	PLA	NT LIST (SCHEDULE 'A')	
SYMBOL	QTY.	BOTANICAL AND COMMON NAME	SIZE
	2	ACER GRISEUM PAPERBARK MAPLE	2 1/2-3" CAL
*	2	PINUS STROBUS EASTERN WHITE PINE	6' - 8' HT.

P-1 | SFD TO ROAD

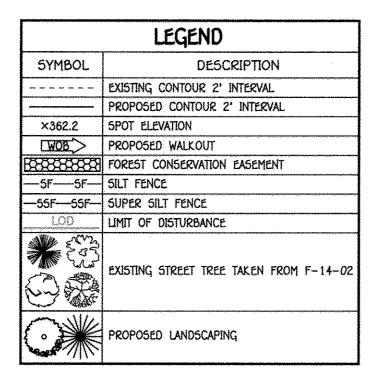
NOTE: TREE TYPES MAY BE SUBSTITUTED WITH A HOWARD COUNTY APPROVED SPECIES FROM THE HOWARD COUNTY LANDSCAPE MANUAL

PERIMETER LANDSCAPING SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE LANDSCAPE MANUAL FINANCIAL SURETY FOR THE REQUIRED 2 SHADE TREES & 2 EVERGREEN TREES SHALL BE PROVIDED WITH THE GRADING PERMIT FOR THIS SITE DEVELOPMENT PLAN (5DP-15-066) IN THE AMOUNT OF \$900.00

DEVELOPER'S/BUILDER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO SECTION 16,124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION A LETTER OF NOTICE OF LANDSCAPE INSTALLATION ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.



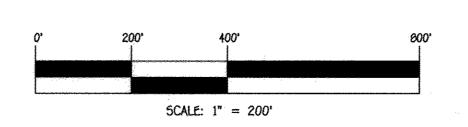


INDEX CHART							
SHEET	DESCRIPTION						
SHEET 1	TITLE SHEET, GENERAL NOTES, LEGEND, SOILS LEGEND, ADDRESS CHART, SHEET INDEX						
SHEET 2	HOUSE TYPES & GENERIC BOXES						
SHEET 3	SITE DEVELOPMENT PLAN, LOTS 42 THRU 51, 80 THRU 85 & 95 THRU 98						
SHEET 4	SITE DEVELOPMENT PLAN, LOTS 52 THRU 65 & 86 THRU 94						
SHEET 5	SEDIMENT/EROSION CONTROL PLAN, LOTS 42 THRU 51, 80 THRU 85 & 95 THRU 98						
SHEET 6	SEDIMENT/EROSION CONTROL PLAN, LOTS 52 THRU 65 & 86 THRU 94						
SHEET 7	SEDIMENT/EROSION CONTROL DETAILS & NOTES						
SHEET 0	STORMWATER MANAGEMENT DETAILS, NOTES & BORING DETAILS						
9HEET 9	regaining wall construction decails						

DATE

HOWARD COUNTY, MARYLAND DEPARTMENT OF RECREATION AND PARKS LIBER 885, FOLIO 78 TAX MAP 30, PARCEL 10 ZONED R-20 36. THIS PLAN IS SUBJECT TO WP-17-035, APPROVED ON DECEMBER 1,2016, WHICH IS AN ALTERNATIVE COMPLANCE TO SECTION 16,1205(017) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS (AMENDED HYPH EDITION) - ON - SITE FOREST RESENTION OF 30" I DAMETER OR LARGER SPECIMEN TREES IS CONDIDERED A PRIDEITY FOR QUI-SITE RESENTION AND PROPERTION IN THE COUNTY, THE APPLICANT IS REQUESTING TO REMOVE TWO (2) SPECIMEN TREES (A WANTE DAK AND A PAULOUNIA "PRINCESS" TREE) FROM THE QUELECT REGIDENTIAL OPEN SPACE-SUBDIVISION, THE TWO SPECIMEN TROOP ARE REFERENCED ON THE ALTERNATIVE COMPLIANCE PETITION EXHIBIT AS SPECIMEN TREES NOW 21 AND 22. APPROVAL IS SUBJECT TO THE YOU ONLY THROSE (3) CONDITIONS: 1) THE REMOVAL OF THE TWO (2) SPECIMEN TREES WILL REQUIRE MITHATION WITH THE MAINTING OF CIT REPLACEMENT TROOPS H.O.A. OPEN SPACE (4 TOTAL) WITH A MINIMUM 3" CALLYER NATIVE KLANT SPECIES AS PART OF THE ON-SITE REPORTS/ATION OR LANDS/LATING APPROVED UNDER FINAL PLAN F-14-081. A RED-LINE REVISION TO F14-081 KOAD CONSTRUCTION DRAWINGS IS REQUIRED TO SHOW AND LABOL LOT 63 LOT 93 LOT 53 THE 4 NEW MITIGATION TROOP LOT 87 2) THE REMAINING ON-SITE SPECIMEN TROOP SHALL BE SAVED AND LOT 64 LOT 94 LOT 52 PROYECTED DURING ANY AND ALL CONSTRUCTION ACTIVITY, ANY LOT 06 H.O.A. OPEN SPACE LOT 104 LOT 65 ADDITIONAL REMOVAL OF SPECIMEN TREES SHALL REQUIRE THE LOT 51 SUBMITTAL OF A NEW ALTERNATIVE COMPLIANCE PERTION APPLICATION LOT 95 PROJUTE A NOTE ON THE APPROVED ROAD CONSTRUCTION DRAWINGS LOT 50 AND THE SHE DEVELOPMENT PLAN RECARDING THIS ALTERNATIVE LOT 98 COMPLANCE POTITION APPROVAL. THIS NOTE SHALL INCLUDE THOSE LOT 49 LOT 97 SUPPRIVATION SECTIONS PETITIONED THE DATE OF THE LOT 79 H.O.A. ALTERNATIVE COMPLIANCE APPROVAL. AND THE CONDITIONS LOT 68 PEN SPACE LOT 48 LOT 98 OF APPROVAL, THIS NOTE MAY BE MODED THROUGH A PLAN LOT 78 reaggiou (repline). LOT 69 LOT 47 LOT 29 OPEN SPACE LOT 103 LOT 30 PART OF HOWARD COUNTY OPEN SPACE PART OF HOWARD COUNTY OPEN SPACE LOT 99 HOWARD COUNTY, MARYLAND DEPARTMENT OF RECREATION AND PARKS LIBER 548, FOLIO 687 TAX MAP 30, PART OF PARCEL 10 ZONED R-20

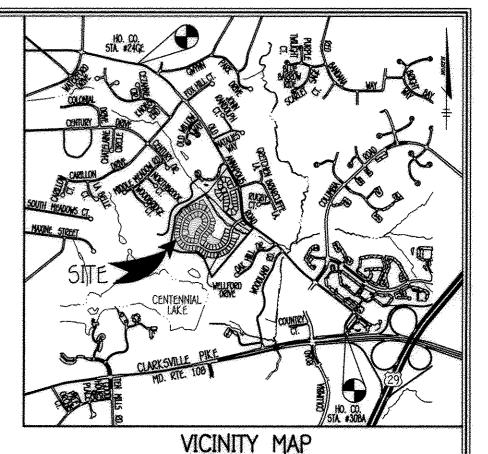
5CALE: I' = 200'



BENCH MARKS

T.P. 24GE ELEV 446.44 N. 578.706.500 E. 1,352,699.713 LOC. NEAR INTERSECTION OF OLD ANNAPOLIS ROAD & GYWNN PARK DRIVE

T.P. 30BA ELEV. 397.14 N. 573,149.094 E. 1,357,063.174 LOC. NEAR INTERSECTION OF COLUMBIA ROAD & MD. RTE. 100



HO. CO. ADC MAP NO. 11, H-13 & J-13

GENERAL NOTES:

SUBJECT PROPERTY ZONED R-20 PER 10/06/13 COMPREHENSIVE ZONING PLAN. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST (5) WORKING DAYS PRIOR TO THE START OF WORK.

THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK THIS PLAN IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED BY FISHER, COLLINS &

CARTER, INC. ON JANUARY, 2012. TOPOGRAPHY SHOWN IS BASED ON FINAL ROAD CONSTRUCTION, GRADING AND STORMWATER MANAGEMENT PLANS

F-14-001 HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON NAD 83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS.

HOWARD COUNTY MONUMENT 24GE N 578,706.500, E 1,352,699.713 ELEVATION 446.44 HOWARD COUNTY MONUMENT 308A N 573,149.094, E 1,357,083.174 ELEVATION 397.14 IN ACCORDANCE WITH SECTION 128.0.A.1. OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS, PORCHES, OR DECKS, OPEN OR ENCLOSED, MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK.

DISTANCES SHOWN ARE BASED ON SURFACE MEASUREMENT AND NOT REDUCED TO NAD '83 GRID MEASUREMENT THE EXISTING HOUSE ON LOT 84, HISTORIC HOUSE HO#401, IS TO BE PAZED.

10. NO CEMETERIES EXIST ON THIS SITE BASED ON BOTH A SITE VISIT AND AN EXAMINATION OF THE HOWARD COUNTY CEMETERY INVENTORY MAP. PREVIOUS DEPARTMENT OF PLANNING AND ZONING FILE NOS.: ECP-12-053, WP-13-096, 5P-13-004, PB-399.

F-14-002, F-14-081, F-14-08151, F-14-08152, F-14-08153, SDP-15-040, CONTRACT NO. 24-4764-0 CONTRACT NO. 24-4917-D AND WP-17-035,

12. PROPERTY IS LOCATED IN METROPOLITAN DISTRICT AND IS SERVED BY PUBLIC WATER AND PUBLIC SEWER (CONTRACT NO. 24-4917-D).

13. IN ACCORDANCE WITH SECTION 16.124 OF THE SUBDIVISION REGULATIONS AND THE LANDSCAPE MANUAL, PERIMETER LANDSCAPING IN PERIMETER NOS. 4. 5, PART OF 6 AND ANY SWM FACILITY WHERE PROVIDES TREATMENT FOR THIS PLAN SHALL BE AS SHOWN ON THE LANDSCAPE PLAN SHEET, OF THE FINAL ROAD CONSTRUCTION DRAWINGS FOR F-14-001. SURETY POSTED WITH THE DEVELOPERS AGREEMENT FOR F-14-001. LANDSCAPE SURETY FOR THE AMOUNT OF \$900.00 SHALL BE POSTED WITH THE GRADING PERMIT APPLICATION FOR TWO (2) SHADE TREES AND

TWO (2) EVERGREEN TREES AT THE SIDE OF LOT 80. 14. THE FOREST CONSERVATION REQUIREMENTS FOR THIS PROJECT WERE PREVIOUSLY ADDRESSED UNDER F-14-002. BY PROVIDING 3.82 ACRES OF ON-SITE RETENTION, 5.14 ACRES OF ON-SITE REFORESTATION AND 0.14 ACRES OF ON-SITE AFFORESTATION. SURETY WAS POSTED WITH DEVELOPERS AGREEMENT FOR F-14-002.

15. NO GRADING, REMOVAL OF VEGETATIVE COVER, OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAM(S), OR THEIR REQUIRED BUFFERS, FLOODPLAIN AND FOREST

CONSERVATION EASEMENT AREAS.

16. THIS PROJECT WAS PRESENTED TO THE HISTORIC DISTRICT COMMISSION ON JUNE 7, 2012 FOR ADVISORY

17. STORMWATER MANAGEMENT WILL BE PROVIDED IN ACCORDANCE WITH THE 2010 MDE, CHAPTER 5 REGULATIONS AND THE LATEST HOWARD COUNTY DESIGN MANUAL, VOL. 1, CHAPTER 5 ADOPTED ON OR AROUND MAY 4, 2010 THROUGH THE USE OF DRYWELLS (M-5). DRYWELLS WILL BE OWNED AND MAINTAINED BY THE LOT OWNER WHERE THAT PARTICULAR DRYWELL IS LOCATED. ALL OTHER SWM OBLIGATIONS HAVE BEEN MET THROUGH PREVIOUSLY APPROVED FACILITIES CONSTRUCTED UNDER F-14-081.

18. THE GEOTECHNICAL REPORT FOR THIS PROJECT WAS PREPARED BY HILLIS-CARNES ENGINEERING ASSOCIATES, INC. DATED AUGUST 2012 AND WAS APPROVED ON MARCH 14, 2013.

19. THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY TRAFFIC GROUP, INC. DATED JANUARY 2012 AND WAS

APPROVED ON MARCH 14, 2013.

20. THERE IS NO FLOODPLAIN WITHIN THE LIMITS OF THIS SITE DEVELOPMENT PLAN. 21. NO NOISE STUDY IS REQUIRED FOR THIS PROJECT.

22. THERE ARE NO AREAS OF STEEP SLOPES LOCATED ON THIS PROPERTY AS DEFINED BY THE HOWARD COUNTY

SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, SECTION 16.116.8. 23. FOREST STAND DELINEATION AND WETLAND DELINEATION FOR THIS PROJECT WAS PREPARED BY MCCARTHY &

ASSOCIATES, INC. DATED MARCH 2012.

24. THE EXISTING LOTS SHOWN ON THIS PLAN ARE SUBJECT TO A FEE OR ASSESSMENT TO COVER OR DEFRAY ALL OR PART OF THE DEVELOPER'S COST OF THE INSTALLATION OF THE WATER AND SEWER FACILITIES, PURSUANT TO THE HOWARD COUNTY CODE SECTION 18.112. THIS FEE OR ASSESSMENT, WHICH RUNS WITH THE LAND, IS A CONTRACTUAL OBLIGATION BETWEEN THE DEVELOPER AND EACH OWNER OF THIS PROPERTY AND IS NOT IN ANY WAY A FEE OR ASSESSMENT OF HOWARD COUNTY.

25. DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:

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

B. SURFACE-6" OF COMPACTED CRUSHER RUN BASE W/TAR AND CHIP COATING (1-1/2"MIN.);

C. GEOMETRY-MAX. 15% GRADE, MAX. 10% GRADE CHANGE AND MIN. 45' TURNING RADIUS; D. STRUCTURES (CULVERTS/BRIDGES)-CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING);

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

F. STRUCTURE CLEARANCES - MINIMUM 12 FEET;

G. MAINTENANCE-SUFFICIENT TO INSURE ALL WEATHER USE. 26. RESIDENTIAL SINGLE FAMILY DETACHED SERVICE CONNECTIONS:

A. WHC: 1 & W/ 1" OUTSIDE METER SETTING

B. SHC: 4" PVC 27. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.

28. SHC ELEVATIONS SHOWN ARE LOCATED AT THE PROPERTY LINE. 29. FOR DRIVEWAY ENTRANCE DETAILS REFER TO THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL

30. THIS R-20 ZONED SUBDIVISION IS BEING DEVELOPED PURSUANT TO SECTION 107.0.D OF THE R-ED ZONING DISTRICT

REGULATIONS AND CRITERIA PER SECTION 108.0.G.3 OF THE ZONING REGULATIONS. 31. SUBJECT PROPERTY ZONED R-20, USING THE R-ED REGULATIONS. THIS PROPERTY IS SUBJECT TO COUNCIL BILL NO. 2, "SECTION 128.0.A.1.I. OF THE ZONING REGULATIONS (CB-2-2012) WHICH ALLOWS SUNROOMS AND ROOM

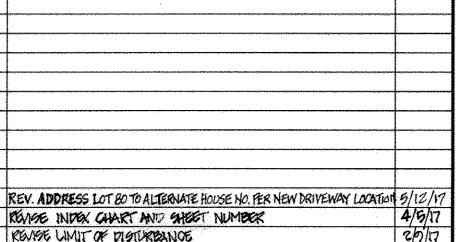
EXTENSIONS NOT MORE THAN 10 FEET INTO THE REAR SETBACK ALONG NOT MORE THAN 60% OF THE REAR FACE OF THE OWELLING ON A LOT WHICH ADJOINS OPEN SPACE ALONG A MAJORITY OF THE REAR LOT LINE FOR R-ED LOTS RECORDED AFTER THE EFFECTIVE DATE OF 5/13/12."

34. CENTENNIAL LAKE OVERLOOK HOMEOWNERS ASSOCIATION, INC. AMENDED AND RESTATED DECLARATION OF COVENANTS, CONDITIONS, RESTRICTIONS AND EASEMENTS IS RECORDED AMONG THE LAND RECORDS OF HOWARD COUNTY MARYLAND.

IN LIBER 15901 AT FOILIO 223. 35. THIS PLAN IS IN CONFORMANCE WITH THE AMENDED FIFTH EDITION OF THE SUBDIMISION AND LAND DEVELOPMENT

REGULATIONS





REVISION



PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/17.

SHRUBS

NK JOHN MANALANSAN II, L.:



hjef, Development Engineering Division Value of Planning and Zoning CENTENNIAL LAKE OVERLOOK OWNER/DEVELOPER BLOCK NO. ZONE BEAZER HOMES, CORP. 23291-23298 30 R-20 8965 GUILFORD ROAD **SUITE 209** WATER CODE COLUMBIA, MARYLAND 21046 410-720-5071

ATTN: MR. BRIAN A. KNAUFF

SITE ANALYSIS DATA CHART

FLOOR SPACE ON EACH LEVEL OF BUILDING: N/A

G. TOTAL NUMBER OF PARKING SPACES REQUIRED = 110 SPACES

H. TOTAL NUMBER OF PARKING SPACES PROVIDED = 188 SPACES

(EACH LOT HAS 2 SPACES IN DRIVEWAY AND A 2 CAR GARAGE)

K. TOTAL AREA OF FLOODPLAIN WITHIN SUBDIVISION LIMITS: 0.00 AC.+

A. TOTAL AREA OF THIS SUBMISSION

(LOT5 42-69, 80-98) = 8.019 AC.*.

B. LIMIT OF DISTURBED AREA = 8.79 AC. ±

TOTAL NUMBER OF UNITS: 47 UNITS

2.5 X 47 LOTS = 110 SPACES

J. BUILDING COVERAGE OF SITE: 28%

M. AREA OF WETLANDS = 0.00 AC.+ N. AREA OF FOREST = 0.00 AC.+

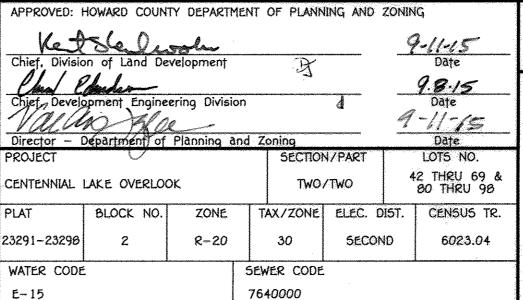
O. IMPERVIOUS AREA = 2.59 AC. *

I. OPEN SPACE ON SITE: N/A

PRESENT ZONING DESIGNATION = R-20

PROPOSED USE: SINGLE FAMILY DETACHED

L TOTAL AREA OF SLOPES IN EXCESS OF 25% WITHIN SUBDIVISION LIMITS = 0.000 AC. ±



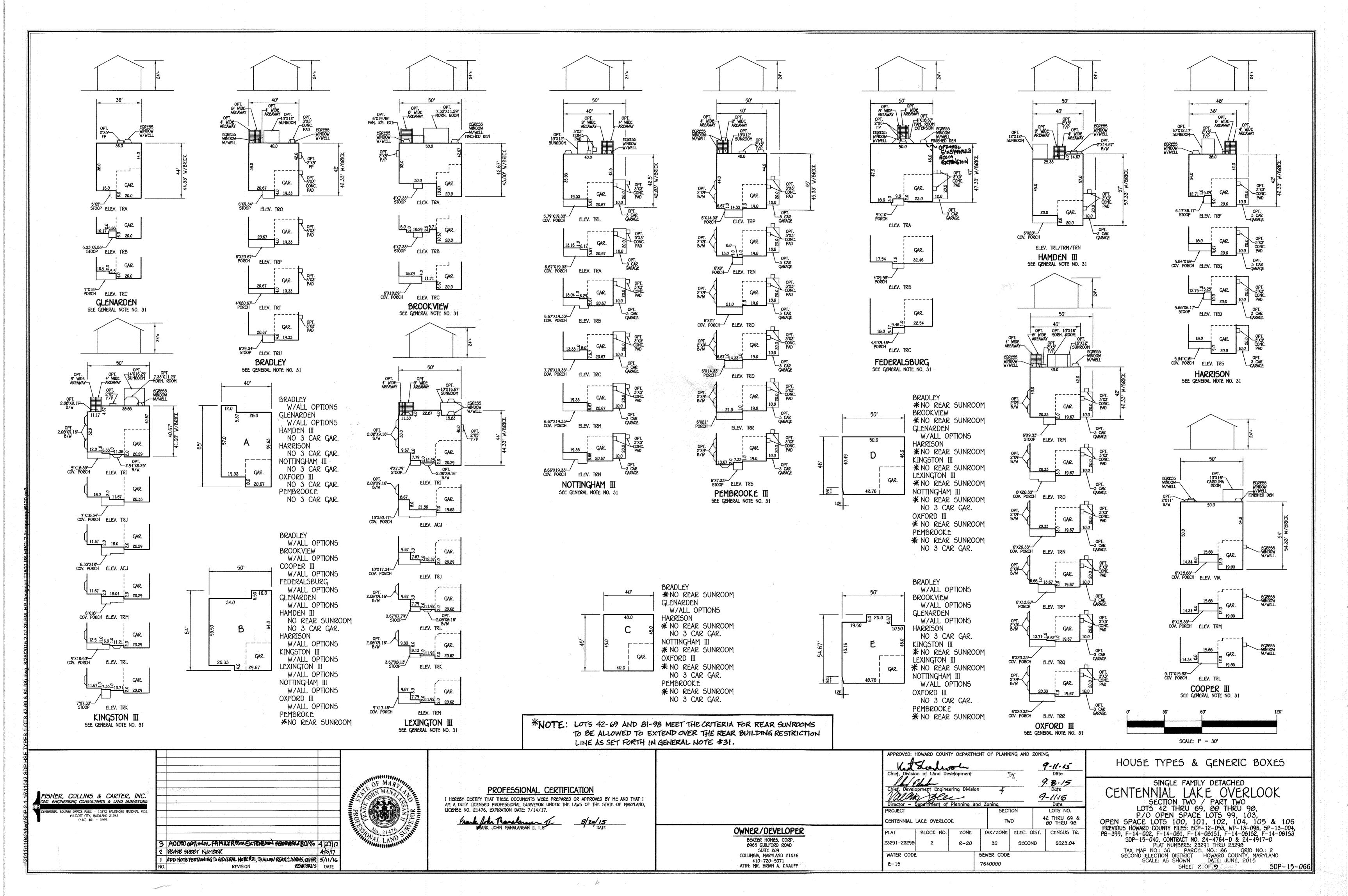
TITLE SHEET

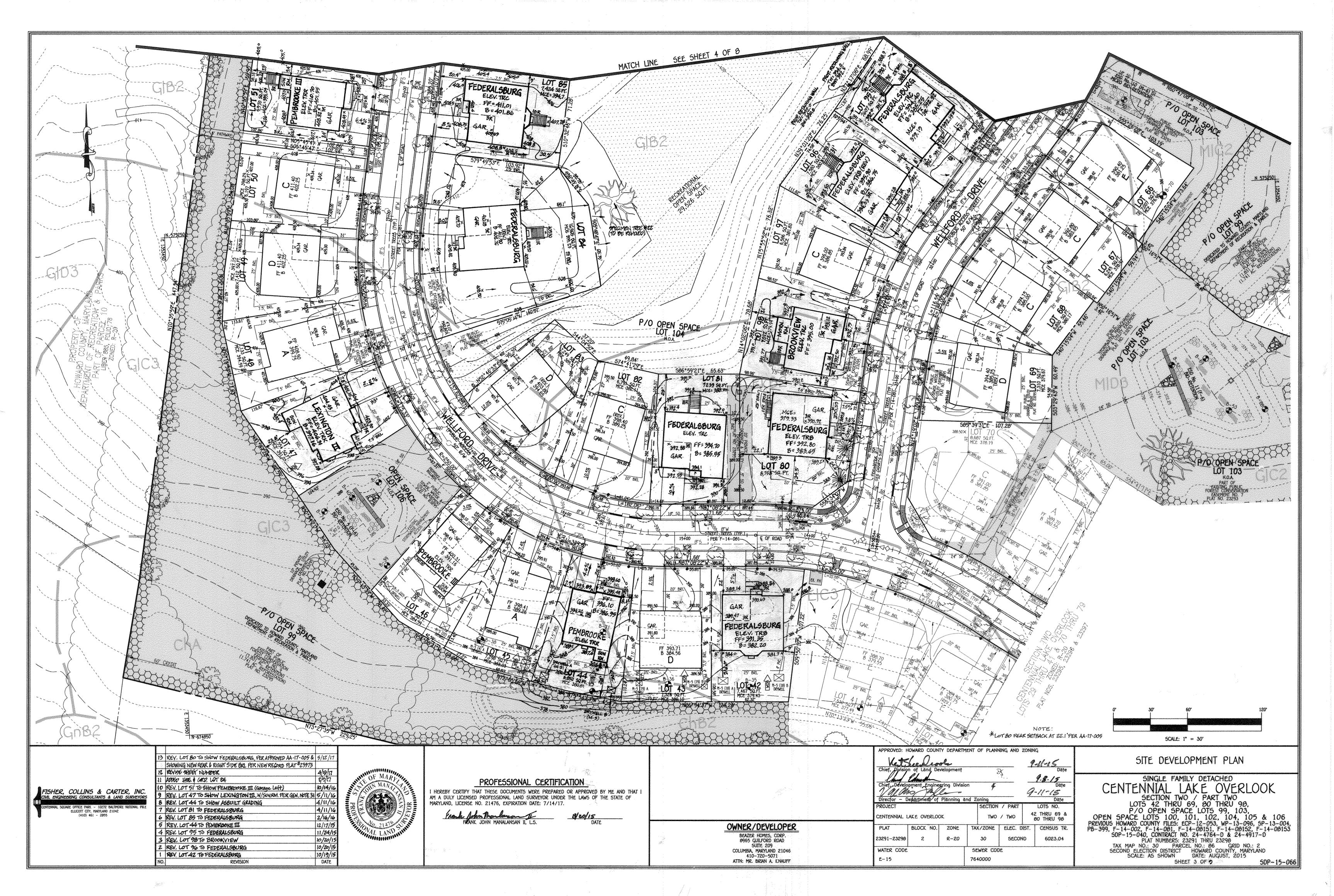
SINGLE FAMILY DETACHED CENTENNIAL LAKE OVERLOOK SECTION TWO / PART TWO LOTS 42 THRU 69, 80 THRU 98,

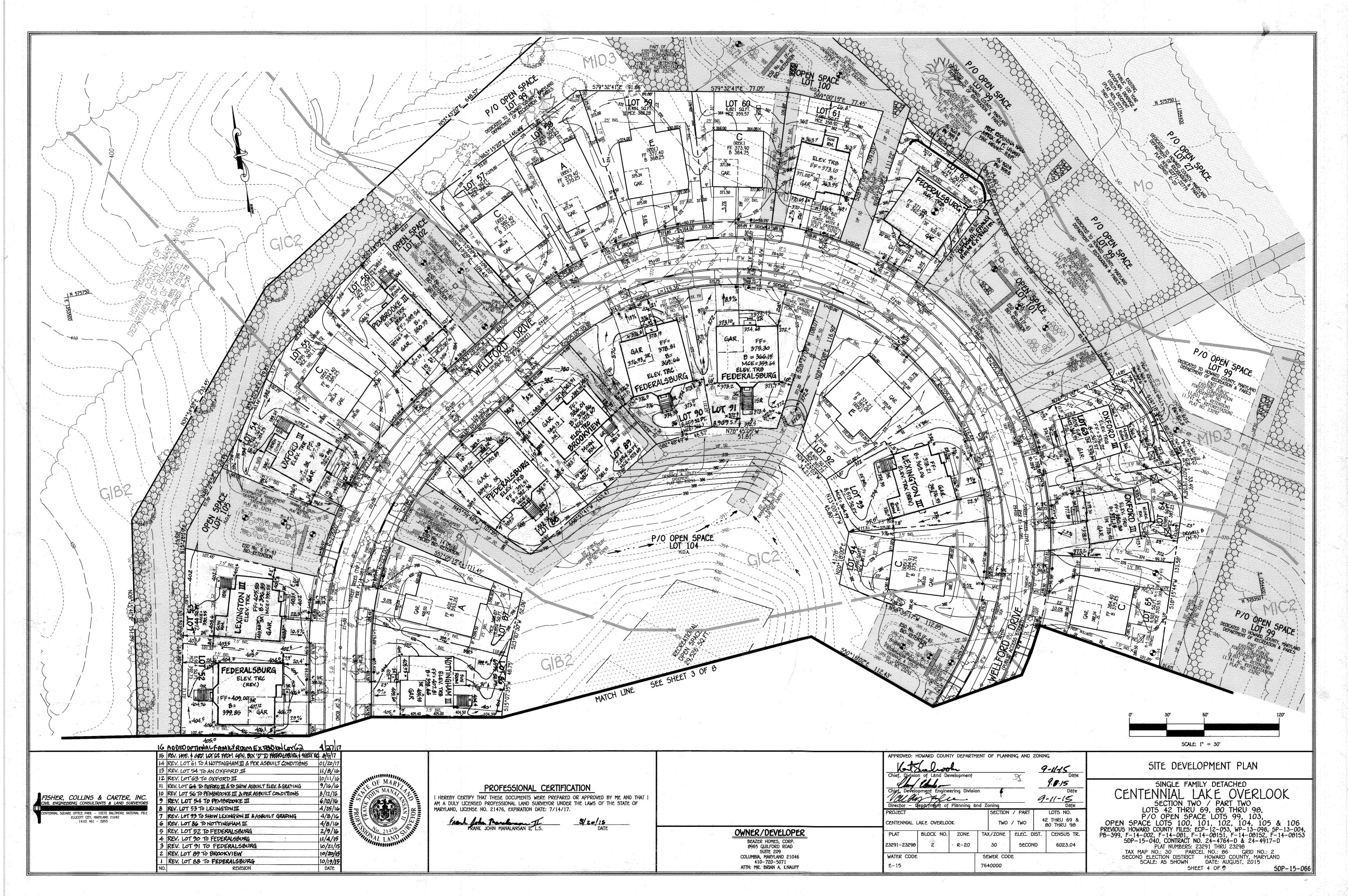
P/O OPEN SPACE LOTS 99, 103,
OPEN SPACE LOTS 100, 101, 102, 104, 105 & 106
PREVIOUS HOWARD COUNTY FILES: ECP-12-053, WP-13-096, 5P-13-004,
PB-399, F-14-002, F-14-001, F-14-00151, F-14-00152, F-14-00153,
5DP-15-040, CONTRACT NO. 24-4764-D & 24-4917-D
PLAT NUMBERS: 23291 THRU 23290

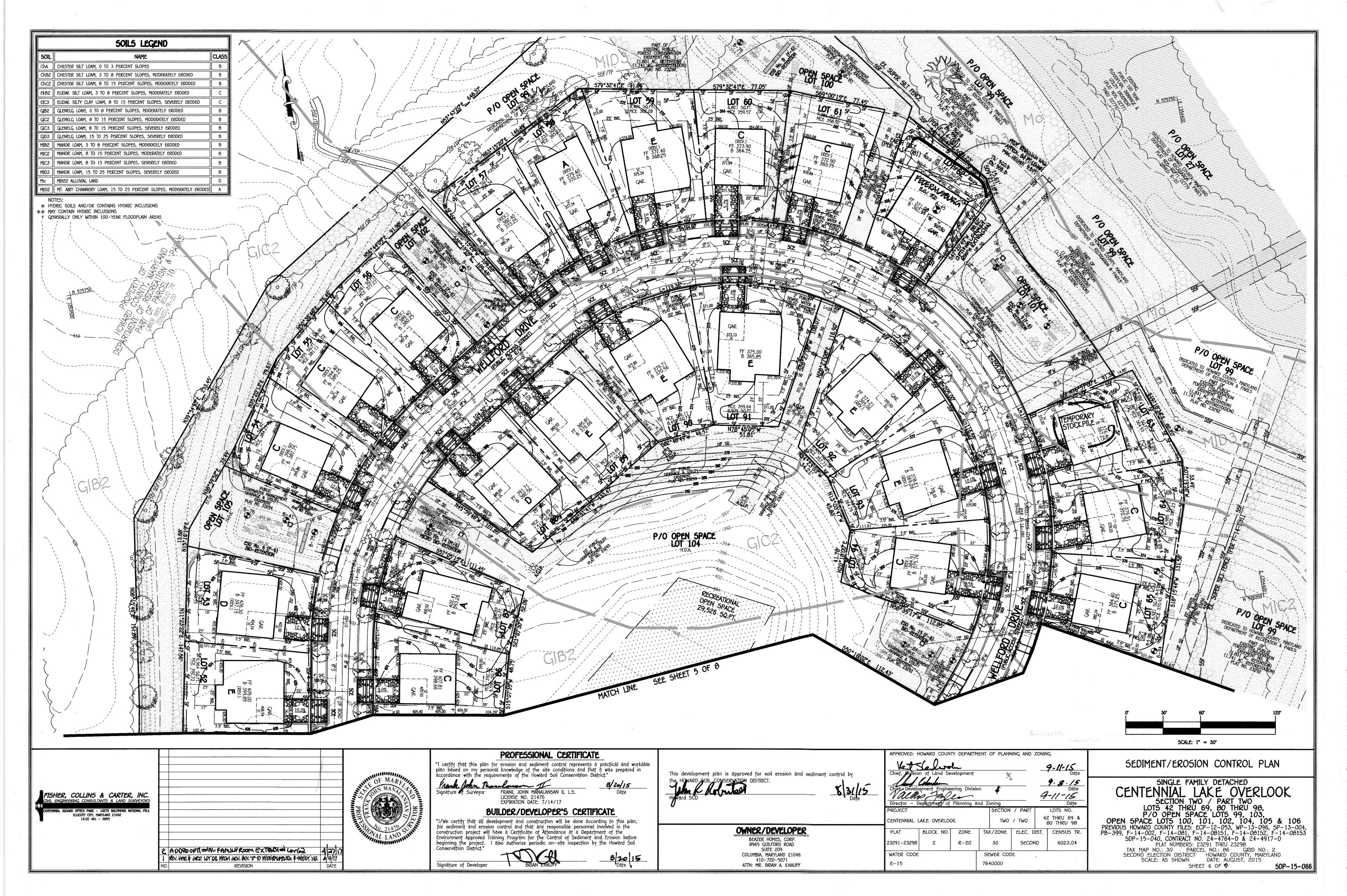
TAX MAP NO.: 30 PARCEL NO.: 86 GRID NO.: 2
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: AUGUST, 2015 SHEET 1 OF 9

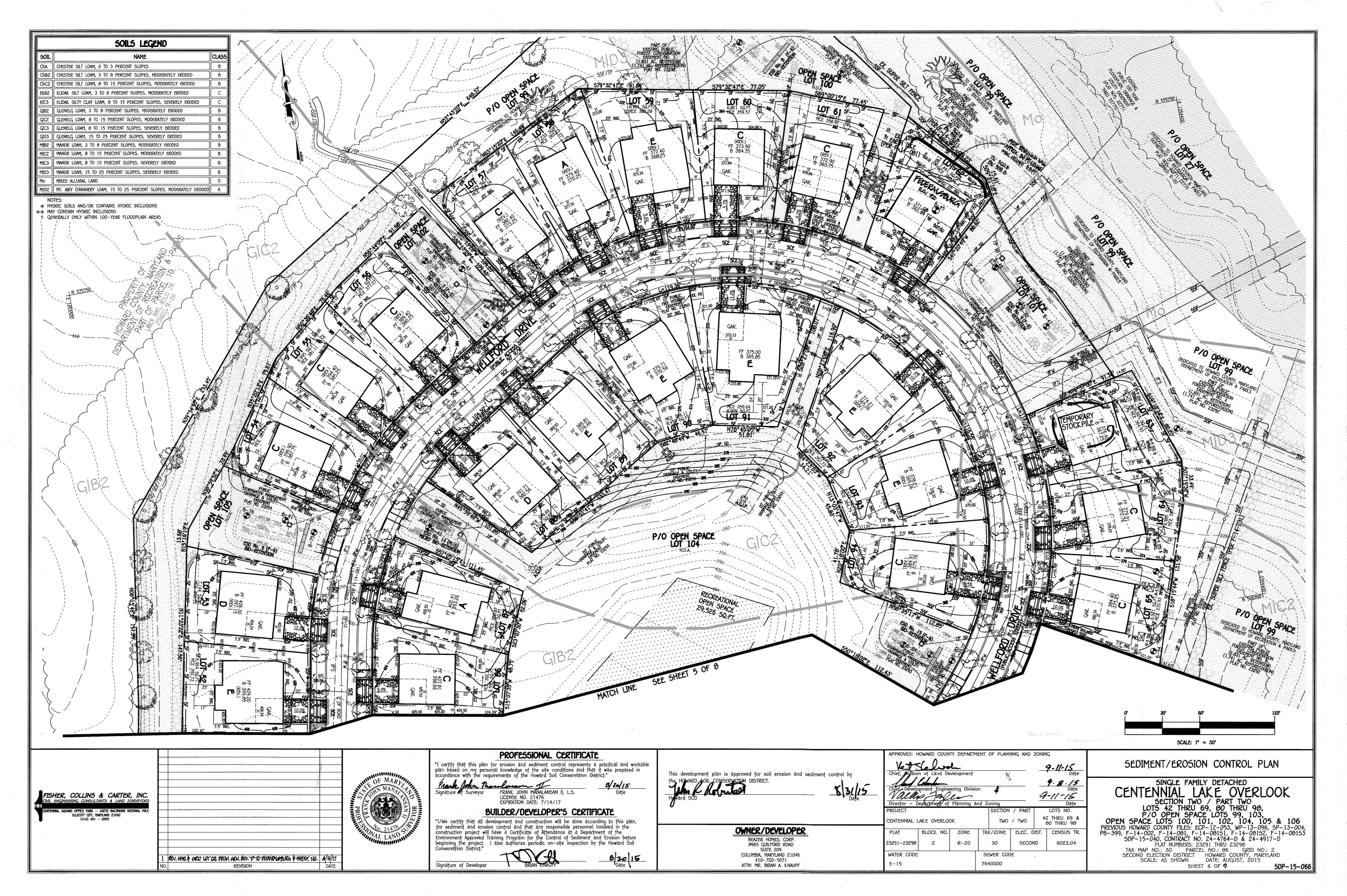
50P-15-066











TEMPORARY STABILIZATION A SEEDBED PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT, SUCH AS DISC HARROWS OR CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. AFTER THE SOIL IS LOOSENED, IT MUST NOT BE ROLLED OR DRAGGED SMOOTH BUT LEFT IN THE ROUGHENED CONDITION. SLOPES 3:1 OR FLATTER ARE TO BE TRACKED WITH RIDGES RUNNING PARALLEL

B. APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS. INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. A. A SOIL TEST IS REQUIRED FOR ANY EARTH DISTURBANCE OF 5 ACRES OR MORE, THE MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE:

I. SOIL PH BETWEEN 6.0 AND 7.0. I. SOLUBLE SALTS LESS THAN 500 PARTS PER MILLION (PPM). III. SOIL CONTAINS LESS THAN 40 PERCENT CLAY BUT ENOUGH FINE GRAINED MATERIAL (GREATER THAN 30 PERCENT SILT PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AN EXCEPTION: IF

LOVEGRASS WILL BE PLANTED, THEN A SANDY SOIL (LESS THAN 30 PERCENT SILT PLUS CLAY) WOULD BE

IV. 50IL CONTAINS 1.5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT. V. SOIL CONTAINS SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION. B. APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE SOILS DO NOT MEET THE ABOVE CONDITIONS.

C. CRADED AREAS MUST BE MAINTAINED IN A TRUE AND EVEN GRADE AS SPECIFIED ON THE APPROVED PLAN. THEN SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES. D. APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY THE RESULTS OF A SOIL TEST. e. Mix soil amendments into the top 3 to 5 inches of soil by disking or other suitable means. Rake lawn

AREAS TO SMOOTH THE SURFACE, REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. LOOSEN SURFACE SOIL BY DRAGGING WITH A HEAVY CHAIN OR OTHER EQUIPMENT TO ROUGHEN THE SURFACE WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDBED PREPARATION. TRACK SLOPES 3:1 OR FLATTER WITH TRACKED EQUIPMENT LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE, LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRIABLE, SEEDBED LOOSENING MAY BE UNNECESSARY ON NEWLY DISTURBED AREAS.

B. TOPSOILING

ACTIVE GRADING.

1. TOPSOIL IS PLACED OVER PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION. THE PURPOSE IS TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT. LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION. 2. TOPSOIL SALVAGED FROM AN EXISTING SITE MAY BE USED PROVIDED IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS, TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-NRCS.

3. TOPSOILING IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE: A. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.

B. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR

FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS. C. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.

D. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.

4. AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN. 5. TOPSOIL SPECIFICATIONS: SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING CRITERIA: A TOPSOIL MUST BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, OR LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. TOPSOIL MUST NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND MUST CONTAIN

less than 5 percent by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash OR OTHER MATERIALS LARGER THAN 1 1/2 INCHES IN DIAMETER. 8. TOPSOIL MUST BE FREE OF NOXIOUS PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACK GRASS, JOHNSON

GRASS, NUT SEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.

C. TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL. 6. TOPSOIL APPLICATION A. EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED WHEN APPLYING TOPSOIL.

B. UNIFORMLY DISTRIBUTE TOPSOIL IN A 5 TO 8 INCH LAYER AND LIGHTLY COMPACT TO A MINIMUM THICKNESS OF 4 INCHES. SPREADING IS TO BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR other operations must be corrected in order to prevent the formation of depressions or water pockets. C. TOPSOIL MUST NOT BE PLACED IF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED

C. SOIL AMENDMENTS (FERTILIZER & LIME SPECIFICATIONS) 1. SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OF 5 ACRES OR MORE. SOIL ANALYSIS MAY BE PERFORMED BY A recognized private or commercial laboratory. Soil samples taken for engineering purposes may also BE USED FOR CHEMICAL ANALYSES. 2. FERTILIZERS MUST BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR ACCURATE

APPLICATION BY APPROPRIATE EQUIPMENT. MANURE MAY BE SUBSTITUTED FOR FERTILIZER WITH PRIOR APPROVAL FROM THE APPROPRIATE APPROVAL AUTHORITY. FERTILIZERS MUST ALL BE DELIVERED TO THE SITE FULLY LABELED ACCORDING TO THE APPLICABLE LAWS AND MUST BEAR THE NAME, TRADE NAME OR TRADEMARK AND WARRANTY OF THE PRODUCER. 3. LIME MATERIALS MUST BE GROUND LIMESTONE (HYDRATED OR BURNT LIME MAY BE SUBSTITUTED EXCEPT WHEN

HYDROSEEDING) WHICH CONTAINS AT LEAST 50 PERCENT TOTAL OXIDES (CALCIUM OXIDE PLUS MAGNESIUM OXIDE). LIMESTONE MUST BE GROUND TO SUCH FINENESS THAT AT LEAST 50 PERCENT WILL PASS THROUGH A \$100 MESH SIEVE AND 98 TO 100 PERCENT WILL PASS THROUGH A #20 MESH SIEVE. 4. LIME AND FERTILIZER ARE TO BE EVENLY DISTRIBUTED AND INCORPORATED INTO THE TOP 3 TO 5 INCHES OF SOIL BY

DISKING OF OTHER SUITABLE MEANS 5. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, SPREAD GROUND LIMESTONE AT THE RATE OF 4 TO 0 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL.

STANDARD STABILIZATION NOTE

FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE A.) THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1). B.) SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER

DUST CONTROL

DEFINITION

CONTROLLING DUST BLOWING AND MOVEMENT ON CONSTRUCTION SITES AND ROADS. <u>PURPOSE</u>

DAMAGE, HEALTH HAZARDS AND IMPROVE TRAFFIC SAFETY. CONDITIONS WHERE PRACTICE APPLIES THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO DUST BLOWING AND MOVEMENT WHERE ON AND OFF-SITE.

TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES, REDUCE ON AND OFF-SITE

DAMAGE IS LIKELY WITHOUT TREATMENT. SPECIFICATIONS

TEMPORARY METHODS MULCHES - SEE STANDARDS FOR VEGETATIVE STABILIZATION WITH MULCHES ONLY. MULCH SHOULD BE CRIMPED OR TACKED TO PREVENT BLOWING. 2. VEGETATIVE COVER - SEE STANDARDS FOR TEMPORARY VEGETATIVE COVER.

3. TILLAGE - TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF THE SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12" APART, SPRING-TOOTHED HARROWS AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.

4. IRRIGATION - THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS MOIST. REPEAT AS NEEDED. AT NO TIME SHOULD THE SITE BE IRRIGATED TO THE POINT THAT RUNOFF BEGINS TO FLOW.

. BARRIERS - SOLID BOARD FENCES SILT FENCES. SNOW FENCES. BURLAP FENCES. STRAW BALE DIKES AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CONTROLLING SOIL BLOWING. CURRENTS AND SOIL BLOWING. CURRENTS AND SOIL BLOWING, BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 10 TIMES THEIR HEIGHT ARE EFFECTIVE IN 6. CALCIUM CHLORIDE — APPLY AT RATES THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT

PERMANENT METHODS 1. PERMENENT VEGETATION — SEE STANDARDS FOR PERMANENT VEGETATIVE COVER AND PERMANENT STABILIZATION WITH SOD. EXISTING TREES OR LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE. 2. TOPSOILING - COVERING WITH LESS EROSIVE SOIL MATERIALS. SEE STANDARDS FOR TOPSOILING. 3. STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

SEQUENCE OF CONSTRUCTION

1. OBTAIN A GRADING PERMIT AND HOLD PRE-CONSTRUCTION MEETING WITH COUNTY INSPECTOR. 2. NOTIFY "MISS UTILITY" AT LEAST 40 HOURS BEFORE BEGINNING ANY WORK AT 1-800-257-7777. (7 DAY5) NOTIFY THE HOWARD COUNTY OFFICE OF CONSTRUCTION/ INSPECTION AT 410-313-1330 AT LEAST 24 HOURS BEFORE STARTING WORK. INSTALL THE STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE, AND SUPER-SILT FENCE (2 DAYS) (3 DAYS) (4 MONTHS) . ROUGH GRADE AROUND HOUSE SITE AND INSTALL TEMPORARY SEEDING, IF REQUIRED.

5. CONSTRUCT BUILDING. 7. FINE GRADE SITE AND INSTALL PERMANENT SEEDING. 8. ALL FINAL GRADES AND STABILIZATION SHOULD BE COMPLETED BEFORE ANY REMOVAL OF CONTROLS. WHEN ALL CONTRIBUTING AREAS TO THE SEDIMENT CONTROL DEVICES HAVE BEEN STABILIZED AND WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, THE SEDIMENT CONTROL DEVICES MAY BE REMOVED. NOTE: THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE EACH RAINFALL AND ON A

BONES OF EPPROPRIES OF U

TEMPORARY SEEDING NOTES (B-4-4)

TO STABILIZE DISTURBED SOILS WITH VEGETATION FOR UP TO 6 MONTHS.

TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURBED SOILS CONDITIONS WHERE PRACTICE APPLIES EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR A PERIOD OF 6 MONTHS OR LESS. FOR LONGER DURATION OF TIME, PERMANENT STABILIZATION PRACTICES ARE REQUIRED.

1. SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE 8.1 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE 8.3), AND ENTER THEM IN THE TEMPORARY SEEDING SUMMARY BELOW ALONG WITH APPLICATION RATES, SEEDING DATES AND SEEDING DEPTHS IF THIS SUMMARY IS NOT PUT ON THE PLAN AND COMPLETED, THEN TABLE B.1 PLUS FERTILIZER AND LIME RATES MUST BE PUT ON THE PLAN.

2. FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY, SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING. 3. WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING SEASON, APPLY SEED AND MULCH OR STRAW MULCH ALONE AS PRESCRIBED IN SECTION 8-4-3.4.1.8 AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

	TEMP	orary seedi	NG SUMM	ARY	:
ARDINESS ED MIXTU	ZONE (FROM FIGURE RE (FROM TABLE B.1)	8.3); <u>68</u>);	-	FERTILIZER RATE (10-20-20)	LIME RATE
SPECIES	APPLICATION RATE (LB/AC)	SEEDING Dates	SEEDING DEPTHS		
BARLEY	96		1**	120 10.740	a TONE (AC
OATS	72	3/1 - 5/15, 8/15 - 10/15	1"	436 LB/AC (10 LB/ 1000 5F)	2 TON5/AC (90 LB/ 1000 SF)
		1		1000 31)	1000 011

1"

PERMANENT SEEDING NOTES (B-4-5)

A. SEED MIXTURES

RYE 112

A. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED IN TABLE 8.3 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE 8.3) AND BASED ON THE SITE CONDITION OR PURPOSE FOUND ON TABLE 8.2. ENTER SELECTED MIXTURE(5), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN. B. ADDITIONAL PLANTING SPECIFICATIONS FOR EXCEPTIONAL SITES SUCH AS SHORELINES, STREAM BANKS,

OR DUNES OR FOR SPECIAL PURPOSES SUCH AS WILDLIFE OR AESTHETIC TREATMENT MAY BE FOUND IN USDA-NRCS TECHNICAL FIELD OFFICE GUIDE, SECTION 342 — CRITICAL AREA PLANTING.

C. FOR SITES HAVING DISTURBED AREA OVER 5 ACRES, USE AND SHOW THE RATES RECOMMENDED BY THE SOIL TESTING AGENCY. 0. FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREA FORM FERTILIZER (46-0-0) AT 3 1/2 POUNDS PER 1000 SQUARE FEET (150 POUNDS PER ACRE) AT THE TIME OF SEEDING IN ADDITION TO THE SOIL AMENDMENTS SHOWN IN THE PERMANENT SEEDING SUMMARY. 2. TURFGRASS MIXTURES

A. AREAS WHERE TURFGRASS MAY BE DESIRED INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE. B. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED BELOW BASED ON THE SITE CONDITIONS OR PURPOSE. ENTER SELECTED MIXTURE(5), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.

1. KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN AREAS THAT RECEIVE INTENSIVE MANAGEMENT. IRRIGATION REQUIRED IN THE AREAS OF CENTRAL MARYLAND AND EASTERN SHORE, RECOMMENDED Certified Kentucky Bluegrass cultivars seeding rate: 1.5 to 2.0 pounds per 1000 square feet.

CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.

II. KENTUCKY BLUEGRASS/PERENNIAL RYE: FULL SUN MIXTURE: FOR USE IN FULL SUN AREAS WHERE RAPID ESTABLISHMENT IS NECESSARY AND WHEN TURF WILL, RECEIVE MEDIUM TO INTENSIVE MANAGEMENT. CERTIFIED PERENNIAL RYEGRASS CULTIVARS/CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE: 2 POUNDS mixture per 1000 square feet, choose a minimum of three kentucky bluegrass cultivars with EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.

III. TALL FESCUE/KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN DROUGHT PRONE AREAS AND/OR FOR AREAS RECEIVING LOW TO MEDIUM MANAGEMENT IN FULL SUN TO MEDIUM SHADE. RECOMMENDED

MIXTURE INCLUDES; CERTIFIED TALL FESCUE CULTIVARS 95 TO 100 PERCENT, CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 0 TO 5 PERCENT. SEEDING RATE: 5 TO 8 POUNDS PER 1000 SQUARE FEET. ONE OR MORE CULTIVARS MAY BE BLENDED.

KENTUCKY BLUEGRASS/FINE FESCUE: SHADE MIXTURE: FOR USE IN AREAS WITH SHADE IN BLUEGRASS LAWNS. FOR ESTABLISHMENT IN HIGH QUALITY, INTENSIVELY MANAGED TURF AREA. MIXTURE INCLUDES; CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 30 TO 40 PERCENT AND CERTIFIED FINE FESCUE AND 60 TO 70 PERCENT. SEEDING RATE: 1 1/2 TO 3 POUNDS PER 1000 SQUARE FEET.

SELECT TURFGRASS VARIETIES FROM THOSE LISTED IN THE MOST CURRENT UNIVERSITY OF MARYLAND PUBLICATION, AGRONOMY MEMO \$77, "TURFGRASS CULTIVAR RECOMMENDATIONS FOR MARYLAND" CHOOSE CERTIFIED MATERIAL CERTIFIED MATERIAL IS THE BEST GUARANTEE OF CULTIVAR PURITY. THE Certification program of the maryland department of agriculture, turp and seed section, provides a reliable means of consumer protection and assures a pure genetic line C. IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURES WESTERN MD: MARCH 15 TO JUNE 1, AUGUST 1 TO OCTOBER 1 (HARDINESS ZONES: 5B, 6A) CENTRAL MD: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONE: 6B) SOUTHERN MD, EASTERN SHORE: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 D. TILL AREAS TO RECEIVE SEED BY DISKING OR OTHER APPROVED METHODS TO A DEPTH OF 2 TO 4 INCHES, LEVEL AND RAKE THE AREAS TO PREPARE A PROPER SEEDBED. REMOVE STONES AND DEBRIS OVER 1 1/2 INCHES IN DIAMETER THE RESULTING SEEDBED MUST BE IN SUCH CONDITION THAT FUTURE MOWING OF

GRASSES WILL POSE NO DIFFICULTY. E. IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER FOR PLANT GROWTH (1/2 TO 1 INCH EVERY 3 TO 4 DAYS DEPENDING ON SOIL TEXTURE) UNTIL THEY ARE FIRMLY ESTABLISHED THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE LATE IN THE PLANTING SEASON, IN ABNORMALLY DRY OR HOT SEASONS, OR ON ADVERSE SITES.

		PERM	ANENT	SEEDING	SUMMARY	,	
 inciste.	elista mara	 ^ - \	60				7.

		ONE (FROM FIGURE E (FROM TABLE B.:		FERTILIZE	LIME RATE			
NO.	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS	N	P ₂ O ₅	K ₂ 0	
ø	TALL FESCUE	100	MAR. 1-MAY 15 AUG. 15-OCT. 15	1/4-1/2 IN.	45 LBS. PER ACRE (1.0 LB/ 1000 SF)	90 LB/AC (2 LB/ 1000 SF)	90 LB/AC (2 LB/ 1000 5F)	2 TONS/AC (90 LB/ 1000 SF)

B. SOD: TO PROVIDE QUICK COVER ON DISTURBED AREAS (2:1 GRADE OR FLATTER).

1. GENERAL SPECIFICATIONS A CLASS OF TURFGRASS SOO MUST BE MARYLAND STATE CERTIFIED. SOD LABELS MUST BE MADE AVAILABLE TO THE B. 500 MUST BE MACHINE CUT AT A UNIFORM SOIL THICKNESS TO 3/4 INCH, PLUS OR MINUS 1/4 INCH, AT THE TIME OF CUTTING, MEASUREMENT FOR THICKNESS MUST EXCLUDE TOP GROWTH AND THATCH, BROKEN PADS AND TORN OR UNEVEN ENDS WILL NOT BE ACCEPTABLE. SIZE AND SHAPE WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON THE UPPER 10 PERCENT OF THE SECTION. D. SOD MUST NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OF WET) MAY

ADVERSELY AFFECT ITS SURVIVAL.
E. SOD MUST BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPLANTED. WITHIN THIS PERIOD MUST BE APPROVED BY AN AGRONOMIST OR SOIL SCIENTIST PRIOR TO ITS INSTALLATION. 2. 500 INSTALLATION A DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, LIGHTLY IRRIGATE THE SUBSOIL IMMEDIATELY PRIOR TO LAYING THE 50D.

B. LAY THE FIRST ROW OF SOD IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO IT AND TIGHTLY WEDGED AGAINST EACH OTHER. STAGGER LATERAL JOINTS TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH.

ENSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE AIR DRYING OF THE ROOTS. WHEREVER POSSIBLE, LAY SOD WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERING JOINTS.
ROLL AND TAMP, PEG OR OTHERWISE SECURE THE SOD TO PREVENT SLIPPAGE ON SLOPES. ENSURE SOLID CONTACT

EXISTS BETWEEN SOD ROOTS AND THE UNDERLYING SOIL SURFACE. D. WATER THE SOD IMMEDIATELY FOLLOWING ROLLING AND TAMPING UNTIL THE UNDERSIDE OF THE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD ARE THOROUGHLY WET. COMPLETE THE OPERATIONS OF LAYING, TAMPING, AND TRRIGATING FOR ANY PIECE OF SOD WITHIN EIGHT HOURS. 3. SOD MAINTENANCE A. IN THE ABSENCE OF ADEQUATE RAINFALL, WATER DAILY DURING THE FIRST WEEK OR AS OFTEN AND SUFFICIENTLY

AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF 4 INCHES, WATER SOO DURING THE HEAT OF THE DAY TO PREVENT WILTING. B. AFTER THE FIRST WEEK, SOD WATERING IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT. C. DO NOT MOW UNTIL THE SOD IS FIRMLY ROOTED. NO MORE THAN 1/3 OF THE GRASS LEAF MUST BE REMOVED BY THE INITIAL CUTTING OR SUBSEQUENT CUTTINGS. MAINTAIN A GRASS HEIGHT OF AT LEAST 3 INCHES UNLESS

HOWARD SOIL CONSERVATION DISTRICT

STANDARD SEDIMENT CONTROL NOTES 1) A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS,

SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (410-313-1855). 2) ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN conformance with the most current maryland standards and specifications for soil erosion and sediment contro 3) FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED

WITHIN: a) 3 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, b) 7 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. 4) ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. B-4-5), TEMPORARY 5EEDING (5EC. B-4-4) AND MULCHING (5EC. B-4-3). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES. 5) ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

6) SITE ANALYSIS: TOTAL AREA OF SITE 8.02 ACRES 8.32 ACRES area disturbed Area to be roofed or paved 2.59 ACRES 5.73 ACRES AREA TO BE VEGETATIVELY STABILIZED 8,464 CU.YOS 8,377 CU.YDS.

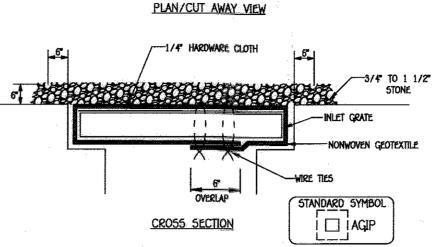
OFFSITE WASTE/BORROW AREA LOCATION 7) ANY SEDIMENT CONTROL PRACTICE THAT IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE B) ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR. 9) ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH

DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL

APPROVAL BY THE INSPECTION AGENCY IS MADE. 10) TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORKDAY, WHICHEVER IS SHORTER.

11) ANY CHANGES OR REVISIONS TO THE SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE PLAN APPROVAL AUTHORITY PRIOR TO PROCEEDING WITH CONSTRUCTION. 12) A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE OF 20 ACRE PER CRADING UNIT) AT A TIME WORK MAY PROCEED TO A SUBSEQUENT GRADING UNIT WHEN AT LEAST 50 PERCENT OF THE DISTURBED AREA IN THE PROCEEDING GRADING UNIT HAS BEEN STABILIZED AND APPROVED BY THE ENFORCEMENT AUTHORITY. UNLESS

OTHERWISE SPECIFIED AND APPROVED BY THE APPROVAL AUTHORITY, NO MORE THAN 30 ACRES CUMULATIVELY MAY BE DISTURBED



CONSTRUCTION SPECIFICATIONS

1. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS. 2. LIFT GRATE AND WRAP WITH NONWOVEN GEOTEXTILE TO COMPLETELY COVER ALL OPENINGS. SECURE

WITH WIRE TIES AND SET GRATE BACK IN PLACE. 3. PLACE CLEAN 3/4" TO 1 1/2" STONE OR EQUIVALENT RECYCLED CONCRETE 6 INCHES THICK ON THE

4. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE, REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED, WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STONE.

AT-GRADE INLET PROTECTION

NOT TO SCALE

TYPICAL PRIVATE DRIVE CROSS SLOPE SECTION

NOT TO SCALE

ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE

WITH HOWARD COUNTY DESIGN MANUAL VOLUME IV, STANDARD

DEFINITION A MOUND OR PILE OF SOIL PROTECTED BY APPROPRIATELY DESIGNED EROSION AND SEDIMENT CONTROL MEASURES. PURPOSE

erosion, sedimentation and changes to drainage patterns. CONDITIONS WHERE PRACTICE APPLIES

CRITERIA 1. THE STOCKPILE LOCATION AND ALL RELATED SEDIMENT CONTROL PRACTICES MUST BE CLEARLY INDICATED ON THE

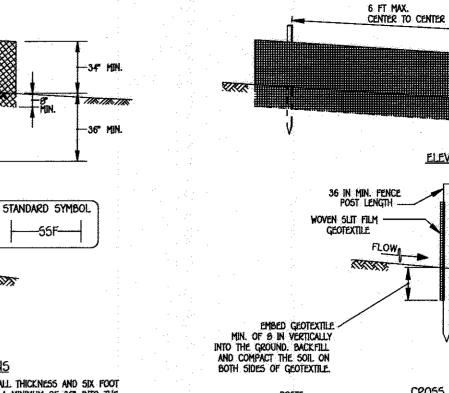
2. THE FOOTPRINT OF THE STOCKPILE MUST BE SIZED TO ACCOMMODATE THE ANTICIPATED VOLUME OF MATERIAL AND BASED ON A SIDE SLOPE RATIO NO STEEPER THAN 2:1 BENCHING MUST BE PROVIDED IN ACCORDANCE WITH SECTION B-3 LAND GRADING.
3. RUNOFF FROM THE STOCKPILE AREA MUST DRAIN TO A SUITABLE SEDIMENT CONTROL PRACTICE.

4. ACCESS THE STOCKPILE AREA FROM THE UPGRADE SIDE. 5. CLEAR WATER RUNOFF INTO THE STOCKPILE AREA MUST BE MINIMIZED BY USE OF A DIVERSION DEVICE SUCH AS

AN EARTH DIKE, TEMPORARY SWALE OR DIVERSION FENCE. PROVISIONS MUST BE MADE FOR DISCHARGING CONCENTRATED FLOW IN A NON-EROSIVE MANNER. 6. WHERE RUNOFF CONCENTRATES ALONG THE TOE OF THE STOCKPILE FILL, AN APPROPRIATE EROSION/SEDIMENT CONTROL

STANDARD B-4-1 INCREMENTAL STABILIZATION AND STANDARD B-4-4 TEMPORARY STABILIZATION. 8. IF THE STOCKPILE IS LOCATED ON AN IMPERVIOUS SURFACE, A LINER SHOULD BE PROVIDED BELOW THE STOCKPILE TO FACILITATE CLEANUP, STOCKPILES CONTAINING CONTAMINATED MATERIAL MUST BE COVERED WITH IMPERMEABLE SHEETING.

MAINTENANCE THE STOCKPILE AREA MUST CONTINUOUSLY MEET THE REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT I accordance with section b–4 vegetative stabilization. Side slopes must be maintained at no steeper than a 2:1 RATIO. THE STOCKPILE AREA MUST BE KEPT FREE OF EROSION. IF THE VERTICAL HEIGHT OF A STOCKPILE EXCEEDS 20 FEET FOR 2;1 SLOPES, OR 30 FEET FOR 3;1 SLOPES, OR 40 FEET FOR 4:1 SLOPES, BENCHING MUST BE PROVIDED IN ACCORDANCE WITH SECTION 8-3 LAND GRADING.



CONSTRUCTION SPECIFICATIONS 1. INSTALL 2 3/8" DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT

LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36" INTO TH

2. FASTEN 9 GAUGE OR HEAVIER CALVANIZED CHAIN LINK FENCE (2 3/8" MAXIMUM OPENING) 42" IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.

3. FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24" AT THE TOP AND MID SECTION.

CROSS SECTION

10 FT MAX.

ELEVATION

CHAIN LINK FENCING

woven slit film geotextile—

EMBED GEOTEXTILE AND— CHAIN LINK FENCE & MIN. INTO GROUND

RINKING FLOW

TIRTIRTIRTIR

EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8" INTO THE GROUND. 4. WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6", FOLDED AND STAPLED TO PREVENT SEDIMENT BY PASS. 5. EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS

6. PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS. 7. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

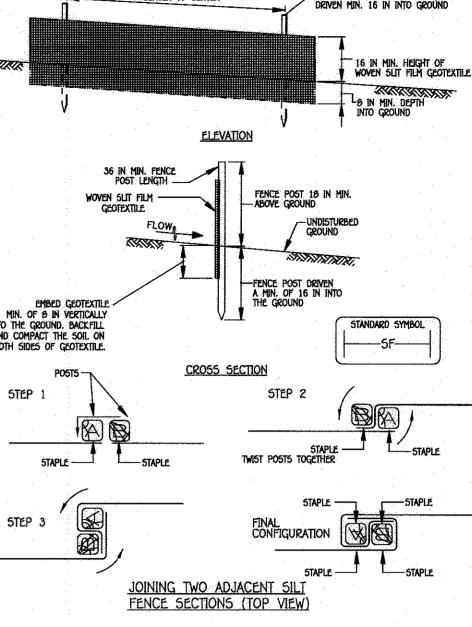
SUPER SILT FENCE NOT TO SCALE

B-4-8 STANDARDS AND SPECIFICATIONS FOR STOCKPILE AREAS

TO PROVIDE A DESIGNATED LOCATION FOR THE TEMPORARY STORAGE OF SOIL THAT CONTROLS THE POTENTIAL FOR

STOCKPILE AREAS ARE UTILIZED WHEN IT IS NECESSARY TO SALVAGE AND STORE SOIL FOR LATER USE.

PRACTICE MUST BE USED TO INTERCEPT THE DISCHARGE. 7. STOCKPILES MUST BE STABILIZED IN ACCORDANCE WITH THE 3/7 DAY STABILIZATION REQUIREMENT AS WELL AS



CONSTRUCTION SPECIFICATIONS

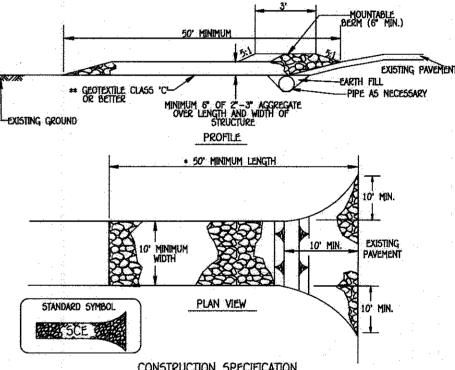
1. Use wood posts 1 3/4" x 1 3/4" ±/16" (Minimum) square cut of sound quality hardwood. As an alternative to wooden post use standard "t" or "u" section steel posts weighing not less THAN 1 POUND PER LINEAR FOOT. 2. USE 36 INCH MINIMUM POSTS DRIVEN 16 INCH MINIMUM INTO GROUND NO MORE THAN 6 FEET APART.

2. Use woven suit film geotextile as specified in section H-1 materials and fasten geotextile securely to upslope side of fence posts with wire ties or staples at top and mid-section.

4. Provide manufacturer certification to the authorized representative of the inspection/enforcement authority showing that the geotextile used meets the requirements in section H-1 materials. 5. EMBED GEOTEXTILE A MINIMUM OF 8 INCHES VERTICALLY INTO THE GROUND. BACKFILL AND COMPACT THE SOIL ON BOTH SIDES OF FABRIC.

6. WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH 7. EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SILT FENCE. 8. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT

REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL FENCE.



CONSTRUCTION SPECIFICATION

1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN.

VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF

50 FEET (+30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE

SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.

2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE

ENTRANCE, MAINTAINING POSITIVE DRAINAGE, PROTECT PIPE INSTALLED THROUGH THE SCE

WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE

OVER THE PIPE PROVIDED PIPE AS SPECIFIED ON APPROVED PLAN WHEN THE SCE IS OVER THE PIPE PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.

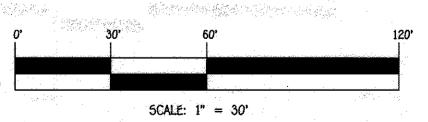
3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1

MAIERIALS.

4. PLACE CRUSHED ACCREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.

5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERN, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCARDING AND/OR SHEEDING. MASHING ROADWAY TO REMOVE ONTO SCRAPING AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

STABILIZED CONSTRUCTION ENTRANCE NOT TO SCALE



SEDIMENT/EROSION CONTROL

DETAILS & NOTES

SINGLE FAMILY DETACHED

CENTENNIAL LAKE OVERLOOK

SECTION TWO / PART TWO

LOTS 42 THRU 69, 80 THRU 98,

P/O OPEN SPACE LOTS 99, 103,

OPEN SPACE LOTS 100, 101, 102, 104, 105 & 106

PREVIOUS HOWARD COUNTY FILES: ECP-12-053, WP-13-096, 5P-13-004,

PB-399, F-14-002, F-14-001, F-14-00151, F-14-00152, F-14-00153

SDP-15-040, CONTRACT NO. 24-4764-D & 24-4917-D

PLAT NUMBERS: 23291 THRU 23298

TAX MAP NO.: 30 PARCEL NO.: 86 GRID NO.: 2

TAX MAP NO.: 30 PARCEL NO.: 86 GRID NO.: 2
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: AUGUST, 2015

TABLE B.1 TEMPORARY SEEDING FOR SITE STABILIZATION

-ON-SITE P-1 PAVING SECTION

OLANT COCOC	SEED	ING RATE 1/	RATE 1/ SEEDING DEPTH 2/ RECOMMENDED SEEDING DATES BY PLANT HARDINESS ZONE				
PLANT SPECS	LB./AC.	LB./1000 FT. ²	174 100 1-61	5b AND 6a	6Ь	7a AND 7b	
COOL-SEASON GRASSES							
ANNUAL RYEGRASS (LOLIUM PERENNE SSP. MUTIFLORUM)	40	1.0	0.5	MAR. 15 TO MAY 31; AUG. 1 TO SEPT. 30	MAR. 1 TO MAY 15; AUG. 1 TO OCT. 15	FEB. 15 TO APR. 30; AUG. 15 TO NOV. 3	
BARLEY (HORDEUM VULGARE)	96	2.2	1.0	MAR. 15 TO MAY 31; AUG. 1 TO SEPT. 30	MAR. 1 TO MAY 15; AUG. 1 TO OCT. 15	FEB. 15 TO APR. 30; AUG. 15 TO NOV. 3	
OATS (AVENA SATIVA)	72	1.7	1.0	MAR. 15 TO MAY 31; AUG. 1 TO SEPT. 30	MAR. 1 TO MAY 15; AUG. 1 TO OCT. 15	FEB. 15 TO APR. 30; AUG. 15 TO NOV. 3	
WHEAT (TRITICUM AESTIVUM)	120	2.8	1.0	MAR. 15 TO MAY 31; AUG. 1 TO SEPT. 30	MAR. 1 TO MAY 15; AUG. 1 TO OCT. 15	FEB. 15 TO APR. 30; AUG. 15 TO NOV. 3	
CEREAL RYE (SECALE CEREALE)	. 112	2.8	1.0	MAR. 15 TO MAY 31; AUG. 31 TO OCT. 31	MAR. 1 TO MAY 15; AUG. 1 TO NOV. 15	FEB. 15 TO APR. 30; AUG. 15 TO DEC. 1	
WARM-SEASON GRASSES					·		
FOXTAIL MILLET (SETARIA ITALICA)	30	0.7	0.5	JUNE 1 TO JULY 31	MAY 16 TO JULY 31	MAY 1 TO AUGUST 14	
PEARL MILLET (PENNISETUM GLAUCUM)	20	0.5	0.5	JUNE 1 TO JULY 31	MAY 16 TO JULY 31	MAY 1 TO AUGUST 14	

1. SEEDING RATES FOR THE WARM-SEASON GRASSES ARE IN POUNDS OF PURE LIVE SEED (PLS). ACTUAL PLANTING RATES SHALL BE ADJUSTED TO REFLECT PERCENT SEED GERMINATION AND PURITY, AS TESTED. ADJUSTMENTS ARE USUALLY NOT NEEDED FOR THE COOL-SEASON GRASSES.

SEEDING RATES LISTED ABOVE ARE FOR TEMPORARY SEEDINGS, WHEN PLANTED ALONE. WHEN PLANTED AS A NURSE CROP WITH PERMANENT SEED MIXES, USE 1/3 OF THE SEEDING RATE LISTED ABOVE FOR BARLEY, OATS AND WHEAT. FOR SMALLER-SEEDED GRASSES (ANNUAL RYEGRASS, PEARL MILLET, FOXTAIL MILLET). DO NOT EXCEED MORE THAN 5% (BY WEIGHT) OF THE OVERALL PERMANENT SEEDING MIX, CEREAL RYE GENERALLY SHOULD NOT BE USED AS A NURSE CROP, UNLESS PLANTING WILL OCCUR IN VERY LATE FALL BEYOND THE SEEDING DATES FOR OTHER TEMPORARY SEEDINGS. CEREAL RYE HAS ALLELOPATHIC PROPERTIES THAT INHIBIT THE GERMINATION AND GROWTH OF OTHER PLANTS. IF IT MUST BE USED AS A NURSE CROP, SEED AT 1/3 OF THE RATE LISTED ABOVE.

OATS ARE THE RECOMMENDED NURSE CROP FOR WARM-SEASON GRASSES.

2. FOR SANDY SOILS, PLANT SEEDS AT TWICE THE DEPTH LISTED ABOVE. 3. THE PLANTING DATES LISTED ARE AVERAGES FOR EACH ZONE AND MAY REQUIRE ADJUSTMENT TO REFLECT LOCAL CONDITIONS, ESPECIALLY NEAR THE BOUNDARIES OF THE ZONE.

PROFESSIONAL CERTIFICATE "I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District." Signature of Surveyor FRANK JOHN MANALANSAN II, L.S. 8/20/15

LICENSE NO. 21476 EXPIRATION DATE: 7/14/17 BUILDER/DEVELOPER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan, for sediment and erosion control and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil

OWNER/DEVELOPER BEAZER HOMES, CORP. 8965 GUILFORD ROAD

SUITE 209 COLUMBIA, MARYLAND 21046 410-720-5071

ATTN: MR. BRIAN A. KNAUFF

his development plan is approved for soil erosion and sediment control by

9-11-15 Director - Department of Planning and Zoning PROJECT 42 THRU 69 8 CENTENNIAL LAKE OVERLOOK 80 THRU 98 TAX/ZONE ELEC. DIST. CENSUS TR 70NF BLOCK NO 23291-23298 6023.04 R-20 30 SECOND WATER CODE SEWER CODE E-15

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

FISHER, COLLINS & CARTER, INC. IL ENGINEERING CONSULTANTS & LAND SURVEYORS ELLICOTT CITY, MARYLAND 21042 (410) 461 - 2855

REVIGE GHEET NUMBER REVISION DATE

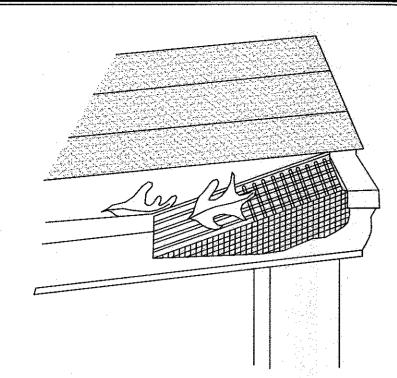
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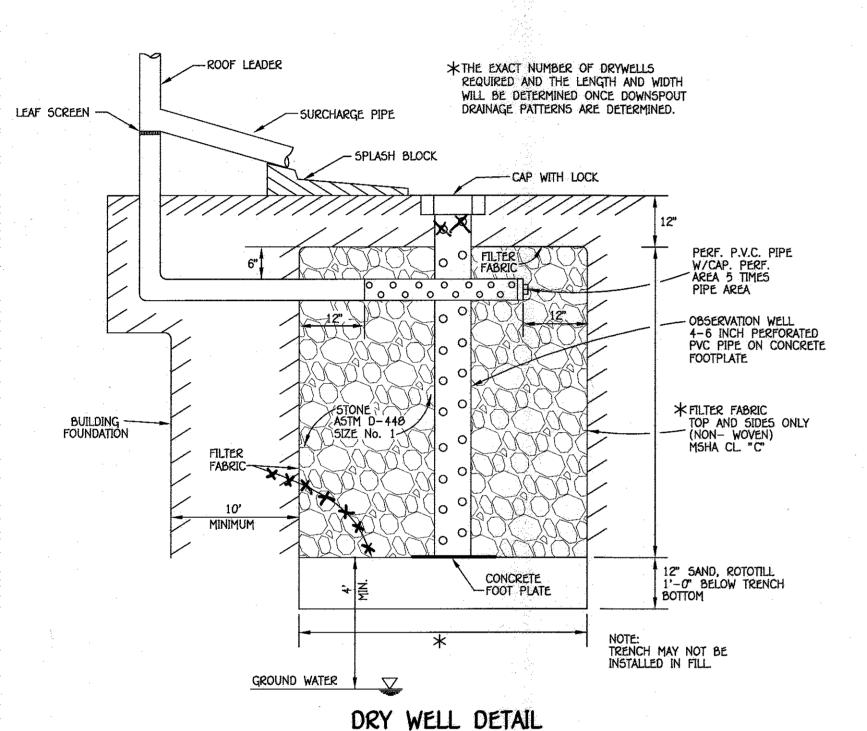
SHEET 7 OF 9

5DP-15-066



GUTTER DRAIN FILTER DETAIL

NOT TO SCALE



NOT TO SCALE

Construction Criteria:

The following items should be addressed during construction of projects

Erosion and Sediment Control:

Final grading for proposed dry wells should not take place until the surrounding site is completely stabilized. If this cannot be accomplished, runoff from disturbed areas shall be diverted.

Excavation should be conducted in dry conditions with equipment located outside of the practice to minimize bottom and sidewall compaction. Construction of a dry well shall be performed with lightweight, wide-tracked equipment to minimize disturbance and compaction. Excavated materials shall be placed in a contained area.

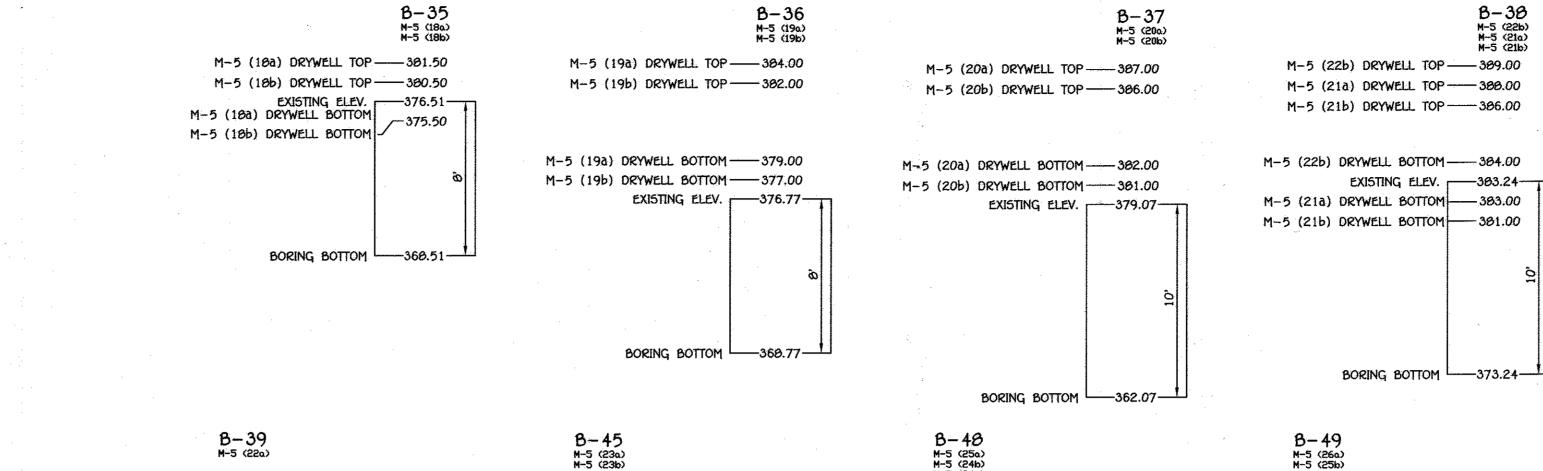
Underground Chamber:

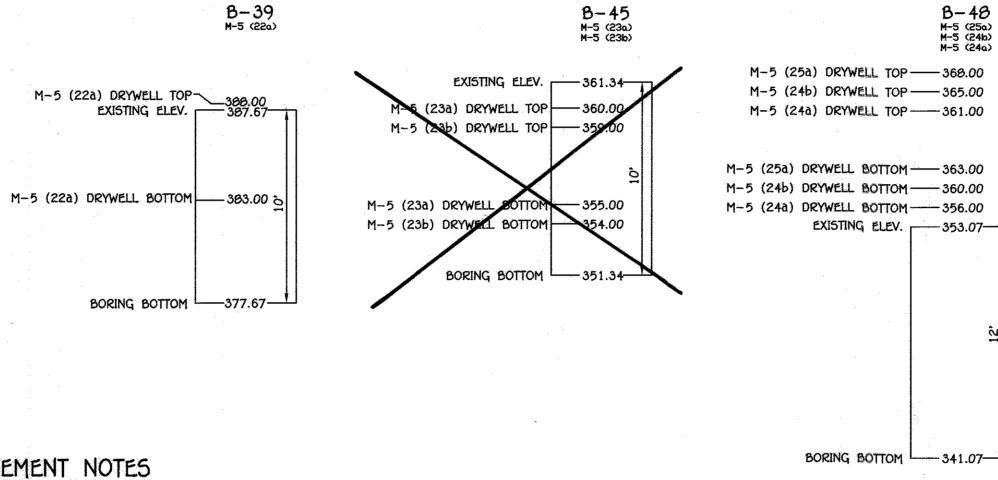
A subsurface prefabricated chamber may be used.

The bottom shall be as level as possible to minimize pooled water in small areas that may reduce overall infiltration and longevity.

Filter cloth shall not be installed on the bottom of the well. Non-woven filter cloth should be used to line the top and sides of the dry well to prevent the pore space between the stones from being blocked by the surrounding native material.

The aggregate shall be composed of an 10 to 48—inch layer of clean washed, open graded material with 40% porosity (e.g., ASTM D440 4, 5, or 6 stone or equal).





STORMWATER MANAGEMENT NOTES

- . STORMWATER MANAGEMENT IS PROVIDED IN ACCORDANCE WITH WITH CHAPTER 5, "ENVIRONMENTAL SITE DESIGN" OF THE 2007 MARYLAND STORMWATER MANAGEMENT DESIGN MANUAL,
- EFFECTIVE MAY 4, 2010. 2. MAXIMUM CONTRIBUTING ROOF TOP AREA TO EACH DOWNSPOUT SHALL BE 1,000 SQ. FT. OR LESS. 3. DRYWELLS SHALL BE PROVIDED AT LOCATIONS WHERE THE LENGTH
- OF DISCONNECTION IS LESS THAN 75' AT 5%. THE SIZE AND CONSTRUCTION OF THE DRYWELL SHALL BE IN ACCORDANCE WITH THE DETAIL SHOWN ON THIS SHEET.
- 4. FINAL GRADING IS SHOWN ON THIS SITE DEVELOPMENT PLAN.

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

- A. THE OWNER SHALL INSPECT THE MONITORING WELLS AND STRUCTURES ON A QUARTERLY BASIS
- AND AFTER EVERY HEAVY STORM EVENT. B. THE OWNER SHALL RECORD THE WATER LEVELS AND SEDIMENT BUILD UP IN THE MONITORING
- WELLS OVER A PERIOD OF SEVERAL DAYS TO ENSURE TRENCH DRAINAGE.

 C. THE OWNER SHALL MAINTAIN A LOG BOOK TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
- D. WHEN THE FACILITY BECOMES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN A SEVENTY-TWO (72) HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BE TAKEN.
- E. THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.

DRY WELL CHART									
LOT NO.	DRYWELL NUMBER	NO. OF DOWNSPOUTS	AREA OF ROOF	VOLUME REQUIRED	VOLUME PROVIDED	AREA OF STORAGE	AREA OF TREATMENT	NO. OF DRYWELLS	DIMENSIONS OF DRYWELLS
42	M-5 (18)	4	1,221 54Ft	174 CuFt	176 CuFt	100%	100%	2	8' X 5.5' X 5'
43	M-5 (19)	2	970 SqFt	70 CuFt	80 CuFt	100%	100%	2	5' X 4' X 5'
44	M-5 (20)	2	900 5qFt	129 CuFt	130 CuFt	100%	100%	2	6.5' X 5' X 5'
45	M-5 (21)	2	970 5qFt	139 CuFt	140 Cuft	100%	100%	2	7' X 5' X 5'
46	M-5 (22)	4	1,010 5qFt	144 CuFt	154 Cuft	100%	100%	2	7' X 5.5' X 5'
52 -	H 5 (23)	*	1,150 SqFt	164 GuFt	168 CuF	100%	100%	2	7' X 6' X 5'
63	M-5 (24)	2	900 5qFt	129 CuFt	130 CuFf	100%	100%	2	6.5' X 5' X 5'
64	M-5 (25)	2	900 SgFt	129 CuFt	130 CuFt	100%	100%	2	6.5' X 5' X 5'
65	M-5 (26)	2	900 SqFt	129 CuFt	130 CuFt	100%	100%	2	6.5' X 5' X 5'

M-5 (26a) DRYWELL TOP ----378.50

M-5 (25b) DRYWELL TOP 371.00

M-5 (26a) DRYWELL BOTTOM -- 373.50

M-5 (25b) DRYWELL BOTTOM 366.00

EXISTING ELEV. ____375.28-__

BORING BOTTOM -365.28-

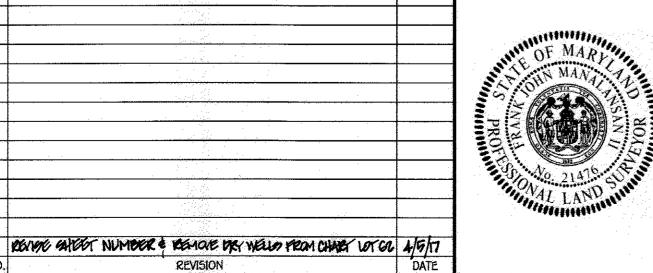
410-720-5071

ATTN: MR. BRIAN A. KNAUFF

- 1) DRYWELL DIMENSIONS SHOWN ARE BASED ON TREATMENT OF 50% OF THE AREA OF THE GENERIC BOX AREA PROPOSED FOR THE LOT ASSUMING THAT THE FRONT PORTION (50%) OF THE ROOF AREA OF THE PROPOSED HOUSE SPECIFIED
- WITHIN THE GENERIC BOX WILL BE CAPTURED UNDER THE SWM PRACTICES PROPOSED UNDER F14-081 2) A MODIFICATION TO THE STORAGE REQUIREMENT (DRYWELL SIZE) MAY BE DETERMINE WHEN THE ACTUAL HOUSE TYPE IS SITED ON THE INDIVIDUAL LOT.

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FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS ELLICOTT CITY, MARYLAND 21042



PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND,

LICENSE NO. 21476, EXPIRATION DATE: 7/14/17.

	APPROVED:	HOWARD COUN	TY DEPARTM	ENT OF PLAN	NING AND ZON	ling
	(et	Selva on of Land De	le.		~	9-11-15 Date
	Charl	Edula	•		<u> </u>	9.8.15
	Vall	opment Engine			\$	Date 9-11-115
		Department of	Planning a		-	Date
	PROJECT			550	TION	LOTS NO.
	CENTENNIAL	LAKE OVERLO	ok	· T	WO	42 THRU 69 & 60 THRU 96
OWNER/DEVELOPER	PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST	. CENSUS TR.
BEAZER HOMES, CORP. 8965 GUILFORD ROAD SUITE 209	23291-23298	2	R-20	30	SECOND	6023.04
COLUMBIA, MARYLAND 21046	WATER CODI	<u>.</u>		SEWER COD	Ē	

E-15

STORMWATER MANAGEMENT DETAILS, NOTES & BORING DETAILS SINGLE FAMILY DETACHED

SINGLE FAMILY DETACHED

CENTENNIAL LAKE OVERLOOK

SECTION TWO / PART TWO

LOTS 42 THRU 69, 80 THRU 98,

P/O OPEN SPACE LOTS 99, 103,

OPEN SPACE LOTS 100, 101, 102, 104, 105 & 106

PREVIOUS HOWARD COUNTY FILES: ECP-12-053, WP-13-096, 5P-13-004,

PB-399, F-14-002, F-14-001, F-14-00151, F-14-00152, F-14-00153

5DP-15-040, CONTRACT NO. 24-4764-D & 24-4917-D

PLAT NUMBERS: 23291 THRU 23290

TAX MAP NO.: 30 PARCEL NO.: 86 GRID NO.: 2

SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN DATE: AUGUST, 2015

SHEET 8 OF 9 SDP-15-0

SEWER CODE 7640000 SHEET 8 OF 9 5DP-15-066

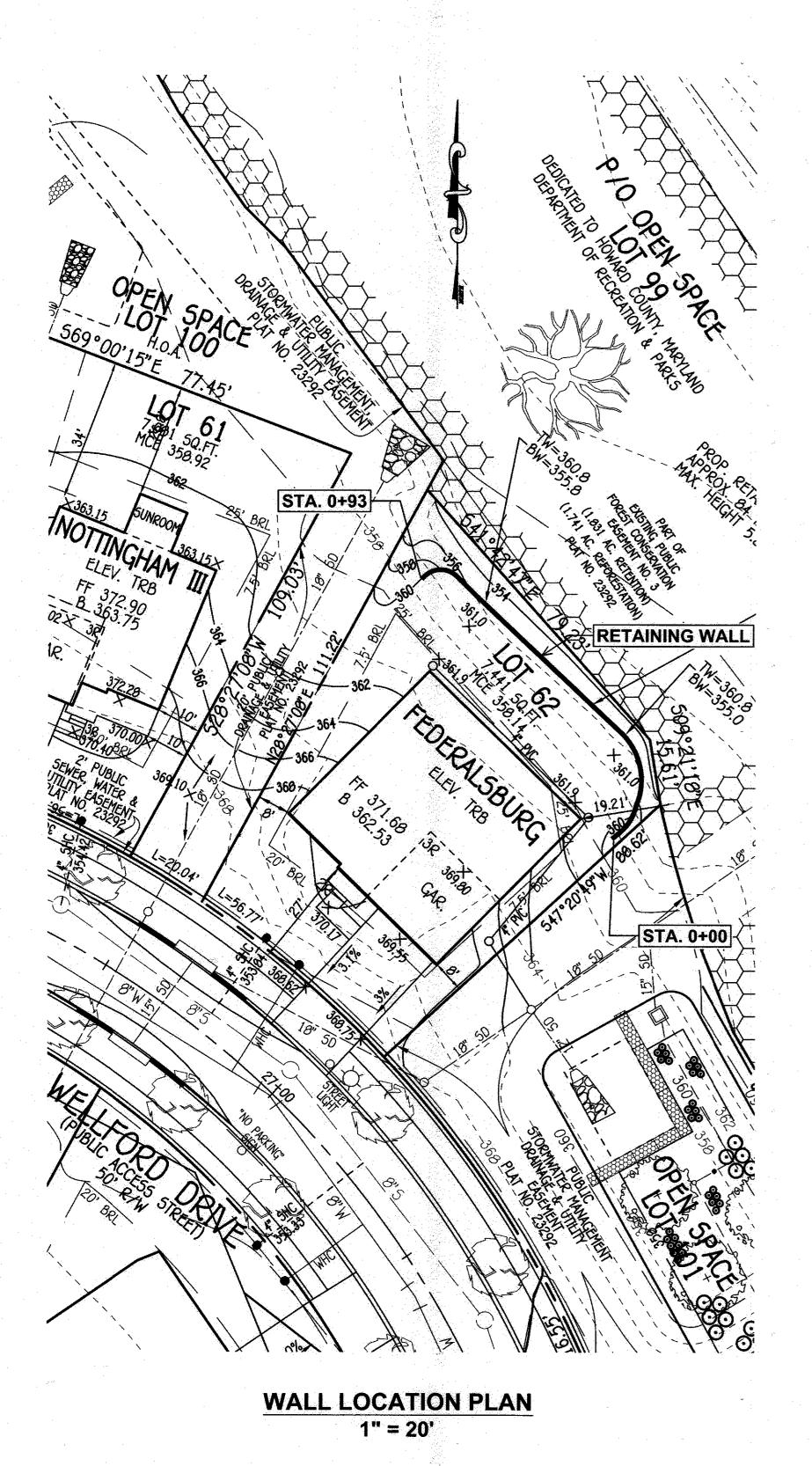
B-94 M-5 (266)

EXISTING ELEV. 381.25

BORING BOTTOM -371.25-

M-5 (26b) DRYWELL TOP 381.00

M-5 (26b) DRYWELL BOTTOM 376.00



REVISION

DATE

HILLIS-CARNES

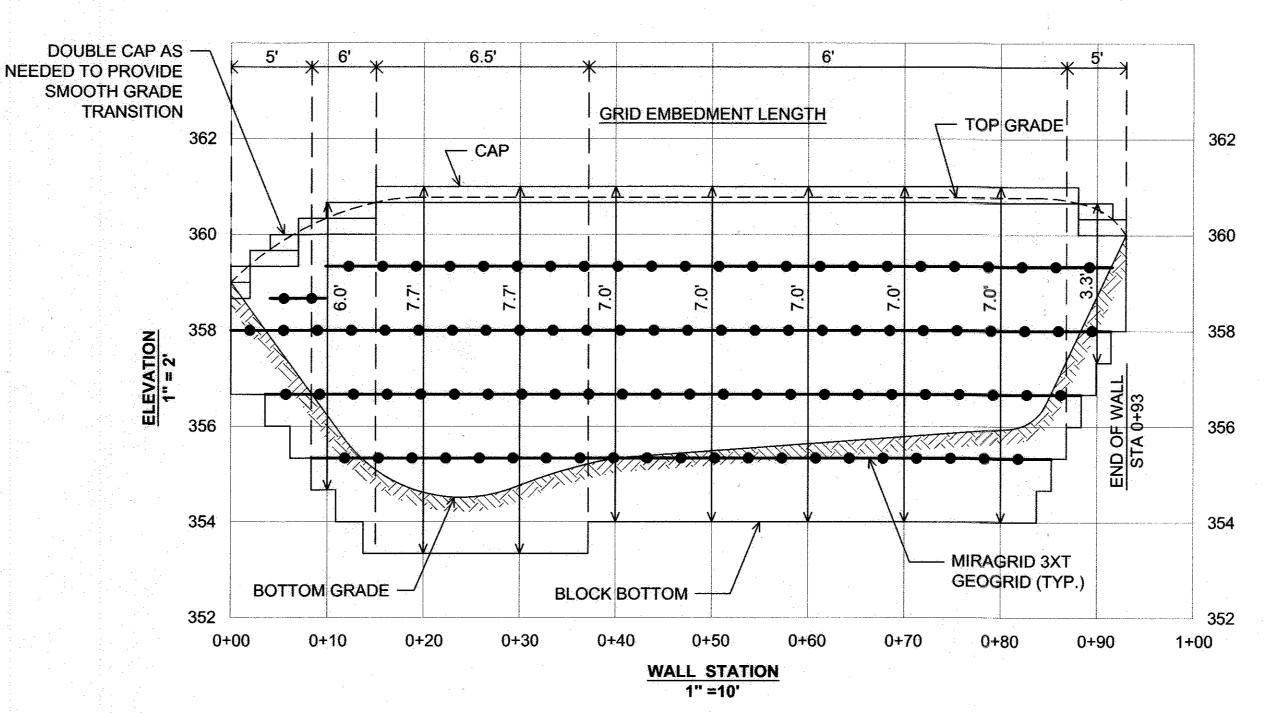
ENGINEERING ASSOCIATES

10975 Guilford Road, Suite A Annapolis Junction, Maryland

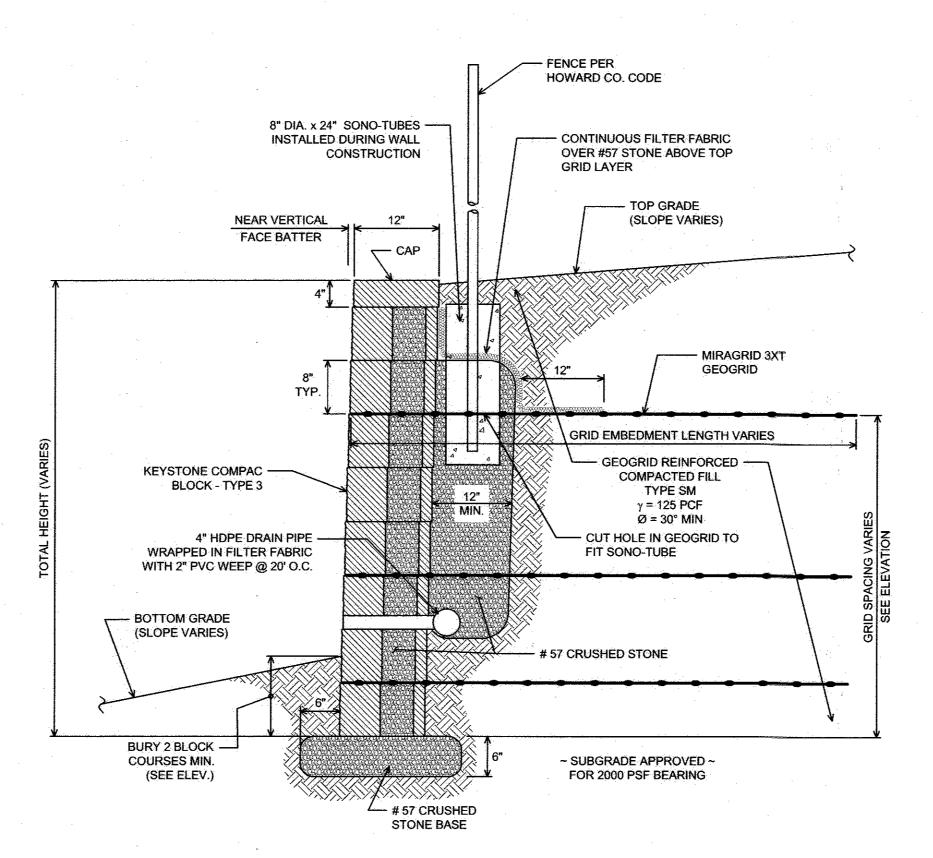
(410) 880-4788 WWW.HCEA.COM Fax: (410) 880-4098

17081-

AS SHOWN



WALL ELEVATION



TYPICAL WALL SECTION N.T.S.

SPECIFICATIONS MODULAR CONCRETE BLOCK RETAINING WALL

PART 1: GENERAL

1.01 DESCRIPTION

- A. WORK SHALL CONSIST OF FURNISHING AND CONSTRUCTION OF A MODULAR RETAINING WALL SYSTEM IN ACCORDANCE WITH THESE SPECIFICATIONS AND IN REASONABLY CLOSE CONFORMITY WITH THE LINES, GRADES, DESIGN, AND DIMENSIONS SHOWN ON THE PLANS.
- B. WORK INCLUDES PREPARING FOUNDATION SOIL, FURNISHING AND INSTALLING LEVELING PAD, UNIT DRAINAGE FILL AND BACKFILL TO THE LINES AND GRADES SHOWN ON THE CONSTRUCTION DRAWINGS
- C. WORK INCLUDES FURNISHING AND INSTALLING GEOGRID SOIL REINFORCEMENT OF THE TYPE, SIZE, LOCATION, AND LENGTHS DESIGNATED ON THE CONSTRUCTION DRAWINGS.

1.02 DELIVERY, STORAGE AND HANDLING

- A. CONTRACTOR SHALL CHECK ALL MATERIALS UPON DELIVERY TO ASSURE THAT THE PROPER TYPE, GRADE, COLOR, AND CERTIFICATION HAS BEEN RECEIVED.
- B. CONTRACTOR SHALL PROTECT ALL MATERIALS FROM DAMAGE DUE TO JOB SITE CONDITIONS AND IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. DAMAGED MATERIALS SHALL NOT BE INCORPORATED INTO THE WORK.

PART 2: PRODUCTS

2.01 MODULAR CONCRETE RETAINING WALL UNITS A. MODULAR CONCRETE UNITS SHALL CONFORM TO THE

FOLLOWING ARCHITECTURAL REQUIREMENTS:

FACE COLOR - COLOR MAY BE SPECIFIED BY THE OWNER FACE FINISH - SCULPTURED ROCK FACE IN ANGULAR TRI-PLANER OR FLAT CONFIGURATION, OTHER FACE FINISHES WILL NOT BE ALLOWED WITHOUT WRITTEN APPROVAL OF OWNER

BOND CONFIGURATION - RUNNING WITH BONDS NOMINALLY LOCATED AT MIDPOINT VERTICALLY ADJACENT UNITS, IN BOTH STRAIGHT AND CURVED ALIGNMENTS EXPOSED SURFACES OF UNITS SHALL BE FREE OF CHIPS,

CRACKS OR OTHER IMPERFECTIONS WHEN VIEWED FROM A DISTANCE OF 10 FEET UNDER DIFFUSED LIGHTING.

B. MODULAR CONCRETE MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C1372 - STANDARD SPECIFICATIONS FOR SEGMENTAL RETAINING WALL UNITS.

C. MODULAR CONCRETE UNITS SHALL CONFORM TO THE

FOLLOWING STRUCTURAL AND GEOMETRIC REQUIREMENTS MEASURED IN ACCORDANCE WITH APPROPRIATE REFERENCES: COMPRESSIVE STRENGTH = 3000 PSI MINIMUM; ABSORPTION = 8%

MAXIMUM (6% IN NORTHERN STATES) FOR STANDARD WEIGHT DIMENSIONAL TOLERANCES = ±1/8" FROM NOMINAL UNIT DIMENSIONS NOT INCLUDING ROUGH SPLIT FACE, ±1/16"

UNIT HEIGHT - TOP AND BOTTOM PLANES; UNIT SIZE - 8" (H) x 18"

(W) x 12" (D) MINIMUM; UNIT WEIGHT - 75 LBS/UNIT MINIMUM FOR STANDARD WEIGHT

INTER-UNIT SHEAR STRENGTH - 1000 PLF MINIMUM AT 2 PSI NORMAL PRESSURE; AT 2 PSI NORMAL FORCE. GEOGRID/UNIT PEAK CONNECTION STRENGTH - 1000 PLF

D. MODULAR CONCRETE UNITS SHALL CONFORM TO THE FOLLOWING CONSTRUCTABILITY REQUIREMENTS: (IF

VERTICAL SETBACK = 1/8"± PER COURSE (NEAR VERTICAL) OR 1"+ PER COURSE PER THE DESIGN; ALIGNMENT AND GRID POSITIONING MECHANISM - FIBERGLASS PINS, TWO PER UNIT

MAXIMUM HORIZONTAL GAP BETWEEN ERECTED UNITS SHALL BE

2.02 SHEAR CONNECTORS

A. SHEAR CONNECTORS SHALL BE 1/2 INCH DIAMETER THERMOSET ISOPTHALIC POLYESTER RESIN-PROTRUDED FIBERGLASS REINFORCEMENT RODS OR EQUIVALENT TO PROVIDE CONNECTION BETWEEN VERTICALLY AND HORIZONTALLY ADJACENT UNITS. STRENGTH OF SHEAR CONNECTORS BETWEEN VERTICAL ADJACENT UNITS SHALL BE APPLICABLE OVER A DESIGN TEMPERATURE OF 10 DEGREES F TO + 100 DEGREES F SHEAR CONNECTORS SHALL BE CAPABLE OF HOLDING THE GEOGRID IN THE PROPER DESIGN POSITION DURING GRID PRE-TENSIONING AND BACKFILLING.

2.03 BASE LEVELING PAD MATERIAL

A. MATERIAL SHALL CONSIST OF A COMPACTED #57 CRUSHED STONE BASE AS SHOWN ON THE CONSTRUCTION DRAWINGS

2.04 UNIT DRAINAGE FILL

2.05 REINFORCED BACKFILL

A. UNIT DRAINAGE FILL SHALL CONSIST OF #57 CRUSHED STONE

A. REINFORCED BACKFILL SHALL BE TYPE SM, BE FREE OF DEBRIS AND MEET THE FOLLOWING GRADATION TESTED IN ACCORDANCE WITH ASTM D-422 AND MEET OTHER PROPERTIES SHOWN ON THE

SIEVE SIZE	PERCENT PASSING
2 INCH	100-75
3/4 INCH	100-75
NO. 40	0-60
NO. 200	0-35

PLASTICITY INDEX (PI) <10 AND LIQUID LIMIT <35 PER ASTM D-4318. B. MATERIAL CAN BE SITE EXCAVATED SOILS WHERE THE ABOVE REQUIREMENTS CAN BE MÉT. UNSUITABLE SOILS FOR BACKFILL (HIGH PLASTIC CLAYS OR ORGANIC SOILS) SHALL NOT BE USED IN

THE REINFORCED SOIL MASS. 2.06 GEOGRID SOIL REINFORCEMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

A. GEOSYNTHETIC REINFORCEMENT SHALL CONSIST OF GEOGRIDS

MANUFACTURED SPECIFICALLY FOR SOIL REINFORCEMENT APPLICATIONS AND SHALL BE MANUFACTURED FROM HIGH TENACITY POLYESTER YARN.

2.07 DRAINAGE PIPE

A. THE DRAINAGE PIPE SHALL BE PERFORATED CORRUGATED HDPE PIPE MANUFACTURED IN ACCORDANCE WITH ASTM D-1248.

PART 3 EXECUTION 3.01 EXCAVATION

A. CONTRACTOR SHALL EXCAVATE TO THE LINES AND GRADES SHOWN ON THE CONSTRUCTION DRAWINGS. OWNER'S REPRESENTATIVE SHALL BE RESPONSIBLE FOR INSPECTING AND APPROVING THE EXCAVATION PRIOR TO PLACEMENT OF LEVELING MATERIAL OR FILL SOILS.

3.02 BASE LEVELING PAD

- A. LEVELING PAD MATERIAL SHALL BE PLACED TO THE LINES AND GRADES SHOWN ON THE CONSTRUCTION DRAWINGS, TO A MINIMUM THICKNESS OF 6 INCHES AND EXTEND LATERALLY A MINIMUM OF 6" IN FRONT AND BEHIND THE MODULAR WALL UNIT.
- LEVELING PAD SHALL BE PREPARED TO INSURE FULL CONTACT TO THE BASE SURFACE OF THE CONCRETE UNITS.

3.03 MODULAR UNIT INSTALLATION

- A. FIRST COURSE OF UNITS SHALL BE PLACED ON THE LEVELING PAD AT THE APPROPRIATE LINE AND GRADE. ALIGNMENT AND LEVEL SHALL BE CHECKED IN ALL DIRECTIONS AND INSURE THAT ALL UNITS ARE IN FULL CONTACT WITH THE BASE AND PROPERLY
- B. PLACE THE FRONT OF UNITS SIDE-BY-SIDE. DO NOT LEAVE GAPS BETWEEN ADJACENT UNITS. LAYOUT OF CORNERS AND CURVES SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- C. INSTALL SHEAR/CONNECTING DEVICES PER MANUFACTURER'S
- RECOMMENDATIONS. D. PLACE AND COMPACT DRAINAGE FILL WITHIN AND BEHIND WALL UNITS. PLACE AND COMPACT BACKFILL SOIL BEHIND DRAINAGE

FILL. FOLLOW WALL ERECTION AND DRAINAGE FILL CLOSELY

- WITH STRUCTURE BACKFILL MAXIMUM STACKED VERTICAL HEIGHT OF WALL UNITS, PRIOR TO UNIT DRAINAGE FILL AND BACKFILL PLACEMENT AND
- COMPACTION, SHALL NOT EXCEED THREE COURSES. 3.04 STRUCTURAL GEOGRID INSTALLATION
- A. GEOGRID SHALL BE ORIENTED WITH THE HIGHEST STRENGTH AXIS PERPENDICULAR TO THE WALL ALIGNMENT.
- B. GEOGRID REINFORCEMENT SHALL BE PLACED AT THE STRENGTHS, LENGTHS, AND ELEVATIONS SHOWN ON THE CONSTRUCTION DESIGN DRAWINGS OR AS DIRECTED BY THE
- C. THE GEOGRID SHALL BE LAID HORIZONTALLY ON COMPACTED BACKFILL AND ATTACHED TO THE MODULAR WALL UNITS. PLACE THE NEXT COURSE OF MODULAR CONCRETE UNITS OVER THE GEOGRID. THE GEOGRID SHALL BE PULLED TAUT, AND ANCHORED PRIOR TO BACKFILL PLACEMENT ON THE GEOGRID.
- GEOGRID REINFORCEMENTS SHALL BE CONTINUOUS THROUGHOUT THEIR EMBEDMENT LENGTHS AND PLACED SIDE-BY-SIDE TO PROVIDE 100% COVERAGE AT EACH LEVEL. SPLICED CONNECTIONS BETWEEN SHORTER PIECES OF GEOGRID OR GAPS BETWEEN ADJACENT PIECES OF GEOGRID ARE NOT PERMITTED.

3.05 REINFORCED BACKFILL PLACEMENT

- A. REINFORCED BACKFILL SHALL BE PLACED, SPREAD, AND COMPACTED IN SUCH A MANNER THAT MINIMIZES THE DEVELOPMENT OF SLACK IN THE GEOGRID AND INSTALLATION
- REINFORCED BACKFILL SHALL BE PLACED AND COMPACTED IN LIFTS NOT TO EXCEED 6 INCHES WHERE HAND COMPACTION IS USED, OR 8 - 10 INCHES WHERE HEAVY COMPACTION EQUIPMENT IS USED. LIFT THICKNESS SHALL BE DECREASED TO ACHIEVE THE REQUIRED DENSITY AS REQUIRED.
- C. REINFORCED BACKFILL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY AS DETERMINED BY ASTM D698. THE MOISTURE CONTENT OF THE BACKFILL MATERIAL PRIOR TO AND DURING COMPACTION SHALL BE UNIFORMLY DISTRIBUTED THROUGHOUT EACH LAYER AND SHALL BE + 3% TO - 3% OF
- D. ONLY LIGHTWEIGHT HAND-OPERATED EQUIPMENT SHALL BE ALLOWED WITHIN 3 FEET FROM THE TAIL OF THE MODULAR CONCRETE UNIT.
- E. TRACKED CONSTRUCTION EQUIPMENT SHALL NOT BE OPERATED DIRECTLY UPON THE GEOGRID REINFORCEMENT. A MINIMUM FILL THICKNESS OF 6 INCHES IS REQUIRED PRIOR TO OPERATION OF TRACKED VEHICLES OVER THE GEOGRID. TRACKED VEHICLE TURNING SHOULD BE KEPT TO A MINIMUM TO PREVENT TRACKS FROM DISPLACING THE FILL AND DAMAGING THE GEOGRID.
- RUBBER TIRED EQUIPMENT MAY PASS OVER GEOGRID REINFORCEMENT AT SLOW SPEEDS, LESS THAN 10 MPH. SUDDEN BRAKING AND SHARP TURNING SHALL BE AVOIDED.
- G. AT THE END OF EACH DAY'S OPERATION, THE CONTRACTOR. SHALL SLOPE THE LAST LIFT OF REINFORCED BACKFILL AWAY FROM THE WALL UNITS TO DIRECT RUNOFF AWAY FROM WALL FACE. THE CONTRACTOR SHALL NOT ALLOW SURFACE RUNOFF FROM ADJACENT AREAS TO ENTER THE WALL CONSTRUCTION

3.06 CAP INSTALLATION

A. CAP UNITS SHALL BE GLUED TO UNDERLYING UNITS WITH AN ALL-WEATHER ADHESIVE RECOMMENDED BY THE MANUFACTURER.

3.07 FIELD QUALITY CONTROL

A. THE OWNER SHALL ENGAGE INSPECTION AND TESTING SERVICES, INCLUDING INDEPENDENT LABORATORIES, TO PROVIDE QUALITY ASSURANCE AND TESTING SERVICES DURING CONSTRUCTION.

AS A MINIMUM, QUALITY ASSURANCE TESTING SHOULD INCLUDE FOUNDATION SOIL INSPECTION, SOIL AND BACKFILL TESTING, VERIFICATION OF DESIGN PARAMETERS, AND OBSERVATION OF CONSTRUCTION FOR GENERAL COMPLIANCE WITH DESIGN DRAWINGS AND SPECIFICATIONS.

5.22-17 SINGLE FAMILY DETACHED
NIAL LAKE OVERLOOK SECTION TWO / PART TWO LOTS 42 THRU 69, 80 THRU 98.

RETAINING WALL CONSTRUCTION DETAILS

P/O OPEN SPACE LOTS 99, 103,
OPEN SPACE LOTS 100, 101, 102, 104, 105 & 106
PREVIOUS HOWARD COUNTY FILES: ECP-12-053, WP-13-096, SP-13-004,
PB-399, F-14-002, F-14-081, F-14-081S1, F-14-081S2, F-14-081S3, SDP-15-040, CONTRACT NO. 24-4764-D & 24-4917-D PLAT NUMBERS: 23291 THRU 23298

TAX MAP NO.: 30 PARCEL NO.: 86 GRID NO.: 2

SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: AS SHOWN DATE: APRIL, 2017 SHEET 9 OF 9

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS 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. 14434, EXPIRATION DATE: 05/13/19.



5.17.17 5-22-17 LOTS NO. CENTENNIAL LAKE OVERLOOK TWO/TWO OWNER/DEVELOPER BLOCK NO. ZONE TAX/ZONE | ELEC. DIST. CENSUS TR BEAZER HOMES, CORP. 23291-23298 R-20 SECOND 6023.04 8965 GUILFORD ROAD SUITE 209 WATER CODE COLUMBIA, MARYLAND 21046 SEWER CODE 410-720-5071 E-15 7640000 ATTN: MR. BRIAN A. KNAUFF