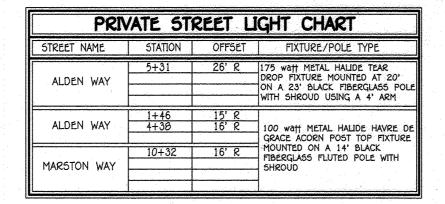
SHEET INDEX							
SHEET NO.	DESCRIPTION						
1	TITLE SHEET						
2	BUILDING ELEVATIONS						
3	SITE DEVELOPMENT PLAN						
4-5	STORMWATER MANAGEMENT NOTES AND DETAILS						
6-9	STORMWATER MANAGEMENT PLAN VIEWS						
10	SEDIMENT AND EROSION CONTROL PLAN						
11-12	SEDIMENT AND EROSION CONTROL NOTES AND DETAILS						
13	STREET TREE AND LANDSCAPE PLAN						
14	LANDSCAPE NOTES AND DETAILS						
15-16	STORM DRAIN PROFILES						
17	ROADWAY DETAILS						
18	SITE DETAILS						
19	DRAINAGE AREA MAP						
20	METES & BOUNDS PLAN						
21-22	GREEN NEIGHBORHOOD PLANS						
23	WATER & SEWER MAIN EXTENSIONS						
24	RESIDENTIAL DEVELOPMENT AREA ANALYSIS PLAN						
25	BUILDING & GARAGE FLOOR PLANS						
26	COURTYARD TIER STEPPED ESD PLAN AND SECTIONS						
↑ 27	SEDIMENT AND EROSION CONTROL PLAN						

	ROAD	CLASSIFICATION C	CHART	
	ROAD NAME	CLASSIFICATIO	N	PAVING WIDTH
	ALDEN WAY	PRIVATE ACCESS S		22'
	MARSTON WAY NBURY DRIVE (EX.)	PRIVATE ACCESS S PUBLIC ACCESS S		22'
CR	POWLEY DRIVE (EX.)	PUBLIC ACCESS S	STREET	22'

	PRIVATE :	STREET SIGN	CHART	
STREET NAME	STATION	N OFFSET	POSTED SIGN	SIGN CODE
ALDEN WAY	0+26	20' L	STOP	R1-1
MARSTON WAY	10+06	16' R	STOP TRUCKS OVER 3/4 T NO RIGHT TURN	R1-1 R12-5(5)
ALDEN WAY	5+27	20' R	STOP	R1-1

	PUBLIC ST	reet sign	CHART	
STREET NAME	STATION	OFF5ET	POSTED SIGN	SIGN CODE
BANBURY DRIVE	24+81	18' R	5TOP	R1-1

FISHER, COLLINS & CARTER, INC.



OXFORD SQUARE

PROJECT TARGET ESDVol. = 393,713 cu. ft. (per 5-15-001)

PROJECT TARGET REV = 20,003 cu. ft. (per 5-15-001)

Individual Plan Reference

Final Road F-12-026

Final Road F-13-095 Final Road F-14-011

Final Road F-15-008

Final Road F-15-000 Lennar 50P-13-068

Lennar SDP-14-019

Lennar 50P-14-071 Lennar 50P-14-072

Woodfields SDP-14-027

* River Overlook 5DP-16-052

School Parcel

ZONED: TOD

ADDED ONE (1) PARKING SPACE IN GARAGE, REVISED LANDSCAPE SURETY & ADDED NEW SHEET

* This Plan-Dartmoor SDP-15-053

Corner Retail 5DP-14-004

* 50P-16-013 Elem. School No. 42

STORMWATER MANAGEMENT TRACKING CHART

GREEN NEIGHBORHOOD F3-b REV Target (51% of baseline WQV) for 6 pts. = 105,681 cu. ft.

3275

29654

16385

* The Attic Retail 50P-16-051 10507 11327 6036

* DENOTES PLAN CURRENTLY UNDER REVIEW AND/OR CONSTRUCTION THUS SUBJECT TO CHANGE.

13833

6177

11495

33881

24669

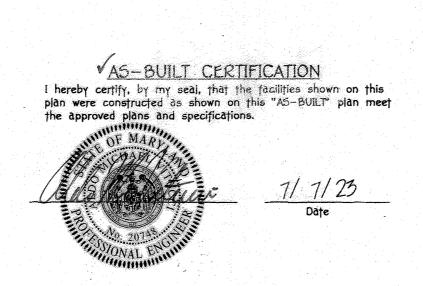
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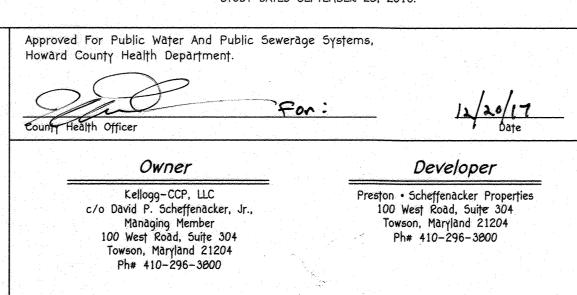
15719

7004

	LEGEND
<u> </u>	LEGEND
SYMBOL	DESCRIPTION
102	EXISTING CONTOUR 2' INTERVAL
100	EXISTING CONTOUR 10' INTERVAL
 102	PROPOSED CONTOUR 2' INTERVAL
100	PROPOSED CONTOUR 10' INTERVAL
- 5F5F-	SILT FENCE
	DRAINAGE LIMITS
L.O.D.	LIMIT OF DISTURBANCE
	EXISTING TREELINE
	WETLANDS BUFFER
	WETLANDS LIMITS
— FP ——	FLOODPLAIN LIMITS
	PROPOSED CROSSWALK
E5D #E-1 ===	STORMWATER MANAGEMENT DEVICE
0	STORM DRAIN
\$ \$	STREET LIGHT (proposed) STREET LIGHT (existing)
\odot	STREET TREE (proposed)
	STREET TREE (existing)
	PROPOSED GARDEN BENCH
8	PROPOSED BRICK PEIR & SITE WALL
Eme	PROPOSED MAILBOX BANK
6-12A	BORING LOCATION
	PROPOSED WHC
	PROPOSED SHC

10/7/21 12/6/17





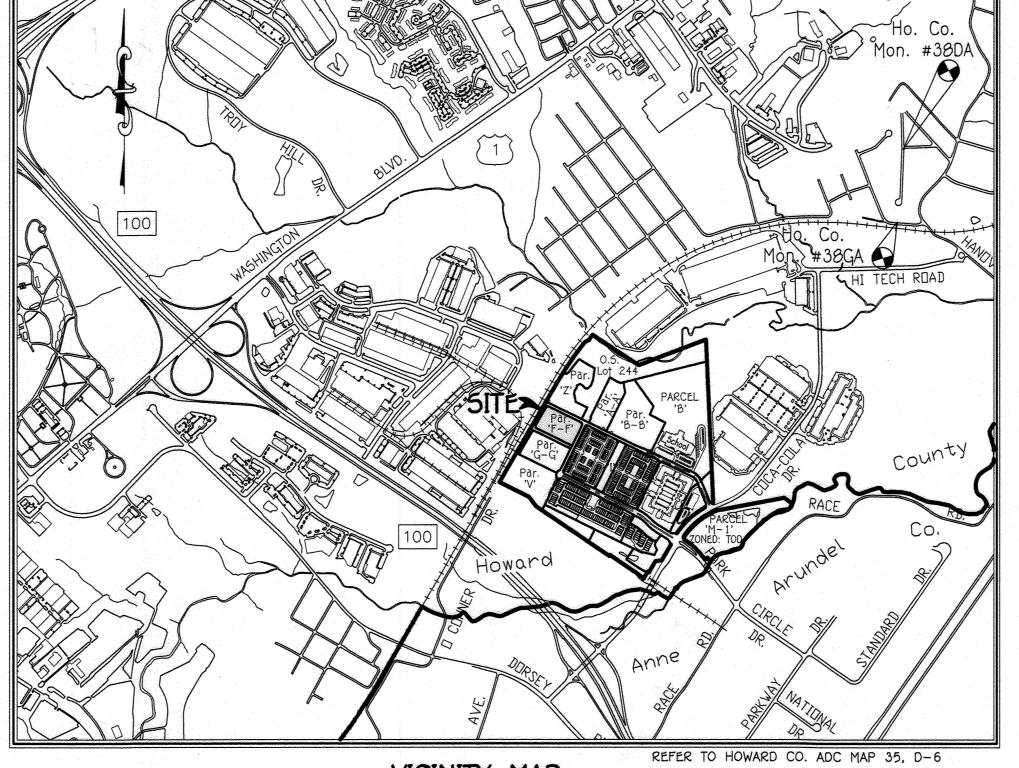
SITE DEVELOPMENT PLAN OXFORD SQUARE

"A Howard County Green Neighborhood"

PARCEL 'F-F' & OPEN SPACE LOT 377 "DARTMOOR PLACE"

ZONED: TOD

TAX MAP No. 38 GRID No. 20 PARCEL No. 761



FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

	LAND USE (PARCEL 'F-F')	MINIMUM PARKING REQUIRED	PARKING PROVIDED
	APARTMENTS (250 @ 2.0 SPACES / UNIT) OVERFLOW PARKING = 0.3 PARKING SPACES PER UNIT	516 77	8 ON-STREET SPACES (PUBLIC) CROWLEY STREET 3 ON-STREET SPACES (PRIVATE) ALDEN WAY A 499 GARAGE SPACES (Includes 12 hdcp & 25 fuel efficent
	TOTAL	593	510
AS-BUILT SURVE			RATIO PROVIDED = 1.97 P.S. PER UNIT
THE INSTRUMENTS	USED IN PERFORMING AS-BUILT SURVEY IC TOTAL STATION & PRISM		NOTE: DPZ AUTHORIZED A PARKING SPACE REDUCTION BASED ON A PARKING NEEDS STUDY DATED SEPTEMBER 20, 2016.

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.

2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS / BUREAU OF ENGINEERING / CONSTRUCTION INSPECTION DIMSION AT 410-313-1860 AT LEAST (5) WORKING DAYS PRIOR TO THE START OF WORK.

3. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-900-257-7777 AT LEAST 49 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.

4. THIS SUBDIVISION PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REQUIATIONS AND THE 10-06-13 ZONING REQUIATIONS PER COUNCIL BILL NO. 32-2013. DEVELOPMENT OR CONSTRUCTION ON THESE LOTS OR PARCELS MUST COMPLY WITH SETBACKS AND BUFFER REQULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF A BUILDING OR GRADING PERMIT APPLICATION.

5. COORDINATES BASED ON NAD'83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 38DA AND NO. 38GA N 555,796.3221 E 1,390,221.4576 Elev. = 126.08 AS - BUILT

6. SUBJECT PROPERTY ZONED TOD PER ZB-1066 M DATED 9/13/10, ZRA-140 DATED 8/1/12 and ZB-1102 M.

a. SUBDIVISION NAME: OXFORD SQUARE - PARCEL 'F-F' (Formerly 'X') & OPEN SPACE LOT 377

b. TAX MAP NO.: 44 c. PARCELS NOS.: 761

d. ZONING: TOD e. ELECTION DISTRICT: FIRST

f. GROSS AREA OF THIS SUBMISSION = 4.707 ACRES (PARCEL 'F-F' & O.S. LOT 377)

b. "MODERATELY INCOME HOUSING UNITS" ARE REQUIRED WITH THIS SUBDIMISION

a. NUMBER OF PARCELS: 1 h. NUMBER OF OPEN SPACE LOTS: 1 i. AREA OF PARCELS: 3.625 ACRES j. AREA OF NON-CREDITED OPEN SPACE LOTS = 0

k. AREA OF PUBLIC ROADWAY TO BE DEDICATED: 0.00 ACRES
1. PREVIOUS FILE NUMBERS: 5-07-066, P-07-070, F-00-055, F-09-005, 5DP-09-275, F-90-125, F-91-069, 5DP-90-041, F-93-023, 5DP-93-055, ZB-1006M, WP-11-130, F-11-057, WP-11-147, 5-11-001, ECP-11-046, 5DP-12-075, F-12-026, F-13-095, F-13-100, ZB-1102 M, 5-15-001, 5DP-13-060, F-14-011, 5DP-14-004, 5DP-14-019, 5DP-14-027, 5DP-14-071, 5DP-14-072, F-15-000, F-15-000 & 5DP-15-052. m. AREA OF FLOODPLAIN = 0.00 AC. + (THIS SUBMISSION)

9. TOTAL NUMBER OF "MODERATELY INCOME HOUSING UNITS" PROVIDED UNDER THIS PLAN (SDP 15-053) = 250 UNITS x 0.15 = 39 MIHU.

4. "THE MODERATE INCOME HOUSING UNIT (MIHU) DECLARATION OF COVENANTS AND RESTRICTIONS WAS RECORDED IN THE HOWARD COUNTY LAND RECORDS IN LIBER 17050, FOLIO 369. THE MIHU AGREEMENT WAS SIGNED BY THE DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT ON 10/6/17."

8. AMENITY REQUIREMENTS: T.O.D. DEVELOPMENT SHALL INCLUDE AN AMENITY AREA PER SECTION 127.4.F.I. OF THE ZONING REGULATIONS AND THE ROUTE 1 MANUAL A. AMENITY AREA REQUIRED: 10.751 ACRES FOR THE ENTIRE PROJECT (107.513 x 10%)

b. TOTAL AMENITY AREA PROVIDED: = 0.00 ac. #/THIS SDP (2.01 ac. UNDER SDP-16-052, 6.60 ac. UNDER SDP-12-075, 1.57 ac. UNDER SDP-13-060, 0.42 ac. UNDER SDP-14-004, 1.07 AC. UNDER SDP-14-019, 0.70 ac. UNDER SDP-14-027, 0.45 ac. UNDER SDP-14-072 & 1.72 AC. UNDER SDP-14-071) = 14.62 ac. + total

9. ALL FILL AREAS WITHIN ROADWAYS AND UNDER STRUCTURES SHALL BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF AASHTO T-180. 10. NOISE STUDY WAS PREPARED BY MARS GROUP DATED SEPTEMBER, 2009 AND AMENDED AS PART OF THE 5-15-001 SKETCH PLAN. THE 650BA NOISE CONTOUR LINE DRAWN ON THIS PLAN IS ADVISORY AS REQUIRED BY THE HOWARD

COUNTY DESIGN MANUAL CHAPTER 5, REVISED FEBRUARY, 1992, AND CANNOT BE CONSIDERED TO EXACTLY LOCATE THE 650BA NOISE EXPOSURE. THE 650BA NOISE LINE WAS ESTABLISHED BY HOWARD COUNTY TO ALERT DEVELOPERS, BUILDERS AND FUTURE RESIDENTS THAT AREAS BEYOND THIS THRESHOLD MAY EXCEED GENERALLY ACCEPTED NOISE LEVELS ESTABLISHED BY THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT. A MITIGATION REPORT IS BEING PRODUCED TO ACCOMPANY THE ARCHITECTURAL REVIEW PLAN SET. 11. EXISTING WATER IS PUBLIC (CONTRACT NO. 14-4923-D) EXISTING SEWER IS PUBLIC (CONTRACT NO. 14-4923-D)

12. SOILS INFORMATION TAKEN ECS SOIL SURVEY DATED NOVEMBER 2, 2009. THE PROPERTY LIES WITHIN THE DEEP RUN TRIBUTARY TO THE PATAPSCO RIVER WATERSHED (2130906). MOST OF THE PARCEL 'Q' CONSISTS OF OVERGROWN FIELD HABITAT THAT DEVELOPED ON A PORTION OF THE SITE THAT WAS MASS GRADED IN THE LATE 1980'S. IT IS DUE TO THIS PREVIOUSLY MASS GRADED CONDITION THAT THE NORMAL HOWARD COUNTY SOIL SURVEY MAPS DATED JULY 1960 DO NOT APPLY. AS A RESULT OF THIS SITE CONDITION, THE OWNER/DEVELOPER HAVE CONTRACTED ECS-MID ATLANTIC, LLC OF HANOVER, MARYLAND. THE SOIL REPORT IS DATED NOVEMBER 2009 WITH AN ADDENDUM DATED

13. BOUNDARY OUTLINE BASED ON FIELD RUN SURVEY PERFORMED BY FISHER COLLINS AND CARTER, INC. DATED OCTOBER, 2009. 14. TOPOGRAPHIC CONTOURS BASED ON AERIAL SURVEY PERFORMED BY HARFORD AERIAL SURVEYS, INC. DATED JANUARY, 2006 AND SUPPLEMENTED WITH FIELD RUN TOPOGRAPHY PREPARED BY FISHER, COLLINS AND CARTER, INC. DATED

15. THE MARYLAND AVIATION ADMINISTRATION (MAA) APPROVED THIS PLAN ON 9/7/17 FOR SEDIMENT AND EROSION CONTROL, STORMWATER MANAGEMENT AND LANDSCAPING, PRIOR TO THE ISSUANCE OF ANY BUILDING PERMIT, AN APPROVED AIRPORT ZONING PERMIT MUST BE OBTAINED. THE MAA ALSO DETERMINED THAT ALTHOUGH OUTSIDE THE AIRPORT NOISE ZONE, OCCUPANTS OF THIS SUBDIVISION WILL EXPERIENCE NOISE FROM AIRCRAFT OVERFLIGHTS AND

16. STORMWATER MANAGEMENT WILL BE PROVIDED IN ACCORDANCE WITH THE 2007 MDE, CHAPTER 5 REQUIATIONS AND THE LATEST HOWARD COUNTY DESIGN MANUAL, VOL. I, CHAPTER 5 ADOPTED ON OR AROUND MAY 4, 2010.
RECHARGE VOLUME WILL BE PROVIDED THROUGH THE USE OF A STONE RESERVOIRS. WATER QUALITY AND CHANNEL PROTECTION VOLUME WILL BE PROVIDED BY 9 MICRO BIO-RETENTION FACILITIES, 9 MICRO BIO-RETENTION TIERED STEP POOL FACILITIES. OVERBANK FLOOD PROTECTION VOLUME AND EXTREME FLOOD VOLUMES ARE NOT REQUIRED FOR THIS SITE.

STORMWATER MANAGEMENT OWNERSHIP & MAINTENANCE

all stormwater management facilities will be privately owned and maintained by the oxford square commercial association, inc. The street EES, PERFORATED UNDERDRAINS, FEEDERS, PLANTINGS AND SWALES WILL ALSO BE PRIVATELY OWNED AND MAINTAINED BY THE OXFORD SQUARE COMMERCIAL ASSOCIATION. HOWARD COUNTY WILL ONLY MAINTAIN THE INLET STRUCTURE WITHIN THE MICRO BIO-RETENTION FACILITIES ADJACENT TO A PUBLIC RIGHT-OF-WAY

17. SEVERAL SPECIMEN TREES ARE KNOWN TO BE LOCATED WITHIN THE EXISTING FOREST, HOWEVER, NONE EXIST WITHIN THE LIMITS OF FOREST TO BE REMOVED.

18. FLOODPLAIN LIMITS SHOWN FOR THE OVERALL OXFORD SQUARE PROJECT WAS PREPARED BY WHITMAN REQUARDT AND ASSOCIATES AND IS DELINEATED ON PLAT 9924 (F-91-069). FOR THE LIMITS OF THIS SUBMISSION, NO FLOODPLAIN LIMITS ARE DELINEATED.

19. THE FOREST CONSERVATION ACT REQUIREMENTS FOR THIS PROJECT HAVE BEEN MET WITH OXFORD SQUARE PLAN F-15-008. 20. THE FOREST STAND DELINEATION AND WETLAND DELINEATION FOR THIS PROJECT WAS PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. DATED MARCH 17, 2011 AND APPROVED UNDER 5-11-001

& ECP-11-046. A NEW FOREST STAND DELINEATION AND WETLAND DELINEATION PLAN WAS PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. DATED AUGUST, 2014 WAS SUBMITTED WITH THE F-15-008 PLAN AND APPROVED ON NOVEMBER 19, 2015.

21. THIS PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT.

22. NO CEMETERIES OR HISTORIC STRUCTURES EXIST WITHIN THIS SUBDIVISION.

23. STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURES AND POLES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME II (2006), SECTION 5.5.A. A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY STREET TREE.

a) THE R1-1 (STOP) SIGNS AND THE STREET NAME SIGN (SNS) ASSEMBLIES FOR THIS DEVELOPMENT MUST BE INSTALLED BEFORE THE BASE PAVING IS COMPLETED. b) THE TRAFFIC CONTROL DEVICE LOCATIONS (SIGNS & PAVING MARKINGS) SHOWN ON THE PLANS ARE APPROXIMATE AND MUST BE FIELD APPROVED BY THE HOWARD COUNTY TRAFFIC DIVISION (410-313-5752) PRIOR TO THE c) ALL TRAFFIC CONTROL DEVICES AND THEIR LOCATIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MIGMUTCD) d) all sign posts used for traffic control signs installed in the county right-of-way shall be mounted on a 2" galvanized steel, perforated, square tube post (14 gauge) inserted into a 2-1/2" galvanized steel, perforated, square tube sleeve (12 gauge) - 3' long. A galvanized steel pole cap shall be mounted on top of each post.

25. THE INITIAL TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY THE TRAFFIC GROUP, DATED MARCH 2011 FOR 5-11-001 AND UPDATED FOR 5-15-001 IN JUNE, 2013. PER THIS STUDY, ONCE THE TOTAL WEEKDAY EVENING PEAK HOUR TRIP GENERATION EXCEEDS 1100 TRIPS, THE ULTIMATE ROAD IMPROVEMENTS ARE NEEDED AT THE INTERSECTION OF COLA COLA DRIVE & PARK CIRCLE DRIVE, AN ADEQUATE ROAD RE-EVALUATION WILL BE PREFORMED FOR PARK CIRCLE DRIVE & COCA COLA DRIVE IN 2017 FOR EVENING PEAK HOUR.

26. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE WETLANDS, STREAMS, THEIR REQUIRED BUFFERS OR THEIR EXTENDED GREEN NEIGHBORHOOD BUFFERS, UNLESS THE ACTIVITIES ARE CONSIDERED NECESSARY OR WAIVERS ARE APPROVED BY THE DEPARTMENT OF PLANNING AND ZONING, ACTIVITIES PROPOSED IN WETLANDS, STREAMS, THEIR BUFFERS, AND THEIR EXTENDED GREEN NEIGHBORHOOD BUFFERS AS PART OF THE APPROVED STREAM AND WETLAND RESTORATION AND HABITAT MANAGEMENT PLANS ARE CONSIDERED NECESSARY BY THE DEPARTMENT OF PLANNING AND ZONING. 27. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING TREES 92 SHADE TREES (39 SHADE TREES + [45 ORNAMENTALS + 1 EVERGREENS] /2 + 300 SHRUBS /10) SHALL BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$27,600.

28. ON JANUARY 13, 2012, A LETTER WAS RECEIVED FROM HOWARD COUNTY PLANNING AND ZONING REGARDING A DESIGN MANUAL WAIVER FOR THE FOLLOWING SECTIONS OF DMV III (AS IT PERTAINS TO 5-11-001);
2.2.G. (BUS STOP TURNOUT LANE), SECTIONS 2.3.A.1.a (MINIMUM RADIUS BASED ON DESIGN SPEED), 2.3.A.3.c (HORIZONTAL DESIGN/DIVIDED HIGHWAYS), 2.4.B.1&2 (RIGHT-OF-WAY WIDTH & PAVEMENT WIDTH AND CROSS SLOPE), 2.5.B.1&4
(INTERSECTION SPACING & MINIMUM CURVATURE), 2.6.D. (SPACING AND CORNER CLEARANCE), 2.9.B. (OVERFLOW GUEST PARKING), 2.9.C. (24' DIVE LANE WIDTH), AND 2.10.E. (REFUSE STORAGE AREA LOCATION). THE FOLLOWING ARE THE

2) SECTION 2.3.A.1.a., DESIGN SPEED/MINIMUM RADII - REQUEST TO REDUCE THE DESIGN SPEED FROM 40 MPH TO 30 MPH (POSTED SPEED = 25 MPH) WAS APPROVED. THE REQUEST TO REDUCE MINIMUM CENTERLINE RADII WAS DECISION WAS APPROVED SUBJECT TO THE REQUIRED SIGHT DISTANCE EASEMENT BEING ADDED AS PART OF PHASE 2.

(3) SECTION 2.3.A.3.c., DIVIDED ROADWAYS - REQUEST MODIFICATIONS TO ALLOW DIVIDED ROADWAY ON A MAJOR COLLECTOR AND REDUCTION OF MEDIAN WIDTH FROM 16' TO 14'. THESE REQUESTS ARE ACCEPTABLE WITH THE SWM DEVICES WITHIN THE ISLANDS TO BE MAINTAINED BY HOA OR COMMERCIAL ASSOC. ALONG SAINT MARGARETS BLVD. THE MEDIAN FOR BANBURY DRIVE WAS APPROVED SUBJECT TO ADJUSTING MEDIAN GRADES TO PROVIDE A SUMP CONDITION. THIS) SECTION 2.5, TABLE 2.08, CURB FILLET RADIUS-REQUEST A REDUCTION IN THE MINIMUM CURB FILLET RADII WAS APPROVED FOR SAINT MARGARETS LANE AND BANBURY DRIVI (6) SECTION 2.6.D., DRIVEWAY SPACING AND CORNER CLEARANCE-REQUEST THAT THE CORNER CLEARANCE BE REDUCED FROM 75' TO 25' AND SPACING BETWEEN INTERSECTIONS BE REDUCED FROM 250' TO 100'. THE SPACING BETWEEN INTERSECTIONS REDUCTION TO 100' IS ACCEPTABLE. THE CORNER CLEARANCE REDUCTION TO 25' IS ACCEPTABLE. (9) SECTION 2.9, TABLE 2.11, OVERFLOW/GUEST PARKING-REQUEST THAT OFF-SITE PARKING BE REDUCED FROM 2.3 SPACES PER DWELLING UNIT TO 2.0 SPACES PER DWELLING UNIT. THIS REQUEST WAS DEFERRED UNTIL FUTURE SITE PLAN PHASE ON A PARCEL BASIS. 10) SECTION 2.10.E., SOLID WASTE STORAGE LOCATION-REQUEST THAT THE DISTANCE FROM A CENTRALIZED REFUSE STORAGE AREA TO A MULTI-FAMILY AREA BE INCREASED FROM 200' TO 300'. APPROVAL WAS GRANTED

12) SECTION 5.5.A.2, STREET LIGHT LOCATION HAS BEEN APPROVED BASED ON MEETINGS WITH B.G.&E. AND HOWARD COUNTY DPW - TRAFFIC ENGINEERING. 29. IN ACCORDANCE WITH THE DESIGN MANUAL WAIVERS OUTLINED IN GENERAL NOTE No. 28 FOR REDUCED PUBLIC ROAD R/W, ALL PUBLIC ROADS SHALL PROVIDE A "PUBLIC SIGNAGE, STREET LIGHT AND UTILITY EASEMENT

) SECTION 2.9.C., OFF STREET PARKING LOTS-REQUEST THAT THE MINIMUM AISLE WIDTHS BETWEEN ROWS OF PARKING BE REDUCED FROM 24' TO 22'. DED HAS DENIED THIS REQUEST.

30. STREAM AND WETLAND RESTORATION AND THE HABITAT MANAGEMENT PLAN PER 5-15-001 SHALL BE IMPLEMENTED BY APRIL 9, 2018. A COPY OF THE JOINT FEDERAL/STATE APPLICATION FOR AUTHORIZATION OF REGULATED ACTIVITIES ASSOCIATED WITH THE STREAM AND WETLAND RESTORATION AND HABITAT MANAGEMENT PLAN WAS SUBMITTED TO DPZ AS PART OF THE SITE DEVELOPMENT PLAN (SDP-14-019) APPLICATION ASSOCIATED WITH CONSTRUCTION OF THE 190th RESIDENTIAL UNIT. THIS PERMIT WAS SUBMITTED WITH SDP-14-019. 31. THIS PLAN IS SUBJECT TO WAIVER PETITION WP-11-147 TO WAIVE SUBSECTIONS 16.144(g) AND 16.144(u) OF THE HOWARD COUNTY CODE. THIS ACTION RELIEVES THE REQUIREMENT TO SUBMIT A PRELIMINARY SUBDIVISION PLAN OR A PRELIMINARY EQUIVALENT SKETCH PLAN FOLLOWING 5-11-001 IN ORDER TO RECEIVE A GREEN NEIGHBORHOOD ALLOCATION. WAIVER PETITION WP-11-147 WAS APPROVED ON APRIL 27, 2011 BY THE DEPARTMENT OF PLANNING AND

32. A PRIVATE ROAD STREET NAME SIGN ASSEMBLY FOR ALL PRIVATE ROADWAYS THAT INTERSECT A PUBLIC ROADWAY SHALL BE FABRICATED AND INSTALLED BY HOWARD COUNTY BUREAU OF HIGHWAYS AT THE DEVELOPERS/OWNERS

34. NO BALCONIES CAN BE CONSTRUCTED WITHIN THE LIMITS OF THE 65 dBa NOISE LINE

35. THE PREVIOUS SDP-15-052 FOR 60 APARTMENT UNITS WAS VOIDED ON JANUARY 21, 2016. THE 60 ALLOCATIONS WERE TRANSFERED TO THIS SDP PLAN.

36. THE COUNTY SHALL BEAR ABSOLUTELY NO RESPONSIBILITY FOR THE RECONSTRUCTION, REPAIR OR REMEDIAL MAINTENANCE REQUIRED DUE TO ANY DAMAGE TO PRIVATE UTILITIES INCLUDING, BUT NOT LIMITED TO STORM DRAINS, STORM DRAIN STRUCTURES (e.g. INLETS AND MANHOLES), MICRO BIO-RETENTION FACILITIES AND OTHER PRIVATE SYSTEMS OR FEATURES RESULTING FROM OR INCURRED DURING MAINTENANCE AND/OR REPAIR OF THE PUBLIC WATER, SEWER OR UTILITIES, ANY COST INCURRED BY THE COUNTY THAT IS ASSOCIATED WITH RECONSTRUCTION OF PRIVATE UTILITIES AND STRUCTURES FOLLOWING MAINTENANCE OF THE PUBLIC UTILITIES, BY THE COUNTY, SHALL BE THE RESPONSIBILITY OF THE OWNER OR ITS SUCCESSORS OR ASSIGNS. THE AFOREMENTIONED INCLUDES PRIVATE UTILITIES AND/OR STRUCTURES PERMITTED WITHIN THE EASEMENT OR WITHIN 10 FOOT EASEMENT SETBACK VIA APPROVED WAIVER FROM THE

PERMANENT STRUCTURE AND THE EDGE OF A PUBLIC UTILITY EASEMENT. THIS WAIVER WAS APPROVED ON DECEMBER 28, 2016 TO ALLOW THE FOLLOWING

OF WHICH LIES WITHIN THE 10' EASEMENT SETBACK AND THE OTHER HALF WHICH ENCROACHES 5'* INTO AN EXISTING PUBLIC SEWER & UTILITY

B. INSTALLATION OF A PRIVATE STORM DRAIN SYSTEM, INCLUDING FIVE (5) MANHOLES, WHICH PARALLELS A PROPOSED & WATER MAIN FOR APPROX

HICH WILL LIE 1' OUTSIDE OF THE 20' PUBLIC WATER & UTILITY EASEMENT, ESSENTIALLY ENCROACHING 9' INTO THE PUBLIC UTILITY	STREET	ADDRESS CHART	
	BLDG. No.	STREET ADDRESS	11
PROVAL OF THIS SITE DEVELOPMENT PLAN DOES NOT ENSURE APPROVAL OF BUILDING PERMIT APPLICATIONS ASSOCIATED WITH THIS AIN FACILITIES TO BE CONSTRUCTED WITHIN THE LIMITS DESCRIBED BY THIS PLAN WILL REQUIRE REVIEW AND APPROVAL BY THE HEALTH SILTIES MAY INCLUDE, BUT ARE NOT LIMITED TO, THOSE WHICH HAVE SWIMMING POOLS, OR THAT SELL PREPARED OR PACKAGED FOODS, SILTIES THAT FAITS PADIATION	1	7200 ALDEN WAY	ᆀᅦ

PLAN. PLANS FOR CERTAIN DEPARTMENT. SUCH FACILITI

PARCEL No.

CENSUS TR.

the state of the s			
	BLDG. No.	STREET ADDRESS	
IG PERMIT APPLICATIONS ASSOCIATED WITH THIS LL REQUIRE REVIEW AND APPROVAL BY THE HEALTH	1	7200 ALDEN WAY	
5, OR THAT SELL PREPARED OR PACKAGED FOODS,			
	REVISED		
TITL	E SHEE	T	

OXFORD SQUARE

13-71-17 2.21.17 12-21-17

SECTION/AREA

TAX/ZONE ELEC. DIST.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

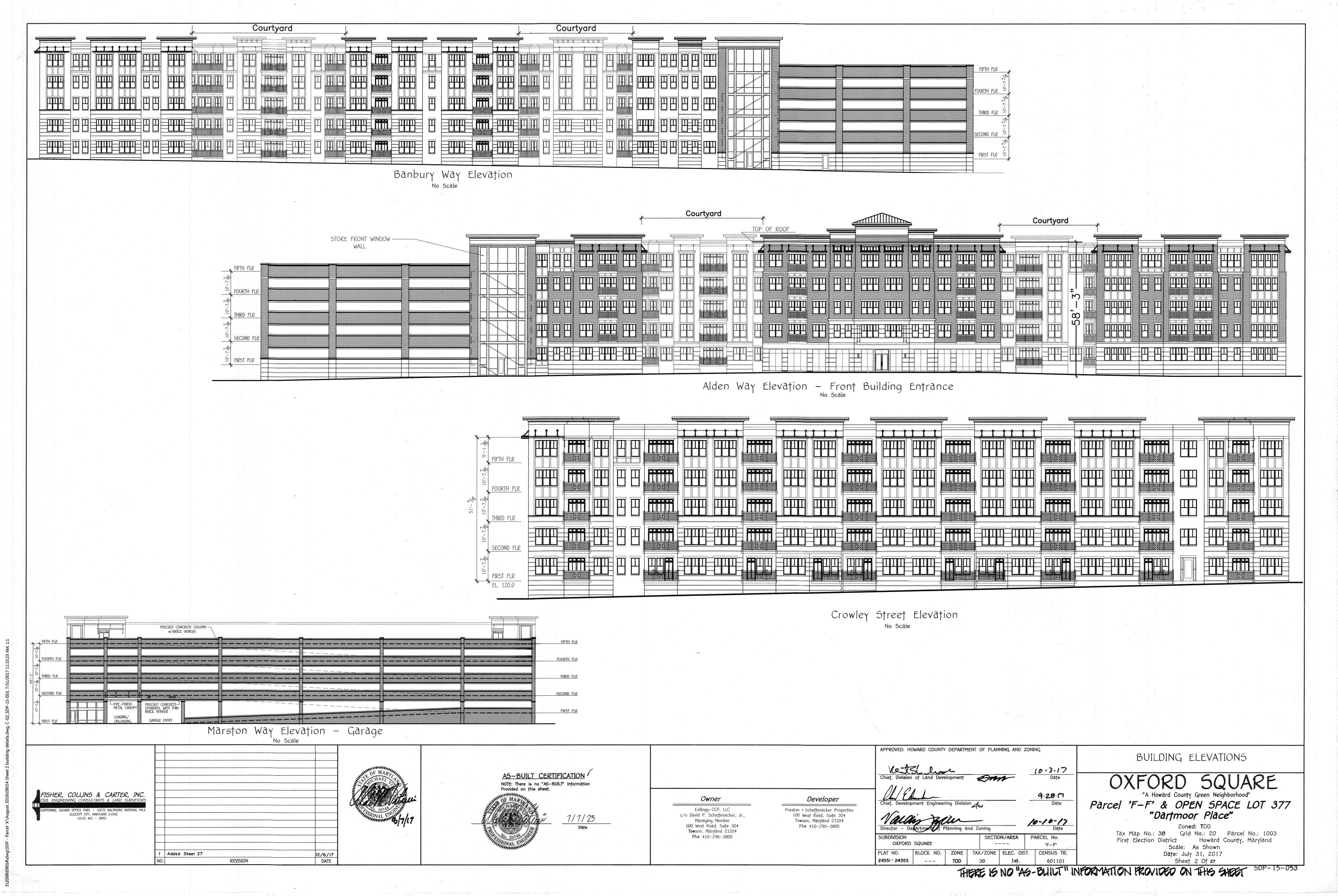
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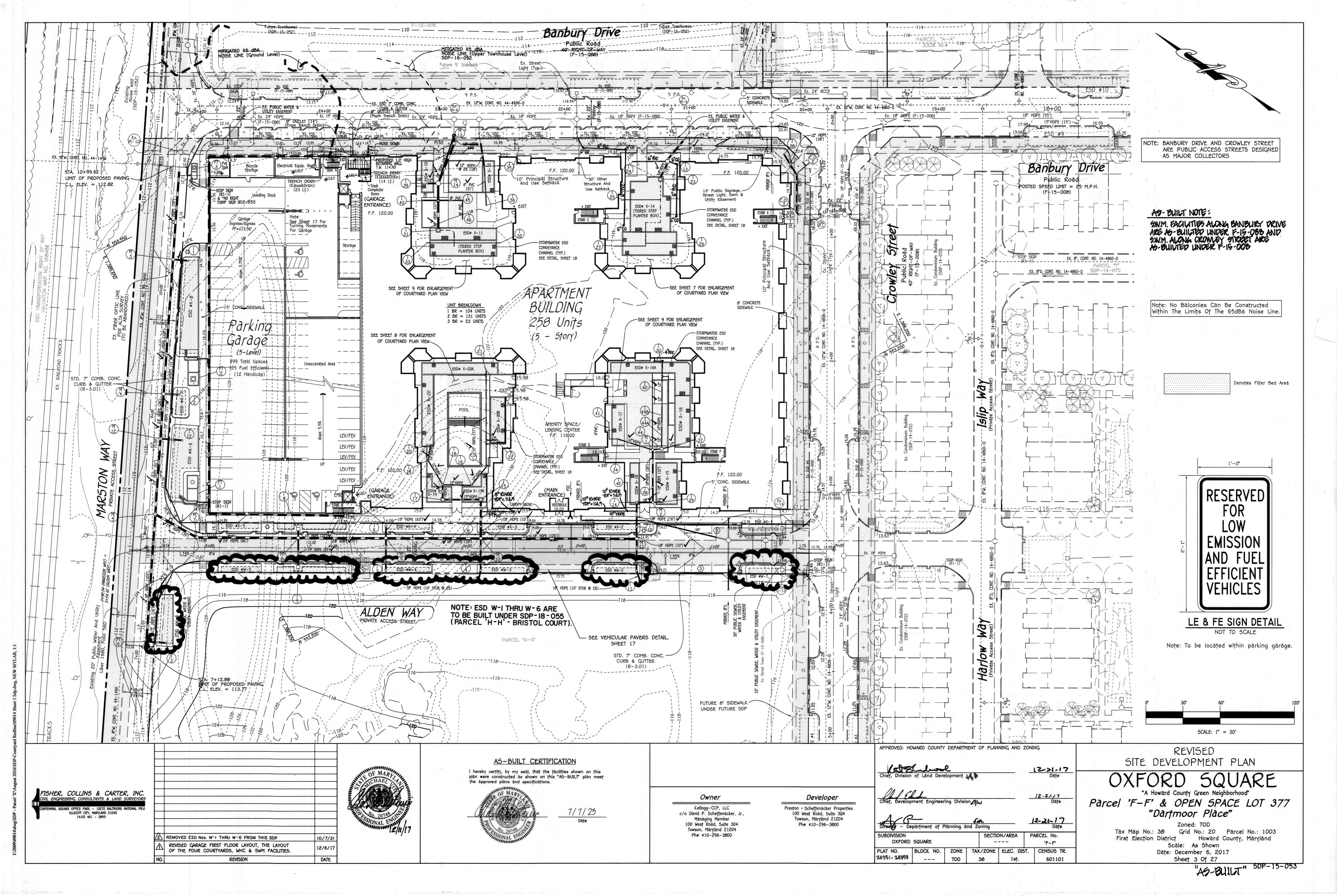
OXFORD SQUARE

24351-24353

Parcel 'F-F' & OPEN SPACE LOT 377 "Dartmoor Place"

Tax Map No.: 38 Grid No.: 20 Parcel No.: 1003 First Election District Howard County, Maryland Scale: As Shown Date: December 6, 2017





When properly planted, vegetation will thrive and enhance the functioning of these systems. For example, pre-treatment buffers will trap sediments that often are bound with phosphorous and metals. Vegetation planted in the facility will aid in nutrient uptake and water storage. Additionally, plant roots will provide arteries for stormwater to permeate soil for groundwater recharge. Finally, successful plantings provide aesthetic value and wildlife habitat making these facilities more desirable to the public.

Design Constraints:

> Planting buffer strips of at least 20 feet will cause sediments to settle out before reaching the facility, thereby reducing the possibility of clogging.

> Determine areas that will be saturated with water and water table depth so that

appropriate plants may be selected (hydrology will be similar to bioretention facilities, see figure A.5 and Table A.4 for planting material guidance). > Plants known to send down deep taproots should be avoided in systems where filter fabric is used as part of facility design.

> Test soil conditions to determine if soil amendments are necessar

> Plants shall be located so that access is possible for structure maintenance > Stabilize heavy flow areas with erosion control mats or sod. > Temporarily divert flows from seeded areas until vegetation is established > See Table A.5 for additional design considerations.

Bio-retention

Soil Bed Characteristics The characteristics of the soil for the bioretention facility are perhaps as important as the facility location, size, and treatment volume. The soil must be permeable enough to allow runoff to filter through the media, while having characteristics suitable to promote and sustain a robust vegetative cover crop. In addition, much of the nutrient pollutant uptake (nitrogen and phosphorus) is accomplished through absorption and microbial activity within the soil profile. Therefore, soils must balance their chemical and physical properties to support

The planting soil should be a sandy loam, loamy sand, loam (USDA), or a loam/sand mix (should contain a minimum 35 to 60% sand, by volume). The clay content for these soils should be less than 25% by volume [Environmental Quality Resources (EQR), 1996; Engineering Technology Inc. and Biohabitats, Inc. (ETAB), 1993]. Soils should fall within the SM, ML, SC classifications o the Unified Soil Classification System (USCS). A permeability of at least 1.0 feet per day (0.5"/hr) is required (a conservative value of 0.5 feet per day is used for design). The soil should be free of stones, stumps, roots, or other woody material over 1" in diameter. Brush or seeds from noxious weeds (e.g., Johnson Grass, Mugwort, Nutsedge, and Canada Thistle or other noxious weeds as specified under COMAR 15.08.01.05.) should not be present in the soils. Placement of the planting soil should be in 12 to 18 lifts that are loosely compacted (tamped lightly with a backhoe bucket or traversed by dozer tracks). The specific characteristics are

matter and planting call plans and at-

Parameter	Value
pH range	5.2 to 7.00
Organic matter	1.5 to 4.0% (by weight)
Magnesium	35 lbs. per acre, minimum
Phosphorus (phosphate - P2O5)	75 lbs. per acre, minimum
Po†assium (po†ash —1(K2O)	85 lbs. per acre, minimum
Soluble salts	500 ppm
Clay	0 to 5%
Silf Silf	30 to 55%
Sand	35 to 60%
حسنا استناده والمستناد والمستاد والمستناد والمستناد والم	

Mulch Layer

The mulch layer plays an important role in the performance of the bioretention system. The mulch layer helps maintain soil moisture and avoids surface sealing, which reduces permeability Mulch helps prevent erosion, and provides a microenvironment suitable for soil biota at the mulch/soil interface. It also serves as a pretreatment layer, trapping the finer sediments, which remain suspended after the primary pretreatment.

The mulch layer should be standard landscape style, single or double shredded hardwood mulch or chips. The mulch layer should be well aged (stockpiled or stored for at least 12 months), uniform in color, and free of other materials, such as weed seeds, soil, roots, etc. The mulch should be applied to a maximum depth of three inches. Grass clippings should not be used as a

Planting Guidance
Plant material selection should be based on the goal of simulating a terrestrial forested community of native species. Bioretention simulates an upland-species ecosystem. The community should be dominated by trees, but have a distinct community of understory trees, shrubs and herbaceous materials. By creating a diverse, dense plant cover, a bioretention facility will be able to treat stormwater runoff and withstand urban stresses from insects, disease, drought, temperature, wind, and exposure. The proper selection and installation of plant materials is key to a successful system. There are essentially three zones within a bioretention facility (Figure A.5). The lowest elevation supports plant species adapted to standing and fluctuating water levels. The middle elevation supports plants that like drier soil conditions, but can still tolerate occasional inundation by

water. The outer edge is the highest elevation and generally supports plants adapted to dryer conditions. For appropriate plant materials for bioretention facilities, Refer To MAA Approved Species List. The layout of plant material should be flexible, but should follow the general principals described in Table A.5. The objective is to have a system, which resembles a random, and natural plant layout, while maintaining optimal conditions for plant establishment and growth. For a more extensive bioretention plan, consult ETAB, 1993 or Claytor and Schueler, 1997.

Operation And Maintenance Schedule For Commercial Association Owned & Maintained Bio-Retention Areas (M-6)

1. The owner shall maintain the plant material, mulch layer and soil layer annually, maintenance of mulch and soil is limited to correcting areas of erosion or wash out. Any mulch replacement shall be done in the spring. Plant material shall be checked for disease and insect infestation and maintenance will address dead material and pruning. Acceptable replacement plant material is limited to the following: 2000 Maryland stormwater design manual volume II, table A.4.1 and 2.

2. The owner shall perform a plant in the spring and in the fall each year. during the inspection, the owner shall remove dead and diseased vegetation considered beyond treatment, replace dead plant material with acceptable replacement plant material, Treat diseased trees and shrubs and replace all deficient stakes and wires.

3. The owner shall inspect the mulch each spring. The mulch shall be replaced every two to three years. The previous mulch layer shall be removed before the new layer is applied.

4. The owner shall correct soil erosion on an as needed basis, with a minimum of once per month and after each heavy storm.

5. The owner shall maintain all observation wells, clean-outs and perforated underdrains. 6. Filter material must be replaced when water remains on the surface of the filter bed for more than 24 hours following any storm event.

Infiltration and Filter System Construction Specifications B.4.C Specifications for Micro-Bioretention, Infiltration and filter systems either take advantage of existing permeable soils or create a Landscape Infiltration & Infiltration Berms

1. Material Specifications

The allowable materials to be used in these practices are detailed in Table 8.4.1.

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 prove 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 15.00.01.05.

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 D 2974). 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 stockpiled topsoil. If topsoil is imported, then a texture analysis shall be performed for each location where the topsoil was excavated.

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 contractor 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 lugs, 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 ponded 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.

Recommended plant material for micro-bioretention practices can be found in Appendix A,

5. Plant Installation

4. Plant Material

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 1/8 th 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

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, impedes this goal. Only add fertilizer if wood chips or mulch are used to amend the soil. Rototill urea fertilizer at a rate of 2 pounds per 1000 square feet.

6. Underdrains

Underdrains should meet the following criteria: Pipe- Should be 47to 67diameter, slotted or perforated rigid plastic pipe (ASTMF 758, Type P5 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

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 (1/4" 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).

These practices may not be constructed until all contributing drainage area has been

STORMWATER MANAGEMENT MAINTENANCE NOTE

ALL STORMWATER MANAGEMENT FACILITIES WILL BE PRIVATELY

AND MAINTAINED BY THE OXFORD SQUARE COMMERCIAL ASSOCIATION, INC. THE STREET TREES, PERFORATED UNDERDRAINS, FEEDERS, PLANTINGS AND SWALES WILL ALSO BE PRIVATELY OWNED AND MAINTAINED BY THE OXFORD SQUARE COMMERCIAL ASSOCIATION. HOWARD COUNTY WILL ONLY MAINTAIN THE INLET STRUCTURE WITHIN THE MICRO BIO-RETENTION FACILITIES ADJACENT TO THE RIGHT-OF-WAY.

15" DOME GRATE ASSEMBLY NYLOPLAST OR EQUAL NOTE: FOR MICRO BIO-RETENTION SECTION, SEE SHEET NOTE: THE BIO-RETENTION PLANTER BOX SHALL BE OWNED BY THE H.O.A. & JOINTLY MAINTAINED BY THE HOMEOWNER & H.O.A. THE H.O.A. SHALL BE RESPONSIBLE FOR THE CONCRETE BIO BOX THE OVERFLOW INLET AND IMPERMEABLE LINER.

	BI	O-RETENTION	PLANTER 1	вох	
ESD No.	Top Elev. FRONT WALL	Top Elev. BACK/SIDE WALLS	6" Dome Top	6" Invert (Perforațed)	Bottom Elevation
X-10	121.000.9	121.25.1	120.50▼	117.00√	116.50
X-12	12 1.00 0.8	121.25 .1	120.50 €	117.00.1	116.50
X-15	117.55	117. 80 ,7	117.05 ✔	113. 55 .7	113.05
X-16	11 9.00 8.8	119.25.6	118.50 ✔	115.89.1	114.50
X-16A	118.25.15	118. 50 ,35	117.78	114.25	113.75
X-17	117.42.0	117.87.25	116.6	113.42.3	112.62
X-18	117.55.45	117.88 .7	117.05	113.55,6	113.05
X-19	118.25.	118. 50 ,4	117.95.6	114.25	113.75
X-19A	118.25,\	118.59 .4	وا. 117. 75 و	114.25	113.75
X-20	118.25.1	118.50 .4	117.75.6	114. 25 .4	113.75
X-20A	118.25	118. 50 .4	117.78	114.25	113.75
X-20B	118.25,1	118.50 .4	117.79 10	114.25▼	113.75

BIO-RETENTION (M-8)

ROAD GRADE

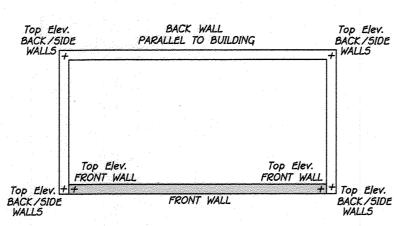
CURB CUT-

(†yp.)

CELL No. 1A

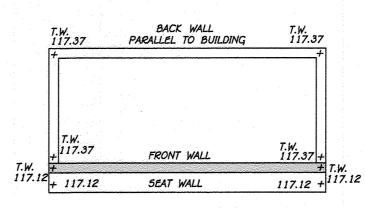
. OBSERVATION WELL w/DOME

WEIR INVERT @ 9"

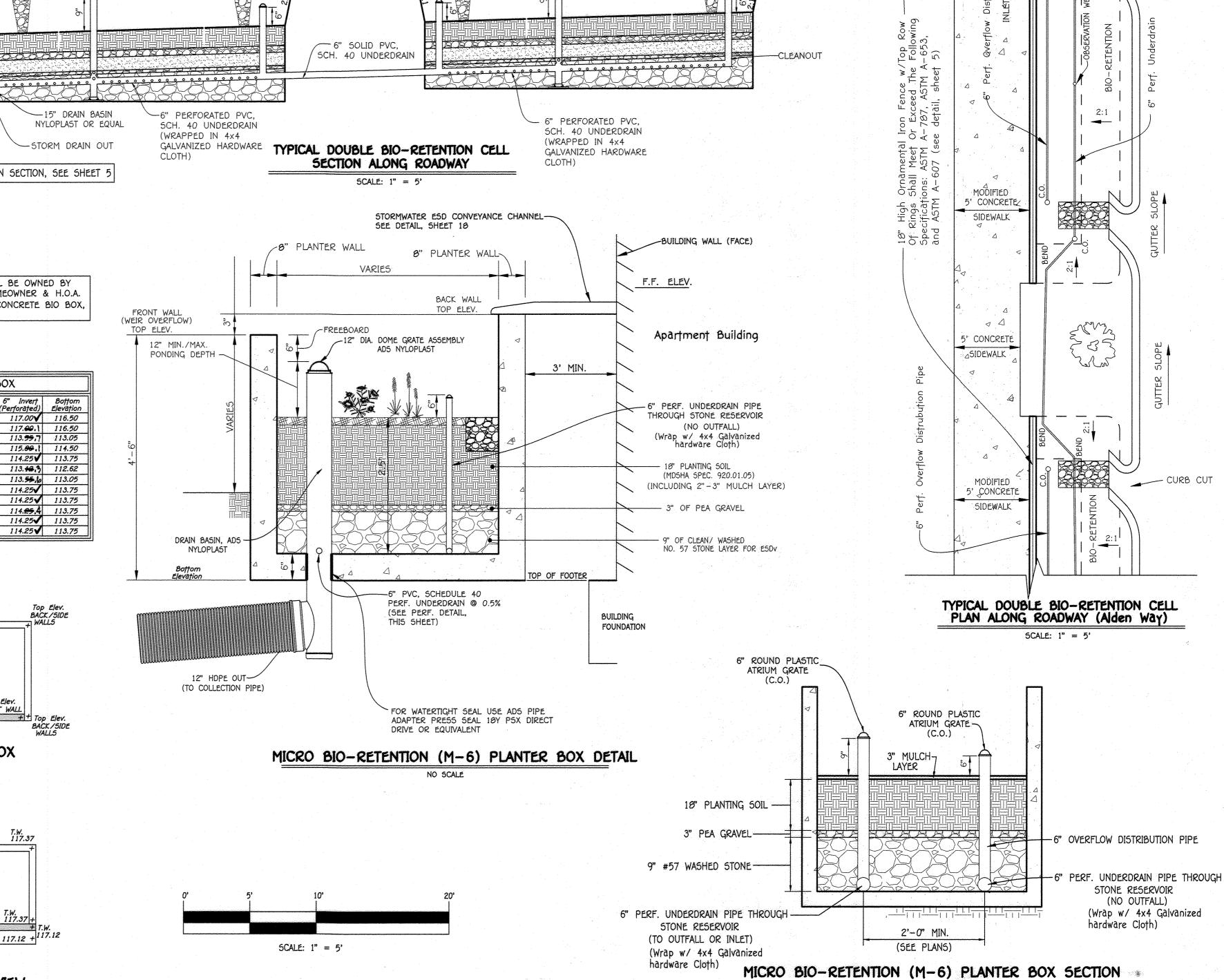


TYPICAL PLANTER BOX

PLAN VIEW



PLANTER BOX (X-17 ONLY) PLAN VIEW



6" dia. CLEANOUT w/DOME

WEIR INVERT @ 6" -

(typ.)

BIO-RETENTION (M-8)

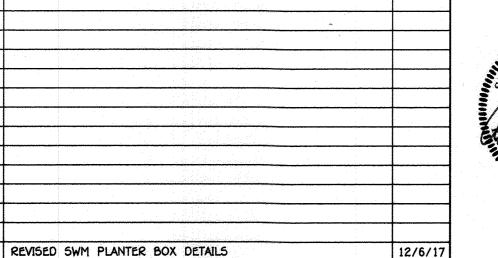
CURBLINE-

CELL No. 1B

ROAD GRADE

CURB CUT-

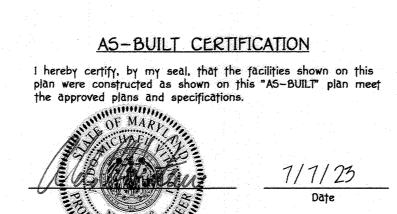
FISHER, COLLINS & CARTER, INC. IVIL ENGINEERING CONSULTANTS & LAND SURVEYORS (410) 461 ~ 2855

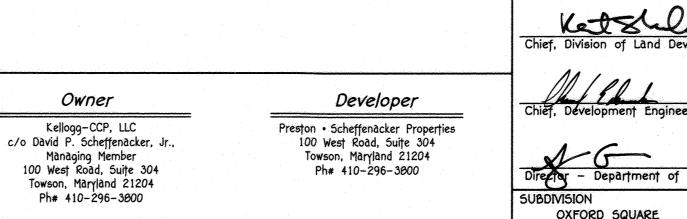


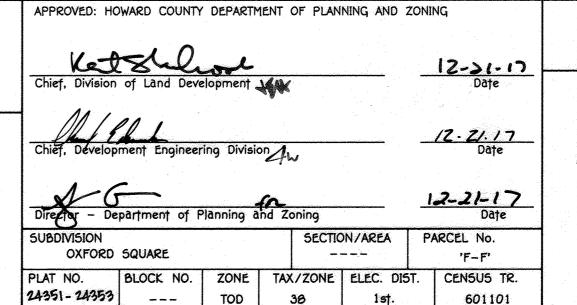
REVISION



DATE







REVISED STORMWATER MANAGEMENT PLAN VIEWS

WITH 6" OVERFLOW DISTRIBUTION PIPE

NO SCALE

5' CONCRETE

SIDEWALK

-FACE OF

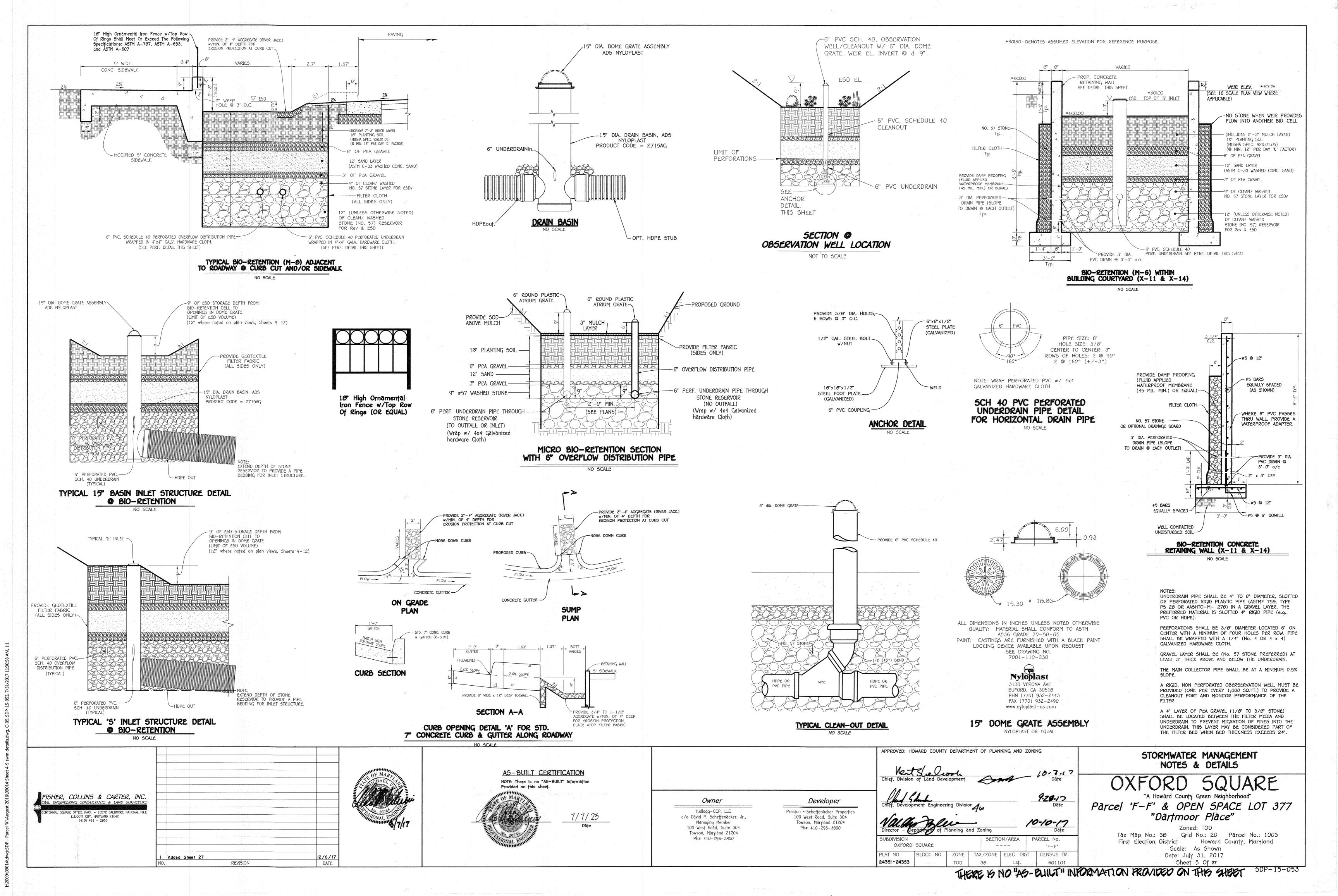
-CURB CUT

"A Howard County Green Neighborhood" Parcel 'F-F' & OPEN SPACE LOT 377

"Dartmoor Place" Zoned: TOD Tax Map No.: 38 Grid No.: 20 Parcel No.: 1003 First Election District Howard County, Maryland

Scale: As Shown Date: December 6, 2017 Sheet 4 Of 27

"AS-BUILT" 5DP-15-053



Parkin. Garagë PROPOSED MICRO BIO-RETENTION (M-6)

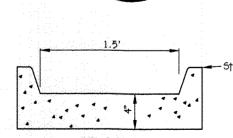
ESD No. X-8 PLAN VIEW



STORMWATER MANAGEMENT MAINTENANCE NOTE

SCALE: 1" = 10'

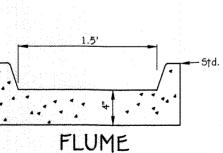
ALL STORMWATER MANAGEMENT FACILITIES WILL BE PRIVATELY OWNED AND MAINTAINED BY THE OXFORD SQUARE COMMERCIAL ASSOCIATION, INC. THE STREET TREES, PERFORATED UNDERDRAINS, FEEDERS, PLANTINGS AND SWALES WILL ALSO BE PRIVATELY OWNED AND MAINTAINED BY THE OXFORD SQUARE COMMERCIAL ASSOCIATION. HOWARD COUNTY WILL ONLY MAINTAIN THE INLET STRUCTURE WITHIN THE MICRO BIO-RETENTION FACILITIES ADJACENT TO THE RIGHT-OF-WAY.

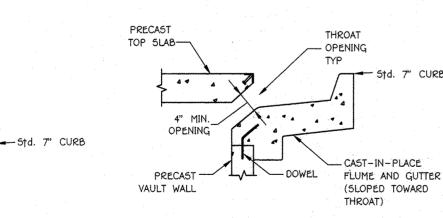


2 REMOVED ESD NO. W-5 FROM THIS SDP

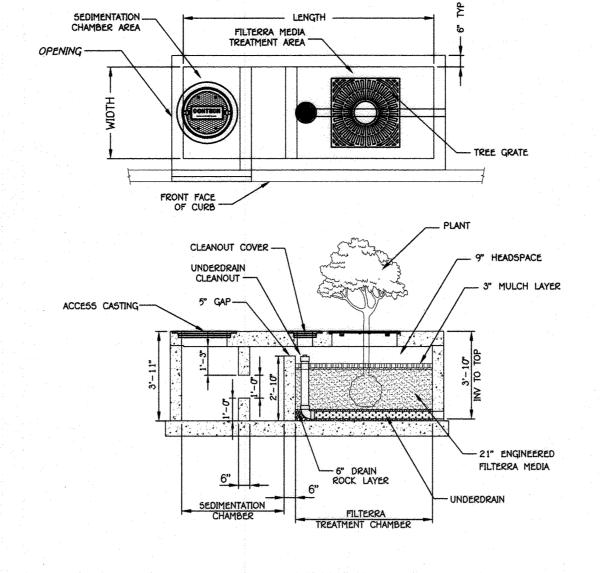
REVISED COURTYARD AMENITIES, SWM ESD'S & STORM DRAIN

REVISION





REVERSE FLUME - SLOPED TOWARDS FILTERRA THROAT (SECTION 'A-A') NO SCALE:



	UNIT DESIGNATION	INSIDE VAULT DIMENSIONS	FILTERRA TREATMENT AREA	MAXIMUM DRAINAGE AREA TREATED (SF)	WQv STORAGE CAPACITY (CF)	
F	FT5C 6' x 4'	12' x 4'	6' x 4'	5,216	103	- FT-3
	FT5C 8' x 4'	16' x 4'	8' x 4'	7,141	141	
	FTSC 6' x 6'	12' x 6'	6' x 6'	7,847	155	
	FTSC 8' x 6'	16' x 6'	8' x 6'	10,734	212	
	FT5C 10' x 6'	19' x 6'	10' x 6'	12,638	250	
	FT5C 10' x 8'	20' x 8'	10' x 8'	18,178	360	- FT-1 & FT-2
	FT5C 11' x 8'	22' x 8'	11' x 8'	20,000	398	

FILTERRA® WITH SEDIMENTATION CHAMBER

FILTERRA STANDARD PLAN NOTES

A. Each unit shall be constructed at the locations and elevations according to the sizes shown on

the approved drawings. Any modifications to the elevation or location shall be at the direction of and approved by the Engineer.

such that the unit and top slab match the grade of the curb in the area of the unit. Compact undisturbed sub-grade materials to 95% of maximum density at +1- 2% of optimum moisture

B. If the Filterra® is stored before installation, the top slab must be placed on the box using the 2x4 wood provided, to prevent any contamination from the site. All internal fittings supplied (if any), must be left in place as per the delivery. C. The unit shall be placed on a compacted sub-grade with a minimum 6-inch gravel base matching the final grade of the curb line in the area of the unit. The unit is to be placed

Unsuitable material below sub-grade shall be replaced to the site engineer's approval. D. Outlet connections shall be aligned and sealed to meet the approved drawings with

Structures", unless directed otherwise in contract documents

modifications necessary to meet site conditions and local regulations. E. Once the unit is set, the internal wooden forms and protective mesh cover must be left intact. Remove only the temporary wooden shipping blocks between the box and top slab. The top lid should be sealed onto the box section before backfilling, using a non-shrink grout, butyl rubber or similar waterproof seal. The boards on top of the lid and boards sealed in the unit's throat must NOT be removed. The Supplier (Americast or its authorized dealer) will remove these sections at the time of activation. Backfilling should be performed in a careful manner, bringing the appropriate fill material up in 6" lifts on all sides. Precast sections shall be set in a manner that will result in a watertight joint. In all instances, installation of Filterra®unit shall conform to ASTM specification C091 "Standard Practice for Installation of Underground Precast Utility

F. The contractor is responsible for inlet protection/sediment control and cleaning around each

G. Curb and gutter construction (where present) shall ensure that the flow-line of the Filterra? units is at a greater elevation than the flow-line of the bypass structure or relief (drop inlet, curb cut or similar). Failure to comply with this guideline may cause failure and/or damage to the Filterra?

H. Eāch Filterra®unit must receive ādequāte irrigātion to ensure survivāl of the living system during periods of drier weather. This may be āchieved through a piped system, gutter flow or through Activation

A. Activation of the Filterra@unit is performed ONLY by the Supplier. Purchaser is responsible for Filterra@inlet protection and subsequent clean out cost. This process cannot commence until the project site is fully stabilized and cleaned (full landscaping, grass cover, final paving and street sweeping completed), negating the chance of construction materials contaminating the Filterra®system. Care shall be taken during construction not to damage the protective throat

B. Activation includes installation of plant(s) and mulch layers as necessary.

Included Maintenance

A Each correctly installed Filterra@unit is to be maintained by the Supplier, or a Supplier approved contractor for a minimum period of 1 year. The cost of this service is to be included in the price of each Filterra@unit. Extended maintenance contracts are available at extra cost upon request.

B. Annual included maintenance consists of a maximum of (2) scheduled visits. The visits are scheduled seasonally; the spring visit aims to clean up after winter loads that may include salts and sands. The fall visit helps the system by removing excessive leaf litter.

- C. Each included Maintenance visit consists of the following tasks.
- 1. Filterra@ unit inspection
- 2. Foreign debris, silt, mulch & trash removal
- 3. Filter media evaluation and recharge as necessary 4. Plant health evaluation and pruning or replacement as necessary
- 5. Replacement of mulch
- 6. Disposal of all maintenance refuse items
- 7. Maintenance records updated and stored (reports available upon request)

D. The beginning and ending date of Supplier's obligation to maintain the installed system shall be determined by the Supplier at the time the system is activated. Owners must promptly notify the Supplier of any damage to the plant(s), which constitute(s) an integral part of the bioretention technology.

DESIGN GUIDELINES FOR USING FILTERRA

1. Do not place in a sump condition. The Standard Filterra®cannot be used as a stand alone inlet -it will need effective bypass during higher intensity rainfall events. For sump conditions please contact

Plans MUST show Filterra® Top Curb (TC) and Flow Line (FL) spot elevations and also bypass

TC (where applicable) and bypass FL spot elevations. The Filterra®TC and FL elevations MUST be higher than the bypass TC and FL elevations for

effective bypass. Use Drawing FLP-2 (p.24) as a detail on the project plans.

2. For proper trash collection ensure a minimum 4" and maximum 6" Filterra®throat opening depth and use Drawing CGT-5 (p.25) as a detail on the project plans. 3. Do not direct surface flow to the standard Filterra®in a "head-on" configuration. Refer to Guidelines GUI-A (p.13) and GU2 (p.18) for grading design that encourages flow to enter a Filterra®in a cross linear flow -left-to-right or right to-left in the gutter in front of the throat, as per a wet curb which prevents system damage. During extreme storm events the excess flow should continue past the

4. To calculate which size Filterra®is required, use Table 1, Filterra®Quick Sizing Table, appropriate to the project's geographical region and target treatment regime (p.12). The entire contributing drainage aread to the Filterra should be considered and the minimum allowable C factors noted the maximum contributing drainage area iwll vary with site conditions, for further information relating to sizing please contact Filterra.

Filterra®to a bypass inlet or other means of relief. Guideline GU3, Parking Lot Corners, shows

5. To ensure correct installation, include the Standard Filterra@Plan Notes (p.26-27) on your Filterra@ detail project sheet, as well as detailed drawings FLP-2 and CGT-5 (p.24,25). 6. Positive drainage of each Filterra®unit's effluent treatment pipe is required to prevent free standing water from accumulating in the system or underdrain. This could occur due to tidal influences or

FILTERRA: Operation and Maintenance

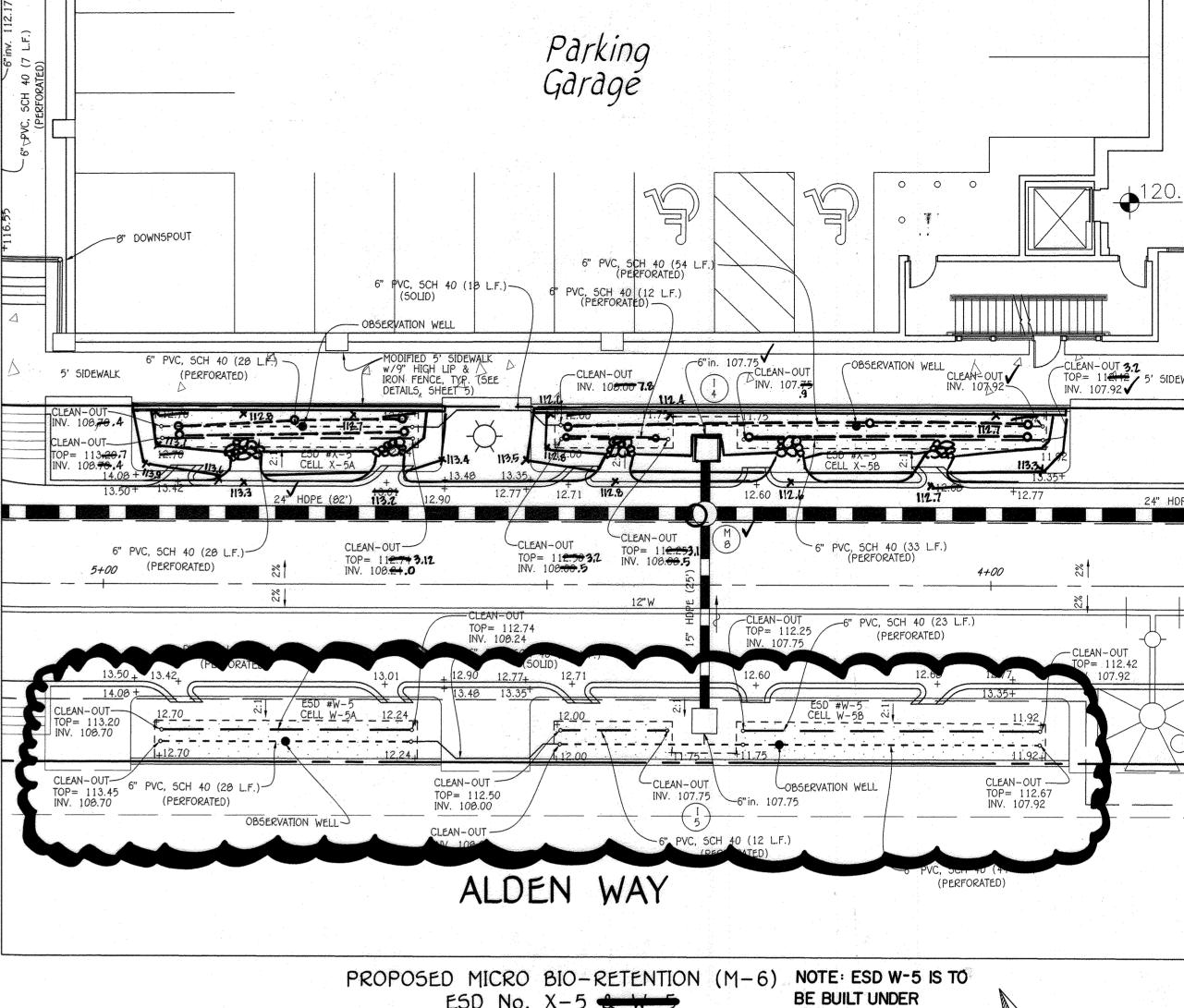
 Annual maintenance consists of a maximum of (2) scheduled visits. The visits are scheduled seasonally; the spring visit aims to clean up after winter loads including salts and sands. The fall visit helps the system by removing excessive leaf litter.

Each maintenance inspection consists of the following tasks:

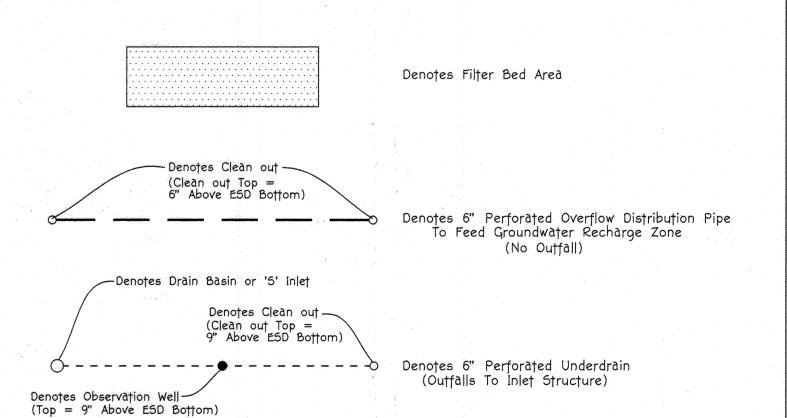
improper connection of Filterra's effluent pipe to a bypass structure or other outfall.

- Filterra unit inspection
- Foreign debris, silt, mulch and trash removal
- Filter media evaluation and recharge as necessary Plant health evaluation and pruning or replacement as necessary
- Replacement of mulch Disposal of all maintenance refuse items

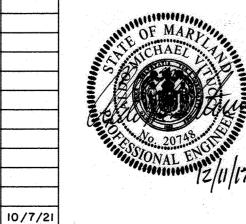
Maintenance records updated and stored



ESD No. X−5 2 1/ 5 SDP-18-055. PLAN VIEW



FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS



12/6/17

DATE

AS-BUILT CERTIFICATION

I hereby certify, by my seal, that the facilities shown on this plan were constructed as shown on this "A5-BUILT" plan meet



1/1/23

Owner Kellogg-CCP, LLC c/o David P. Scheffenacker, Jr., Managing Member 100 West Road, Suite 304

Towson, Maryland 21204

Ph# 410-296-3800

Developer Preston · Scheffenacker Properties 100 West Road, Suite 304

Towson, Maryland 21204 Ph# 410-296-3800

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING 12-21-17 12.21.17 Date 12-21-17 SUBDIVISION SECTION/AREA PARCEL No. OXFORD SQUARE 'F-F' BLOCK NO. ZONE TAX/ZONE ELEC. DIST. CENSUS TR. PLAT NO. 24351 - 24353 TOD 601101 ___

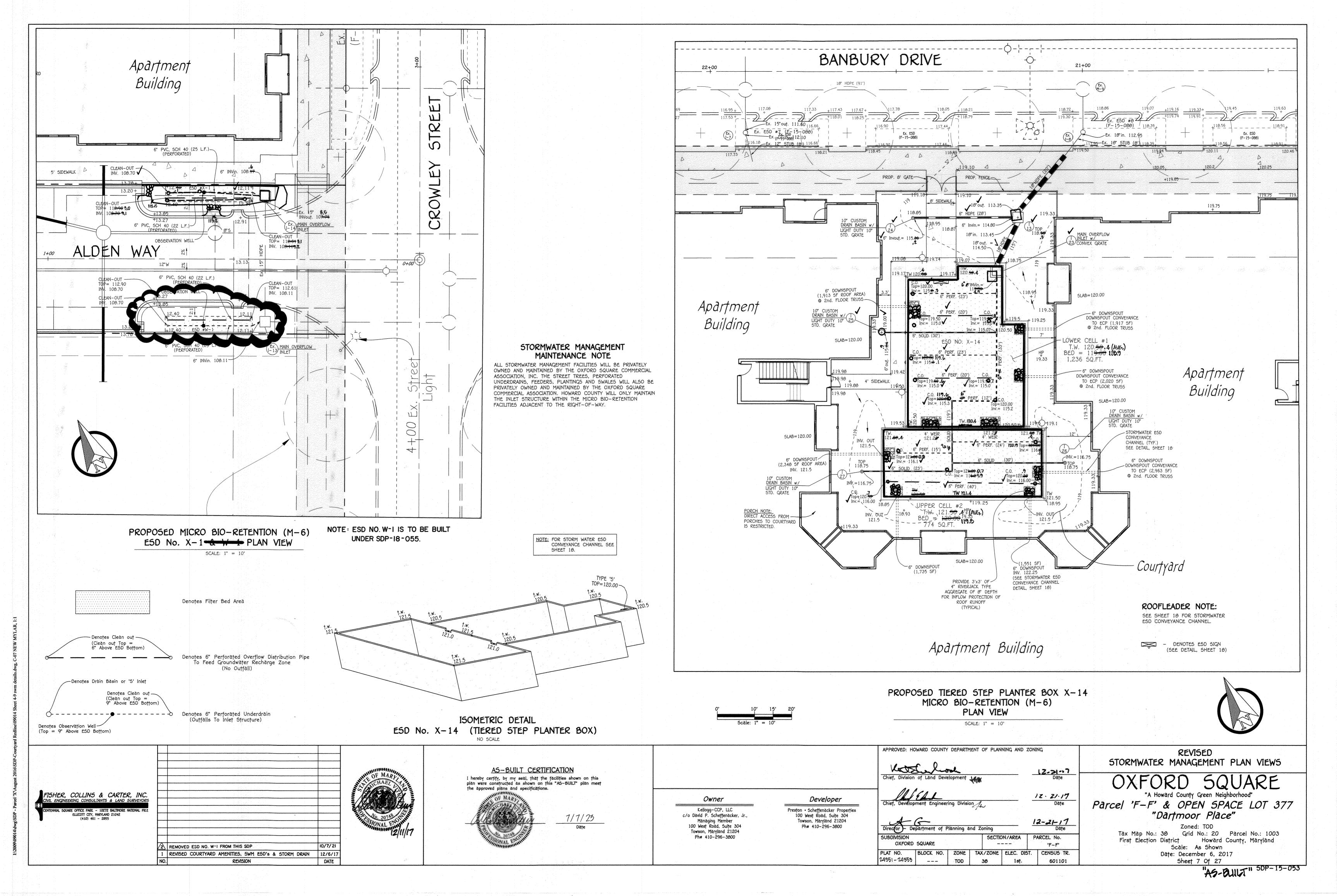
REVISED STORMWATER MANAGEMENT PLAN VIEWS

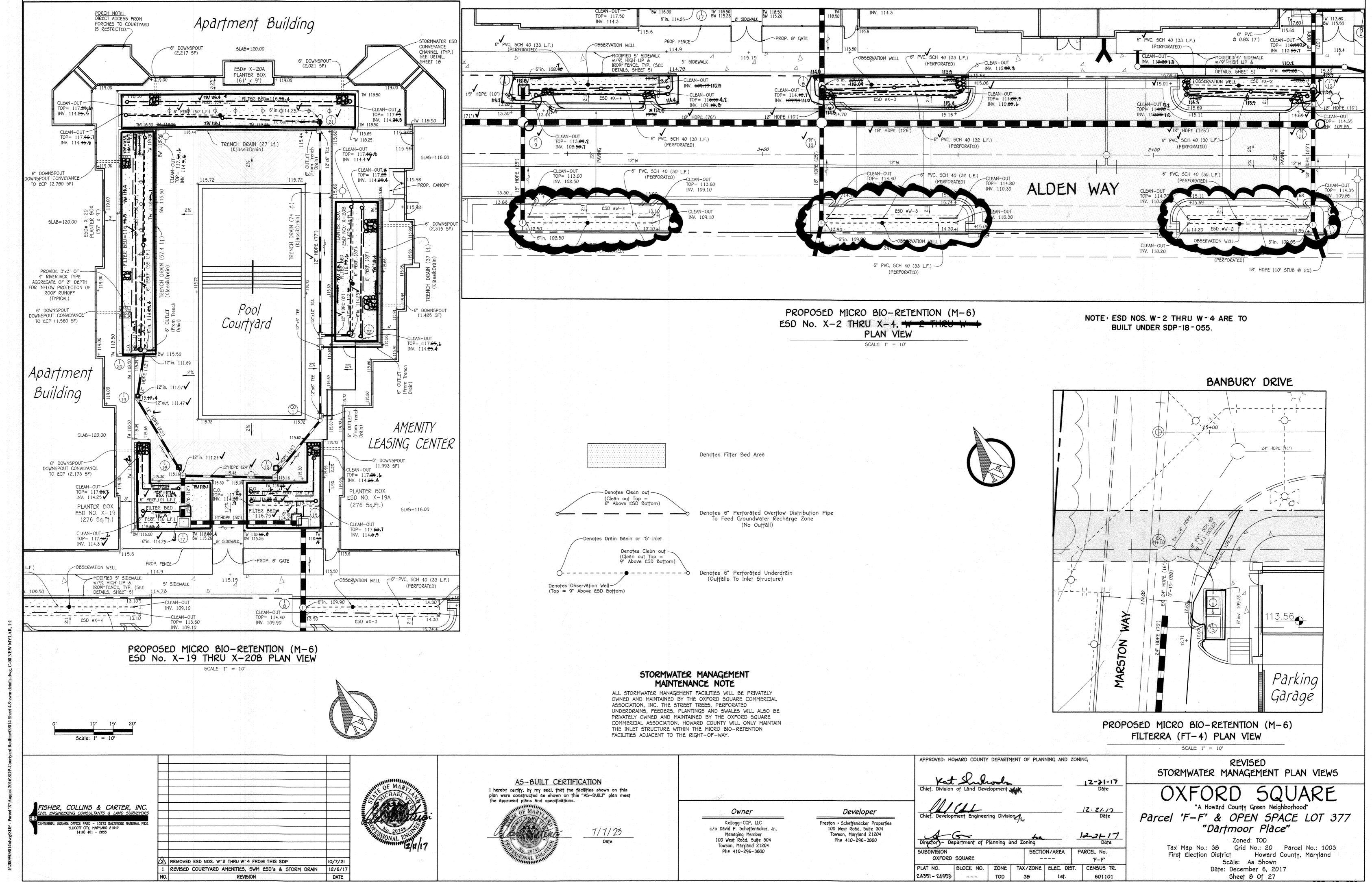
OXFORD SQUARE

Parcel 'F-F' & OPEN SPACE LOT 377

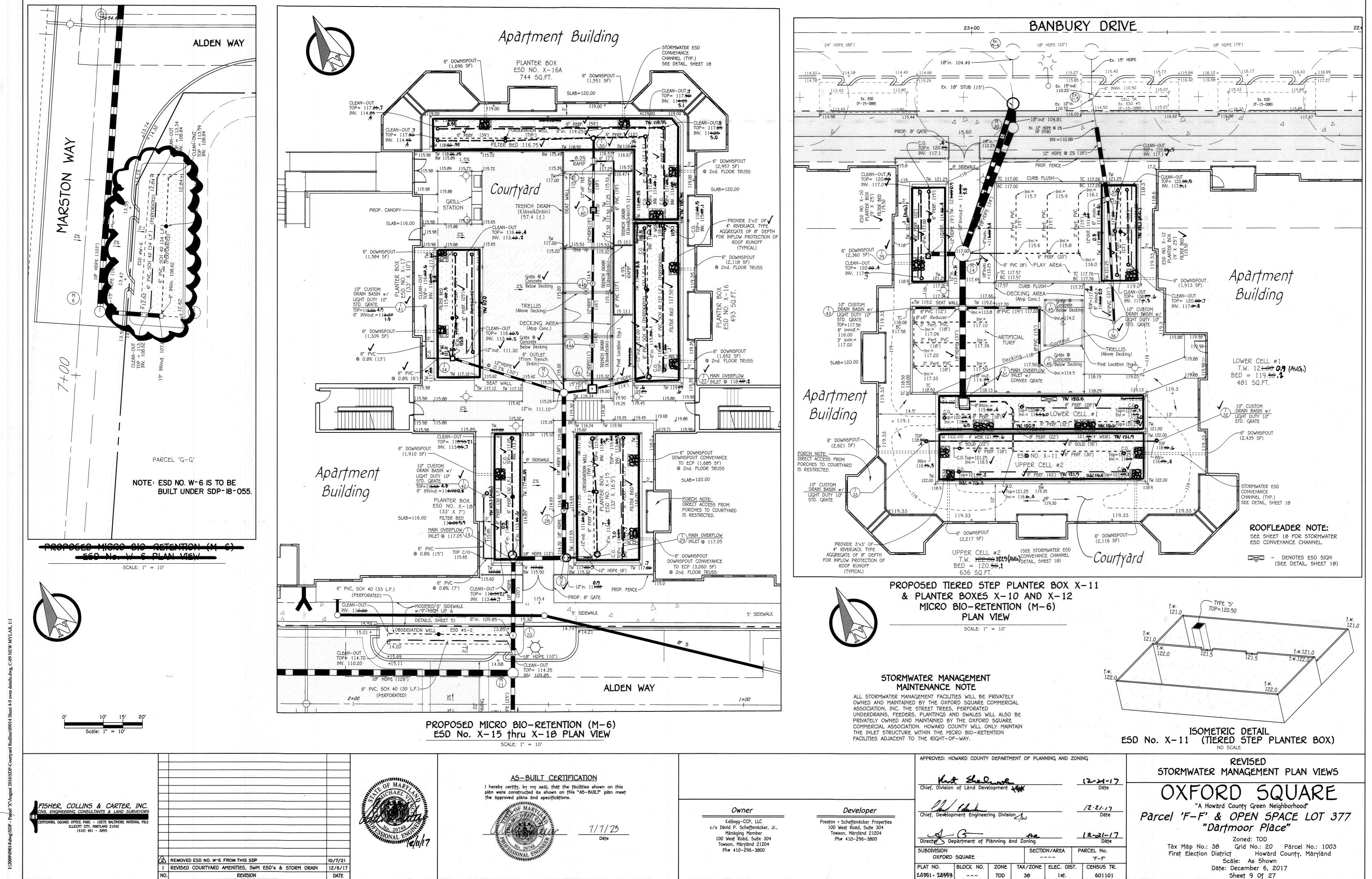
"Dartmoor Place" Zoned: TOD Tax Map No.: 38 Grid No.: 20 Parcel No.: 1003 First Election District Howard County, Maryland Scale: As Shown

> Date: December 6, 2017 Sheet 6 Of 27 "A9-BUILT" 50P-15-053

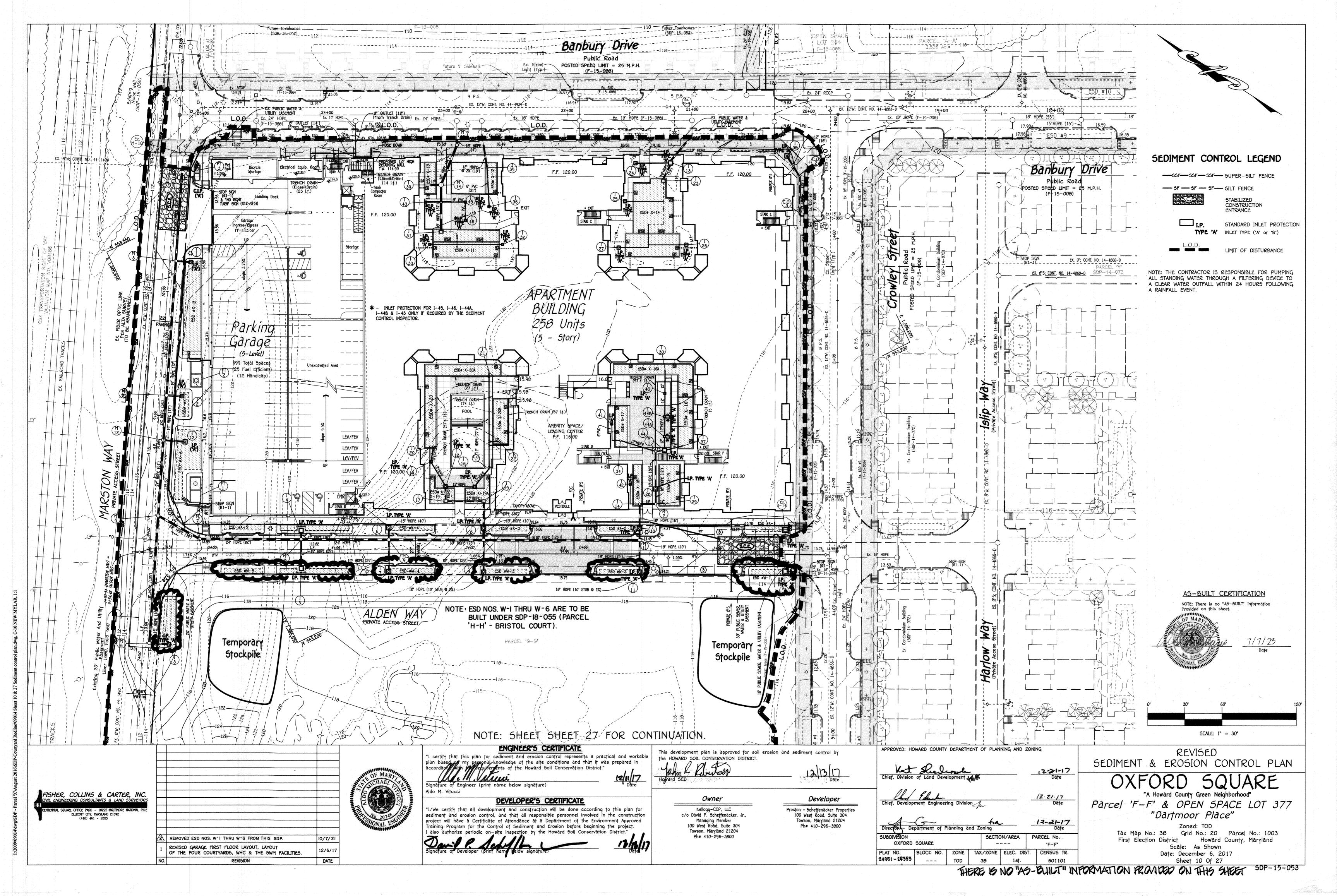




"A9-BUILT" 50P-15-053



"A9-BUILT" 5DP-15-053



b. Apply fertilizer and lime as prescribed on the plans.

c. Incorporate lime and fertilizer into the top 3 to 5 inches of soil by disking or other suitable means.

2. Permanent Stabilization

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:

ii. 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 acceptable. iv. Soil 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. Graded 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

6. Topsoil Application

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 oradation.

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

b. 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.

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 preparation. C. Soil Amendments (Fertilizer and 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 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 or 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 8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. 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 B-4-3.A.1.b and maintain until the next seeding season.

Temporary Seeding Summary

ardiness Zo eed Mixture	ne (from Figure B. (from Table B.1):	3):6b		Fertilizer Rate (10-20-20)	Lime Rate
Species	Application Rate (lb/ac)	5eeding Dates	Seeding Depths	-	
BARLEY	96	3/1 - 5/15, 8/15 - 10/15	1"	436 lb/ac (10 lb/ 1000 sf)	2 tons/do
OAT5	72	3/1 - 5/15, 8/15 - 10/15	1"		(90 lb/ 1000 sf)
RYE	. 112	3/1 - 5/15, 8/15 - 10/15	1"		

REVISED S.O.C. AND L.O.D. AREA

PERMANENT SEEDING NOTES (8-4-5)

A. Seed Mixtures 1. General Use

a. Select one or more of the species or mixtures listed in Table 8.3 for the appropriate Plant Hardiness Zone (from Figure B.3) and based on the site condition or purpose found on Table B.2. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The Summary is to be

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 d. For areas receiving low maintenance, apply ured form fertilizer (46-0-0) at 3 1/2 pounds pe 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. Turforass Mixtures

a. Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites which will

b. Select one or more of the species or mixtures listed below based on the site conditions or purpose. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The summary is to be placed on the plan.

i. 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

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

iv. 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 quarantee of cultivar purity. The certification program of the Maryland Department of Agriculture, Turf 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 (Hardiness Zones: 7a. 7b)

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 moving of grasses will pose no

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

Permanent Seeding Summary

	5pecies	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	N	P ₂ O ₅	K ₂ 0	
8	TALL FESCUE	100	Mar. 1-May 15 Aug. 1-Oct. 15	1/4-1/2 in.	per acre	90 lb/ac (2 lb/	90 lb/ac (2 lb/	2 tons/ac (90 lb/
				-	(1.0 lb/ 1000 sf)	1000 sf)	1000 sf)	1000 sf)

STANDARD STABILIZATION NOTE

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

b.) SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.

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

<u>Definition</u>

The mound or pile of soil protected by appropriately designed erosion and sediment control measures.

To provide a designated location for the temporary storage of soil that controls the potential for erosion, sedimentation, and changes to drainage patterns.

Conditions Where Practice Applies

Stockpile areas are utilized when it is necessary to salvage and store soil for later use.

1. The stockpile location and all related sediment control practices must be clearly indicated on the erosion and sediment control plan.

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 tha 2:1. Benching must be provided in accordance with Section B-3 Land Grading. Runoff from the stockpile area must drain to a suitable sediment control practice.

Access the stockpile area from the upgrade side. 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 practice must be used to intercept the discharge.

Stockpiles must be stabilized in accordance with the 3/7 day stabilization requirement as well as 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

Maintenance

The stockpile area must continuously meet the requirements for Adequate Vegetative Establishment in 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, 30 feet for 3:1 slopes, or 40 feet for 4:1 slopes, benching must be provided in accordance with Section B-3

STANDARDS AND SPECIFICATIONS

SEEDING AND MULCHING

(8-4-3)

Definition

Criteria

The application of seed and mulch to establish vegetative cover.

<u>Purpose</u> To protect disturbed soils from erosion during and at the end of construction.

Conditions Where Practice Applies

To the surface of all perimeter controls, slopes, and any disturbed area not under active grading.

Specifications a. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory. All seed used must have been tested within the 6 months immediately preceding the date of sowing such material on any project. Refer to Table B.4 regarding the quality of seed. Seed tags must be available upon request to the inspector to verify type of seed and seeding rate.

Mulch alone may be applied between the fall and spring seeding dates only if the ground is frozen. The appropriate seeding mixture must be applied when the ground thaws. c. Inoculants: The inoculant for treating legume seed in the seed mixtures must be a pure culture

of nitrogen fixing bacteria prepared specifically for the species. Inoculants must not be used later than the date indicated on the container. Add fresh inoculants as directed on the package Use four times the recommended rate when hydroseeding. Note: It is very important to keetp inoculant as cook as possible until used. Temperatures above 75 to 80 degrees Fahrenheit can weaken bacteria and make the inoculant less effective. d. Sod or seed must not be placed on soil which has been treated with soil sterilants or chemicals

phyto-toxic materials.

a. Dry Seeding: This includes use of conventional drop or broadcast spreaders.

Incorporate seed into the subsoil at the rates prescribed on Temporary Seeding Table B.1, Permanent Seeding Table B.3, or site-specific seeding summaries. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction. Roll the seeded area with weighted roller to provide good seed to soil

used for weedcontrol until sufficient time has elapsed (14 days min.) to permit dissipation of

b. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil. Cultipacking seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seedbed must be firm after planting

Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction. c. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer). If fertilizer is being applied at the time of seeding, the application rates should not exceed

the following: nitrogen, 100 pounds per acre total of soluble nitrogen; P 0 (phosphorus), 200 pounds per acre; K O (potassium), 200 pounds per acre. ii. Lime: Use only ground agricultural limestone (up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons are applied by hydroseeding at any one

time. Do not use burnt or hydrated lime when hydroseedina. Mix seed and fertilizer on site and seed immediately and without interruption. iv. When hydroseeding do not incorporate seed into the soil.

 Mulch Materials (in order of preference) a. Straw consisting of thoroughly threshed wheat, rye, oat, or barley and reasonably bright in color. Straw is to be free of noxious weed seeds as specified in the Maryland Seed Law and not musty, moldy, caked, decayed, or excessively dusty. Note: Use only sterile straw mulch in areas

where one species of grass is desired. b. Wood Cellulose Fiber Mulch (WCFM) consisting of specially prepared wood cellulose processed into uniform fibrous physical state. WCFM is to be dyed green or contain a green dye in the package that will provide an

appropriate colot to facilitate visual inspection of the uniformly spread slurry. WCFM including dve, must contain no germination or growth inhibiting factors. WCFM materials are to be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch

and percolation properties and must cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings. WCFM material must not contain elements or compounds at concentration levels that will by

WCFM must conform to the following physical requirements: fiber length of approximately 10 millimeters, diameter approximately 1 millimeter, pH range of 4.0 to 8.5, ash content of 1.6 percent maximum and water holding capacity of 90 percent minimum.

material must form a blotter-like ground cover, on application, having moisture absorption

Apply mulch to all seeded areas immediately after seeding. When straw mulch is used spread it over all seeded areas at the rate of 2 tons per acre to a uniform loose depth of 1 to 2 inches. Apply mulch to achieve a uniform distribution and depth so that the soil surface is not exposed. When using a mulch anchoring tool, increase the application rate to 2.5 tons per acre.

Wood cellulose fiber used as mulch must be applied to a net dry weight of 1500 pounds per acre. Mix the wood cellulose fiber with water to attain a mixture with a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.

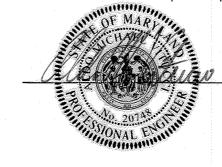
Perform mulch anchoring immediately following application of mulch to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon the size of the area and erosion hazard: A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of 2 inches. This practice is most effective on large greas, but is limited to flatter slopes where equipment can operate safely. If used on

sloping land, this practice should follow the contour. Wood cellulose fiber may be used for anchoring straw. Apply the fiber binder at a net dry weight of 750 pounds per acre. Mix the wood cellulose fiber with water at a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.

iii. Synthetic binders such as Acrylic DLR (Agro-Tack), DCA-70, Petroset, Terra Tax II, Terra Tack AR or other approved equal may be used. Follow application rates as specified by the manufacturer. Application of liquid binders needs to be heavier at the edges where wind catches mulch, such as in valleys and on crests of banks. Use of asphalt binders is strictly prohibited. Lightweight plastic netting may be stapled over the mulch according to manufacturer

recommendations. Netting is usually available in rolls 4-15 feet wide and 300 to 3,000

AS-BUILT CERTIFICATION NOTE: There is no "A5-BUILT" Information Provided on this sheet.



7/7/23

SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMITS. (2 WEEKS)

. NOTIFY "MISS UTILITY" AT LEAST 48 HOURS BEFORE ANY WORK AT 1-800-257-7777. NOTIFY HOWARD COUNTY OFFICE OF CONSTRUCTION/INSPECTION DIVISION AT 410-313-1870 AT LEAST 24-HOURS BEFORE STARTING ANY WORK.

3. INSTALL THE STABILIZED CONSTRUCTION ENTRANCES, PERIMETER SUPER SILT AS SHOWN ON THE

4. ONCE THE COUNTY SEDIMENT CONTROL INSPECTOR APPROVES THE SCE AND SUPER SILT FENCING, THE CONTRACTOR CAN START ON THE BUILDING-GARAGE FOUNDATIONS AND

5. CONCURRENT WITH VERTICAL CONSTRUCTION, THE CONTRACTOR CAN INSTALL ALL THE UTILITIES.

6. ONCE THE UTILITIES UNDER THE ROADS ARE COMPLETE, START CURB/GUTTER AND BASE PAVING. (2 MONTHS)

7. STABILIZE ALL REMAINING AREAS DISTURBED AREAS ONSITE WITH PERMANENT SEEDING OR

OPTIONAL SODDING OR PROTECT BIO-RETENTION AREAS WITH SILT FENCING THE FINAL CONSTRUCTION OF THE BIO-RETENTION FACILITIES CAN BE COMPLETED WITH THE FILTER MEDIA AND PLANTINGS. 8. STANDARD NOTE: THE CONTRACTOR SHALL COORDINATE WITH THE INSPECTOR IN REGARDS TO THE

REQUIREMENT THAT NO MORE THAN 20-ACRES OF "OPEN" GROUND SHALL BE DISTURBED AT ANY GIVEN TIME, IF REQUIRED. THIS PARCEL "F-F" AND ASSOCIATED L.O.D. IS LESS THAN 20-ACRES IN SIZE. 9. THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON ALL SEDIMENT AND

10. GREEN NEIGHBORHOOD NOTE: ALL CONSTRUCTION WASTE WILL BE MANAGED IN ACCORDANCE WITH THE APPROVED GREEN NEIGHBORHOOD WASTE MANAGEMENT PLAN.

NOTE: ALL CONSTRUCTION WASTE MUST BE MANAGED IN ACCORDANCE WITH THE CONSTRUCTION WASTE MANAGEMENT PLAN PER GREEN NEIGHBORHOOD CREDIT H-3.

HOWARD SOIL CONSERVATION DISTRICT (HSCD) STANDARD SEDIMENT CONTROL NOTES

1. A pre-construction meeting must occur with the Howard County Department of Public Works, Construction Inspection Division (CID), 410-313-1855 after the future LOD and protected areas are marked clearly in the field. A minimum of 40 hour notice to CID must be given at the following stages: a. Prior to the start of earth

b. Upon completion of the installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or arading. c. Prior to the start of another phase of construction or opening of another grading unit, d. Prior to

the removal or modification of sediment control practices. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made. Other related state and federal permits shall be referenced, to ensure coordination and to

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 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.

3. Following initial soil disturbance or re-disturbance, permanent or temporary stabilization is required within three (3) calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes steeper than 3 horizontal to 1 vertical (3:1): and seven (7) calendar days as to all other disturbed areas on the project site except for those areas under active grading. 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 topsoil (Sec. 8-4-2), permanent seeding (Sec. 8-4-5), temporary seeding (Sec. 8-4-4) and mulching (Sec. 8-4-3). Temporary stabilization with mulch alone can only be applied between the fall and spring seeding dates if the ground is frozen. Incremental stabilization (Sec. B-4-1) specifications shall be enforced in areas with >15' of cut and/or fill. Stockpiles (Sec. 8-4-8) in excess of 20 ft, must be benched with stable outlet. All concentrated flow, steep slope, and highly erodible areas shall receive soil stabilization matting (Sec. B-4-6)

5. All sediment control structures are to remain in place, and are to be maintained in operative condition until

6. Site Analysis Total Area of Site: 3.625 Acres (PARCEL 'F-F') 1\ 8.58* Acres Area Disturbed

_____3.42___ Acres Area to be roofed or paved: *NOTE: 3.4 Ac. + 15 FOR STAGING/DELIVERY AREA Area to be vegetatively stabilized: ____1.76__ Acres _____733____ Cu. Yds Total Cut:

avoid conflicts with this plan.

Total Fill:

ON-SITE OF OXFORD PROJECT waste/borrow area location: 7. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance

____8114___ Cu. Yds.

8. Additional sediment control must be provided, if deemed necessary by the CID. The site and all controls shall be inspected by the contractor weekly; and the next day after each rain event. A written report by the contractor, made available upon request, is part of every inspection and should include:

 Inspection date • Inspection type (routine, pre-storm event, during rain event) Name and title of inspector · Weather information (current conditions as well as time and amount of last recorded precipitation)

· Brief description of project's status (e.g., percent complete) and/or current activities · Evidence of sediment discharges · Identification of plan deficiencies Identification of sediment controls that require maintenance • Identification of missing or improperly installed sediment controls

· Compliance status regarding the sequence of construction and stabilization requirements Photographs Monitoring/sampling · Maintenance and/or corrective action performed . Other inspection items as required by the General Permit for Stormwater Associated with Construction

9. Trenches for the construction of utilities is limited to three pipe lengths or that which can and shall be back-filled and stabilized by the end of each workday, whichever is shorter. 10. Any major changes or revisions to the plan or sequence of construction must be reviewed and approved by the HSCD prior to proceeding with construction. Minor revisions may allowed by the CID per the list of HSCD-approved field changes.

11. Disturbance shall not occur outside the L.O.D. A project is to be sequenced so that grading activities begin on one grading unit (maximum acreage of 20 ac. per grading unit) at a time. Work may proceed to a subsequent grading unit when at least 50 percent of the disturbed area in the preceding grading unit has been stabilized and approved by the HSCD. Unless otherwise specified and approved by the HSCD, no more than 30 acres cumulatively may be disturbed at a given time.

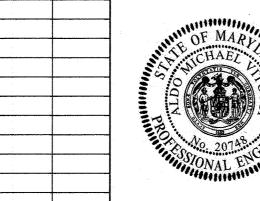
12. Wash water from any equipment, vehicles, wheels, pavement, and other sources must be treated in a sediment basin or other approved washout structure.

13. Topsoil shall be stockpiled and preserved on-site for redistribution onto final grade. 14. All Silt Fence and Super Silt Fence shall be placed on-the-contour, and be imbricated at 25' minimum intervals, with lower ends curled uphill by 2' in elevation 15. Stream channels must not be disturbed during the following restricted time periods

• Use I and IP March 1 - June 15 • Use III and IIIP October 1 - April 30 • Use IV March 1 - May 31

16. A copy of this plan, the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and associated permits shall be on-site and available when the site is active.

FISHER, COLLINS & CARTER, INC. ELLICOTT CITY, MARYLAND 21042 (410) 461 - 2855



ENGINEER'S CERTIFICATE I certify that this plan for sediment and erosion 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."

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 all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved raining Program for the Control of Sediment and Erosion before beginning the project. authorize periodic on-site inspection by the Howard Soil Conservation District."

Kellogg-CCP, LLC Managing Member Towson, Maryland 21204 Ph# 410-296-3800

Developer Preston · Scheffenacker Properties 100 West Road, Suite 304 Towson, Maryland 21204 Ph# 410-296-3800

12-21-17 /Z.Z1.17 12-21-17 SECTION/AREA PARCEL No. OXFORD SQUARE PLAT NO. BLOCK NO. ZONE TAX/ZONE | ELEC. DIST. CENSUS TR. 24351 - 24353 TOD

REVISED

SEDIMENT AND EROSION CONTROL NOTES & DETAILS

Parcel 'F-F' & OPEN SPACE LOT 377

"Dartmoor Place"

Zoned: TOD Tax Map No.: 38 Grid No.: 20 Parcel No.: 1003 First Election District Howard County, Maryland Scale: As Shown Date: December 6, 2017

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET

12/6/17

DATE

Aldo M. Vitucci

signature of Engineer (print name below signature)

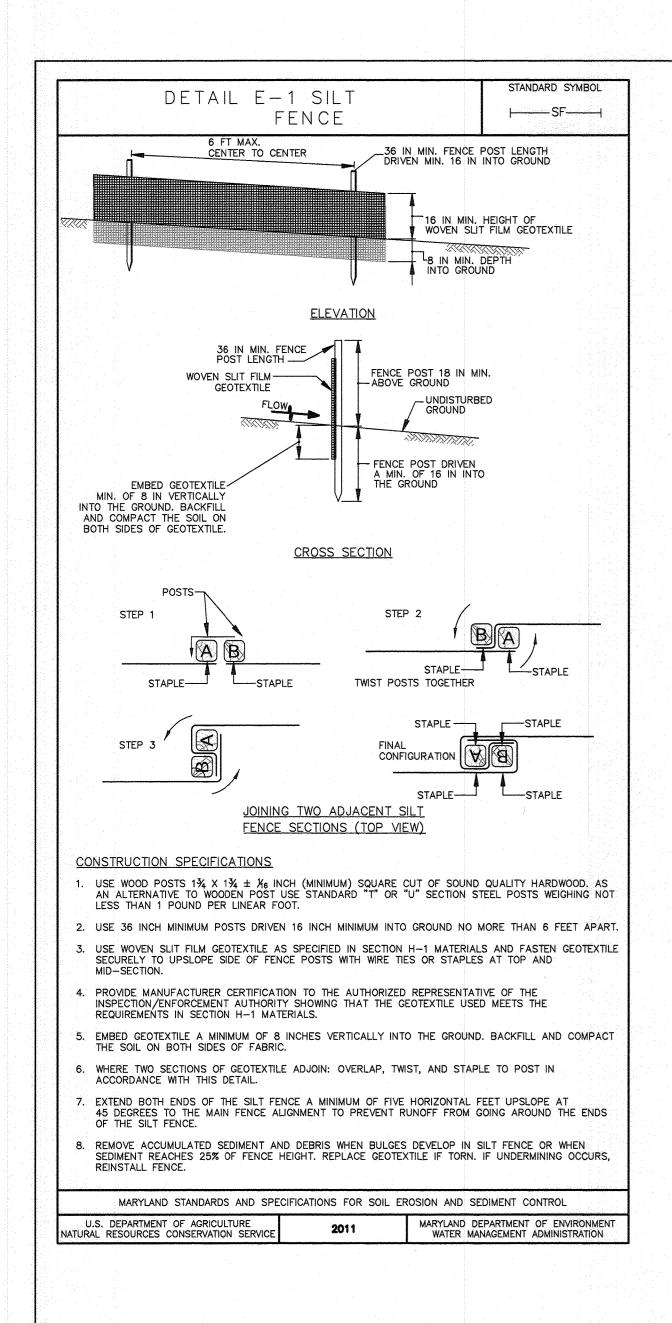
c/o David P. Scheffenacker, Jr., 100 West Road, Suite 304

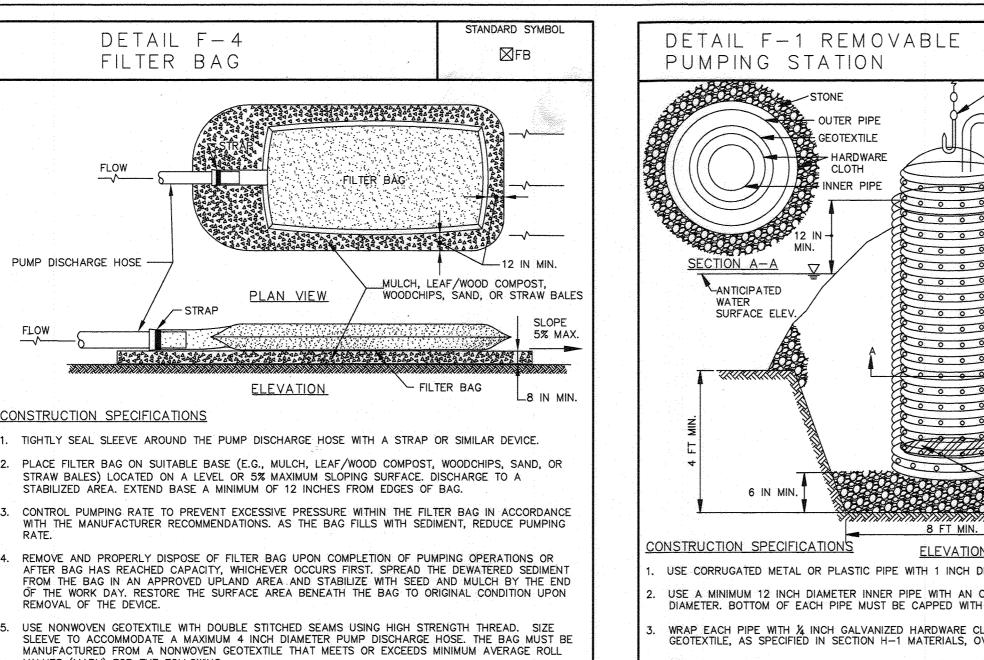
Owner

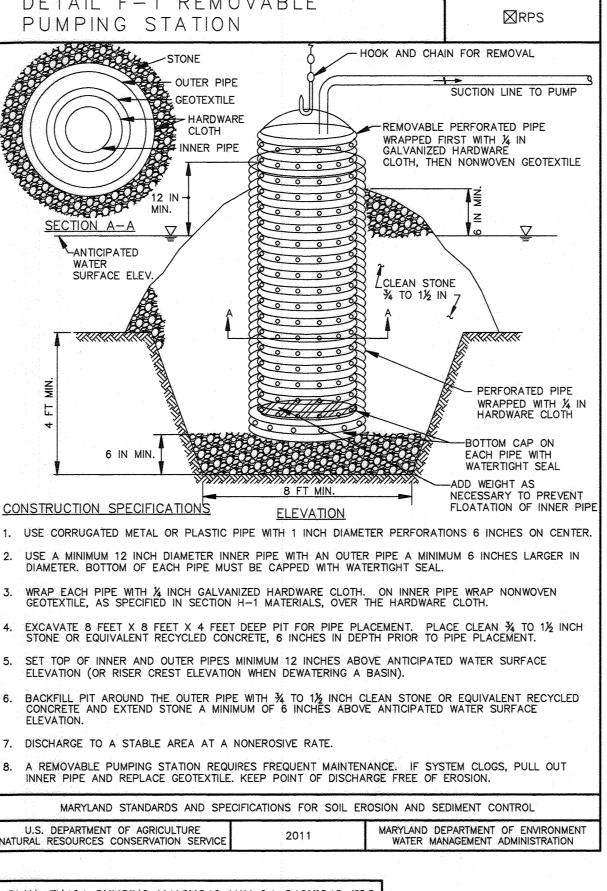
This development plan is approved for soil erosion and sediment control by

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

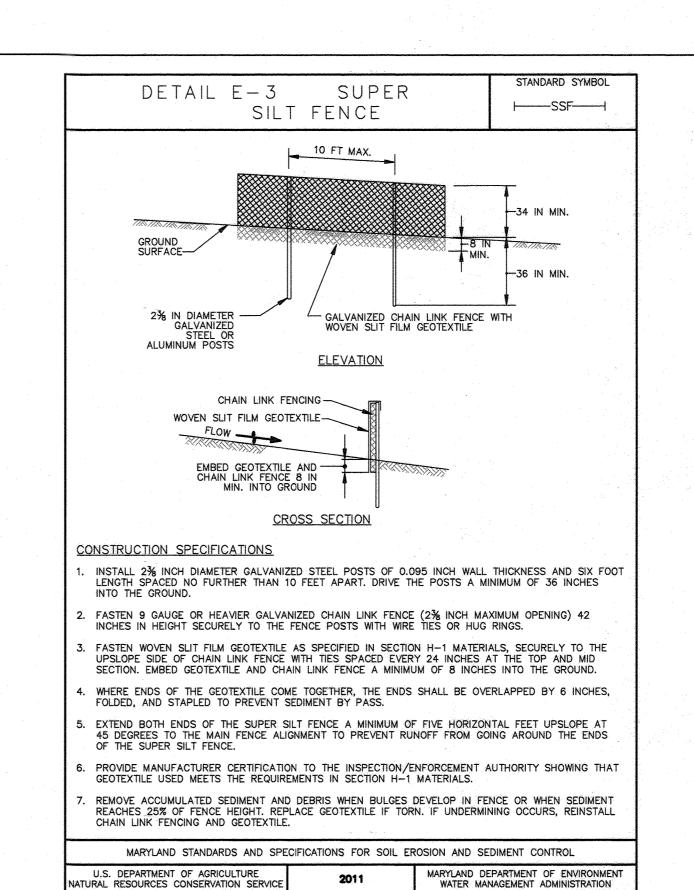
Sheet 11 Of 27



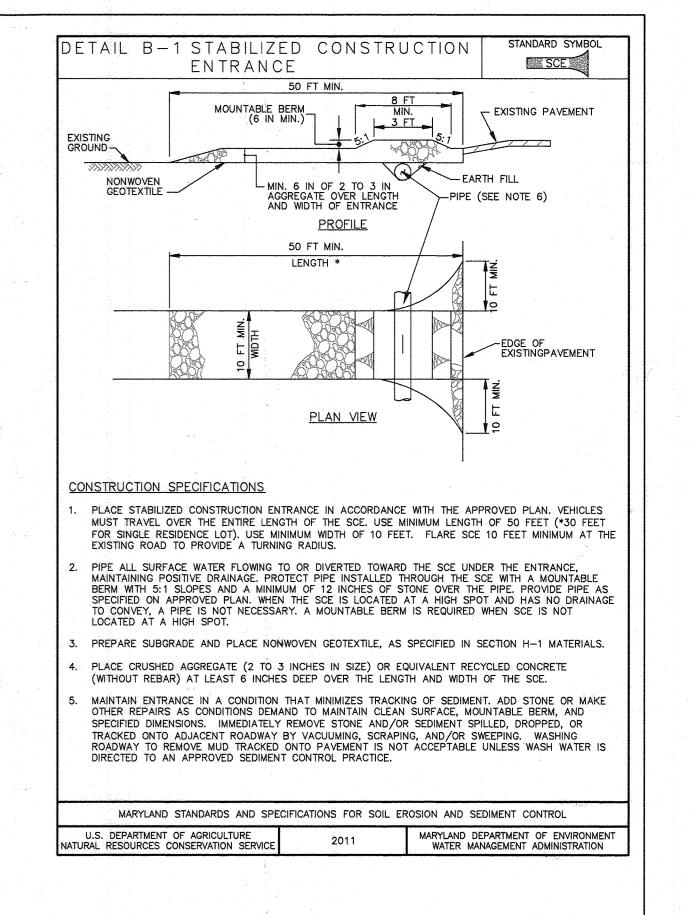




STANDARD SYMBOL



ETAIL B-4-6-A



NOTE FOR DETAILS F-1 & F-4: ALTHOUGH NO TRAPS/BASINS ARE REQUIRED FOR THIS PLAN, THESE PUMPING MEASURES MAY BE REQUIRED FOR FOUNDATION CONSTRUCTION AND UTILITY INSTALLATION.

ASTM D-4632

ASTM D-4491

ASTM D-4491

ASTM D-4355

MARYLAND DEPARTMENT OF ENVIRONMENT

WATER MANAGEMENT ADMINISTRATION

ASTM D-4751

ASTM D-4632

ASTM D-4833

PUNCTURE

FLOW RATE

PERMITTIVITY (SEC-

APPARENT OPENING SIZE (AOS)

NATURAL RESOURCES CONSERVATION SERVICE

UV RESISTANCE

SEAM STRENGTH

70 GAL/MIN/FT²

0.15-0.18 MM

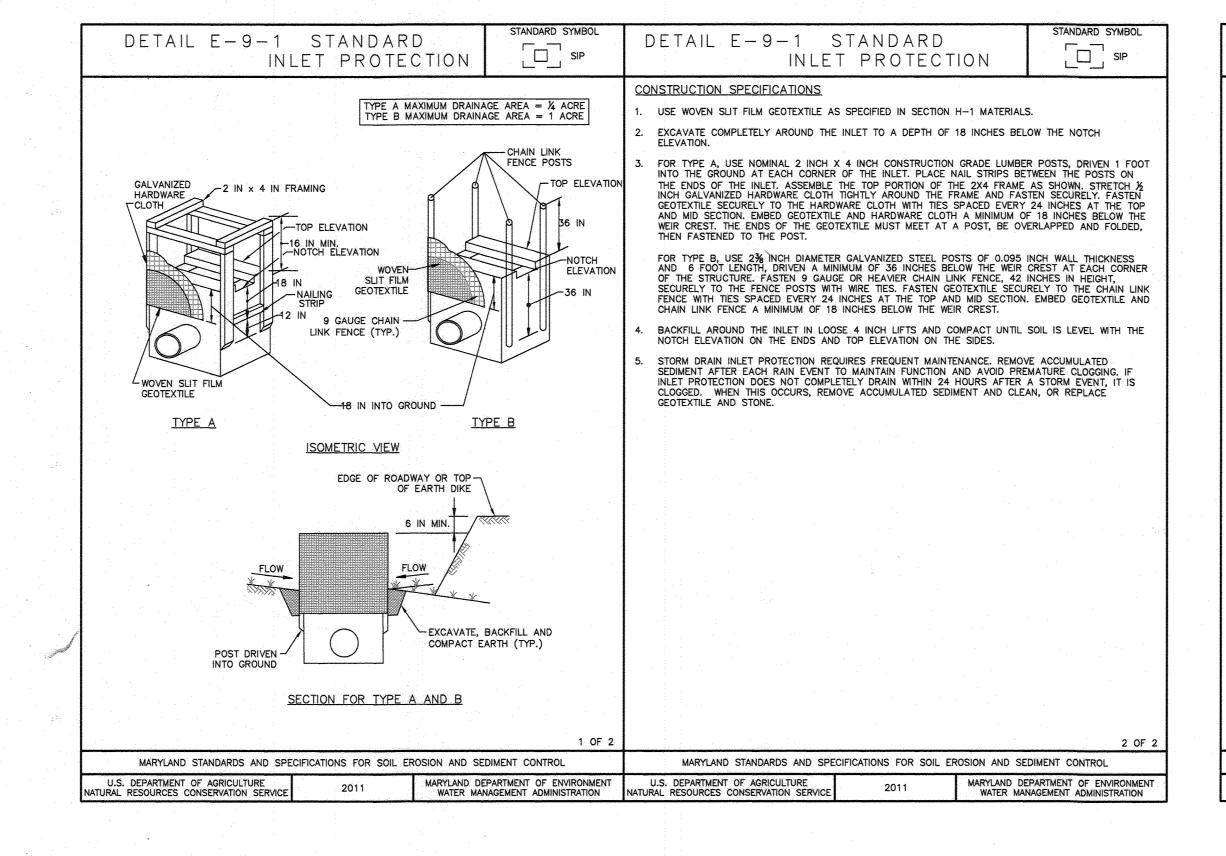
70% STRENGTH @ 500 HOURS

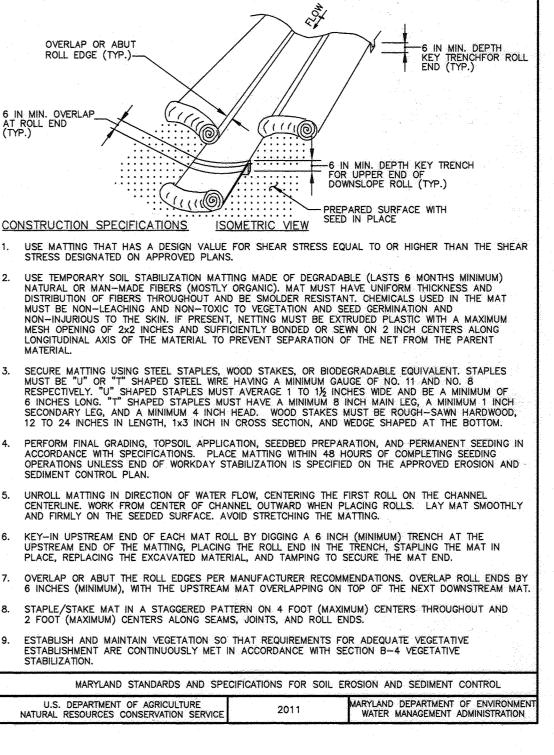
REPLACE FILTER BAG IF BAG CLOGS OR HAS RIPS, TEARS, OR PUNCTURES. DURING OPERATION KEEP

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

CONNECTION BETWEEN PUMP HOSE AND FILTER BAG WATER TIGHT. REPLACE BEDDING IF IT BECOMES

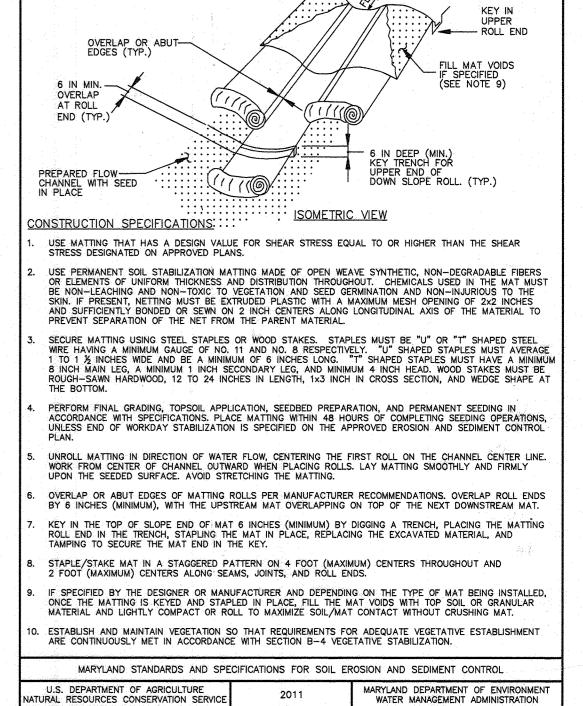
1.2 SEC⁻¹





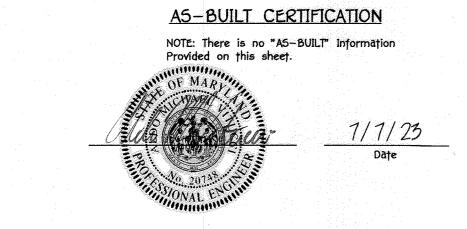
TEMPORARY

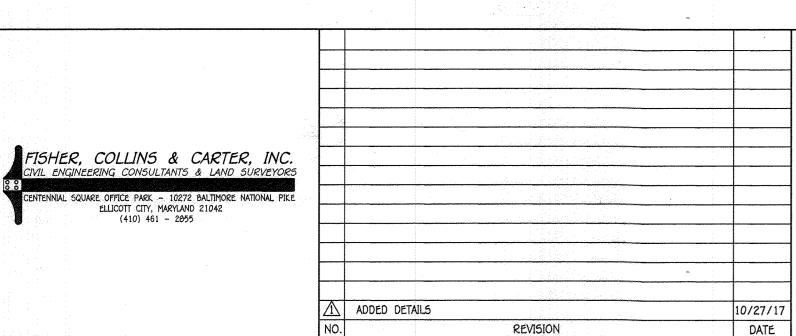
(* INCLUDE SHEAR STRESS)



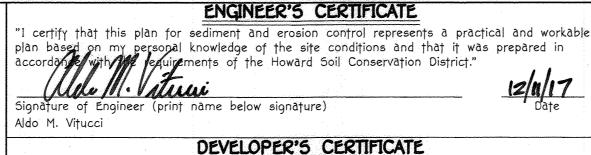
(* INCLUDE SHEAR STRESS

DETAIL B-4-6-C PERMANENT









DEVELOPER'S CERTIFICATE /We certify that all development and construction will be done according to this plan for sediment and erosion control, and that all 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. horize periodic on-site inspection by the Howard Soil Conservation District."

This development plan is approved for soil erosion and sediment control by Owner Developer

Kellogg-CCP, LLC Preston · Scheffenacker Properties c/o David P. Scheffenacker, Jr., 100 West Road, Suite 304 Towson, Maryland 21204 100 West Road, Suite 304 Ph# 410-296-3800 Towson, Maryland 21204 Ph# 410-296-3800

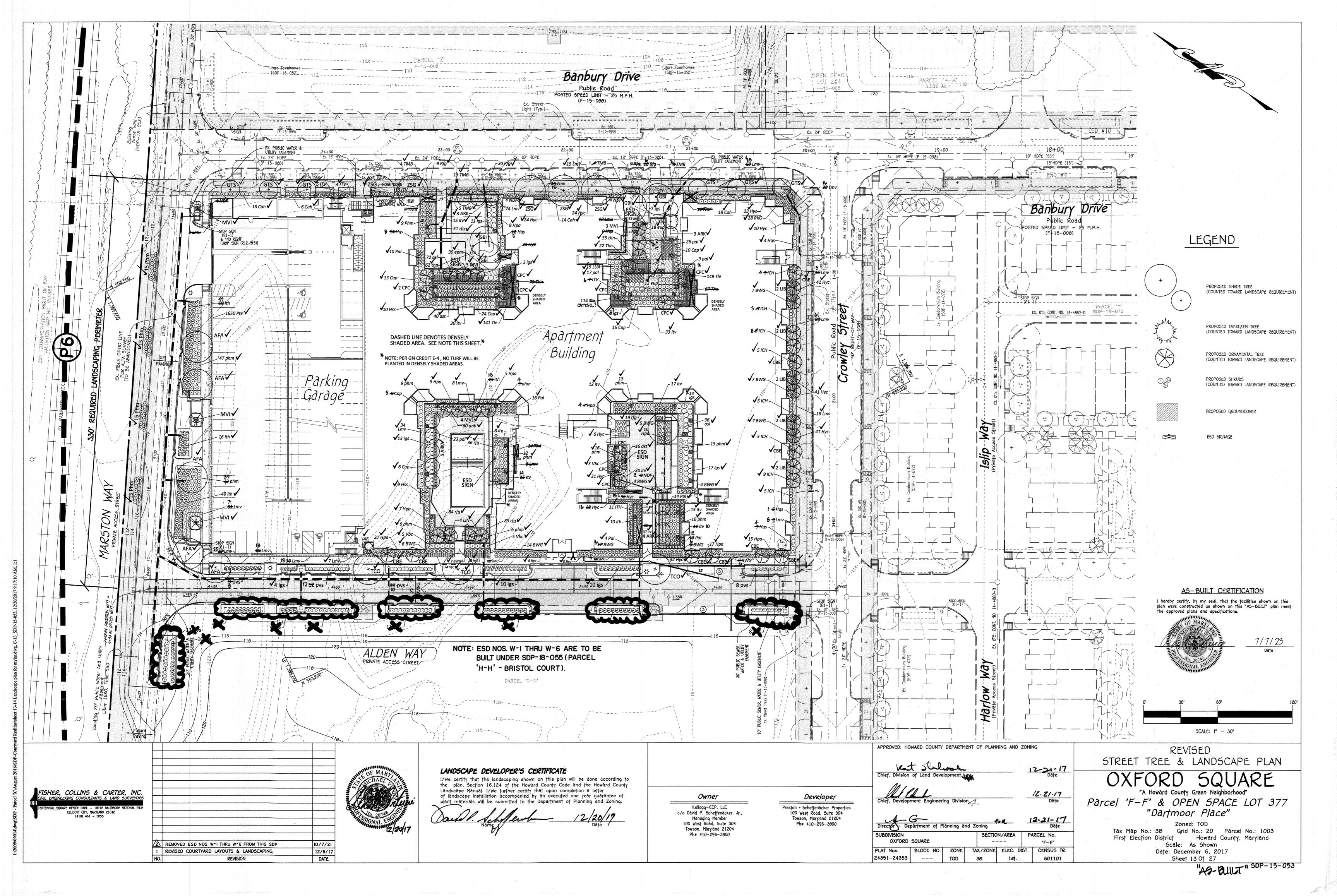
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING 12-21.17 Chief, Division of Land Development 🎎 12.21.17 Chief, Development Engineering Division AG 12-21-17 Director - Department of Planning and Zoning SUBDIVISION SECTION/AREA PARCEL No. OXFORD SQUARE PLAT Nos. BLOCK NO. ZONE TAX/ZONE ELEC. DIST. CENSUS TR. 24351-24353 TOD

REVISED SEDIMENT AND EROSION CONTROL NOTES & DETAILS

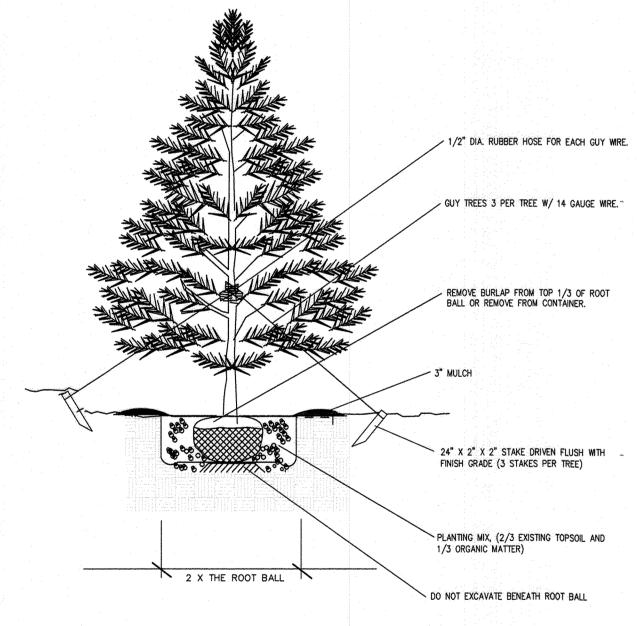
Parcel 'F-F' & OPEN SPACE LOT 377 "Dartmoor Place"

Zoned: TOD Tax Map No.: 38 Grid No.: 20 Parcel No.: 1003 First Election District Howard County, Maryland Scale: As Shown Date: December 6, 2017 Sheet 12 Of 27

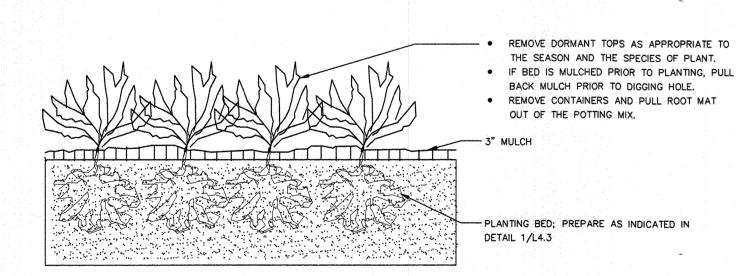
THERE IS NO "AS-BUILT" INFORMATION PROJUED ON THIS SHEET 50P-15-053



DECIDUOUS TREE - TYPICAL PLANTING DETAIL



EVERGREEN TREE - TYPICAL PLANTING DETAIL



GROUNDCOVER / PERENNIAL PLANTING - TYPICAL

REVISED LANDSCAPING CHARTS

REVISION

GENERAL PLANTING NOTES:

__(3) STEMS MINIMUM

MULTI-STEM TREES

-FINISH GRADE

PREPARE PLANTING MIX OF: 1 PART EXISTING SOIL, 1 PART ORGANIC MATTER,

1 PART IMPORTED TOPSOIL PER SPECIFICATIONS

ROOTBALL IN COMPLIANCE WITH ANLA STANDARDS AND SPECIFICATIONS CUT BURLAP AND FOLD DOWN TOP 1/3

INTO HOLE AFTER LOCATION AND DEPTH HAVE BEEN APPROVED BY LANDSCAPE ARCHITECT

CUT TOP 2 ROWS OF WIRE IN 4 PLACES.
 FOLD WIRE DOWN INTO HOLE.

3" MULCH SEE SPECS; FORM SAUCER ONLY WHEN PLANTING AN INDIVIDUAL SHRUB

SET 1/8 OF ROOT BALL ABOVE

FINISH GRADE UNLESS OTHERWISE REQUIRED BY SOIL CONDITIONS

SCARIFY SUBSOIL TO 6" MIN. DEPTH

- 1. CLEAR & GRUB ALL PLANTING AREAS. 2. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES IN THE FIELD PRIOR TO INSTALLATION OF ANY PLANT MATERIAL.
- 3. NO CHANGES SHALL BE MADE WITHOUT WRITTEN CONSENT OF THE OWNER OR LANDSCAPE ARCHITECT. 4. PRIOR TO CONSTRUCTION OF PLANTING BEDS, THE CONTRACTOR SHALL STAKE OUT PLANTING BED LINES IN THE FIELD
- FOR REVIEW BY THE LANDSCAPE ARCHITECT. 5. INSTALL ALL REQUIRED PLANTING AND LAWN SOILS AS PER DETAILS. ALL SHRUBS, GROUND COVERS, AND PERENNIALS
- SHALL BE PLANTED IN PLANTING BEDS PREPARED AS REQUIRED BY THE DETAILS. 6. MAINTAIN POSITIVE DRAINAGE OUT OF PLANTING BEDS AT A MINIMUM 2% SLOPE AND MAINTAIN POSITIVE DRAINAGE
- OF ALL LAWN AREAS, UNLESS OTHERWISE NOTED ON DRAWINGS. ALL GRADES, DIMENSIONS, AND EXISTING CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR ON SITE BEFORE CONSTRUCTION BEGINS. . ALL PLANT BEDS SHALL BE CONTAINED WITH A SPADED EDGE UNLESS OTHERWISE NOTED ON DRAWINGS.
- 8. IN THE EVENT OF A DISCREPANCY BETWEEN QUANTITIES SHOWN ON THE DRAWINGS AND QUANTITIES SHOWN ON THE PLANT LIST, THE QUANTITIES ON THE DRAWINGS SHALL APPLY.
- 9. ALL PLANTS SHALL CONFORM TO THE SIZES GIVEN IN THE PLANT LIST AND SHALL BE NURSERY GROWN IN ACCORDANCE WITH THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1), LATEST EDITION.
- 10. PLANTS SHALL BE LOCATED AS SHOWN ON THE DRAWINGS. PRIOR TO PLANTING, THE CONTRACTOR SHALL STAKE OUT THE LOCATIONS OF ALL PLANTS IN THE FIELD FOR REVIEW BY THE LANDSCAPE ARCHITECT. LANDSCAPE ARCHITECT SHALL MAKE ADJUSTMENTS IN THE FIELD AS NECESSARY. ALL FINAL PLANT LOCATIONS ARE TO BE APPROVED BY THE LANDSCAPE ARCHITECT. FOR LAYOUT REVIEW, CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT A MINIMUM OF THREE DAYS IN ADVANCE.
- 11. ALL DISTURBED AREAS SHALL BE FINE GRADED AND SEEDED OR SODDED.

	PLANTIN	G SCHEDULE (INCLUDED IN SOP LAI	IDUCATE REQUIR	EMENIS)	
QTY.	KEY	BOTANICAL NAME COMMON NAME	SIZE	CONT.	REMARKS
TREES -	DECIDUOUS SH	HADE		-	
5	AFA	Acer x freemanii 'Autumn Blaze'	2-1/2" cal. min.	B & B	Seedless
15	ARK	Freeman Maple Acer rubrum 'Karpik' Karpick Red Maple	2-1/2" cal. min.	B & B	Seedless/Fastigiate
5	GBI	Ginkgo biloba Maidenhair Tree	2-1/2" cal. min.	B & B	Seedless/Male Only
6	GTS	Gleditsia triacanthos var. inermis 'Drave Streetkeeper Honeylocust	s' 2-1/2" cal. min.	B & B	Thornless/Fastigiat
3	TCO	Tilla cordata 'Greenspire' Littleleaf Linden	2-1/2" cal. min.	B & B	Street Tree
5	ZSG	Zelkova serrata 'Green Vase' Japanese Zelkova	2-1/2" cal. min.	B & B	
1	IAF	llex x attenuata 'Fosteri' Foster's Holly	6'-8' ht. min.	B & B	Male Only
TOFFS -	ORNAMENTAL	<u> </u>		1	
4	LIN	Lagerstroemia indica x fauriei 'Natchez'	8'-10' ht. min.	B & B	Multistem/4 canes m
		Natchez Crapemyrtle			
10	LIB	Lagerstroemia x 'Biloxi' Biloxi Crapemyrtle	8'-10' ht. min.	B & B	Multistem/4 canes m
13	MVI	Magnolia virginiana Sweetbay Magnolia	8'-10' ht. min.	B & B	Multistem/4 canes m
9	CBE	Carpinus betulus European Hornbeam	2-1/2" cal. min.	B & B	Fastigiate
11	CPC	Carpinus caroliniana American Hornbeam	2-1/2" cal. min.	B & B	
SHRUBS (PART OF SCHI	EDULE 'C' REQUIREMENT)			
95 91	BWG	Buxus microphylla var. koreana 'Wintergreen' Wintergreen Boxwood	24"-30" Ht.	Cont.	36" O.C.
4 8 44	ICH	llex crenata 'Helleri' Japanese Holly	24"-30" spd.	Cont.	30" O.C.
11	ITH	Itea virginica 'Little Henry' Sweetspire	24"-30" Ht.	Cont.	36" O.C.
21	ITV	Itea virginica 'Henry's Garnet' Sweetspire	24"-30" Ht.	Cont.	36" O.C.
15	LUA	Leucothoe axillaris Coast Fetterbush	18"-24" Ht.	Cont.	42" O.C.
10	NDF	Nandina domestica 'Firepower' Firepower Heavenly Bamboo	24"-30" ht.	Cont.	36" O.C.
28	RKO	Rosa 'Light Pink Knockout Rose' Knockout Rose	24"-30" Ht.	Cont.	36" O.C.
18	SMC	Spirea japonica 'Magic Carpet' Magic Carpet Spirea Taxus x media 'Brownii'	18"-24" Ht.	Cont.	24" O.C.
25		Anglojap Yew REQUIREMENT)	24 –30 Ht.	B & B	40 0.c.
60	Phm	Panicum virgatum 'Heavy Metal' Heavy Metal Switchgrass	#1	Cont.	36" O.C.
ESD PLAN	ITS				
124	anb	Aster novo-belgii New York Aster	#1	Cont.	18" o.c.
200 258	asl	Aster laevis Smooth Aster	#1	Cont.	18" o.c.
70	ast	Aesclepias tuberosa Butterfly Weed	#1	Cont.	30" o.c.
30	épm	Echinacea purpurea 'Magnus' Purple Coneflower	#1	Cont.	18" o.c.
30	eup	Eupatorium pupureum 'Little Joe' 'Little Joe' Joe-Pye Weed	#1	Cont.	36" O.C.
120	igs	llex glabra 'Shamrock' Inkberry	24"-30" Ht.	Cont.	40" o.c./Male Cultiva
142	irv	Iris versicolor Blue Flag Iris	1 Gal.	Cont.	18" o.c.
149 150	ith	Itea virginica 'Little Henry' Sweetspire	24"-30" Ht.	Cont.	36" O.C.
154 154	itv	Itea virginica 'Henry's Garnet' Sweetspire	24"-30" Ht.	Cont.	36" O.C.
175	phm	Panicum virgatum 'Heavy Metal' Heavy Metal Switchgrass	#1	Cont.	36" O.C.
75	pal	Pennisetum alopecuroides Fountaingrass	#1	Cont.	30" O.C.
82	pvs	Panicum virgatum Switchgrass	#1	Cont.	36" O.C.
309	rfg	Rudbeckia fulgida 'Goldstrum' Black—eyed Susan	1 Qt.	Cont.	18" O.C.

SCHEDULE A PERIMETER LANDSCAP	E EDGE
PERIMETER	P6 (F-12-026)
CATEGORY	Res. Adjàcent to Non-Res.
LANDSCAPE TYPE	Α
LINEAR FEET OF PERIMETER (TOTAL PERIMETER)	1630.70°**
CREDIT FOR EXISTING VEGETATION (TOTAL PERIMETER) (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	YE5-350' F-12-026
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE IF NEEDED)	NO
NUMBER OF PLANTS REQUIRED (TOTAL PERIMETER) SHADE TREES EVERGREEN TREES SHRUBS	32 64 -
NUMBER OF PLANTS REQUIRED W/THIS SDP (330') SHADE TREES EVERGREEN TREES	6 0
NUMBER OF PLANTS PROVIDED W/THIS SDP (330') SHADE TREES EVERGREEN TREES OTHER TREES (2:1 SUBSTITUTION) SHRUBS (10:1 SUBSTITUTION) (DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)	0 0 0 60

** PERIMETER P-6 NOTE: TOTAL PERIMETER P-6 PER (F-12-026) = 1630.70330' OF P-6 IS PART OF THIS SDP-15-053 1025' OF P-6 IS PART OF 5DP-16-052 WITH THE REMAINING 275.70' BEING PROVIDED UNDER A FUTURE SDP.

SCHEDU RESIDENTAL D INTERNAL LA	EVELOPMENT
NUMBER OF DWELLING UNITS	258
NUMBER OF TREES REQUIRED (1:DU SFA; 1:3 DU APTS)	<i>Ø</i> 6
NUMBER OF TREES PROVIDED SHADE TREES	39
OTHER TREES (2:1 SUBSTITUTION) SHRUBS (10:1 SUBSTITUTION)	48 (1 EVERGREEN / 47 ORNAMENTAL) 317

QTY.	KEY	BOTANICAL NAME COMMON NAME	SIZE	CONT.	REMARKS
HRUBS/PE	RENNIAL5/G	ROUNDCOVER		: '.	,
			T.	T	
56	Cah	Clethra alnifolia 'Hummingbird' Hummingbird Summersweet	24"-30" ht.	Cont.	36" O.C.
74	Сар	Clethra alnifolia 'Pink Spire' Pink Spire Summersweet	24"-30" ht.	Cont.	36" O.C.
101 98	Нра	Hydrangea paniculata 'Little Lime' 'Little Lime' Hydrangea	30"-36" ht.	Cont.	40" O.C.
22	Hqs	Hydrangea quercifolia 'Snow Queen' Oakleaf Hydrangea	24"-30" ht.	Cont.	40" O.C.
19	Hss	Hosta 'Sum and Substance' Sum and Substance Hosta	#1	Cont.	42" O.C.
399	Нус	Hypericum calycinum Aaronsbeard St. Johnswort	15"-18" ht.	Cont.	18" O.C.
623 479	Lmv	Liriope muscari 'Variegata' Variegated Lilyturf	#1	Cont.	18" O.C.
57 56	Pal	Pennisetum alopecuroides Fountaingrass	#1	Cont.	30" O.C.
\$6 45	Rfg	Rudbeckia fulgida 'Goldstrum' Black-eyed Susan	1 Qt.	Cont.	18" O.C.
5	Phm	Panicum virgatum 'Heavy Metal' Heavy Metal Switchgrass	#1	Cont.	36" O.C.
1,650	Pte	Pachysandra terminalis Japanese Spurge		Cell Pack	6" O.C.
170	Thn	Thelypteris noveboracensis New York Fern	#1	Cont.	18" O.C.
404	Tle	Tiarella cordifolia 'Lehigh' Lehigh Foamflower	#1	Cont.	12" O.C.
13	Vbc	Viburnum burkwoodil 'Conoy' Burkwood Viburnum	30"-36" ht.	B & B	48" O.C.

* DENOTES NATIVE SPECIES PLANTED WITHIN DENSELY SHADED AREAS.

NUMBER OF TREES REQUIRED (SCHEDULE 'A' & 'C')

SHADE TREES:		92
EVERGREEN TREES:		0
		92

NUMBER OF TREES PROVIDED:

SHADE TREES: **EVERGREEN TREES: ORNAMENTAL TREES:**

SHRUBS:

1/2 = 0.547/2 = 23.5 317/10 = 31.7

TOTAL TREES PROVIDED:

FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING TREES 92 SHADE TREES (39 SHADE TREES + [45 ORNAMENTALS + 1 EVERGREENS] /2 + 300 SHRUBS /10) SHALL BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$27,600.

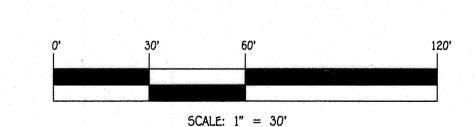
A5-BUILT CERTIFICATION

I hereby certify, by my seal, that the facilities shown on this plan were constructed as shown on this "A5-BUILT" plan meet the approved plans and specifications.



7/7/23

601101



FISHER, COLLINS & CARTER, INC. (410) 461 - 2055



12/6/17

DATE

DO NOT PRUNE PLANT ---

SET 1/8 OF ROOTBALL

4" EARTH SAUCER TO

TAMP SETTING BED

DO NOT EXCAVATE BENEATH ROOT BALL

2 X WIDTH OF ROOTBALL

SHRUB AND HEDGEROW - TYPICAL PLANTING DETAIL

PLANTING SPECIFICATIONS

5. NO CHANGES SHALL BE MADE WITHOUT WRITTEN CONSENT OF THE OWNER OR LANDSCAPE ARCHITECT.

REVIEW, CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT A MINIMUM OF THREE DAYS IN ADVANCE.

2. PROVIDE PROTECTION FOR TREES, SHRUBS, AND PERENNIALS/GROUND COVERS THAT ARE TO BE PRESERVED.

3. CONTRACTOR SHALL VERIFY THE CORRECT LOCATION OF ALL UNDERGROUND UTILITIES IN THE FIELD PRIOR TO

6. PRIOR TO CONSTRUCTION OF PLANTING BEDS, THE CONTRACTOR SHALL STAKE OUT PLANTING BED LINES IN THE FIELD

FOR REVIEW BY THE LANDSCAPE ARCHITECT. LANDSCAPE ARCHITECT SHALL MAKE ADJUSTMENTS IN THE FIELD AS NECESSARY. ALL FINAL PLANTING BED LOCATIONS ARE TO BE APPROVED BY THE LANDSCAPE ARCHITECT. FOR LAYOUT

7. INSTALL ALL REQUIRED PLANTING AND LAWN SOILS AS PER DETAILS AND SPECIFICATIONS, AND ALL SHRUBS, GROUND

COVERS, AND PERENNIALS SHALL BE PLANTED IN PLANTING BEDS PREPARED AS REQUIRED BY THE DETAILS AND

CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR ON SITE BEFORE CONSTRUCTION BEGINS. ANY DISCREPANCIES

10. IN THE EVENT OF A DISCREPANCY BETWEEN QUANTITIES SHOWN ON THE DRAWINGS AND QUANTITIES SHOWN ON THE

PLANT LIST, THE QUANTITIES ON THE DRAWINGS SHALL APPLY. REPORT DISCREPANCIES TO THE LANDSCAPE ARCHITECT

11. ALL PLANTS SHALL CONFORM TO THE SIZES GIVEN IN THE PLANT LIST AND SHALL BE NURSERY GROWN IN ACCORDANCE

12. PLANTS SHALL BE LOCATED AS SHOWN ON THE DRAWINGS. PRIOR TO PLANTING, THE CONTRACTOR SHALL STAKE OUT

SHALL MAKE ADJUSTMENTS IN THE FIELD AS NECESSARY. ALL FINAL PLANT LOCATIONS ARE TO BE APPROVED BY THE LANDSCAPE ARCHITECT. FOR LAYOUT REVIEW, CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT A MINIMUM OF

THE LOCATIONS OF ALL PLANTS IN THE FIELD FOR REVIEW BY THE LANDSCAPE ARCHITECT. LANDSCAPE ARCHITECT

14. CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING AND MAINTAINING ALL PLANTS DURING THE WARRANTY PERIOD;

8. MAINTAIN POSITIVE DRAINAGE OUT OF PLANTING BEDS AT A MINIMUM 2% SLOPE AND MAINTAIN POSITIVE DRAINAGE

OF ALL LAWN AREAS, UNLESS OTHERWISE NOTED ON DRAWINGS. ALL GRADES, DIMENSIONS, AND EXISTING

9. ALL PLANT BEDS SHALL BE CONTAINED WITH A SPADED EDGE UNLESS OTHERWISE NOTED ON DRAWINGS.

13. ALL DISTURBED AREAS SHALL BE FINE GRADED AND SEEDED OR SODDED; SEE PLAN FOR LOCATIONS.

1. CLEAR & GRUB ALL PLANTING AREAS AS INDICATED ON THE DRAWINGS.

4. ALL PLANTING SHALL BE DONE AS PER PLANTING DETAILS AND SPECIFICATIONS.

SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT OR OWNER.

WITH THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1), LATEST EDITION.

INSTALLATION OF ANY PLANT MATERIALS.

FOR CLARIFICATION PRIOR TO BIDDING.

THREE DAYS IN ADVANCE.

REFER TO SPECIFICATIONS.

MULTISTEM TREE - TYPICAL PLANTING DETAIL

12" PLANTING TOPSOIL

3" MULCH ----

LANDSCAPE DEVELOPER'S CERTIFICATE

I/We certify that the landscaping shown on this plan will be done according to the plan, Section 16.124 of the Howard County Code and the Howard County Landscape Manual. I/We further certify that upon completion a letter of landscape installation accompanied by an executed one year quarantee of

plant materials will be submitted to the Department of Planning and Zoning.

Owner

Thelypteris noveboracensis

* DENOTES NATIVE SPECIES PLANTED WITHIN DENSELY SHADED AREAS

Kellogg-CCP, LLC c/o David P. Scheffenacker, Jr. Managing Member 100 West Road, Suite 304 Towson, Maryland 21204 Ph# 410-296-3800

Developer

24351-24353

Preston · Scheffenacker Properties 100 West Road, Suite 304 Towson, Maryland 21204 Ph# 410-296-3800

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING 12-26-17

12.21.17

12-21-17 SUBDIVISION PARCEL No. SECTION/AREA OXFORD SQUARE ____ BLOCK NO. ZONE TAX/ZONE ELEC. DIST. CENSUS TR. PLAT Nos.

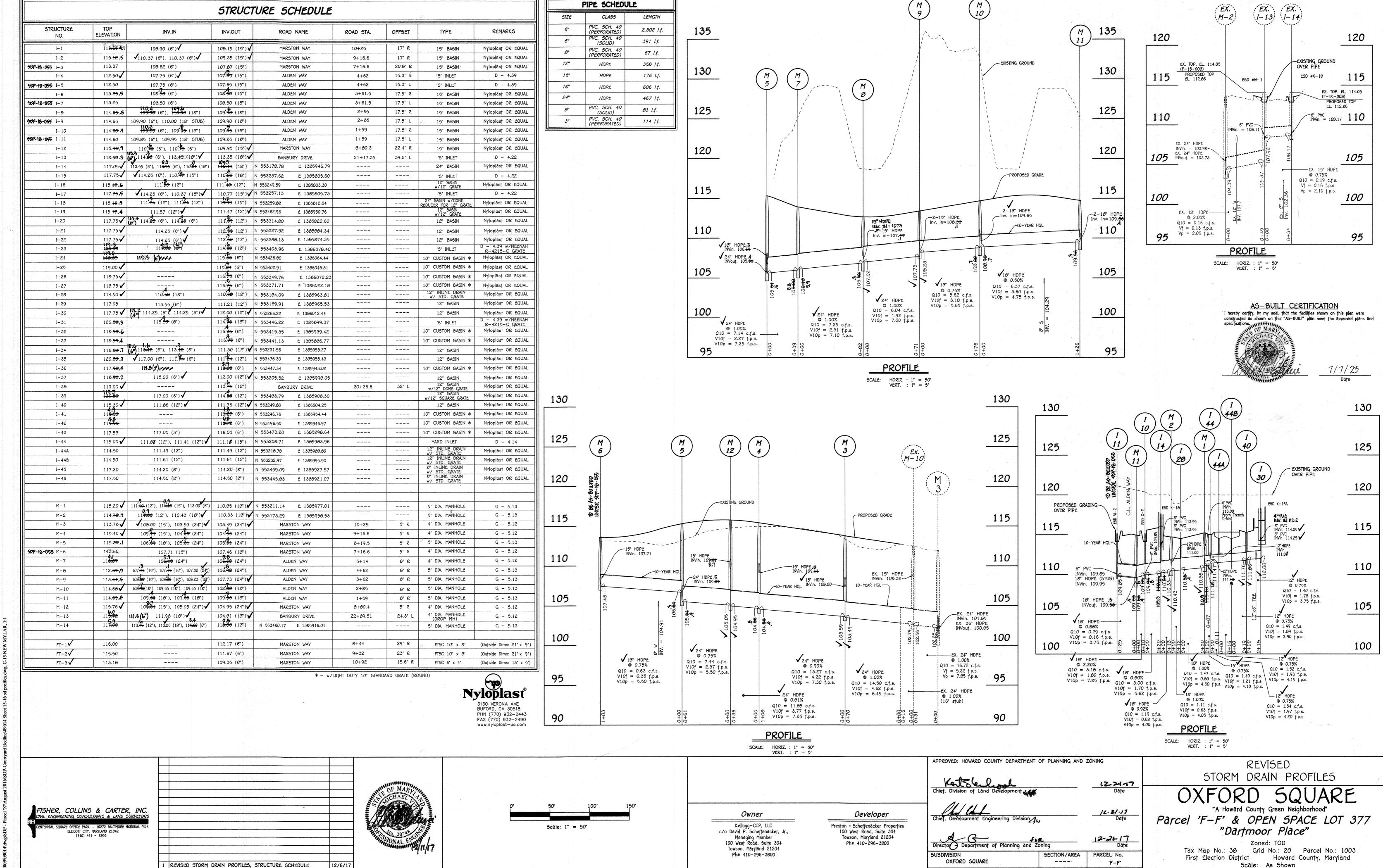
TOD

REVISED LANDSCAPE DETAILS

Parcel 'F-F' & OPEN SPACE LOT 377 "Dartmoor Place"

> Zoned: TOD Tax Map No.: 38 Grid No.: 20 Parcel No.: 1003 First Election District Howard County, Maryland Scale: As Shown Date: December 6, 2017 Sheet 14 Of 27

"A9-BUILT" 50P-15-053



BLOCK NO. ZONE

TOD

24351-24353

TAX/ZONE ELEC. DIST.

CENSUS TR.

601101

Date: December 6, 2017

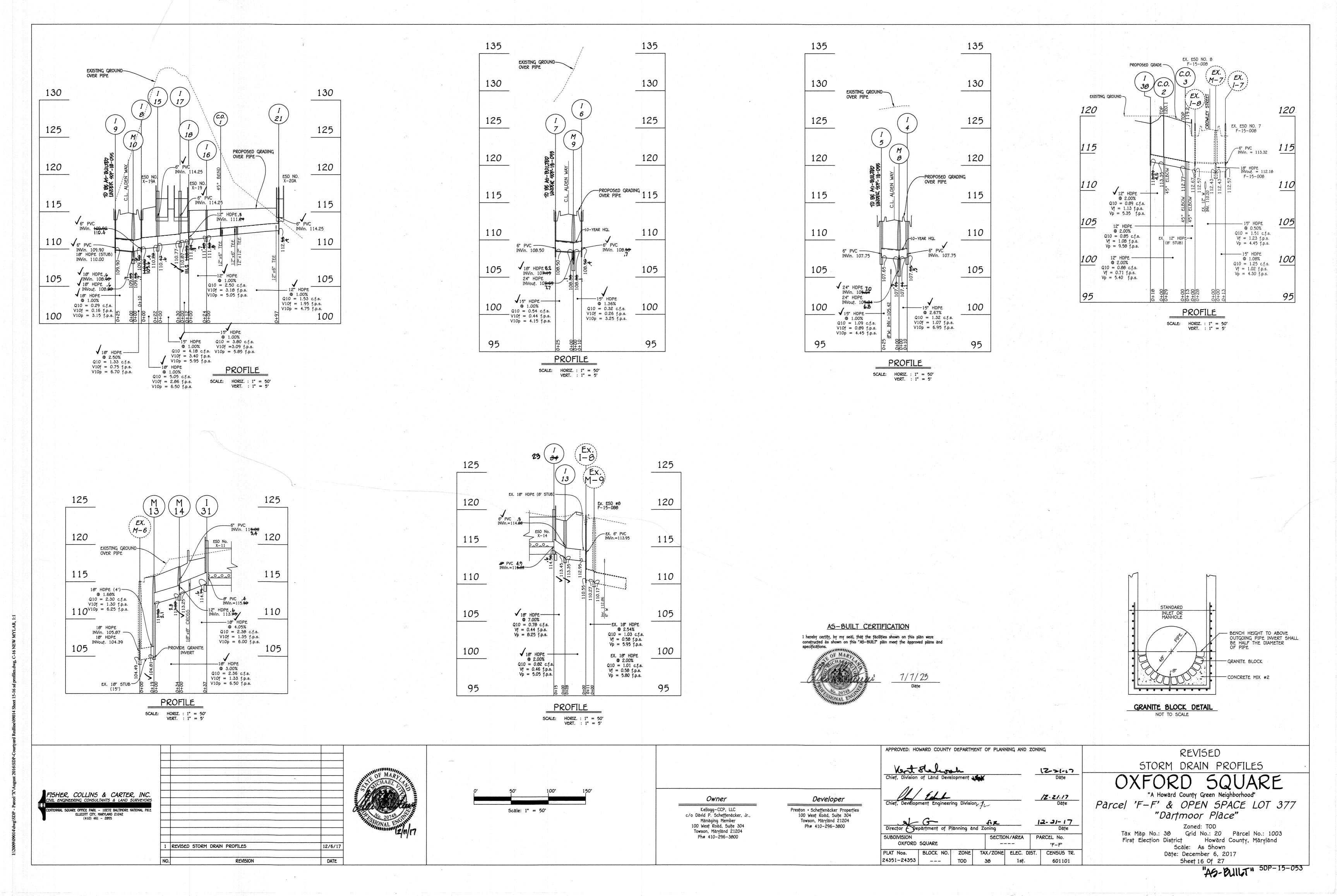
Sheet 15 Of 27

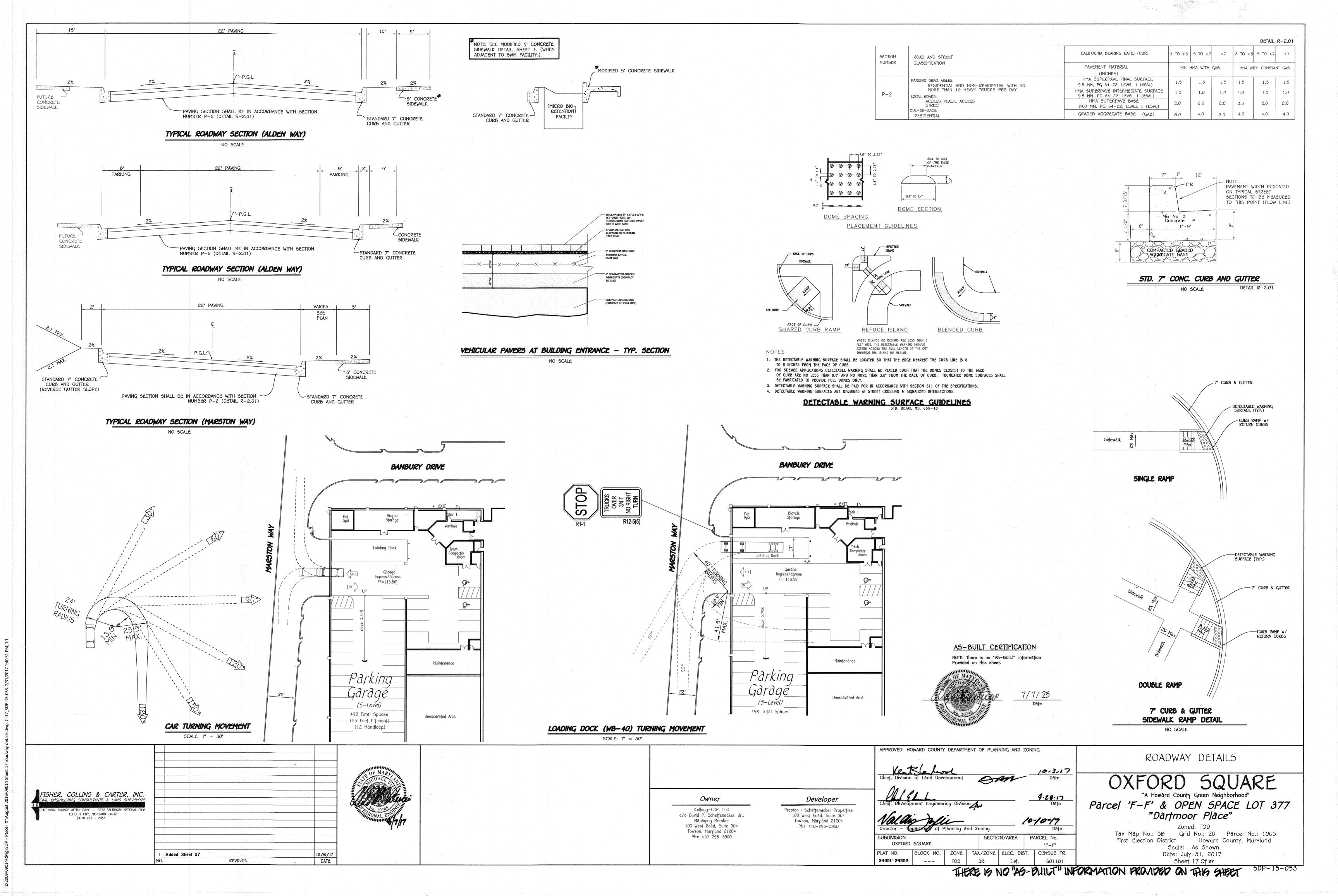
"AS-BUILT" 5DP-15-053

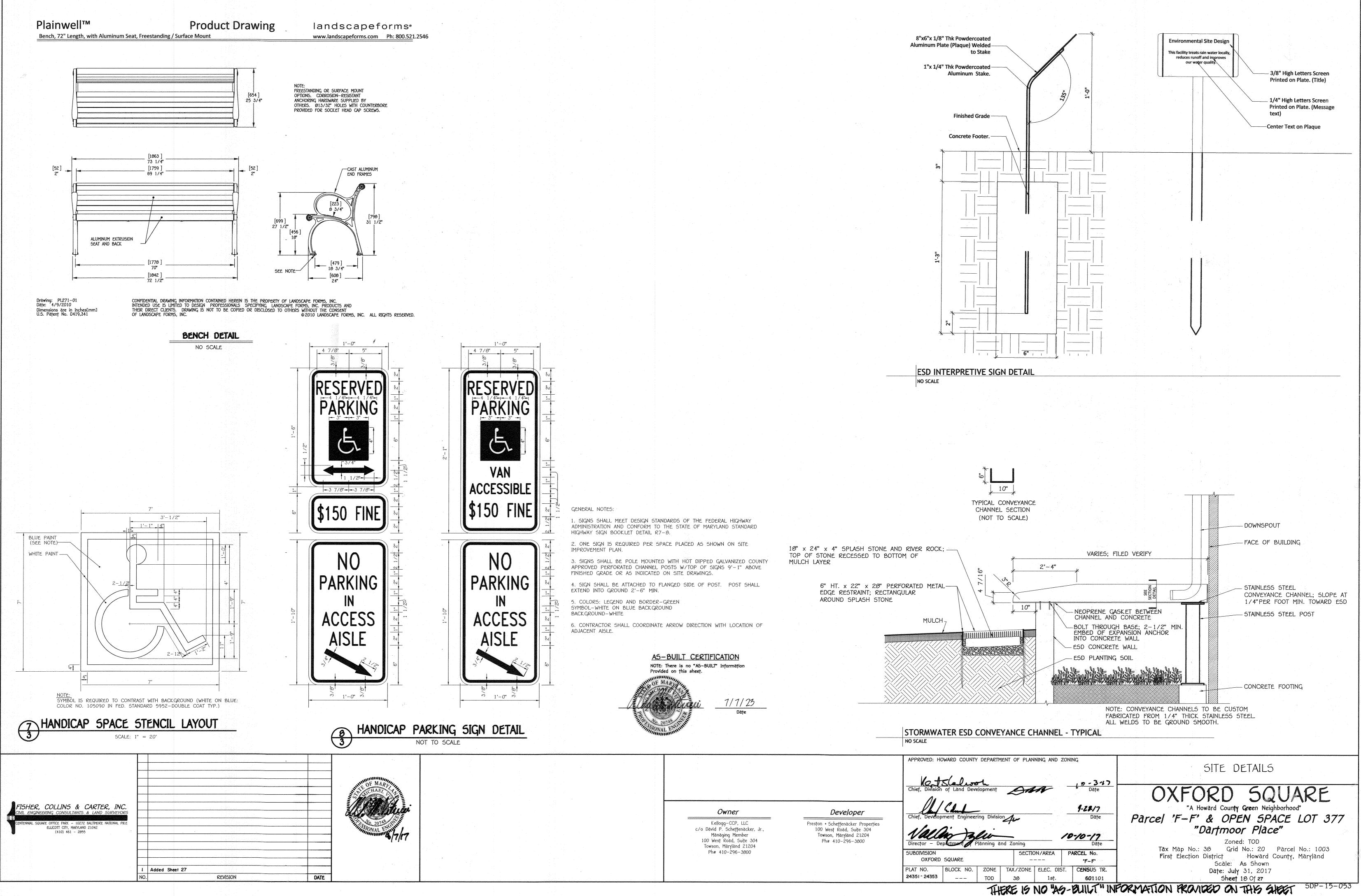
AND PIPE SCHEDULE

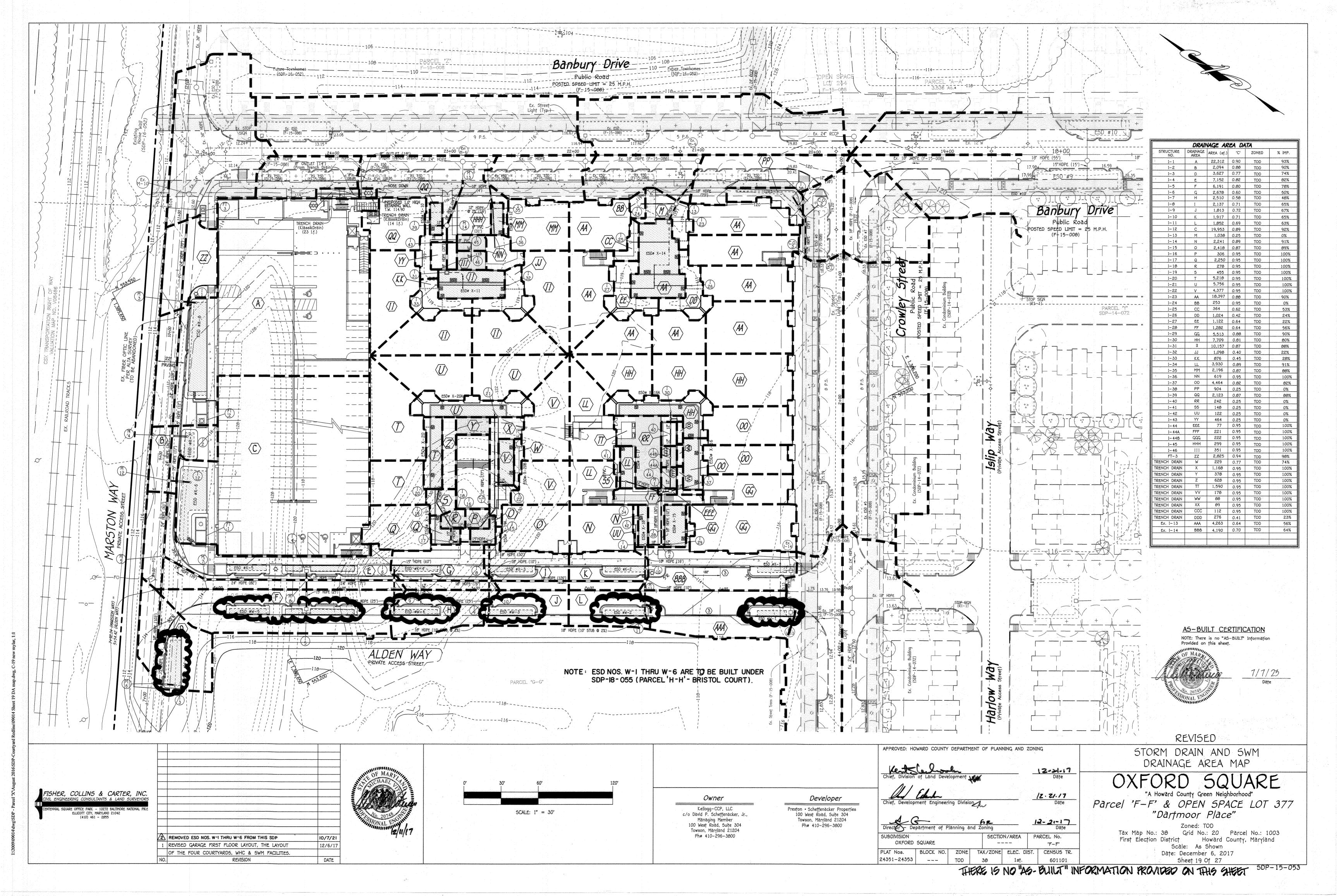
REVISION

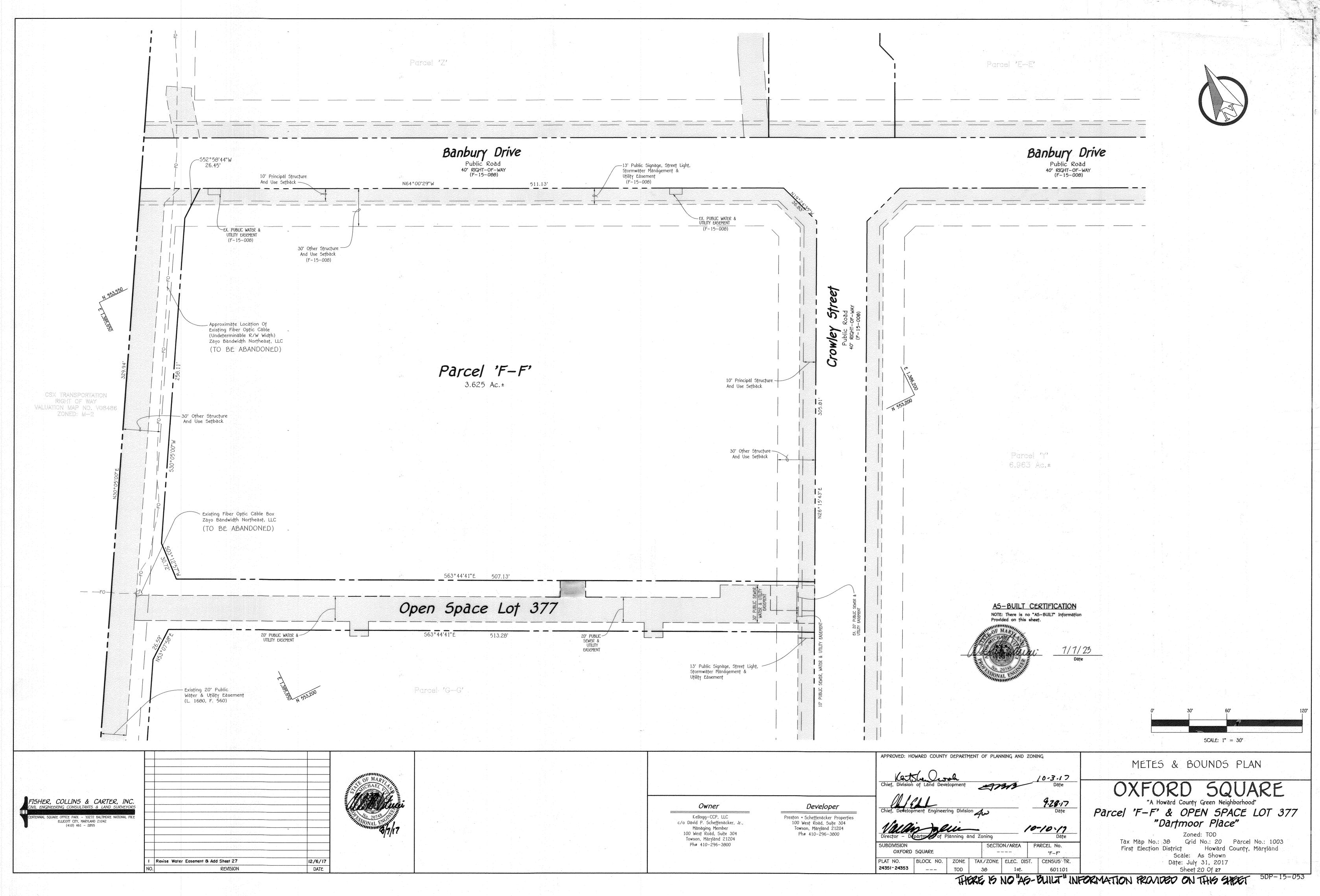
DATE











2009\09014\dwg\SDP - Parcel 'X'\August 2016\09014 Sheet 20 Metes & Boun

GREEN NEIGHBORHOOD CHECKLIST:

Credit No.	Credit	Champion (Name, Role)	Requirement	Site Development Plan GN Strategies	Documentation Location	M ax Points	Requeste
A 1	Innovative / Integra			Provide documentation	GN Report	4	4
A-1	Green Development Plan	PCM/Petitoner; HCM/Planners	Shows how plans meet criteria, includes checklist, natural resource inventory and energy analysis	Provide documentation	GN Plan	REQ'D	
A-2	Interdisciplinary Project Team	PCM/Petitoner	Includes U.S. Green Building Council Leadership in Energy and Environmental Design (LEED) Accredited professional, ecologist /	architect and landscape architect.	GN Plan	REQ'D	
A-3	Third Party Certification	PCM/Petiloner	environmental professional / landscape architect, and engineer Certification of credits by independent LEED	Alexander Design Studio	GN Plan GN Report	REQ'D	
A-4a	Innovative Design A	HCM/Planners	accredited professional Green Streets	Green Streets	GN Report SDP-15-053	1	1
A-4b	Innovative Design B	HCM/Planners	Priority Parking for Fuel Efficient Cars	Reserve 5% for Priority Parking for Fuel Efficient Cars	Sheet 3, 17 GN Report GN Plan	1	1
A-4c	Innovative Design C	HCM/Planners	Compact Development	Residential Development will exceed 20 DU/AC		1	1
A-4d	Innovative Design D	HCM/Planners	Walkable Streets	More than 80% building frontage oriented tow ards public spaces; Less than 20% service and garage openings to public spaces.	GN Plan GN Report GN Plan	1	1
B B-1a	Location, Linkages Redevelopment Site	HCM/Planners	Reuse of previously	More than 25% area previously developed	GN Plan	27	8 2
		FCC/Civil	developed site (minimum 25% existing impervious, with sliding scale for credits based on amount or % impervious)	(former sand and gravel operation).	Reference: Sketch Plan (S-15-001)		
B-1b	Redevelopment Site (Brownfield)	NA	Brow nfield cleanup of redevelopment site	N/A	N/A	8	0
B-2	Historic Buildings	WA	Preserve, restore or rehabilitate historic properties.	N/A	N/A	4	0
В-За	Transit Access & Amenities for Reduced Auto Dependence (Stop)	HCM/Planners	Site is served by transit stop within 1/2 mile (1 point) or 1/4 mile (2 points) walk from property	Private Shuttle Service with 2 stops (94% DU within 1/4 mile walking distance)	GN Plan Reference: Sketch Plan (S-15-001) F-15-008	2	2
B-3b	Transit Access & Amenities for Reduced Auto Dependence (Shelter)	HCM/Planners	Provide county-specified transit shelter with benches and lighting at transit stop within 1/2 mile of property and provided pedestrian link to stop if none currently exists	Provide HoCo transit approved shelter for private shuttle service	GN Plan Reference: SDP-13-068	4	4
B-4	Proximity to Community Resources	NA	Credit for 1/2 mile proximity to existing or proposed community resources such as schools, parks, library, post office, etc.		N/a	5	0
Commence of the Commence of th	Compact, Complete	A Committee of the Comm				27	25
បី	Diversity of Uses	HCWP lanners	1 point per different landuse; minimum 100 sf for ech non-residential per DU. Minimmum of 147,000 SF each of office, instituional and civic use, per 1,470 DU	Provide 3 Uses: Institutional, Civic and Office	GN Plan References: Sketch Plan (S-15-001)	3	3
	Planned Service Area	HCM/Planners	Locate the project within the Planned Service Area	The project is within the Planned Service Area	GN Plan	5	5
C-3a	Pedestrian System (Path)	HCMPlanners	Provide an off-site pathway/trail system with 2 connections to internal or external sidewalks, with minimal environmental impacts, long-term	Provide a shared use path system.	GN Plan References: Sketch Plan (S-15-001)	2	2
C-3b	Pedestrian System (Connections)	NA	Provide an off-site pathway/trail connection	NA	N/A	2	0
	Pedestrian System (Amenities)	HCM/Planners	Provide at least tw o different pedestrian experience features	Provide pedestrian amenities at trailheads, the lawn, school and residential mews	GN Plan References: Sketch Plan (S-15-001)	2	2
C4	Connected On-site Street Network	HCW/Planners	Provide a gridded street netw ork	More than 75% connected streets	GN Plan SDP-15-053 Sheet 3 Reference: Sketch Plan (S-15-001)	2	2
C -5	Parking does not exceed Required Minimum	HCM/Planners	exceed required parking ratios (1 point); plan takes advantage of shared parking provisions parking structure provided (in deck or beneath building (2 points); does not include	Provide common parking structures (4 points)	GN Plan SDP-15-053 Sheet 3 Reference: Sketch Plan (S-15-001)	4	4
C-6	Exceed Minimum Open Space Requirements	HCM/Planners	required minimum open space for the TOD zone. 1	Provide more than 25% increase in amenity space above the required minimum amenity space (TOD zoning regulations)	GN Plan Reference: Sketch Plan (S-15-001)	5	5
			point for every 10% of non- buildable HOA parcels				:
	Green Spaces and	HCW/Planners	above 50% of the site (up tp 3 points). Open space along	Publicly accessible open space will be provided		2	2

D-1	Environmental Pre					52	32
	Stream Restoration or Wetland Creation	EcoScience	Restoration of degraded on site stream channel; on-site	Provide w etland restoration for Wetland 'D'	GN Report References:	16	16
	or Restoration		restoration of degraded	(17- 00,010 3F)	Sketch Plan (S-15-001)		
			w etland or creation of		SDP-15-045		
			additional w etlands (sliding scale				
			based on % or length of			-	٠.
			stream restored and % or acres of wetland created				-
			or restored)				
0-2	Habitat Management Plan	EcoScience	Prepare and implement plan that identifies, conserves	Provide Habitat Management Plan	GN Report Reference:	4	4
	,		and enhances natural		Sketch Plan (S-15-001)		
			resources and ecological communities (may include		SDP-15-045		
	-		clean up of debris, removal				
			of invasives, etc.)				
)-3	25% Steep Slope	N/A	Protect all existing steep	N/A	N∕A	2	0
	Preservation		slopes as defined by County regulations				
		<i>3</i> 1	required; provide 25'				
			minimum buffer at top of				•
			25% slope (2 points)				
14	15% Slope Preservation	FCC/Civit; HCM/Planners	Protect existing 15%+ slopes (protect minimum	Preserve between 26-50% of 15%-24.9% slopes	GN Plan	4	2
			1/2 acre, with sliding scale		Reference:		
			based on area or % protected)		Sketch Plan (S-15-001)		
			protected)				
)-5	Minimize Grading and	FCC/Civil;	Minimize limit of	Balance Cut and Fill on entire site 2 points	GN Plan	5	4
	Site Disturbance	HCWPlanners	disturbance: leave at least	Minimize Retaining Walls 0 points			
			20% of site undisturbed (1 point), 30% (2 points), 40%	No new > 25% Steep slopes- 1 point Leave more than 20% of site undisturbed 1	Reference: Sketch Plan (S-15-001)		
			(3 points); balancecut and	points			
			fill on site (2 points); retaining walls 3-5.9'				-
-			(deduct 1 point) retaining				
		\$7°	w alls 6-8.9' (deduct 2				
			points), walls 9' and higher (deduct 3 points), no new			-	
			created steep slopes over				
			25% (1 point); amend soil nutrients in turf and				
			planting areas (1 point)				
-6	Exceed Minimum	EcoScience	1 point for every 10% of	N/A	WA	5	0
	Forest Conservation	FCC/Civil;	existing forest retained				
	Requirements	HOW/Planners	above break even point; 1 point for every 10% of on-				
			site forest planted in				
			excess of afforestation obligation				-
)-7	Save Trees above	N/A	1 point for protecting each	N/A	IN/A	4	0
,	12" Minimum Caliper	, 427	25% of all specimen trees				
		 	(does not include specimen trees within forest			-	
			conservation area or within				
			forests that are being			- 1	
		٠	cleared)			1	
			1	Landa and the second second second second		.	
-8a	Exceed Minimum	FCC/Civil;	75' buffer required for	75' buffer required for perennial and intermittent	I a contract to the contract t	REQ'D	
8a	Stream Buffer	FCC/Civit;	perennial and intermittent	75' buffer required for perennial and intermittent streams inside PSA,	Reference:	REQ'D	
-8a		FCC/Civit;	perennial and intermittent streams inside PSA, 100' buffer required for		I a contract to the contract t	REQ'D	
-8a	Stream Buffer	FCC/Civil;	perennial and intermittent streams inside PSA, 100'		Reference: Sketch Plan (S-15-001)	REQ'D	
	Stream Buffer Requirements		perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA	streams inside PSA,	Reference: Sketch Plan (S-15-001) F-15-008		
	Stream Buffer	FCC/Civit; ExoScience FCC/Civit;	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional	streams inside PSA, Provide 150 FT Stream Buffer (75 FT enhanced	Reference: Sketch Plan (S-15-001)	REQ'D	6
	Stream Buffer Requirements Exceed Minimum	EcoScience	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in	streams inside PSA,	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001)		6
	Stream Buffer Requirements Exceed Minimum Stream Buffer	EcoScience FCC/Civil;	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in	streams inside PSA, Provide 150 FT Stream Buffer (75 FT enhanced	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference:		6
	Stream Buffer Requirements Exceed Minimum Stream Buffer	EcoScience FCC/Civil;	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside w etland	streams inside PSA, Provide 150 FT Stream Buffer (75 FT enhanced	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001)		6
8b	Stream Buffer Requirements Exceed Minimum Stream Buffer Requirements Exceed Minimum	EcoScience FCC/Civil; HCM/Planners	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside w etland buffer or floodplain 2 points for each additional	streams inside PSA, Provide 150 FT Stream Buffer (75 FT enhanced buffer) 6 points	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001)		6
8b	Stream Buffer Requirements Exceed Minimum Stream Buffer Requirements Exceed Minimum Wetland Buffer	EcoScience FCC/Civil; HCM/Planners	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside w etland buffer or floodplain	streams inside PSA, Provide 150 FT Stream Buffer (75 FT enhanced buffer) 6 points	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001) F-15-008	6	
8b	Stream Buffer Requirements Exceed Minimum Stream Buffer Requirements Exceed Minimum	EcoScience FCC/Civil; HOMPlanners EcoScience FCC/Civil;	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside w etland buffer or floodplain 2 points for each additional 25' of w etland buffer	streams inside PSA, Provide 150 FT Stream Buffer (75 FT enhanced buffer) 6 points	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001) F-15-008	6	
8b	Stream Buffer Requirements Exceed Minimum Stream Buffer Requirements Exceed Minimum Wetland Buffer	EcoScience FCC/Civil; HOMPlanners EcoScience FCC/Civil;	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside wetland buffer or floodplain 2 points for each additional 25' of wetland buffer buffer outside stream buffer or floodplain 1 point for each 25' of	streams inside PSA, Provide 150 FT Stream Buffer (75 FT enhanced buffer) 6 points	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001) F-15-008	6	
8b	Stream Buffer Requirements Exceed Minimum Stream Buffer Requirements Exceed Minimum Wetland Buffer Requirements	EcoScience FCC/Civil; HCM/Planners EcoScience FCC/Civil; HCM/Planners	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside wetland buffer or floodplain 2 points for each additional 25' of wetland buffer buffer outside stream buffer or floodplain 1 point for each 25' of buffer to floodplain outside	streams inside PSA, Provide 150 FT Stream Buffer (75 FT enhanced buffer) 6 points N/A	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001) F-15-008	6	0
8b	Stream Buffer Requirements Exceed Minimum Stream Buffer Requirements Exceed Minimum Wetland Buffer Requirements	EcoScience FCC/Civil; HCM/Planners EcoScience FCC/Civil; HCM/Planners	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside wetland buffer or floodplain 2 points for each additional 25' of wetland buffer buffer outside stream buffer or floodplain 1 point for each 25' of	streams inside PSA, Provide 150 FT Stream Buffer (75 FT enhanced buffer) 6 points N/A	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001) F-15-008	6	0
-9 10	Stream Buffer Requirements Exceed Minimum Stream Buffer Requirements Exceed Minimum Wetland Buffer Requirements Floodplain Buffer	EcoScience FCC/Civil; HCM/Planners EcoScience FCC/Civil; HCM/Planners	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside wetland buffer or floodplain 2 points for each additional 25' of wetland buffer buffer outside stream buffer or floodplain 1 point for each 25' of buffer to floodplain outside required or provided	streams inside PSA, Provide 150 FT Stream Buffer (75 FT enhanced buffer) 6 points N/A	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001) F-15-008	4	0
8b	Stream Buffer Requirements Exceed Minimum Stream Buffer Requirements Exceed Minimum Wetland Buffer Requirements	EcoScience FCC/Civil; HCM/Planners EcoScience FCC/Civil; HCM/Planners	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside wetland buffer or floodplain 2 points for each additional 25' of wetland buffer buffer outside stream buffer or floodplain 1 point for each 25' of buffer to floodplain outside required or provided	streams inside PSA, Provide 150 FT Stream Buffer (75 FT enhanced buffer) 6 points N/A	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001) F-15-008	6	0
-9 10	Stream Buffer Requirements Exceed Minimum Stream Buffer Requirements Exceed Minimum Wetland Buffer Requirements Floodplain Buffer Site Landscape Imp Landscaping exceeds Minimum	EcoScience FCC/Civil; HCM/Planners EcoScience FCC/Civil; HCM/Planners N/A	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside wetland buffer or floodplain 2 points for each additional 25' of wetland buffer buffer outside stream buffer or floodplain 1 point for each 25' of buffer to floodplain outside required or provided wetland or stream buffer 1 point for each 10% increase in number of	Streams inside PSA, Provide 150 FT Stream Buffer (75 FT enhanced buffer) 6 points	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001) F-15-008 N/A	4	0
-9 10	Stream Buffer Requirements Exceed Minimum Stream Buffer Requirements Exceed Minimum Wetland Buffer Requirements Floodplain Buffer Site Landscape Implandscaping	EcoScience FCC/Civil; HCM/Planners EcoScience FCC/Civil; HCM/Planners N/A	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside w etland buffer or floodplain 2 points for each additional 25' of w etland buffer buffer outside stream buffer or floodplain 1 point for each 25' of buffer to floodplain outside required or provided w etland or stream buffer	Provide 150 FT Stream Buffer (75 FT enhanced buffer) 6 points N/A N/A Provide 20% increase in Landscape	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001) F-15-008	4	0
-9 -10	Stream Buffer Requirements Exceed Minimum Stream Buffer Requirements Exceed Minimum Wetland Buffer Requirements Floodplain Buffer Site Landscape Imp Landscaping exceeds Minimum Requirements and	EcoScience FCC/Civil; HCM/Planners EcoScience FCC/Civil; HCM/Planners N/A	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside wetland buffer or floodplain 2 points for each additional 25' of wetland buffer buffer outside stream buffer or floodplain 1 point for each 25' of buffer to floodplain outside required or provided wetland or stream buffer 1 point for each 10% increase in number of plants (must be native plants) provided above total minimum required in	Provide 150 FT Stream Buffer (75 FT enhanced buffer) 6 points N/A N/A Provide 20% increase in Landscape	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001) F-15-008 N/A N/A RMA	4	0
-9 10	Stream Buffer Requirements Exceed Minimum Stream Buffer Requirements Exceed Minimum Wetland Buffer Requirements Floodplain Buffer Site Landscape Implandscaping exceeds Minimum Requirements and Reduces Heat Island	EcoScience FCC/Civil; HCM/Planners EcoScience FCC/Civil; HCM/Planners N/A	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside wetland buffer or floodplain 2 points for each additional 25' of wetland buffer buffer outside stream buffer or floodplain 1 point for each 25' of buffer to floodplain outside required or provided wetland or stream buffer 1 point for each 10% increase in number of plants (must be native plants) provided above	Provide 150 FT Stream Buffer (75 FT enhanced buffer) 6 points N/A N/A Provide 20% increase in Landscape	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001) F-15-008 N/A N/A RMA	4	0
-9 10	Stream Buffer Requirements Exceed Minimum Stream Buffer Requirements Exceed Minimum Wetland Buffer Requirements Floodplain Buffer Site Landscape Implandscaping exceeds Minimum Requirements and Reduces Heat Island	EcoScience FCC/Civil; HCM/Planners EcoScience FCC/Civil; HCM/Planners N/A	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside wetland buffer or floodplain 2 points for each additional 25' of wetland buffer buffer outside stream buffer or floodplain 1 point for each 25' of buffer to floodplain outside required or provided wetland or stream buffer 1 point for each 10% increase in number of plants (must be native plants) provided above total minimum required in Landscape Manual; retain or plant trees on south and west sides of buildings and	Provide 150 FT Stream Buffer (75 FT enhanced buffer)— 6 points N/A Provide 20% increase in Landscape Requirements	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001) F-15-008 N/A N/A RMA	4	0
-9 10	Stream Buffer Requirements Exceed Minimum Stream Buffer Requirements Exceed Minimum Wetland Buffer Requirements Floodplain Buffer Site Landscape Implandscaping exceeds Minimum Requirements and Reduces Heat Island	EcoScience FCC/Civil; HCM/Planners EcoScience FCC/Civil; HCM/Planners N/A	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside wetland buffer or floodplain 2 points for each additional 25' of wetland buffer buffer outside stream buffer or floodplain 1 point for each 25' of buffer to floodplain outside required or provided wetland or stream buffer 1 point for each 10% increase in number of plants (must be native plants) provided above total minimum required in Landscape Manual; retain or plant trees on south and west sides of buildings and increase trees within	Provide 150 FT Stream Buffer (75 FT enhanced buffer)— 6 points N/A Provide 20% increase in Landscape Requirements	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001) F-15-008 N/A N/A RMA	4	0
-9 10	Stream Buffer Requirements Exceed Minimum Stream Buffer Requirements Exceed Minimum Wetland Buffer Requirements Floodplain Buffer Site Landscape Implandscaping exceeds Minimum Requirements and Reduces Heat Island	EcoScience FCC/Civil; HCM/Planners EcoScience FCC/Civil; HCM/Planners N/A	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside wetland buffer or floodplain 2 points for each additional 25' of wetland buffer buffer outside stream buffer or floodplain 1 point for each 25' of buffer to floodplain outside required or provided wetland or stream buffer 1 point for each 10% increase in number of plants (must be native plants) provided above total minimum required in Landscape Manual; retain or plant trees on south and west sides of buildings and	Provide 150 FT Stream Buffer (75 FT enhanced buffer)— 6 points N/A Provide 20% increase in Landscape Requirements	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001) F-15-008 N/A N/A RMA	4	0
-9 110	Stream Buffer Requirements Exceed Minimum Stream Buffer Requirements Exceed Minimum Wetland Buffer Requirements Floodplain Buffer Site Landscape Implandscaping exceeds Minimum Requirements and Reduces Heat Island	EcoScience FCC/Civil; HCM/Planners EcoScience FCC/Civil; HCM/Planners N/A	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside wetland buffer or floodplain 2 points for each additional 25' of wetland buffer buffer outside stream buffer or floodplain 1 point for each 25' of buffer to floodplain outside required or provided wetland or stream buffer 1 point for each 10% increase in number of plants (must be native plants) provided above total minimum required in Landscape Manual; retain or plant trees on south and west sides of buildings and increase trees within parking areas and along	Provide 150 FT Stream Buffer (75 FT enhanced buffer)— 6 points N/A Provide 20% increase in Landscape Requirements	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001) F-15-008 N/A N/A RMA	4	0
8b 10 10 €	Stream Buffer Requirements Exceed Minimum Stream Buffer Requirements Exceed Minimum Wetland Buffer Requirements Floodplain Buffer Site Landscape Implandscaping exceeds Minimum Requirements and Reduces Heat Island	EcoScience FCC/Civil; HCM/Planners EcoScience FCC/Civil; HCM/Planners N/A	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside wetland buffer or floodplain 2 points for each additional 25' of wetland buffer buffer outside stream buffer or floodplain 1 point for each 25' of buffer to floodplain outside required or provided wetland or stream buffer 1 point for each 10% increase in number of plants (must be native plants) provided above total minimum required in Landscape Manual; retain or plant trees on south and west sides of buildings and increase trees within parking areas and along sidew alks and paths	Provide 150 FT Stream Buffer (75 FT enhanced buffer)— 6 points N/A Provide 20% increase in Landscape Requirements	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001) F-15-008 N/A N/A RMA	4	0
8b 10 10 €	Stream Buffer Requirements Exceed Minimum Stream Buffer Requirements Exceed Minimum Wetland Buffer Requirements Floodplain Buffer Site Landscape Imp Landscaping exceeds Minimum Requirements and Reduces Heat Island Effect	EcoScience FCC/Gwil; HCM/Planners EcoScience FCC/Gwil; HCM/Planners N/A	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside wetland buffer or floodplain 2 points for each additional 25' of wetland buffer buffer outside stream buffer outside stream buffer or floodplain 1 point for each 25' of buffer to floodplain outside required or provided wetland or stream buffer 1 point for each 10% increase in number of plants (must be native plants) provided above total minimum required in Landscape Manual; retain or plant trees on south and west sides of buildings and increase trees within parking areas and along sidew alks and paths 1 point for 80%, 2 points for 90%, 3 points for 100%	Provide 150 FT Stream Buffer (75 FT enhanced buffer) 6 points N/A Provide 20% increase in Lendscape Requirements	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001) F-15-008 N/A N/A N/A SDP-15-053 Sheets 13,14	6 4 2 5	0
-8b 10 10 E -1	Stream Buffer Requirements Exceed Minimum Stream Buffer Requirements Exceed Minimum Wetland Buffer Requirements Floodplain Buffer Site Landscape Imp Landscaping exceeds Minimum Requirements and Reduces Heat Island Effect	EcoScience FCC/Gwil; HCM/Planners EcoScience FCC/Gwil; HCM/Planners N/A	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside wetland buffer or floodplain 2 points for each additional 25' of wetland buffer buffer outside stream buffer or floodplain 1 point for each 25' of buffer to floodplain outside required or provided wetland or stream buffer 1 point for each 10% increase in number of plants (must be native plants) provided above total minimum required in Landscape Manual; retain or plant trees on south and west sides of buildings and increase trees within parking areas and along sidew alks and paths 1 point for 80%, 2 points for 90%, 3 points for 100% of all plants native to within	Provide 150 FT Stream Buffer (75 FT enhanced buffer) 6 points N/A Provide 20% increase in Lendscape Requirements	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001) F-15-008 N/A N/A N/A SDP-15-053 Sheets 13,14	6 4 2 5	0
-8b 10 10 E -1 10 E -2 10 -2 10 10 -2 10 -2 10 10 10 10 10 10 10 10 10 10 10 10 10	Stream Buffer Requirements Exceed Minimum Stream Buffer Requirements Exceed Minimum Wetland Buffer Requirements Floodplain Buffer Site Landscape Imp Landscaping exceeds Minimum Requirements and Reduces Heat Island Effect	EcoScience FCC/Gwil; HCM/Planners EcoScience FCC/Gwil; HCM/Planners N/A	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside wetland buffer or floodplain 2 points for each additional 25' of wetland buffer buffer outside stream buffer outside stream buffer or floodplain 1 point for each 25' of buffer to floodplain outside required or provided wetland or stream buffer 1 point for each 10% increase in number of plants (must be native plants) provided above total minimum required in Landscape Manual; retain or plant trees on south and west sides of buildings and increase trees within parking areas and along sidew alks and paths 1 point for 80%, 2 points for 90%, 3 points for 100%	Provide 150 FT Stream Buffer (75 FT enhanced buffer) 6 points N/A Provide 20% increase in Lendscape Requirements	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001) F-15-008 NVA NVA SN Plan GN Report SDP-15-053 Sheets 13,14	6 4 2 5	0
-8b 10 10 E -1 1 10 E -2 1 10	Stream Buffer Requirements Exceed Minimum Stream Buffer Requirements Exceed Minimum Wetland Buffer Requirements Floodplain Buffer Site Landscape Imp Landscaping exceeds Minimum Requirements and Reduces Heat Island Effect Native Plants	EcoScience FCC/Civil; HCM/Planners EcoScience FCC/Civil; HCM/Planners N/A	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside wetland buffer or floodplain 2 points for each additional 25' of wetland buffer buffer outside stream buffer outside stream buffer or floodplain 1 point for each 25' of buffer to floodplain outside required or provided wetland or stream buffer 1 point for each 10% increase in number of plants (must be native plants) provided above total minimum required in Landscape Manual; retain or plant trees on south and west sides of buildings and increase trees within parking areas and along sidew alks and paths 1 point for 80%, 2 points for 90%, 3 points for 100% of all plants native to within 200 miles of site No plants that are on DNR, USDA or Cooperative	Provide 150 FT Stream Buffer (75 FT enhanced buffer)— 6 points N/A Provide 20% increase in Landscape Requirements	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001) F-15-008 N/A N/A SNP-15-053 Sheets 13,14 GN Plan SDP-15-053	6 4 2 5	0
-9 10 E -1 -2	Stream Buffer Requirements Exceed Minimum Stream Buffer Requirements Exceed Minimum Wetland Buffer Requirements Floodplain Buffer Site Landscape Imp Landscaping exceeds Minimum Requirements and Reduces Heat Island Effect Native Plants	EcoScience FCC/Civil; HCM/Planners EcoScience FCC/Civil; HCM/Planners N/A	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside wetland buffer or floodplain 2 points for each additional 25' of wetland buffer buffer outside stream buffer outside stream buffer or floodplain 1 point for each 25' of buffer to floodplain outside required or provided wetland or stream buffer 1 point for each 10% increase in number of plants (must be native plants) provided above total minimum required in Landscape Manual; retain or plant trees on south and west sides of buildings and increase trees within parking areas and along sidew alks and paths 1 point for 80%, 2 points for 90%, 3 points for 100% of all plants native to within 200 miles of site No plants that are on DNR,	Provide 150 FT Stream Buffer (75 FT enhanced buffer)— 6 points N/A Provide 20% increase in Landscape Requirements	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001) F-15-008 NVA NVA SN Plan GN Report SDP-15-053 Sheets 13,14	6 4 2 5	0
-9 -10	Stream Buffer Requirements Exceed Minimum Stream Buffer Requirements Exceed Minimum Wetland Buffer Requirements Floodplain Buffer Site Landscape Implements Site Landscape Implements And Scaping exceeds Minimum Requirements and Reduces Heat Island Effect Native Plants	EcoScience FCC/Civil; HCM/Planners EcoScience FCC/Civil; HCM/Planners N/A N/A HCM/Planners	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside wetland buffer or floodplain 2 points for each additional 25' of wetland buffer buffer outside stream buffer or floodplain 1 point for each 25' of buffer to floodplain outside required or provided wetland or stream buffer 1 point for each 10% increase in number of plants (must be native plants) provided above total minimum required in Landscape Manual; retain or plant trees on south and west sides of buildings and increase trees within parking areas and along sidew alks and paths 1 point for 80%, 2 points for 90%, 3 points for 100% of all plants native to within 200 miles of site No plants that are on DNR, USDA or Cooperative Extension Service lists of invasive plants	Provide 150 FT Stream Buffer (75 FT enhanced buffer)— 6 points N/A Provide 20% increase in Landscape Requirements N/A Will not plant invasive plants	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001) F-15-008 NVA NVA NVA SNP-15-053 Sheets 13,14 SNP-15-053 Sheets 13-14	6 4 2 10 5 5	0 0 3 2
-9 -10	Stream Buffer Requirements Exceed Minimum Stream Buffer Requirements Exceed Minimum Wetland Buffer Requirements Floodplain Buffer Site Landscape Imp Landscaping exceeds Minimum Requirements and Reduces Heat Island Effect Native Plants	EcoScience FCC/Civil; HCM/Planners EcoScience FCC/Civil; HCM/Planners N/A	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside wetland buffer or floodplain 2 points for each additional 25' of wetland buffer buffer outside stream buffer or floodplain 1 point for each 25' of buffer to floodplain outside required or provided wetland or stream buffer 1 point for each 10% increase in number of plants (must be native plants) provided above total minimum required in Landscape Manual; retain or plant trees on south and west sides of buildings and increase trees within parking areas and along sidew alks and paths 1 point for 80%, 2 points for 90%, 3 points for 100% of all plants native to within 200 miles of site No plants that are on DNR, USDA or Cooperative Extension Service lists of invasive plants Turf does not exceed 30%	Provide 150 FT Stream Buffer (75 FT enhanced buffer)—6 points N/A Provide 20% increase in Landscape Requirements N/A Will not plant invasive plants Will not plant conventional turf in densely	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001) F-15-008 N/A N/A SNP-15-053 Sheets 13,14 GN Plan SDP-15-053	6 4 2 5	0
-9 -10	Stream Buffer Requirements Exceed Minimum Stream Buffer Requirements Exceed Minimum Wetland Buffer Requirements Floodplain Buffer Site Landscape Implements Site Landscape Implements And Scaping exceeds Minimum Requirements and Reduces Heat Island Effect Native Plants	EcoScience FCC/Civil; HCM/Planners EcoScience FCC/Civil; HCM/Planners N/A N/A HCM/Planners	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside wetland buffer or floodplain 2 points for each additional 25' of wetland buffer buffer outside stream buffer outside stream buffer or floodplain 1 point for each 25' of buffer to floodplain outside required or provided wetland or stream buffer 1 point for each 10% increase in number of plants (must be native plants) provided above total minimum required in Landscape Manual; retain or plant trees on south and west sides of buildings and increase trees within parking areas and along sidew alks and paths 1 point for 80%, 2 points for 90%, 3 points for 100% of all plants native to within 200 miles of site No plants that are on DNR, USDA or Cooperative Extension Service lists of invasive plants Turf does not exceed 30% of unpaved site (1 point); no turf on new created	Provide 150 FT Stream Buffer (75 FT enhanced buffer)— 6 points N/A Provide 20% increase in Landscape Requirements N/A Will not plant invasive plants	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001) F-15-008 N/A N/A N/A SN Plan GN Report SDP-15-053 Sheets 13,14 GN Plan GN Plan GN Plan GN Report SDP-15-053 Sheets 13-14	6 4 2 10 5 5	0
-9 -10	Stream Buffer Requirements Exceed Minimum Stream Buffer Requirements Exceed Minimum Wetland Buffer Requirements Floodplain Buffer Site Landscape Implements Site Landscape Implements And Scaping exceeds Minimum Requirements and Reduces Heat Island Effect Native Plants	EcoScience FCC/Civil; HCM/Planners EcoScience FCC/Civil; HCM/Planners N/A N/A HCM/Planners	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside wetland buffer or floodplain 2 points for each additional 25' of wetland buffer buffer outside stream buffer outside stream buffer to floodplain 1 point for each 25' of buffer to floodplain outside required or provided wetland or stream buffer 1 point for each 10% increase in number of plants (must be native plants) provided above total minimum required in Landscape Manual; retain or plant trees on south and west sides of buildings and increase trees within parking areas and along sidew alks and paths 1 point for 80%, 2 points for 90%, 3 points for 100% of all plants native to within 200 miles of site No plants that are on DNR, USDA or Cooperative Extension Service lists of invasive plants Turf does not exceed 30% of unpaved site (1 point); no turf on new created steep slopes 25%+ or in	Provide 150 FT Stream Buffer (75 FT enhanced buffer)—6 points N/A Provide 20% increase in Landscape Requirements Will not plant invasive plants Will not plant conventional turf in densely shaded areas and on newly created >25%	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001) F-15-008 N/A N/A SN Plan GN Report SDP-15-053 Sheets 13,14 GN Plan GN Plan GN Plan GN Report SDP-15-053 Sheets 13-14	6 4 2 10 5 5	0
9 10 10 2 2 3	Stream Buffer Requirements Exceed Minimum Stream Buffer Requirements Exceed Minimum Wetland Buffer Requirements Floodplain Buffer Site Landscape Implements Site Landscape Implements And Scaping exceeds Minimum Requirements and Reduces Heat Island Effect Native Plants	EcoScience FCC/Civil; HCM/Planners EcoScience FCC/Civil; HCM/Planners N/A N/A HCM/Planners	perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA 2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside wetland buffer or floodplain 2 points for each additional 25' of wetland buffer buffer outside stream buffer outside stream buffer or floodplain 1 point for each 25' of buffer to floodplain outside required or provided wetland or stream buffer 1 point for each 10% increase in number of plants (must be native plants) provided above total minimum required in Landscape Manual; retain or plant trees on south and west sides of buildings and increase trees within parking areas and along sidew alks and paths 1 point for 80%, 2 points for 90%, 3 points for 100% of all plants native to within 200 miles of site No plants that are on DNR, USDA or Cooperative Extension Service lists of invasive plants Turf does not exceed 30% of unpaved site (1 point); no turf on new created	Provide 150 FT Stream Buffer (75 FT enhanced buffer)—6 points N/A Provide 20% increase in Landscape Requirements Will not plant invasive plants Will not plant conventional turf in densely shaded areas and on newly created >25%	Reference: Sketch Plan (S-15-001) F-15-008 GN Plan Reference: Sketch Plan (S-15-001) F-15-008 N/A N/A N/A SN Plan GN Report SDP-15-053 Sheets 13,14 GN Plan GN Plan GN Plan GN Report SDP-15-053 Sheets 13-14	6 4 2 10 5 5	0

	Water Conservation Rainwater	Straughan	Collect and make use of	Provide rainw ater harvesting for school and	GN Plan	17	1 1
- 1	Harvesting System	- I	water runoff from minimum		Reference:		
- 1	,		50% of roof area; provide		Sketch (S-15-001)		
1			storage system and		SDP (SDP-12-075)		ľ
- 1			monitoring device and	,	1		
.			maintenance / management				
النيا			program				
1	Water-Permeable	NA	Use water-permeable	NA	NA	4	0
- 1	Walkways		materials in 50% or more of				.1
			pathways; provide				
F-3a	Low Impact	FCC/Givil	maintenance program Meets minimum Design	No dry ponds		DENIE	
- 1	Development (LID)	TCC/CIVII	Manual requirements; no	no dry ponds	GN Plan SDP-15-053	REQ'D	
	Stormwater		dry ponds allowed				
	Treatment		ury portus anoweu		Sheets 4-9	•	
	Low Impact	FCC/Civil	Exceeds Design Manual	Will provide 51% w ater quality volume stored	GN Plan	8	6
1	Development (LID)		requirements; maximize	and infiltrated/re-used On-Site	GN Report		
	Stormw ater		use of bioretention (esp.		SDP-15-053		
	Treatment		for parking lots), rain		Sheets 4-9		
			gardens, rain barrels,				
		1	stormwater wetlands,				
			green roof, etc.			<u> </u>	
	Energy Efficiency	Ironio: 3	Tourista se ano monato o	AVA		13	0
	Light Pollution Reduction	FCC/Civil; HOW/Planners	Shield all site lighting fixtures to reduce light and	N/A	NA	4	0
1	T VGULUCIIOI I	- MANA FIGHT THEIS	spillover below county				
٠.			code requirements; install			1	
I			sensors or timers on all				
1	1.		exterior site lighting fixtures				
1			January Indianes			1	
G-2	Solar Orientation	NA	Orient 50% (1 point) or	N/A	NA	3	0
-			75% (2 points) or 100% (3			1	- · · · ·
	-		points) of buildings to make				
			available for solar			l	
l		<u></u> .	strategies	<u></u>			
G-3	Infrastructure Energy	NA	Select high efficiency	NA	N/A	6	0
	Efficiency		fixtures for parking lot and				
	Samuel Institute of the second of the	<u>L.</u>	other site light fixtures				August 1
			ent / Waste Management			17	7
	Environmentally	Straughan		NA	NA	8	0
1	Preferable Site	FCC/Civil;	including: recycled				
l	Products	HCM/Planners	materials (concrete,				
ľ			asphalt, tires, plastic, etc.),				1.0
		-	materials with recycled				
			content, salvaged or				
1			engineered materials;				-
H-2	Reduce Heat-Island	N/A	Use light-colored or high	NA	3.1/4	<u> </u>	0
	Effect of Paving	1.40	albedo materials and/or	INC.	NA	2	U
1	a root or raving		porous paving with a				
			minimum Solar Reflective				
			Index of 0.6 or over for at			.	
1			least 30% of the site				
1			hardscape			· · ·	
H-3	Site Construction	Straughan	Develop and implement a	Divert 75% or more site construction waste	GN Report:	4	4
ŀ	Waste Management		construction waste				
			management plan to divert,				
- 1	.		reuse, recycle or reduce				
- 1			the amount of site material				
		- Control of the Cont	sent to the landfill by 25%				
1			(2 points) or 50% (3 points)				
	D	6 3	or 75% (4 points)				
- 1	Regionally Provided Materials	Straughan FCC/Civil;	20% of common and public infrastructure materials	Use regionally produced materials for 20% of total site materials	GN Report:	3	- 3
ľ	water ass	HCW/Planners	from within 200 miles	total site filterials			
. 1							
	Operations and Mai HOA Documents	intenance Educati Straughan;	Include information about	Provide HQA document	CNIPorted	0 0	0
-	. On Locuitonis	ou augman,	green site features and	TOVIGE FOR GOCUHENT	GN Report Reference:	REQ'D	
			maintenance requirements		SDP-15-053	[
1			in HOA documents		337-10-000		
1-2	Maintenance Manual	Straughan	Provide a manual that	Provide manual	GN Report	REQ'D	
- 1	for Owner / HOA /		includes information on		Reference:		
- 1	Manager		how to maintain the green		SDP-15-053		
		1	features of the site,	·			
. [,		including paving materials,				
			landscaping and		•		
						1	
	r 1.		stormwater management	•	· ·		
			stormwater management LID and encourages				
			stormwater management LID and encourages additional green activities				
			stormwater management LID and encourages additional green activities such as recycling,				
			stormwater management LID and encourages additional green activities such as recycling, gardening, etc.				
L3 [Public Awareness of	Straughan; HCM	stormwater management LID and encourages additional green activities such as recycling, gardening, etc. Develop a program to	Implement public awareness strategy	GN Report	REQ'D	
1-3	Sustainable	Straughan; HCM	stormwater management LID and encourages additional green activities such as recycling, gardening, etc. Develop a program to advertise the environmental		SDP-15-053	REQ'D	
1-3	Market and the second of the s	Straughan, HCM	stormwater management LID and encourages additional green activities such as recycling, gardening, etc. Develop a program to		SDP-15-053 Sheets 13, 18	REQ'D	in an annual
1-3	Sustainable	Straughan, HCM	stormwater management LID and encourages additional green activities such as recycling, gardening, etc. Develop a program to advertise the environmental		SDP-15-053 Sheets 13, 18 Reference:	REQ'D	
1-3	Sustainable	Straughan; HCM	stormwater management LID and encourages additional green activities such as recycling, gardening, etc. Develop a program to advertise the environmental		SDP-15-053 Sheets 13, 18	REQ'D	
1-3	Sustainable	Straughan; HCM	stormwater management LID and encourages additional green activities such as recycling, gardening, etc. Develop a program to advertise the environmental		SDP-15-053 Sheets 13, 18 Reference:	REQ'D	
1-3	Sustainable	Straughan; HCM	stormwater management LID and encourages additional green activities such as recycling, gardening, etc. Develop a program to advertise the environmental benefits of the community	GREEN NEIGHBORHOOD SITE POINTS	SDP-15-053 Sheets 13, 18 Reference: SDP-13-068;	REQ'D	90
1-3	Sustainable	Straughan; HCM	stormwater management LID and encourages additional green activities such as recycling, gardening, etc. Develop a program to advertise the environmental benefits of the community		SDP-15-053 Sheets 13, 18 Reference: SDP-13-068;	167	90
1-3	Sustainable	Straughan; HCM	stormwater management LID and encourages additional green activities such as recycling, gardening, etc. Develop a program to advertise the environmental benefits of the community	GREEN NEIGHBORHOOD SITE POINTS	SDP-15-053 Sheets 13, 18 Reference: SDP-13-068;		90
1-3	Sustainable	Straughan; HCM	stormwater management LID and encourages additional green activities such as recycling, gardening, etc. Develop a program to advertise the environmental benefits of the community	GREEN NEIGHBORHOOD SITE POINTS ts required to obtain Green Neighborhood	SDP-15-053 Sheets 13, 18 Reference: SDP-13-068;	167	90
1-3	Sustainable	Straughan; HCM	stormwater management LID and encourages additional green activities such as recycling, gardening, etc. Develop a program to advertise the environmental benefits of the community TOTAL C Number of point	GREEN NEIGHBORHOOD SITE POINTS ts required to obtain Green Neighborhood Allocations	SDP-15-053 Sheets 13, 18 Reference: SDP-13-068;	167	
I-3	Sustainable Community		stormwater management LID and encourages additional green activities such as recycling, gardening, etc. Develop a program to advertise the environmental benefits of the community TOTAL C Number of point	GREEN NEIGHBORHOOD SITE POINTS ts required to obtain Green Neighborhood Allocations Party Certification	SDP-15-053 Sheets 13, 18 Reference: SDP-13-068;	167	80
I-3	Sustainable Community By affixing my signatu	ure below, the under	stormwater management LID and encourages additional green activities such as recycling, gardening, etc. Develop a program to advertise the environmental benefits of the community TOTAL C Number of point Third rsigned does hereby declare	CREEN NEIGHBORHOOD SITE POINTS ts required to obtain Green Neighborhood Allocations Party Certification and affirm to How and County that the targeted G	SDP-15-053 Sheets 13, 18 Reference: SDP-13-068;	167	\$0
I-3	Sustainable Community By affixing my signatu	ure below, the under	stormwater management LID and encourages additional green activities such as recycling, gardening, etc. Develop a program to advertise the environmental benefits of the community TOTAL C Number of point Third rsigned does hereby declare	GREEN NEIGHBORHOOD SITE POINTS ts required to obtain Green Neighborhood Allocations Party Certification	SDP-15-053 Sheets 13, 18 Reference: SDP-13-068;	167	\$0
I-3	Sustainable Community By affixing my signatu	ure below, the under	stormwater management LID and encourages additional green activities such as recycling, gardening, etc. Develop a program to advertise the environmental benefits of the community TOTAL C Number of point Third rsigned does hereby declare	GREEN NEIGHBORHOOD SITE POINTS ts required to obtain Green Neighborhood Allocations Party Certification and affirm to How ard County that the targeted Get, are reasonable and achievable.	SDP-15-053 Sheets 13, 18 Reference: SDP-13-068;	167	\$0
I-3	Sustainable Community By affixing my signatu	ure below, the under	stormw ater management LID and encourages additional green activities such as recycling, gardening, etc. Develop a program to advertise the environmental benefits of the community TOTAL C Number of point Third resigned does hereby declare nood Site Compliance Checklis	GREEN NEIGHBORHOOD SITE POINTS Its required to obtain Green Neighborhood Allocations Party Certification and affirm to How ard County that the targeted Got, are reasonable and achievable. No. 104 392 C	SDP-15-053 Sheets 13, 18 Reference: SDP-13-068; reen Neighborhood Site credits and Street Control of the Contro	167	
1-3	Sustainable Community By affixing my signatu	ure below, the under	stormw ater management LID and encourages additional green activities such as recycling, gardening, etc. Develop a program to advertise the environmental benefits of the community TOTAL C Number of point Third resigned does hereby declare nood Site Compliance Checklis	GREEN NEIGHBORHOOD SITE POINTS Its required to obtain Green Neighborhood Allocations Party Certification and affirm to How ard County that the targeted Got, are reasonable and achievable. No. 104 392 C	SDP-15-053 Sheets 13, 18 Reference: SDP-13-068; reen Neighborhood Site credits and Street Control of the Contro	167	
13	Sustainable Community By affixing my signatutotal, as specified in the	are below, the under	stormw ater management LID and encourages additional green activities such as recycling, gardening, etc. Develop a program to advertise the environmental benefits of the community TOTAL C Number of point Third resigned does hereby declare nood Site Compliance Checklis	GREEN NEIGHBORHOOD SITE POINTS Its required to obtain Green Neighborhood Allocations Party Certification and affirm to How ard County that the targeted Got, are reasonable and achievable. No. 104 392 C	SDP-15-053 Sheets 13, 18 Reference: SDP-13-068; reen Neighborhood Site credits and Street Control of the Contro	167 90 and point	
1-3	Sustainable Community By affixing my signatu total, as specified in the	are below, the under	stormw ater management LID and encourages additional green activities such as recycling, gardening, etc. Develop a program to advertise the environmental benefits of the community TOTAL C Number of point Third resigned does hereby declare nood Site Compliance Checklis	GREEN NEIGHBORHOOD SITE POINTS ts required to obtain Green Neighborhood Allocations Party Certification and affirm to How ard County that the targeted Get, are reasonable and achievable.	SDP-15-053 Sheets 13, 18 Reference: SDP-13-068; reen Neighborhood Site credits and Street Control of the Contro	167 90 and point	

AS-BUILT CERTIFICATION

NOTE: There is no "AS-BUILT" Information Provided on this sheet.

OF MAR

CHAE

AO 2014

Date

HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING GREEN NEIGHBORHOOD PLAN FOR SITES

Resource conservation division Date

APPROVED

LEED ACCREDITED PROFESSIONAL CERTIFICATE
GREEN NEIGHBORHOOD PLAN FOR SITES

I hereby certify that this plan represents a practical and workable plan for achieving the targeted credits and point total shown on the Green Neighborhood for Sites Compliance Checklist.

Marthew J FOZSIMMONS, LEED AP LEED ACCREDITATION NUMBER DA

hord | coplan | macht

750 E. Pratt Street, Suite 1100 Baltimore MD 21202 410.837.7311 | www.hcm2.com Hord Coplan Macht, Inc. 2014

FISHER, COLLINS & CARTER, INC.

CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS

83

CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042

(410) 461 - 2255

1 Added Sheet 27

NO. REVISION DATE



MAR AEL 20148 AL E

Cwner

Kellogg-CCP, LLC
c/o David P. Scheffenacker, Jr.,
Managing Member
100 West Road, Suite 304
Towson, Maryland 21204
Ph# 410-296-3800

Preston • Scheffenacker Properties
100 West Road, Suite 304
Towson, Maryland 21204
Ph# 410-296-3800

Chief, Division	n of Land Dev	elopment	E	>1	m		Dațe
MI	1/1					4	28.17
Chief, Develo	p ment Enginee	ring D ivisi	on fu				Dațe
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Director - D	epartment of f	Planning a	and Zonin	9			Date
SUBDIVISION			5	ECTION	V/AREA	PARC	EL No.
OXFORD	SQUARE					_	'F-F'
DI AT MO	BLOCK NO	70NE	TAY /7/	NIE	SIEC DIC	T 16	ENCLIC TO

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

GREEN NEIGHBORHOOD PLAN

OXFORD SQUARE

"A Howard County Green Neighborhood"

Parcel 'F-F' & OPEN SPACE LOT 377
"Dartmoor Place"

Zoned: TOD

Tax Map No.: 38 Grid No.: 20 Parcel No.: 1003

First Election District Howard County, Maryland

Scale: As Shown

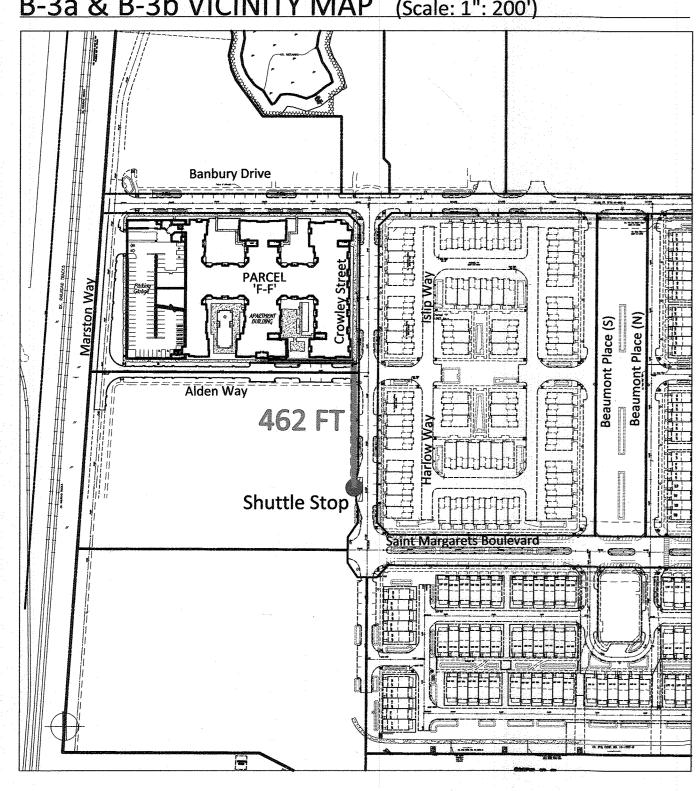
Date: July 31, 2017

Sheet 21 Of 27

GREEN NEIGHBORHOOD NOTES:

- THE DESIGN AND DEVELOPMENT TEAM INCLUDES A LEED AP (MATTHEW FITZSIMMONS-HORD COPLAN MACHT), ENVIRONMENTAL PROFESSIONAL (JOHN CANOLES- ECO-SCIENCE PROFESSIONALS, INC.), LANDSCAPE ARCHITECT (JOSH KILRAIN- HORD COPLAN MACHT) AND AN ENGINEER (ALDO VITUCCI PE-FISHER COLLINS & CARTER)
- THE THIRD PARTY CERTIFICATION IS PROVIDED BY CHARLES ALEXANDER, LEED-AP OF ALEXANDER DESIGN STUDIOS.
- THE 118.5 ACRE DEVELOPMENT CONSISTS OF 30.4 ACRES OF PREVIOUSLY DEVELOPED LAND (25.7% OF THE OXFORD SQUARE DEVELOPMENT).
- OXFORD SQUARE WILL PROVIDE TWO TRANSIT STOPS FOR THE PROPOSED PRIVATE SHUTTLE SERVICE CONNECTING OXFORD SQUARE TO THE DORSEY MARC COMMUTER RAIL STATION. THE STOPS WILL BE WITHIN 1/4 WALKING DISTANCE TO ALL DWELLING UNITS. EXCEPT FOR THE UNITS FURTHERS NORTH ON PARCEL 'Z'.
- OXFORD SQUARE WILL PROVIDE ONE SHELTER AT ONE OF THE PRIVATE SHUTTLE STOPS. THE SHELTER WILL COMPLY WITH COUNTY -APPROVED CRITERIA INCLUDING BENCHES AND LIGHTING.
- OXFORD SQUARE WILL PROVIDE THREE DIVERSE USES OTHER THAN RESIDENTIAL: INSTITUTIONAL (MIDDLE SCHOOL BUILDING AND OUTDOOR CLASSROOM SPACE, ELEMENTARY SCHOOL), CIVIC (SCHOOL'S RECREATIONAL PLAYING FIELDS AND SHARED-USE PATH) AND OFFICE.
- OXFORD SQUARE IS LOCATED WITHIN THE EXISTING PLANNED WATER AND SEWER SERVICE AREA.
- OXFORD SQUARE WILL PROVIDE A MINIMUM OF TWO PEDESTRIAN SYSTEM AMENITY EXPERIENCES: 1) SHARED USE PATH AND NATURE TRAIL (TRAIL SIGNS AND MARKERS, BENCHES, LITTER RECEPTACLES, INFORMATIONAL SIGNS, BIKE RACKS), 2) THE LAWN (BENCHES, EXTERIOR LIGHTING, INFORMATIONAL SIGNS), 3) RESIDENTIAL COURTYARDS AND MEWS (BENCHES), AND 4) SCHOOL SITES (PLAYING FIELDS, BENCHES, BIKE RACKS)
- OXFORD SQUARE WILL PROVIDE A MINIMUM 75 FT ENHANCED STREAM BUFFER.
- OXFORD SQUARE WILL NOT PLANT INVASIVE PLANTS.
- OXFORD SQUARE WILL NOT PLANT TURF IN DENSELY SHADED AREAS.
- OXFORD SQUARE WILL PROVIDE AT LEAST 51% WATER QUALITY VOLUME STORED AND INFILTRATED/RE-USED ON-SITE.

B-3a & B-3b VICINITY MAP (Scale: 1": 200')



GREEN NEIGHBORHOOD CALCULATIONS & TABLES:

Complete Build-Out

A-4b Priority Parking for Low-Emitting and Fuel Efficient Vehicles

	Overall Development	SDP
Total Number of Off-Street Parking Spaces:	1,085 Spaces	498 Spaces
Total Number of Proposed Preferred Parking Spaces:	57 Spaces	25 Spaces
Percent of Preferred Parking Space	s: 5.3%	5.0%

Note: Overall Development calculations summarize all filed Site Development Plans.

A-4c Compact Development

		mpiece bunu-out	
tal Dwelling Units:		1,470 DU	
sidential Land Area:		50.8 AC	
	Residential Density:	28.94 DU/AC	
Note: This SDP provides 258DU. There are 2	2 fewer residential units on Par	cel 'F-F' than recorded on S-15-0	01.
Future SDPs will not exceed the project wid	e allowable residential program	of 1,492 DU.	

A-4d Walkable Streets

	Complete Build-Out	SDP
Length of Buildings Frontage Oriented Towards the Public Space:	11,869 FT	757 FT
Total Length of Building Frontage:	14,186 FT	1,292 FT
% of Building Frontage Oriented Towards the Public S	paces: 83.7%	58.6%
28.		525 FT
Length of Building Frontage with Service or Garage Openings:	1,420 FT	535 FT
Length of Building Frontage Oriented Towards Public Spaces		
(including Service and Garage openings):	13,289 FT	1,292 FT
% of Building Frontage with Service or Garage Ope	enings: 10.7%	41.4%

B-1a Redevelopment Site

	Percent of Previously Developed:	25.7%
Area of Existing Development (Acres):		30.4 Acres
Gross Site Area:		118.5 Acres

B-3a Transit Access & Amenities for Reduced Auto Dependence (Stop)

	Total Number of	
Residential Buildings within 1/4 Mile (<1,320 FT)	Qualifying Units	Percent of all Units
All Buildings except the most distant building on Parcel 'Z'	1,380 DU	94%

C-1 Diversity of Uses

Residential Us	es	Number of Units	Percent of Total Units
Apartments an	nd Townhouses	1,470 DU	100%
Nonresidentia	I Uses	Area	SF per Dwelling Unit
Office:		166,000 SF	113 SF/DU
Institutional:	Middle School	95,747 SF	
	Middle School Outdoor Classroom Space	2,500 SF	
	Elementary School	101,014 SF	***************************************
	Institutional Subtotal	: 199,261 SF	136 SF/DU
Civic:	Recreational Playing Fields (School Site)	236,139 SF	
	Northern Shared- Use Path (8 FT wide)	22,968 SF	
	Southern Shared-Use Path (8 FT wide)	8,016 SF	
	Civic Subtotal	: 267,123 SF	182 SF/DU

C-3a Pedestrian System (Paths and Trails)

Northern Shared Use Path:		Width of Path: 8 FT	
		Length: 2,871 FT (0.54 Mile	5)
Southern Shared Use Path:		Width of Path: 8 FT	
		Length: 1,002 FT (0.19 Miles	5)
Nature Path		Width of Path: 8 FT	
		Length: 1,129 FT (0.21 Mile	5)

C-4 Street Connections

Street Name / ID (per S-15-001)	Street Length	Qualifying Street Length
Saint Margarets Boulevard	1,684 FT	1,684 FT
Banbury Drive	2,491 FT	2,491 FT
Southmoor Street	960 FT	960 FT
Dene Court	514 FT	- FT
Crowley Street	1,136 FT	947 FT
Danvers Street	465 FT	465 FT
Beaumont Place	1,450 FT	1,450 FT
Dunstead Street	240 FT	- FT
Headley Street	120 FT	- FT
Pattison Street	120 FT	- FT
Road I	736 FT	736 FT
Alden Way (Road B)	554 FT	554 FT
Marsten Way (Road C)	1,613 FT	928 FT

Summary			
Total Street Length:	12,083 FT	*	
Total Connected Street Length:			10,215 FT
Darcant Connected Streets	04.50/		

C-5 Parking Does Not Exceed Required Minimum

Number of Spaces within a Common Parking Structure:	1,922 spaces
Note: Parcel 'F-F' provides 498 common structure park	king spaces. This is 7 more spaces proposed than at

C-6 Exceed Minimum Open Space

Note: This SDP does not contribute amenity space toward	ls this credit.
Percent Increase above the Minimum Required:	118.1%
Provided Amenity Space:	23.4 AC
Required Amenity Space (TOD: 10% of Net Acreage):	10.7 AC
Net Acreage:	107.4 AC

C-7 Green Spaces and Amenity Areas

Parcel	Road Frontage	Amenity Type	Amenity Area	
Open Space 1: Lawn and Barn	+/-108 FT	Lawn: passive	57,604 SF	
Parcel 'I' (future SDP)	(length along	recreation and	(1.32 AC)	
	Banbury	gathering space		
	Drive)	Barn: learning,	12 10 10 10 10 10 10 10 10 10 10 10 10 10	
		meeting and		
		performance		
		space		
Open Space 2: Pool House and Pool	+/-138 FT		11,282 SF	
O.S. Lot #107 (SDP-13-068)	(length along	Pool house, Pool,	(0.26 AC)	
	Dene Court)	Fitness Room, and		
		Warming Kitchen		

		GN Boundary
Total Area of Slopes 15-24.9%:		506,841 SF
Area of Undisturbed Slopes 15-24.9%:	file to	200,866 SF
Percent of Undisturbed Slopes:		39.6 %

D-5 Minimize Grading and Site Disturbance

	Complete Build Out
Gross Area of Site	118.5 AC
Existing Impervious Cover	30.4 AC
Area of Site	88.1 AC
Area of Site to Remain Undisturbed	24.2 AC
Precent of Site to Remain Undistrubed:	27.5 %
Ratio of Cut to Fill:	1.16 Ratio
Retaining Wall:	<3 FT

D-8b Exceed Minimum	Stream	Buffer	Requirements
Total Stream Buffer Width:			150 FT

Street Name / ID (per S-15-001)	Street Length	Qualifying Street Length
Saint Margarets Boulevard	1,684 FT	1,684 FT
Banbury Drive	2,491 FT	2,491 FT
Southmoor Street	960 FT	960 FT
Dene Court	514 FT	- FT
Crowley Street	1,136 FT	947 FT
Danvers Street	465 FT	465 FT
Beaumont Place	1,450 FT	1,450 FT
Dunstead Street	240 FT	- FT
Headley Street	120 FT	- FT
Pattison Street	120 FT	- FT
Road I	736 FT	736 FT
Alden Way (Road B)	554 FT	554 FT
Marsten Way (Road C)	1,613 FT	928 FT
_		

Summary		
Total Street Length:	12,083 FT	
Total Connected Street Length:		10,215 FT
Percent Connected Streets:	84 5%	

Number of Spaces within a Common Parking Structure:	1,922 spaces
Note: Parcel 'F-F' provides 498 common structure par	king spaces. This is 7 more spaces proposed than at
Sketch Plan (S-15-001).	

Percent Increase above the Minimum Required:	118.1%
Provided Amenity Space:	23.4 AC
Required Amenity Space (TOD: 10% of Net Acreage):	10.7 AC
Net Acreage:	107.4 AC

D-4 15% Slope Preservation

		GN Boundary
Total Area of Slopes 15-24.9%:		506,841 SF
Area of Undisturbed Slopes 15-24.9%:	the state of	200,866 SF
Percent of Undisturbed Slopes:	39.6 %	

Note: 1. The area of undisturbed slopes is the summation of slopes impacted by the greatest extent of LODs accumulated from the entire development. 2. Includes area of development per Sketch Plan and future environmental restoration work

	_	Complete Build Out
Gross Area of Site	•	118.5 AC
Existing Impervious Cover		30.4 AC
Area of Site		88.1 AC
Area of Site to Remain Undisturbed	*	24.2 AC
Precent of Site to Rema	in Undistrubed:	27.5 %
Ra	tio of Cut to Fill:	1.16 Ratio
	Retaining Wall:	<3 FT

Note: 1. Complete Build Out Calculations are based on the aggregate greatest extent of LOD's from entire development 2. No dirt will be imported or exported from Oxford Square.

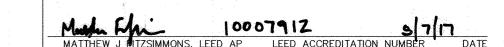
and Minimum Change Duffey Denvis

otal Stream Buffer Width:	150 FT
idth of Buffer Exceeding Requirements:	75 FT
otal Length of Stream Buffer:	1,984.2 FT
ength of Stream Buffer Outside Other Buffers:	1,352.3 FT
Percent of Stream Buffer Outside Other Buffers:	68.2 %

APPROVED 🗽 HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING GREEN NEIGHBORHOOD PLAN FOR SITES

Beth Burgo

LEED ACCREDITED PROFESSIONAL CERTIFICATE GREEN NEIGHBORHOOD PLAN FOR SITES



E-1 Landscaping

Plants Required		Trees	Evergreen	Shrubs	Total	Percent		
Number of Plants Required by Landscape Manual		92		0	92			
Number Excess Plants Required for GN Credit		19	0	0	19	20.7		
Landscape Manual and GN Requirements		111	0	0	111			
Plants Provided		26.4						
	Shade	Shade Tree		Evergreen	Other Trees		Shrub	
Plants Provided	Trees	(Substitute)	Evergreen	(Substitute)	(Substitute)	Shrubs	(Substitute)	Total
Number of Plants Provided to Meet Landscape Manual	29	26.5		0			36.5	92

Notes: 1. Required Shade Trees (4 AFA, 11 ARK, 3 GBI, 6 GTS, 3 TCO, 2 ZSG)= 29 shade trees 2. Shade Tree Substitute (8 evergreens + 45 ornamentals) / 2= 26.5 shade trees

3. Shade Tree Substitute 365 shrubs / 10 = 36.5 shade trees 4. This plan is deficient 19 native shade trees to meet this credit's goal

> A5-BUILT CERTIFICATION NOTE: There is no "A5-BUILT" Information

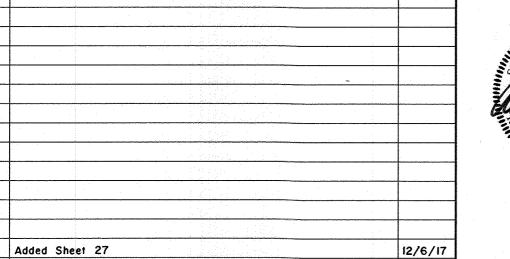


7/7/23

hord coplan macht 750 E. Pratt Street, Suite 1100 Baltimore MD 21202 410.837.7311 | www.hcm2.com

Hord Coplan Macht, Inc. 2014

FISHER, COLLINS & CARTER, INC. ELLICOTT CITY, MARYLAND 21042 (410) 461 - 2855



REVISION

DATE



Owner Kellogg-CCP, LLC c/o David P. Scheffenacker, Jr., 100 West Road, Suite 304 Towson, Maryland 21204

Ph# 410-296-3800

Developer Preston · Scheffenacker Properties 100 West Road, Suite 304 Towson, Maryland 21204 Ph# 410-296-3800

SUBDIVISION

24351 - 24353

10-10-17 SECTION/AREA OXFORD SQUARE

BLOCK NO. ZONE TAX/ZONE ELEC. DIST. CENSUS TR.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

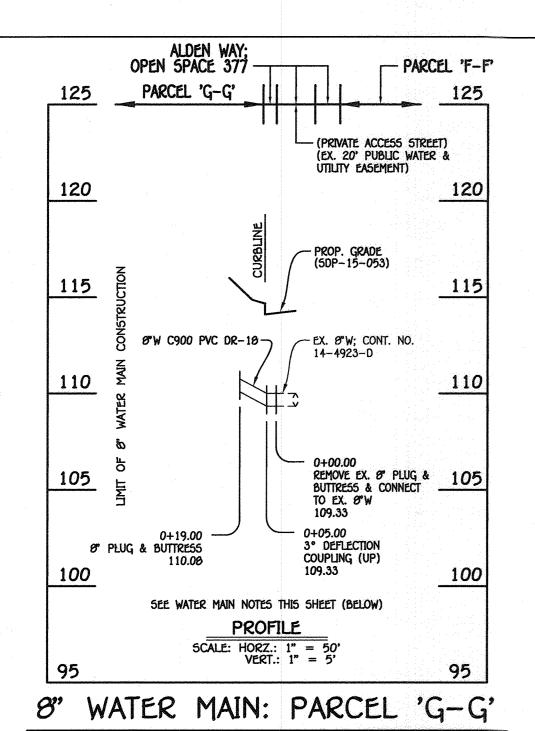
GREEN NEIGHBORHOOD PLAN

Parcel 'F-F' & OPEN SPACE LOT 377 "Dartmoor Place"

> Tax Map No.: 38 Grid No.: 20 Parcel No.: 1003 First Election District Howard County, Maryland Scale: As Shown Date: July 31, 2017 Sheet 22 Of **27**

Zoned: TOD

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET 5DP-15-053



	WATER MAIN TABU	LATION CHAR	T
W.M. STA.	APPURTENANCE	NORTHING	EASTING
	8" WATER MAIN: PAR	CEL 'G-G'	
0+00.00	EX. 8" PLUG & BUTTRESS	553123.39	1385945.5
0+19.00	8" PLUG & BUTTRESS	553106.35	1305937.1

WATER MAIN NOTES:

1. ALL WATER MAINS SHALL BE AWWA C900 PVC PIPE; DR-18.
2. ALL PIPE BEDDING, TRACER WIRE, LOCATING TAPE AND OTHER APPURTENANCES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV - WATER AND SEWER STANDARDS FOR AWWA C900 PVC WATER PIPE INSTALLATION.

3. DEFLECTION COUPLINGS SHALL BE CERTAIN-TEED PVC HIGH DEFLECTION COUPLINGS. 4. ALL WATER HOUSE CONNECTIONS AND TAPS SHALL BE

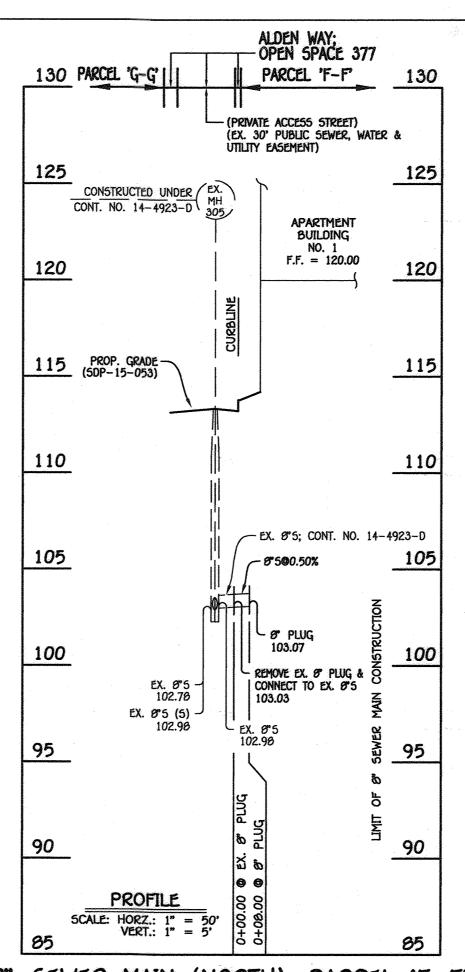
PERFORMED USING A SADDLE.

			:
,		ALDEN WAY; OPEN SPACE 377	
130		PARCEL 'F-F'	130
125		(PRIVATE ACCESS STREET) (30' PUBLIC SEWER, WATER & UTILITY EASEMENT) SM STA. 0+10.00 8'5@18'50 (5DP-15-053) INV. = 110.00	125
120	CONSTRUCTED UNDER	053) F.F. = 120.00	120
115	T		115
		CTION	
110	EX. 8"5@0.51%	EX. 8'5@0.50%	110
105	ا ا ا ا ا ا ا ا ا ا ا ا ا ا ا ا ا ا ا	2500.50% EX	105
100	EX. 8°5 (E) 102.43 EX. 8°5 102.63	REMOVE EX. 8" PLUG 103.32 103.59 EX. 8"5 102.98	100
٥٥		EX. 8"5 (N)	05
95	EX. 8'5 102.78	102.98 EX. 8°5 (5) 102.98	95
	PROFILE	0+00.00	90
5CALE:	HORZ.: 1" = 50' VERT.: 1" = 5'	0+00.00 0+57.63 0+00.00 0+04.00	
85		оп o o o	85
	AM	THE LEADER LIKE ALABOR IN THE	

8" SEWER MAIN: ALDEN WAY; PARCEL 'F-F'

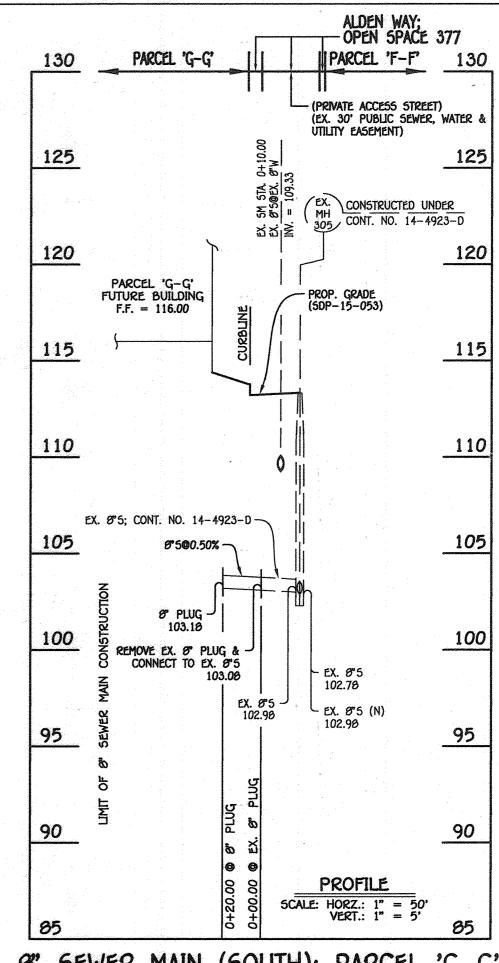
M.	ANHOLE TAB	ULATION CHA	ART
NO.	NORTHING	easting	RIM ELEVATION
	8" SEWER MAIN: ALD	EN WAY; PARCEL 'F-F'	
EX. & PLUG	553125.45	1305991.91	
C/O 1	553162.20	1385947.52	115.16
C/O 2	553185.65	1305099.99	115.89
Ø" PLUG	553189.24	1385901.75	

NOTE: SET C/O RIMS FLUSH W/PROPOSED GRADE.



8" SEWER MAIN (NORTH): PARCEL 'F-F'

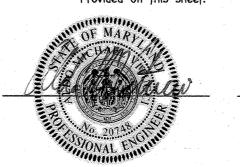
M	ANHOLE TABL	JLATION CH	ART
NO.	NORTHING	easting	RIM ELEVATION
	8" SEWER MAIN (NO	ORTH): PARCEL 'F-F'	
EX. & PLUG	553127.06	1386004.26	
Ø' PLUG	553135.02	1306007.79	



8" SEWER MAIN (SOUTH): PARCEL 'G-G'

MANHOLE TABULATION CHART					
NO.	NORTHING	EASTING	RIM ELEVATION		
	8" SEWER MAIN (50	OUTH): PARCEL 'G-G'			
EX. Ø PLUG	553100.96	1305990.99			
8" PLUG	553083.02	1305902.14			

AS-BUILT CERTIFICATION NOTE: There is no "A5-BUILT" Information Provided on this sheet.

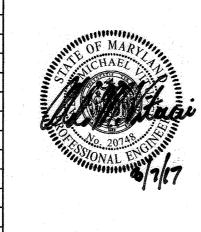


Пем	estimated	AS-BUILT			
		QUANTITIE5	TYPE	SUPPLIER	
Ø'5; PVC; 50R-35	155 LF.				
CLEAN-OUTS	2 EACH				
Ø" PLUG	3 EACH				
FW; C900 PVC; DR-18	19 L.F.				
Ø PLUG & BUTTRESS	1 EACH				
		. *			

FISHER, COLLINS & CARTER, INC. ELLICOTT CITY, MARYLAND 21042 (410) 461 - 2055

I Added Sheet 27

REVISION



12/6/17

DATE

Owner Kellogg-CCP, LLC c/o David P. Scheffenacker, Jr., Managing Member 100 West Road, Suite 304 Towson, Maryland 21204 Ph# 410-296-3800

Developer Preston • Scheffenacker Properties 100 West Road, Suite 304 Towson, Märyländ 21204 Ph# 410-296-3800

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING 9.28.17 10-10-17 PARCEL No. OXFORD SQUARE BLOCK NO. ZONE TAX/ZONE ELEC. DIST. CENSUS TR.

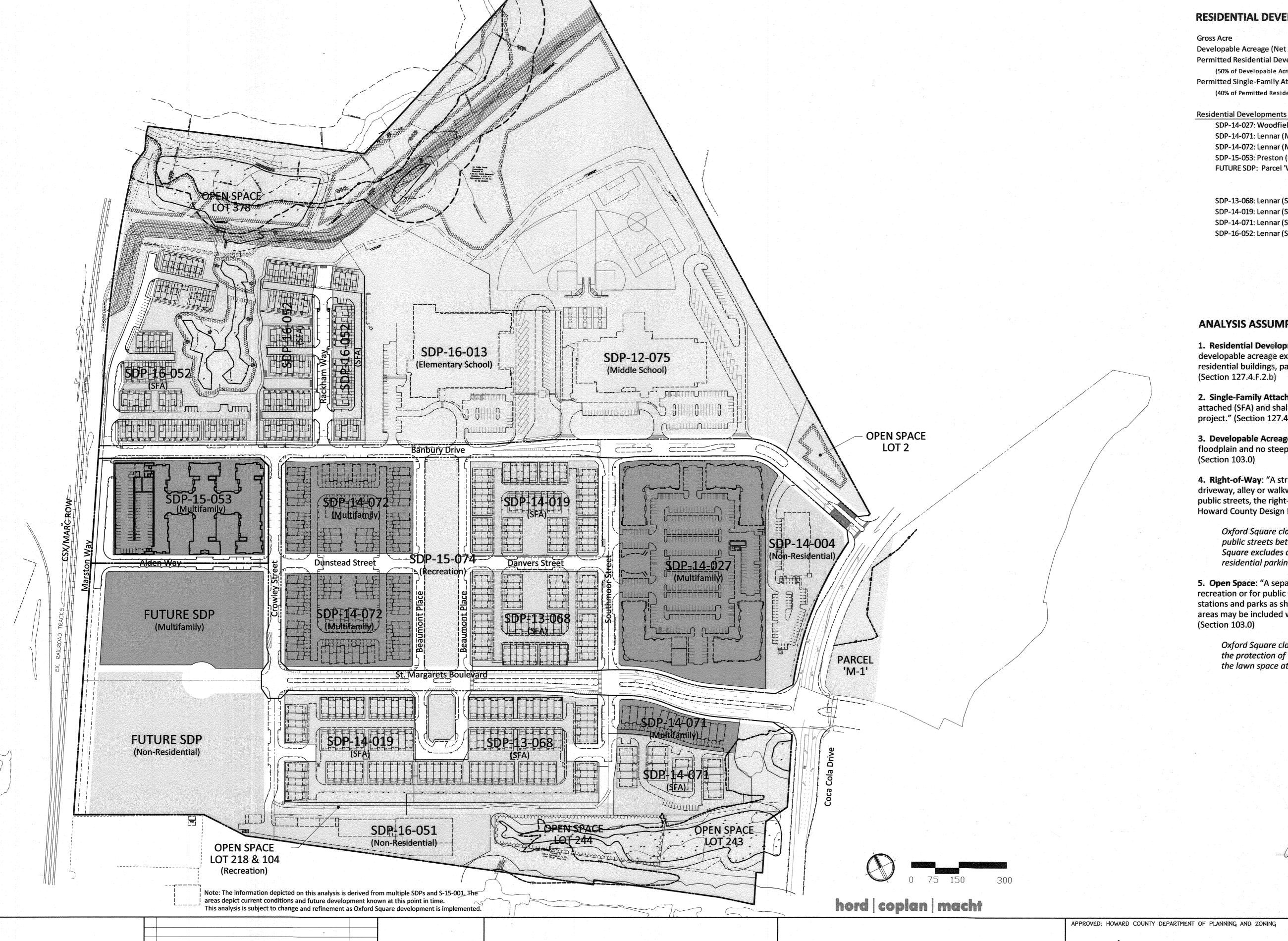
SEWER AND WATER MAIN EXTENSIONS PROFILES, CHARTS & NOTES

"A Howard County Green Neighborhood"

Parcel 'F-F' & OPEN SPACE LOT 377 "Dartmoor Place"

> Tax Map No.: 38 Grid No.: 20 Parcel No.: 1003 First Election District Howard County, Maryland
> Scale: As Shown
> Date: July 31, 2017
> Sheet 23 Of 27

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET



FISHER, COLLINS & CARTER, INC.

ELLICOTT CITY, MARYLAND 21042 (410) 461 - 2855

Added Sheet 27

REVISION

12/6/17

RESIDENTIAL DEVELOPMENT AREA CALCULATION

129.53 Acres Gross Acre 107.51 Acres Developable Acreage (Net Acre) Permitted Residential Development Area (RDA) 53.76 Acres (50% of Developable Acreage) 21.50 Acres

Permitted Single-Family Attached Development Area (SFA) (40% of Permitted Residential Development Area)

SDP-14-027: Woodfield (Multifamily)

SDP-14-071: Lennar (Multifamily) SDP-14-072: Lennar (Multifamily)

SDP-15-053: Preston (Multifamily) FUTURE SDP: Parcel 'W' (Multifamily)

7.31 Acres 0.86 Acres 5.38 Acres 3.26 Acres 3.50 Acres

Residential Development Area

Total Multifamily Development Area: 20.31 Acres

SDP-13-068: Lennar (Single Family Attached) 6.63 Acres 5.80 Acres SDP-14-019: Lennar (Single Family Attached) SDP-14-071: Lennar (Single Family Attached) 2.06 Acres SDP-16-052: Lennar (Single Family Attached) 6.70 Acres **Total Single Family Attached Development Area:** 21.19 Acres

> % of Permitted RDA: 39.4%

41.50 Acres **Total Residential Development Area:** % of Developable Acreage: 38.6%

ANALYSIS ASSUMPTIONS

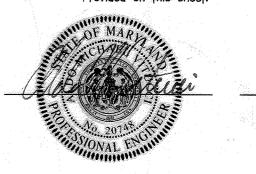
- 1. Residential Development Area: Land area of which "no more than 50% of developable acreage excluding road right-of-way and open space devoted to residential buildings, parking and amenity spaces." (Section 127.4.F.2.b)
- 2. Single-Family Attached Development Area: Land area devoted to single-family attached (SFA) and shall "not occupy more than 40% of the residential land area within the project." (Section 127.4.B.8)
- 3. Developable Acreage: "Net Acre: An acre of land that includes no 100-year floodplain and no steep slopes existing at the time of subdivison." (Section 103.0)
- 4. Right-of-Way: "A strip or parcel of land designated for use as a street, highway, driveway, alley or walkway, or for any drainage or public utility purpose or other similar uses. For public streets, the right-of-way width shall be as required by the State for State roads and the Howard County Design Manual for County Roads." (Section 103.0)

Oxford Square clarifies the definition of Right-of-Way to include both private and public streets between the outer edge of associated walkways (sidewalks). Oxford Square excludes alleys and driveways from right-of-way as they functionally support residential parking.

5. Open Space: "A separate lot or area which provides for protection of the environment, for recreation or for public use, including public facilities such as schools, libraries, fire stations and parks as shown on the General Plan or hiking, biking and equestrian trails. Parking areas may be included within open space if accessory to an open space use." (Section 103.0)

Oxford Square clarifies the definition of Open Space to include land reserved for the protection of the environment and for general public use and recreation, such as the lawn space at Beaumont Place and the shared use path network.

> AS-BUILT CERTIFICATION NOTE: There is no "A5-BUILT" Information



7/7/23

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

OXFORD SQUARE

24351 - 24353

Owner Developer Kellogg-CCP, LLC c/o David P. Scheffenacker, Jr.

Managing Member

100 West Road, Suite 304

Towson, Maryland 21204

Ph# 410-296-3800

Preston · Scheffenacker Properties 100 West Road, Suite 304 Towson, Maryland 21204 Ph# 410-296-3800

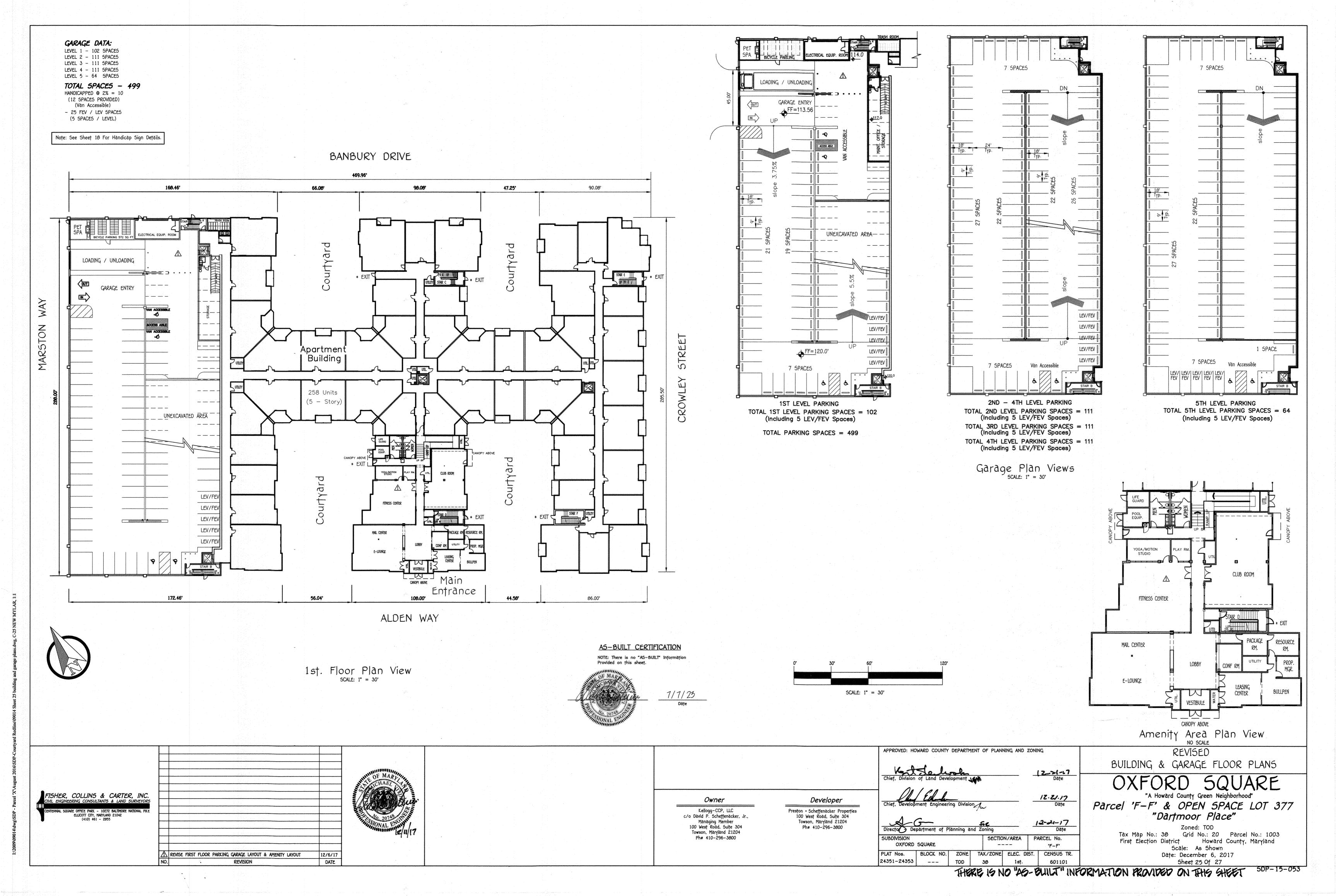
9.28.17 10-10-17 SECTION/AREA

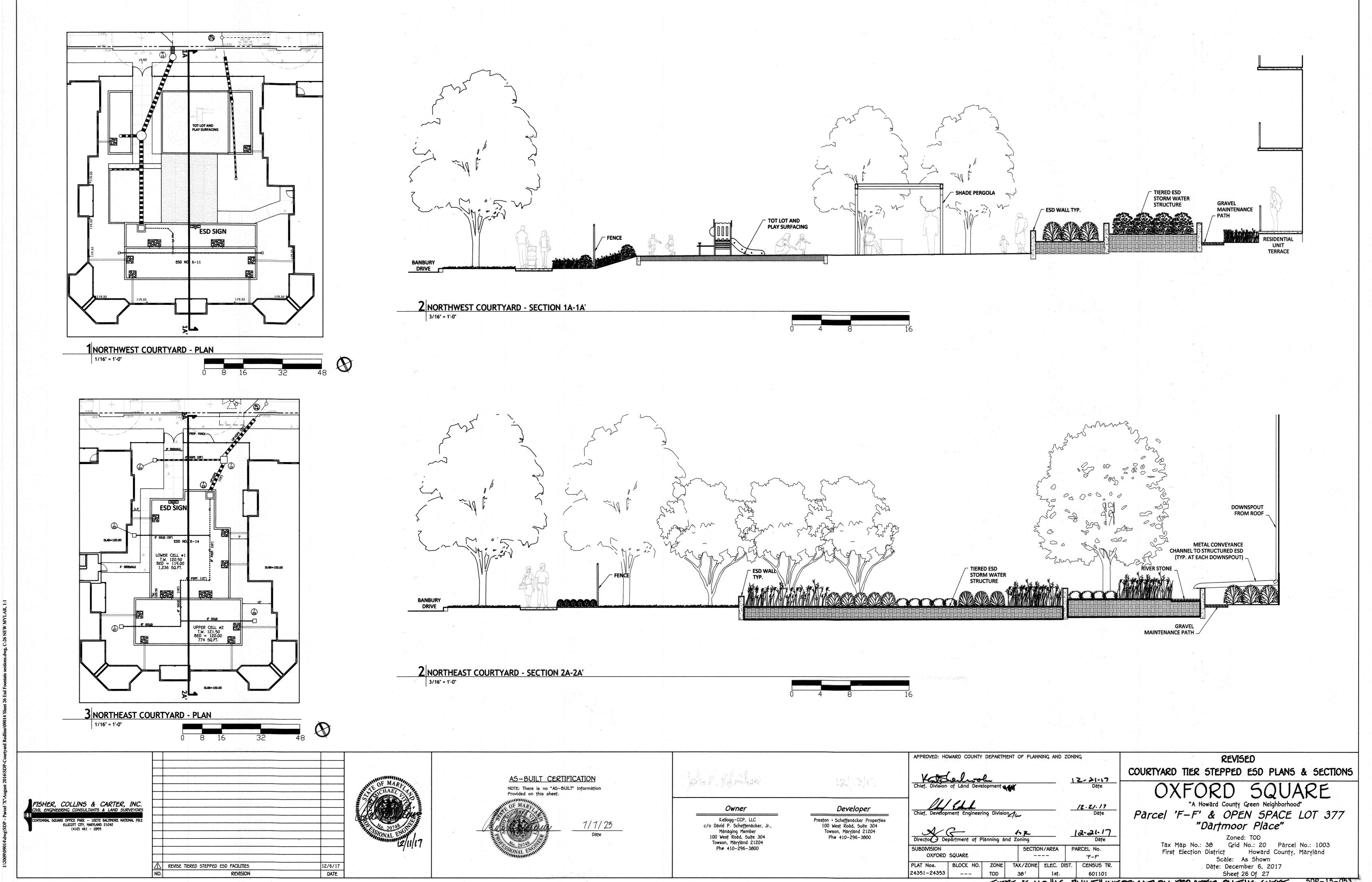
BLOCK NO. ZONE TAX/ZONE ELEC. DIST.

Parcel 'F-F' & OPEN SPACE LOT 377 "Dartmoor Place" Zoned: TOD

RESIDENTIAL DEVELOPMENT AREA

Tax Map No.: 38 Grid No.: 20 Parcel No.: 1003 First Election District Howard County, Maryland Scale: As Shown Date: July 31, 2017





THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET

