181. EXPIRATION DATE: 11/3/2021  |  | 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. 31181. EXPIRATION DATE: 11/3/2021   |  |
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PRE DEVELOPMENT  
DRAINAGE AREA MAP

| LEGEND               |          |          |
|----------------------|----------|----------|
| DESCRIPTION          | EXISTING | PROPOSED |
| DRAINAGE AREA DIVIDE |          |          |
| SOIL BOUNDARY        |          |          |
| WOODSLINE            |          |          |
| BUILDING             |          |          |
| PAVEMENT             |          |          |
| CONCRETE             |          |          |
| > 15% STEEP SLOPES   |          |          |
| > 25% STEEP SLOPES   |          |          |



COLLINSON, OLIFF & ASSOCIATES, INC.

SURVEYORS & ENGINEERS  
LAND PLANNERS

P.O. BOX 2209 ~ 110 MAIN STREET  
PRINCE FREDERICK, MARYLAND 20678  
410-535-3101 • 301-865-1599  
FAX: 410-535-3103 • EMAIL: INFO@COA-NC.COM

DATE: 11/16/19

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. 31181, EXPIRATION  
DATE: 11/3/2021

|          |           |                                   |        |          |
|----------|-----------|-----------------------------------|--------|----------|
| SCALE    | AS SHOWN  | FOLDER REFERENCE                  | PLAN # | SPR #    |
| DATE     | OCT. 2018 | TM 44 GRID 11 PARCEL 389          | 3      | 2018-282 |
| REVISION | 11/27/18  | REVISED PER TEG COMMENTS 11-14-18 |        |          |
| JOB NO.  | 1-12812   | REV PER P&Z AND DPW COMMENTS      |        |          |
| DRAWN BY | MAE       |                                   |        |          |
| APPROVED | JJK       |                                   |        |          |
| CASE NO. | 2018-282  |                                   |        |          |

PRE DEVELOPMENT DRAINAGE AREA MAPS

**ANNMARIE GARDENS ~ SPR 2018 - 282**

WILDFLOWER MEADOW & PATIO

TM 44 GRID 11 PARCEL 389 ~ 13480 DOWELL RD

FIRST DISTRICT, CALVERT COUNTY

DOWELL, MARYLAND 20629

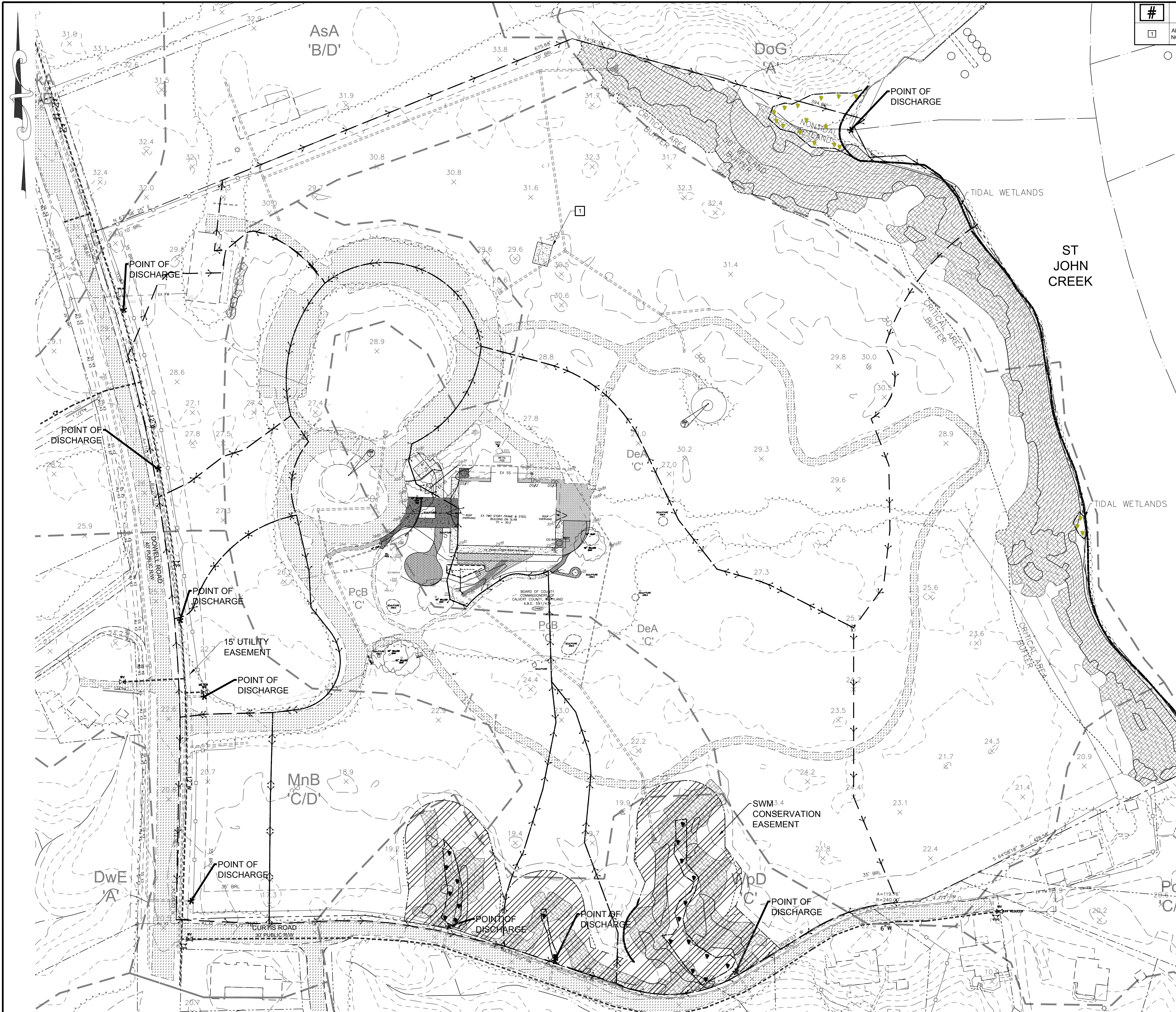
KOENIG PRIVATE FOUNDATION

THIS STAMP IN  
RED COLOR  
INDICATES ORIGINAL

C 1.2

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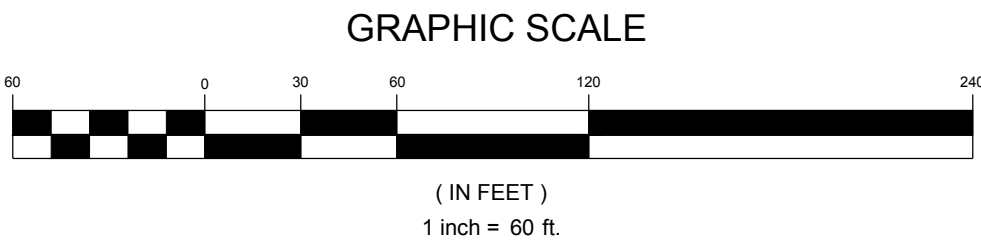


POST DEVELOPMENT  
DRAINAGE AREA MAP

| # | UTILITY KEYED NOTES   |
|---|---|
| 1 | APPROXIMATE LOCATION OF PROPOSED 20'x28' PAVILION SITUATED WITHIN GROVE OF LOBLOLLY PINES. NO CLEARING IS PROPOSED. |

| CONSISTENCY REPORT PROJECT DATA                                 |  |  |
|---|--|--|
| TOTAL PROPERTY AREA = 28.89 AC ±                                |  |  |
| CRITICAL AREA (LDA) AREA = 28.89 AC ±                           |  |  |
| EXISTING FOREST / WOODLANDS / TREES = 23 AC ± = 79% OF PROPERTY |  |  |
| PROPOSED CLEARING = 0.0 AC = 0% OF EXISTING FOREST              |  |  |
| EXISTING LOT COVERAGE = 2.94 AC ± = 10% OF PROPERTY             |  |  |
| EXISTING LOT COVERAGE TO BE REMOVED = 1,659 SF                  |  |  |
| PROPOSED NEW LOT COVERAGE = 8,801 SF                            |  |  |
| NET INCREASE IN LOT COVERAGE = 7,142 SF                         |  |  |
| TOTAL LOT COVERAGE = 3.11 AC ± = 10.7% OF PROPERTY              |  |  |
| TOTAL DISTURBED AREA = 0.54 AC                                  |  |  |

| LEGEND               |          |          |
|----------------------|----------|----------|
| DESCRIPTION          | EXISTING | PROPOSED |
| DRAINAGE AREA DIVIDE |          |          |
| SOIL BOUNDARY        |          |          |
| WOODSLINE            |          |          |
| BUILDING             |          |          |
| PAVEMENT             |          |          |
| CONCRETE             |          |          |
| > 15% STEEP SLOPES   |          |          |
| > 25% STEEP SLOPES   |          |          |



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FAX: 410-535-3103 • EMAIL: INFO@COANC.COM

JOSEPH J. KADJESKI MD PE #31181  
11/6/19  
DATE

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. 31181, EXPIRATION DATE: 11/3/2021

|          |           |                          |                |                                   |
|----------|-----------|--------------------------|----------------|-----------------------------------|
| SCALE    | AS SHOWN  | FOLDER REFERENCE         | DATE           | REVISION                          |
| DATE     | OCT. 2018 | TM 44 GRID 11 PARCEL 389 | 11/27/18       | REVISED PER TEG COMMENTS 11-14-18 |
| JOB NO.  | 1-12812   |                          | 1/16/19        | REV PER P&Z AND DPW COMMENTS      |
| DRAWN BY | MAE       |                          |                |                                   |
| APPROVED | JJK       |                          |                |                                   |
| CASE NO. | 2018-282  |                          |                |                                   |
| PLAN # 3 |           |                          | SPR # 2018-282 |                                   |

POST DEVELOPMENT DRAINAGE AREA MAPS

ANNMARIE GARDENS ~ SPR 2018 - 282  
WILDFLOWER MEADOW & PATIO  
TM 44 GRID 11 PARCEL 389 ~ 13480 DOWELL RD  
FIRST DISTRICT, CALVERT COUNTY  
DOWELL, MARYLAND 20629

THIS STAMP IN RED COLOR INDICATES ORIGINAL

C 1.3

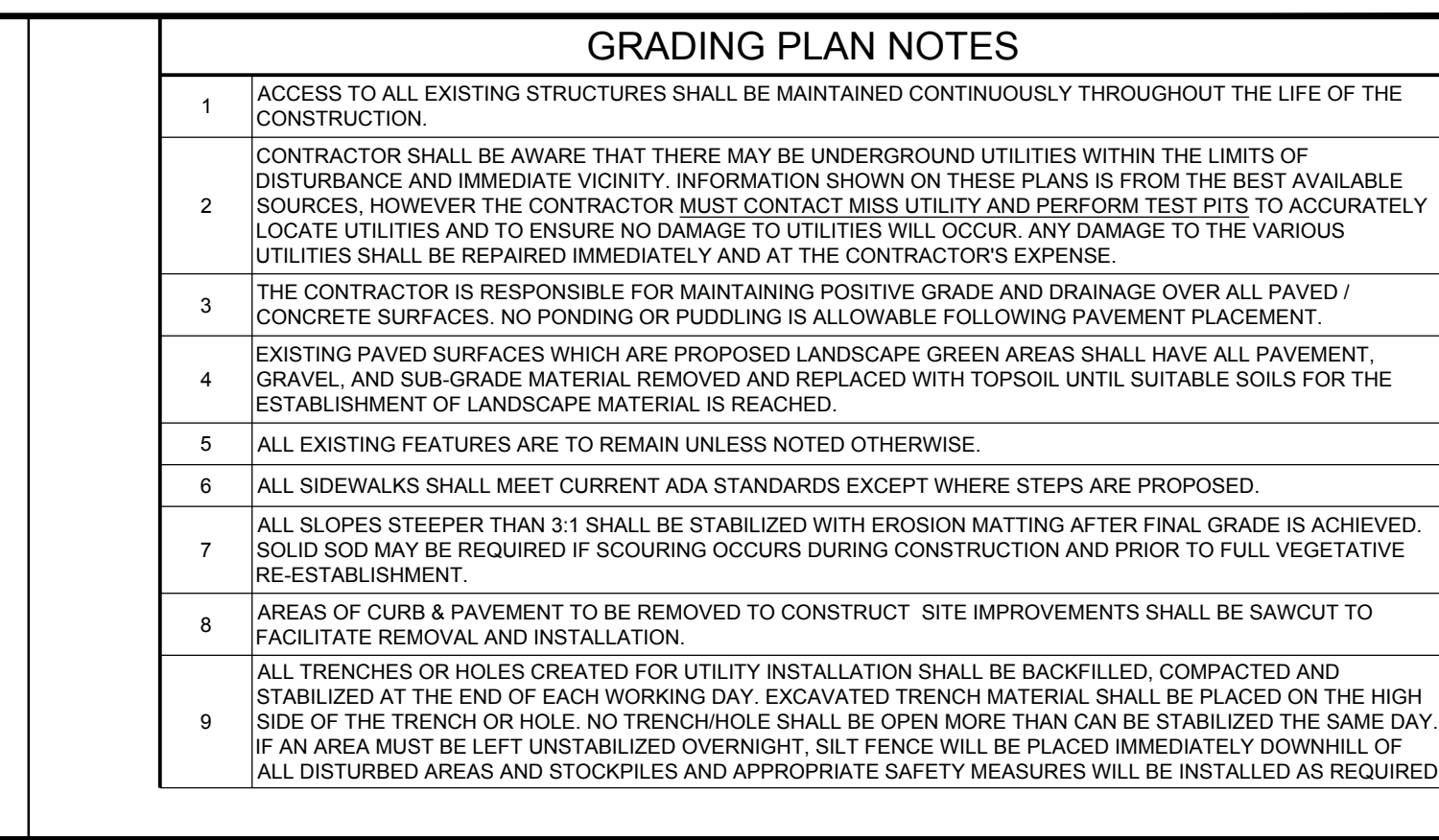
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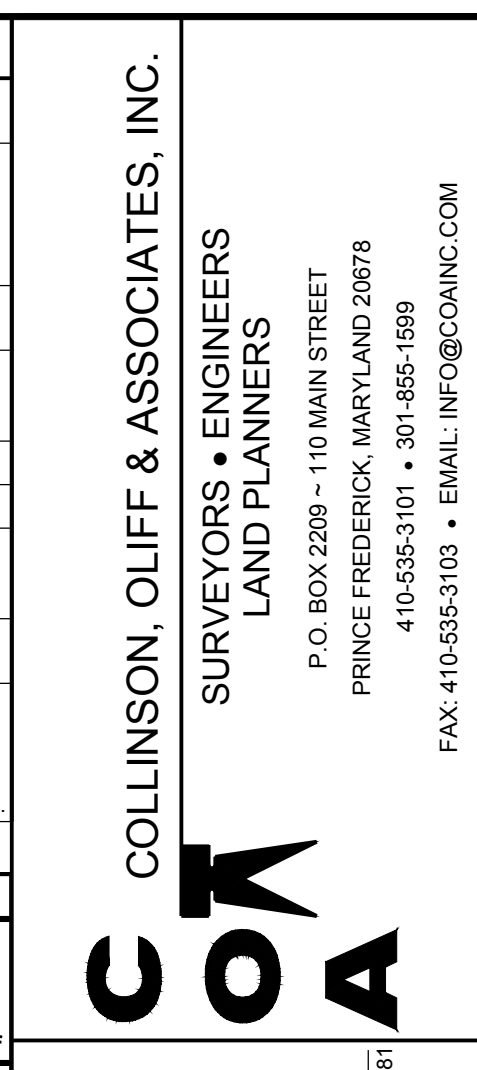






| Stormwater Management Summary Table |                        |                        |                   |    |    |              |                       |            |                     |                           |             |                 |
|-------------------------------------|------------------------|------------------------|-------------------|----|----|--------------|-----------------------|------------|---------------------|---------------------------|-------------|-----------------|
| Site Area<br>LOD                    | Existing<br>Impervious | Proposed<br>Impervious | 1 %<br>Impervious | Rv | Qe | Target<br>Pe | Target<br>ESDv<br>REQ | WQv<br>REQ | Target<br>Cp<br>RCN | Total<br>ESDv<br>Provided | Max<br>ESDv | Asbuilt<br>ESDv |
| ac / sf                             | ac / sf                | s.f.                   |                   |    |    |              | ac-ft / cf            | ac-ft / cf |                     | ac-ft / cf                | ac-ft / cf  | ac-ft / cf      |

|                               |          |                    |                      |                   |           |                  |           |               |                    |       |       |
|-------------------------------|----------|--------------------|----------------------|-------------------|-----------|------------------|-----------|---------------|--------------------|-------|-------|
| 0.54                          | 0.07     | 0.20               | 36.9%                | 0.38              | 0.69      | 1.80             | 0.03      | 0.02          | 70                 | 0.04  | 0.05  |
| 23,550                        | 3,075    | 8,695              |                      |                   |           |                  | 1,350     | 750           |                    | 1,620 | 2,101 |
| SWM BMP SUMMARY               |          |                    |                      |                   |           |                  |           |               |                    |       |       |
|                               |          | DESIGN             |                      |                   |           | VOLUMES PROVIDED |           |               |                    |       |       |
| BMP NAME                      | BMP TYPE | DRAINAGE AREA (sf) | Impervious Area (sf) | Surface Area (sf) | Pe Credit | Rv               | ESDv (cf) | MAX ESDv (cf) | As-Built ESDv (cf) |       |       |
| Interpretation Area #1 (MB#1) | M-6      | 5,300              | 3,525                | 500               | 2.20      | 0.649            | 631       | 802           |                    |       |       |
| #1 (DS #1)                    | M-1      | 1,960              | 1,960                |                   | 2.15      | 0.950            | 334       | 434           |                    |       |       |
| #2 (DS #2)                    | M-1      | 615                | 615                  |                   | 1.38      | 0.950            | 67        | 136           |                    |       |       |
| #3 (DS #3)                    | M-1      | 765                | 765                  |                   | 1.11      | 0.950            | 67        | 170           |                    |       |       |
| #4 (DS #4)                    | M-1      | 1,590              | 1,590                |                   | 2.65      | 0.950            | 334       | 352           |                    |       |       |
| Gravel Pavement               | A-2      | 1,165              | 1,165                | 1,165             | 2.02      | 0.950            | 186       | 258           |                    |       |       |
| MANAGED                       |          | 11,395             | 9,620                |                   |           |                  | 1,619     |               |                    |       |       |

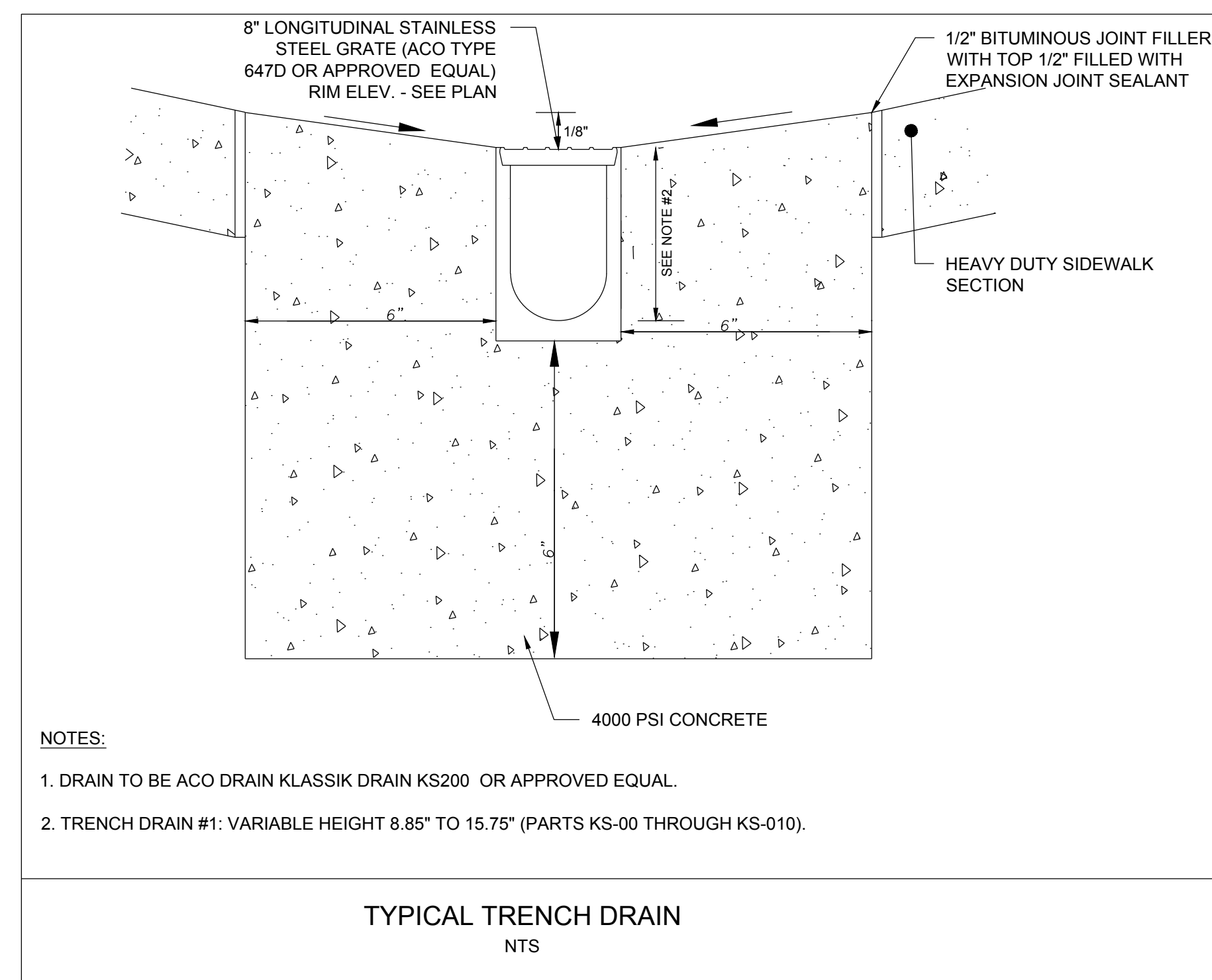
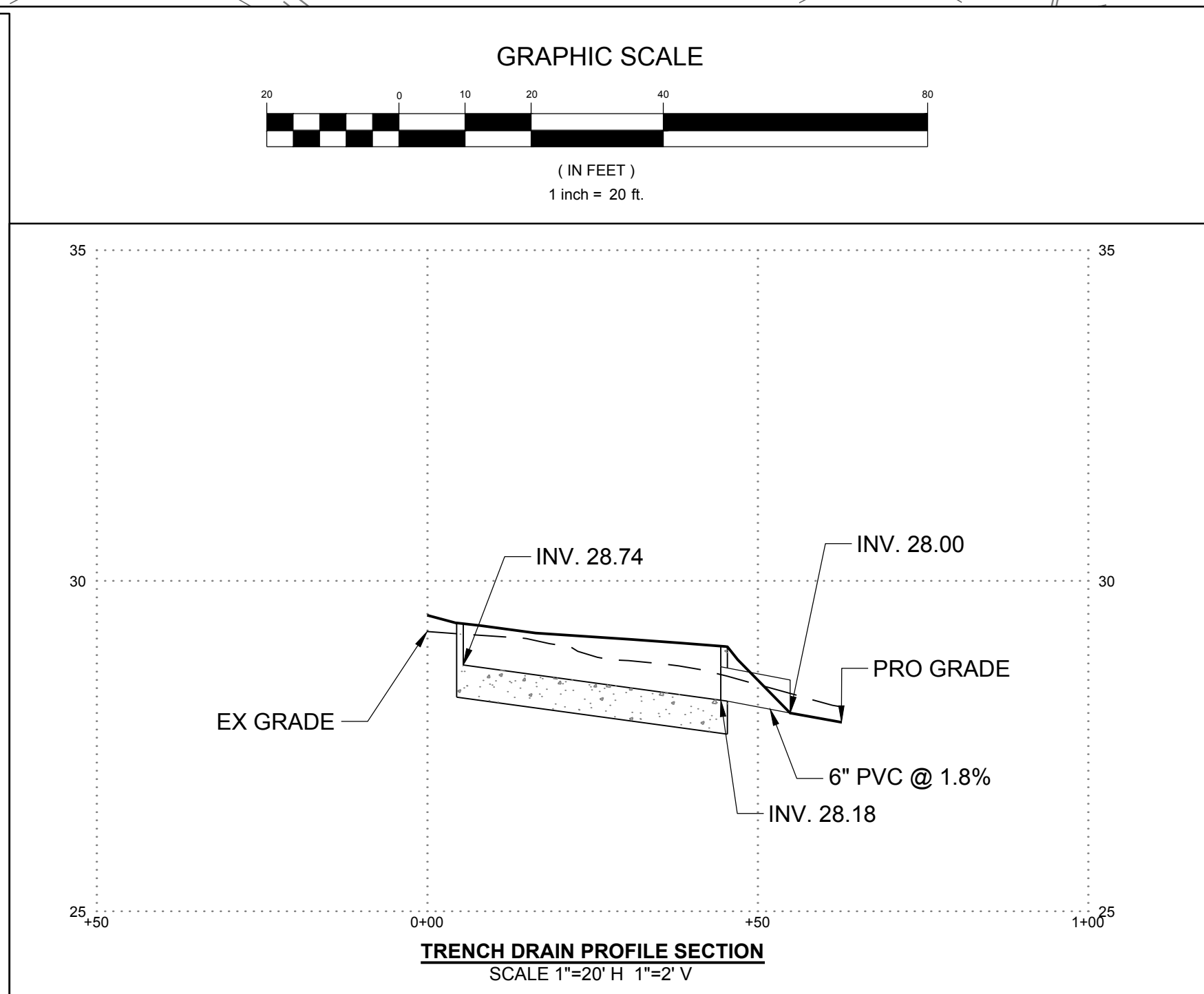


STATE OF MARYLAND  
JOSEPH J. KADLESKI  
PROFESSIONAL ENGINEER  
REGISTERED  
NO. 3181  
MD PE #311

11/16/19  
DATE

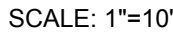
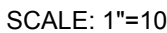
I HEREBY CERTIFY THAT  
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ENGINEER UNDER THE LAWS OF  
THE STATE OF MARYLAND.  
LICENSE NO. 31181, EXPIRATION  
DATE: 1/13/2021

|            | FOUNDER REFERENCE<br>TM-44 GRID 11 PARCEL 389 |
|------------|---|
| NO SHOWN   |   |
| DATE       | REVISION                                      |
| 2018       | 11/27/18 REVISED PER TEG COMMENTS 11-14-18    |
| DO         | 1/16/19 REV PER P&Z AND DPW COMMENTS          |
| 8/12       | -   |
| NINBY      | -   |
|            | -   |
| APPROVED   | -   |
|            | -   |
| NO SPR 282 | PLAN #: 3      SPR #: 2018-282                |



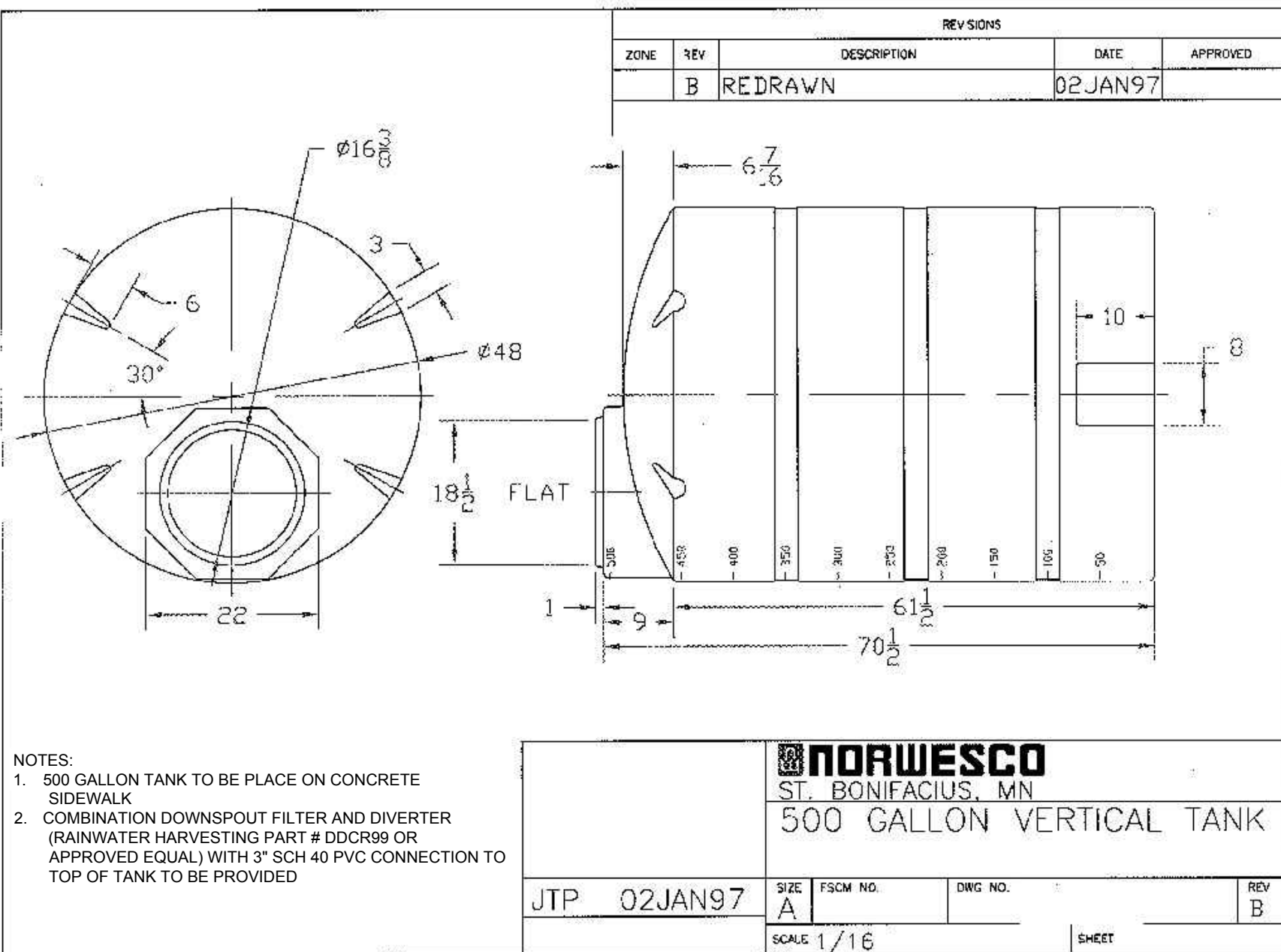
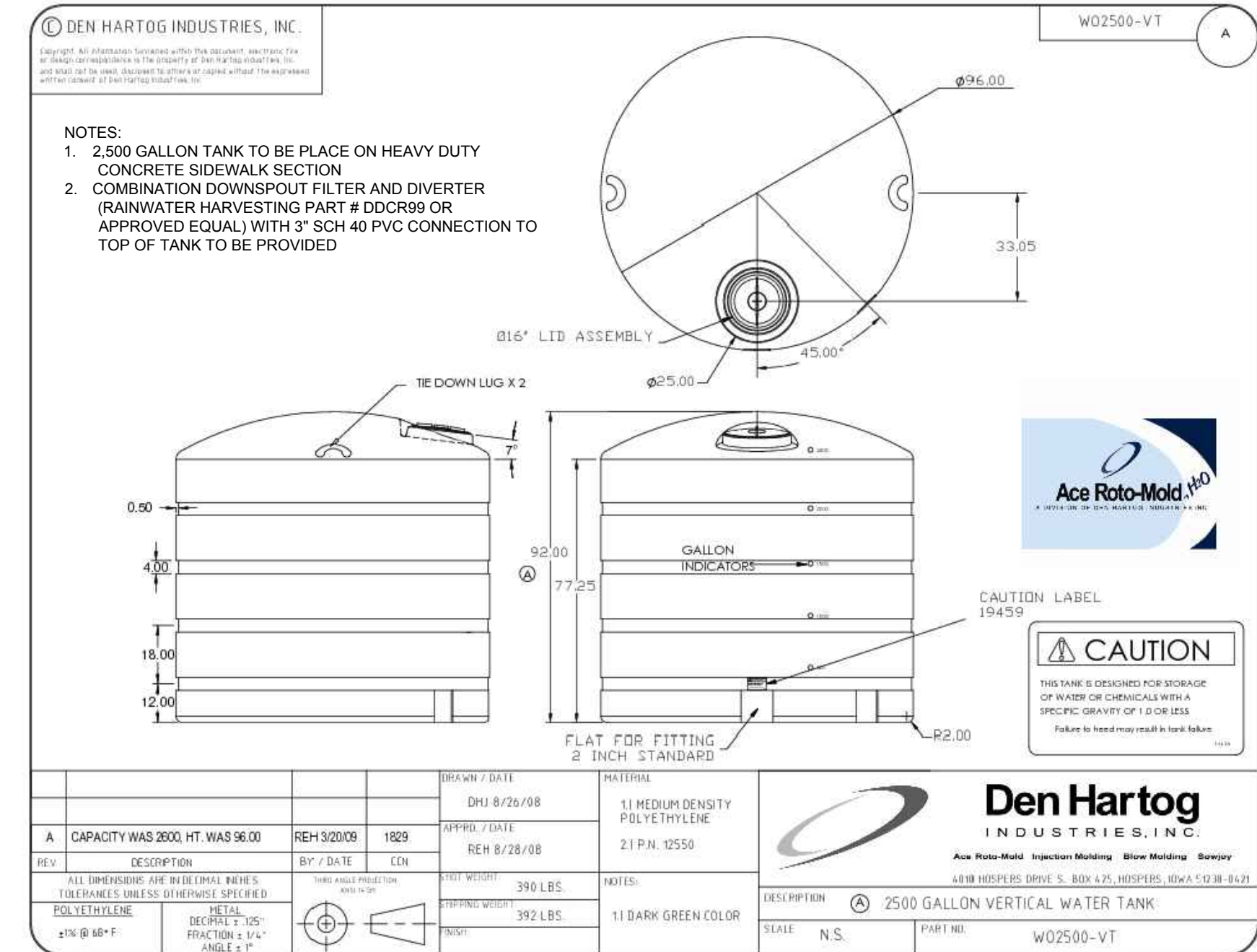
|   |                    |  |
|---|--------------------|--|
| SITE PLAN   | GRADING & SWM PLAN | SCALE<br>AS SHOWN  |
| <p align="center"><b>ANNMARIE GARDENS ~ SPR 2018 - 282</b><br/> WILDFLOWER MEADOW &amp; PATIO<br/> TM 44 GRID 11 PARCEL 389 ~ 13480 DOWELL RD<br/> FIRST DISTRICT, CALVERT COUNTY<br/> DOWELL, MARYLAND 20629</p> |                    | DATE<br>JOB<br>COC<br>DRAWN BY<br>MADE BY<br>APPROVED BY<br>JULY |
|   |                    | CASH ON HAND<br>2017   |





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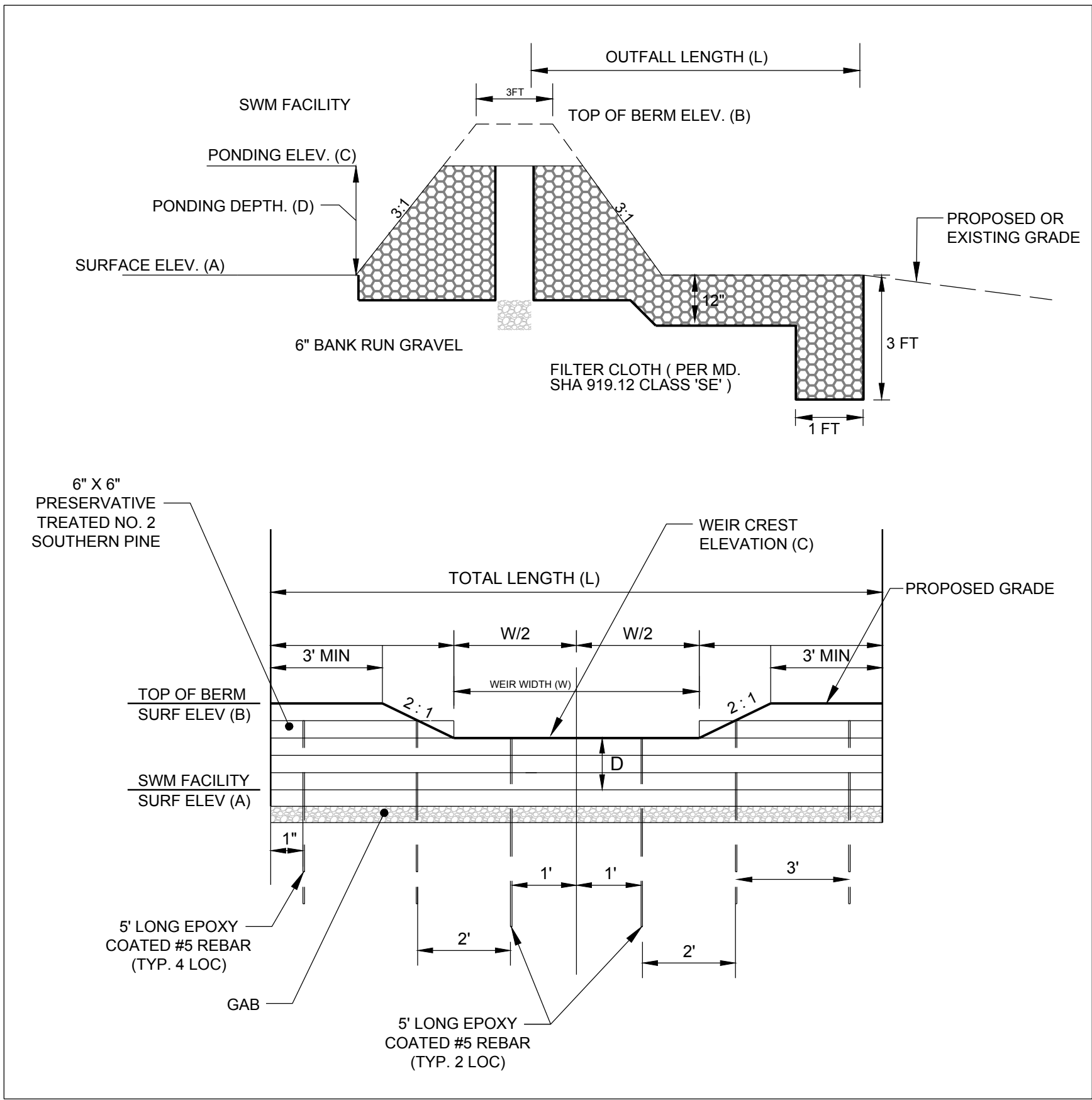
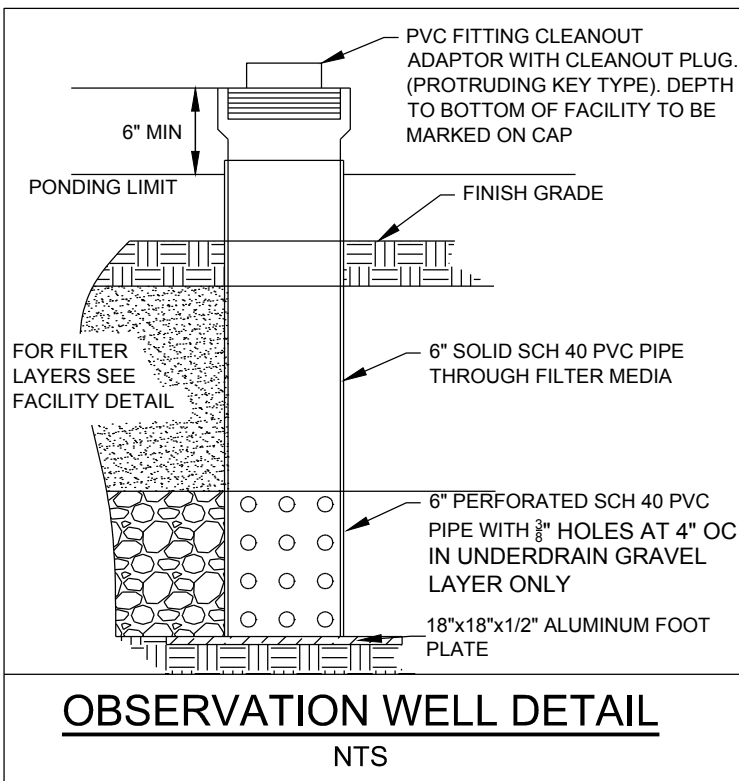
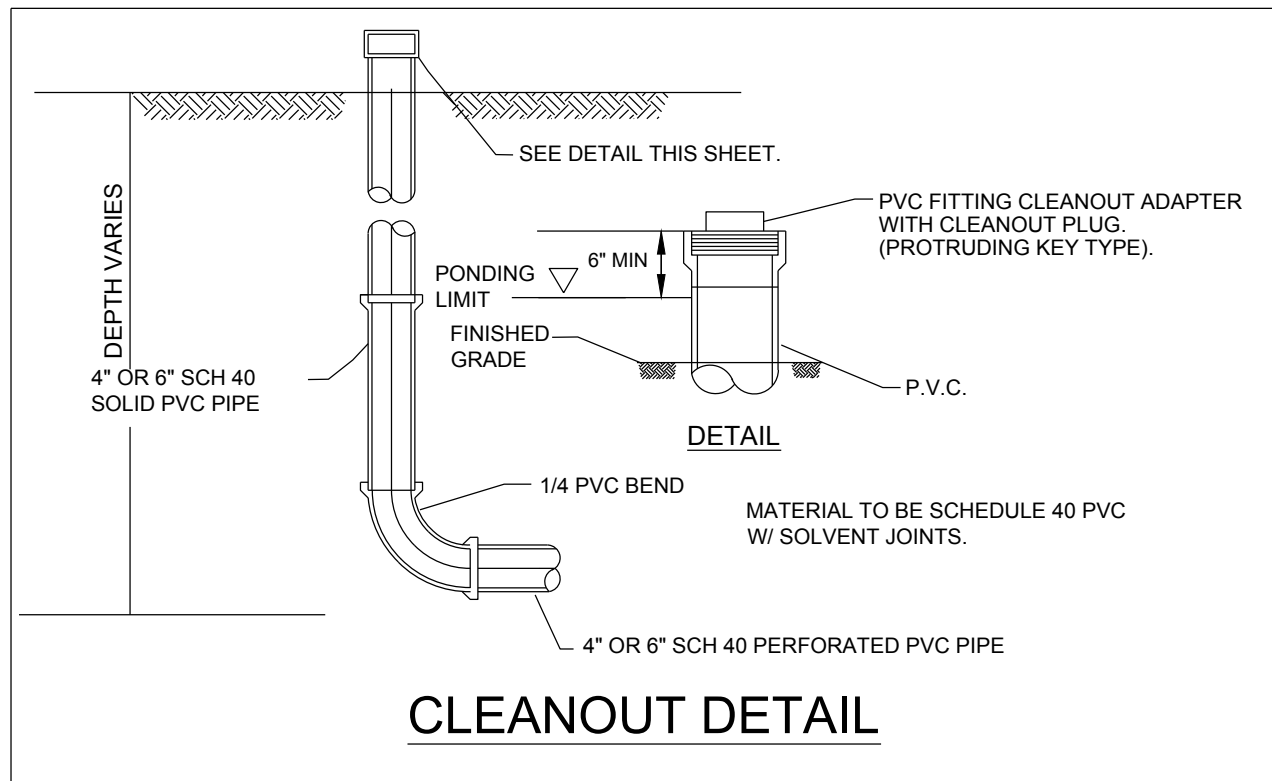
## RAINWATER HARVESTING MAINTANANCE, CONSTRUCTION & INSPECTION

### SPRING / SUMMER

- Clear gutters at least once a year and cistern filter / screen as needed of leaf material, sticks, and other debris to prevent clogging and to prevent growth of bacteria.
- The water collected in your cistern should be used or drained completely at least every seven days. Mosquitos breed in standing water.
- If your cistern is in direct sunlight, algae may grow in the water. If it happens, drain the cistern and wash well with a weak bleach solution ( $\frac{3}{4}$  cups of bleach for each gallon if water). Rinse the cistern afterward.
- Do not drink the water from a cistern.

### Fall / Winter

- Cistern should be disconnected, drained, and cleaned before the start of the cold season to avoid damage from freezing.
- Remember to reconnect your rain spout when your cistern is not in use to divert water away from the structure.



| SYSTEM | SURFACE ELEV. (A) | TOP OF BERM ELEV. (B) | PONDING / TOP OF WEIR ELEV. (C) | PONDING DEPTH (D) | WEIR WIDTH (W) (FT) | TOTAL LENGTH (L) (FT) | OUTFALL LENGTH (FT) |
|--------|-------------------|-----------------------|---------------------------------|-------------------|---------------------|-----------------------|---------------------|
| MB #1  | 27.75             | 28.5                  | 28.08                           | 0.23              | 8.0                 | 17                    | 6                   |
| -      | -                 | -                     | -                               | -                 | -                   | -                     | -                   |

| TABLE B.4.1 MATERIALS                       |  |  |   |
|---|--|--|---|
| MATERIAL                                    | SPECIFICATIONS   | SIZE                                     | NOTES   |
| PLANTINGS                                   | SEE APPENDIX A, TABLE A.4  | N/A                                      | PLANTINGS ARE SITE-SPECIFIC   |
| PLANTING SOIL (2' TO 4' DEEP)               | LOAMY SANDS (60-65%) & COMPOST (35-40%) OR SANDY LOAM (30%), COARSE SAND (30%) & COMPOST (40%) | N/A                                      | USDA SOIL TYPES OR SANDY LOAM; CLAY CONTENT LESS THAN 5%  |
| ORGANIC CONTENT                             | MIN. 10% BY DRY WEIGHT (ASTM D 2974)   |  |   |
| MULCH                                       | SHREDDED HARDWOOD  |  | AGED 6 MONTHS, MINIMUM: NO PINE OR WOOD CHIPS   |
| PEA GRAVEL DIAPHRAGM                        | PEA GRAVEL: ASTM-D-448   | NO. 8 OR NO. 9 (1/8" TO 3/8")            |   |
| CURTAIN DRAIN                               | ORNAMENTAL STONE: WASHED COBBLES   | STONE 2" TO 5"                           |   |
| GEOTEXTILE                                  |  | N/A                                      | PE TYPE 1 NONWOVEN  |
| GRAVEL (UNDERDRAINS AND INFILTRATION BERMS) | AASHTO M-43  | No. 57 OR No. 6 AGGREGATE (3/8" TO 3/4") |   |
| UNDERDRAIN PIPING                           | F 758, TYPE PS 28 OR AASHTO M-278  | 4" TO 6" RIGID SCH 40 PVC                | SLOTTED OR PERFORATED PIPE: 3/8" PERF. @ 6" ON CENTER, 4 HOLES PER ROW; MINIMUM OF 3" OF GRAVEL OVER AND BELOW PIPES; PERFORATED PIPE SHALL BE WRAPPED WITH 1/4" GALVANIZED HARDWARE CLOTH  |
| POURED IN PLACE CONCRETE (IF REQUIRED)      | MASH MIX NO. 3 PSI @ 28 DAYS, NORMAL WEIGHT, AIR-ENTRAINED; REINFORCING TO MEET ASTM-615-60    | N/A                                      | ON SITE TESTING OF POURED-IN-PLACE CONCRETE REQUIRED; 28 DAY STRENGTH AND SUMP TEST; ALL CONCRETE DESIGN (CAST-IN-PLACE OR PRE-CAST) NOT USING PREVIOUSLY APPROVED STATE OR LOCAL STANDARDS REQUIRES DESIGN DRAWING SEALED AND APPROVED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF MARYLAND |
| SAND  | AASHTO M-6 OR ASTM-C-33  | 0.02" TO 0.04"                           | SAND SUBSTITUTIONS SUCH AS DIABASE AND GREYSTONE (AASHTO) #10 ARE NOT ACCEPTABLE. NO CALCIUM CARBONATE OR DOLOMITIC SAND SUBSTITUTIONS ARE ACCEPTABLE. NO "ROCK DUST" CAN BE USED FOR SAND.   |

## B.4.C SPECIFICATIONS FOR MICRO-BIORETENTION. RAIN GARDENS, LANDSCAPE INFILTRATION & INFILTRATION BERMS

### 1. MATERIAL SPECIFICATIONS

THE ALLOWABLE MATERIALS TO BE USED IN THESE PRACTICES ARE DETAILED IN TABLE B.4.1.

### 2. FILTERING MEDIA OR PLANTING SOIL

THE SOIL SHALL BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES. NO OTHER MATERIALS OR SUBSTANCES SHALL BE MIXED OR DUMPED WITHIN THE MICRO-BIORETENTION PRACTICE THAT MAY BE HARMFUL TO PLANT GROWTH, OR PROVIDE A HINDRANCE TO THE PLANTING OR MAINTENANCE OPERATIONS. THE PLANTING SOIL SHALL BE FREE OF BERMUDA GRASS, QUACKGRASS, JOHNSON GRASS, OR OTHER NOXIOUS WEEDS AS SPECIFIED UNDER COMAR 15.08.01.05.

THE PLANTING SOIL SHALL BE TESTED AND SHALL MEET THE FOLLOWING CRITERIA:

- SOIL COMPONENT - LOAMY SAND OR SANDY LOAM (USDA SOIL TEXTURAL CLASSIFICATION)
- ORGANIC CONTENT - MINIMUM 10% BY DRY WEIGHT (ASTM D2974). IN GENERAL, THIS CAN BE MET WITH A MIXTURE OF LOAMY SAND (60% - 65%) AND COMPOST (35% TO 40%) OR SANDY LOAM (30%), COARSE SAND (30%), AND COMPOST (40%).
- CLAY CONTENT - MEDIA SHALL HAVE A CLAY CONTENT OF LESS THAN 5%.
- PH RANGE - SHOULD BE BETWEEN 5.5 - 7.0. AMENDMENTS (E.G., LIME, IRON SULFATE PLUS SULFUR) MAY BE MIXED INTO THE SOIL TO INCREASE OR DECREASE PH.

THERE SHALL BE AT LEAST ONE SOIL TEST PER PROJECT. EACH TEST SHALL CONSIST OF BOTH THE STANDARD SOIL TEST FOR PH, AND ADDITIONAL TESTS OF ORGANIC MATTER, AND SOLUBLE SALTS. A TEXTURAL ANALYSIS IS REQUIRED FROM THE SITE STOCKPILES OF TOPSOIL. IF TOPSOIL IS IMPORTED, THEN A TEXTURE ANALYSIS SHALL BE PERFORMED FOR EACH LOCATION WHERE THE TOPSOIL WAS EXCAVATED.

### 3. COMPACTION

IT IS VERY IMPORTANT TO MINIMIZE COMPACTION OF BOTH THE BASE OF BIORETENTION PRACTICES AND THE REQUIRED BACKFILL. WHEN POSSIBLE, USE EXCAVATION HOES TO REMOVE ORIGINAL SOIL. IF PRACTICES ARE EXCAVATED USING A LOADER, THE CONTROLLER SHOULD USE WIDE TRACK OR MARSH TRACK EQUIPMENT, OR LIGHT EQUIPMENT WITH TURF TYPE TIRES. USE OF EQUIPMENT WITH NARROW TRACKS OR NARROW TIRES, RUBBER TIRES WITH LARGE LOGS, OR HIGH-PRESSURE TIRES WILL CAUSE EXCESSIVE COMPACTION RESULTING IN REDUCED INFILTRATION RATES AND IS NOT ACCEPTABLE. COMPACTION WILL SIGNIFICANTLY CONTRIBUTE TO DESIGN FAILURE.

COMPACTION CAN BE ALLEVIATED AT THE BASE OF THE BIORETENTION FACILITY BY USING A PRIMARY TILLING OPERATION SUCH AS A CHISEL PLOW, RIPPER, OR SUBSOILER. THESE TILLING OPERATIONS ARE TO REFRACTURE THE SOIL PROFILE THROUGH THE 12 INCH COMPACTION ZONE. SUBSTITUTE METHODS MUST BE APPROVED BY THE ENGINEER. ROTOTILLERS TYPICALLY DO NOT TILL DEEP ENOUGH TO REDUCE THE EFFECTS OF COMPACTION FROM HEAVY EQUIPMENT.

ROTOTILL 2 TO 3 INCHES OF SAND INTO THE BASE OF THE BIORETENTION FACILITY BEFORE BACKFILLING THE OPTIONAL SAND LAYER. PUMP ANY PONDING WATER BEFORE PREPARING (ROTOTILLING) BASE.

WHEN BACKFILLING THE TOPSOIL OVER THE SAND LAYER, FIRST PLACE 3 TO 4 INCHES OF TOPSOIL OVER THE SAND, THEN ROTOTILL THE SAND/TOPSOIL TO CREATE A GRADATION ZONE. BACKFILL THE REMAINDER OF THE TOPSOIL TO FINAL GRADE.

WHEN BACKFILLING THE BIORETENTION FACILITY, PLACE SOIL IN LIFTS 12" TO 18". DO NOT USE HEAVY EQUIPMENT WITHIN THE BIORETENTION BASIN. HEAVY EQUIPMENT CAN BE USED AROUND THE PERIMETER OF THE BASIN TO SUPPLY SOILS AND SAND. GRADE BIORETENTION MATERIALS WITH LIGHT EQUIPMENT SUCH AS A COMPACT LOADER OR A DOZER/LOADER WITH MARSH TRACKS.

### 4. PLANT MATERIAL

RECOMMENDED PLANT MATERIAL FOR MICRO-BIORETENTION PRACTICES CAN BE FOUND IN APPENDIX A, SECTION A.2.5.

### 5. PLANT INSTALLATION

COMPOST IS A BETTER ORGANIC MATERIAL SOURCE, IS LESS LIKELY TO FLOAT, AND SHOULD BE PLACED IN THE INVERT AND OTHER LOW AREAS. MULCH SHOULD BE PLACED IN SURROUNDING TO A UNIFORM THICKNESS OF 2" TO 3". SHREDDED OR CHIPPED HARDWOOD MULCH IS THE ONLY ACCEPTED MULCH. PINE MULCH AND WOOD CHIPS WILL FLOAT AND MOVE TO THE PERIMETER OF THE BIORETENTION AREA DURING A STORM EVENT AND ARE NOT ACCEPTABLE. SHREDDED MULCH MUST BE WELL AGED (6 TO 12 MONTHS) FOR ACCEPTANCE.

ROOTSTOCK OF THE PLANT MATERIAL SHALL BE KEPT MOIST DURING TRANSPORT AND ON-SITE STORAGE. THE PLANT ROOT BALL SHOULD BE PLANTED SO 1/8TH OF THE BALL IS ABOVE FINAL GRADE SURFACE. THE DIAMETER OF THE PLANTING PIT SHALL BE AT LEAST SIX INCHES LARGER THAN THE DIAMETER OF THE PLANTING BALL. SET AND MAINTAIN THE PLANT STRAIGHT DURING THE ENTIRE PLANTING PROCESS. THOROUGHLY WATER GROUND BED COVER AFTER INSTALLATION.

TREES SHALL BE BRACED USING 2" BY 2" STAKES ONLY AS NECESSARY AND FOR THE FIRST GROWING SEASON ONLY. STAKES ARE TO BE EQUALLY SPACED ON THE OUTSIDE OF THE TREE BALL.

GRASSES AND LEGUME SEED SHOULD BE DRILLED INTO THE SOIL TO A DEPTH OF AT LEAST ONE INCH. GRASS AND LEGUME PLUGS SHALL BE PLANTED FOLLOWING THE NON-GRASS GROUND COVER PLANTING SPECIFICATIONS.

THE TOPSOIL SPECIFICATIONS PROVIDE ENOUGH ORGANIC MATERIAL TO ADEQUATELY SUPPLY NUTRIENTS FROM NATURAL CYCLING. THE PRIMARY FUNCTION OF THE BIORETENTION STRUCTURE IS TO IMPROVE WATER QUALITY. ADDING FERTILIZERS DEFEATS, OR AT A MINIMUM, IMPEDS THIS GOAL. ONLY ADD FERTILIZER IF WOOD CHIPS OR MULCH ARE USED TO AMEND THE SOIL. ROTOTILL AREA FERTILIZER AT A RATE OF 2 POUNDS PER 1000 SQUARE FEET.

### 6. UNDERDRAINS

UNDERDRAINS SHOULD MEET THE FOLLOWING CRITERIA:

- PIPE - SHOULD BE 4" TO 6" DIAMETER, SLOTTED OR PERFORATED RIGID PLASTIC PIPE (ASTM F 758, TYPE PS 28, OR AASHTO M-278) IN A GRAVEL LAYER. THE PREFERRED MATERIAL IS SLOTTED, 4" RIGID PIPE (E.G., PVC OR HDPE).
- PERFORATIONS - IF PERFORATED PIPE IS USED, PERFORATIONS SHOULD BE 3/8" DIAMETER LOCATED 6" ON CENTER WITH A MINIMUM OF FOUR HOLES PER ROW. PIPE SHALL BE WRAPPED WITH A 1/4" (NO. 4 OR #4) GALVANIZED HARDWARE CLOTH.
- GRAVEL - THE GRAVEL LAYER (NO. 57 STONE PREFERRED) SHALL BE AT LEAST 3" THICK ABOVE AND BELOW THE UNDERDRAIN.
- THE MAIN COLLECTOR PIPE SHALL BE AT A MINIMUM 0.5% SLOPE.
- A RIGID, NON-PERFORATED OBSERVATION WELL MUST BE PROVIDED (ONE PER EVERY 1,000 SQUARE FEET) TO PROVIDE A CLEAN-OUT PORT AND MONITOR PERFORMANCE OF THE FILTER.
- A 4" LAYER OF PEA GRAVEL (1/8" TO 3/8" STONE) SHALL BE LOCATED BETWEEN THE FILTER MEDIA AND UNDERDRAIN TO PREVENT MIGRATION OF FINES INTO THE UNDERDRAIN. THIS LAYER MAY BE CONSIDERED PART OF THE FILTER BED WHEN BED THICKNESS EXCEEDS 24".

THE MAIN COLLECTOR PIPE FOR UNDERDRAIN SYSTEMS SHALL BE CONSTRUCTED AT A MINIMUM SLOPE OF 0.5%. OBSERVATION WELLS AND/OR CLEAN-OUT PIPES MUST BE PROVIDED (ONE MINIMUM PER EVERY 1000 SQUARE FEET OF SURFACE AREA).

### 7. MISCELLANEOUS

THESE PRACTICES MAY NOT BE CONSTRUCTED UNTIL ALL CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.

## AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT FACILITIES (BOTH BMPs AND ESD PRACTICES) SHOWN ON THE PLANS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE PLANS APPROVED BY THE CALVERT COUNTY DEPARTMENT OF PUBLIC WORKS, EXCEPT AS NOTED IN RED ON THE "AS-BUILT" DRAWINGS.

BY: JOSEPH J. KADJESKI MD PE #31181

DATE: 1/6/19

**COLLISON, OLIFF & ASSOCIATES, INC.**

**SURVEYORS & ENGINEERS**

**LAND PLANNERS**

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PRINCE FREDERICK, MARYLAND 20678

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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. 31181, EXPIRATION DATE: 11/3/2021

| REVISION | DATE     | DESCRIPTION                       |
|----------|----------|-----------------------------------|
| 1        | 11/27/18 | REVISED PER TEG COMMENTS 11-14-18 |
| 2        | 1/16/19  | REV PER P&Z AND DWP COMMENTS      |
| 3        | -        | -                                 |
| 4        | -        | -                                 |
| 5        | -        | -                                 |

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|--------------------------|----------------|
| TM 44 GRID 11 PARCEL 389 | SPR # 2018-282 |
| PLAN # 3                 |                |

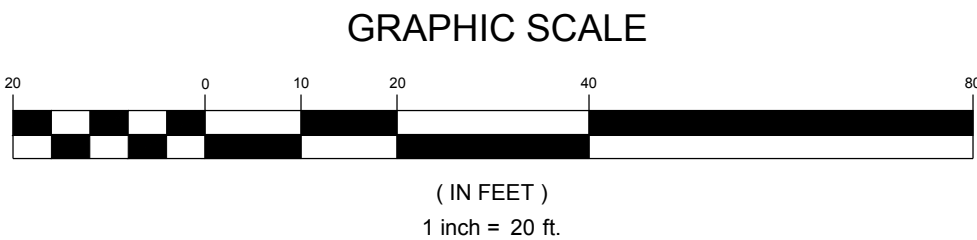
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| SITE PLAN                                  | STORMWATER MANAGEMENT DETAILS  |
| ANMMARIE GARDENS ~ SPR 2018 - 282          | WILDFLOWER MEADOW & PATIO      |
| TM 44 GRID 11 PARCEL 389 ~ 13480 DOWELL RD | FIRST DISTRICT, CALVERT COUNTY |
| DOWELL, MARYLAND 20629                     | FOR: KOENIG PRIVATE FOUNDATION |

**THIS STAMP IN RED COLOR INDICATES ORIGINAL**

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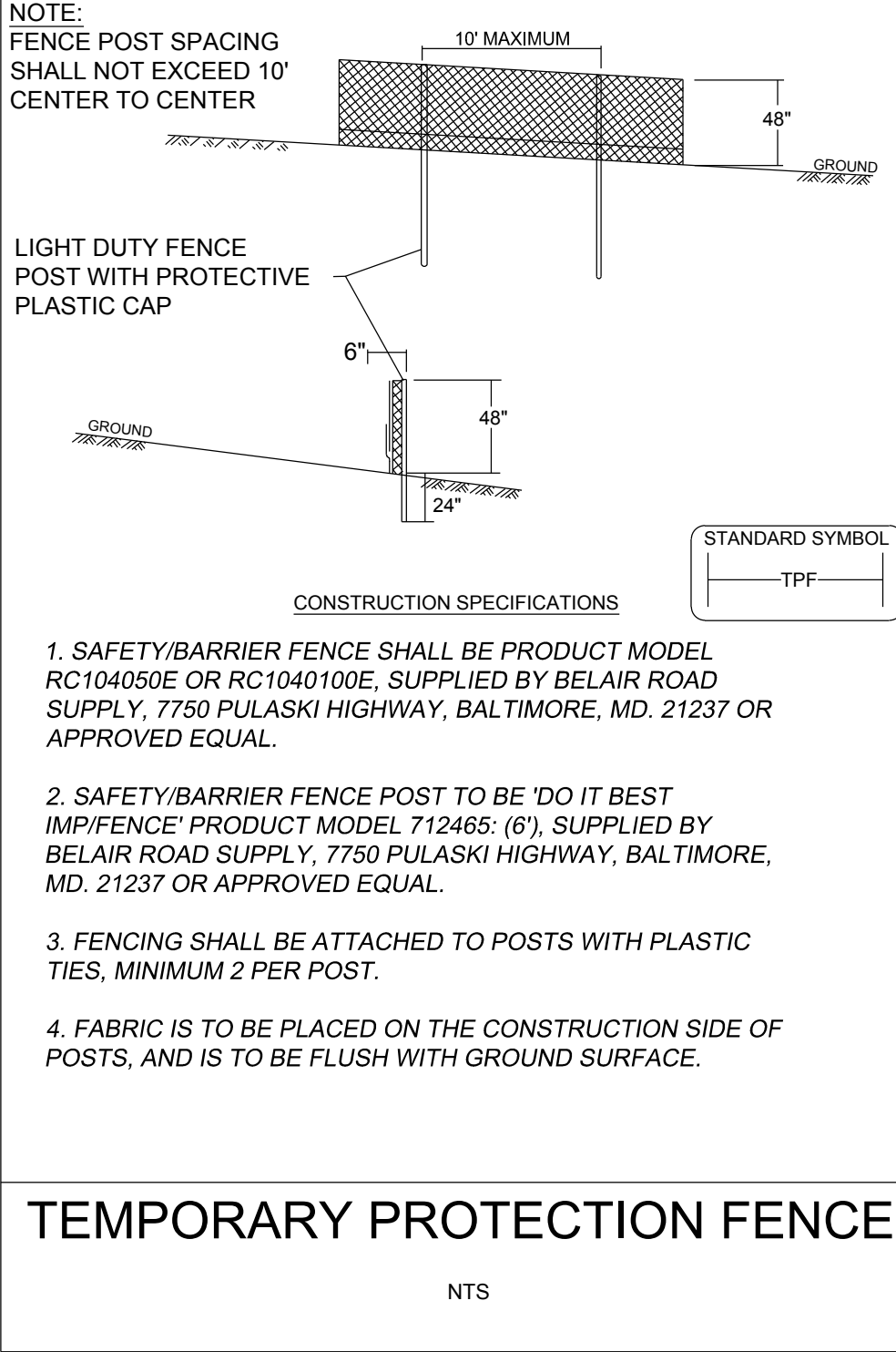
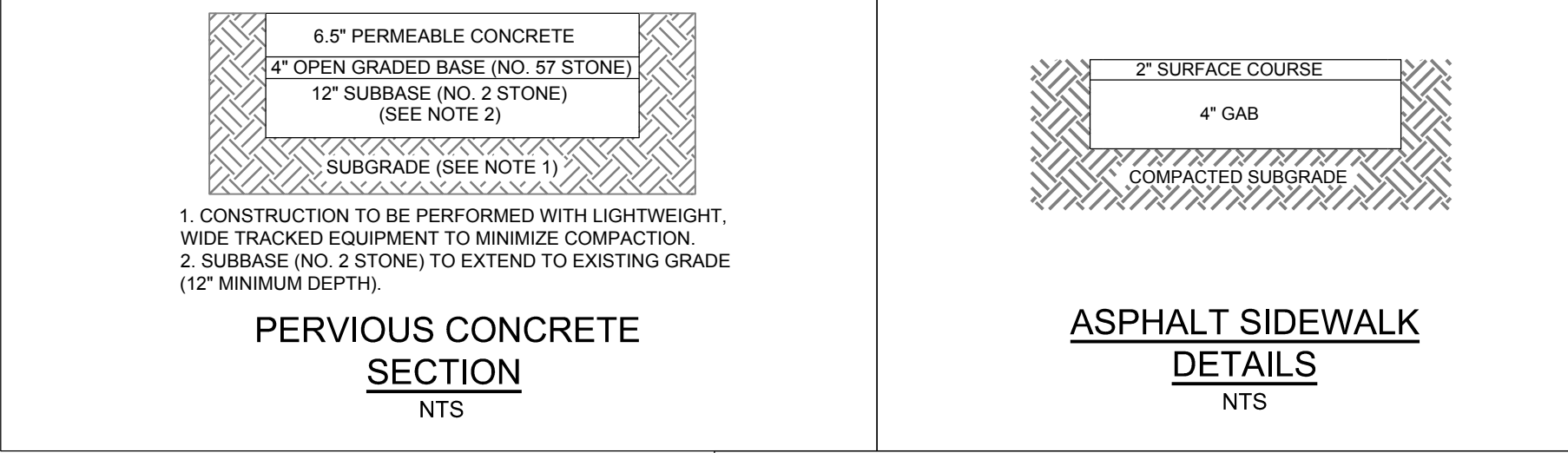
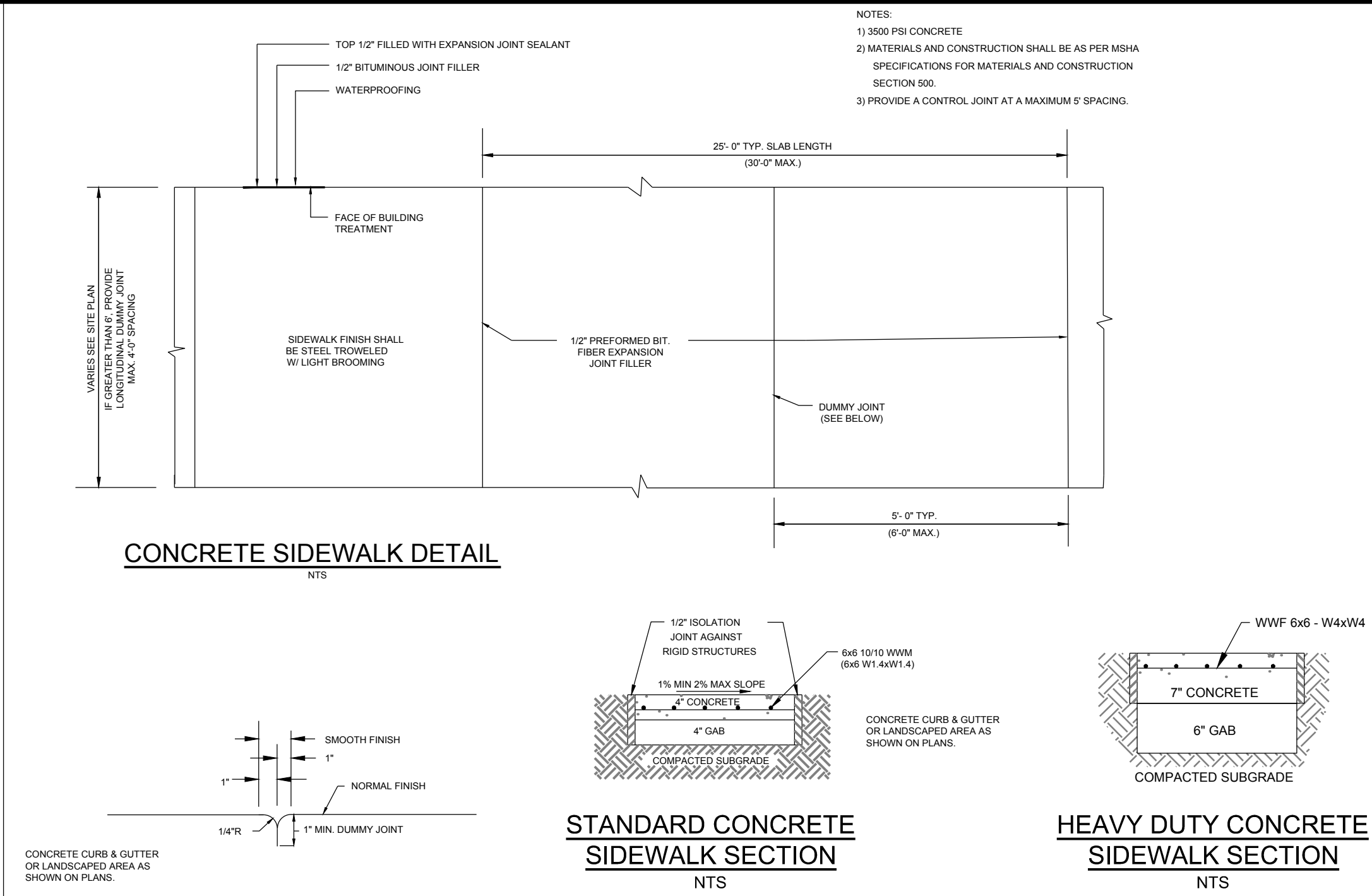
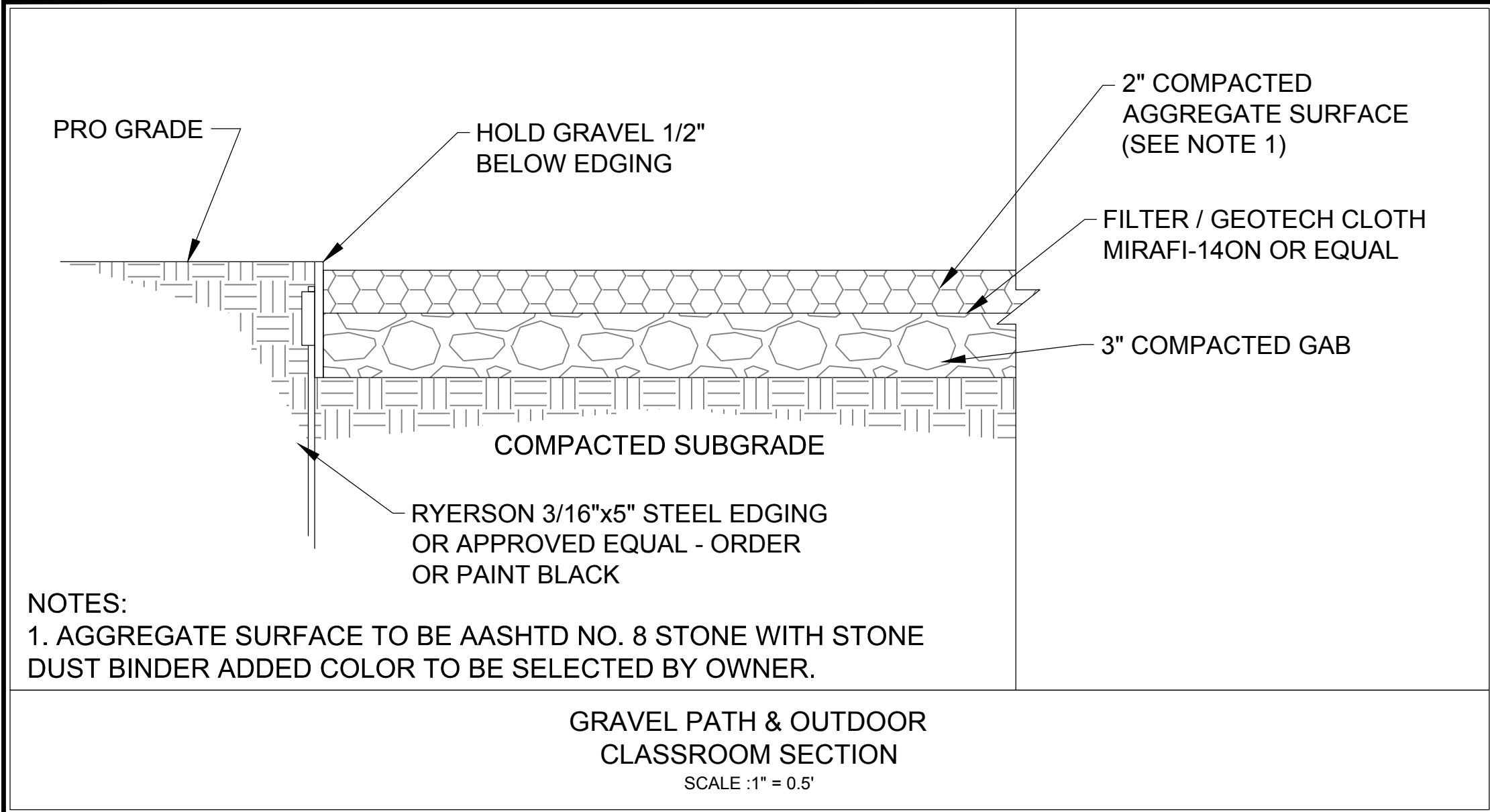


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COA

JOSEPH J. KADIESKI

10/16/19

DATE

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SITE PLAN

SITE DETAILS

ANMMARIE GARDENS ~ SPR 2018 - 282

WILDFLOWER MEADOW & PATIO

TM 44 GRID 11 PARCEL 389 ~ 13480 DOWELL RD

FIRST DISTRICT, CALVERT COUNTY

DOWELL, MARYLAND 20629

FOR: KOENIG PRIVATE FOUNDATION

SCALE AS SHOWN

DATE OCT. 2018

JOB NO. 1-12812

DRAWN BY MAE

APPROVED JJK

CASE NO. SPR 2018-282

FOLDER REFERENCE

TM 44 GRID 11 PARCEL 389

DATE 11/27/18

REVISION

REVISED PER TEG COMMENTS 11-14-18

REV PER P&Z AND DPW COMMENTS

DATE 11/3/2021

PLAN # : 3

SPR # : 2018-282

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