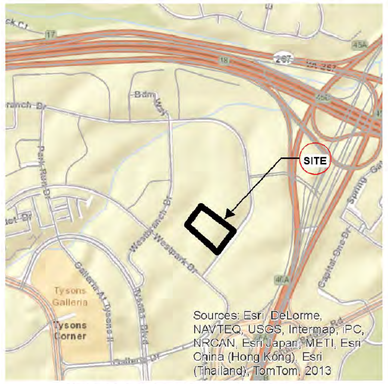
7915 JONES BRANCH DRIVE

CONCEPTUAL / FINAL DEVELOPMENT PLAN

RZ / FDP 2014-PR-004

PROVIDENCE DISTRICT
FAIRFAX COUNTY, VIRGINIA

INITIAL SUBMISSION DECEMBER 18, 2013
FEBRUARY 3, 2014



TAX MAP/VICINITY MAP
SCALE - 1" = 1000'

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ILLUSTRATIVE DEVELOPMENT PERSPECTIVE

TAX MAP NOS.
29-4 ((7)) PARCEL 6
AND PART OF
29-4 ((7)) PARCEL 7B

APPLICANT:
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C/O KETTLER
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MCLEAN, VIRGINIA 22102
GRAHAM TYRELL (703) 852-5764

ATTORNEY:
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ARCHITECT:
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TYSONS, VIRGINIA 22102
MIKE PINKOSKE (703) 917-6620

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NOTES

1. THE PROPERTY THAT IS THE SUBJECT OF THIS REZONING CONSISTS OF PARCELS IDENTIFIED ON THE 2013 FAIRFAX COUNTY TAX ASSESSMENT MAP AS 29-4 ((7)) 6 AND PART OF 029-4 ((07)) 7B. THE PROPERTY IS CURRENTLY ZONED C-3. THE PURPOSE OF THIS APPLICATION IS TO REZONE THE PROPERTY FROM C-3 TO PTC, AND TO DEVELOP THE PROPERTY AS GENERALLY SHOWN ON THE CDP/FDP.

2. THE HORIZONTAL DATUM IS VIRGINIA STATE GRID NORTH, VCS '83.

3. THE TOPOGRAPHY SHOWN HEREON WAS FIELD RUN BY VIKA VIRGINIA, INC. AND THE CONTOUR INTERVAL IS TWO (2) FEET.

4. THE BOUNDARY INFORMATION WAS PREPARED BY VIKA VIRGINIA, INC.

5. THE PROPERTY IS LOCATED IN THE URBAN NEIGHBORHOOD SUB-DISTRICT OF THE NORTH CENTRAL DISTRICT OF THE TYSONS CORNER URBAN CENTER OF THE FAIRFAX COMPREHENSIVE PLAN.

6. PUBLIC WATER AND SANITARY SEWER ARE AVAILABLE AND WILL BE EXTENDED TO SERVE THE DEVELOPMENT.

7. STORMWATER MANAGEMENT AND BMP FACILITIES FOR THE PROPOSED DEVELOPMENT WILL BE PROVIDED ON SITE THROUGH A COMBINATION OF LID DEVICES AS DEPICTED HEREIN (SEE SHEETS C-11 TO C-17) IN ACCORDANCE WITH THE TYSONS URBAN STORMWATER PLAN.

8. TO THE BEST OF OUR KNOWLEDGE, NO GRAVE SITES OR STRUCTURES MARKING A BURIAL SITE ARE PRESENT ON THE SUBJECT PROPERTY.

9. TO THE BEST OF OUR KNOWLEDGE, NO HAZARDOUS OR TOXIC SUBSTANCES ARE KNOWN TO EXIST ON THE SUBJECT PROPERTY.

10. THE ENTIRE SUBJECT PROPERTY IS NOT LOCATED WITHIN A RMA ZONE. NO MAJOR FLOODPLAIN, R.P.A. OR ENVIRONMENTAL QUALITY CORRIDOR CURRENTLY EXIST ON THIS PROPERTY. THERE IS AN EXISTING MINOR FLOODPLAIN IN THE AREA OF THE PROPOSED OFFSITE PARK IMPROVEMENT. (SEE SHEET C-3A)

11. THIS SITE IS IMPROVED WITH A 6-STORY OFFICE BUILDING CONSTRUCTED APPROXIMATELY IN 1977. THE BUILDING IS PLANNED TO BE DEMOLISHED. DEVELOPMENT IS EXPECTED TO COMMENCE UPON COMPLETION OF ALL REQUIRED FAIRFAX COUNTY PLAN PROCESSING AND APPROVALS. COMMENCEMENT OF DEVELOPMENT IS ALSO SUBJECT TO MARKET DEMAND.

12. THE DEVELOPMENT CONFORMS TO THE PROVISIONS OF ALL APPLICABLE STANDARDS WITH THE EXCEPTION OF WAIVERS AND MODIFICATIONS REQUESTED ON THIS SHEET.

13. LANDSCAPED OPEN SPACE AREAS SHOWN HEREON MAY BE MODIFIED AT THE TIME OF ENGINEERED SITE PLAN, PROVIDED GENERAL CONFORMANCE TO SIZE, FUNCTION AND QUALITY OF THESE AREAS IS MAINTAINED.

14. THE BUILDING FOOTPRINTS, GARAGES, PLAZAS, PARKS AND STREETS REPRESENTED HEREON ARE BEING PROVIDED FOR CONCEPTUAL PURPOSES ONLY. IN ACCORDANCE WITH THE PROFFERS. THESE FEATURES MAY BE ALTERED, MOVED AND INCREASED OR DECREASED IN SIZE OR QUANTITY AT THE TIME OF SITE PLAN (WITHIN SUBSTANTIAL CONFORMANCE ALLOWANCES) WITHOUT THE NEED TO AMEND THE CONCEPT/FINAL DEVELOPMENT PLAN SO LONG AS THE MINIMUM/MAXIMUM GFA BUILDING SETBACKS FROM THE PROPERTY LINE AS SHOWN ON THE CDP/FDP ARE MAINTAINED, AND THE MINIMUM/MAXIMUM NUMBER OF RESIDENTIAL UNITS, AND MINIMUM/MAXIMUM BUILDING HEIGHTS COMPLY WITH THOSE SHOWN ON THE CDP/FDP, AS DETERMINED BY THE ZONING ADMINISTRATOR.

15. SITE AMENITIES, FEATURES AND FURNISHINGS REPRESENTED HEREIN ARE CONCEPTUAL AND, AS SUCH, ARE INTENDED TO REFLECT THE GENERAL THEME AND CHARACTER OF THE PROPOSED DEVELOPMENT. FINAL SELECTION MAY VARY AT THE TIME OF SITE PLAN, BUT WILL BE CONSISTENT WITH THE QUALITY OF THE DESIGN REPRESENTED HEREIN. ADDITIONAL SITE AMENITIES AND FEATURES SUCH AS PLANTERS, GAZEBOS, BENCHES, OTHER SEATING AREAS, WALKWAYS, TRELLISES. WATER FOUNTAINS OR SPECIAL FEATURES, PUBLIC ART, SIGNS, WALLS, LIGHTS, UTILITY AND MAINTENANCE STRUCTURES AND SIMILAR FEATURES NOT REPRESENTED HEREIN MAY BE PROVIDED AS LONG AS THE RESULTANT DEVELOPMENT IS IN GENERAL CONFORMANCE WITH THE QUALITY REPRESENTED ON THE CDP/FDP.

16. THE PROPOSED DEVELOPMENT ON THE SUBJECT PROPERTY WILL NOT POSE ANY ADVERSE EFFECT ON ADJACENT OR NEIGHBORING PROPERTIES.

17. THE PROJECT WILL MEET THE PARKING REQUIREMENTS AS SET FORTH IN THE PTC ZONE PER ARTICLES 6 & 11 OF THE ZONING ORDINANCE AND SHALL BE PROVIDED IN PARKING STRUCTURES AND SURFACE SPACES. THE NUMBER OF PARKING SPACES PROVIDED HEREON MAY BE ADJUSTED AT THE TIME OF SITE PLAN BASED ON THE ACTUAL AMOUNT OF GFA AND MIX OF USES, AS DETERMINED BY THE ZONING ADMINISTRATOR. THE FINAL DESIGNATION AND/OR RESTRICTION OF ON-STREET PARKING SPACES--INCLUDING THE LOCATION OF HANDICAP SPACES--SHALL BE DETERMINED IN CONSULTATION WITH VDOT AND FCDOT AT TIME OF SITE PLAN.

18. SIGNAGE WILL BE PROVIDED IN ACCORDANCE WITH THE ZONING ORDINANCE OR A COMPREHENSIVE SIGN PLAN.

19. THERE ARE NO SCENIC ASSETS OR NATURAL FEATURES ON THE PROPERTY WORTHY OF DELINEATION, AND THE PROPERTY IS NEITHER IN NOR ADJACENT TO A HISTORIC OVERLAY DISTRICT.

20. PRIOR TO COMMENCEMENT OF CONSTRUCTION OF THE RESIDENTIAL BUILDING, THE APPLICANT RESERVES THE RIGHT TO PROVIDE ANY USE PERMITTED IN THE C-3 DISTRICT, AND PRIVATELY OWNED AND OPERATED COMMERCIAL OFF-STREET PARKING AND COMMUTER PARKING INSTALLED AS INTERIM USES.

21. THERE ARE NO EXISTING UTILITY EASEMENTS HAVING A WIDTH OF TWENTY FIVE (25) FEET OR MORE. THERE ARE NO MAJOR UNDERGROUND UTILITY EASEMENTS LOCATED ON THIS SITE.

22. APPLICANT RESERVES THE RIGHT TO DETERMINE THE HEIGHT, UNIT COUNT, AND FINAL GFA OF THE BUILDING AT SITE PLAN, PROVIDED THE MINIMUMS SHOWN HEREON ARE NOT REDUCED NOR MAXIMUMS EXCEEDED.

23. MINOR MODIFICATIONS TO WHAT IS SHOWN ON THIS FDP MAY BE MADE TO THE CONSTRUCTION PLANS FOR THE SUBJECT PROPERTY - PER SECTION 16-403 OF THE ZONING ORDINANCE.

24. THE SUBJECT PROPERTY MAY BE SUBDIVIDED IN THE FUTURE FOR THE PURPOSE OF SALE, JOINT VENTURE, OR PHASING. ANY PROPOSED SUBDIVISION SHOWN ON CDP/FDP MAY BE MODIFIED ADMINISTRATIVELY BY THE DIRECTOR OF DPWES WITHOUT REQUIRING MODIFICATION OF THE CDP/FDP PLAT OR PRELIMINARY PLAN.

25. ALL PRIVATE STREETS SHALL BE DESIGNED TO MEET PFM CRITERIA. THE DESIGN SPEED SHALL BE DETERMINED AT TIME OF SITE PLAN.

26. FINAL BUILDING HEIGHTS ARE TO BE DETERMINED AT SITE PLAN, PROVIDED MAXIMUMS AND MINIMUMS SHOWN HEREIN ARE NOT EXCEEDED.

27. PUBLIC ACCESS EASEMENTS WILL BE PROVIDED OVER ALL PRIVATE STREETS AND PUBLIC PARK AREAS.

28. LOCATION AND TYPE OF INTERNAL (TO THE SITE) AND EXTERNAL CROSSWALKS AND ADA CURB RAMPS ARE SUBJECT TO VDOT APPROVAL AT TIME OF SITE PLAN, AND MAY BE SUBJECT TO CHANGE WITHOUT THE NEED FOR A CDPA/FDPA.

29. ROOT BARRIERS WILL BE REQUIRED IN TREE PITS ADJACENT TO PUBLIC STREETS AS DETERMINED BY VDOT AT SITE PLAN.

30. BICYCLE PARKING WILL BE PROVIDED IN ACCORDANCE WITH THE TRANSPORTATION DESIGN STANDARDS FOR TYSONS CORNER URBAN CENTER & THE TYSONS CORNER URBAN DESIGN GUIDELINES, AS COORDINATED WITH FCDOT AND DPWES AT TIME OF SITE PLAN.

31. PROPOSED ROADWAY IMPROVEMENTS (ENTRANCES, CURBING & ETC.) MAY REQUIRE EXCEPTION/DEVIATION FROM THE TRANSPORTATION DESIGN GUIDELINES FOR TYSONS CORNER URBAN CENTER' (AS MAY BE DETERMINED AT SITE PLAN);COMPLIANCE WITH SUCH EXCEPTIONS / CHANGES SHALL NOT REQUIRE AN AMENDMENT TO THE CDP/FDP PROVIDED SUCH CHANGES ARE IN SUBSTANTIAL CONFORMANCE WITH THE CDP/FDP.

32. ALL GRADING INDICATED ON THIS CDP/FDP IS CONCEPTUAL AND SUBJECT TO CHANGE AT SITE PLAN.

33. AREAS OF SHARED PARKING, MANAGED PARKING AND/OR TANDEM/VALET PARKING SHALL BE DEMONSTRATED ON THE SITE PLAN, AND OPERATED IN ACCORDANCE WITH THE PROFFERS.

34. PURSUANT TO ARTICLE 2 SECTION 6-502 OF THE ZONING ORDINANCE (AND SUBJECT TO THE USE LIMITATIONS OF THE PTC DISTRICT), IN ADDITION TO THE RESIDENTIAL, NON-RESIDENTIAL, OFFICE, RETAIL AND OTHER USES IDENTIFIED IN TABULATIONS, THE FOLLOWING ADDITIONAL USES MAY BE PERMITTED WITHOUT REQUIRING AN AMENDMENT TO THE CDP/FDP INCLUDING BUT NOT LIMITED TO: ACCESSORY USES, COMMERCIAL OFF-STREET PARKING, COMMUTER PARKING, ATMs, BUSINESS SERVICE & SUPPLY SERVICE ESTABLISHMENTS, QUICK SERVICE FOOD STORES, FAST FOOD RESTAURANTS, HEALTH CLUBS AND SIMILAR COMMERCIAL RECREATIONAL USES, COMMUNITY USES, EATING ESTABLISHMENTS, FINANCIAL INSTITUTIONS, GARMENT CLEANING ESTABLISHMENTS, OFFICES, PERSONAL SERVICE ESTABLISHMENTS, PUBLIC AND QUASI PUBLIC USES, RETAIL SALES ESTABLISHMENTS AND SIMILAR USES. FINANCIAL INSTITUTIONS AND CHILD CARE CENTERS AND FOOD VENDING TRUCKS SHALL BE PERMITTED, SUBJECT TO APPROVAL AS SHOWN VIA FDP OR SE. PURSUANT TO PARAGRAPH 20 OF SECTION 10-102 OF THE ZONING ORDINANCE, "LIVE-WORK UNITS" SHALL BE DEEMED A PERMITTED "ACCESSORY USE".

35. PRIVATE DRIVEWAYS SHOWN ON THE CDP/FDP SHALL NOT BE CONSIDERED 'SERVICE STREETS', AND SHALL MEET THE TYSONS TRANSPORTATION DESIGN STANDARD FOR DRIVEWAYS.

36. ALL ENTRANCES ON PUBLIC STREETS SHALL TYPICALLY BE CONSTRUCTED AS VDOT STD CG-13 UNLESS INDICATED OTHERWISE AND AS DETERMINED BY VDOT AT SITE PLAN.

37. A GRAPHIC DEPICTION OF THE ANGLE OF BULK PLANE FOR THE PROPOSED DEVELOPMENT SITE IS NOT REQUIRED AS THIS DEVELOPMENT IS NOT LOCATED NEAR THE PERIPHERY OF THE TYSONS URBAN CENTER AS DESCRIBED IN SECTION 16-102 OF THE ZONING ORDINANCE.

38. ALL PROPOSED SIGNALS AND EXISTING SIGNAL MODIFICATIONS ARE SUBJECT TO VDOT REVIEW AND APPROVAL.

39. ALL LANE USE (EX., INTERIM, OR PLANNED) AND/OR CROSSWALKS (OR OTHER PAVEMENT MARKINGS ON PUBLIC STREETS) ARE SUBJECT TO REVIEW AND APPROVAL BY VDOT AT THE TIME OF SITE PLAN AND MAY BE MODIFIED WITHOUT THE NEED FOR PCA, CDPA AND/OR FDPA.

40. THIS PLAN IS CONCEPTUAL AND IS INTENDED TO BE USED IN CONJUNCTION WITH THE LAND USE APPROVAL PROCESS ONLY. IT IS NOT AN ENGINEERING CONSTRUCTION DRAWING, AND MINOR DEVIATIONS AND ADJUSTMENTS MAY BE REQUIRED---AND ARE PERMITTED PURSUANT TO ZONING ORDINANCE SECTION 18-204(5)---AS PART OF THE FINAL SITE PLAN APPROVAL PROCESS. HOWEVER, THE FINAL CONSTRUCTION DRAWINGS SHALL BE IN SUBSTANTIAL CONFORMANCE WITH THIS PLAN.

WORK FORCE HOUSING NOTE:

20% OF THE TOTAL OF ALL THE DWELLING UNITS SHALL BE WORK FORCE DWELLING UNITS. SAID UNITS SHALL BE PROVIDED AS OUTLINED IN THE PROFFERS. (SEE FOOTNOTE #4 UNDER DEVELOPMENT TABULATION)

ZONING ORDINANCE WAIVERS / MODIFICATIONS REQUESTED

ZONING ORDINANCE ARTICLE 2 - GENERAL REGULATIONS

1. APPLICANT REQUESTS A WAIVER OF SECTION 2-505 OF THE ZONING ORDINANCE TO ALLOW BUILDINGS TO BE CONSTRUCTED TO THE STREETSCAPE BUILDING ZONE LINE ON CORNER LOTS ON PUBLIC STREETS AND LOTS WITH PRIVATE STREET EASEMENTS WHICH MAY CREATE A CORNER LOT CONFIGURATION AS DEFINED IN THE ZONING ORDINANCE.
2. APPLICANT REQUESTS A WAIVER / MODIFICATION OF SECTION 2-505 TO ALLOW FOR A PARAPET WALL, CORNICE OR SIMILAR PROJECTION TO EXCEED THE HEIGHT LIMIT ESTABLISHED BY MORE THAN THREE (3) FEET IN ORDER TO SCREEN MECHANICAL EQUIPMENT, AS MAY BE INDICATED ON THE FDP.
3.

ZONING ORDINANCE ARTICLE 6 - PLANNED DEVELOPMENT DISTRICT REGULATIONS

4. APPLICANT REQUESTS A MODIFICATION OF ARTICLE 6-501-7 OF THE ZONING ORDINANCE FOR THE TYSON'S CORNER URBAN CENTER STREETSCAPE DESIGN IN FAVOR OF THAT SHOWN ON THE CDP.
5. APPLICANT REQUESTS A WAIVER OF SECTION 6-506 PARAGRAPH 1 TO ALLOW A DISTRICT SIZE LESS THAN 10 ACRES FOR AN APPLICATION.

ZONING ORDINANCE ARTICLE 10 - ACCESSORY USES, ACCESSORY SERVICES USES, AND HOME OCCUPATIONS

6. AS ALLOWED WITHIN ZONING ORDINANCE SECTION 10-104.3.E APPLICANT REQUESTS A WAIVER OF THE MAXIMUM FENCE HEIGHT FROM SEVEN FEET TO FOURTEEN FEET AROUND ACCESSORY USES / STRUCTURES LOCATED WITHIN THE REAR YARD FOR THOSE AREAS OF FENCING ASSOCIATED WITH ANY PROPOSED SPORTS COURTS AND URBAN PLAZA AREAS AS INDICATED ON THE CDP OR AS MAY BE INDICATED ON AN FDP. LOCATION AND MATERIAL OF FENCE TO BE ESTABLISHED AT FDP.

ZONING ORDINANCE ARTICLE 11 - PARKING AND LOADING

5. APPLICANT REQUESTS A MODIFICATION OF SECTION 11-202(4) REQUIRING MINIMUM DISTANCE OF FORTY FEET (40') OF A LOADING SPACE IN PROXIMITY TO DRIVE AISLES, TO THAT AS DEMONSTRATED ON THE CDP AND SHOWN ON THE APPROVED FDP.
6. APPLICANT REQUESTS A WAIVER OF THE MAXIMUM LENGTH OF PRIVATE STREETS AS PROVIDED IN PARAGRAPH 2 OF SECTION 11-302 OF THE ZONING ORDINANCE TO ALLOW PRIVATE STREETS IN EXCESS OF 600 FT. IN LENGTH.

ZONING ORDINANCE ARTICLE 13 - LANDSCAPING

7. APPLICANT REQUESTS A MODIFICATION / WAIVER OF INTERIOR PARKING LOT LANDSCAPE REQUIREMENTS (SECTION 13-202-8) FOR INTERIM SURFACE LOTS AND SPACES ON PRIVATE STREETS AS ALLOWED PER SECTION 13-202, PARA 6, TO THAT SHOWN ON THE CDP AND TO BE SHOWN ON THE FDP. FOR INTERIM SURFACE PARKING LOTS: INTERIOR LANDSCAPING WILL BE DEMONSTRATED ON SUBSEQUENT FDP APPLICATIONS AND WILL UTILIZE EXISTING VEGETATION WITHIN PARKING LOTS, TO THE EXTENT POSSIBLE.
8. APPLICANT REQUESTS A MODIFICATION OF PERIPHERAL LANDSCAPE REQUIREMENTS (SECTION 13-203-5) FOR ABOVE GRADE PARKING STRUCTURES, PARKING ON PRIVATE STREETS, AND INTERIM SURFACE LOTS AS ALLOWED BY SECTION 13-203, PARA 3, TO THAT SHOWN ON THE CDP OR AS MAY BE SHOWN ON THE FDP.

ZONING ORDINANCE ARTICLE 17 - SITE PLAN

10. APPLICANT REQUESTS A WAIVER OF SECTION 17-201-(3)(B) REQUIRING ADDITIONAL INTER-PARCEL ACCESS TO ADJOINING PARCELS (OTHER THAN THOSE SHOWN ON THE CDP) AND AS PROFFERED.
11. APPLICANT REQUESTS A WAIVER AND/OR MODIFICATION OF SECTION 17-201 ALL TRAILS AND BIKE TRAILS IN FAVOR OF THE STREETSCAPE AND ON-ROAD BIKE LANE SYSTEM SHOWN ON THE CDP AND AS PROFFERED.
12. THE APPLICANT REQUESTS A DETERMINATION OF ZONING ORDINANCE SECTION 17-201 PARAGRAPH (4) REQUIRING ANY FURTHER DEDICATION AND CONSTRUCTION OF WIDENING FOR EXISTING ROADS BEYOND THAT WHICH IS INDICATED ON THE CDP. DEDICATION AND IMPROVEMENTS SHOWN ON THE CDP SHALL BE DEEMED TO MEET ALL COMPREHENSIVE PLAN POLICY PLAN REQUIREMENTS.
13. IN ACCORDANCE WITH ZONING ORDINANCE SECTION 17-201 (7), THE APPLICANT REQUEST THE RIGHT TO ESTABLISH PARKING CONTROL, SIGNS (INCLUDING SPACING AND LOCATION), AND PARKING METERS ALONG PRIVATE STREETS WITHIN AND ADJACENT TO THE DEVELOPMENT IN COORDINATION WITH FCDOT.

PFM WAIVERS / MODIFICATIONS REQUESTED

PUBLIC FACILITIES MANUAL WAIVERS / MODIFICATIONS REQUESTS

1. WAIVER OF PFM SECTION 6-0303.8, TO ALLOW STORMWATER MANAGEMENT FACILITIES (SWM AND BMP) TO BE PROVIDED WITHIN UNDERGROUND SYSTEMS WITHIN THE RESIDENTIAL BLOCKS OF THE PROPOSED DEVELOPMENT. (SEPARATE WAIVER FILED 001682-WSWD-001-1)
2. MODIFICATION OF SECTION 7-0802.2 PARKING GEOMETRIC STANDARDS TO ALLOW FOR UP TO A 4% PROJECTION OF STRUCTURAL COLUMNS WITHIN PARKING STRUCTURES INTO THE REQUIRED PARKING STALL AREA. THE PARKING STALLS AFFECTED BY SUCH STRUCTURAL COLUMNS SHALL COUNT TOWARD THE NUMBER OF REQUIRED PARKING SPACES.
3. MODIFICATION OF PFM SECTION 7-0800 TO ALLOW TANDEM/VALET PARKING SPACES, CONTROLLED BY BUILDING MANAGEMENT, AND THAT SUCH SPACES MAY COUNT TOWARD REQUIRED PARKING.
4. MODIFICATION OF SECTION 12-0510 TO PERMIT:
   A) REDUCTION IN THE MINIMUM PLANTING AREA FROM EIGHT (8) FEET, TO A MINIMUM OF SIX (6) FEET IN ORDER FOR TREES TO SATISFY THE TREE COVER REQUIREMENT. REFER TO LANDSCAPE PLANS HEREIN FOR GRAPHIC OF THE PROPOSED PLANTING AREA.
   B) TREES LOCATED IN EXISTING OR PROPOSED RIGHT-OF-WAY DEDICATION AREAS TO COUNT TOWARD THE 10-YEAR TREE CANOPY REQUIREMENTS.
5. MODIFICATION OF SECTION 12-511 FOR REQUIRED TREE PRESERVATION TARGET AND TEN PERCENT CANOPY COVERAGE ON INDIVIDUAL LOTS / LAND BAYS, TO ALLOW FOR TREE PRESERVATION AND CANOPY TO BE CALCULATED ON THE OVERALL CDP DEVELOPMENT AREA, AS DEMONSTRATED ON THE CDP HEREIN.
6. WAIVER OF SECTION 8-0201.3 REQUIRING TRAILS AND BIKE TRAILS SHOWN ON THE COMPREHENSIVE TRAILS PLAN IN FAVOR OF THE STREETSCAPE AND ON-ROAD BIKE TRAIL SYSTEM SHOWN ON THE CDP.
7. MODIFICATION OF SECTION 12-0601.1B TO PERMIT THE REDUCTION OF THE MINIMUM PLANTER OPENING AREA FOR TREES USED TO SATISFY THE TREE COVER REQUIREMENT, IN FAVOR OF THAT SHOWN ON THE CDP AND AS PROFFERED.
8. MODIFICATION OF SECTION 12-0515.6B TO ALLOW FOR TREES LOCATED ABOVE ANY PROPOSED PERCOLATION TRENCH OR BIO-RETENTION AREAS TO COUNT TOWARDS COUNTY TREE COVER REQUIREMENTS.

THE FOLLOWING PFM WAIVERS MODIFICATIONS 9 THRU 10 ARE REQUIRED FROM THE DIRECTOR TO SUPPORT THE DESIGN ELEMENTS AND PROFFERED COMMITMENTS OF THIS APPLICANT AND CDP. APPLICANT REQUESTS THE BOARD SUPPORT THESE PFM WAIVERS AND MODIFICATION AND DIRECT THE DIRECTOR TO GRANT THESE WAIVERS/MODIFICATIONS AT SITE PLAN.

9. WAIVER OF PFM SECTION 7 IN FAVOR OF THE TRANSPORTATION DESIGN STANDARDS FOR THE TYSONS CORNER URBAN CENTER.

PFM WAIVERS / MODIFICATIONS REQUESTED (CONT.)

PFM SECTION 6 - STORMWATER AND BMP CODE REQUIREMENTS

10. DEVIATIONS / MODIFICATION OF REQUIRED SWM AND BMP CRITERIA BY THE DIRECTOR, DPWES AS OUTLINED IN THE "STORMWATER MANAGEMENT DESIGN PFM DEVIATIONS NARRATIVE" OUTLINED ON STORMWATER MANAGEMENT SHEETS AND AS FOLLOWS:
    A) ALL REQUIRED DEVIATIONS OF PFM SECTION 6-1304.2C TO ALLOW FOR INSTALLATION OF PERMEABLE PAVEMENT SYSTEMS THAT UTILIZE INFILTRATION TO BE CONSTRUCTED ON IN-SITU FILL MATERIAL, PROVIDED FIELD TESTS SHOW ADEQUATE INFILTRATION RATES EXIST FOR IN-SITU MATERIAL.
    B) ALL REQUIRED DEVIATIONS OF PFM SECTION 6-1304.2F TO SET THE MINIMUM HORIZONTAL SETBACKS FOR BOTH INFILTRATING AND NON-INFILTRATING SYSTEMS FROM BUILDING FOUNDATIONS BE REDUCED TO ZERO (0) FEET IN ORDER TO FACILITATE INSTALLATION OF PERMEABLE PAVERS IN AN URBAN ENVIRONMENT SET FORTH IN THE TYSON'S CORNER DESIGN GUIDELINES.
    C) ALL REQUIRED DEVIATIONS OF PFM SECTION 6-1304.4I TO ALLOW UTILIZATION OF INFILTRATION RATES LESS THAN 0.52 IN/HR FOR DESIGN OF INFILTRATION SYSTEMS UTILIZED TO MEET THE COMPREHENSIVE PLAN REQUIREMENT FOR RETENTION OF THE FIRST 1" OF RUNOFF ON-SITE.
    D) ALL REQUIRED DEVIATIONS OF PFM SECTION 6-1306.3F TO ALLOW FOR ANY DETENTION FACILITY LOCATED WITHIN A BUILDING OR GARAGE STRUCTURE TO BE GOVERNED BY BUILDING CODE REQUIREMENTS FOR ACCESS AND MAINTENANCE.
    E) ALL REQUIRED DEVIATIONS OF PFM SECTION 6-1307.2C TO ALLOW FOR INSTALLATION OF BIO-RETENTION FACILITIES THAT UTILIZE INFILTRATION TO BE CONSTRUCTED ON IN-SITU FILL MATERIAL, PROVIDED FIELD TESTS SHOW ADEQUATE INFILTRATION RATES EXIST FOR IN-SITU MATERIAL.
    F) ALL REQUIRED DEVIATIONS OF PFM SECTION 6-1307.2E TO SET THE MINIMUM HORIZONTAL SETBACKS FROM BUILDING FOUNDATIONS BE REDUCED TO ZERO (0) FEET IN ORDER TO FACILITATE INSTALLATION OF BIO-RETENTION SYSTEMS IN AN URBAN ENVIRONMENT SET FORTH IN THE TYSON'S CORNER DESIGN GUIDELINES.
    G) ALL REQUIRED DEVIATIONS OF PFM SECTION 6-1307.2F TO ALLOW INSTALLATION OF BIO-RETENTION FACILITIES IN THE VICINITY OF LOADING DOCKS, VEHICLE MAINTENANCE AREAS OR OUTDOOR STORAGE AREAS TO ACCOMMODATE THE URBAN ENVIRONMENT SET FORTH IN THE TYSON'S CORNER DESIGN GUIDELINES.
    H) ALL REQUIRED DEVIATIONS OF PFM SECTION 6-1307.2G TO ALLOW FOR THE MAXIMUM DRAINAGE AREAS TO BIO-RETENTION FILTERS UTILIZED FOR RETENTION OF THE FIRST 1" OF RUNOFF BE ELIMINATED IN ORDER TO ACCOMMODATE ROOFTOP RUNOFF PIPED TO PROPOSED STRUCTURES.
    I) ALL REQUIRED DEVIATIONS OF PFM SECTION 6-1309.2C TO ALLOW INSTALLATION OF TREE BOX FILTERS IN THE VICINITY OF LOADING DOCKS, VEHICLE MAINTENANCE AREAS OR OUTDOOR STORAGE AREAS TO ACCOMMODATE THE URBAN ENVIRONMENT SET FORTH IN THE TYSON'S CORNER DESIGN GUIDELINES.

SOILS MAP 1"=500'

LAND USE MIX

Use	GFA	Percentage of Total [1]	FAR [2]
Residential	295,000 - 437,700	100 - 97%	1.18 – 1.75
Non-Residential	0 - 12,300	0 – 3%	0 – 0.05
TOTAL	**295,000 - 450,000**		**1.18 – 1.80**

[1] Percentages are based on the maximum GFA scenario.
[2] Calculation of FAR is based on land area and density credits totaling 250,628 SF.

INTENSITY TIERS

Intensity Tiers	Land Area and Density Credits	GFA	FAR
< 1/2 mile	106,372 SF	189,000 [2]	1.78
Non-TOD >1/2 mile	144,256 SF	261,000 [3]	1.81
TOTAL	**250,628 SF**	**450,000**	**1.80**

[1] Intensity calculations are based on the maximum GFA scenario.
[2] Includes 42% of the building GFA.
[3] Includes 58% of the building GFA.

DEVELOPMENT TABULATION

Building Height [1]		Range of Stories [2]	Use [3]	Building GFA	Dwelling Units	WDUs [4]	Parking Permitted/Provided < 1/4 Mile to Metro [5]		Loading Spaces [6]
Min.	Max.						Minimum	Maximum	
45'	85'	4 - 6	Residential	295,000 - 437,700	275 - 400	46- 66	327 - 475	413 - 602	1
			Non-Residential	0 - 12,300			0 - 55	0 - 80	
TOTALS				295,000 - 450,000	275 - 400	46 - 66	327 - 530	413 - 682	1

[1] Building height is measured from average grade and includes the podium and any social rooms/usable area on the roof penthouse level. Building height does not include architectural features or mechanical penthouse; such features may be a maximum of 20 feet.

[2] The number of floors shown is conceptual and may be adjusted provided the maximum building height is not exceeded.

[3] Non-residential use as indicated in this tabulation may include a variety of commercial uses such as, but not limited to, eating establishments and fast food restaurants as well as public uses and residential amenity space. (See Proffers.)

[4] The number of WDUs to be provided is estimated and will be calculated at the time of site plan based on the number of units to be constructed, the policies set forth in the Comprehensive Plan and the Tysons Corner Urban Center Workforce Dwelling Unit Administrative Policy Guildeines. Being located beyond 1/4 mile of a Metro station, any units created with bonus floor area will be excluded from the 20% WDU calculation.

[5] The minimum required and maximum permitted parking spaces for each use were calculated in accordance with Sect. 6-509 of the Zoning Ordinance, which is restated below for the primary uses proposed on the CDP/FDP. It is understood that commercial uses have differing parking rates but for the purposes of this tabulation, parking was based on retail sales establishments rates. Residential parking was based on an average mix of 65% 0-1 bedroom units and 35% 2-bedroom units. At the time of site plan, parking will be provided based on the specific uses, GFA, number of units and mix of bedroom types and the minimum and maximum rates set forth in Section 6-509 of the Zoning Ordinance.

[6] Additional loading spaces may be provided as identified at the time of final site plan.

Primary Use	Parking Permitted/Provided > 1/4 Mile to Metro (Non-TOD)	
	Minimum	Maximum
Non-Residential (retail/service etc.)	75% of rates set forth in Zoning Ordinance Section 11-104	110% of rates set forth in Zoning Ordinance Section 11-104
Multi-Family Residential		
0 - 1 Bedroom	1.1/Unit	1.4/Unit
2 Bedrooms	1.35/Unit	1.7/Unit

PUBLICLY ACCESSIBLE PARKS RECOMMENDATIONS
RESIDENTIAL
ASSUME 1.75 PEOPLE FOR UNIT AVERAGE x 400 UNITS = 700 PEOPLE
1.5 ACRES RECOMMENDED PER 1,000 PEOPLE
700 / 1,000 = .7
.7 x 1.5 ACRES = 1.05 ACRES RECOMMENDED

PUBLIC ACCESSIBLE PARKS PROVIDED

1	PARK (ON SITE)	0.77 ACRES
2	DOG PARK (OFF SITE)	0.66 ACRES
3	METRO CONNECTOR (OFF SITE)	0.12 ACRES
	TOTAL ON SITE ACCESSIBLE PARKS	0.77 ACRES
	TOTAL OFF SITE ACCESSIBLE PARKS	0.78 ACRES
	TOTAL PUBLIC ACCESSIBLE PARKS	1.55 ACRES

PUBLIC ACCESSIBLE PARKS RECOMMENDED: 1.05 ACRES / PROVIDED 1.55 ACRES

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VIKA VIRGINIA LLC
8180 GREENSBORO DRIVE, SUITE 200 ■ TYSONS, VIRGINIA 22102
(703) 442-7800 ■ FAX (703) 761-2787
W W W . V I K A . C O M

7915 JONES BRANCH DRIVE
PROVIDENCE DISTRICT
FAIRFAX COUNTY, VIRGINIA

NOTES AND TABULATIONS

VIKA REVISIONS

REV. 2/3/14
INITIAL SUB. 12/18/13
DES. RRC DWN. RRC
SCALE: N/A
PROJECT/FILE NO. VV7388F
SHEET NO. C-2

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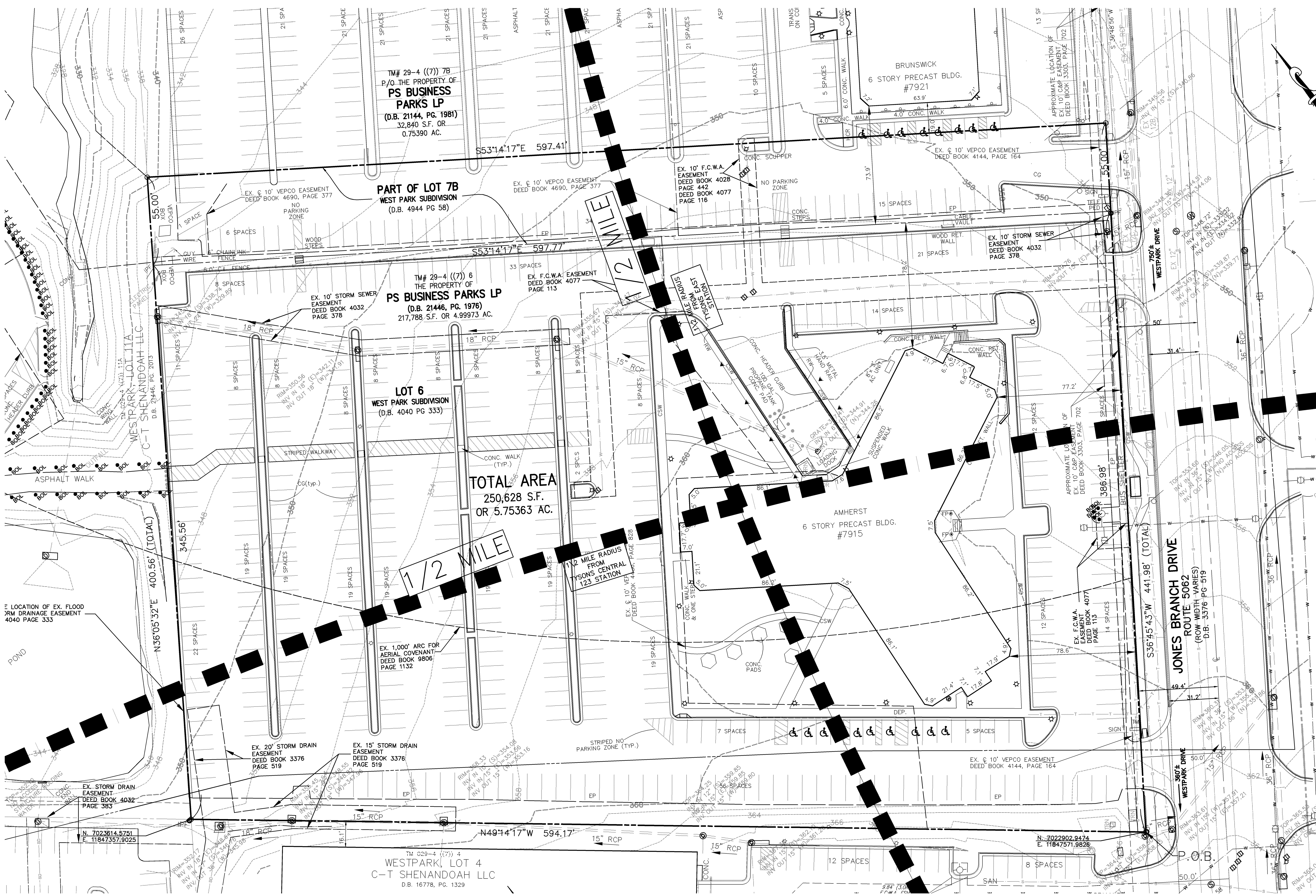

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VICINITY MAP SCALE: 1"=2000'

NOTES:

1. THE SUBJECT PROPERTIES SHOWN HEREON ARE IDENTIFIED AS FAIRFAX COUNTY TAX ASSESSMENT MAP **#029-4-07-6** (ZONED **C-3**) AND PART OF **029-4-07-7B** (ZONED **C-3**).
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3. THE PROPERTIES SHOWN HEREON IS THE PROPERTY OF **PS BUSINESS PARKS, L.P.**, AS ACQUIRED IN DEED BOOK **21146** AT PAGE **1976** AND DEED BOOK **21144** AT PAGE **1981** ALL AMONG THE LAND RECORDS OF FAIRFAX COUNTY, VIRGINIA.
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5. THE VERTICAL DATUM IS REFERENCED TO NGVD 29.
6. THE BOUNDARY INFORMATION SHOWN HEREON IS BASED ON A FIELD RUN BOUNDARY SURVEY PREPARED BY VIKA VIRGINIA LLC DATED JUNE 19, 2013
7. TITLE REPORT PROVIDED **BYFIDELITY NATIONAL TITLE INSURANCE COMPANY**, FILE NO. **192001751** WITH AN EFFECTIVE DATE OF **MAY 05, 2013, (REVISION DATE MAY 22, 2013)** AND **FIDELITY NATIONAL INSURANCE COMPANY**, REFERENCE NO. **192001751A** WITH AN EFFECTIVE DATE OF **JUNE 05, 2013 (REVISION DATED JUNE 11, 2013)** HAVE BEEN INCORPORATED ONTO THIS CERTIFIED PLAT.

LEGAL DESCRIPTION:

BEING ALL OF THE LOT SIX (6), WESTPARK SUBDIVISION, AS RECORDED IN DEED BOOK 4040 AT PAGE 333 AND A PORTION OF LOT SEVEN (7) B, WESTPARK SUBDIVISION, AS RECORDED IN DEED BOOK 4944 AT PAGE 58, ALL AMONG THE LAND RECORDS OF FAIRFAX COUNTY, VIRGINIA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE WESTERLY RIGHT-OF-WAY LINE OF JONES BRANCH DRIVE, ROUTE 5062 (VARIABLE WIDTH), AT THE COMMON CORNER OF AFORESAID LOT 6 AND LOT 4, WESTPARK SUBDIVISION, (DEED BOOK 4040, PAGE 333); THENCE DEPARTING FROM SAID WESTERLY RIGHT-OF-WAY LINE OF JONES BRANCH DRIVE AND RUNNING WITH COMMON LINE BETWEEN SAID LOT 6 AND SAID LOT 4

1. NORTH 49°14'17"WEST, 594.17 FEET TO THE COMMON CORNER OF SAID LOT 4, LOT 8, WESTPARK SUBDIVISION (DEED BOOK 4040, PAGE 333) AND LOT 11A WESTPARK SUBDIVISION (DEED BOOK 4740, PAGE 305); THENCE LEAVING THE COMMON LINE OF SAID LOT 6 AND LOT 4 AND RUNNING WITH THE COMMON LINE OF SAID LOT 6 AND LOT 11A

2. NORTH 36°05'32"EAST, 400.56 FEET TO A POINT ON THE COMMON LINE OF SAID LOT 7B AND SAID LOT 11A; THENCE LEAVING SAID COMMON LINE OF SAID LOT 7B AND LOT 11A AND RUNNING SO AS TO CROSS AND INCLUDE A PORTION OF SAID LOT 7B

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4. SOUTH 36°45'43"WEST, 441.98 FEET TO THE POINT OF BEGINNING CONTAINING 250,628 SQUARE FEET OR 5.75363 ACRES OF LAND.

AREA TABULATION:

029-4-07-6	.... 217,788 SQ. FT. OR 4.99973 ACRES
PART OF 029-4-07-7B	.... 32,840 SQ. FT. OR 0.75390 ACRES
TOTAL SITE AREA	**.........250,628 SQ. FT. OR 5.75363 ACRES**

ZONING TABULATION:

EXISTING ZONE C-3	
TOTAL	...............250,628 SQ.FT. OR 5.75363 ACRES
PROPOSED ZONE PTC	**...............250,628 SQ.FT. OR 5.75363 ACRES**

W.M.A.T.A. RADIUS TABULATION:

AREA WITHIN 1/2 MILE RADIUS	
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AREA BETWEEN 1/2 MILE RADIUS	
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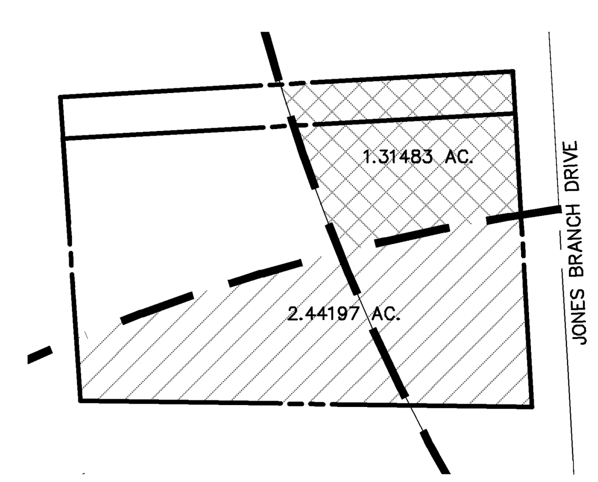
TOTAL	164,646 SQ.FT. OR 3.75680 ACRES



SCALE: 1"=200'

LEGEND:

BUILDING LINE
ELECTRICAL CONDUIT
EDGE OF PAVEMENT
FENCE LINE
NATURAL GAS CONDUIT
OVERHEAD WIRES
TELEPHONE/COMMUNICATIONS CONDUIT
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SANITARY CLEANOUT
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WATER MANHOLE
WATER VALVE
FIRE HYDRANT
FIRE DEPARTMENT CONNECTION
IRRIGATION CONTROL VALVE
WELL
WSO

TREE
HANDICAP
PARKING METER
HVAC UNIT
UKNOWN UTILITY MANHOLE
BOLLARD
COLUMN
CENTERLINE
SOIL BORING
TEST PIT

SIGN POST
WOOD POST
IRON PIPE FOUND
REBAR FOUND
PKNAIL FOUND
DRILL HOLE FOUND
BENCHMARK

CONC	CONCRETE
C&G	CURB AND GUTTER
TRANS	ELECTRICAL TRANSFORMER
ASPH	ASPHALT
ESMT	EASEMENT
BLDG	BUILDING
RCP	REINFORCED CONCRETE PIPE
CMP	CORRIGATED METAL PIPE
R/W	RIGHT-OF-WAY
HCR	HANDICAP RAMP
DB	DEED BOOK
PG	PAGE
TRANS	ELECTRIC TRANSFORMER
BRL	BUILDING RESTRICTION LINE

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

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WWW.VIKA.COM

7915 JONES BRANCH DRIVE

PROVIDENCE DISTRICT
FAIRFAX COUNTY, VIRGINIA

EXISTING CONDITIONS PLAN

VIKA REVISIONS

REV. 2/3/14
INITIAL SUB. 12/18/13
DES. FEJ | DWN. JMB
SCALE: 1"=30'
PROJECT/FILE NO. VV7388E
SHEET NO. C-3

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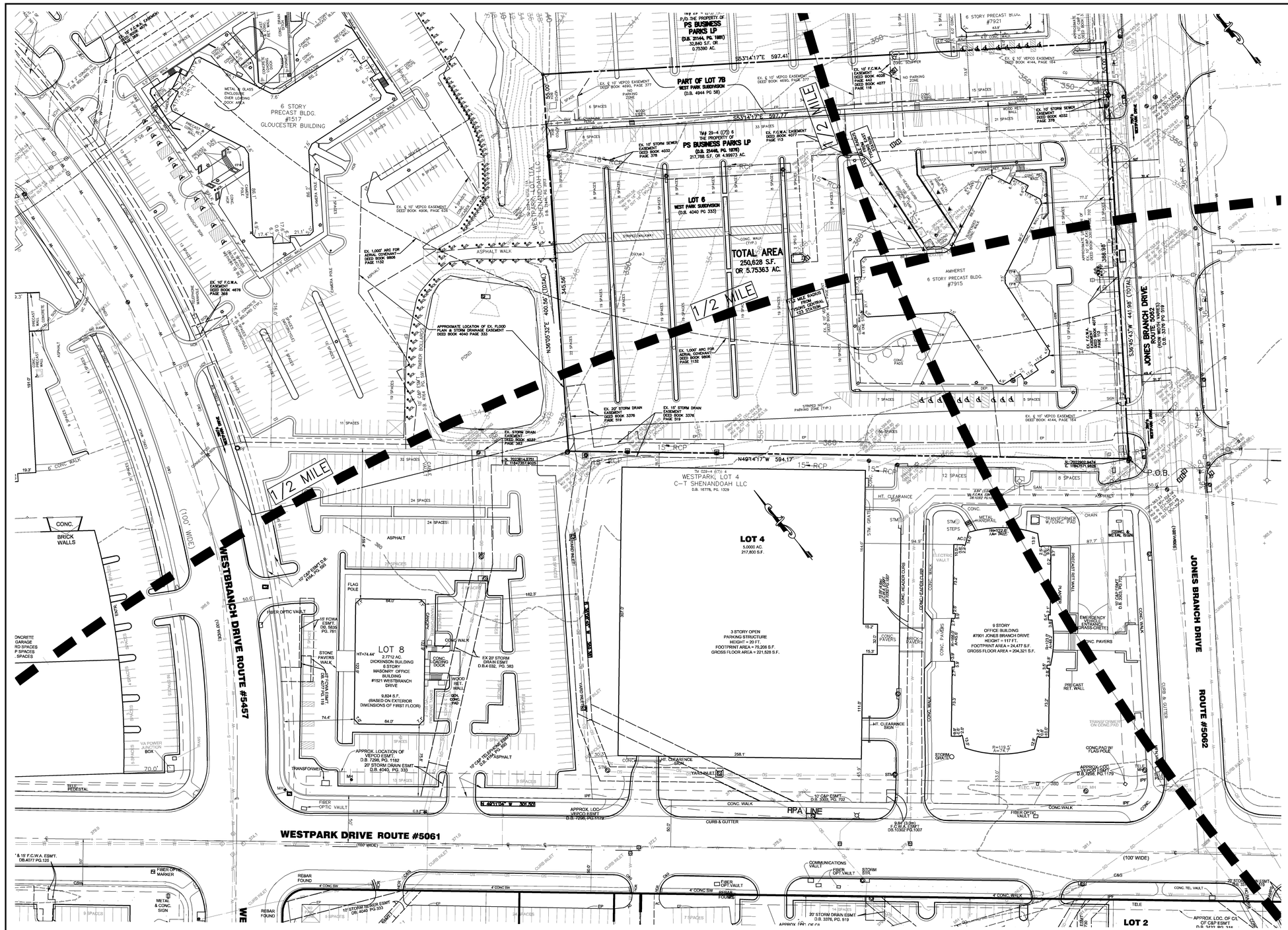

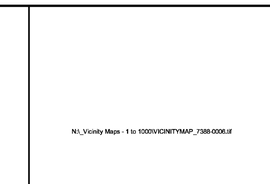

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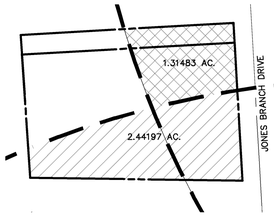

SCALE: 1"=200'

LEGEND:

BUILDING LINE
ELECTRICAL CONDUIT
EDGE OF PAVEMENT
FENCE LINE
NATURAL GAS CONDUIT
OVERHEAD WIRES
TELEPHONE/COMMUNICATIONS CONDUIT
PROPERTY LINES
PUBLIC UTILITIES EASEMENTS
SANITARY SEWER CONDUIT
STORM DRAIN CONDUIT
WATER CONDUIT

ELECTRICAL MANHOLE
ELECTRICAL JUNCTION BOX
GUY POLE
LIGHT POLE
GROUND LIGHT
UTILITY POLE
PHONE MANHOLE
PHONE PEDESTAL
CABLE TELEVISION PEDESTAL
GAS VALVE
GAS MANHOLE
GAS MARKER
TRAFFIC CONTROL BOX
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STORM DRAIN MANHOLE
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WATER MANHOLE
WATER VALVE
FIRE HYDRANT
FIRE DEPARTMENT CONNECTION
IRRIGATION CONTROL VALVE
WELL
WSO

TREE
HANDICAP
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HVAC UNIT
UKNOWN UTILITY MANHOLE
BOLLARD
COLUMN
CENTERLINE
SOIL BORING
TEST PIT

SIGN POST
WOOD POST
IRON PIPE FOUND
REBAR FOUND
PKNAIL FOUND
DRILL HOLE FOUND
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CONC CONCRETE
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DB DEED BOOK
PG PAGE
TRANS ELECTRIC TRANSFORMER
BRL BUILDING RESTRICTION LINE

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

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7915 JONES BRANCH DRIVE

PROVIDENCE DISTRICT
FAIRFAX COUNTY, VIRGINIA

EXISTING CONDITIONS OVERALL

VIKA REVISIONS

REV. 2/3/14
INITIAL SUB. 12/18/13

DES.	DWN.
FEJ	JMB

SCALE: 1"=50'

PROJECT/FILE NO. VV7388E

SHEET NO. C–3A

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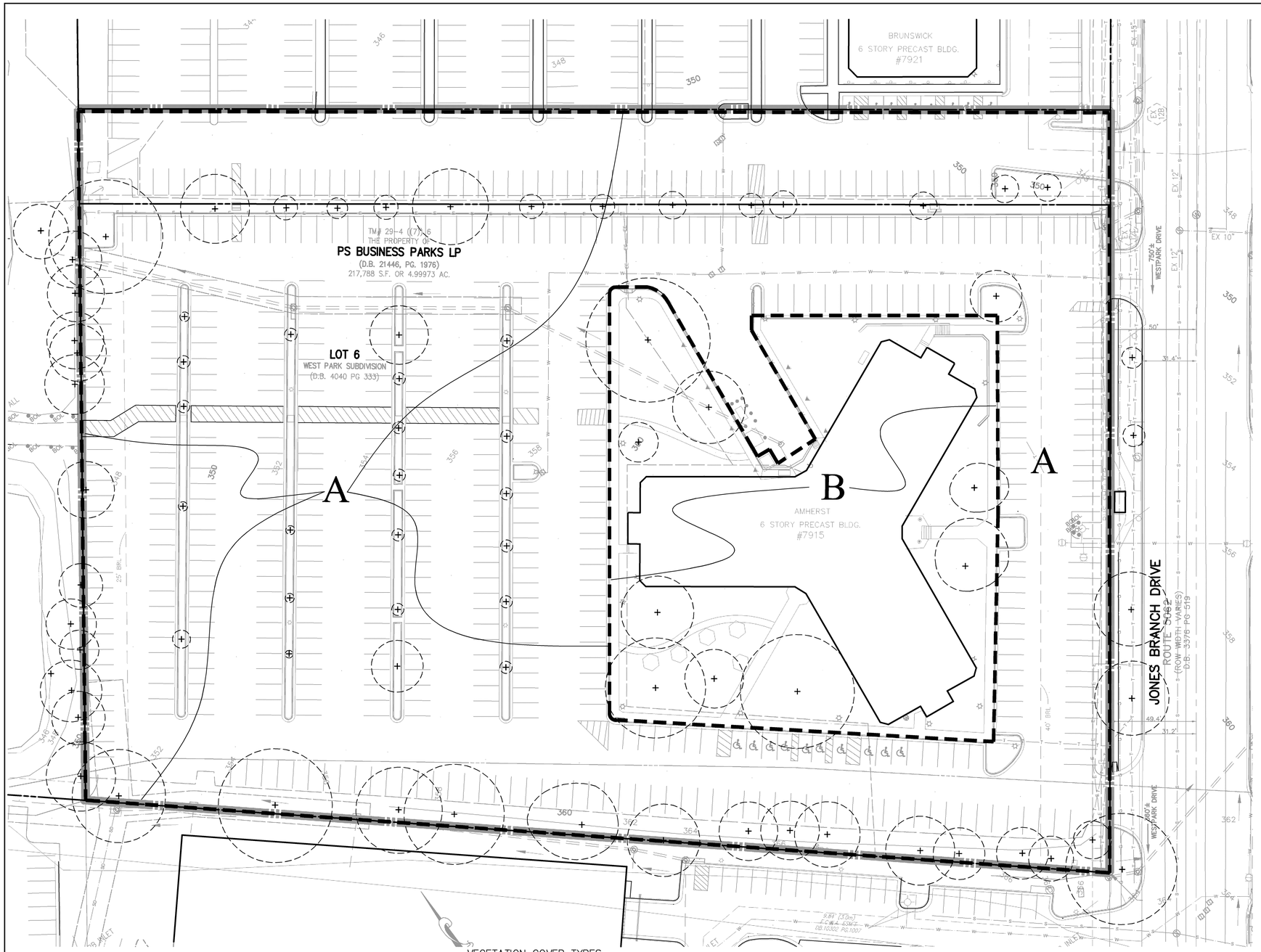

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ENGINEERS ◆ PLANNERS ◆ LANDSCAPE ARCHITECTS ◆ SURVEYORS ◆ SUSTAINABLE DESIGN

November 15, 2013

Mr. Michael Knapp, Director UFMD
Forest Conservation Branch, DPWES
Department of Public Works and Environmental Services
Land Development Services, Urban Forest Management Division
12055 Government Center Parkway, Suite 518
Fairfax, Virginia 22035-5503

RE: Amherst at Westpark
Conceptual Development Plan (CDP)
Tree Preservation Target Deviation Request
VIKA No: VV7388F

Dear Mr. Knapp:

This letter is to request a deviation to the Tree Preservation Target (TPT) requirements for the above referenced site. In June 22, 2010 the Fairfax County Board of Supervisors adopted the new zoning district for Tysons Corner, the PTC District, Planned Tysons Corner Urban District. The above referenced site, Tysons Central, is located in that PTC District and is associated with the rezoning Conceptual Development Plan (CDP) number RZ-2011-PR-005. This deviation is requested in whole and is based under the following two allowable deviation conditions as outlined in the Fairfax County Public Facilities Manuel (PFM). They are as follow:

12-0508.3A(1) - where meeting the Tree Preservation Target would preclude the development of uses or densities otherwise allowed by the Zoning Ordinance.

12-508.3A(3) – where construction activities could be reasonably expected to impact existing trees or forested areas used to meet the Tree Preservation Target to the extent these would not likely survive in a healthy and structurally sound manner of a minimum of 10-years in accordance with the post-development standards for trees and forested areas provided in PFM 12-0403 and 12-0404.

The total existing on-site canopy is 37,820 SF. The existing vegetation appears to have been planted with the development of the subject site. A significant portion of the site will be razed of existing features. The re-development will include major redesign of the utility infrastructure, the street grid, as well a variety urban components such as building types and uses, active and passive recreation and improvements associated with the metro transportation.

The basis for this deviation is warranted as a result of the site engineering necessary within this portion of the Tysons Corner Urban Center redesign. This site has a 10% canopy requirement. With the redevelopment of this site the TPT vegetation requirements cannot be fulfilled.
It is hereby requested here that UFMD deem the outlined TPT conditions, and the provided landscape design, will hereby provide and satisfied the 10-year tree canopy requirements. Please refer to the concept landscape planting plans for the landscape design, tabulations and computations proposed with this submittal.

Thank you for your time and attention and should you have any questions or need additional information, please do not hesitate to contact our office.

VIKA, Incorporated
8180 Greensboro Drive, Suite 200 ◆ McLean, Virginia 22102 ◆ 703.442.7800 Fax 703.761.2787
McLean, VA ◆ Germantown, MD ◆ Washington, DC
www.vika.com

Mr. Michael Knapp, Director UFMD
Forest Conservation Branch, DPWES
RE: Amherst at Westpark
Concept / Final Development Plan (CDP / FDP)
Tarpet Deviation Request
VIKA #VV7388F
April 17, 2013
Page 2 of 2

Sincerely,
VIKA, Inc.

Nelson P. Kirchner, RLA,
Landscape Architect/ISA Certified Arborist
Associate

NPK/npk

cc: Todd Nelson, Urban Forrester II, Fairfax County UFMD

X:\DATA\7000-9000\7388\VV7388F\Letter\Knapp (Amherst CDP Tree Perserve Deviatet (2013.11.15).doc

Table 12.3 Tree Preservation Target Calculations and Statement — **November 15, 2013**

A	Pre-development area of existing tree canopy (from Exisiting Vegetation Map)(SF) =	37,820	see § 12-0508.2
B	Percentage of gross site area covered by existing tree canopy =	17%	
C	Percentage of 10-year tree canopy required for site =	10%	see Table 12.4
D	Percentage of the 10-year tree canopy requirement that should be met through tree preservation =	2%	
E	Proposed percentage of canopy requirement that will be met through tree preservation =	0.0%	
F	Has the Tree Preservation Target minimum been met?	No	Provide Yes or No
G	If No for line A 6, then a request to deviate from the Tree Preservation Target shall be provided on the plan that states one or more of the justifications listed in § 12-0508.3 along with a narrative that provides a site-specific explanation of why the T	C-4	Provide sheet number, see § 12-0508.3
H	If step A 7 requires a narrative, it shall be prepared in accordance with § 12-0508.4	YES	see § 12-0508.4
I	Place this information prior to the 10-year Tree Canopy Calculations as per instructions in Table 12.10.	YES	

X:\DATA\7000-9000\7388\VV7388F\[10-yr Tree Canopy Reqmt's (2013.08.23).xls]Sheet1 (2)

VEGETATION COVER TYPES

AREA–A

Ilex opaca – American Holly
Fagus grandifolia – American Beech
Magnolia grandifolia – Southern Magnolia
Quercus phellos – Willow Oak
Taxodium distichum – Baldcypress

AREA–B

Juniperus virginiana – Eastern Redcedar
Pinus strobus– Eastern White Pine
Prunus x yedoensis –Yoshino Flowering Cherry
Pyrus calleryana–Callery Pear
Quercus alba – White Oak
Quercus rubra – Red Oak

EVM INDEX	COVER TYPE	SUCCESSIONAL STAGE	AREA	COVER CONDITION	PRIMARY SPECIES	COMMENTS
A	DEVELOPED LAND	N/A	199,313 SF	SHOWS GOOD HEALTH & VIGOR	SEE COVER TYPE (THIS SHEET)	DEVELOPED OFFICE BUILDING, FOUNDATION PLANTING & MATURE TREE LANDSCAPING.
B	DEVELOPED LAND	N/A	51,315 SF	SHOWS GOOD HEALTH & VIGOR	SEE COVER TYPE (THIS SHEET)	DEVELOPED PARKING COMPOUND WITH INTERIOR & PERIPHERAL PARKING LOT LANDSCAPING.
		TOTAL AREA	250,628 SF 5.7536 AC			

EVM NARRATIVE

THE SUBJECT SITE HAS BEEN DEVELOPED WITH ONE EXISTING MID–RISE OFFICE BUILDING. 20% OF THE DEVELOPMENT ACCOUNTS FOR THE BUILDING FOOT PRINT AREA AND AND SURROUNDING LANDSCAPED AREA. THE REMAINING 80% OF THE SITE AREA IS ASPHALT PARKING LOT COMPOUND WITH LANDSCAPED PLANTINGS THROUGH THE PARKING AREA AND THE PERIPHERY OF THE PARKING AREA. THE VEGETATION APPEARS TO HAVE BEEN INSTALLED WITH THE DEVELOPMENT OF THE PROPERTY. THE EXISTING PLANT MATERIAL IS PRIMARILY MATURE AND SUB–MATURE VEGETATION. THE GENERAL HEALTH AND CONDITION OF THIS VEGETATION IS GOOD AND GENERALLY SHOWS GOOD VIGOR AND VITALITY.
WITH THIS APPLICATION THE PROPOSED ZONING WILL BE PTC. THIS SITE IS SPECIFIED FOR SIGNIFICANT REDEVELOPMENT WHERE THE EXISTING BUILDING, SURFACE PARKING AND LANDSCAPING WILL BE REMOVE AND REDEVELOPED WITH LANDSCAPED WITH VARIOUS COMPONENTS.

PLAN PREPARED BY: NELSON P. KIRCHNER, RLA
ISA CERTIFIED ARBORIST NO. MA–4720AM

SIGNATURE _____ DATE _____

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

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7915 JONES BRANCH DRIVE
PROVIDENCE DISTRICT
FAIRFAX COUNTY, VIRGINIA

EXISTING VEGETATION MAP AND CALCULATIONS

VIKA REVISIONS

REV. 2/3/14
INITIAL SUB. 12/18/13

DES.	DWN.
NPK	NPK

SCALE: 1"=40'
PROJECT/FILE NO. VV7388F
SHEET NO. C–4

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01 Illustrative Masterplan

SCALE : 1"=30'-0"

TYSONS CORNER DISTRICT
FAIRFAX COUNTY, VIRGINIA

PARKER RODRIGUEZ, INC
PLANNING URBAN DESIGN LANDSCAPE ARCHITECTURE
101 North Union St. #320
Alexandria VA 22314
703.548.5010

REVISIONS

02.03.2014	COUNTY COMMENTS

Illustrative Landscape Masterplan

ORIGINAL ISSUE DATE
12.18.2013

DESIGNED BY
DC

DRAWN BY
ET/ JB

CHECKED BY
DC

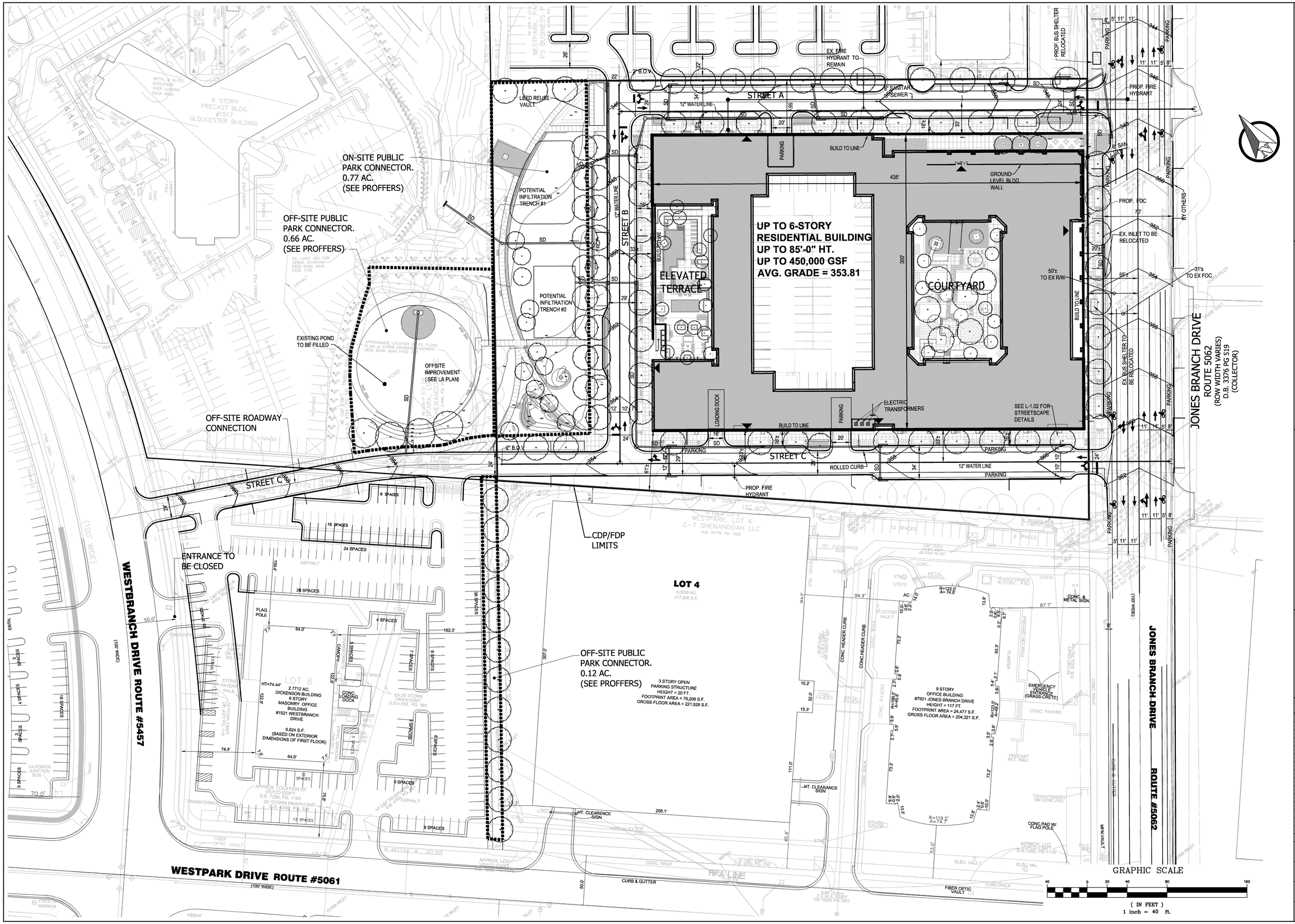
NORTH

SCALE
1"=30'-0"

0 15 30 60
FEET

CDP/ FDP SUBMISSION - 12.18.2013

L1.00



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PROVIDENCE DISTRICT
FAIRFAX COUNTY, VIRGINIA

OVERALL CONCEPTUAL/FINAL DEVELOPMENT PLAN

VIKA REVISIONS

REV. 2/3/14	
INITIAL SUB. 12/18/13	
DES. RRC	DWN. DM
SCALE: 1"=40'	
PROJECT/FILE NO. VV7388F	
SHEET NO. C-5	

UP TO 6-STORY
RESIDENTIAL BUILDING
UP TO 85'-0" HT.
UP TO 450,000 GSF
AVG. GRADE = 353.81

ELEVATED TERRACE

COURTYARD

STREET A (LOCAL STREET)

STREET B (LOCAL STREET)

STREET C (LOCAL STREET)

JONES BRANCH DRIVE
ROUTE 5062
(RIGHT OF WAY VARIES)
(S.R. 3376 IN 1938)
(COLLECTOR)

ON-SITE PUBLIC PARK CONNECTOR. 0.77 AC. (SEE PROFFERS)

OFF-SITE PUBLIC PARK CONNECTOR. 0.66 AC. (SEE PROFFERS)

OFF-SITE PUBLIC PARK CONNECTOR. 0.12 AC. (SEE PROFFERS)

OFF-SITE PUBLIC PARK CONNECTOR. 0.12 AC. (SEE PROFFERS)

EXISTING POND TO BE FILLED

OFFSITE IMPROVEMENT (SEE LA PLAN)

POTENTIAL INFILTRATION TRENCH #1

POTENTIAL INFILTRATION TRENCH #2

LEED REUSE VAULT

EX. FIRE HYDRANT TO REMAIN

PROP. FIRE HYDRANT

PROP. FDC

EX. INLET TO BE RELOCATED

EX. BUS SHELTER TO BE RELOCATED

SEE L-1.02 FOR STREETSCAPE DETAILS

BUILD TO LINE

GROUND LEVEL BLDG. WALL

12" WATER LINE

8" SANITARY SEWER

8" SAN

2" B.O.V.

ROLLED CURB

PARKING

LOADING DOCK

BY OTHERS

50'± TO EX R/W

31'± TO EX FOC

MATCHLINE ON THIS SHEET

MATCHLINE ON THIS SHEET

GRAPHIC SCALE

(IN FEET)
1 inch = 30 ft.

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PROVIDENCE DISTRICT
FAIRFAX COUNTY, VIRGINIA

CONCEPTUAL/FINAL DEVELOPMENT PLAN

VIKA REVISIONS

REV. 2/3/14	
INITIAL SUB. 12/18/13	
DES. RRC	DWN. DM
SCALE: 1"=30'	
PROJECT/FILE NO. VV7388F	
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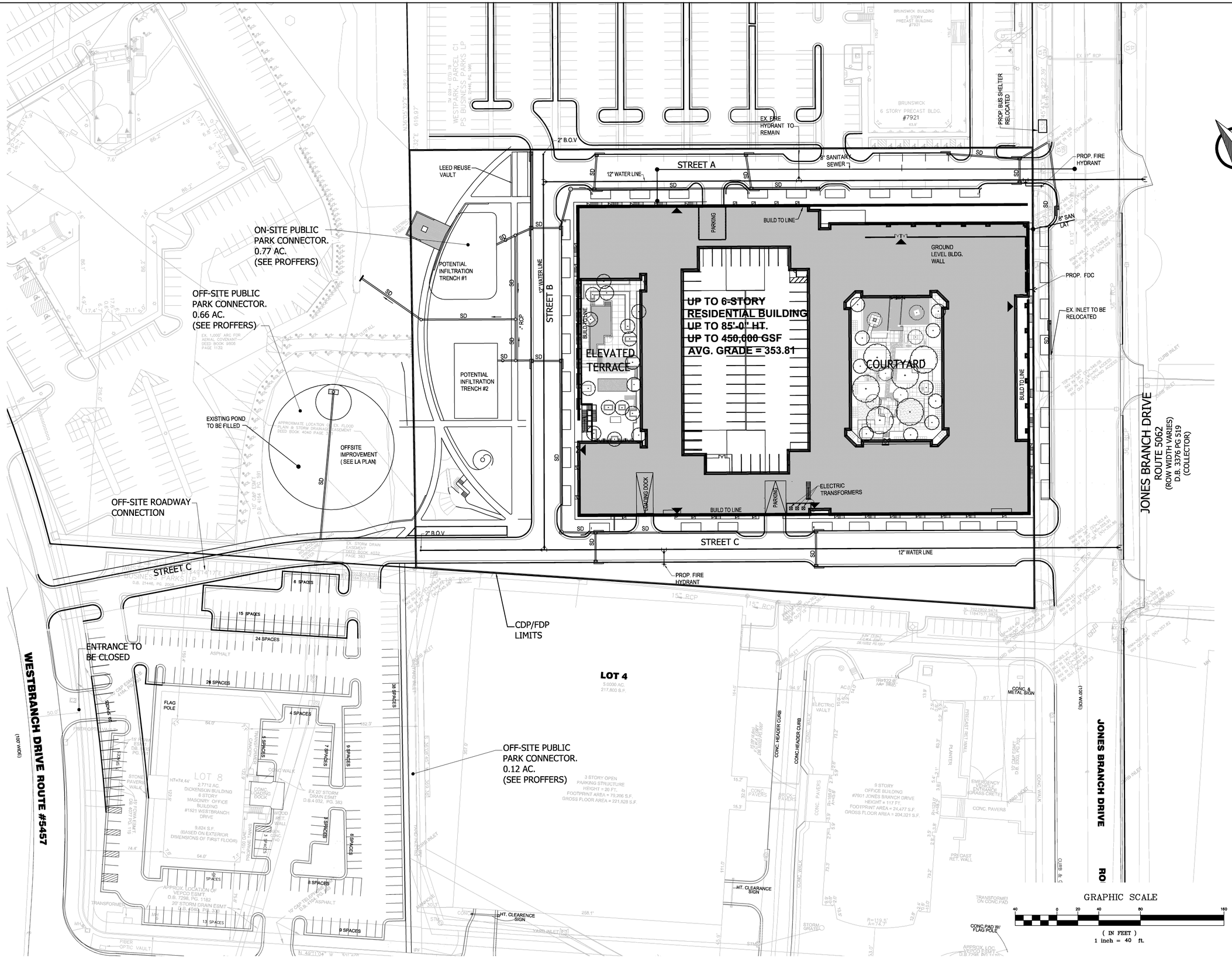

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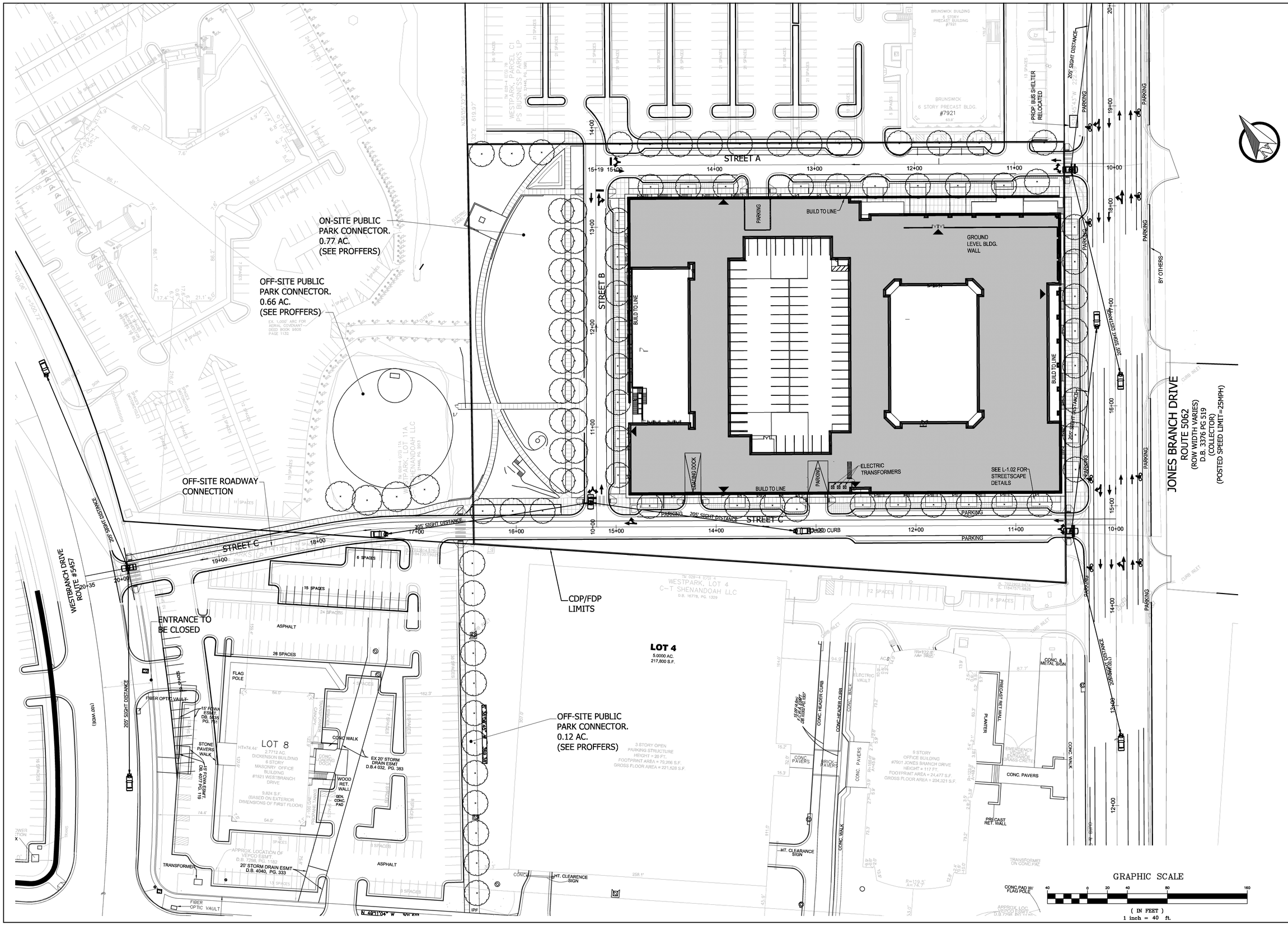
7915 JONES BRANCH DRIVE

PROVIDENCE DISTRICT
FAIRFAX COUNTY, VIRGINIA

PRELIMINARY PROPOSED UTILITY LAYOUT

VIKA REVISIONS

REV 2/3/14	
INITIAL SUB. 12/18/13	
DES. RRC	DWN. DM
SCALE: 1"=40'	
PROJECT/FILE NO. VV7388F	
SHEET NO. C-7	



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PROVIDENCE DISTRICT
FAIRFAX COUNTY, VIRGINIA

TRAFFIC CIRCULATION & SIGHT DISTANCE PLAN

VIKA REVISIONS

REV. 2/3/14	
INITIAL SUB. 12/18/13	
DES. RRC	DWN. DM
SCALE: 1"=40'	
PROJECT/FILE NO. VV7388F	
SHEET NO. C-8	

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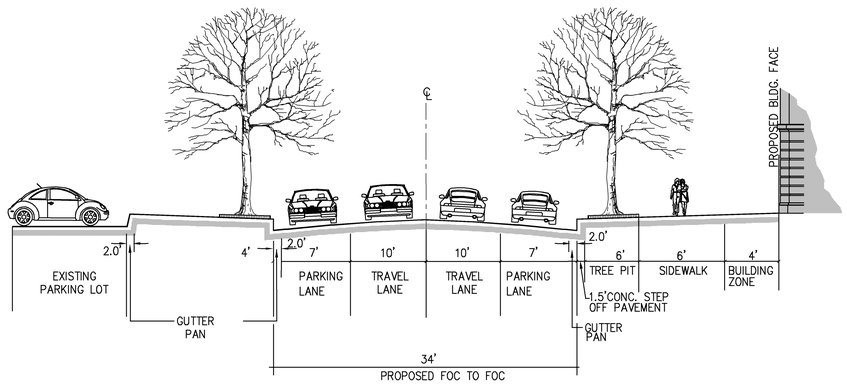
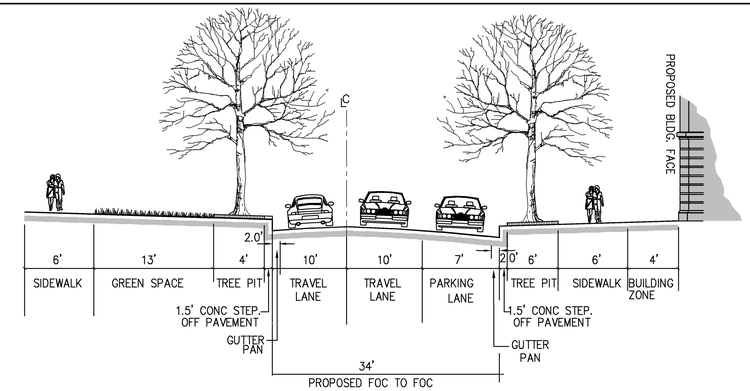


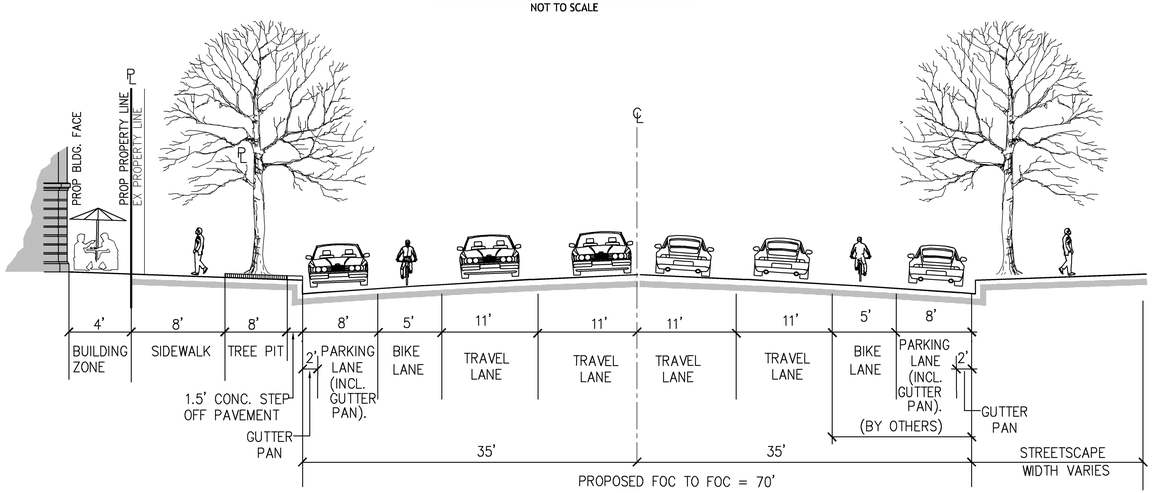
SECTION A-A
STREET C - LOOKING SOUTHEAST
PRIVATE LOCAL ROAD

NOT TO SCALE



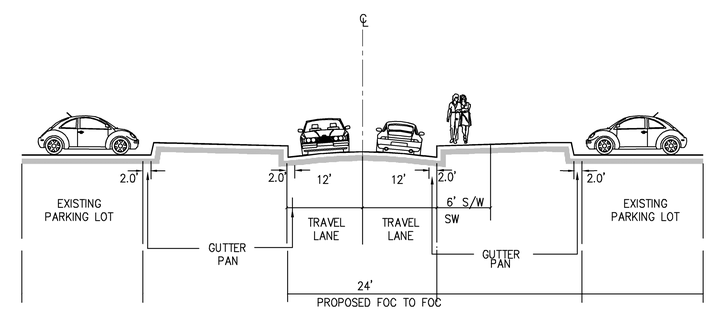
SECTION D-D
STREET B - LOOKING SOUTHWEST
PRIVATE LOCAL ROAD

NOT TO SCALE



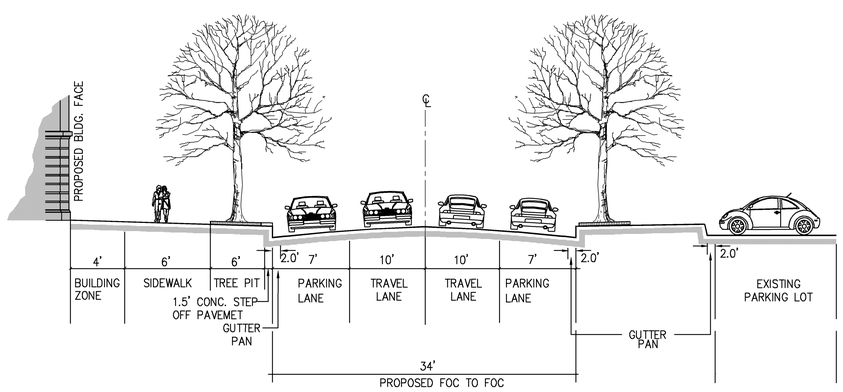
SECTION B-B
JONES BRANCH DRIVE - LOOKING EAST

NOT TO SCALE



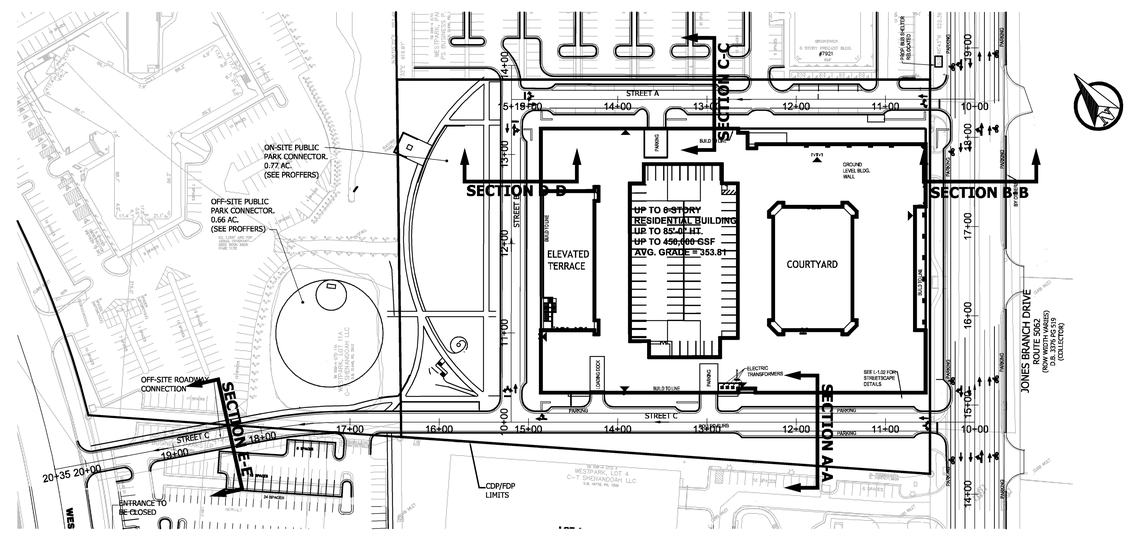
SECTION E-E
STREET C - LOOKING SOUTHEAST
PRIVATE LOCAL ROAD

NOT TO SCALE



SECTION C-C
STREET A - LOOKING NORTHWEST
PRIVATE LOCAL ROAD

NOT TO SCALE



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PROVIDENCE DISTRICT
FAIRFAX COUNTY, VIRGINIA

EXISTING & PROPOSED STREET SECTIONS PLAN

VIKA REVISIONS

REV 2/3/14	
INITIAL SUB. 12/18/13	
DES. RRC	DWN. DM
SCALE: 1"=40'	
PROJECT/FILE NO. VV7388F	
SHEET NO. C-9	

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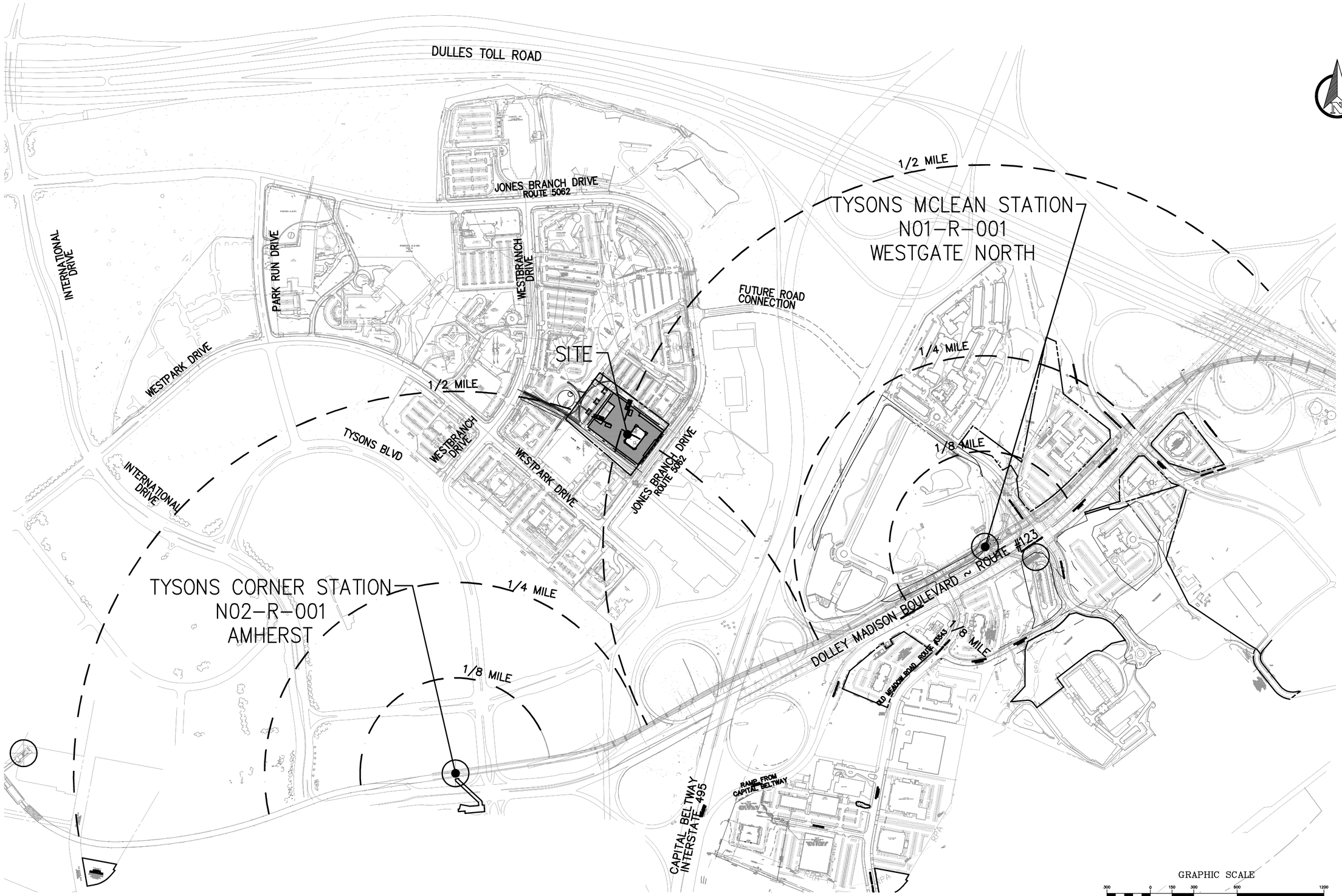

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PROVIDENCE DISTRICT
FAIRFAX COUNTY, VIRGINIA

AREA AND MET RO CONTEXT PLAN

VIKA REVISIONS

REV. 2/3/14
INITIAL SUB. 12/18/13

DES.	DWN.
RRC	DM

SCALE: 1"=300'

PROJECT/FILE NO. VV7388F

SHEET NO. C-10

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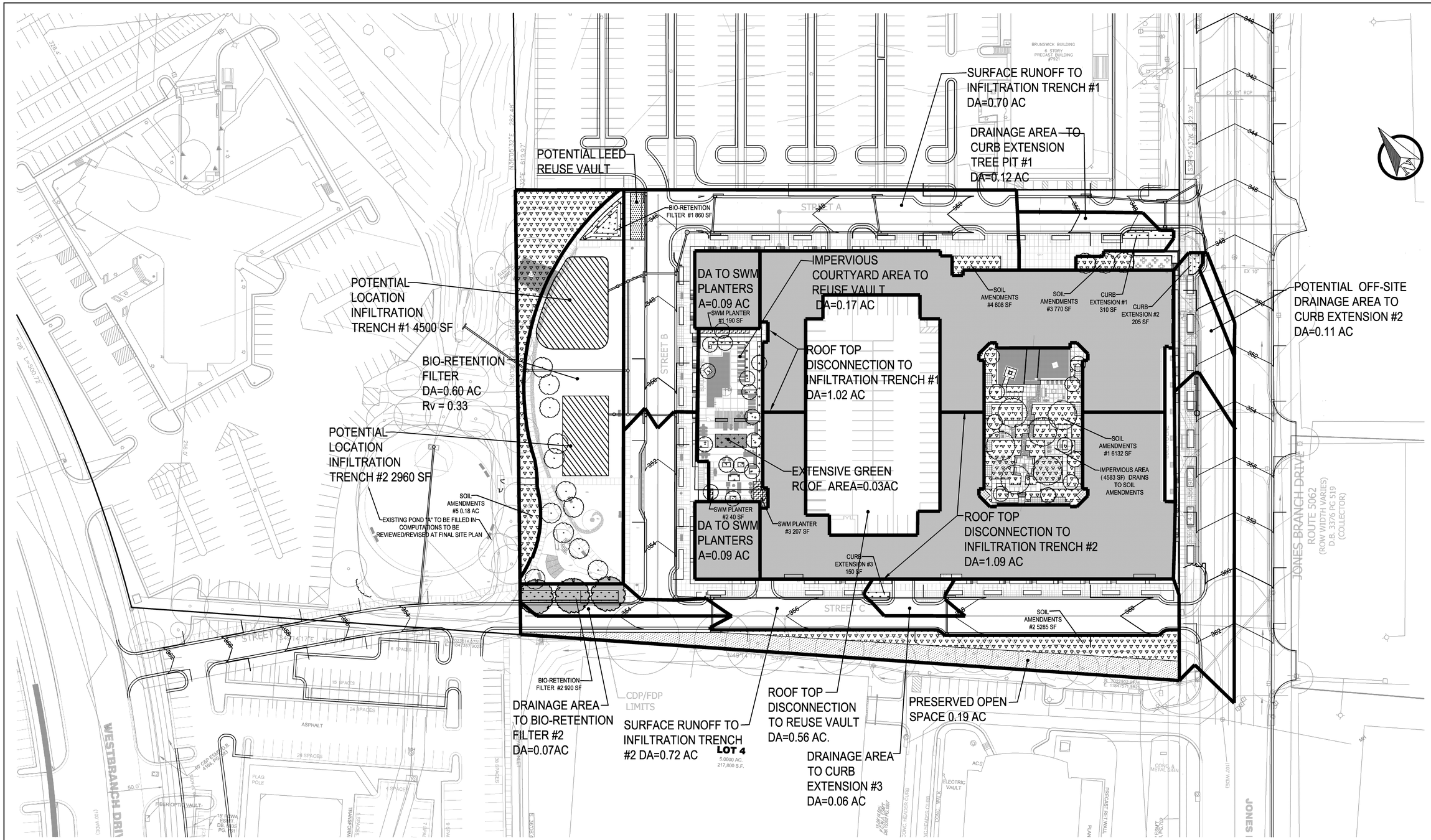

LEGEND:

- BIO-RETENTION FILTER AND CURB EXTENTIONS
- POTENTIAL LOC. INFILTRATION TRENCH
- EXTENSIVE GREEN ROOF
- SOIL AMENDMENT
- ROOFTOP DISCONNECTION TO PLANTER
- PRESERVED OPEN SPACE

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

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7915 JONES BRANCH DRIVE

PROVIDENCE DISTRICT
FAIRFAX COUNTY, VIRGINIA

STORMWATER MANAGEMENT MAP

VIKA REVISIONS

REV. 2/3/14
INITIAL SUB. 12/18/13

DES.	DWN.
JA	DM

SCALE: 1"=40'

PROJECT/FILE NO. VV7388F

SHEET NO. C-11

COMPREHENSIVE PLAN GOAL III
OVERALL SWM COMPUTATIONS - TYSONS CORNER CONFORMANCE SPREADSHEET

SWM NARRATIVE

EXISTING CONDITIONS:
THE 5.75 ACRE SITE CURRENTLY CONSISTS OF AN OFFICE BUILDING AND PARKING LOT. THE SITE DRAINS TO THE NORTH AND STORMWATER IS CONVEYED THROUGH CLOSED CONDUIT STORM SEWER SYSTEMS TO AN EXISTING OUTFALL (EXISTING WET POND 'A'). PLEASE NOTE THAT CURRENTLY THAT SWM AND BMP CONTROLS ARE PROVIDED BY AN EXISTING WET POND (POND 'C') FOR THIS SITE. THIS POND THEN OUTFALLS VIA A COMBINATION OF OPEN CHANNEL AND CLOSED CONDUIT SYSTEMS INTO EXISTING WET POND 'C' AND EVENTUALLY OUTFALLS INTO SCOTTS RUN. SEE SHEET 17 FOR ADEQUATE OUTFALL DESCRIPTION AND MAP.

PROPOSED CONDITIONS
THIS APPLICATION DEPICTS A MULTILEVEL RESIDENTIAL BUILDING. THE WATER QUALITY AND QUANTITY REQUIREMENTS FOR THE DEVELOPMENT WILL BE ACHIEVED THROUGH A POTENTIAL COMBINATION OF URBAN BIO-RETENTION AREAS (TREE PITS), PERMEABLE PAVERS, INFILTRATION, SOIL AMENDMENTS, STORMWATER PLANTERS, AND GREEN ROOFS WHICH ARE SHOWN ON THE STORMWATER MANAGEMENT PLAN. (SEE SHEET C-11) ALSO, AN EXTENDED DETENTION VAULT SHALL BE PROVIDED TO MEET LEED 6.2 REQUIREMENTS. SEE SHEET C-11 FOR PLAN VIEW.

QUANTITY REQUIREMENTS
THE STORMWATER MANAGEMENT CONTROLS FOR THE PROPOSED DEVELOPMENT WILL BE ACHIEVED BY THE EXISTING WET POND (POND 'C') AND THROUGH A POTENTIAL COMBINATION OF URBAN BIO-RETENTION AREAS (TREE PITS), PERMEABLE PAVERS, INFILTRATION, SOIL AMENDMENTS, STORMWATER PLANTERS, AND GREEN ROOFS TO HELP REDUCE THE PEAK RELEASE RATE FOR THE GIVEN POST DEVELOPED STORM EVENT. PLEASE NOTE THAT THIS EXISTING DOWN STREAM WET POND (POND 'C') CURRENTLY PROVIDED BOTH QUANTITY AND QUALITY FOR THIS SITE. THIS STORMWATER PROGRAM WILL (AS CALLED FOR IN THE TYSONS CORNER URBAN CENTER COMPREHENSIVE PLAN) BE EVALUATED FOR THREE DISTINCT CRITERIA. THESE CRITERIA INCLUDE AN EVALUATION FOR COMPLIANCE WITH LEED, CAPTURING/CONTROLLING THE FIRST ONE INCH OF RAINFALL, AS WELL AS THE DETENTION REQUIREMENTS OF THE PFM. IN ORDER TO DESCRIBE THE DETAILS OF THE PROPOSED SWM/LID ELEMENTS, WE HAVE BROKEN OUR COMPUTATIONS DOWN INTO THREE PARTS.

PART I: LEED

THE FIRST TARGET FOR STORMWATER MANAGEMENT DESIGN WILL BE TO ATTEMPT TO MEET CURRENT LEED REQUIREMENTS. BECAUSE THE PROPERTY THAT IS THE SUBJECT OF THIS SITE PLAN IS LESS THAN 50% IMPERVIOUS IN THE EXISTING CONDITION (EXISTING SWM FACILITY IS PROVIDED), THE LEED REQUIREMENT (AND THEREFORE THE TARGET FOR THIS PLAN) IS THE POST DEVELOPMENT PEAK DISCHARGE RATE AND QUANTITY SHALL NOT EXCEED THAT OF THE PRE DEVELOPMENT FOR BOTH THE 1 YEAR AND 2 YEAR 24-HOUR DESIGN STORMS.. ALSO LEED 6.2 IS PROPOSED TO BE MET VIA THE VARIOUS RUNOFF REDUCTION METHODS AND/OR BY A POTENTIAL EXTENDED DETENTION VAULT.

PART II: PFM COMPLIANCE

ADDITIONALLY, PER THE FAIRFAX COUNTY STANDARD REQUIREMENT, THE PEAK RELEASE RATE FOR THE POST DEVELOPED 2-YR AND 10-YR DESIGN STORMS WILL BE REDUCED TO A LEVEL EQUAL TO OR LESS THAN THE EXISTING CONDITION 2-YR AND 10-YR STORM PEAK RELEASE RATE FOR THE ENTIRE SITE AREA. THIS POST DEVELOPED PEAK RELEASE RATE CONTROL WILL BE ACCOMPLISHED THROUGH THE EXISTING WET POND (POND 'C') AND THE VARIOUS RUNOFF REDUCTION TECHNIQUES EMPLOYED ONSITE.

PART III: CONTROL CAPTURE THE FIRST 1"
SEE SHEET 16 FOR FULL NARRATIVE

BMP NARRATIVE
SEE NARRATIVE AND COMPUTATIONS ON SHEET 13.

ALTERNATE/ADDITIONAL SWM OPTIONS AND CREDITS

TOTAL RUNOFF REDUCTION REQUIRED	20,873 CFT
TOTAL RUNOFF REDUCTION PROVIDED	20,924 CFT
RAINFALL DEPTH RETAINED ONSITE	1.00 IN
SITE AREA	5.75

OFFSITE ALTERNATIVES TO MITIGATE SHORTAGE

RUNOFF REDUCTION PRACTICE	CONTRIBUTING DA	DA RV	1" VOL REQUIRED (CF)	VOL PROVIDED (CF)	ACTUAL RUNOFF RETAINED (INCHES)	VOLUME	EQUIVALENT DEPTH RETAINED
BIORETENTION (TREES) - Jones Branch	0.11	0.95	379	390	1.00	379	0.02
					TOTAL VOLUME	379	0.02

STORAGE IN EXCESS OF 1" STORM PROVIDED IN PROPOSED RUNOFF REDUCTION PRACTICES AVAILABLE DURING LEED EVENT

RUNOFF REDUCTION PRACTICE	CONTRIBUTING DA	DA RV	1" VOL REQUIRED (CF)	VOL PROVIDED (CF)	LEED RUNOFF RETAINED (INCHES)	EXCESS VOLUME	EQUIVALENT DEPTH RETAINED
EXTENSIVE GREEN ROOF	0.03	0.95	119	150	1.26	31	0.00
BIORETENTION FILTER	0.67	0.40	1205	2344	2.43	1380	0.07
CURB EXTENSIONS	0.18	0.95	621	702	1.13	81	0.00
INFILTRATION	2.97	0.95	11266	16329	1.59	6086	0.29
STORMWATER PLANTERS	0.18	0.95	621	673	1.08	52	0.00
SOIL AMENDMENT	0.58	0.38	789	789	1.00	0	0.00
*NOTE: LEED SPECIFIED STORM FOR THIS PART OF THE COUNTRY IS 3.2"					TOTAL EXCESS VOL	7630	0.37

OVERALL APPLICATION BREAKDOWN BY PRACTICE

PRACTICE	INCHES CONTRIBUTED TO OVERALL		
EXTENSIVE GREEN ROOF	0.01	IN	TIER I CONTROLS 0.97
BIORETENTION FILTER	0.05	IN	
CURB EXTENSIONS	0.03	IN	
INFILTRATION	0.49	IN	
RAINWATER HARVESTING	0.16	IN	
RAINFALL NOT CONVERTED TO RUNOFF	0.20	IN	
SOIL AMENDMENT	0.038	IN	
STORMWATER PLANTERS	0.03	IN	TIER II CONTROLS 0.03"
TOTAL	1.00	IN	

NOTE:
COMPUTATIONS HEREON ARE BASED ON APPROXIMATIONS OF PROPOSED PERVIOUS/IMPERVIOUS AREA. AT THE TIME OF FINAL CONSTRUCTION PLANS, BASED ON FINAL PERVIOUS/IMPERVIOUS AREAS, THE FINAL SWM VOLUME REQUIREMENTS WILL BE DETERMINED. THE METHODOLOGY USED SHALL BE CONSISTENT WITH THAT SHOWN HEREON

ALL GRADING SHOWN IS CONCEPTUAL AND SUBJECT TO CHANGE WITH THE FINAL SITE PLAN

ALL STORMWATER MANAGEMENT FACILITIES MUST BE PRIVATELY MAINTAINED AND A PRIVATE MAINTENANCE AGREEMENT WILL BE REQUIRED BEFORE THE CONSTRUCTION PLAN IS APPROVED.

Tysons Corner Comprehensive Plan Stormwater Conformance Spreadsheet - Beta Version 4-18-2012

Site Name: 7195 Jones Branch Drive

Description: RESIDENTIAL

Post-Development Land Cover

data input cells highlighted in yellow

Drainage Area A

Land Cover Type	HSG A soils	HSG B Soils	HSG C Soils	HSG D Soils	Totals
Forest / Preserved Open Space - Undisturbed, protected forest and open				0.19	0.19
Managed Turf (acres)				1.01	1.01
Impervious Cover (acres)				4.55	4.55
				Total	5.75

Drainage Area B

Land Cover Type	HSG A soils	HSG B Soils	HSG C Soils	HSG D Soils	Totals
Forest / Preserved Open Space - Undisturbed, protected forest and open					0.00
Managed Turf (acres)					0.00
Impervious Cover (acres)					0.00
				Total	0.00

Drainage Area C

Land Cover Type	HSG A soils	HSG B Soils	HSG C Soils	HSG D Soils	Totals
Forest / Preserved Open Space - Undisturbed, protected forest and open					0.00
Managed Turf (acres)					0.00
Impervious Cover (acres)					0.00
				Total	0.00

Drainage Area D

Land Cover Type	HSG A soils	HSG B Soils	HSG C Soils	HSG D Soils	Totals
Forest / Preserved Open Space - Undisturbed, protected forest and open					0.00
Managed Turf (acres)					0.00
Impervious Cover (acres)					0.00
				Total	0.00

Drainage Area E

Land Cover Type	HSG A soils	HSG B Soils	HSG C Soils	HSG D Soils	Totals
Forest / Preserved Open Space - Undisturbed, protected forest and open					0.00
Managed Turf (acres)					0.00
Impervious Cover (acres)					0.00
				Total	0.00

Rv Coefficients

Land Cover Type *	HSG A soils	HSG B Soils	HSG C Soils	HSG D Soils
Forest / Preserved Open Space - Undisturbed, protected forest and open space or reforested land	0.02	0.03	0.04	0.05
Managed Turf	0.15	0.20	0.22	0.25
Impervious Cover	0.95	0.95	0.95	0.95

** See the instructions tab for a definition of each land cover type.*

Land Cover Summary

Forest / Preserved Open Space (ac)	0.19
Weighted Rv (forest)	0.05
% Forest	3%
Managed Turf (acres)	1.01
Weighted Rv (turf)	0.25
% Managed Turf	18%
Impervious Cover (acres)	4.55
Rv (impervious)	0.95
% Impervious	79%
Total Site Area (acres)	**5.75**
Site Rv	**0.80**

Rainfall / Runoff Summary

Target Rainfall to Retain Onsite (inches)	1.0
1-inch Rainfall Volume for entire site (cf)	**20,873**
Volume Not Converted to Runoff (cf)	**4,231**
1-inch Runoff Volume for entire site (cf)	**16,642**

Runoff Reduction Summary

Target Runoff Reduction Volume (cf)	16,642
Runoff Reduction Volume Achieved (cf)	16,694
Total Runoff Volume Retained (cf)	20,924
Total Area of Site Captured in a BMP (acres)	5.34

Conformance with Comprehensive Plan Goal

Total Site Area Captured by a BMP (%) **93%**

Rainfall Depth Retained Onsite (inch) **1.00**

Tysons Corner Comprehensive Plan Stormwater Conformance Spreadsheet - Beta Version 4-18-2012

Site Name: 7195 Jones Branch Drive

Drainage Area A Post-Development Land Cover	HSG A soils	HSG B Soils	HSG C Soils	HSG D Soils	Totals
Forest / Preserved Open Space	0.00	0.00	0.00	0.19	**0.19**
Managed Turf	0.00	0.00	0.00	1.01	**1.01**
Impervious Cover	0.00	0.00	0.00	4.55	**4.55**
				D.A. Total (acres)	**5.75**

Rv (turf) 0.25
Rv (impervious) 0.95

data input cells highlighted

Runoff from 1" Rainfall (cf) = 16,642

Apply Runoff Reduction Practices	Description of Area	Roof Area Contributing to RWH (ac)	Design Rainfall for RWH (in)	Max Volume Captured by Practice (cf)	RWHS Credit	Input % RR from Model	Est'd % Credit	Volume Received from Upstream Practices (cf)	Total Volume Received by Practice (cf)	Estimate RWH RR % Credit: Avg Daily Drawdown (gallons)	Available Cistern Volume (gallons)	Runoff Reduction Vol (cf)	Remaining Volume (cf)	Downstream Practice
Rooftop Rainwater Harvesting	Roof Top Disconnection to Reuse Vault	0.73	1.40	3,524	Estimate Runoff Reduction % Using Spreadsheet		95%	0	3,524	7,500	30,000	3,339	318	

Apply Runoff Reduction Practices	Description of Area	Impervious Cover in Contributing D.A. (ac)	Managed Turf in Contributing D.A. (ac)	Max Volume Received by Practice (ft^3)	Description of Credit	% Credit	Volume Received from Upstream Practices (ft^3)	Total Volume Received by Practice (ft^3)	Surface Area of Practice (ft^2)	Storage Vol Provided by Practice (ft^3)	Runoff Reduction Vol (ft^3)	Remaining Volume (ft^3)	Downstream Practice
Infiltration Practice	Two-Conventional Level 2 Infiltration Trenches	1.42		4,897	Subtract 100% of provided storage vol.	100%	5,345	10,242	N/A	16,329	10,242	0	
Vegetated Roof	Extensive	0.03	N/A	119	Subtract 100% of provided storage vol.	100%	N/A	119	N/A	150	119	0	
Bioretention - DCR Level 2 Design Spec (enhanced)	Two- Tradtional Bioretention Filters	0.14	0.53	964	Subtract 100% of provided storage vol.	100%	0	964	N/A	2,344	964	0	
Disconnection to Dry Well/French Drain-DCR Level 2 Design	Roof Top Disconnection to Infiltration	1.55	N/A	5,345	Subtract 100% of provided storage vol.	100%	0	5,345	N/A		0	5,345	Infiltration Practice
Disconnection to Stormwater Planter, Extended Tree Pit, or Curb Extension (Urban Bioretention)	Curb Extensions 0.18AC. SWM Planters 0.18 AC	0.36	N/A	1,241	Subtract 100% of provided storage vol.	100%	0	1,241	N/A	1,374	1,241	0	
Sheetflow to Vegetated Filter Strip in A/B Soils or Amended C/D Soils	Soil Amendments	0.11	0.47	789	Reduce volume by 0.06 cu. ft per sq. ft. of conservation area.	N/A	0	789	25047	N/A	789	0	N/A
	Totals:	4.34	1.00										

Total Drainage Area Treated (acres): 5.34

Runoff Reduction Volume Achieved for Drainage Area A (cubic feet): 16,694

See Site Data and Summary Tab for Site Results

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W W W . V I K A . C O M

7915 JONES BRANCH DRIVE
PROVIDENCE DISTRICT
FAIRFAX COUNTY, VIRGINIA

STORMWATER MANAGEMENT GOAL III, AND SUPPORTING DATA

VIKA REVISIONS

REV. 2/3/14
INITIAL SUB. 12/18/13
DES. BC DWN. BC
SCALE: N/A
PROJECT/FILE NO. VV7388F
SHEET NO. C-12

FILE: P:\projects\7388\VV7388F\CADD\PLANNING\PLANNING DRAWINGS\CDP\7388901-SWM.dwg USER: Koeser DATE: February 2, 2014 TIME: 10:45:59 AM

PART I: LEED COMPUTATIONS

EXISTING CONDITION

```
WINTR-20 PRINTED PAGE FILE      BEGINNING OF INPUT DATA LIST
TR20.INP

WINTR-20: VERSION 1.10                    0         0         0.05
AMHERST - CDP/FDP
EXISTING CONDITIONS

SUB-AREA:
         EXISTING  OUTLET                .00898    91.       .1

STREAM REACH:

STORM ANALYSIS:
         2-YR                             3.2       TYPE II   2
         1-YR                             2.7       TYPE II   2

STRUCTURE RATING:

GLOBAL OUTPUT:
         2         0.05                   YYYYN     YYYYNN


WINTR-20 PRINTED PAGE FILE      END OF INPUT DATA LIST

                                AMHERST - CDP/FDP
                               EXISTING CONDITIONS

                          NAME OF PRINTED PAGE FILE:
                                    TR20.OUT
STORM 1-YR

AREA OR    DRAINAGE  RAIN GAGE    RUNOFF   ------------ PEAK FLOW ------------
 REACH      AREA      ID OR       AMOUNT   ELEVATION  TIME      RATE     RATE
IDENTIFIER  (SQ MI)   LOCATION     (IN)      (FT)     (HR)     (CFS)    (CSM)

EXISTING    0.009                 1.786              11.93     15.69   1746.88

STORM 2-YR

AREA OR    DRAINAGE  RAIN GAGE    RUNOFF   ------------ PEAK FLOW ------------
 REACH      AREA      ID OR       AMOUNT   ELEVATION  TIME      RATE     RATE
IDENTIFIER  (SQ MI)   LOCATION     (IN)      (FT)     (HR)     (CFS)    (CSM)

EXISTING    0.009                 2.252              11.93     19.59   2181.05
```

TOTAL RUNOFF VOLUME (EXISTING CONDITIONS)

1 YR STORM: 5.75 AC X 1.786 (IN) X 1FT/12IN X 43560 = 37,278 CU. FT.
2 YR STORM: 5.75 AC X 2.252 (IN) X 1FT/12IN X 43560 = 47,005 CU. FT.

PROPOSED CONDITION

```
WINTR-20 PRINTED PAGE FILE      BEGINNING OF INPUT DATA LIST
TR20.INP

WINTR-20: VERSION 1.10                    0         0         0.05
AMHERST - CDP/FDP
PROPOSED CONDITIONS

SUB-AREA:
         PROPOSED  OUTLET                .00898    92.       .1

STREAM REACH:

STORM ANALYSIS:
         2-YR                             3.2       TYPE II   2
         1-YR                             2.7       TYPE II   2

STRUCTURE RATING:

GLOBAL OUTPUT:
         2         0.05                   YYYYN     YYYYNN


WINTR-20 PRINTED PAGE FILE      END OF INPUT DATA LIST

                                AMHERST - CDP/FDP
                               PROPOSED CONDITIONS

                          NAME OF PRINTED PAGE FILE:
                                    TR20.OUT
STORM 1-YR

AREA OR    DRAINAGE  RAIN GAGE    RUNOFF   ------------ PEAK FLOW ------------
 REACH      AREA      ID OR       AMOUNT   ELEVATION  TIME      RATE     RATE
IDENTIFIER  (SQ MI)   LOCATION     (IN)      (FT)     (HR)     (CFS)    (CSM)

PROPOSED    0.009                 1.872              11.93     16.33   1818.45

STORM 2-YR

AREA OR    DRAINAGE  RAIN GAGE    RUNOFF   ------------ PEAK FLOW ------------
 REACH      AREA      ID OR       AMOUNT   ELEVATION  TIME      RATE     RATE
IDENTIFIER  (SQ MI)   LOCATION     (IN)      (FT)     (HR)     (CFS)    (CSM)

PROPOSED    0.009                 2.344              11.93     20.23   2252.98
```

TOTAL RUNOFF VOLUME (PROPOSED CONDITIONS)

1 YR STORM: 5.75 AC X 1.872 (IN) X 1FT/12IN X 43560 = 39,073 CU. FT.
2 YR STORM: 5.75 AC X 2.344 (IN) X 1FT/12IN X 43560 = 48,925 CU. FT.

EXISTING CONDITION

```
JDA                       7195 JONES BRANCH DR
                      EXISTING PEAK RELEASE RATES
                        FAIRFAX COUNTY, VIRGINIA

                          SUB-AREA SUMMARY TABLE

 SUB-AREA   DRAINAGE    TIME OF      CURVE   RECEIVING    SUB-AREA
IDENTIFIER   AREA    CONCENTRATION  NUMBER    REACH      DESCRIPTION
             (AC)        (HR)
--------------------------------------------------------------------------
AMHERST       5.75     0.100          61      OUTLET

TOTAL AREA:   5.75 (AC)
```

61 — ASSUMES OPEN SPACE IN GOOD CONDITION

```
JDA                       7195 JONES BRANCH DRIVE
                      EXISTING PEAK RELEASE RATES
                        FAIRFAX COUNTY, VIRGINIA

                    HYDROGRAPH PEAK/PEAK TIME TABLE

 SUB-AREA       PEAK FLOW AND PEAK TIME (HR) BY RAINFALL RETURN PERIOD
 OR REACH       2-YR       1-YR
IDENTIFIER     (CFS)      (CFS)
            (HR)       (HR)
--------------------------------------------------------------------------
SUBAREAS
AMHERST         3.15       1.53
           12.02      12.03

REACHES

OUTLET          3.15       1.53
```

3.15 / 1.53 — ALLOWABLE PEAK RELEASE RATE

LEED CREDIT 6.1 REQUIREMENTS

THE SITE HAS EXISTING DETENTION FACILITIES (OFF SITE) WHICH HAVE BEEN DESIGNED TO MIMIC THE PEAK RELEASE RATE OF THE UNDEVELOPED PARCEL (C=0.30) BEFORE THE EXISTING DEVELOPMENT WAS CONSTRUCTED. IT IS FOR THIS REASON THE SITE IS CONSIDERED AS "UNDEVELOPED" OR LESS THAN 50% IMPERVIOUS FOR THE PEAK RELEASE RATE COMPUTATIONS (CASE 1). THUS THE PEAK DISCHARE RATE FOR THE 1-YR AND 2-YR 24-HOUR DESIGN STORM SHALL NOT EXCEED THE EXISTING RATE.

SINCE THERE ARE NO EXISTING STORMWATER VOLUME CONTROLS FOR THE SITE THE POST-DEVELOPED VOLUME FOR THE 2 YEAR STORM MUST BE REDUCED BY 25% RELATIVE TO THE EXISTING CONDITIONS VOLUME (CASE 2). THEREFORE, ANY ADDITIONAL STORAGE REQUIRED SHALL BE MEET WITH RUNOFF REDUCTION PRACTICES.

2-YEAR STORM (VOLUME REQUIREMENTS)

ALLOWABLE LEED VOLUME RELEASE = 47,005 CU FT X 0.75 = 35,254 CU. FT.
REQUIRED LEED VOLUME REDUCTION = 48,925 CU FT - 35,254 CU FT = 13,617 CU FT

1-YR AND 2-YEAR STORM (PEAK DISCHARGE REQUIREMENTS)

ALLOWABLE PEAK RELEASE RATE = 1-YR STORM: 1.53 CFS
ALLOWABLE PEAK RELEASE RATE = 2-YR STORM: 3.15 CFS

LEED CREDIT 6.1 NARRATIVE

THE VOLUMES REDUCTION REQUIREMENTS OF LEED CREDIT 6.1 SHALL BE MET VIA THE RUNOFF REDUCTION TECHNIQUES DEPICTED ON SHEET C-11 AND CALCULATED ON SHEET 14. AS CAN BE SEEN THE TOTAL STORAGE VOLUME PROVIDED IS EQUAL TO THE SUM OF THE STORAGE PROVIDED TO DETAIN THE FIRST 1" OF RAINFALL AND ANY ADDITIONAL STORAGE PROVIDED BY THE VARIOUS RUNOFF REDUCTION PRACTICES. AS CAN BE SEEN IN THE COMPUTATIONS ON SHEET 14, APPROXIMATELY 23,907 CFT OF STORAGE HAS BEEN PROVIDED TO HELP MEET THE LEED REQUIREMENT OF RUNOFF VOLUME REDUCTION (THIS VOLUME DOES NOT INCLUDE THE STORAGE PROVIDED IN THE OFFSITE BIO-RETENTION TREE PITS THAT TREAT JONES BRANCH DRIVE RUNOFF). AS CAN BE SEEN, THE RUNOFF REDUCTION PROVIDED IS GREATER THAN WHAT IS REQUIRED TO MEET THE LEED ALLOWABLE RELEASE. THUS, THIS SITE DOES NOT EXCEED THE ALLOWABLE RUNOFF VOLUME FOR THE 2-YR STORM.

THE ALLOWABLE PEAK RELEASE RATE SHALL BE MET VIA THE RUNOFF REDUCTIONS PRACTICES EMPLOYED AROUND THE SITE AND BY THE EXISTING WET POND (POND 'C') WHICH HAS BEEN DESIGNED TO REDUCE THE OVERALL PEAK RELEASE RATE FOR THIS SITE TO THAT OF AN UNDEVELOPED CONDITION. PLEASE NOTE THAT THIS EXISTING WET POND WAS DESIGNED USING THE 24 HOUR STORM EVENTS.

LEED 6.2 NARRATIVE

LEED CREDIT SS6.2 SHALL REQUIRE THIS SITE TO TREAT THE STORMWATER RUNOFF FROM 90% OF THE AVERAGE ANNUAL RAINFALL (1.0" FOR HUMID WATERSHEDS) WITH A BMP(S) CAPABLE OF REMOVING 80% OF THE AVERAGE ANNUAL POST DEVELOPMENT SUSPENDED SOLIDS (TSS). AS CAN BE SEEN IN THE COMPUTATIONS BELOW, THIS SITE SHALL COMPLY WITH THIS LEED REQUIREMENT VIA THE VARIOUS RUNOFF REDUCTION DEVICES AND POTENTIALLY AN EXTENDED DETENTION VAULT. REFER TO SHEET 14 FOR SIZING COMPUTATIONS.

LEED SS6.2 (WATER QUALITY) COMPUTATIONS

BMP TYPE	LOCATION	IN SERIES?	DRAINAGE AREA	PERCENT SITE TREATED	TSS REMOVAL EFFICIENCY (%)	SOURCE OF TSS REMOVAL DATA	WEIGHTED AVG. TSS REMOVAL EFF. (%)
INFILTRATION TRENCH	PARK	NO	2.97	51.65%	95.00%	VA SWM HANDBOOK	49.07%
BIORETENTION FILTER	PARK	NO	0.67	11.65%	90.00%	VA SWM HANDBOOK	10.49%
CURB EXTENSIONS	ON-SITE	NO	0.18	3.13%	90.00%	VA SWM HANDBOOK	2.82%
SWM PLANTERS	PODIUM COURTYARD	NO	0.18	3.13%	90.00%	VA SWM HANDBOOK	2.82%
EXTENSIVE GREEN ROOF	PODIUM COURTYARD	NO	0.03	0.52%	100.00%	VA SWM HANDBOOK	0.52%
PRESERVED OPEN SPACE	ON-SITE	NO	0.18	3.13%	95.00%	VA SWM HANDBOOK	2.97%
Reuse	ON-SITE	NO	0.73	12.70%	95.00%	VA SWM HANDBOOK	12.06%
				TOTAL WEIGHTED AVERAGE TSS REMOVAL EFFICIENCY			80.75%

\\vikamclean\eng\DATA\7000-9000\7388\VV7388G\SWM\LEED COMPS\[6.2 COMPS (TSS).xlsx]LEED 6.2 TOTAL SITE

NOTE: LEED AREA IS THE FDP LIMITS, 5.75 ACRES.

PART II: PFM COMPLIANCE

PFM ALLOWABLE RELEASE RATE

PER THE PFM, POST-DEVELOPED RELEASE RATE FOR THE 2 YEAR AND 10 YEAR STORM MUST NOT EXCEED THE EXISTING CONDITIONS RELEASE RATE. PEASE NOTE THAT THE EXISTING SITE DOES HAVE STORMWATER MANAGEMENT CONTROLS IN PLACE (OFFSITE POND 'C') THEREFORE THE PRE-DEVELOPMENT RELEASE RATE IS BASED ON A 'C' FACTOR OF 0.30 (GRASS). SEE COMPUTATION ON THIS SHEET FOR ALLOWABLE 2YR AND 10YR RATES.

PFM PROVIDED RELEASE RATE

THE POST DEVELOPMENT RELEASE RATE FOR BOTH THE 2-YEAR AND 10-YEAR STORM EVENTS IS CONTROLLED BY EXISTING WET POND 'C'. THIS POND HAS BEEN DESIGNED TO CONTROL THE SUBJECT PROPERTY WITH AN ASSUMED CURVE NUMBER OF 92. AS THE COMPUTATIONS BELOW DEMONSTRATE, THE SUBJECT SITE SHALL BE IN CONFORMANCE TO THE ASSUMED DEVELOPMENT WITHIN THE WATERSHED BY NOT EXCEEDING THE CURVE NUMBER OF 92 AND THEREFORE SHALL MEET ITS STORMWATER MANAGEMENT REQUIREMENTS VIA THE EXISTING POND 'C'.

LAND USE - PROPOSED CONDITION

```
JDA                  7195 JONES BRANCH DR - CDP/FDP
                           PROPOSED CONDITIONS
                        FAIRFAX COUNTY, VIRGINIA

              SUB-AREA LAND USE AND CURVE NUMBER DETAILS

 SUB-AREA                                          HYDROLOGIC  SUB-AREA  CURVE
IDENTIFIER         LAND USE                           SOIL       AREA    NUMBER
                                                     GROUP       (AC)
-------------------------------------------------------------------------------
PROPOSED  OPEN SPACE; GRASS COVER > 75%      (GOOD)    B          .94      61
          PAVED PARKING LOTS, ROOFS, DRIVEWAYS         B         4.81      98

          TOTAL AREA / WEIGHTED CURVE NUMBER                     5.75      92
                                                                 ====      ==
```

BEST MANAGEMENT PRACTICE COMPLIANCE

BMP FACILITY DESIGN CALCULATIONS

Plan Name: 7195 Jones Branch Drive   Date: 12/17/2013

Plan Number: ________   Engineer: BC

I. WATER QUALITY NARRATIVE

CURRENTLY THE SITE CONSIST OF 5.75 ACRES OF OFFICE DEVELOPMENT WITH AN AVERAGE IMPERVIOUSNESS OF 85% AND EXISTING BMP CONTROL INTHE FORM OF AN EXISTING WET POND (POND 'C'). THE ENTIRE SITE WILL BE DEVELOPED AS A MULTI-FAMILY RESIDENTIAL USE. THE SITE IS LOCATED IN A RESOURCE MANAGEMENT AREA OUTSIDE THE OCCOQUAN WATERSHED AND SHALL BE CONSIDERED NEW DEVELOPMENT THEREFORE, 40% PHOSPHOROUS REMOVAL IS REQUIRED. BMP REQUIREMENTS SHALL BE MET VIA THE USE OF THE EXISTING WET POND, GREEN ROOFS, RAIN GARDEN (BIO-RETENTION), INFILTRATION FACILITIES, AND TREE PITS (URBAN BIO-RETENTION).

II. WATERSHED INFORMATION

Part 1: List all of the Subareas and "C" factors used in the BMP Computations

Subarea Designation (1)	"C" (2)	Acres (3)
(1) Vegetated Roof	0.90	0.03
(2) Bioretention Filter	0.42	0.67
(3) Curb Extensions	0.90	0.18
(5) Infiltration	0.90	2.97
(6) SWM Planters	0.90	0.18
(7) Reuse	0.90	0.73
(8) Uncontrolled	0.85	0.99
	Total	5.75

III a. PHOSPHORUS REMOVAL - "OCCOQUAN METHOD"

Part 2: Compute the Weighted Average "C" Factor for the Site

(A) Area of the Site   (a) 4.76 acres

Subarea Designation (1)	"C" (2)		Acres (3)		Product (4)
0	0.00	x	0.00	=	0.00
(1) Vegetated Roof	0.90	x	0.03	=	0.03
(2) Bioretention Filter	0.42	x	0.67	=	0.28
(3) Curb Extensions	0.90	x	0.18	=	0.16
(5) Infiltration	0.90	x	2.97	=	2.67
(6) SWM Planters	0.90	x	0.18	=	0.16
(7) Reuse	0.90	x	0.73	=	0.66

(b) Total 3.96

(C) Weighted average "C" factor   (b)/(a) = (C) 0.83

Part 3: Compute the Total Phosphorus Removal for the Site

Subarea Designation (1)	Removal Efficiency (%) (3)		Area Ratio (4)		"C" Ratio (5)		Product (6)
0	0	x	0.00	x	0.00	=	0.00
(1) Vegetated Roof	40	x	0.01	x	1.08	=	0.23
(2) Bioretention Filter	50	x	0.12	x	0.50	=	2.94
(3) Curb Extensions	50	x	0.03	x	1.08	=	1.69
(5) Infiltration	50	x	0.52	x	1.08	=	27.92
(6) SWM Planters	50	x	0.04	x	1.08	=	2.04
(7) Reuse	95	x	0.15	x	1.08	=	15.75
		x		x		=	0.00
		x		x		=	0.00
		x		x		=	0.00
		x		x		=	0.00

(a) Total = 50.58

Part 4: Determine Compliance with Phosphorus Removal Requirement

(A) Select Requirement   (a) 40.0

Water Supply Overlay District (Occoquan Watershed) = 50% (Fairfax County and Prince William County)

Chesapeake Bay Preservation Area (New Development) = 40% (Fairfax County) 50% (Prince William County)

Chesapeake Bay Preservation Area (Redevelopment) [1 - 0.9 x ("I" pre/"I" post)] x 100 = _____ %

(B) If Line 3(a) > Line 4(a), the Phosphorus removal requirement is satisfied.

Line 3(a) 50.6 >= 40.0

\\192.168.10.4\eng\DATA\7000-9000\7388\VV7388G\SWM\[BMPCOMPS.xls]Sheet1   **PHOSPHORUS REMOVAL REQUIREMENT IS SATISFIED**

BMP NARRATIVE

THE DEVELOPMENT PROPOSED ON THE SUBJECT SITE WILL PROVIDE A PHOSPHOROUS REMOVAL RATE OF 40% AT A MINIMUM. THIS WILL BE ACCOMPLISHED BY WAY OF THE EXISTING WET POND (POND 'C') AND/OR LID TECHNIQUES DESCRIBED IN THE SWM NARRATIVE (BIO-RETENTION TREE PITS, AND GREEN ROOFS) OR THE USE OF STRUCTURAL FILTER SYSTEMS (POTENTIALLY LOCATED IN VAULTS WITHIN THE GARAGE), OR A COMBINATION THEREOF. FINAL DESIGN, LOCATION AND TYPES OF BMP SYSTEM(S) SHALL BE ESTABLISHED WITH FINAL CONSTRUCTION PLANS AND MAY BE REVISED TO ALTERNATES ALLOWED BY THE PFM.

NOTE:
ALL STORMWATER MANAGEMENT FACILITIES WILL BE PRIVATELY MAINTAINED AND A PRIVATE MAINTENANCE AGREEMENT WILL BE REQUIRED BEFORE THE CONSTRUCTION PLAN IS APPROVED.

ENGINEERS ■ PLANNERS ■ LANDSCAPE ARCHITECTS ■ SURVEYORS ■ SUSTAINABLE DESIGN
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W W W . V I K A . C O M

7915 JONES BRANCH DRIVE
PROVIDENCE DISTRICT
FAIRFAX COUNTY, VIRGINIA

LEED/PFM STORMWATER MANAGEMENT COMPUTATIONS

VIKA REVISIONS

REV. 2/3/14
INITIAL SUB. 12/18/13
DES. BC   DWN. BC
SCALE: N/A
PROJECT/FILE NO. VV7388F
SHEET NO. C-13

FILE: P:\projects\7388\VV7388F\CADD\PLANNING\PLANNING DRAWINGS\CDP\7388901-SWM.dwg   USER: Koeser   DATE: February 2, 2014   TIME: 10:45:59 AM

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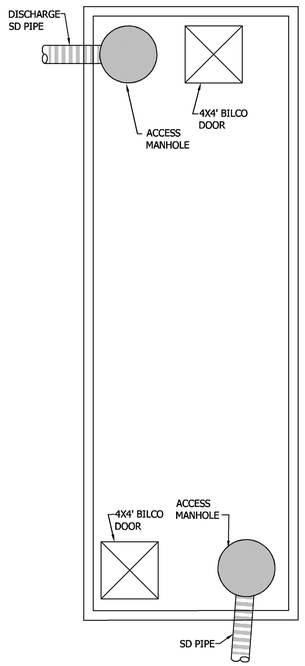

LEED REUSE VAULT DETAIL
SCALE 1"=5'

MINIMUM STORMWATER INFORMATION FOR REZONING, SPECIAL EXCEPTION, SPECIAL PERMIT AND DEVELOPMENT PLAN APPLICATIONS

The following information is required to be shown or provided in all zoning applications, or a waiver request of the submission requirement with justification shall be attached. Note: Waivers will be acted upon separately. Failure to adequately address the required submission information may result in a delay in processing this application.

This information is required under the following Zoning Ordinance paragraphs:

Special Permits (8-011 2J & 2L)	Special Exceptions (9-011 2J & 2L)
Cluster Subdivision (9-615 1G & 1N)	Commercial Revitalization Districts (9-622 2A (12) & (14))
Development Plans PRC District (16-302 3 & 4L)	PRC Plan (16-303 1E & 1O)
FDP P Districts (except PRC) (16-502 1F & 1Q)	Amendments (18-202 10F & 10I)

☒ 1. Plat is at a minimum scale of 1"=50' (unless it is depicted on one sheet with a minimum scale of 1"=100').

☒ 2. A graphic depicting the stormwater management facility(ies) and limits of clearing and grading accommodate the stormwater management facility(ies), storm drainage pipe systems and outlet protection, pond spillways, access roads, site outfalls, energy dissipation devices, and stream stabilization measures as shown on Sheet C-11.

☒ 3. Provide:

Facility Name/ Type & No.	On-site area served (acres)	Off-site area served (acres)	Drainage area (acres)	Footprint area (sf)	Storage Volume (cf)	If pond, dam height (ft)
(e.g. dry pond A, infil. trench, underground vault, etc.)						
Totals						

☒ 4. Onsite drainage channels, outfalls and pipe systems are shown on Sheet C-11. Pond inlet and outlet pipe systems are shown on Sheet N/A.

☒ 5. Maintenance access (road) to stormwater management facility(ies) are shown on Sheet C-11. Type of maintenance access road surface noted on the plat is ASPHALT (asphalt, geoblock, gravel, etc.).

☐ 6. Landscaping and tree preservation shown in and near the stormwater management facility is shown on Sheet N/A.

☒ 7. A 'stormwater management narrative' which contains a description of how detention and best management practices requirements will be met is provided on Sheet C-12 THRU C-16

☒ 8. A description of the existing conditions of each numbered site outfall extended downstream from the site to a point which is at least 100 times the site area or which has a drainage area of at least one square mile (640 acres) is provided on Sheet C-17

☒ 9. A description of how the outfall requirements, including known changes to contributing drainage areas (i.e. drainage diversions), of the Public Facilities Manual will be satisfied is provided on Sheet C-16

☒ 10. Existing topography with maximum contour intervals of two (2) feet and a note as to whether it is an air survey or field run is provided on Sheets C-3.

☒ 11. A submission waiver is requested for UNDERGROUND DETENTION IN RESIDENTAIL AREA (REQUESTED WITH CDP/FDP)

☐ 12. Stormwater management is not required because N/A

Revised 2-21-2006

RUNOFF REDUCTION SIZING COMPUTATIONS

Tyson's Corner Curb Extension Sizing chart (ON-SITE)

CURB EXTENSION #	DA (Ac.)	SURFACE AREA REQ'D (SFT)	Rv	Tv REQ'D (CFT)	SURFACE AREA PROV'D (SFT)	PONDING DEPTH (INCH)	SOIL DEPTH (FT)	GRAVEL DEPTH (FT)	PONDING Vr	SOIL Vr	GRAVEL Vr	Tv PROV'D (CFT)
1	0.12	207	0.95	414	310	6	2.5	1	1	0.25	0.4	473
3	0.06	103	0.95	207	150	6	2.5	1	1	0.25	0.4	229
TOTALS =	**0.18**	**310**		**621**	**460**							**702**

\\vikamclean\eng\DATA\7000-9000\7388\VV7388G\SWM\[DCR SPEC CALCS-Site Plan.xlsx]Infiltration

Note: Sizing based on DCR Spec# 9-A
SA(REQ'D)=Tv/2
*Tv(RED'Q)=1" *Rv*A/12*
*Tv(PROV'D)=SA*SUM OF STORAGE*

Tyson's Corner Curb Extension Sizing chart (OFF-SITE)

CURB EXTENSION #	DA (Ac.)	SURFACE AREA REQ'D (SFT)	Rv	Tv REQ'D (CFT)	SURFACE AREA PROV'D (SFT)	PONDING DEPTH (INCH)	SOIL DEPTH (FT)	GRAVEL DEPTH (FT)	PONDING Vr	SOIL Vr	GRAVEL Vr	Tv PROV'D (CFT)
2	0.11	190	0.95	379	205	6	4	1	1	0.25	0.4	390
TOTALS =	**0.11**	**190**		**379**	**205**							**390**

\\vikamclean\eng\DATA\7000-9000\7388\VV7388G\SWM\[DCR SPEC CALCS-Site Plan.xlsx]Infiltration

Note: Sizing based on DCR Spec# 9-A
SA(REQ'D)=Tv/2
*Tv(RED'Q)=1" *Rv*A/12*
*Tv(PROV'D)=SA*SUM OF STORAGE*

Tyson's Corner Green Roof Sizing Chart (CDP/FDP)

GREEN ROOF NUMBER	INTENSIVE/EXTENSIVE	DA (VEGETATIVE) (SQ.FT.)	DA (NON-VEGETATIVE) (SQ.FT.)	Rv	Tv REQ'D (CFT)	SURFACE AREA PROV'D (SFT)	SOIL DEPTH (in)	MEDIA POROSITY	Tv PROV'D (CFT)
1	EXTENSIVE	1500	0	0.95	119	1500	4	0.30	150
Total		**1500**	**0**		119	1500			**150**

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Note: Sizing based on DCR Spec# 5
*Tv(RED'Q)=1" *Rv*DA/12*
*Tv(PROV'D)=(Surface Area*Soil Depth*Porosity)/12*

Tyson's Corner Bio-retention Filter Sizing chart (CDP/FDP)

Bio-retention #	DA (Ac.)	SURFACE AREA REQ'D (SFT)	Rv	Tv REQ'D (CFT)	SURFACE AREA PROV'D (SFT)	PONDING DEPTH (INCH)	SOIL DEPTH (FT)	GRAVEL DEPTH (FT)	PONDING Vr	SOIL Vr	GRAVEL Vr	Tv PROV'D (CFT)
Filter #1	0.6	681	0.33	898	860	2	3	1	1	0.25	0.4	1132
Filter #2	0.07	229	0.95	302	920	2	3	1	1	0.25	0.4	1211
TOTALS =	**0.67**	**909**		**1200**	**1780**							**2344**

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Note: Sizing based on DCR Spec# 9 - Level 2
*SA(REQ'D)=1.25*Tv/1.65*
*Tv(RED'Q)=1" *Rv*A/12*
*Tv(PROV'D)=SA*SUM OF STORAGE*

Tyson's Corner Infiltration Sizing chart (CDP/FDP)

Infiltration Trench Number	LEVEL 1/LEVEL 2	DA To Trench (Ac.)	Rv	Tv REQ'D (CFT)	SURFACE AREA PROV'D (SFT)	f (ft/day)	t_d (day)	Vr	d_{max} (ft)	$d_{provided}$ (ft)	t_f (days)	Tv PROV'D (CFT)
1	Level 2	1.44	0.95	5462	4500	1.04	2.000	0.40	2.600	3	0.083	7350
2	Level 2	1.53	0.95	5804	2960	1.04	2.000	0.40	2.600	6.5	0.083	8979
Total		**2.97**		11266	7460							**16329**

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Note: Sizing based on DCR Spec #8
*Tv(RED'Q)=1.1" *Rv*DA/12*
Tv(PROV'D)=Surface Aread_p*

Tyson's Corner Stormwater planers Sizing chart (CDP/FDP)

STORMWATER PLANTER #	DA TO Planter (Ac.)	SURFACE AREA REQ'D (SFT)	Rv	Tv REQ'D (CFT)	SURFACE AREA PROV'D (SFT)	PONDING DEPTH (INCH)	SOIL DEPTH (FT)	GRAVEL DEPTH (FT)	PONDING Vr	SOIL Vr	GRAVEL Vr	Tv PROV'D (CFT)
1	0.09	155	0.95	310	190	3	4	1	1	0.25	0.4	314
2	0.02	34	0.95	69	40	4	4	1	1	0.25	0.4	69
3	0.07	121	0.95	241	207	0	4	1	1	0.25	0.4	290
TOTALS =	**0.18**	**310**		**621**	**437**							**673**

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Note: Sizing based on DCR Spec# 9-A
SA(REQ'D)=Tv/2
*Tv(RED'Q)=1" *Rv*A/12*
*Tv(PROV'D)=SA*SUM OF STORAGE*

Tyson's Corner Soil Amendments Sizing chart (CDP/FDP)

Soil Amendment Area	Hydrologic Soil Group	DA To Amended Soils (Ac.)	Rv	Amended Soils Area (Ac.)	Rv	IC/SA Ratio	Tv REQ'D (CFT)	SURFACE AREA PROV'D (SFT)	Depth of Amendments (ft)	V, unitless	Tv PROV'D (CFT)
1	D	0.11	0.95	0.14	0.25	0.75	489	6132	1.50	0.25	2300
2	D	0		0.12	0.25	-	109	5285	1	0.25	1321
3	D	0		0.02	0.25	-	18	770	1	0.25	193
4	D	0		0.01	0.25	-	9	608	1	0.25	152
5	D	0		0.18	0.25	-	163	7850	1	0.25	1963
Total		**0.11**		**0.47**		0.75	789	20645			**5928**

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Note: Sizing based on DCR Spec #7 Level 2
*Tv(RED'Q)=1" *Rv*DA/12*
Tv(PROV'D)=Surface Aread_p*

TOTAL RUNOFF REDUCTION VOLUME PROVIDED (LEED EVENT)

GREEN ROOFS =	150	CFT
TREE PITS (ON SITE) =	702	CFT
RAIN GARDEN =	2,585	CFT
STORMWATER PLANTER	673	CFT
SOIL AMENDMENT	789	CFT
INFILTRATION	17,353	CFT
TOTALS =	22,250	CFT

TOTAL INCLUDES THE 1" VOLUME AND ADDITIONAL VOLUME FOR THE LEED EVENT (3.2" OF RAINFALL)

NOTE:
ALL STORMWATER MANAGEMENT FACILITIES WILL BE PRIVATELY MAINTAINED AND A PRIVATE MAINTENANCE AGREEMENT WILL BE REQUIRED BEFORE THE CONSTRUCTION PLAN IS APPROVED.

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FAIRFAX COUNTY, VIRGINIA

STORMWATER COMPUTATIONS

VIKA REVISIONS

REV. 2/3/14
INITIAL SUB. 12/18/13

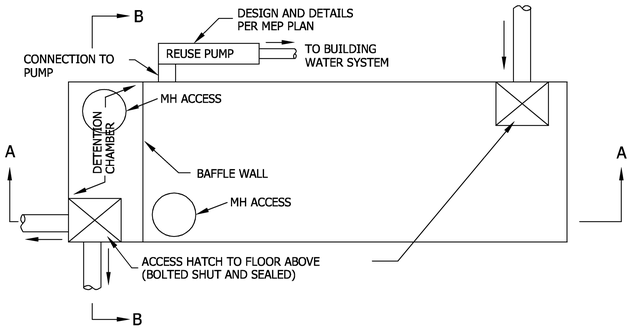
DES. BC | DWN. BC

SCALE: N/A

PROJECT/FILE NO. VV7388F

SHEET NO. C-14

FILE: P:\projects\7388\VV7388F\CADD\PLANNING\PLANNING DRAWINGS\CDP\7388901-SWM.dwg USER: Kpeser DATE: February 2, 2014 TIME: 10:45:59 AM



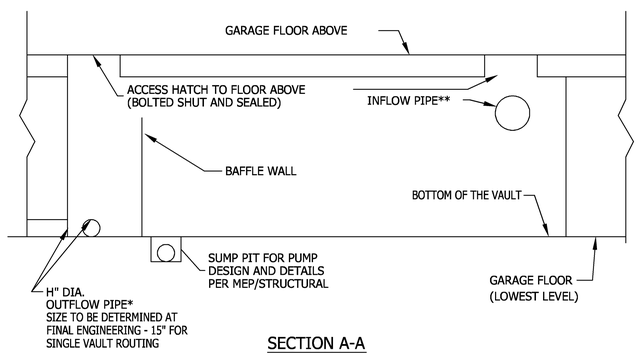
PLAN VIEW

* ONE OUTFLOW PIPE PER VAULT. LOCATION TO BE DETERMINED WITH FINAL ENGINEERING. OUTFALL MAY BE PUMPED
** FINAL NUMBER AND LOCATION OF INFLOW PIPES PER MEP

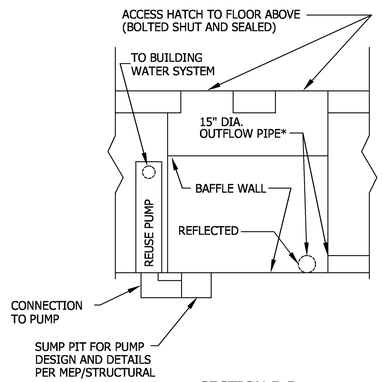
NOTES:

1) FINAL NUMBER, SHAPE, SIZE, LOCATION, AND DESIGN OF STORMWATER MANAGEMENT VAULTS ARE SUBJECT TO CHANGE AT THE TIME OF FINAL ENGINEERING.

2) SUPPORT AND REINFORCING FOR VAULTS PER STRUCTUAL ENGINEERING PLANS.



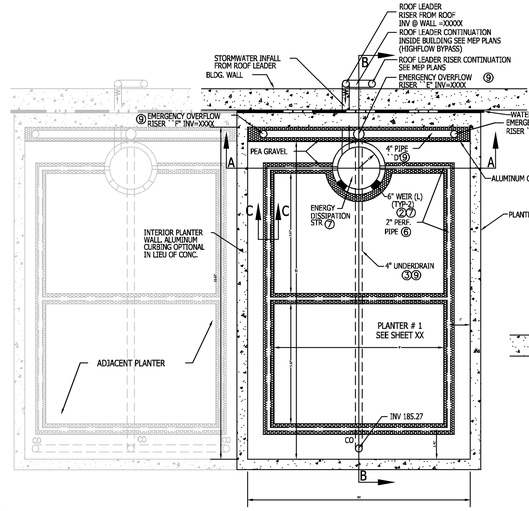
SECTION A-A



SECTION B-B

SWM/REUSE VAULT TYPICAL DETAIL

NOT TO SCALE



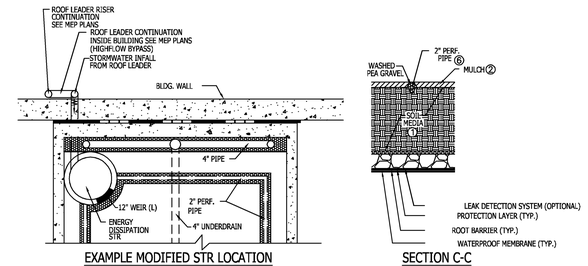
PLAN VIEW

STORMWATER PLANTER OPERATION NARRATIVE

THE FOLLOWING IS A BRIEF DESCRIPTION OF HOW THE STORMWATER (SWM) PLANTERS OPERATE:

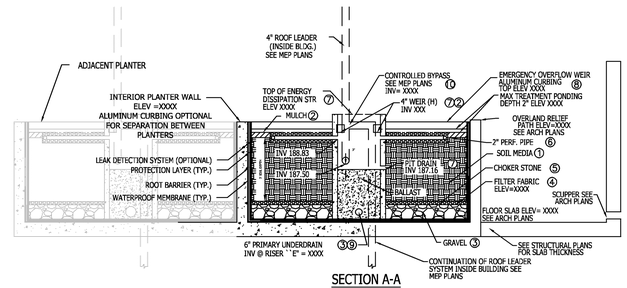
GENERAL TREATMENT AND OPERATION INFORMATION:
THE PLANTERS ARE DESIGNED TO TREAT A 1" RAINFALL EVENT AND ARE DESIGNED TO BYPASS RAINFALL EXCEEDING 1". THE SWM PLANTERS TREAT 11,625 SF OF ROOF AREA BY DISCONNECTION AND 800 SF OF THEIR FOOTPRINT AREA ON THE LOWER ROOF. THE TOTAL ROOF DRAINAGE AREA HAS BEEN DIVIDED UP INTO 5 SEPARATE AREAS EACH WITH ITS OWN ROOF DRAIN AND LEADER SEPARATELY ROUTED TO A SPECIFIC SWM PLANTER. EACH SWM PLANTER TREATS A MAXIMUM IMPERVIOUS AREA OF 2,500 SF AND OPERATES INDEPENDENTLY UNLESS THE EMERGENCY OVERFLOW SYSTEM IS ACTIVATED. THE PRIMARY BYPASS SYSTEM IS CAPABLE OF PASSING THE 100 YEAR RAINFALL EVENT (0.55 CFS) BEFORE THE EMERGENCY OVERFLOW SYSTEM ACTIVATES. THE EMERGENCY OVERFLOW SYSTEM IS PROVIDED IN THE EVENT THE PRIMARY BYPASS IS CLOGGED OR OTHERWISE INOPERABLE. THE EMERGENCY OVERFLOW SYSTEM IS CAPABLE OF PASSING 6 CFS, APPROXIMATELY 11 TIMES THE PEAK 100 YEAR DISCHARGE. WHEN THE EMERGENCY OVERFLOW SYSTEM IS ACTIVATED THE SYSTEMS PROVIDED IN ALL 5 PLANTERS OPERATE SIMULTANEOUSLY PROVIDING REDUNDANCY IN CASE OF FAILURE IN ONE OR MORE SYSTEMS. IN THE EVENT ALL 10 BYPASS SYSTEMS FOR THE PLANTERS ARE CLOGGED OR OTHERWISE INOPERABLE, SCUPPERS IN THE ROOF ARE PROVIDED FOR POSITIVE OVERLAND RELIEF BEFORE WATER ENTERS THE BUILDING.

DETAILED DESCRIPTION OF WATER TREATMENT AND CONTROL:
ROOF WATER IS DELIVERED TO THE SWM PLANTER VIA THE INTERNAL ROOF LEADER WHICH TURNS BY A 90° BEND THROUGH THE WALL AND INTO THE PLANTER ENERGY DISSIPATION STRUCTURE AT A SLOPE OF 1.0VPH. THE INFALL PIPE SIT AT THE SIDE OF THE ENERGY DISSIPATION STR. WILL SWIRL THE WATER PRODUCING SEDIMENT DROP OUT (PRETREATMENT) WHILE THE WATER LEVEL IN THE STR. RISES UP TO THE 2" PERFORATED PIPE SYSTEM. THIS PERFORATED PIPE SYSTEM LAID AT THE TOP OF THE PLANTER WILL ALLOW THE WATER TO DISTRIBUTE THROUGHOUT THE PLANTER AND INFILTRATE INTO THE SOIL PREVENTING EROSION AND SOIL UPLIFT. ONCE THE SOIL IS SATURATED AND THE WATER CONTINUES TO RISE THE TWO WIERS PROVIDED IN THE ENERGY DISSIPATION STRUCTURE (6"LONG 4"TALL) WILL PROVIDE RELIEF FOR THE WATER TO BEGIN TO POND ABOVE THE MULCH LAYER OF THE PLANTER. ONCE THE PONDING HAS REACHED THE TREATMENT DEPTH OF 2 INCHES THE BYPASS PIPE INSIDE THE BUILDING (CONTINUATION OF THE ROOF LEADER) WILL BEGIN TO ALLOW WATER TO BYPASS. FOR RAINFALL EVENTS GREATER THAN 1" SEE ABOVE FOR BYPASS CONTROLS.

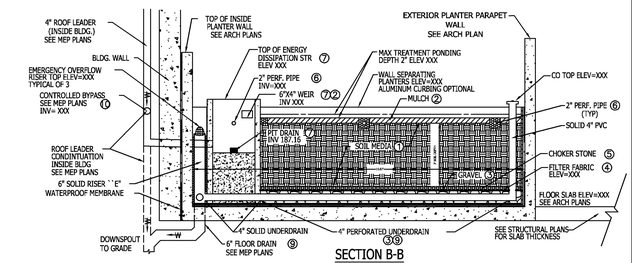


EXAMPLE MODIFIED STR LOCATION

SECTION C-C



SECTION A-A



SECTION B-B

STORMWATER PLANTER TYPICAL DETAIL

NOT TO SCALE

VA DCR STORMWATER DESIGN SPECIFICATION NO. 8 INFILTRATION

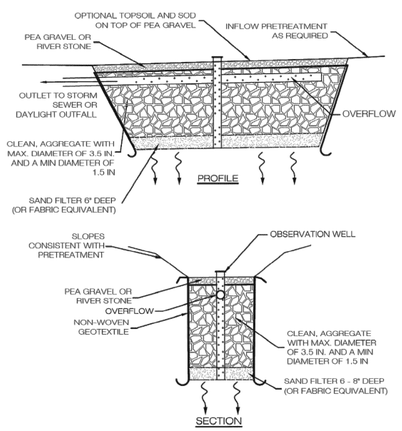
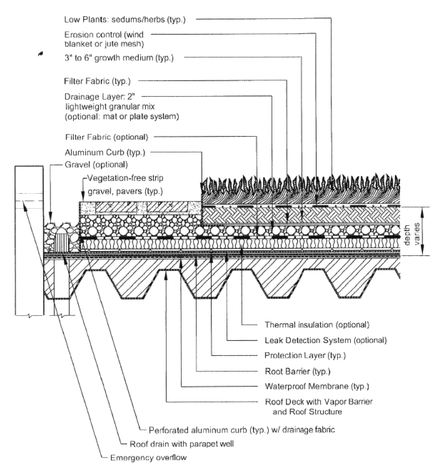


Figure 8.5: Typical Infiltration Trench

TYPICAL INFILTRATION TRENCH DETAIL

VA DCR STORMWATER DESIGN SPECIFICATION NO. 5 VEGETATED ROOF



CROSS SECTION VIEW (NTS)

Figure 5.2. Typical Section – Extensive Vegetated Roof (Source: Northern VA Regional Commission)

TYPICAL EXTENSIVE GREEN ROOF DETAIL

SEE LANDSCAPE PLAN SHEETS FOR URBAN BIO-RETENTION (TREE PITS) AND RAIN-GARDEN DETAILS.

NOTE:

ALL STORMWATER MANAGEMENT FACILITIES MUST BE PRIVATELY MAINTAINED AND A PRIVATE MAINTENANCE AGREEMENT WILL BE REQUIRED BEFORE THE CONSTRUCTION PLAN IS APPROVED.

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STORMWATER MANAGEMENT DETAILS

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INITIAL SUB. 12/18/13	
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SCALE: N/A	
PROJECT/FILE NO. VV7388F	
SHEET NO. C-15	

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TYSONS CORNER COMPREHENSIVE PLAN STORMWATER CONFORMANCE CHECKLIST NARRATIVE

THE PURPOSE OF THIS NARRATIVE IS TO DETAIL THE PROCESS BY WHICH THE SUBJECT SITE MEETS, EXCEEDS, OR PROVIDES TO THE MAXIMUM EXTENT PRACTICABLE THE RUNOFF REDUCTION REQUIREMENTS OF THE TYSONS CORNER COMPREHENSIVE PLAN.

COMPREHENSIVE PLAN STORMWATER MANAGEMENT GOALS:

- THIS STORMWATER MANAGEMENT NARRATIVE EXPLAINS HOW THIS PLAN PROPOSES TO MEET THE STORMWATER REQUIREMENTS OF THE TYSONS CORNER COMPREHENSIVE PLAN. THIS NARRATIVE DESCRIBES THE VARIOUS STRATEGIES BY WHICH THE VARIOUS GOALS ARE TO BE MET (E.G. VEGETATIVE ROOF, URBAN BIO-RETENTION, PERMEABLE PAVERS ETC.) AS WELL AS THOSE STRATEGIES WE EVALUATED BUT WERE UNABLE TO IMPLEMENT DUE TO SITE CONSTRAINTS.

COMPREHENSIVE PLAN STORMWATER MANAGEMENT GOALS	RESPONSE
STORMWATER MANAGEMENT AND WATER QUALITY CONTROLS FOR REDEVELOPMENT SHOULD BE DESIGNED TO RETURN WATER INTO THE GROUND WHERE SOILS ARE SUITABLE OR REUSE IT, WHERE ALLOWED, TO THE EXTENT PRACTICABLE. REDUCTION OF STORMWATER RUNOFF VOLUME IS THE SINGLE MOST IMPORTANT STORMWATER DESIGN OBJECTIVE FOR TYSONS.	INFILTRATION FACILITIES HAVE BEEN PROVIDED AS A POSSIBLE MEASURE TO HELP RETAIN A PORTION OF THE 1 INCH OF RAINFALL VOLUME FROM THE SITE. POTENTIAL INFILTRATION FACILITY LOCATIONS FOR THIS PROJECT ARE LIMITED FOR SEVERAL REASONS INCLUDING PROPOSED FUTURE RIGHT-OF-WAY DEDICATIONS AS WELL AS THE SOILS FOUND IN THIS AREA OF TYSONS. AS SUCH, THESE FACILITIES SHALL REQUIRE WAIVERS DUE TO PREVIOUS CONSTRUCTION ON IN-SITU MATERIAL IS PRESENT AND FOR INFILTRATION RATES LESS THAN 0.52 IN/HR. A FULL LIST OF REQUIRED WAIVERS CAN BE FOUND IN THE NEXT SECTION. INFILTRATION FACILITIES PROPOSED WITH THIS APPLICATION INCLUDE: BIO-RETENTION AREAS, AND INFILTRATION TRENCHES. THE FOCUS OF THE OVERALL SWM PLAN IS TREATMENT OF THE PROPOSED IMPERVIOUS AREAS WITH RUNOFF REDUCING BMP'S. AS SUCH WHERE PRACTICABLE ROOFTOP AREAS HAVE BEEN DISCONNECTED TO THESE PRACTICES AND BIORETENTION ELEMENTS HAVE BEEN INTEGRATED INTO THE STREETSCAPE.
AT A MINIMUM, THE FIRST INCH OF RAINFALL SHOULD BE RETAINED ON-SITE THROUGH INFILTRATION, EVAPOTRANSPIRATION AND/OR REUSE. IF, ON A GIVEN SITE, THE RETENTION ON-SITE OF THE FIRST INCH OF RAINFALL IS DEMONSTRATED NOT TO BE FULLY ACHIEVABLE, ALL AVAILABLE MEASURES SHOULD BE IMPLEMENTED TO THE EXTENT POSSIBLE IN ORDER TO SUPPORT THIS GOAL AND ACHIEVE PARTIAL RETENTION OF THE FIRST INCH OF RAINFALL."	THE TARGET GOAL OF THE RUNOFF REDUCTION METHOD IS TO CAPTURE AND CONTROL THE FIRST INCH OF RAINFALL. TO THIS EXTENT FIVE MAIN STORMWATER MANAGEMENT STRATEGIES HAVE BEEN UTILIZED: VEGETATIVE ROOFS, BIORETENTION, REUSE, INFILTRATION, SOIL AMENDMENTS, AND ROOFTOP DISCONNECT TO STORMWATER PLANTERS. • THE VEGETATIVE ROOFS SHALL BE DESIGNED PER DCR SPEC #5 AND ARE USED TO TREAT ONLY VEGETATIVE AND ROOF AREAS. • BIORETENTION SHALL BE DESIGNED PER DCR SPEC #9 • INFILTRATION FACILITIES SHALL BE DESIGNED PER DCR SPEC #8 • SOIL AMENDMENTS SHALL BE DESINGED PER DCR SPEC #4 • STORMWATER PLANTERS SHALL BE DESIGNED PER DCR SPEC #9 • THE URBAN CURB EXTENSIONS SHALL BE DESIGNED PER DCR SPEC #9 APPENDIX 9A. THESE TREE PITS ARE UTILIZED TO TREAT THE ROADWAY RUNOFF AS WELL AS THE SURROUNDING STREETSCAPE. • DUE TO THE URBAN NATURE OF THIS SITE GRASS SWALES, GRASS CHANNELS, EXTENDED DETENTION PONDS, VEGETATIVE FILTER STRIPS, AND SHEET FLOW TO CONSERVATION AREAS ARE NOT PRACTICABLE. SIZING COMPUTATIONS HAVE BEEN PROVIDED THAT VERIFY THE REQUIRED STORAGE HAS BEEN MET FOR EACH ALTERNATIVE. EACH OF THESE PRACTICES IS ADEQUATELY SIZED FOR THE PROPOSED DRAINAGE AREAS TO THEM. THESE PRACTICES COMBINED YIELD AN ONSITE RETAINED RAINFALL DEPTH OF 0.96 INCHES (PLEASE NOTE THAT THE RUNOFF REDUCTION ACHIEVED ACTUALLY IS 1.24 INCHES IF CREDIT IS ALLOWED FOR THE LEED RAINFALL EVENT). ALL AREAS OF THE SITE THAT HAVE THE POTENTIAL FOR A GREEN ROOF HAVE BEEN UTILIZED FOR SUCH PURPOSES. URBAN DESIGN GUIDELINES, NEED FOR PENTHOUSE, AND SIGNATURE SKYLINE ARCHITECTURE PRECLUDE THE ABILITY TO KEEP ALL ROOFS FLAT AND AVAILABLE FOR SWM PURPOSES. GIVEN THESE CONSTRAINTS, A TOTAL CONTROLLED AREA OF 5.34 ACRES OR 93% OF THE SITE HAS BEEN IDENTIFIED AND DEMONSTRATES "TO THE MAXIMUM EXTENT PRACTICABLE" WE HAVE MET THE TYSONS CORNER COMPREHENSIVE PLAN GOAL TO RETAIN/REUSE THE FIRST INCH OF RAINFALL. PLEASE NOTE THAT POTENTIAL OFF-SITE BIO-RETENTION DRAINAGE AREAS HAVE BEEN IDENTIFIED AND THE DEVELOPER RESERVES THE RIGHT TO, AT SITE PLAN TIME, UTILIZE THESE AREAS IN THE EVENT OF ANY SHORTFALL IN THE TARGET RUNOFF REDUCTION DEPTH.
REDEVELOPMENT PROJECTS IN TYSONS SHOULD INCORPORATE INNOVATIVE STORMWATER MANAGEMENT MEASURES IN A MANNER THAT WILL, FIRST AND FOREMOST, OPTIMIZE REDUCTION OF STORMWATER RUNOFF VOLUME AND CONTROL OF PEAK FLOWS FOR THE REMAINING STORMWATER THAT CANNOT BE COMPLETELY CAPTURED ON-SITE."	THE RUNOFF REDUCTION PRACTICES SHALL BE USED IN CONFORMANCE WITH THE DCR SPECIFICATION THAT GOVERNS THEM. THE VEGETATIVE ROOF, INFILTRATION, REUSE, SOIL AMENDMENTS, STORMWATER PLANTERS, AND BIO-RETENTION HAVE BEEN DESIGNED IN ACCORDANCE WITH THEIR RESPECTIVE SPECIFICATION.
"AT A MINIMUM, STORMWATER MANAGEMENT MEASURES THAT ARE SUFFICIENT TO ATTAIN BOTH THE STORMWATER DESIGN-QUANTITY CONTROL AND STORMWATER DESIGN-QUALITY CONTROL CREDITS OF THE MOST CURRENT VERSION OF THE LEED-NC OR LEED-CS RATING SYSTEM (OR THE EQUIVALENT OF THESE CREDITS) SHOULD BE PROVIDED. IF, ON A GIVEN SITE, THE ATTAINMENT OF THE STORMWATER DESIGN LEED CREDITS (OR EQUIVALENT) IS DEMONSTRATED NOT TO BE FULLY ACHIEVABLE, ALL AVAILABLE MEASURES SHOULD BE IMPLEMENTED TO THE EXTENT POSSIBLE IN SUPPORT OF THIS GOAL."	LEED STORMWATER CREDITS 6.1 AND 6.2 SHALL BE OBTAINED THROUGH THE USE OF THE VARIOUS RUNOFF REDUCTION METHODS PREVIOUSLY DESCRIBED. EACH PRACTICE PROVIDES BOTH QUANTITY AND QUALITY CONTROL. FOR LEED CREDIT 6.1 THE VOLUME BASED COMPUTATIONS PROVIDED USE A SITE IMPERVIOUSNESS OF GREATER THAN 50% AS THIS IS THE EXISTING CONDITION ON SITE. FOR THE PEAK RATE RELEASE COMPUTATIONS THE SITE IS ASSUMED TO BE LESS THAN 50% BECAUSE THERE ARE EXISTING DETENTION FACILTIES ON SITE WHICH REDUCE THE SITE PEAK RELEASE RATES TO THAT OF AN UNDEVELOPED CONDITION (IE LESS THAN 50% IMPERVIOUS). FOR CREDIT 6.2 TREATMENT ON SITE MAY BE SUPPLEMENTED BY MANUFACTURED BMP FILTRATION FACILITIES ON SITE AT TIME OF FINAL SITE PLAN AND/OR A LEED REUSE VAULT/EXTENDED DETENTION.
"EQUIVALENT APPROACHES MAY INCORPORATE COORDINATED STORMWATER MANAGEMENT ON MULTIPLE DEVELOPMENT SITES AND/OR OFF-SITE CONTROLS. ADDITIONAL STORMWATER MANAGEMENT EFFORTS SHOULD BE ENCOURAGED."	THIS SUBJECT APPLICATION DOES NOT PROPOSE SHARED STORMWATER ALTERNATIVE; HOWEVER POTENTIAL OFFSITE CONTROLS HAVE BEEN SHOWN TO TREAT PORTION OF THE EXISTING JONES BRANCH R-O-W.
"LID TECHNIQUES OF STORMWATER MANAGEMENT SHOULD ALSO BE INCORPORATED INTO NEW AND REDESIGNED STREETS WHERE ALLOWED AND PRACTICABLE."	LOW IMPACT DEVELOPMENT (LID) TECHNIQUES ARE PROVIDED FOR IN THE STREET DESIGN VIA INFILTRATION FACILITIES AND THE URBAN BIO-RETENTION (CURB EXTENSIONS). THESE TREE PITS PROVIDE BOTH QUANTITY AND QUALITY CONTROL AS OUTLINED BY DCR SPEC #9.
"RESTORATION AND/OR STABILIZATION OF DEGRADED STREAMS ON DEVELOPMENT SITES SHOULD BE PURSUED WHERE FEASIBLE; RESTORATION AND STABILIZATION TECHNIQUES THAT INCORPORATE ECOLOGICALLY AND AESTHETICALLY BENEFICIAL, VEGETATED APPROACHES ARE PREFERRED. OFF-SITE EFFORTS TO RESTORE AND/OR STABILIZE STREAMS IN TYSONS CORNER SHOULD ALSO BE ENCOURAGED. THE ABOVE GUIDELINES ARE INTENDED TO IMPROVE STORMWATER MANAGEMENT CONTROLS SUFFICIENTLY TO ALLOW FOR IMPROVEMENTS TO THE HABITAT AND RECREATIONAL VALUES OF STREAMS IN TYSONS CORNER THROUGH NATURAL RESTORATIVE PROCESSES AND/OR THROUGH RESTORATION PROJECTS."	THIS SUBJECT APPLICATION DOES NOT PROPOSE ANY STREAM RESTORATION AS IT HAS NOT OPEN CHANNELS OR STREAMS WITHIN IT BOUNDARY. IT IS BELIEVED THAT ANY STREAM RESTORATION SHOULD BE COMPREHENSIVE IN MANNER AND NOT PROVIDED IN PIECE MEAL FORM TO BETTER PROVIDE AESTHETIC AND RECREATIONAL VALUE TO TYSONS CORNER.

THE TYSON'S CORNER COMPREHENSIVE STORMWATER MANAGEMENT PLAN SHALL BE IMPLEMENTED VIA THE USE OF URBAN BIO-RETENTION (CURB EXTENSIONS & SWM PLANTERS), BIO-RETENTION FILTERS, SOIL AMENDMENTS, INFILTRATION, REUSE, AND VEGETATIVE ROOFS. THE ROADWAY ROW AND STREETSCAPE SHALL BE CONTROLLED, WHERE POSSIBLE, BY INFILTRATION AND CURB EXTENSIONS THAT ARE STRATEGICALLY PLACED TO MAXIMIZE RUNOFF INTERCEPTION. THE BUILDING'S ROOF AREA SHALL BE CONTROLLED BY VEGETATIVE ROOF AREAS DESIGNED TO TREAT THEIR FOOTPRINT AREA, DISCONNECTION TO INFILTRATION, AND DISCONNECTION TO STORMWATER PLANTERS. BELOW IS A BREAKDOWN OF THE IMPLEMENTATION ITEMS ON THE STORMWATER CONFORMANCE CHECK LIST:

- THE COMPUTATIONS PROVIDED ON SHEET C-12 CALCULATE THE REQUIRED TREATMENT VOLUME OF 1" OF RAINFALL OVER THE ENTIRE SITE CDP AREA REGARDLESS OF ROW DEDICATION.
- THIS SUBJECT APPLICATION PROPOSES NO NEW OR INNOVATIVE BMP'S NOT PREVIOUSLY IDENTIFIED BY THE COUNTY. THIS APPLICATION DOES PROPOSE THE USE OF TIER II APPROACHES TO HELP CAPTURE/REUSE THE FIRST INCH OF RAINFALL. THE STORMWATER MANAGEMENT DESIGN FOR THIS SITE SHALL INCLUDE PRACTICES THAT ARE DOCUMENTED IN THE DCR RUNOFF REDUCTION MANUAL AND THOSE APPROVED AND USED IN OTHER JURISDICTIONS OF THE COUNTRY.

ACCESS FOR THE VEGETATIVE ROOFS & STORMWATER PLANTERS AND STREET ACCESS FOR THE CURB EXTENSIONS, INFILTRATION, AND SOIL AMENDMENTS.

- THE CURB EXTENSIONS, INFILTRATION, REUSE VAULTS, STORMWATER PLANTERS, SOIL AMENDMENTS, AND VEGETATIVE ROOFS SHALL BE PRIVATELY MAINTAINED.
- THE DESIGN SHALL CREATE A SAFE ENVIRONMENT FOR THE PUBLIC. THE EXTENSIVE VEGETATIVE ROOF AREAS AND STORMWATER PLANTERS SHALL HAVE SAFE PUBLIC ACCESS AND THE CURB EXTENSIONS SHALL BE PROVIDED WITH A GRATE OR FENCE TO PREVENT PEDESTRIAN CONFLICTS AND AS MENTIONED PREVIOUSLY WHERE EXCESSIVE TRAFFIC IS EXPECTED CURB EXTENSIONS HAVE NOT BEEN PROVIDED TO AVOID IMPEDING PEDESTRIAN MOVEMENT AND/OR CAUSE A SAFETY HAZARD.
- THIS PROJECT SHALL NOT BE CONSTRUCTED IN PHASES.
- CERTAIN PFM REQUIREMENTS SHALL NEED TO BE WAIVED IN ORDER TO MEET THE OVERALL CONCEPT OF THE PTC COMPREHENSIVE PLAN. A DETAILED LIST OF WAIVERS IS AS FOLLOWS:

1. A MODIFICATION OF SECTION 12-0510 TO PERMIT A REDUCTION IN THE MINIMUM PLANTING AREA FROM EIGHT (8) FEET, TO A MINIMUM OF FOUR (4) FEET IN ORDER FOR TREES TO SATISFY THE TREE COVER REQUIREMENT. REFER TO THE LANDSCAPE PLANS HEREIN FOR A GRAPHIC OF THE PROPOSED PLANTING AREA.
2. A WAIVER OF PFM SECTION 6-0303.8, TO ALLOW STORMWATER MANAGEMENT (SWM) AND BEST MANAGEMENT PRACTICES (BMPS) TO BE PROVIDED WITHIN UNDERGROUND SYSTEMS WITHIN THE RESIDENTIAL BLOCKS OF THE PROPOSED DEVELOPMENT. (SEPARATE WAIVER FILED XXX-WPFM-001-1)
3. ALL REQUIRED DEVIATIONS OF PFM SECTION 6-1304.2C TO ALLOW FOR INSTALLATION OF IN-SITU FILL MATERIAL, PROVIDED FIELD TESTS SHOW ADEQUATE INFILTRATION RATES EXIST FOR IN-SITU MATERIAL.
4. ALL REQUIRED DEVIATIONS OF PFM SECTION 6-1304.2F TO SET THE MINIMUM HORIZONTAL SETBACKS FOR BOTH INFILTRATING AND NON-INFILTRATING SYSTEMS FROM BUILDING FOUNDATIONS BE REDUCED TO ZERO (0) FEET IN ORDER TO FACILITATE INSTALLATION OF PERMEABLE PAVERS IN AN URBAN ENVIRONMENT SET FORTH IN THE TYSON'S CORNER DESIGN GUIDELINES.
5. ALL REQUIRED DEVIATIONS OF PFM SECTION 6-1304.4I TO ALLOW UTILIZATION OF INFILTRATION RATES LESS THAN 0.52 IN/HR FOR DESIGN OF INFILTRATION SYSTEMS UTILIZED TO MEET THE COMPREHENSIVE PLAN REQUIREMENT FOR RETENTION OF THE FIRST 1" OF RUNOFF ON-SITE.
6. ALL REQUIRED DEVIATIONS OF PFM SECTION 6-1307.2C TO ALLOW FOR INSTALLATION OF BIO-RETENTION FACILITIES THAT UTILIZE INFILTRATION TO BE CONSTRUCTED ON IN-SITU FILL MATERIAL, PROVIDED FIELD TESTS SHOW ADEQUATE INFILTRATION RATES EXIST FOR IN-SITU MATERIAL.
7. ALL REQUIRED DEVIATIONS OF PFM SECTION 6-1307.2E TO SET THE MINIMUM HORIZONTAL SETBACKS FROM BUILDING FOUNDATIONS BE REDUCED TO SIX (6) FEET IN ORDER TO FACILITATE INSTALLATION OF BIO-RETENTION SYSTEMS IN AN URBAN ENVIRONMENT SET FORTH IN THE TYSON'S CORNER DESIGN GUIDELINES.
8. ALL REQUIRED DEVIATIONS OF PFM SECTION 6-1307.2F TO ALLOW INSTALLATION OF BIO-RETENTION FACILITIES IN THE VICINITY OF LOADING DOCKS, VEHICLE MAINTENANCE AREAS OR OUTDOOR STORAGE AREAS TO ACCOMMODATE THE URBAN ENVIRONMENT SET FORTH IN THE TYSON'S CORNER DESIGN GUIDELINES.
9. ALL REQUIRED DEVIATIONS OF PFM SECTION 6-1309.2C TO ALLOW INSTALLATION OF TREE BOX FILTERS IN THE VICINITY OF LOADING DOCKS, VEHICLE MAINTENANCE AREAS OR OUTDOOR STORAGE AREAS TO ACCOMMODATE THE URBAN ENVIRONMENT SET FORTH IN THE TYSON'S CORNER DESIGN GUIDELINES.

- POTENTIAL SWM VAULTS AND/OR RAINWATER HARVESTING CISTERN SHALL NOT ADVERSELY IMPACT LANDSCAPING OR THE SIDEWALK ZONE.
- A 4'X4' ACCESS DOOR SHALL BE PROVIDED FOR THE VAULT MAINTENANCE.

DESIGN OF BEST MANAGEMENT PRACTICES

- INFILTRATION BMP'S

INFILTRATION TRENCHES HAS BEEN PROVIDED WITH THIS PLAN. A SOIL ANALYSIS SHALL BE PERFORMED PRIOR TO SITE PLAN TO DETERMINE THE SUITABILITY OF THE INFILTRATION FACILITY. AS CAN BE SEEN ON THIS SHEET A WAIVER FOR CONSTRUCTION ON FILL MATERIAL, POSSIBLE INFILTRATION RATE OF LESS THAN 0.52 IN/HR, AND HORIZONTAL SETBACK FROM BUILDING FOUNDATION SHALL BE REQUIRED. THESE WAIVERS ARE NEEDED IN ORDER TO HELP MEET THE REQUIREMENTS OF THE TYSONS CORNER COMPREHENSIVE PLAN STORMWATER REQUIREMENTS OF RETAINING THE FIRST 1" OF RAINFALL. THIS INFILTRATION FACILITY SHALL ONLY CAPTURE A PORTION OF THE FIRST 1" OF RAINFALL, THIS PLAN PROPOSES THE USE OF VEGETATIVE ROOFS, STORMWATER PLANTERS AND URBAN BIO-RETENTION (CURB EXTENSIONS), AND SOIL AMENDMENTS TO HELP MAXIMIZE THE AMOUNT OF RAINFALL CAPTURED.

- RAINWATER HARVESTING

RAINWATER HARVESTING IS PROPOSED FOR THIS RESIDENTIAL BUILDING.

- RUNOFF REDUCTION PRACTICES

THE PROPOSED RUNOFF REDUCTION PRACTICES SHALL INCLUDE VEGETATIVE ROOFS, URBAN BIO-RETENTION (CURB EXTENSIONS), BIO-RETENTION FILTERS, INFILTRATION, REUSE, AND SOIL AMENDMENTS. BELOW IS A BREAKDOWN OF THE RUNOFF REDUCTION PRACTICES ITEMS ON THE STORMWATER CONFORMANCE CHECK LIST:

- RUNOFF REDUCTION BMP'S IN THE FORM OF URBAN BIO-RETENTION (CURB EXTENSIONS) SHALL BE PROVIDED WITH UNDER-DRAINS (AS REQURIED) AND A SUBSURFACE STONE LAYER AS DETAILED IN DCR SPEC#9
- BOTH THE BIO-RETENTION AND VEGETATIVE ROOF SYSTEM SHALL CONFORM TO DCR SPEC # 9 AND #5 RESPECTIVELY.
- AS MENTIONED EARLIER 0.96" OF RAINFALL HAS BEEN CAPTURED/CONTROLLED. THE PROPOSED PLANS ACCOUNTS FOR 0.96" (1.24" WHEN CONSIDERING THE LEED EVENT) AS CAN BE SEEN ON THE TYSONS STORMWATER CONFORMANCE SPREADSHEET (SEE SHEET C-12).

- TIER 2 INNOVATIVE BMP'S (ACCEPTED IN OTHER JURISDICTIONS)

1. IT IS PROPOSED THAT THE INNOVATIVE IMPLEMENTATION/MODIFICATION OF THE DCR SPEC #9A FOR USE WITH A STORMWATER PLANTER LOCATED ON A ROOF SHALL BE CONSIDERED A TIER 2 BMP. THE DESIGN OF THE TREATMENT PROVIDED BY THESE FACILITIES FOLLOW THE DESIGN GUIDELINES PROVIDED IN DCR SPEC #9A WITH SPECIAL DETAILS PROVIDED ON C-15 FOR THE DISCONNECTION OF HIGHRISE ROOF WATER TO THE LOWER PODIUM ROOF AREAS. IN ADDTION, IT SHOULD BE NOTED THIS TEQNAWSOME OF DISCONNECTING A TOWER ROOF TO A LOWER PODIUM INTO A SWM PLANTER WAS ACCEPTED AND IMPLEMENTED AS A STANDARD PRACTICE IN CONSTRA COSTA COUNTY, CALIFORNIA IN 2005.

http://www.co.contra-costa.ca.us/

http://www.ccleanwater.org/stormwater-c-3-guidebook/

SEE THE NEXT SECTION BELOW FOR POTENTIAL MITIGATION OF TIER II PRACTICES PROPOSED IN THE EVENT THEY ARE FOUND TO BE IMPRACTICABLE AT FINAL SITE PLAN.

- TIER 3 INNOVATIVE BMP'S (NON-APPROVED)
NO TIER III APPROACHES ARE PROPOSED.

- OFFSITE OR SHARED FACILITIES

CURRENTLY THE SUBJECT APPLICATION DOES NOT PROPOSE THE USE OF OFFSITE OR SHARED SWM FACILITIES. HOWEVER, AS MENTIONED ABOVE, THE APPLICATION RESERVES THE RIGHT TO IMPLEMENT

- CONFORMANCE WITH COMPREHENSIVE PLAN STORMWATER GOALS

IT IS THE BELIEF OF THE UNDERSIGNED ENGINEER THAT THIS SITE PLAN ADEQUATELY HANDLES, TO THE MAXIMUM EXTENT POSSIBLE, THE RUNOFF REDUCTION REQUIREMENTS OF THE TYSONS CORNER COMPREHENSIVE PLAN. BELOW IS SUMMARY OF THE RUNOFF REDUCTION PRACTICES UTILIZED IN THE STORMWATER MANAGEMENT PLAN AND THEIR CONFORMANCE TO THE OVERALL GOAL OF THE COMPREHENSIVE STORMWATER MANAGEMENT PLAN FOR THIS SUBJECT APPLICATION.

- THIS SUBJECT APPLICATION PROPOSES TO CONTROL CAPTURE, TO THE MAXIMUM EXTENT PRACTICABLE, THE FIRST 0.96" (THE ACTUAL AMOUNT CONTROLLED IS 1.24" WHEN CONSIDERING THE LEED EVENT) OF RAINFALL.
- THIS PROPOSED DESIGN SHALL OPTIMIZE, TO THE MAXIMUM EXTEND FEASIBLE, RUNOFF REDUCTION VIA THE EMPLOYMENT OF VEGETATIVE ROOFS, INFILTRATION, REUSE, SOIL AMENDMENTS, STORMWATER PLANTERS, AND URBAN BIO-RETENTION (CURB EXTENSIONS). 93% OF THE TOTAL SITE AREA IS CAPTURED ALONG WITH 0.96" (THE ACTUAL AMOUNT CONTROLLED IS 1.24" WHEN CONSIDERING THE LEED EVENT) OF THE FIRST 1 INCH OF RAINFALL.
- AS MENTIONED PREVIOUSLY SITE CONSTRAINTS HAVE LIMITED THE USE OF MANY BMP'S PRACTICES.
- THE PROPOSED DESIGN DOES HELP CONTROL PEAK FLOW BY REDUCING THE RUNOFF VOLUME AND AS SUCH THE PEAK DISCHARGED IS REDUCED. ADDITIONALLY, PEAK RELEASE RATES FOR THE SUBJECT SITE ARE CONTROLLED BY EXISTING WET POND 'C' WHICH HAS BEEN DESIGNED TO ACCOUNT FOR THE INTENSITY OF THIS DEVELOPMENT.
- STREET RUNOFF HAS BEEN ADDRESSED VIA THE USE OF URBAN BIO-RETENTION (CURB EXTENSIONS) THAT ARE DESIGNED IN ACCORDANCE WITH DCR SPEC #9 AND INFILTRATION DESIGNED IN ACCORDANCE WITH DCR SPEC #8.

- STREAM STABILIZATION AND RESTORATION HAS NOT BEEN PROPOSED WITH THIS SUBJECT APPLICATION DUE TO THE NEED OF A COMPREHENSIVE STREAM RESTORATION PROGRAM.
- THIS SUBJECT APPLICATION SHALL CONFORM TO THE PFM'S SWM REQUIREMENTS FOR ADEQUATE OUTFALL, DETENTION, WATER QUALITY, AND OVERLAND RELIEF. SEE SHEETS C-12 THRU C-17 FOR DETAILS.

- SUPPLEMENTAL INFORMATION/JUSTIFICATION REQUEST

WHILE IT IS NOT PRACTICABLE TO RETAIN ALL OF THE SUBJECT SITE, INCLUDING AREAS OF THE SITE PERIPHERY, DUE TO VARIOUS CONSTRAINTS INCLUDING SITE GRADING, OTHER COMPREHENSIVE PLAN REQUIREMENTS, AND VDOT REQUIREMENTS. COMPLIANCE WITH THE COMPREHENSIVE PLAN GOAL FOR CAPTURING/RETAINING THE FIRST 1-INCH RAIN EVENT CAN NOT BE MET EVEN WITH CAPTURING OFFSITE AREAS. IF THE RUNOFF REDUCTION MEASURES AND/OR COMPUTATIONS SHOWN HEREIN ARE NOT APPROVED BY DPWES, THE APPLICANT WILL WORK WITH THE COUNTY TO RETAIN THE FIRST 1-INCH OF RAINFALL TO THE EXTENT PRACTICABLE IN ACCORDANCE WITH THE COMPREHENSIVE PLAN GOAL.

IN FURTHERANCE OF THE APPLICANT'S COMMITMENTS HEREIN AND WHILE IT INTENDS TO MEET THE 1-INCH RETENTION GOAL USING THE TECHNIQUES SHOWN, IT RESERVES THE RIGHT TO UTILIZE ANY COMBINATION OF LID (EXISTING AND FUTURE) MEASURES TO MEET THIS GOAL SUBJECT TO THE REVIEW AND APPROVAL OF DPWES AT TIME OF SITE PLAN.

RECOGNIZING THAT RUNOFF REDUCTION TECHNOLOGIES ARE RELATIVELY NEW AND STILL EVOLVING, THE APPLICANT'S FINAL DESIGN DEVELOPMENT AND/OR DPWES COMMENTS ON THE SITE PLAN MAY RESULT IN CHANGES TO THE LID MEASURES SHOWN ON THE CDP AND/OR FDP, INCLUDING, BUT NOT LIMITED TO, ELIMINATION OR ADDITION OF MEASURES SO LONG AS THESE CHANGES DO NOT AFFECT THE GRID OF STREETS, THE GENERAL LOCATION OF THE POINTS OF ACCESS TO EACH BLOCK, THE GENERAL LOCATION OF THE BUILDINGS, THE BUILD-TO LINES, THE MINIMUM AMOUNT AND GENERAL LOCATION OF PUBLICLY-ACCESS URBAN PARK LAND AS MAY BE APPLICABLE FOR EACH BLOCK AND THE GENERAL QUALITY AND CHARACTER OF THE STREETSCAPE ALONG THE PUBLIC AND PRIVATE STREETS WITHIN AND ABUTTING THE SUBJECT PROPERTY AND AS OTHERWISE SPECIFIED IN THE PROFFERS.

- ELIMINATION OF EXISTING POND "A"

THE EXISTING WET DETENTION POND "A" WILL BE FILLED IN WITH THIS CDP/FDP. THE PUBLIC IMPROVEMENT PLAN THAT INSTALLED THE POND(S) (6377-PI-001-2) PLACED THIS POND IN SERIES WITH ADDITIONAL PONDS DOWNSTREAM. THE COMPUTATIONS PROVIDED IN THE ORIGINAL PLAN WILL BE REVIEWED AND REVISED AT FINAL SITE PLAN TO COMPENSATE FOR THE REMOVAL OF THIS POND.

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W W W . V I K A . C O M

7915 JONES BRANCH DRIVE
PROVIDENCE DISTRICT
FAIRFAX COUNTY, VIRGINIA

STORMWATER MANAGEMENT NARRATIVES

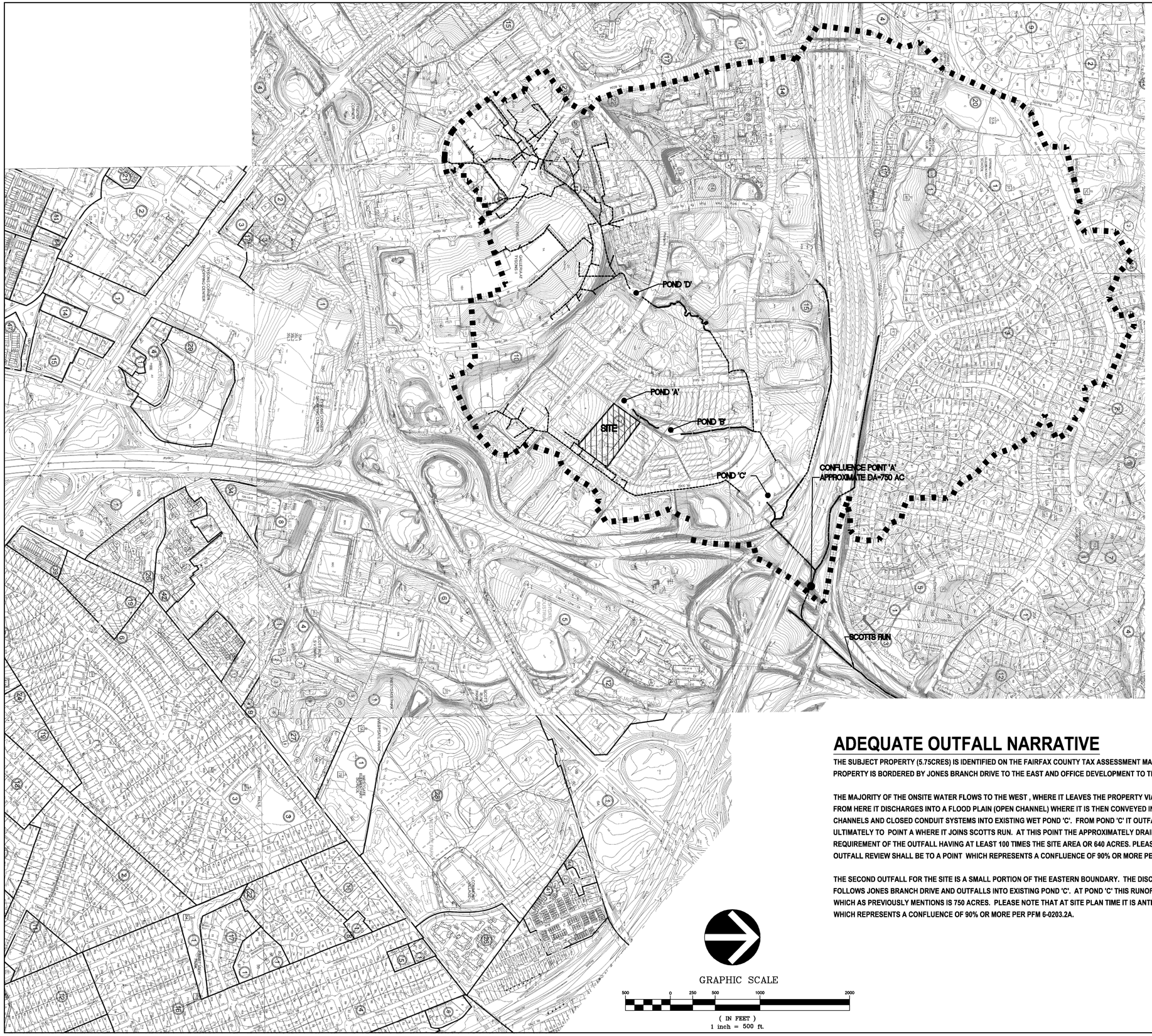
VIKA REVISIONS

REV. 2/3/14
INITIAL SUB. 12/18/13

DES.	DWN.
BC	BC

SCALE: N/A
PROJECT/FILE NO. VV7388F
SHEET NO. C-16

FILE: P:\projects\7388\VV7388F\CADD\PLANNING\PLANNING DRAWINGS\CDP\7388901-SWM.dwg USER: Cichocki DATE: February 3, 2014 TIME: 8:57:19 AM



LEGEND

- OPEN CHANNEL
- PIPE
- OVERALL WATERSHED

ADEQUATE OUTFALL NARRATIVE

THE SUBJECT PROPERTY (5.75CRES) IS IDENTIFIED ON THE FAIRFAX COUNTY TAX ASSESSMENT MAP AS 294-((07))-6, AND IS LOCATED IN THE TYSONS CORNER AREA. THE SUBJECT PROPERTY IS BORDERED BY JONES BRANCH DRIVE TO THE EAST AND OFFICE DEVELOPMENT TO THE NORTH, SOUTH, AND WEST. THERE ARE TWO OUTFALLS ASSOCIATED WITH THIS SITE.

THE MAJORITY OF THE ONSITE WATER FLOWS TO THE WEST , WHERE IT LEAVES THE PROPERTY VIA AN EXISTING CLOSED CONDUIT SYSTEM AND DISCHARGES INTO EXISTING WET POND 'A' FROM HERE IT DISCHARGES INTO A FLOOD PLAIN (OPEN CHANNEL) WHERE IT IS THEN CONVEYED INTO EXISTING WET POND 'B'. FROM HERE IT SI DISCHAGED VIA A COMBINATION OF OPEN CHANNELS AND CLOSED CONDUIT SYSTEMS INTO EXISTING WET POND 'C'. FROM POND 'C' IT OUTFALLS ACROSS THE DULLES AIRPORT ACCESS ROAD VIA MULTIPLE CULVERTS AND THEN ULTIMATELY TO POINT A WHERE IT JOINS SCOTTS RUN. AT THIS POINT THE APPROXIMATELY DRAINAGE AREA IS 750 ACRES, SATISFYING THE FAIRFAX COUNTY ZONING ORDINANCE REQUIREMENT OF THE OUTFALL HAVING AT LEAST 100 TIMES THE SITE AREA OR 640 ACRES. PLEASE NOTE THAT AT SITE PLAN TIME IT IS ANTICIPATED THE THE EXTENT OF THE ADEQUATE OUTFALL REVIEW SHALL BE TO A POINT WHICH REPRESENTS A CONFLUENCE OF 90% OR MORE PER PFM 6-0203.2A.

THE SECOND OUTFALL FOR THE SITE IS A SMALL PORTION OF THE EASTERN BOUNDARY. THE DISCHARGE FRO THIS AREA IS CONVEYED INTO AN EXISTING CLOSED CONDUIT SYSTEM THAT FOLLOWS JONES BRANCH DRIVE AND OUTFALLS INTO EXISTING POND 'C'. AT POND 'C' THIS RUNOFF IS JOINED BY THE RUNOFF FROM THE FIRST OUTFALL AND FLOWS ULTIMTLY TO POINT A WHICH AS PREVIOUSLY MENTIONS IS 750 ACRES. PLEASE NOTE THAT AT SITE PLAN TIME IT IS ANTICIPATED THE THE EXTENT OF THE ADEQUATE OUTFALL REVIEW SHALL BE TO POINT A1 WHICH REPRESENTS A CONFLUENCE OF 90% OR MORE PER PFM 6-0203.2A.

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7915 JONES BRANCH DRIVE

PROVIDENCE DISTRICT
FAIRFAX COUNTY, VIRGINIA

ADEQUATE OUTFALL

VIKA REVISIONS

REV. 2/3/14
INITIAL SUB. 12/18/13

DES.	DWN.
JDA	JDA

SCALE: AS SHOWN

PROJECT/FILE NO. VV7388F

SHEET NO. C-17

FILE: P:\projects\7388\VV7388F\CADD\PLANNING\PLANNING DRAWINGS\CDP\7388SD2-OUTFALL.dwg USER: kantonucci DATE: January 31, 2014 TIME: 12:12:58 PM

PROJECT: 7915 JONES BRANCH DRIVE

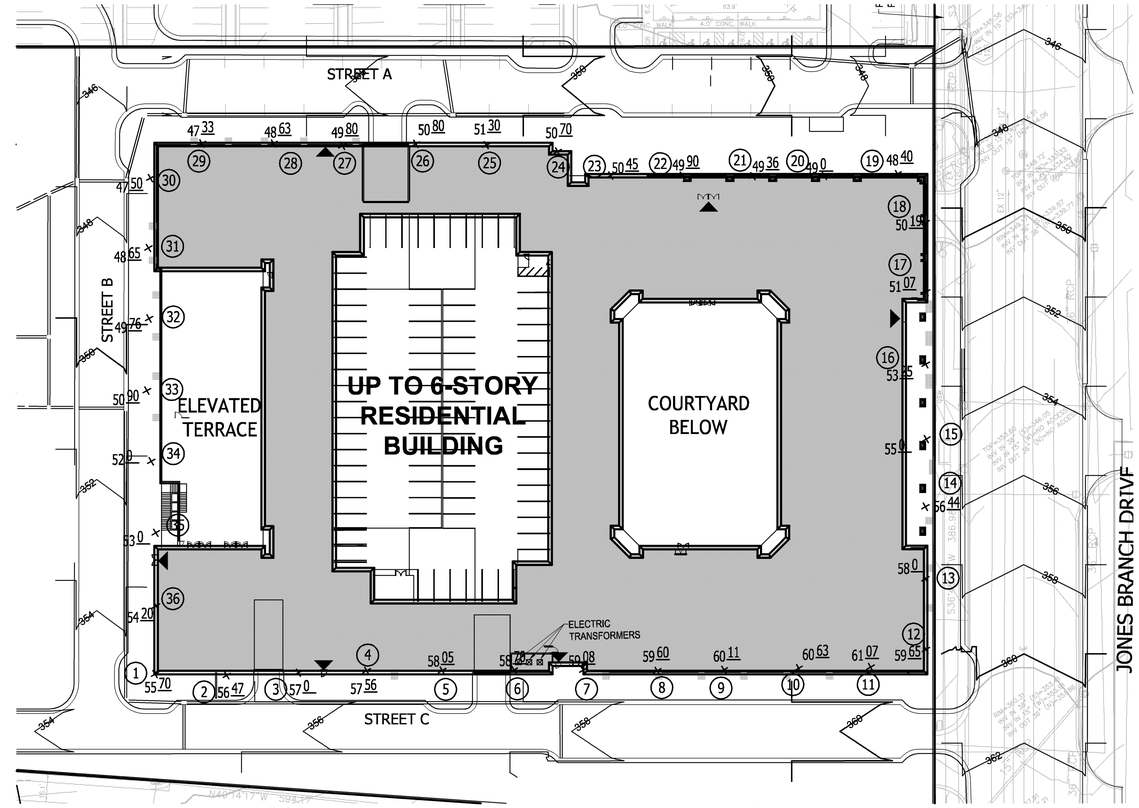
AVERAGE GRADE COMPUTATION

AVERAGE GRADE = 353.81

NUMBER OF SPOTS = 31

GRADE SUM = 10967.99

SPOT #	GRADE	SPOT #	GRADE
1	355.70	28	348.63
2	356.47	29	347.33
3	357.00	30	347.50
4	357.56	31	348.65
5	358.05		
6	358.70		
7	358.08		
8	359.60		
9	360.11		
10	360.63		
11	361.07		
12	359.65		
13	358.00		
14	356.44		
15	355.00		
16	353.25		
17	351.07		
18	350.19		
19	348.40		
20	349.00		
21	349.36		
22	349.50		
23	350.45		
24	350.70		
25	351.30		
26	350.80		
27	349.80		



G = +/- 353.81'

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

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7915 JONES BRANCH DRIVE
PROVIDENCE DISTRICT
FAIRFAX COUNTY, VIRGINIA

AVERAGE GRADE CALCULATION EXHIBIT

VIKA REVISIONS

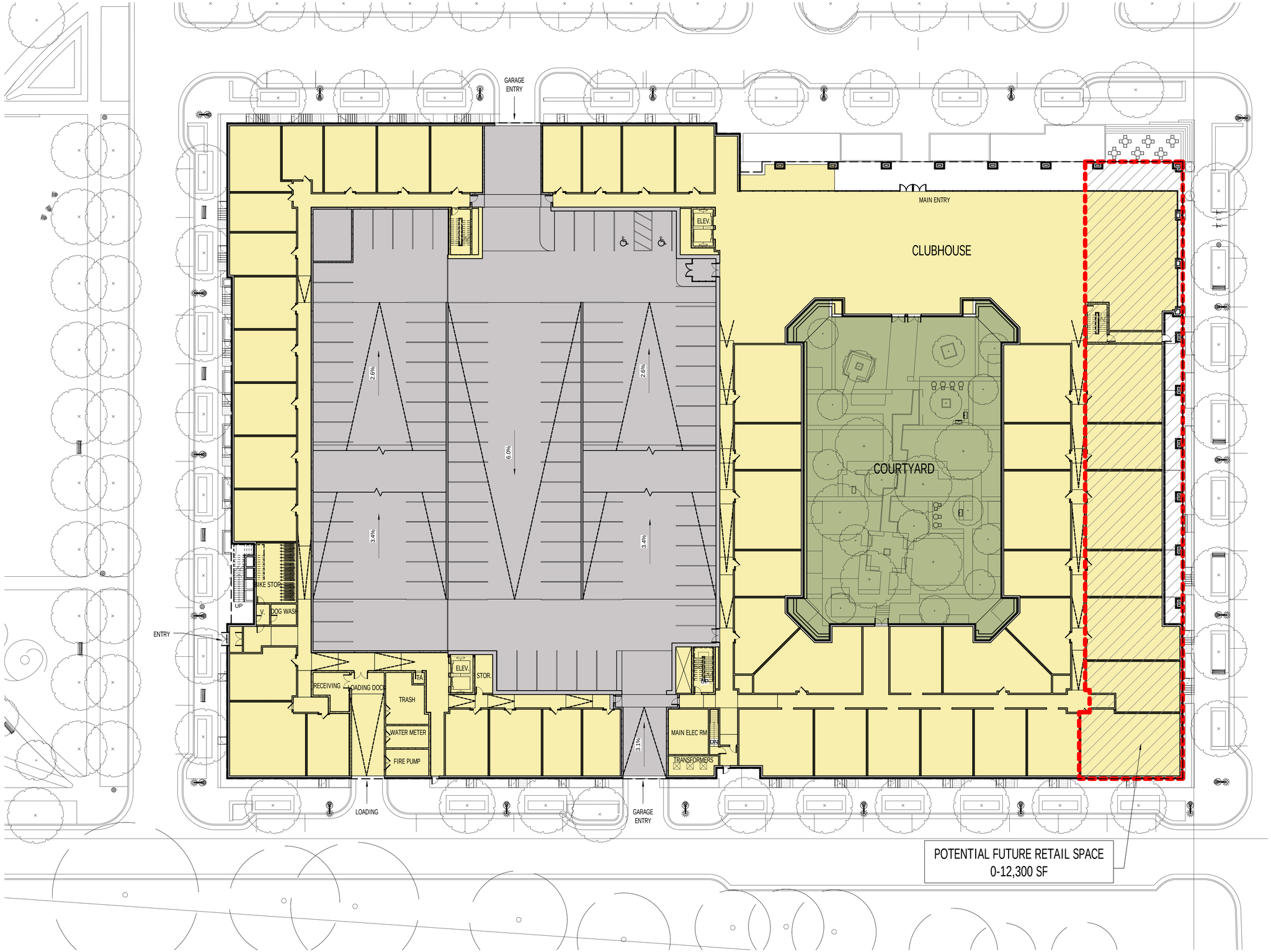
REV. 2/3/14
INITIAL SUB. 12/18/13

DES.	DWN.
RRC	DM

SCALE: 1"=40'

PROJECT/FILE NO. VV7388F

SHEET NO. C-18



1 A-1.0 FLOOR PLAN - GROUND FLOOR
1" = 20'-0"

NOT FOR CONSTRUCTION

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ISSUED FOR		DATE
2	CDP/FDP RESUBMISSION	2/3/2014
1	INITIAL CDP / FDP SUBMISSION	12/18/13

CONSULTANT

OWNER / DEVELOPER
Amherst Property LLC

PROJECT NAME
The Metropolitan at McLean

PROJECT ADDRESS
7915 Jones Branch Drive
Tysons Corner, Virginia

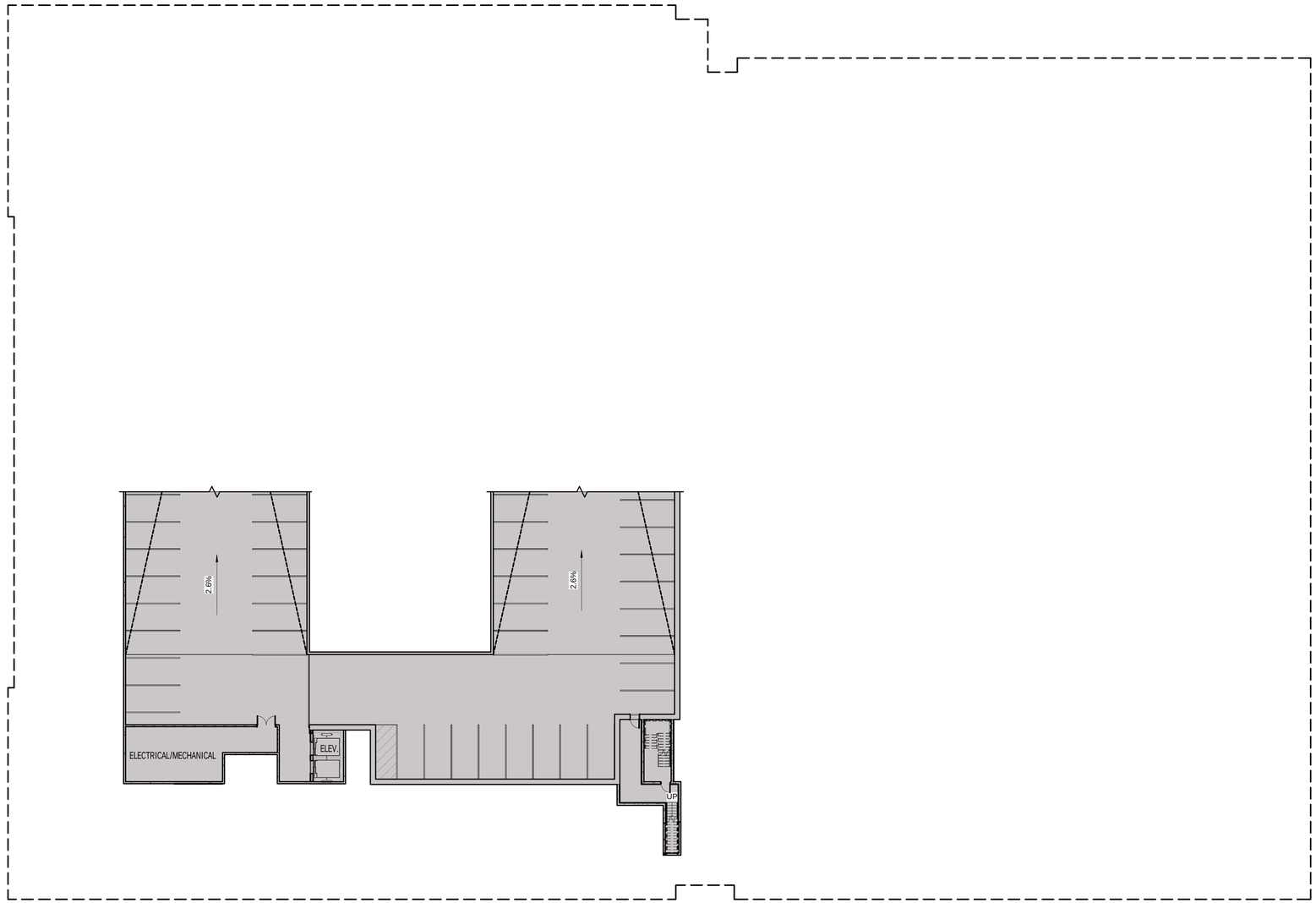
PROJECT MANAGEMENT
DCI Project No. 832-13
Owner Project No. XXXX
Drawn By: Author **Checked By:** Checker

SEAL

SHEET TITLE
GROUND FLOOR PLAN

SCALE
1" = 20'-0"

SHEET NUMBER
A-1.0



1 / A-1.1 FLOOR PLAN - BELOW GRADE PARKING
1" = 20'-0"

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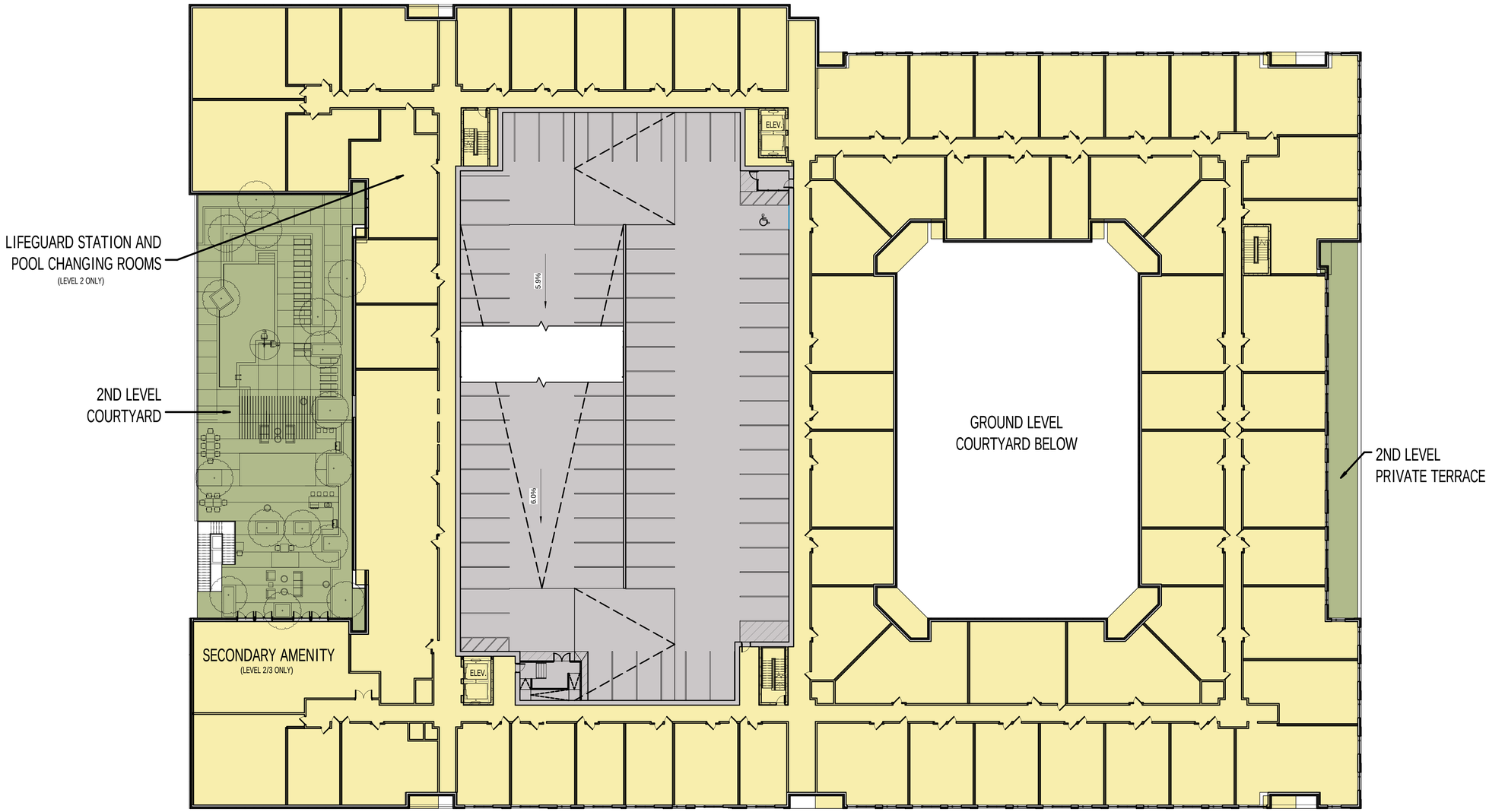
PROJECT MANAGEMENT
DCI Project No. 832-13
Owner Project No. XXXX
Drawn By: Author **Checked By:** Checker

SEAL

SHEET TITLE
BELOW GRADE PARKING

SCALE
1" = 20'-0"

SHEET NUMBER
A-1.1



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1	INITIAL CDP / FDP SUBMISSION	12/18/13

CONSULTANT

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PROJECT NAME
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PROJECT ADDRESS
7915 Jones Branch Drive
Tysons Corner, Virginia

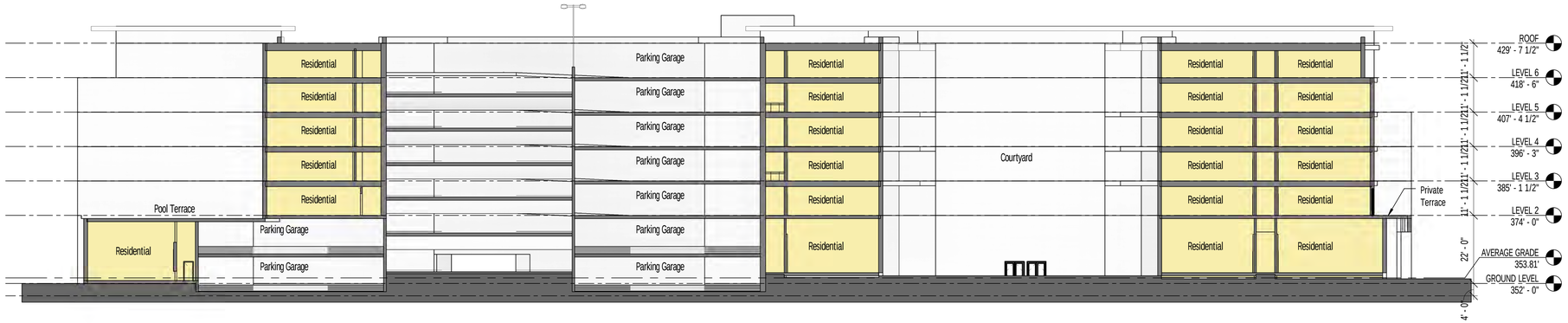
PROJECT MANAGEMENT
DCI Project No. 832-13
Owner Project No. XXXX
Drawn By: Author **Checked By:** Checker

SEAL

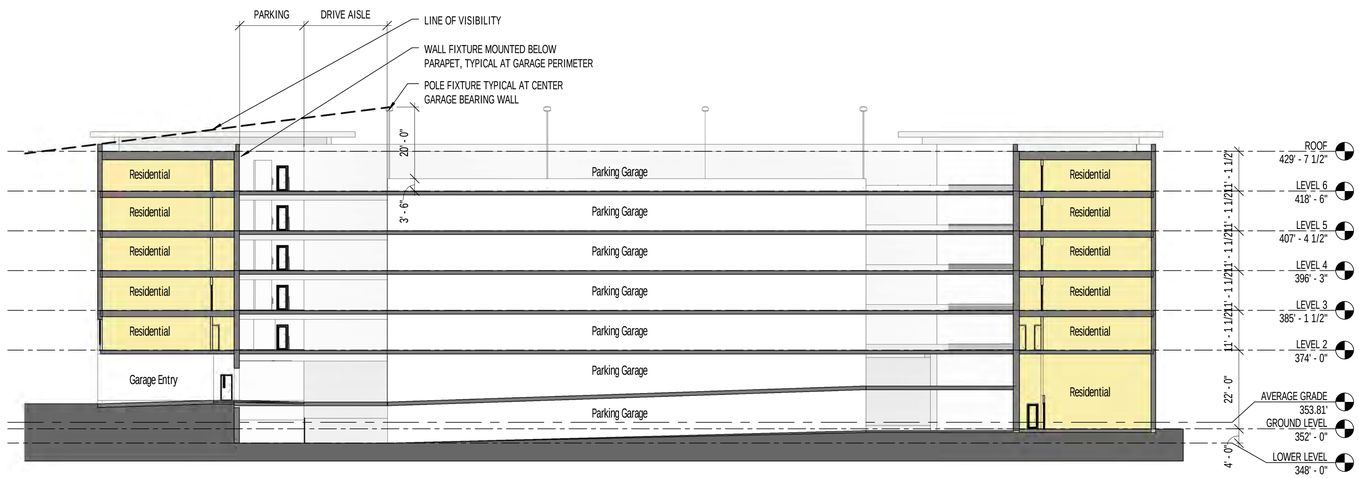
SHEET TITLE
TYPICAL LEVEL

SCALE
1" = 20'-0"

SHEET NUMBER
A-1.2



1 A-2.0 SECTION - LONGITUDINAL
1" = 20'-0"



2 A-2.0 SECTION - CROSS
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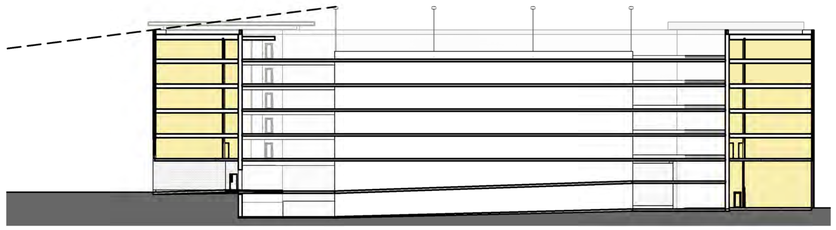

3 A-2.0 SITE SECTION - GARAGE LIGHTING
1/32" = 1'-0"

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CONSULTANT

OWNER / DEVELOPER
Amherst Property LLC

PROJECT NAME
The Metropolitan at McLean

PROJECT ADDRESS
7915 Jones Branch Drive
Tysons Corner, Virginia

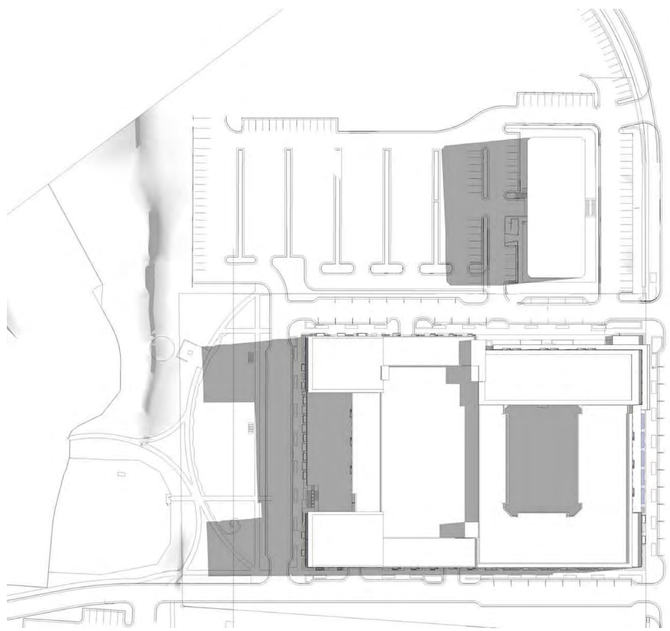
PROJECT MANAGEMENT
DCI Project No. 832-13
Owner Project No. XXXX
Drawn By: Author **Checked By:** Checker

SEAL

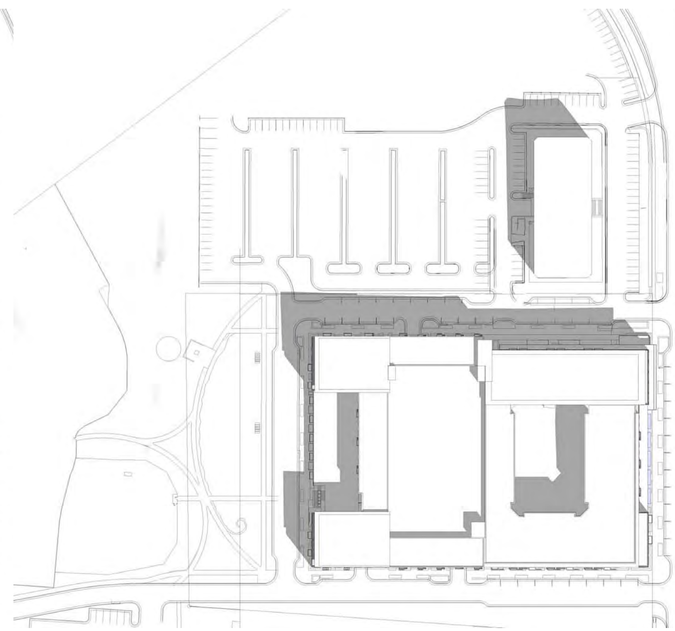
SHEET TITLE
BUILDING SECTIONS

SCALE
As indicated

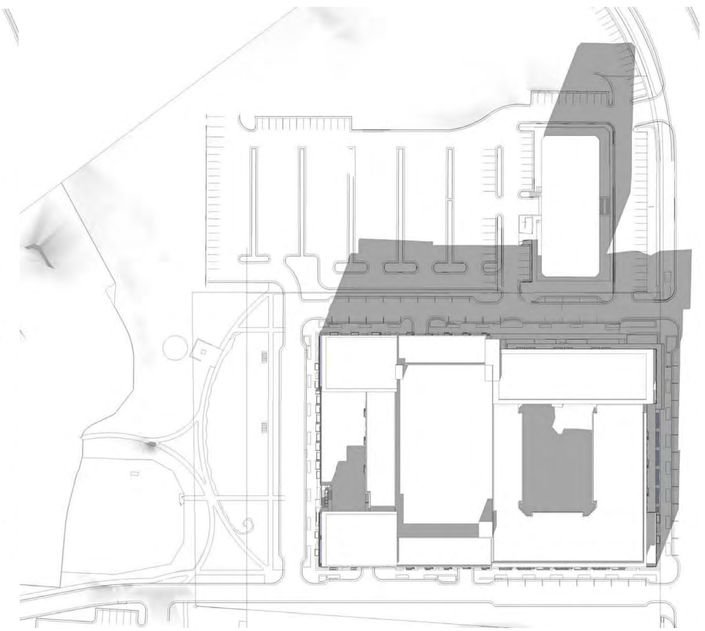
SHEET NUMBER
A-2.0



MARCH/SEPTEMBER - 9 AM



MARCH/SEPTEMBER - NOON



MARCH/SEPTEMBER - 3 PM

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DCI Project No. 832-13
Owner Project No. XXXX
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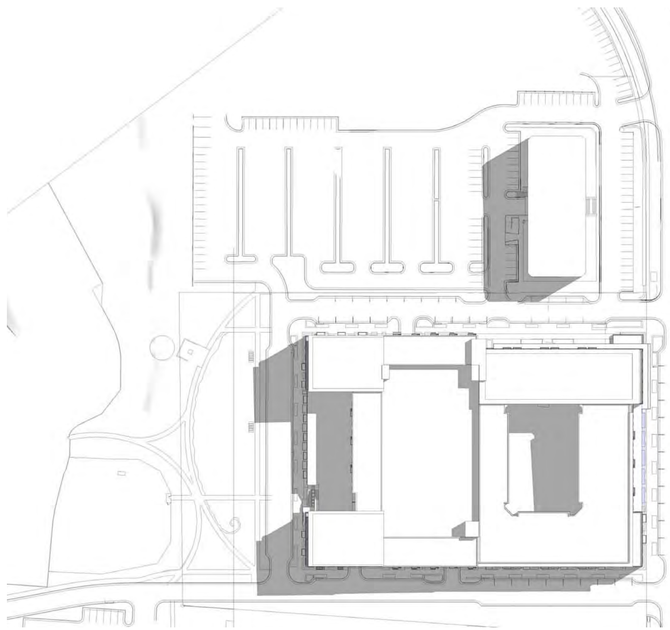
SEAL

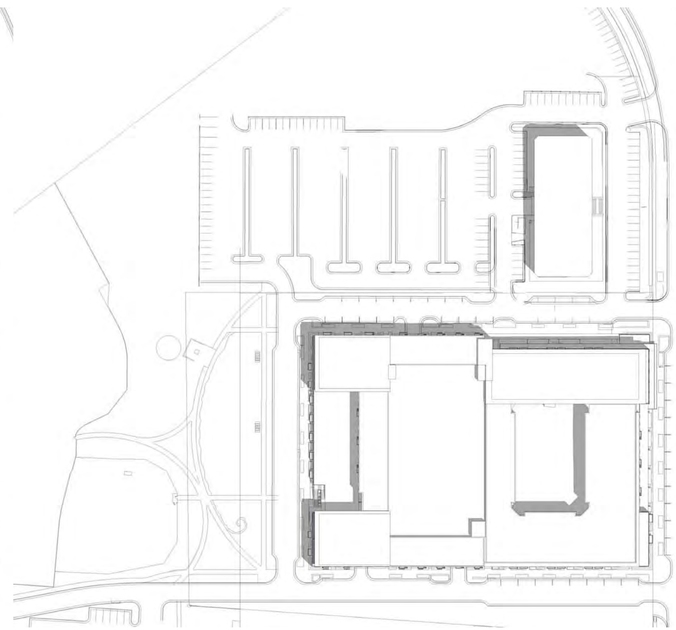
SHEET TITLE
SHADOW STUDY - MARCH/SEPTEMBER

SCALE

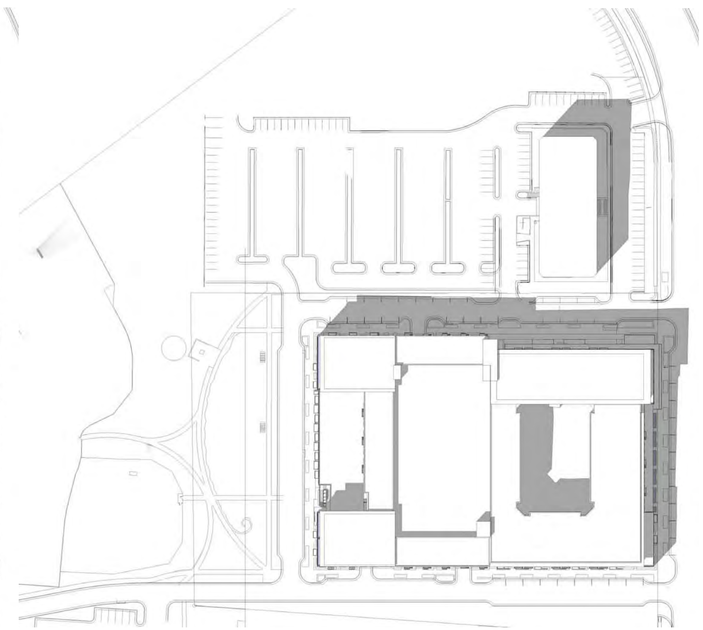
SHEET NUMBER
A-3.0



JUNE - 9 AM



JUNE - NOON



JUNE - 3 PM

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DCI Project No. 832-13
Owner Project No. XXXX
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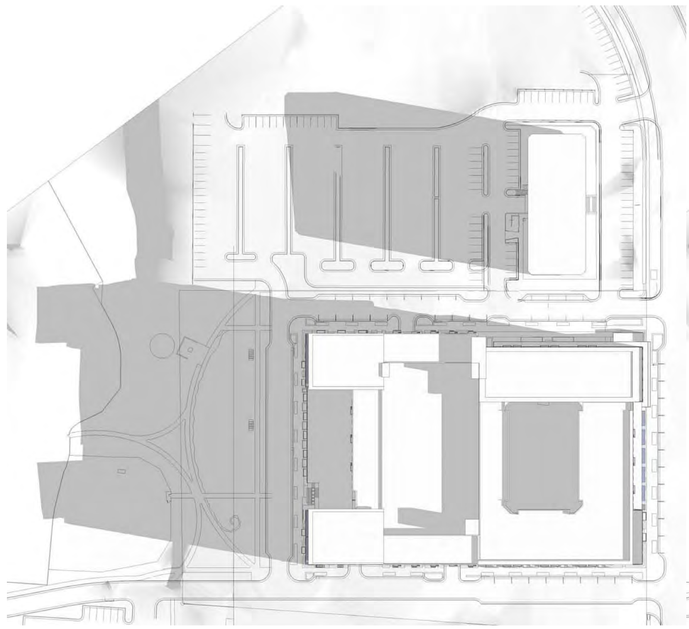
SEAL

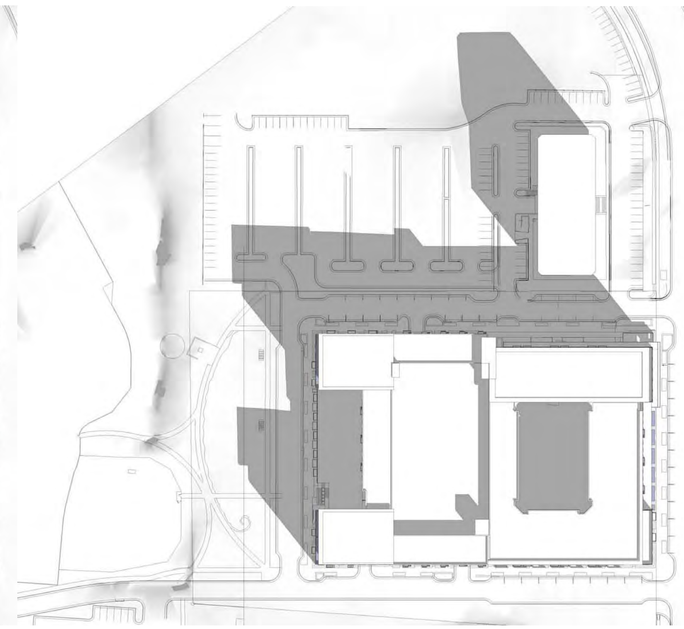
SHEET TITLE
SHADOW STUDY - JUNE

SCALE

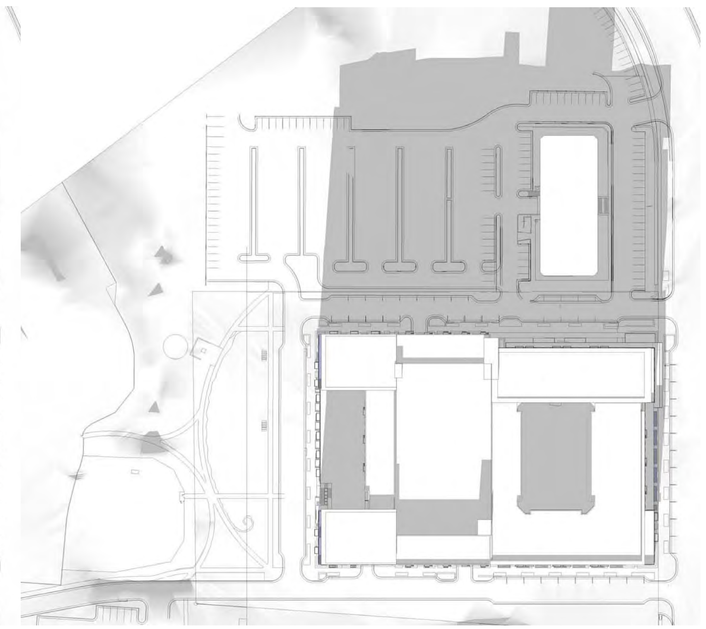
SHEET NUMBER
A-3.1



DECEMBER - 9 AM



DECEMBER - NOON



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Owner Project No. XXXX
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SEAL

SHEET TITLE
SHADOW STUDY - DECEMBER

SCALE

SHEET NUMBER
A-3.2

1 / A-4.0 ELEVATION - SOUTHEAST
1" = 20'-0"

2 / A-4.0 ELEVATION - NORTHEAST
1" = 20'-0"

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Owner Project No. XXXX
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SEAL

SHEET TITLE
ELEVATIONS

SCALE
1" = 20'-0"

SHEET NUMBER
A-4.0

1 A-5.0 ENTRY VIEW FROM JONES BRANCH DRIVE
6" = 1'-0"

2 A-5.0 VIEW FROM PARK
12" = 1'-0"

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DCI Project No. 832-13
Owner Project No. XXXX
Drawn By: Author **Checked By:** Checker

SEAL

SHEET TITLE
VIEWS

SCALE
As indicated

SHEET NUMBER
A-5.0

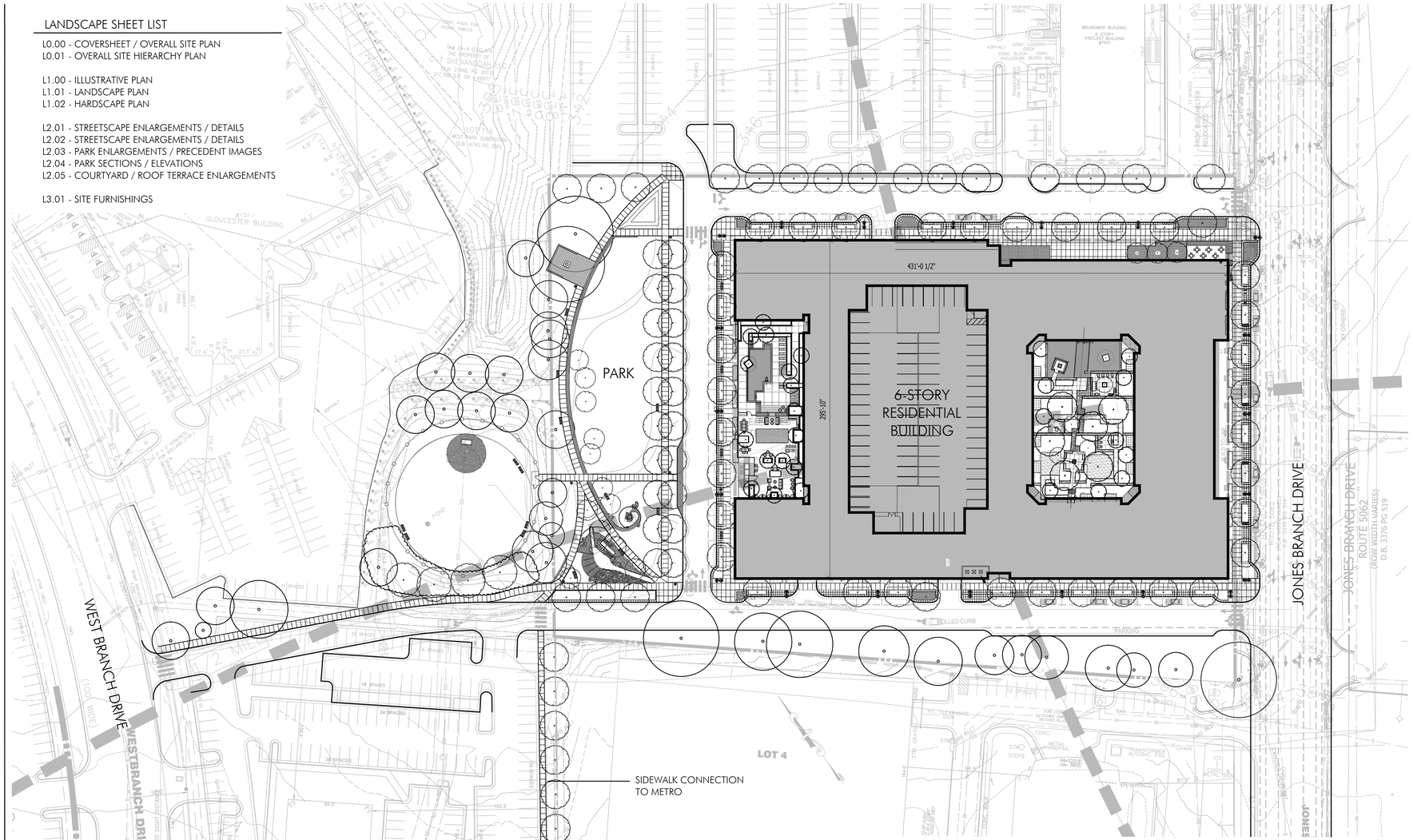
LANDSCAPE SHEET LIST

L0.00 - COVERSHEET / OVERALL SITE PLAN
L0.01 - OVERALL SITE HIERARCHY PLAN

L1.00 - ILLUSTRATIVE PLAN
L1.01 - LANDSCAPE PLAN
L1.02 - HARDSCAPE PLAN

L2.01 - STREETSCAPE ENLARGEMENTS / DETAILS
L2.02 - STREETSCAPE ENLARGEMENTS / DETAILS
L2.03 - PARK ENLARGEMENTS / PRECEDENT IMAGES
L2.04 - PARK SECTIONS / ELEVATIONS
L2.05 - COURTYARD / ROOF TERRACE ENLARGEMENTS

L3.01 - SITE FURNISHINGS



GENERAL LANDSCAPE NOTES :

1. THE PROPOSED LANDSCAPE WILL BE USED TO MEET THE MINIMUM TREE COVER REQUIREMENTS. LOCATIONS, SPECIES AND QUANTITIES MAY BE ADJUSTED WITH FINAL DESIGN.
2. UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE. FINAL LOCATIONS TO BE DETERMINED AT SITE PLAN.
3. ALL STREET LEVEL TREES ARE PLANTED ON GRADE UNLESS OTHERWISE NOTED.
4. THE PLAN AND IMAGERY SHOWN MAY BE MODIFIED WITH FINAL ENGINEERING AND DESIGN, PROVIDED THAT THE GENERAL DESIGN QUALITY AND CHARACTERISTICS ARE IN SUBSTANTIAL CONFORMANCE WITH THAT WHICH IS SHOWN.

PLANTING SCHEDULE

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	COND.	10-YR TREE CANOPY FT²	TREE CANOPY SUB-TOTAL FT²	COMMENTS
Canopy Trees								
GT	18	*Gleditsia triacanthos inermis*	Thornless Honeylocust	3" cal.	B&B	175	3150	full branching; single leader
PA	13	Platanus x acerifolia 'Bloodgood'	London Planetree	3" cal.	B&B	250	3250	full branching; single leader
QR	8	*Quercus rubra*	Red Oak	3" cal.	B&B	250	2000	full branching; single leader
ZS	22	*Zelkova serrata 'Village Green'*	Japanese Zelkova	3" cal.	B&B	250	5500	full branching; single leader
			TOTAL 10-YEAR TREE CANOPY PROVIDED BY PLANTING				13900	

Table 12.3 Tree Preservation Target Calculations and Statement

A	Pre-development area of existing tree canopy (from Exisiting Vegetation Map)(SF) =	15,273	see § 12-0508.2
B	Percentage of gross site area covered by existing tree canopy =	6%	
C	Percentage of 10-year tree canopy required for site =	10%	see Table 12.4
D	Percentage of the 10-year tree canopy requirement that should be met through tree preservation =	1%	
E	Proposed percentage of canopy requirement that will be met through tree preservation =	87.8%	
F	Has the Tree Preservation Target minimum been met?	Yes	Provide Yes or No
G	If No for line A 6, then a request to deviate from the Tree Preservation Target shall be provided on the plan that states one or more of the justifications listed in § 12-0508.3 along with a narrative that provides a site-specific explanation of why the Tree Preservation Target cannot be met. Provide sheet number where deviation request is located.	C-16	Provide sheet number, see § 12-0508.3
H	If step A 7 requires a narrative, it shall be prepared in accordance with § 12-0508.4	–	see § 12-0508.4
I	Place this information prior to the 10-year Tree Canopy Calculations as per instructions in Table 12.10.		

\\PRI-SRV01\alexandria\Land Projects\Amherst\dw g\LA\Sheets\[Amherst_FFx Co 10-yr Tree Canopy Requirements (FFX)

Table 12.10 10-Year Tree Canopy Calculation Worksheet

Step		Totals	Reference
A. Tree Preservation Target and Statement			
A 1	Place the Tree Preservation Target calculations and statement here preceeding the 10-year tree canopy	1%	see § 12-0508.2 for list of required elements and worksheet
B. Tree Canopy Requirement			
B1	Identify gross site area (SF) =	250,628	§ 12-0511.1A
B2	Subtract area dedicated to parks, road frontage(SF) =	33,182	§ 12-0511.1B
B3	Subtract area of exemptions(SF) =	0	§ 12-0511.1C(1) through § 12-0511.1C(6)
B4	Adjusted gross site area (B1-B2,B3)(SF) =	217,446	Square feet
B5	Identify the site's zoning and/or use	PTC	
B6	Percentage of 10-year tree canopy required =	10.0%	§ 12-0510.1 and Table 12.4
B7	Area of 10-year Tree Canopy Required (B4 x B6)(SF) =	21,745	Square feet
B8	Modification of 10-year Tree Canopy Requirements requested?	NO	Yes or No
B9	If B8 is yes, then list plan sheet where modification request is located		Sheet number
C. Tree Preservation			
C 1	Tree Preservation Target Area(SF) =	133	Square Feet
C 2	Total canopy area meeting standards of § 12-0400 (SF) =	15,273	Square Feet
C 3	C 2 x 1.25(SF) =	19,091	§ 12-0510.3B
C 4	Total canopy area provided by unique or valuable forest or woodland communities(SF) =	0	Square Feet
C 5	C 4 x 1.5(SF) =	0	§ 12-0510.3B(1)
C 6	total of canopy area provided by "Heritage," "Memorial," "Specimen," or "Street" trees (SF) =	0	Square Feet
C 7	C 6 x 1.5 to 3.0 (SF)=	0	§ 12-0510.3B(2)
C 8	Canopy area of trees within resource Protection Areas and 100-year floodplains (SF) =	0	Square Feet
C 9	C 8 x 1.0 (SF) =	0	§ 12-0510.3C(1)
C 10	Total of C 3, C 5, C 7 and C 9 =	19,091	If area of C 10 is less than B 7 remainder of requireent must be met through tree planting - go to D
D. Tree Planting			
D 1	Area of canopy to be met through tree planting (B 7-C10) =	2,653	Square feet
D 2	Area of canopy planted for air quality benefits =	0	Square feet
D 3	D 2 x 1.5 (SF) =	0	§ 12-0510.4B(1)
D 4	Area of canopy planted for energy conservation =	0	Square feet
D 5	D 4 x 1.5 (SF) =	0	§ 12-0510.4B(2)
D 6	Area of canopy planted for water quality benefits =	0	Square feet
D 7	D 6 x 1.25 (SF) =	0	§ 12-0510.4B(3)
D 8	Area of canopy planted for wildlife benefits =	0	Square feet
D 9	D 8 x 1.5 (SF) =	0	§ 12-0510.4B(4)
D 10	Area of canopy provided by native trees =	0	Square feet
D 11	D 10 x 1.5 (SF) =	0	§ 12-0510.4B(5)
D 12	Area of canopy provided by improved cultivars and varieties =	0	Square feet
D 13	D 12 x 1.25 (SF) =	0	§ 12-0510.4B(6)
D 14	Area of canopy provided through tree seedlings (SF) =	0	§ 12-0510.4D(1)
	D 14 x 1.0 =	0	Square feet
D 15	Area of canopy provided through native shrubs=		
	D15 x 1.0 =	0	
D 16	Percentage of D 14 represented by D 15 =	0.0%	Must not exceed 33% of D 14
	Area of canopy to be planted with no benefit credits =	13,900	Square feet
D 17	Total of canopy area provided through tree planting =	13,900	Square feet
D 18	Is an offsite planting relief requested?	NO	Yes or No
D 19	Tree Bank or Tree Fund?	NO	Yes or No § 12-0512
D 20	Canopy area requested to be provided through offsite banking or tree fund =	0	Square Feet
D 21	Amount to be deposited into the Tree Preservation and Planting Fund =	NO	
E. Total of 10-year Tree Canopy Provided			
E 1	Total of canopy area provided through tree preservation (C 10) =	19,091	Square Feet
E 2	Total of canopy area provided through tree planting (D 17) =	13,900	Square Feet
E 3	Total of canopy area provided through offsite mechanism (D 19) =	0	Square Feet
E 4	Total of 10-year Tree Canopy Provided (SF)= (E1+E2+E3)	32,991	Total of E 1 through E 3, area should meet or exceed area in B 7

\\PRI-SRV01\alexandria\Land Projects\Amherst\dw g\LA\Sheets\[Amherst_FFx Co 10-yr Tree Canopy Requirements (FFX)

CDP/ FDP SUBMISSION - 12.18.2013

TYSONS CORNER DISTRICT
FAIRFAX COUNTY, VIRGINIA

PARKER RODRIGUEZ, INC
PLANNING URBAN DESIGN LANDSCAPE ARCHITECTURE
101 North Union St. #320
Alexandria VA 22314
703.548.5010

REVISIONS

02.03.2014	COUNTY COMMENTS

Overall Landscape Site Plan

ORIGINAL ISSUE DATE
12.18.2013

DESIGNED BY
DC

DRAWN BY
ET/ JB

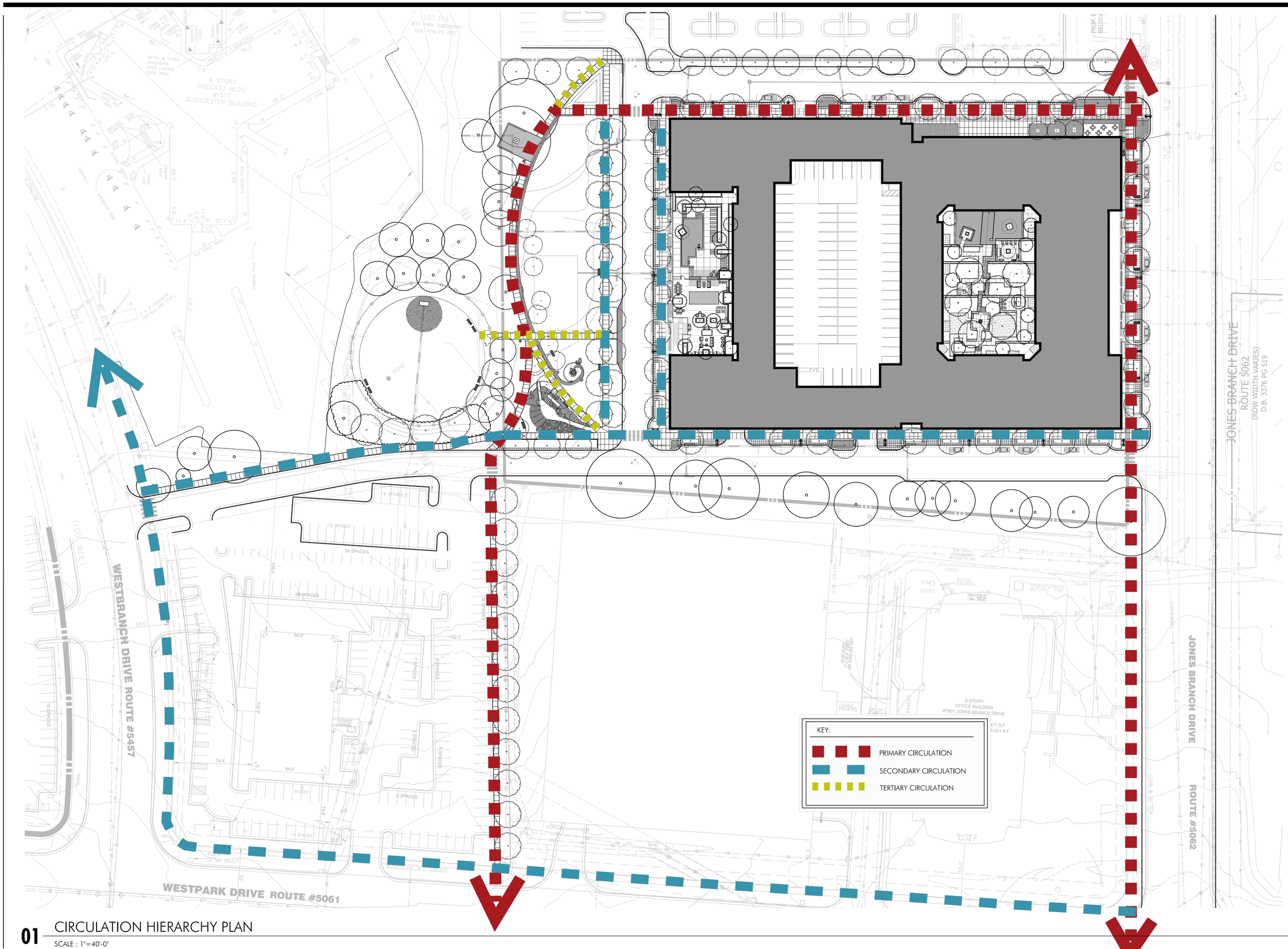
CHECKED BY
DC

NORTH

SCALE
1"=50'-0"

0 25 50 100
FEET

L0.00



01 CIRCULATION HIERARCHY PLAN

SCALE : 1"=40'-0"

TYSONS CORNER DISTRICT
FAIRFAX COUNTY, VIRGINIA

PARKER RODRIGUEZ, INC
PLANNING URBAN DESIGN LANDSCAPE ARCHITECTURE
101 North Union St. #320
Alexandria VA 22314
703.548.5010

REVISIONS

02.03.2014	COUNTY COMMENTS

Circulation Hierarchy Plan

ORIGINAL ISSUE DATE
12.18.2013

DESIGNED BY
DC

DRAWN BY
ET/ JB

CHECKED BY
DC

NORTH

SCALE
1"=40'-0"

0 20 40 80
FEET

CDP/ FDP SUBMISSION - 12.18.2013

L0.01

01 Illustrative Masterplan

SCALE : 1"=30'-0"

TYSONS CORNER DISTRICT
FAIRFAX COUNTY, VIRGINIA

PARKER RODRIGUEZ, INC
PLANNING URBAN DESIGN LANDSCAPE ARCHITECTURE
101 North Union St. #320
Alexandria VA 22314
703.548.5010

REVISIONS

02.03.2014	COUNTY COMMENTS

Illustrative Landscape Masterplan

ORIGINAL ISSUE DATE
12.18.2013

DESIGNED BY
DC

DRAWN BY
ET/ JB

CHECKED BY
DC

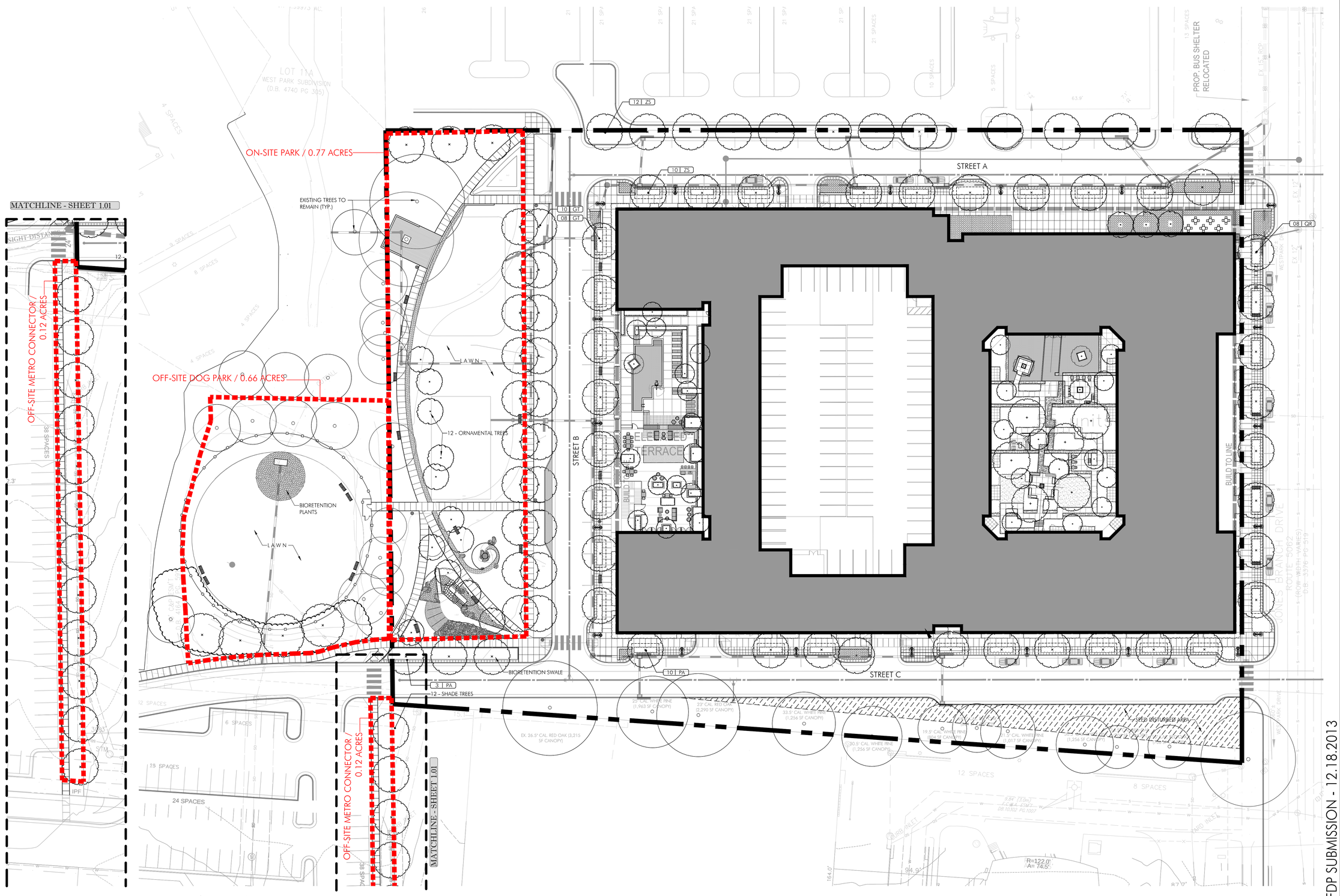
NORTH

SCALE
1"=30'-0"

0 15 30 60
FEET

CDP/ FDP SUBMISSION - 12.18.2013

L1.00



01 Landscape Plan

SCALE : 1"=30'-0"

TYSONS CORNER DISTRICT
FAIRFAX COUNTY, VIRGINIA

PARKER RODRIGUEZ, INC
PLANNING URBAN DESIGN LANDSCAPE ARCHITECTURE
101 North Union St. #320
Alexandria VA 22314
703.548.5010

REVISIONS

02.03.2014	COUNTY COMMENTS

Landscape/
Park Plan

ORIGINAL ISSUE DATE
12.18.2013

DESIGNED BY
DC

DRAWN BY
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CHECKED BY
DC

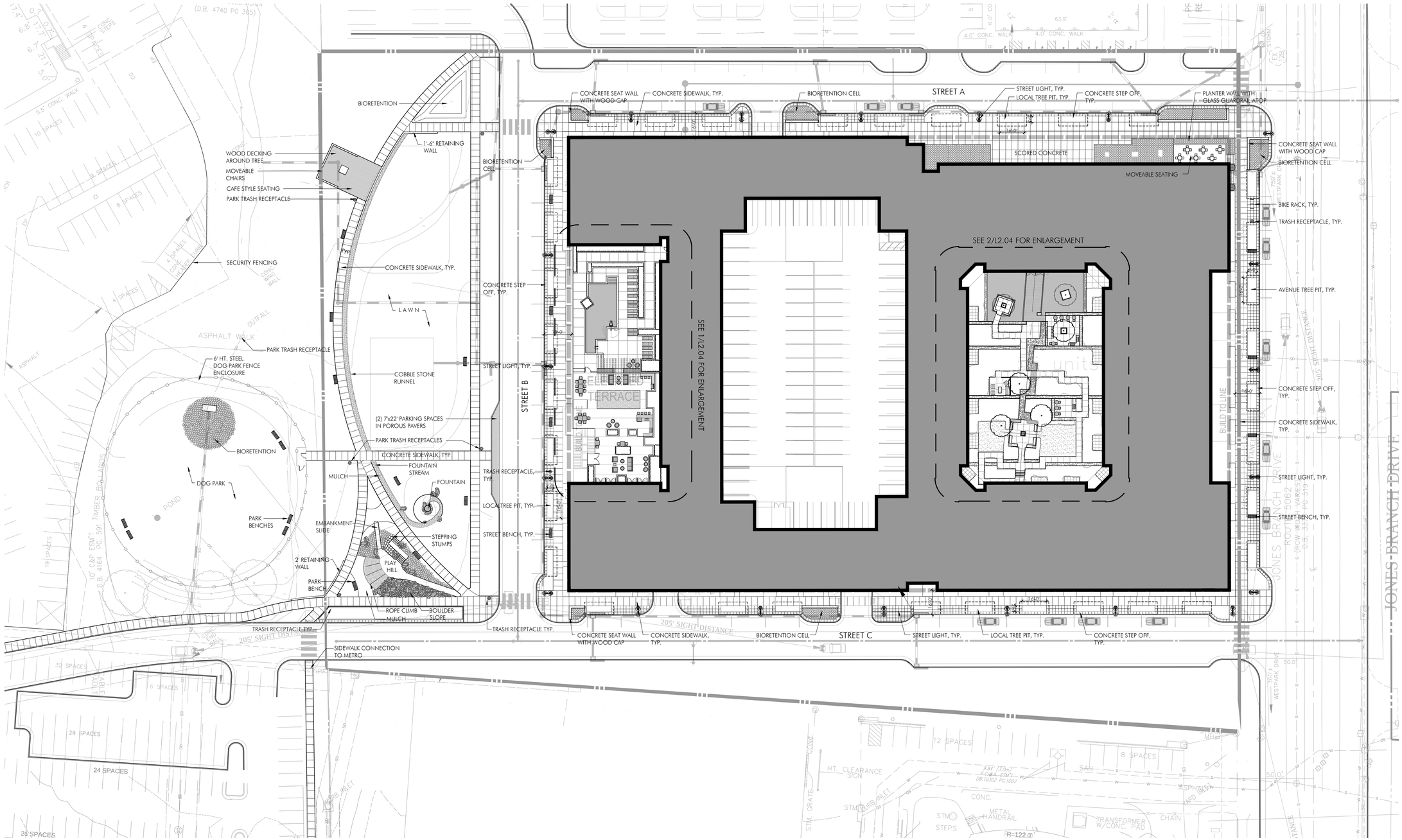
NORTH

SCALE
1"=30'-0"

0 15 30 60
FEET

CDP/ FDP SUBMISSION - 12.18.2013

L1.01



01 Hardscape Plan

SCALE : 1"=30'-0"

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FAIRFAX COUNTY, VIRGINIA

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02.03.2014	COUNTY COMMENTS

Hardscape Plan

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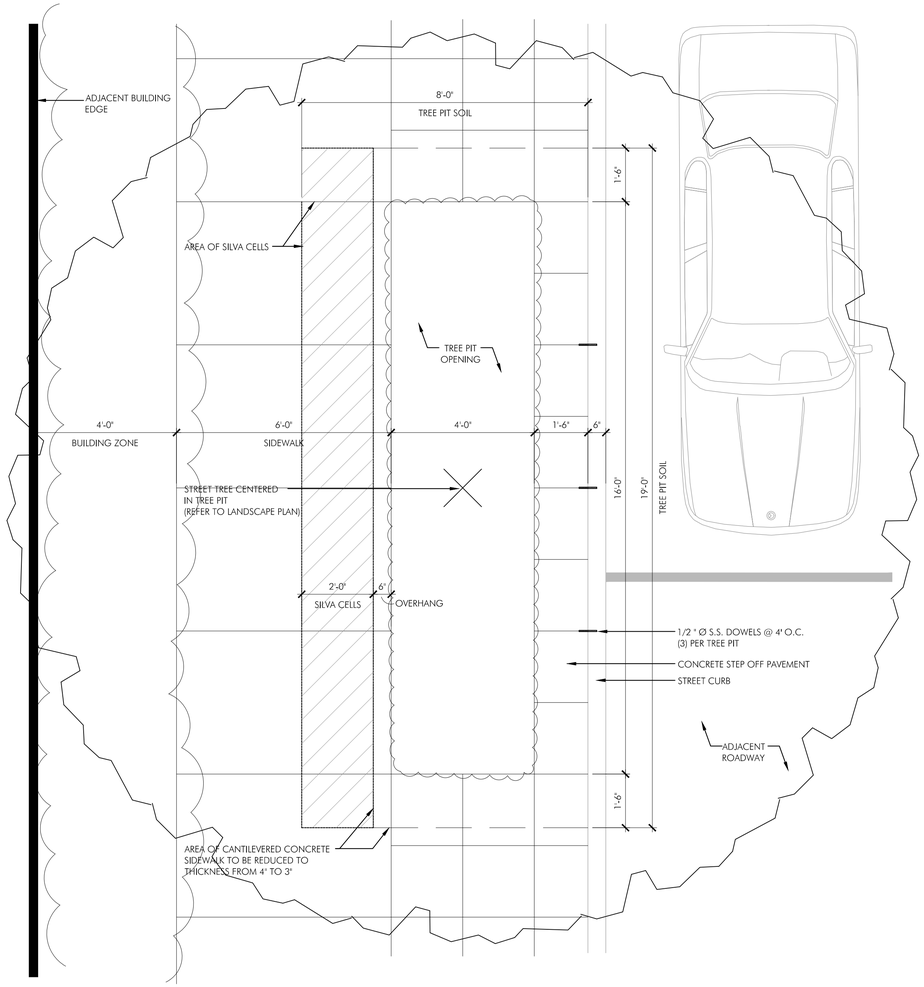
NORTH

SCALE
1"=30'-0"

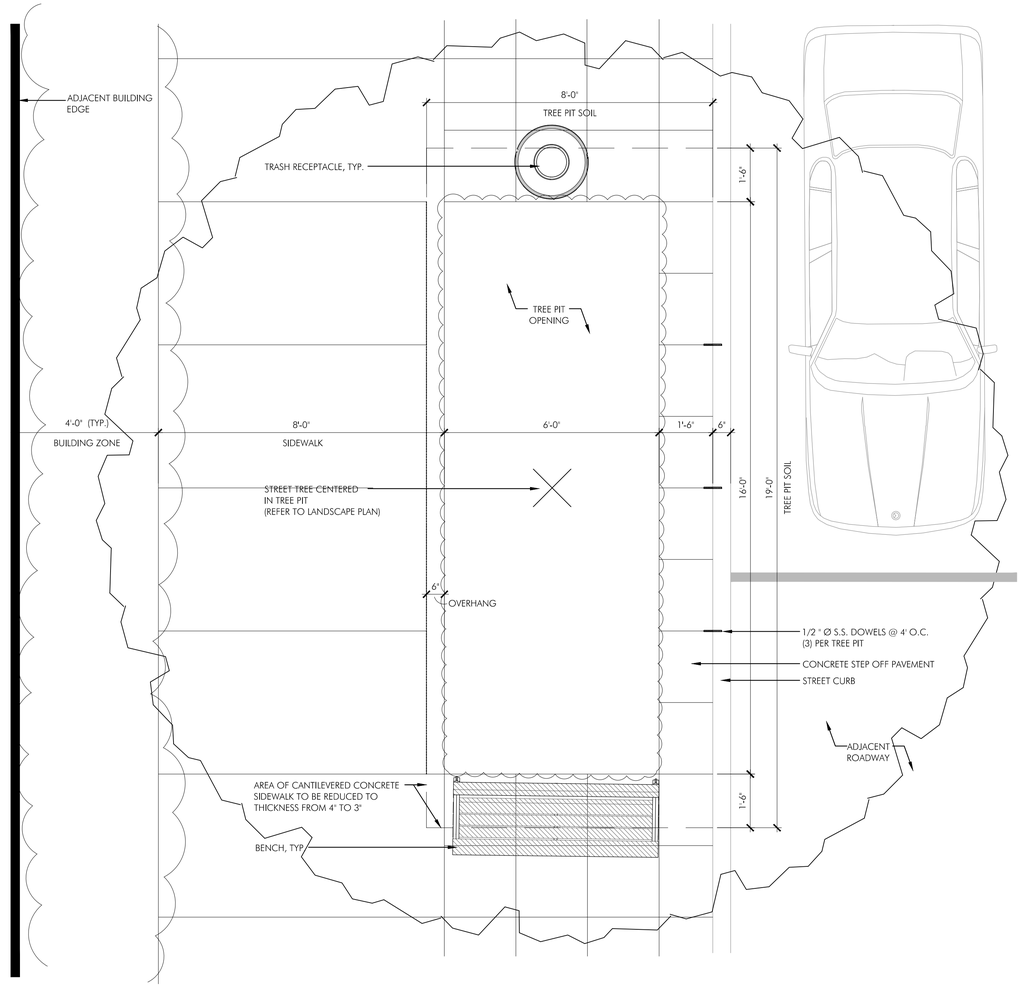
0 15 30 60
FEET

CDP/ FDP SUBMISSION - 12.18.2013

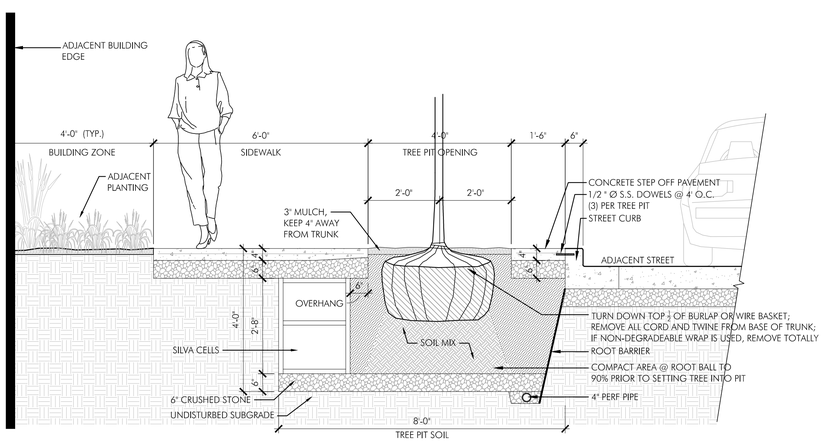
L1.02



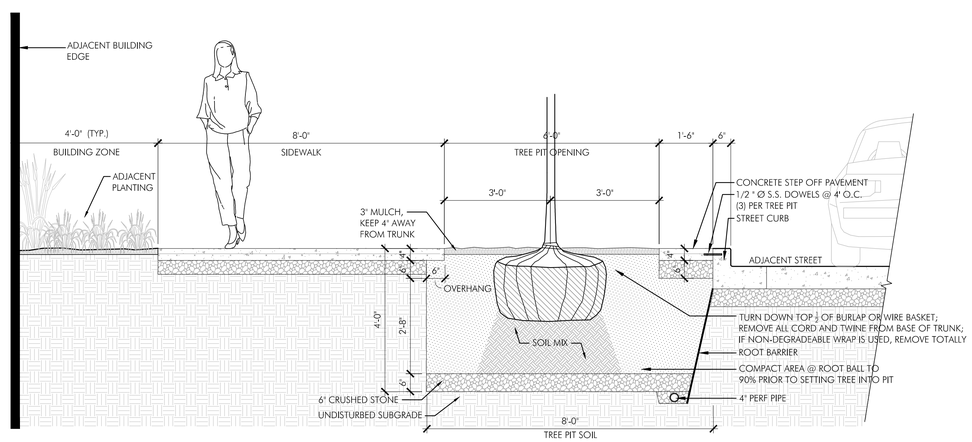
STREET TREE PIT PLAN



STREET TREE PIT PLAN



STREET TREE PIT SECTION



STREET TREE PIT SECTION

01 TREE PIT - LOCAL STREET

SCALE : 1/2"=1'-0"

02 TREE PIT - AVENUE

SCALE : 1/2"=1'-0"

TYSONS CORNER DISTRICT
FAIRFAX COUNTY, VIRGINIA

PARKER RODRIGUEZ, INC
PLANNING URBAN DESIGN LANDSCAPE ARCHITECTURE
101 North Union St. #320
Alexandria VA 22314
703.548.5010

REVISIONS

02.03.2014	COUNTY COMMENTS

Streetscape Enlargements

ORIGINAL ISSUE DATE
12.18.2013

DESIGNED BY
DC

DRAWN BY
ET/ JB

CHECKED BY
DC

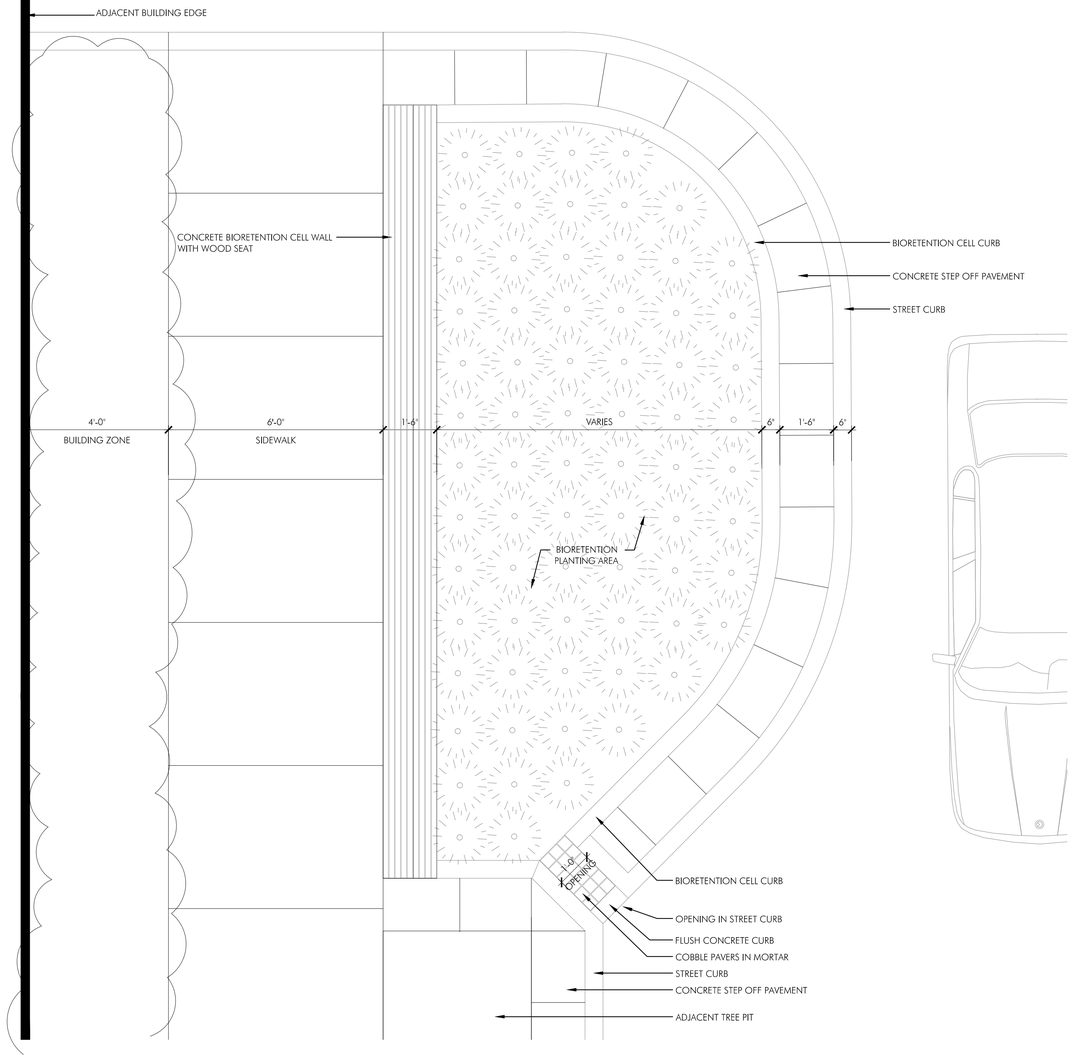
NORTH

SCALE
1"=30'-0"

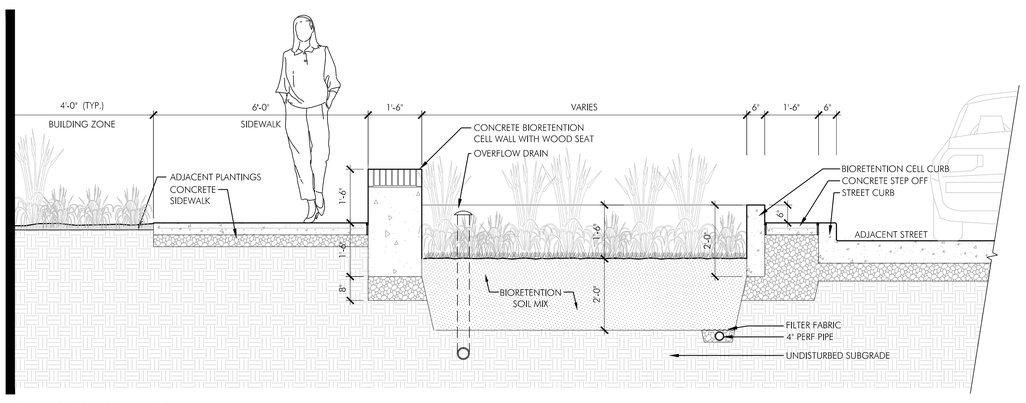
0 15 30 60
FEET

CDP/ FDP SUBMISSION - 12.18.2013

L2.01



BIORETENTION CELL PLAN



BIORETENTION CELL SECTION

01 BIORETENTION CELL ENLARGEMENT

SCALE : 1/2"=1'-0"

02 STREETSCAPE VIEW - AVENUE

SCALE : NTS

03 STREETSCAPE VIEW - LOCAL STREET

SCALE : NTS

TYSONS CORNER DISTRICT
FAIRFAX COUNTY, VIRGINIA

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REVISIONS

02.03.2014	COUNTY COMMENTS

Streetscape Enlargements and Perspectives

ORIGINAL ISSUE DATE
12.18.2013

DESIGNED BY
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DC

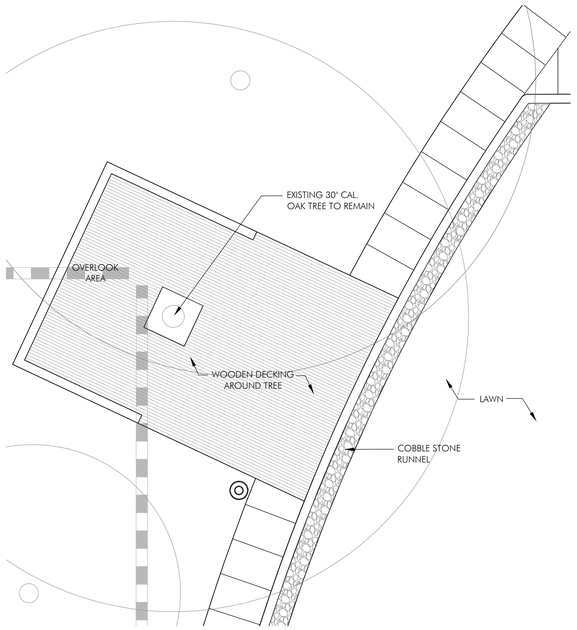
NORTH

SCALE
1/2"=1'-0"

0 1/4 1/2 1 FEET

CDP/ FDP SUBMISSION - 12.18.2013

L2.02



DECK UNDER TREE WITH CAFE SEATING AND MOVEABLE CHAIRS

GATHERING SPACE IN OPEN LAWN

01 DECK ENLARGEMENT

SCALE : 1/8"=1'-0"

02 PARK PERSPECTIVE: FROM NORTH LOOKING SOUTH

SCALE : N.T.S.

POOLING WATER STREAMING FROM GROUP OF BOULDERS

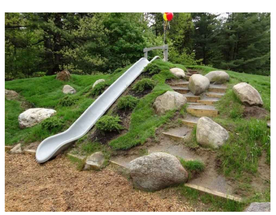
CONCRETE RUNNEL WITH WATER STREAMING FROM ROCK FOUNTAIN

STEPPING STUMPS

ROPE CLIMBING SLOPE AND SOFT MULCH AREA

BOULDER SLOPE FOR CLIMBING AND PLAYING

HILLSIDE SLIDE, BOULDERS, AND STEPS



HILLSIDE SLIDE, BOULDERS, AND STEPS

03 PLAY HILL & FOUNTAIN ENLARGEMENT

SCALE : 1/8"=1'-0"

TYSONS CORNER DISTRICT
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REVISIONS

02.03.2014	COUNTY COMMENTS

Park Enlargements

ORIGINAL ISSUE DATE
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DC

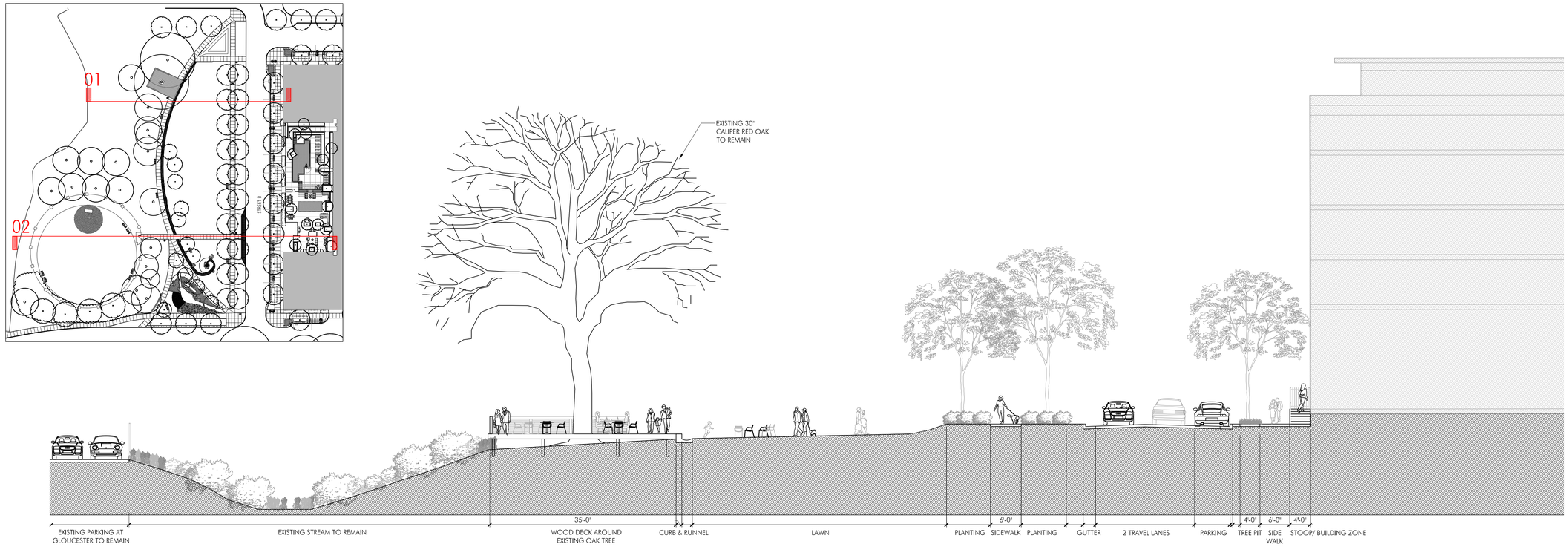
NORTH

SCALE
1/8"=1'-0"

0 4 8 16 FEET

CDP/ FDP SUBMISSION - 12.18.2013

L2.03



01 SECTION THROUGH NORTHERN END OF PARK, LOOKING NORTH

SCALE : 3/32"=1'-0"

02 SECTION THROUGH SOUTHERN END OF PARK, LOOKING SOUTH

SCALE : 3/32"=1'-0"

CDP/ FDP SUBMISSION - 12.18.2013

TYSONS CORNER DISTRICT
FAIRFAX COUNTY, VIRGINIA

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REVISIONS

02.03.2014	COUNTY COMMENTS

Park Sections

ORIGINAL ISSUE DATE
12.18.2013

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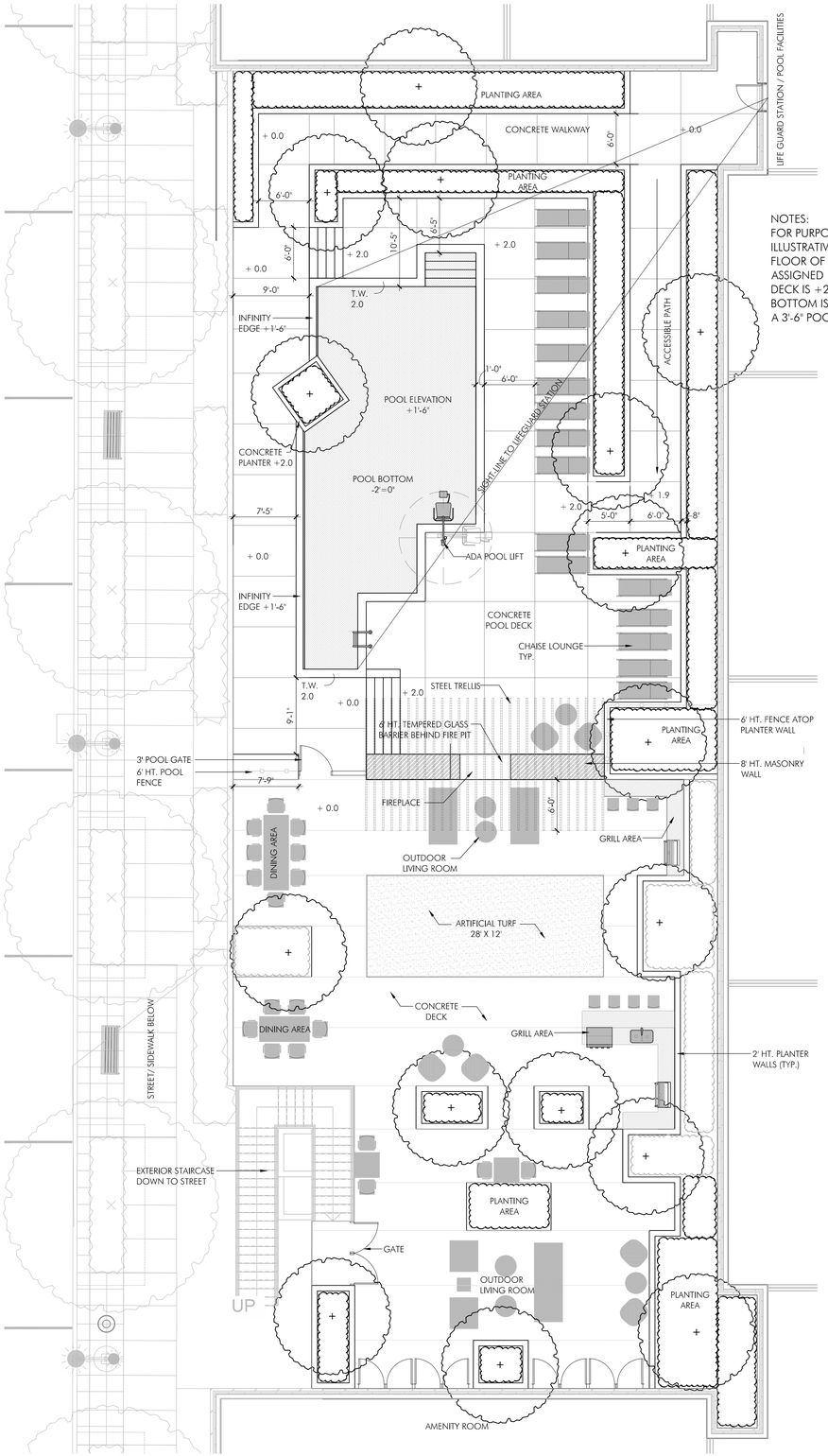
DC

NORTH

SCALE
3/32"=1'-0"

0 FEET

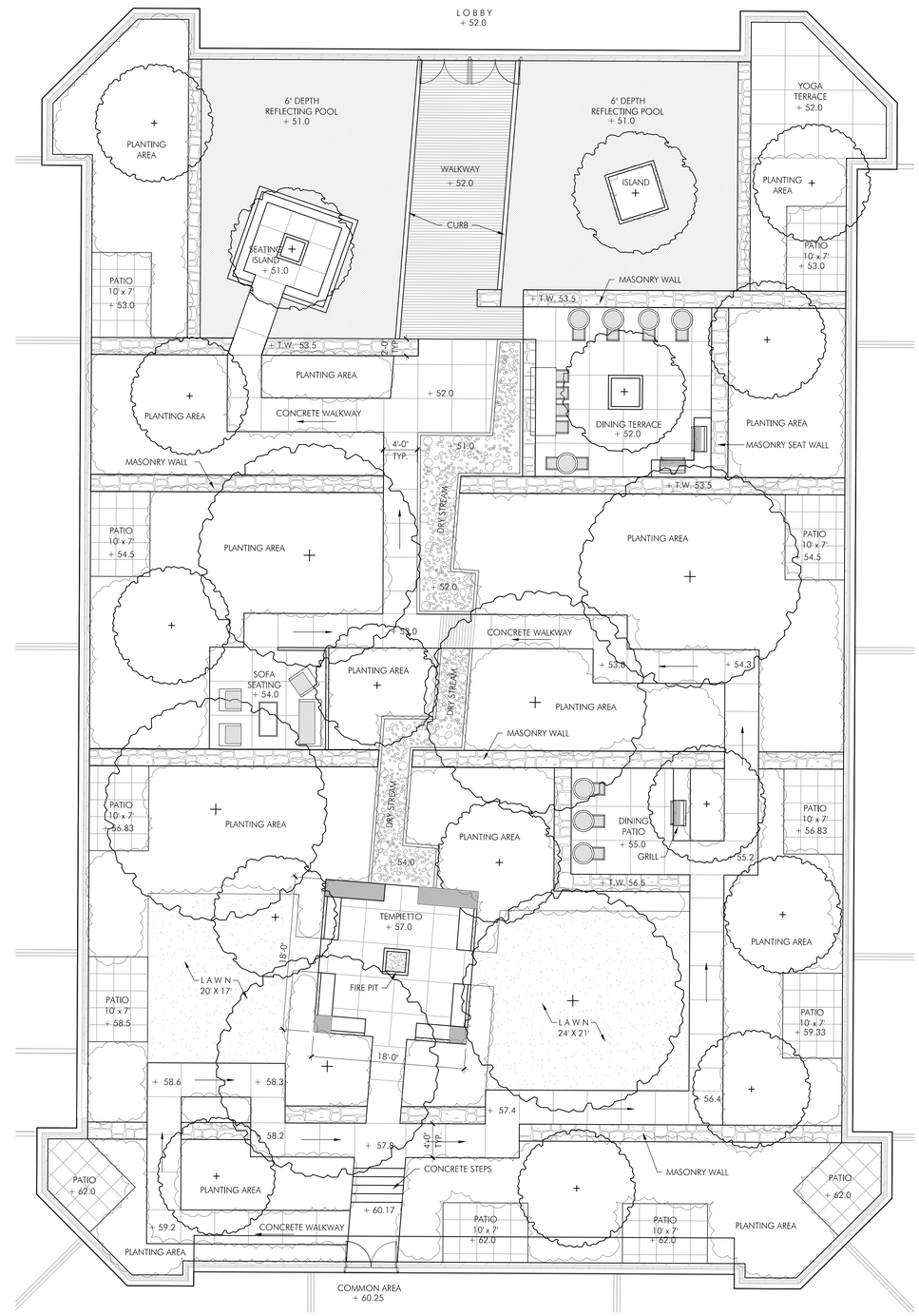
L2.04



NOTES:
FOR PURPOSE OF THIS ILLUSTRATIVE PLAN, FINISHED FLOOR OF THIS LEVEL IS ASSIGNED +0.00. THE POOL DECK IS +2'-0" & THE POOL BOTTOM IS -2'-0", PROVIDING A 3'-6" POOL DEPTH.

01 ROOF TERRACE ENLARGEMENT

SCALE : 1/8"=1'-0"



02 COURTYARD ENLARGEMENT PLAN

SCALE : 1/8"=1'-0"

TYSONS CORNER DISTRICT
FAIRFAX COUNTY, VIRGINIA

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703.548.5010

REVISIONS

02.03.2014	COUNTY COMMENTS

Roof Terrace and Courtyard Enlargements

ORIGINAL ISSUE DATE
12.18.2013

DESIGNED BY
DC

DRAWN BY
ET/ JB

CHECKED BY
DC

NORTH

SCALE
1"=10'-0"
0 5 10 20 FEET

CDP/ FDP SUBMISSION - 12.18.2013

L2.05

Manufacturer: Urbanscape
Model: Dewart Bench (DE1113C) with Horizontal Slats
Size: 6 Length with Back with Arms'
Color: Powder Coating (AAMA 2604-05)
Website: www.urbanscapefurniture.com

01 STREETSCAPE - BENCH

Scale: NTS

Manufacturer: Urbanscape
Model: Receptacle TA3F33P
Size: 32 Gallon
Color: Powder Coating (AAMA 2604-05)
Website: www.urbanscapefurniture.com

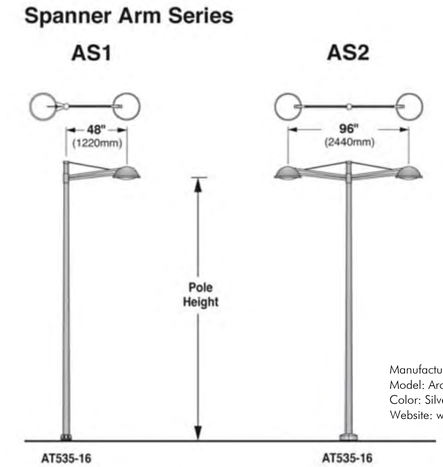
02 STREETSCAPE - TRASH RECEPTACLES

Scale: NTS

Manufacturer: Urbanscape
Model: Loop Bike Rack (BRH5381)
Color: Powder Coating (AAMA 2604-05)
Website: www.urbanscapefurniture.com

03 STREETSCAPE - BIKE RACK

Scale: NTS



Manufacturer: Se'lux
Model: Arc Spanner Arm Series
Color: Silver Finish
Website: www.selux.com

04 STREETSCAPE - LIGHT POLE

Scale: NTS

Manufacturer: Urbanscape
Model: Hanna Collection Arm Chair
Color: Powder Coating (AAMA 2604-05)
Website: www.urbanscapefurniture.com

05 STREETSCAPE - CAFE STYLE SEATING

Scale: NTS

Manufacturer: Forms and Furfaces
Model: Cordia Bench (Backed)
Color: Black
Website: www.forms-surfaces.com

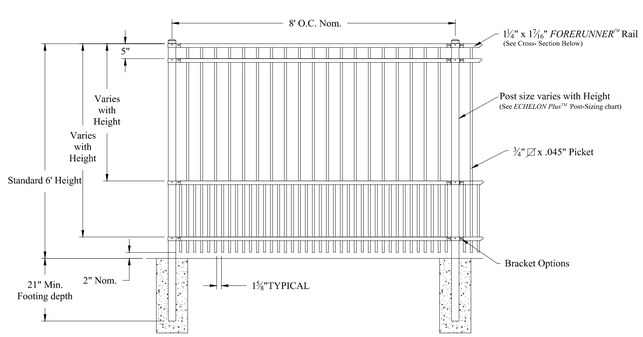
06 PARK - BENCH

Scale: NTS

Manufacturer: Landscape Forms
Model: Plainwell Trash Receptacle (32 Gallon)
Color: Black)
Website: www.forms-surfaces.com

07 PARK - TRASH RECEPTACLE

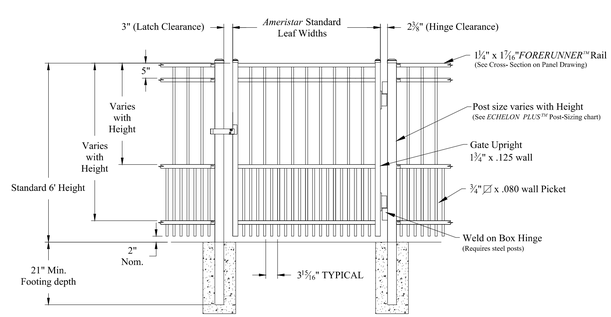
Scale: NTS



Manufacturer: Ameristar Fence Products
Model: Echelon Plus Puppy Panel
Size: 6 Length (Standard)
Color: Black
Website: www.ameristarfence.com

08 PARK - FENCE

Scale: NTS

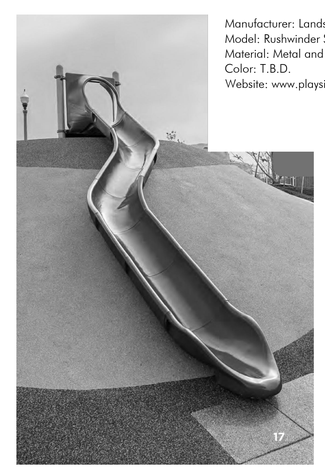


Single gate Arrangement

Manufacturer: Ameristar Fence Products
Model: Echelon Plus Puppy Panel Gate
Color: Black
Website: www.ameristarfence.com

09 PARK - GATE

Scale: NTS



Manufacturer: Landscape Structures
Model: Rushwinder Slide, Custom
Material: Metal and Plastic
Color: T.B.D.
Website: www.playsi.com

10 PARK - SLIDE

Scale: NTS

TYSONS CORNER DISTRICT
FAIRFAX COUNTY, VIRGINIA

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Alexandria VA 22314
703.548.5010

REVISIONS

02.03.2014	COUNTY COMMENTS

Streetscape
and Park
Site Furnishings

ORIGINAL ISSUE DATE
12.18.2013

DESIGNED BY
DC

DRAWN BY
ET/ JB

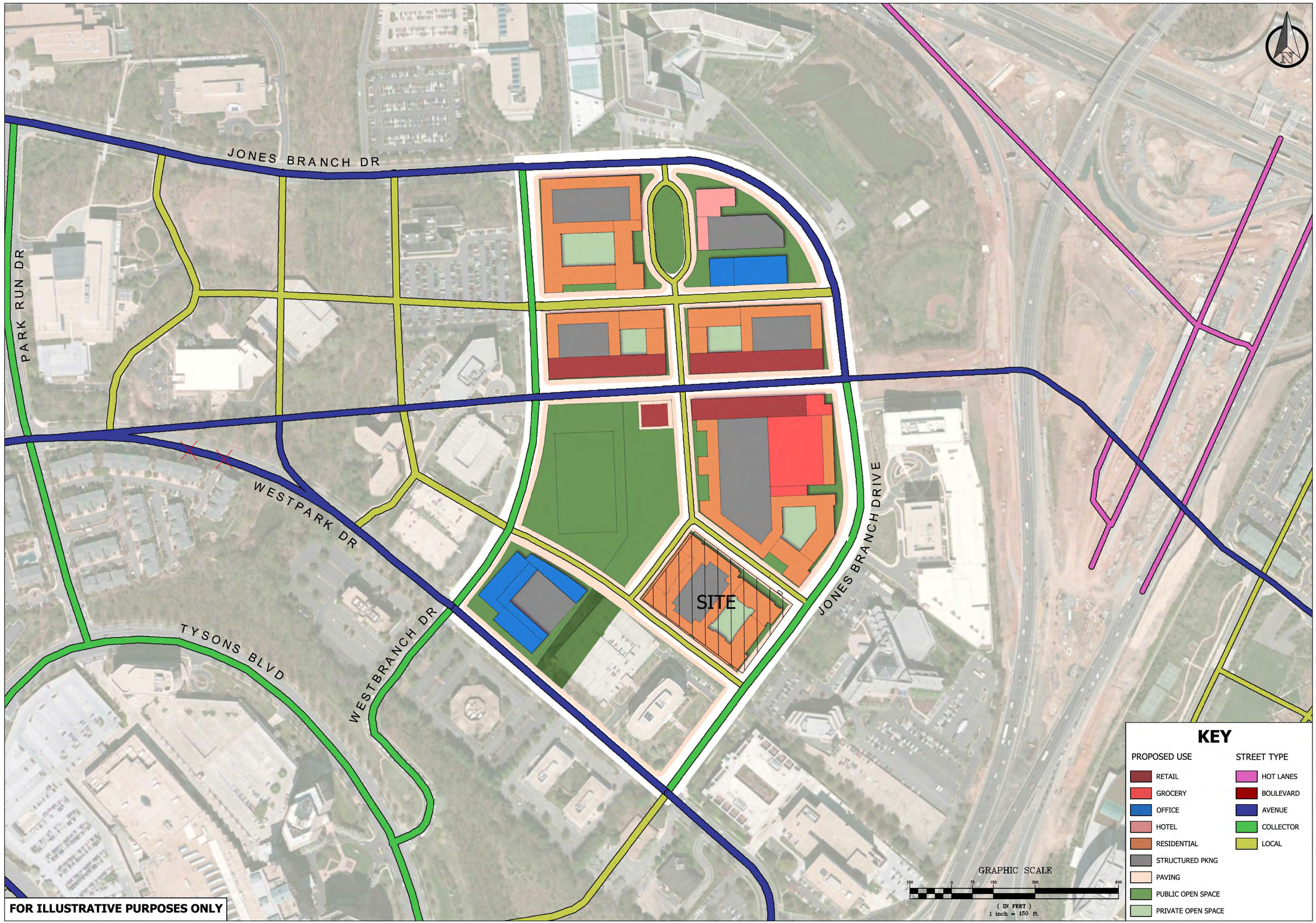
CHECKED BY
DC

NORTH

SCALE
1"=30'-0"
0 15 30 60
FEET

CDP/ FDP SUBMISSION - 12.18.2013

L3.01



FOR ILLUSTRATIVE PURPOSES ONLY

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VIKA VIRGINIA LLC
8180 GREENSBORO DRIVE SUITE 200 ■ TYSONS, VIRGINIA 22102
(703) 442-7800 ■ FAX (703) 761-2797
W W W . V I K A . C O M

7915 JONES BRANCH DRIVE

PROVIDENCE DISTRICT
FAIRFAX COUNTY, VIRGINIA

CONCEPTUAL MASTER PLAN

VIKA REVISIONS

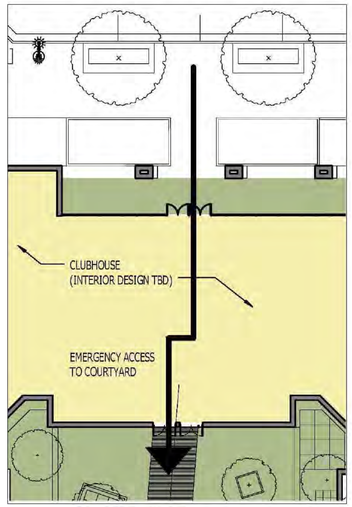
REV. 2/3/14
INITIAL SUB. 12/18/13

DES.	DWN.
RRC	

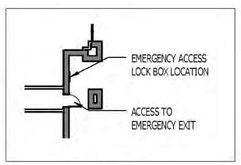
SCALE: 1"=150'

PROJECT/FILE NO. VV7388F

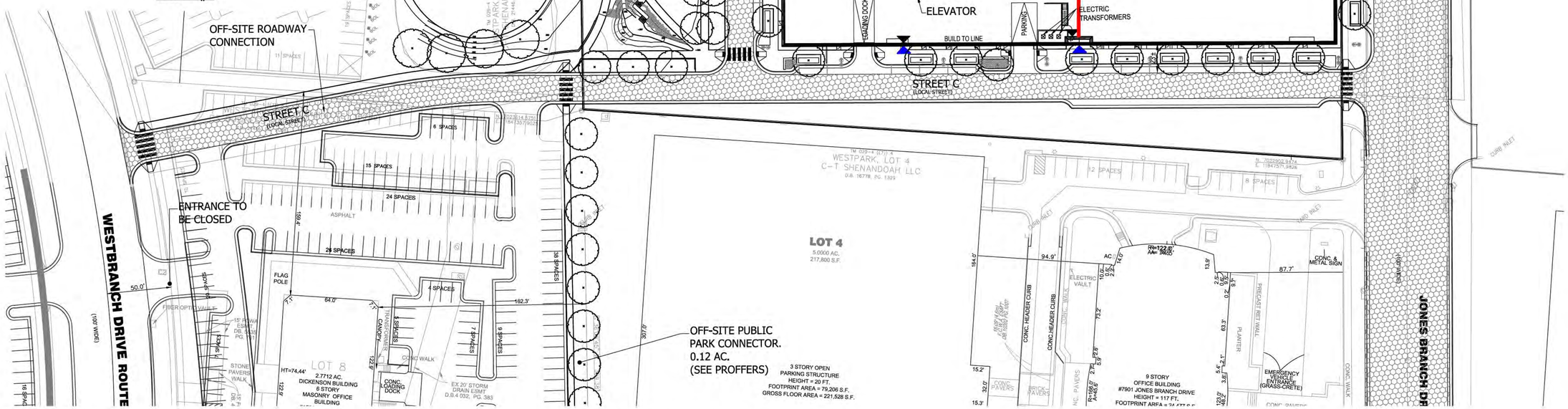
SHEET NO. S-1



DETAIL #1



DETAIL #2



BUILDING DATA

BUILDING	RESIDENTIAL
TYPE OF CONSTRUCTION	TYPE III OVER TYPE IA PODIUM
NUMBER OF STORIES	6
BUILDING HEIGHT	81'-4" (UP TO 85')
USE GROUP	R-2 (RESIDENTIAL) A-3 (CLUBHOUSE & COURTYARDS) S-2 (PARKING)
BUILDING FOOT PRINT	123,523 S.F.
FULLY SPRINKLERED PER NFPA 13	✓ YES ___ NO
FIRE WALL RATING	3 HOUR SEPARATION AT PODIUM CAP 3 HOUR FIRE WALL BETWEEN S-2 & R-2 2 HOUR FIRE WALL BETWEEN FIRE ZONES OF R-2

FIRE ACCESS SHEET REQUIREMENTS

1) ALL ROADS PROPOSED BY THE PROJECT, AS WELL AS ADJOINING ROADS; THE CLASSIFICATIONS OF THE ROADS (I.E. ARTERIAL, COLLECTOR, ETC.) SHOULD BE NOTED. (PROVIDED)
2) LOCATION AND DIMENSIONS OF ALL FIRE ACCESS LANES AND TURNAROUNDS; VEHICLE ACCESS TO THE REAR OF BUILDINGS, INCLUDING INTERIOR COURTYARDS FOR STICK-BUILD, DONUT-SHAPED BUILDINGS, NEEDS TO BE SHOWN. (PROVIDED)
3) ARROW DIAGRAMS INDICATING WHERE EMERGENCY VEHICLES CAN ACCESS BUILDINGS. (PROVIDED)
4) DIMENSIONS OF THE DISTANCE BETWEEN THE PORTIONS OF THE ROADWAY THAT ARE ACCESSIBLE TO FIRE TRUCKS AND THE FAÇADES OF THE BUILDINGS. THE TARGET DISTANCE IS BETWEEN 15 AND 30 FEET SEPARATION. (PROVIDED)
5) IMPROVEMENTS PLANNED FOR THE AREA BETWEEN THE PORTIONS OF THE ROADWAY THAT ARE ACCESSIBLE TO FIRE TRUCKS AND THE FACADES OF THE BUILDINGS, INCLUDING PARKING LANES, GARAGE PODIUMS, LANDSCAPED AREAS, STEEP SLOPES, SIDEWALKS, PLAZAS, YARDS, OUTDOOR SEATING AREAS, STEPS, PLANTERS, SCULPTURES, ETC. (PROVIDED)
6) CLEAR IDENTIFICATION OF BUILDING FOOTPRINTS, CANTILEVERED EXTENSIONS, PENTHOUSES, BALCONIES, PATIOS, ETC. (PROVIDED)
7) HEIGHTS OF THE PROPOSED BUILDINGS; FOR BUILDINGS WITH MULTIPLE HEIGHTS DUE TO STEP BACKS, THE HEIGHT AND NUMBER OF STORIES OF EACH BUILDING SEGMENT SHOULD BE CLEARLY NOTED. (PROVIDED)
8) LOCATION OF OVERHEAD UTILITY LINES. (PROVIDED)
9) IDENTIFICATION OF CONSTRUCTION TYPE FOR EACH BUILDING; FOR MULTIPLE BUILDINGS LOCATED ON A SINGLE GARAGE PODIUM, THE CONSTRUCTION TYPE FOR EACH BUILDING MUST BE IDENTIFIED - THE GARAGE PODIUM CAN BE IDENTIFIED AS A BLOCK, WITH EACH BUILDING IDENTIFIED SEPARATELY. EACH PORTION OF STRUCTURE WITH A DIFFERENT CONSTRUCTION TYPE IS CONSIDERED A SEPARATE BUILDING. STRUCTURES THAT ARE SEPARATED BY A FIRE WALL ARE ALSO CONSIDERED SEPARATE BUILDINGS. (PROVIDED)
10) TYPE OF BUILDING SKIN MATERIAL (COMBUSTIBLE/NON-COMBUSTIBLE), TYPE OF SPRINKLERS (TYPE 13; IF 13R PLEASE EXPLAIN), AND ROOF TYPE (CLASS A PREFERRED). (PROVIDED)
11) LOCATION OF PROPOSED BUILDING ENTRANCES, BOTH PEDESTRIAN AND VEHICULAR; ACCESS DOORS AND ELEVATORS, INCLUDING MEDEVAC ELEVATORS, SHOULD BE SHOWN ON THE FDP. ALSO, ANY INTERIOR ROUTES AVAILABLE FOR EMERGENCY VEHICLE USE, SUCH AS SUITABLY SIZED DRIVEWAYS THROUGH PARKING GARAGES AND COURTYARDS, SHOULD BE DELINEATED. (PROVIDED)
12) LOADING AREAS AND WHETHER THEY ARE ACCESSIBLE TO EMERGENCY VEHICLES. (PROVIDED)
13) ACCESS TO ACTIVE COURTYARDS (ESPECIALLY WITH POOLS, TENNIS COURTS, ETC.) NEEDS TO BE SHOWN - HOW WILL THE MEDICAL STAFF GET THERE, WITH THEIR EQUIPMENT, QUICKLY? (PROVIDED)

LEGEND:

= DENOTES VEHICULAR FIRE ACCESS

= PEDESTRIAN ENTRY

= COURTYARD ACCESS POINT

= EMERGENCY ACCESS

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

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PROVIDENCE DISTRICT
FAIRFAX COUNTY, VIRGINIA

FIRE ACCESS EXHIBIT

VIKA REVISIONS

REV. 2/3/14	
INITIAL SUB. 12/18/13	
DES. RRC	DWN. DM
SCALE: 1"=40'	
PROJECT/FILE NO. VV7388F	
SHEET NO. S-2	

FILE: P:\projects\7388\VV7388F\CADD\PLANNING\PLANNING DRAWINGS\CDP\7388F100-CDP.dwg USER: kantonucci DATE: February 3, 2014 TIME: 8:21:16 AM