BILL PAGE HONDA &
WESTLAWN SHOPPING CENTER

GENERALIZED DEVELOPMENT PLAN/SPECIAL EXCEPTION PLAT

FAIRFAX COUNTY, VIRGINIA

NOTES

1. OWNER(S): CWSS ASSOCIATES, LLC, 6715 ARLINGTON BLVD. FALLS CHURCH, VA 22042; WESTLAWN LIMITED PARTNERSHIP, 6715 ARLINGTON BLVD. FALLS CHURCH, VA 22042

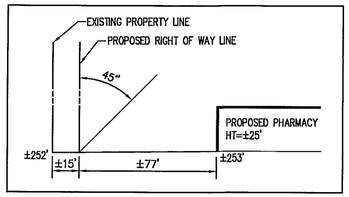
   APPLICANT: WESTLAWN LIMITED PARTNERSHIP, 6715 ARLINGTON BLVD. FALLS CHURCH, VA 22042

2. THIS PROPERTY IS IDENTIFIED ON THE FAIRFAX COUNTY TAX ASSESSMENT MAP AS 050-4-01-006, ZONED C-8 AND 050-4-01-0007, 050-4-17-H, 050-4-14-H-1, ZONED C-6. THE SITE ALSO LIES WITHIN THE HIGHWAY CORRIDOR OVERLAY DISTRICT (HCOD).
3. THE TOTAL SITE AREA OF THE PROPERTY IS 364,253 SF OR 8.36 AC.
4. A PORTION OF THIS SITE, PARCEL 6, IS TO BE REZONED TO C-6, COMMUNITY RETAIL DISTRICT.
5. A CATEGORY 5 SPECIAL EXCEPTION IS REQUIRED FOR THE VEHICLE SALES ESTABLISHMENT AND THE DRIVE-THRU PHARMACY. A CATEGORY 6 SPECIAL EXCEPTION IS REQUIRED FOR AN INCREASE IN BUILDING HEIGHT AND THE DRIVE-IN FINANCIAL INSTITUTION LOCATED WITHIN THE HCOD.
6. TOPOGRAPHY AND EXISTING CONDITIONS TAKEN FROM A FIELD SURVEY DONE BY THIS FIRM, DATED FEBRUARY 14, 2005. CONTOUR INTERVAL IS TWO FEET.
7. THERE ARE NO PROPOSED SPECIAL AMENITIES FOR THIS PROPERTY.
8. THIS PROPERTY IS SERVED BY PUBLIC WATER AND SEWER.
9. THERE IS NO OBSERVABLE EVIDENCE OF GRAVE SITES OR BURIAL GROUNDS ON THIS PROPERTY.
10. THERE ARE NO PUBLIC FACILITIES PROPOSED WITH THIS PROPERTY.
11. TO THE BEST OF OUR KNOWLEDGE ALL UTILITY EASEMENTS HAVING A WIDTH OF 25 FEET OR MORE ARE SHOWN.
12. A REVIEW OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP, COMMUNITY PANEL #515525 0087 D, REVISED MARCH 5, 1990, DESIGNATES A PORTION OF THE PROPERTY AS BEING IN A SPECIAL FLOOD HAZARD AREA, ZONE AE, AREAS DETERMINED TO BE INUNDATED BY THE 100-YEAR FLOOD, A PORTION OF THE PROPERTY AS BEING IN ZONE X, AREAS OF 100-YEAR FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT, AND THE REMAINDER OF THE SITE AS BEING IN ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOOD PLAIN.
13. LIMITS OF RESOURCE PROTECTION AREA (RPA) SHOWN ARE FROM RPA PLAN #5934-RPA-001-1 PREPARED BY WETLAND STUDIES & SOLUTIONS, INC. AND APPROVED BY FAIRFAX COUNTY ON MAY 14, 2007.
14. ALL EXISTING ON-SITE BUILDINGS AND STRUCTURES TO BE REMOVED UNLESS OTHERWISE NOTED.
15. IN ACCORDANCE WITH THE FAIRFAX COUNTY COMPREHENSIVE TRAIL PLAN, UPDATED 2003, A 10' PAVED TRAIL IS PROPOSED ALONG ARLINGTON BOULEVARD AND ANNANDALE ROAD.
16. THE PROPOSED REDEVELOPMENT WILL RESULT IN A REDUCTION OF IMPERVIOUS AREA WITHIN THE RPA.
17. THERE ARE NO MAJOR SANITARY SEWER IMPROVEMENTS PROPOSED WITH THIS APPLICATION.
18. PER THE FAIRFAX COUNTY ZONING ORDINANCE, A FINANCIAL INSTITUTION WITH DRIVE THRU WINDOWS MAY HAVE 5 STACKING SPACES IN FRONT OF EACH OF THE FIRST TWO WINDOWS, PROVIDED THAT BOTH WINDOWS REMAIN OPEN WHEN THE DRIVE THRU FACILITY IS OPERATIONAL.
19. THERE ARE NO SCENIC ASSETS OR NATURAL FEATURES ON-SITE DESERVING OF PROTECTION OR PRESERVATION. THE PROPOSED REDEVELOPMENT OF THE SITE DOES NOT PROPOSE ANY CHANGES TO TRIPPS RUN.
20. IT IS ANTICIPATED THAT CONSTRUCTION WILL BEGIN FOLLOWING RECEIPT OF ALL NECESSARY COUNTY APPROVALS. PHASING WILL BE DETERMINED AT TIME OF SITE PLAN.
21. EXCEPT AS NOTED IN THE MODIFICATIONS/WAIVERS REQUESTED, THE PROPOSED DEVELOPMENT CONFORMS TO THE PROVISIONS OF ALL APPLICABLE ORDINANCES, REGULATIONS, AND ADOPTED STANDARDS.
22. APPLICANT RESERVES THE RIGHT TO OPERATE AND MAINTAIN THE EXISTING DEALERSHIP UNTIL READY TO PROCEED WITH PROPOSED REDEVELOPMENT. THE EXISTING DEALERSHIP WILL REMAIN OPEN AND OPERATING DURING CONSTRUCTION OF THE NEW DEALERSHIP.
23. ONE CAR WASH ANCILLARY TO THE DEALERSHIP WILL BE INCLUDED, AS SHOWN ON THE PLAN.

WAIVERS AND MODIFICATIONS REQUESTED

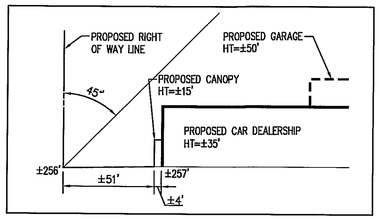
1. A WAIVER OF THE TRANSITIONAL SCREENING YARD REQUIREMENT ADJACENT TO THE SINGLE FAMILY HOMES DUE TO THE EXISTING CONCRETE TRIPPS RUN CHANNEL AND STORM SEWER EASEMENT IS REQUESTED.
2. A WAIVER OF THE BARRIER REQUIREMENT ADJACENT TO THE SINGLE FAMILY HOMES TO ALLOW THE EXISTING FENCES TO REMAIN IS REQUESTED.
3. A WAIVER OF INTERPARCEL ACCESS ALONG ANNANDALE ROAD DUE TO THE EXISTING TRIPPS RUN AND ADJACENT RESIDENTIAL LAND IS REQUESTED.
4. A WAIVER OF THE SERVICE DRIVE REQUIREMENT ALONG ARLINGTON BOULEVARD IS REQUESTED TO PROVIDE A ONE-WAY SERVICE DRIVE, IF APPROVED, OR REMOVAL OF THE SERVICE DRIVE.
5. A WAIVER OF THE ON ROAD BIKE ROUTE LANE ON ARLINGTON BOULEVARD IS REQUESTED.
6. A WAIVER OF THE MINOR PAVED TRAIL REQUIREMENT ALONG TRIPPS RUN IS REQUESTED.
7. A WAIVER OF THE PERIPHERAL PARKING LOT LANDSCAPING REQUIREMENT ADJACENT TO PARCEL 50-1-17-G, DUE TO THE EXISTING COUNTY STORM PIPE IS REQUESTED.
8. A MODIFICATION OF THE PERIPHERAL PARKING LOT LANDSCAPING ALONG ARLINGTON BOULEVARD IS REQUESTED.

ANGLE OF BULK PLANE DETAIL ANNANDALE ROAD



(SCALE 1"=40')

ANGLE OF BULK PLANE DETAIL ARLINGTON BOULEVARD



(SCALE 1"=40')

AREA TABULATION

TOTAL SITE AREA: ±364,252 SF/±8.36 AC

PROP. R.O.W. DEDICATION AREA = ±8,680 SF/±0.20 AC

PROP. BUILDING AREA:

PROP. DEALERSHIP	=	±62,000 SF
PROP. RETAIL	=	±32,000 SF
PROP. PHARMACY	=	±15,000 SF
PROP. FINANCIAL INSTITUTION	=	±6,000 SF
TOTAL PROP. BUILDING AREA	=	±115,000 SF
PROP. F.A.R.	=	±0.32*

(* FAR BASED ON PRE-DEDICATION AREA)

ZONING TABULATION

PROP. ZONE: C-6, COMMUNITY RETAIL COMMERCIAL DISTRICT

	REQUIRED	PROVIDED
MIN. LOT AREA	40,000 SF	±364,253 SF/±8.36 AC
MIN. LOT WIDTH	200 FT	±505 FT
MAX. BLD. HT.	40 FT	±50 FT*
MIN. YARD REQUIREMENTS		
FRONT	45' ABP,40 FT	CANOPY = ±51 FT BUILDING = ±55 FT
SIDE	NONE	N/A
REAR	20 FT	BUILDING = ±113 FT GARAGE = ±87 FT
MAX. FAR**	0.40	±0.32
OPEN SPACE	15%	±20%

*A SPECIAL EXCEPTION FOR AN INCREASE IN BLDG. HEIGHT IS REQUESTED WITH THIS PLAT.

**FAR BASED ON PRE-DEDICATION AREA

PARKING TABULATION

USE: SHOPPING CENTER

4.3 SPACES PER 1,000 SF OF GFA

TOTAL RETAIL GFA = ±53,000 SF OF GFA

±53,000/1,000 x 4.3

= 228 SPACES

USE: VEHICLE SALE, RENTAL, AND ANCILLARY SERVICE ESTABLISHMENT

1 SPACE PER 500 SF OF ENCLOSED SALES/RENTAL FLOOR AREA, PLUS 1 SPACE PER 2500 SF OF OPEN SALES/RENTAL DISPLAY LOT AREA, PLUS 2 SPACES PER SERVICE BAY AND 1 SPACE PER EMPLOYEE, BUT NOT LESS THAN 5 SPACES

PROP. HONDA DEALERSHIP

ENCLOSED SALES/RETAIL:	± 10,000/500 =	20 SPACES
OPEN SALES/RENTAL DISPLAY:	±4,000/2500 =	2 SPACES
SERVICE BAYS:	2 X 30 BAYS =	60 SPACES
EMPLOYEES:	130 EMP. =	130 SPACES
		212 SPACES

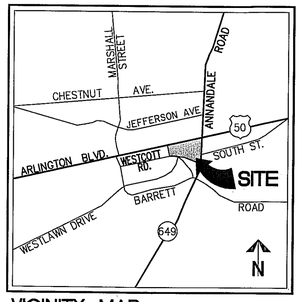
TOTAL PARKING REQUIRED (ENTIRE SITE) = 440 SPACES

PARKING PROVIDED = 443 SPACES (INCLUDING 10 HANDICAP)

PARKING PROVIDED INCLUDES:

231 – SURFACE SPACES

212 – STRUCTURE SPACES (ADDITIONAL PARKING AREA IN STRUCTURE FOR VEHICLE STORAGE.)



VICINITY MAP SCALE: 1"=2000'

Application No RZ 2009-MA-011 Staff T.Strunk
APPROVED DEVELOPMENT PLAN
(DPA) (GDP) (CDP) (FDP)
SEE PROFFERS DATED Mar 4, 2010
Date of (BOS) (PC) approval Mar 9, 2010
Sheet 1 of 19
Concur. w/ SEA 95-M-039: dev cond. dated 3-2-2010

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6. TREE PRESERVATION NOTES
7. LANDSCAPE NOTES
8. PRELIMINARY SIGHT DISTANCE PROFILES
9. PRELIMINARY SIGHT DISTANCE PROFILES
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15. LINE OF SIGHT
16. PHARMACY ELEVATION
17. FINANCIAL INSTITUTION ELEVATION

RECEIVED
Department of Planning & Zoning
FEB 19 2010
Zoning Evaluation Division

WALTER L. PHILLIPS
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CIVIL ENGINEERS LAND SURVEYORS PLANNERS LANDSCAPE ARCHITECTS
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DATE: 3/16/09; REV. 4/29/09; 8/10/09; REV. 10/16/09; 11/12/09; 1/12/10; 2/5/10 DRAWN: MRW

SCALE: AS NOTED

COMMONWEALTH OF VIRGINIA JEFFREY L. STUCHELL LIC. NO. 021215 PROFESSIONAL ENGINEER 2/5/10

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

REVISION APPROVED BY

COVER SHEET

WESTLAWN SHOPPING CENTER AND BILL PAGE HONDA

MASON DISTRICT

FAIRFAX COUNTY, VIRGINIA

File No. FG-16 Tax Map No. 50-4 Job No. 91084 Cadd Dwg. File: GDP\91084_GDP Xref:

EXISTING VEGETATION MAP INFORMATION

KEY	COVER TYPE	PRIMARY SPECIES	SUCCESSIONAL STAGE	CONDITION	ACREAGE	COMMENTS
A	OPEN FIELD			FAIR	5,700 SF .13 AC	GRASS/HERBACEOUS MATERIAL, SOMEWHAT MAINTAINED BY SEASONAL MOWING
B	BOTTOMLAND FOREST	WHITE PINE, ELM, ASH, POPLAR, MAPLE	SUB-CLIMAX	FAIR	19,850 SF .46 AC	INVASIVE PLANT MATERIAL - INCLUDING MULTIFLORA ROSE, WILD GRAPE, HONEYSUCKLE - MODERATE
C	EARLY SUCESSIONAL FOREST COMMUNITY	CEDAR, ASH, MAPLE	SUB-CLIMAX	POOR	17,700 SF .41 AC	ALONG RIP-RAP SECTION OF CREEK, INVASIVE PLANTS INCLUDE MIMOSA, WILD GRAPE, HONESUCKLE, MULTIFLORA ROSE - EXTENSIVE
D	DEVELOPED LAND				321,012 SF 7.36 AC	EXISTING BUILDINGS, WALKS, ASPHALT
				TOTAL:	364,252 SF 8.36 AC	

PARCEL KEY

TAX MAP #	EX. ZONE	PROP. ZONE
050-4-01-0006	C-8	C-6
050-4-01-0007	C-6	C-6
050-4-17-H	C-6	C-6
050-4-17-H-1	C-6	C-6

LEGEND

AC..... AIR CONDITIONER
APPROX.LOC..... APPROXIMATE LOCATION
CO..... CLEANOUT
CONC..... CONCRETE
CONST..... CONSTRUCTION
DB..... DEED BOOK
EC..... EDGE OF CONCRETE
EG..... EDGE OF GRAVEL
EP..... EDGE OF PAVEMANT
ESMT..... EASEMENT
FC..... HEADER CURB
FDC..... FIRE DEPARTMENT CONNECTION
FF..... FIRST/FINISH FLOOR
GM..... GAS METER
GV..... GAS VALVE
HC..... HANDICAPPED RAMP
INV..... INVERT
IPF..... IRON PIPE FOUND
IPS..... IRON PIPE SET
N/F..... NOW OR FORMERLY
OH..... OVERHANG/CANOPY
PG..... PAGE
RD..... ROOF DRAIN
RET..... RETAINING WALL
RPA..... RESOURCE PROTECTION AREA
SD..... STORM SEWER STRUCTURE
SS..... SANITARY SEWER STRUCTURE
SW..... SIDEWALK
TCB..... TRAFFIC CONTROL BOX
TEMP..... TEMPORARY
WM..... WATER METER
WV..... WATER VALVE
..... FIRE HYDRANT
..... DOORWAY/ENTRANCE
..... UTILITY POLE
..... LIGHT POLE
..... TELEPHONE MANHOLE
..... TELEPHONE PEDESTAL
X FENCE
GUY WIRE
OVERHEAD WIRES
G UNDERGROUND GAS LINE
T UNDERGROUND TELEPHONE LINE
U UNDERGROUND UTILITY LINE
W UNDERGROUND WATER LINE
..... TREE
LIMITS OF TREE CANOPY/VEGETATION
..... CURB AND GUTTER
..... BOLLARD
..... ELECTRIC TRANSFORMER
123 ..... SPOT ELEVATION
..... SIGN

CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA	TANGENT	CHORD	CHORD BEARING
C1	18.50'	33.28'	103°04'25"	23.29'	28.97'	S50°19'13"E
C2	1,236.80'	130.90'	6°03'51"	65.51'	130.84'	S02°48'56"E
C2A	1,236.80'	81.36'	3°46'09"	40.70'	81.35'	S01°40'05"E
C2B	1,236.80'	49.54'	2°17'42"	24.77'	49.53'	S04°42'01"E
C3	1,175.66'	52.87'	2°34'35"	26.44'	52.86'	S04°33'34"E
C4	444.47'	184.11'	23°44'00"	93.39'	182.80'	S12°04'38"W
C4A	444.47'	93.82'	12°05'37"	47.08'	93.64'	S06°15'27"W
C4B	444.47'	90.29'	11°38'23"	45.30'	90.14'	S18°07'27"W

INVASIVE PLANT MATERIAL -
MULTIFLORA ROSE
HONEYSUCKLE
AMPELOPSIS
ENGLISH IVY
MIMOSA
WILD GRAPE

REMOVE INVASIVE PLANT MATERIAL WITHIN RIP-RAP SECTION OF STREAM BY CUTTING AND TREATING WITH HERBICIDE AS RECOMMENDED BY VA. CERTIFIED APPLICATOR. REVEGETATE WITH PLUGS OF HERBACEOUS NATIVE PLANT MATERIAL, AND SHRUB PLUGS WHERE THERE IS ENOUGH ORGANIC MATERIAL TO SUPPORT ADDITIONAL PLANTINGS. THIS AREA IS WITHIN A STORM SEWER EASEMENT, THEREFORE, ALL PROPOSED PLANTINGS ARE SUBJECT TO COUNTY APPROVAL.

0 20 40
(IN FEET)
1 INCH = 40'

Application No RZ 2009-MA-011 Staff T.Strunk
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (CDP) (FDP)
SEE PROFFERS DATED Mar 4, 2010
Date of (BOS) (PC) approval Mar 9, 2010

Sheet 2 of 19
Concur. w/ SEA 95-M-039: dev cond. dated 3-2-2010

File No. FC-16 Tax Map No. 50-4 Job No. 91084 Cadd Dwg. File: GDP\91084_EVM Xref:

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DRAWN: MRM
SCALE: 1"=40'

JEFFREY J. STUCHEL Lic. No.031215 2/5/10 PROFESSIONAL ENGINEER

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

REVISION APPROVED BY

EXISTING CONDITIONS PLAN/EXISTING VEGETATION MAP

WESTLAWN SHOPPING CENTER AND BILL PAGE HONDA

MASON DISTRICT
FAIRFAX COUNTY, VIRGINIA

SHEET: 2 OF 17

Application No RZ 2009-MA-011 Staff T.Strunk
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (CDP) (FDP)
SEE PROFFERS DATED Mar 4, 2010
Date of (BOS) (PC) approval Mar 9, 2010
Sheet 3 of 19
Concur. w/ SEA 95-M-039: dev cond. dated 3-2-2010

NOTE

1. HOUSE LOCATIONS SHOWN FOR WESTLAWN SECTION ONE SUBDIVISION ARE FROM RECORD INFORMATION ONLY, AND ARE NOT FIELD SURVEYED.

0 20 40
(IN FEET)
1 INCH = 40'

File No. FG-16 Tax Map No. 50-4 Job No. 91084 Cadd Dwg. File: GDP\91084_GDP Xref:

GENERALIZED DEVELOPMENT PLAN/SPECIAL EXCEPTION PLAT

WESTLAWN SHOPPING CENTER AND BILL PAGE HONDA

MASON DISTRICT
FAIRFAX COUNTY, VIRGINIA

WALTER L. PHILLIPS
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SCALE: 1"=40' DRAWN: MKW

JEFFREY A. STUCHEL Lic. No.031215 2/5/10
COMMONWEALTH OF VIRGINIA PROFESSIONAL ENGINEER

NO.	DESCRIPTION	DATE	REV. BY	APPROVED

REVISION APPROVED BY

SHEET: 3 OF 17

TREE COVER CALCULATIONS

TOTAL SITE AREA	±364,252	S.F.
R.O.W. DEDICATION	– ±8,680	S.F.
FLOODPLAIN AREA	– ±48,726	S.F.
ADJUSTED SITE AREA	±306,846	S.F.
PERCENT REQUIRED	X 10	%
TREE COVER REQUIRED	**±30,685**	**S.F.**
TREE COVER PROVIDED (PLANTED)	±33,600	S.F.
EXISTING TREE COVERAGE	+ 0	S.F.
TOTAL TREE COVERAGE	**±33,600**	**S.F. (±10%)**

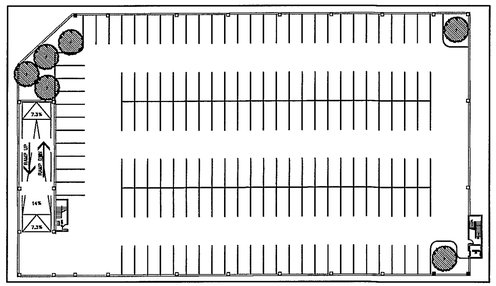
TABLE 12.3

TABLE 12.3 TREE PRESERVATION TARGET CALCULATIONS AND STATEMENT

A. PRE-DEVELOPMENT AREA OF EXISTING TREE CANOPY (FROM EVM): 37,550 SF
AREA OF EXISTING TREES OUTSIDE FLOODPLAIN/STORM EASEMENT AREA: 300 SF
B. PERCENTAGE OF GROSS SITE AREA COVERED BY EXISTING TREE CANOPY: <1%
(TOTAL ADJUSTED SITE AREA = 307,634 SF)
C. PERCENTAGE OF 10-YEAR TREE CANOPY REQUIRED FOR SITE: 10% (35,636 SF)
(INCLUDING RPA/FLOOD PLAIN AREA)
D. PERCENTAGE OF 10 YEAR TREE CANOPY REQUIREMENT THAT SHOULD BE MET THROUGH TREE PRESERVATION: (35,636 * 1%)
1% – 356 SF
*NOTE THESE TREES ARE BRADFORD PEARS AND NOT CANDIDATES FOR PRESERVATION
ADJUSTED TARGET OUTSIDE OF STORM SEWER AND FLOODPLAIN – 0%

E. PROPOSED PERCENTAGE OF CANOPY REQUIREMENT THAT WILL BE MET THROUGH TREE PRESERVATION: 0 SF 100 %
F. HAS THE TREE PRESERVATION TARGET MINIMUM BEEN MET? YES

GARAGE LANDSCAPING DETAIL



PROPOSED TREE CALCULATIONS

CATEGORY IV TREES ±101 @ 200 SF ±20,200 SF
2–2.5" CALIPER
REPRESENTATIVE TREE TYPES: ACER RUBRUM, PLATANUS ACERIFOLIA, QUERCUS PHELLOS, QUERCUS RUBRA, TILIA AMERICANA

CATEGORY III TREES ±2 @ 150 SF ±300 SF
2–2.5" CALIPER
REPRESENTATIVE TREE TYPES: BETULA NIGRA, CELTIS OCCIDENTALIS, GLEDITSIA TRIACANTHOS, NYSSA SYLVATICA, TAXODIUM DISTICHUM, TILIA CORDATA

CATEGORY II TREES ±26 @ 100 SF ±2,600 SF
2–2.5" CALIPER
REPRESENTATIVE TREE TYPES: AMELANCHIER ARBOREA, AMELANCHIER CANADENSIS, CERCIS CANADENSIS, CHIONANTHUS VIRGINICUS, CORNUS MAS, HALESIA CAROLINIANA, MAGNOLIA VIRGINIANA, OXYDENDRUM ARBOREUM

CATEGORY IV EVERGREEN TREES ±20 @ 200 ±4,000 SF
8–10' HEIGHT
REPRESENTATIVE TREE TYPES: MAGNOLIA GRANDIFLORA

CATEGORY II EVERGREEN TREES ±65 @ 100 ±6,500 SF
8–10' HEIGHT
REPRESENTATIVE TREE TYPES: ILEX OPACA, JUNIPERUS VIRGINIANA, PINUS BUNGEANA, PICEA OMORIKA

TOTAL PLANTED TREE COVERAGE: ±33,600 SF

INTERIOR PARKING LOT LANDSCAPING CALCULATIONS

TOTAL PARKING AREA (INCL. SURFACE OF PARKING GARAGE)	±176,100 S.F. X 5 %	
REQUIRED	±8,805 S.F. (45 TREES @ 200 SF)	
PROPOSED	**±9,600 S.F. (48 TREES @ 200 SF)**	

LANDSCAPE LEGEND

PROPOSED DECIDUOUS TREES

PROPOSED DECIDUOUS TREES (COUNTED TOWARDS INTERIOR PARKING LOT LANDSCAPING)

PROPOSED DECIDUOUS TREES (COUNTED TOWARDS PERIPHERAL PARKING LOT LANDSCAPING)

PROPOSED MEDIUM DECIDUOUS/ ORNAMENTAL TREES/FILTERRA

PROPOSED EVERGREEN TREES

PROPOSED DECORATIVE PLANTINGS

EXISTING TREE COVER TO REMAIN. THESE TREES ARE WITHIN A STORM SEWER EASEMENT; THEREFORE, CREDIT HAS NOT BEEN TAKEN.

REMOVE SECTIONS OF CHAIN LINK FENCE, CONNECTING WOOD FENCE IN NEW/GOOD CONDITION WITH SIMILAR 6–7' BOARD ON BOARD FENCE FOR ADDITIONAL SCREENING OF RESIDENTIAL NEIGHBORHOOD. REMOVE CHAIN LINK FENCE WHERE IT OVERLAPS WOOD FENCE INSTALLED BY RESIDENCES AS IT CREATES AN AREA FOR INVASIVE PLANT MATERIAL AND DEBRIS TO ACCUMULATE.

REMOVE ALL DEBRIS FROM RESIDENTIAL NEIGHBORHOOD (YARD DEBRIS, BRANCHES, LITTER) WITHIN THE LIMITS OF TREE PRESERVATION USING HAND METHODS SEE TREE NARRATIVE

ANY TREES IN FLOODPLAIN/EASEMENT AREA WILL NOT HAVE ANY TREE COVER CREDIT TAKEN. IN ADDITION, THEY WILL BE FIELD LOCATED AFTER REMOVAL OF INVASIVE SPECIES AND ANY DEAD TREES TO BE REMOVED. THIS WILL BE DETERMINED AT SITE PLAN.

LIMITS OF RPA (PER APPROVED RPA PLAN #5634-RPA-001 PREPARED BY WSSI)

PROP. RETAIL/ FINANCIAL INSTITUTION, (W/ 2 DRIVE-THRU LANES) (±6,000 SF) (HT=±25')

PROP. CARWASH (±13.5' W x ±40'L x ±10'H)

PROP. LIMITS OF PARKING STRUCTURE ABOVE (HT=±50')

PROPOSED RAMP

PROPOSED CAR DEALERSHIP

PROPOSED RETAIL (HT=±25')

PROP. LIMITS OF PARKING STRUCTURE (ABOVE) (HT=±50')

PROP. PHARMACY (W/ DRIVE-THRU) (±15,000 SF) (HT=±25')

ATM LANE

BY-PASS LANE

ARLINGTON BOULEVARD – U.S. ROUTE 50
(VARIABLE WIDTH PUBLIC RIGHT-OF-WAY)
POSTED SPEED LIMIT 45 MPH

SOUTH STREET

ANNANDALE ROAD – ROUTE 649
(VARIABLE WIDTH PUBLIC RIGHT-OF-WAY)
POSTED SPEED LIMIT 35 MPH

EX. TRAFFIC SIGNAL

APPROX LOC VEPCO ESMT DB 2594 PG 128

EX. CONC. CHANNEL

FLOODPLAIN AS SHOWN ON FLOOD INSURANCE STUDY FOR MASON RUN DATED SEPTEMBER 1978

WESTLAWN SECTION 1

LOT 109, LOT 110, LOT 111, LOT 112, LOT 113, LOT 114, LOT 115, LOT 116, LOT 117

N/F CATACORA DB 11868 PG 2159

N/F CATACORA DB 2473 PG 126

0 20 40
(IN FEET)
1 INCH = 40'

Application No RZ 2009-MA-011 Staff T.Strunk
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (CDP) (FDP)
SEE PROFFERS DATED Mar 4, 2010
Date of (BOS) (PC) approval Mar 9, 2010

Sheet 4 of 19
Concur. w/ SEA 95-M-039: dev cond. dated 3-2-2010

WALTER L. PHILLIPS
INCORPORATED
CIVIL ENGINEERS LAND SURVEYORS PLANNERS LANDSCAPE ARCHITECTS
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 FAX (703) 533-1301 WWW.WLPINC.COM

DATE: 3/16/09; REV. 4/29/09, 8/10/09; REV.: 10/16/09, 11/12/09, 12/10/09, 2/5/10
DRAWN: MRW
SCALE: 1"=40'

JEFFREY J. STUCHELL Lic. No.031215 PROFESSIONAL ENGINEER 2/5/10

NO.	DESCRIPTION	DATE	REV. BY	APPROVED

REVISION APPROVED BY

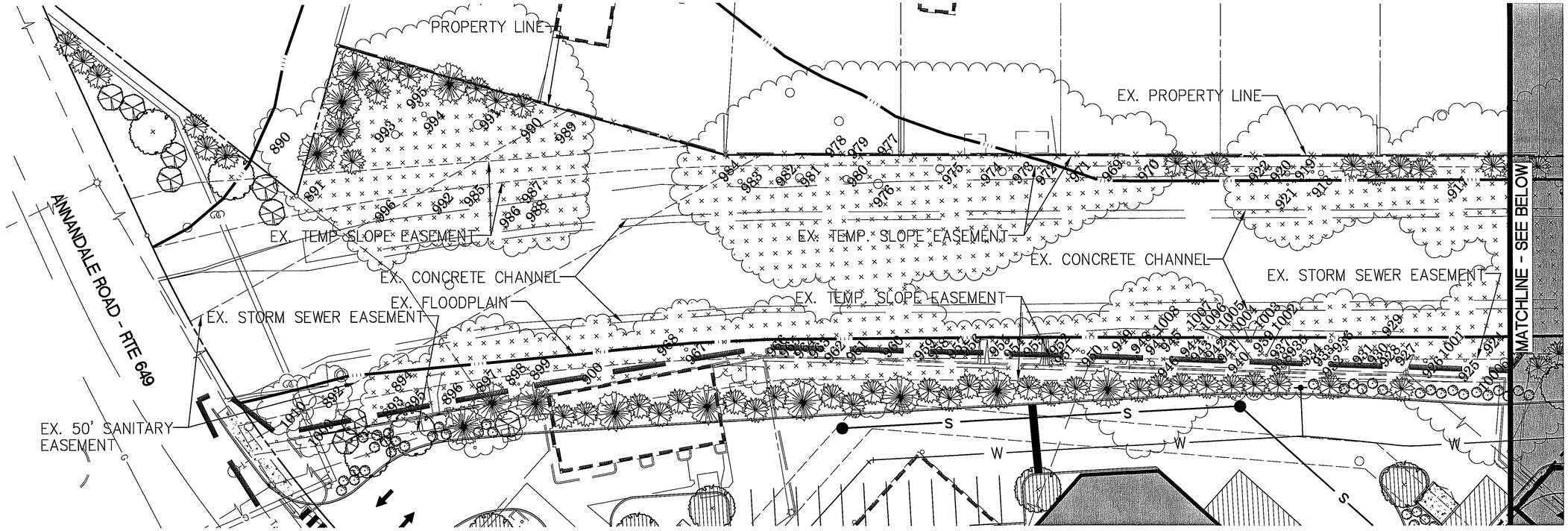
DATE

APPROVED

CONCEPTUAL LANDSCAPE PLAN

WESTLAWN SHOPPING CENTER AND BILL PAGE HONDA

MASON DISTRICT
FAIRFAX COUNTY, VIRGINIA



LANDSCAPE LEGEND

PROPOSED DECIDUOUS TREES

PROPOSED DECIDUOUS TREES (COUNTED TOWARDS INTERIOR PARKING LOT LANDSCAPING)

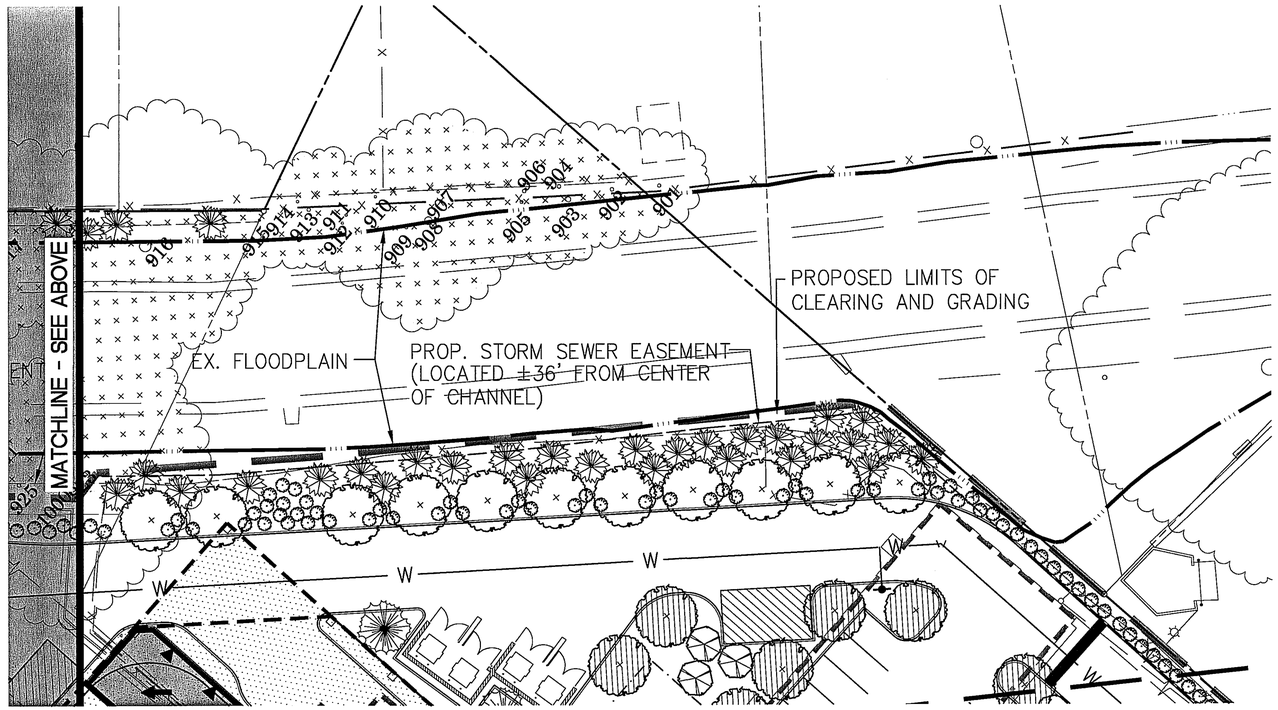
PROPOSED DECIDUOUS TREES (COUNTED TOWARDS PERIPHERAL PARKING LOT LANDSCAPING)

PROPOSED MEDIUM DECIDUOUS/ ORNAMENTAL TREES/FILTERRA

PROPOSED EVERGREEN TREES

PROPOSED DECORATIVE PLANTINGS

EXISTING TREE COVER TO REMAIN. THESE TREES ARE WITHIN A STORM SEWER EASEMENT; THEREFORE, CREDIT HAS NOT BEEN TAKEN.



0 10 20 40

(IN FEET)
1 INCH = 20'

Application No RZ 2009-MA-011 Staff T.Strunk
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (CDP) (FDP)
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File No. FC-16 Tax Map No. 50-4 Job No. 91084 Cadd Dwg. File: GDP\91084_GDP Xref:

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(703) 532-6163 FAX (703) 533-1301 WWW.WLPINC.COM

DATE: 3/5/09; REV. 4/29/09; 8/10/09; REV. 10/15/09; 11/12/09; 1/12/10; 2/5/10 | DRAWN: MRW | SCALE: 1"=20'

COMMONWEALTH OF VIRGINIA — JEFFREY J. STUCHELL — Lic. No.031215 — PROFESSIONAL ENGINEER — 2/5/10

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

DETAIL AND PROPOSED LANDSCAPING OF TRIPPS RUN

WESTLAWN SHOPPING CENTER AND BILL PAGE HONDA

MASON DISTRICT
FAIRFAX COUNTY, VIRGINIA

SHEET: 5 OF 17

Westlawn Tree Inventory
Tree Survey Information Completed by Walter L. Phillips
Arborist: Kathy von Bredow ISA#MA-4729A

Tree #	Botanical Name	Common Name	Size (DBH)	Critical Root Zone (CRZ)	Species Rating	Condition %
890	Robinia pseudoacacia	Black locust	8"	8'	65%	59%
891	Ulmus americana	American elm	12"	13'	65%	41%
892	Pyrus calleryana	Callery pear	8"	8'	20%	56%
893	Juniperus virginiana	Eastern redcedar	9"	9'	85%	56%
894	Quercus rubra	Northern red oak	8"	8'	85%	72%
895	Juniperus virginiana	Eastern redcedar	11"	11'	85%	66%
896	Juniperus virginiana	Eastern redcedar	11"	11'	85%	59%
897	Populus deltoides	Eastern cottonwood	24"	24'	70%	56%
898	Ulmus americana	American elm	10"	10'	65%	59%
899	Juniperus virginiana	Eastern redcedar	8"	8'	85%	59%
900	Ulmus americana	American elm	20"	20'	65%	47%
901	Prunus serotina	Black cherry	8"	8'	65%	38%
902	Fraxinus americana	White ash	17"	17'	60%	75%
903	Fraxinus americana	White ash	22"	22'	60%	75%
904	Acer negundo	Boxelder	12"	12'	50%	63%
905	Fraxinus americana	White ash	11"	11'	60%	78%
906	Fraxinus americana	White ash	13"	13'	60%	78%
907	Ulmus americana	American elm	13"	13'	65%	66%
908	Platanus occidentalis	American sycamore	31"	47'	70%	78%
909	Fraxinus americana	White ash	9"	9'	60%	75%
910	Fraxinus americana	White ash	18"	18'	60%	84%
911	Fraxinus americana	White ash	8"	8'	60%	81%
912	Fraxinus americana	White ash	8"	8'	60%	84%
913	Fraxinus americana	White ash	13"	13'	60%	81%
914	Fraxinus americana	White ash	10"	10'	60%	81%
915	Fraxinus americana	White ash	18"	18'	60%	63%
916	Acer saccharinum	Silver maple	45"	68'	60%	59%
917	Acer saccharinum	Silver maple	28"	28'	60%	63%
918	Fraxinus americana	White ash	26"	26'	60%	53%
919	Acer saccharinum	Silver maple	8"	8'	60%	63%
920	Juglans nigra	Black walnut	24"	24'	80%	59%
921	Fraxinus americana	White ash	10"	10'	60%	56%
922	Fraxinus americana	White ash	18"	18'	60%	59%
923	Acer saccharinum	Silver maple	54"	81'	60%	50%
924	Quercus rubra	Northern red oak	12"	12'	85%	53%
925	Juniperus virginiana	Eastern redcedar	11"	11'	85%	44%
926	Juniperus virginiana	Eastern redcedar	17"	17'	85%	47%
927	Juniperus virginiana	Eastern redcedar	12"	12'	85%	59%
928	Juniperus virginiana	Eastern redcedar	9"	9'	85%	53%
929	Fraxinus americana	White ash	10"	10'	60%	53%
930	Pinus strobus	Eastern white pine	13"	13'	75%	56%
931	Juniperus virginiana	Eastern redcedar	13"	13'	85%	47%
932	Juniperus virginiana	Eastern redcedar	8"	8'	85%	44%
933	Juniperus virginiana	Eastern redcedar	7"	8'	85%	44%
934	Juniperus virginiana	Eastern redcedar	11"	11'	85%	41%
935	Morus rubra	Red mulberry	19"	19'	40%	47%
936	Morus rubra	Red mulberry	18"	18'	40%	50%
937	Dead	Dead	16"	0'	0%	0%
938	Pinus strobus	Eastern white pine	12"	12'	75%	56%
939	Juniperus virginiana	Eastern redcedar	9"	9'	85%	59%
940	Pinus strobus	Eastern white pine	10"	10'	75%	75%
941	Pinus strobus	Eastern white pine	13"	13'	75%	66%
942	Dead	Dead	9"	0'	0%	0%
943	Pinus strobus	Eastern white pine	11"	11'	75%	56%
944	Pinus strobus	Eastern white pine	10"	10'	75%	53%
945	Robinia pseudoacacia	Black locust	9"	9'	65%	69%
946	Ulmus americana	American elm	30"	45'	65%	59%
947	Pinus strobus	Eastern white pine	9"	9'	75%	59%
948	Robinia pseudoacacia	Black locust	10"	10'	65%	41%
949	Pinus strobus	Eastern white pine	13"	13'	75%	56%
950	Pinus strobus	Eastern white pine	15"	15'	75%	63%
951	Pinus strobus	Eastern white pine	12"	12'	75%	63%
952	Fraxinus americana	White ash	8"	8'	60%	78%
953	Pinus strobus	Eastern white pine	10"	10'	75%	75%
954	Pinus strobus	Eastern white pine	17"	17'	75%	69%
955	Pinus strobus	Eastern white pine	13"	13'	75%	69%
956	Pinus strobus	Eastern white pine	14"	14'	75%	66%
957	Pinus strobus	Eastern white pine	10"	10'	75%	59%
958	Pinus strobus	Eastern white pine	15"	15'	75%	59%
959	Pinus strobus	Eastern white pine	15"	15'	75%	53%
960	Ulmus americana	American elm	22"	22'	65%	50%
961	Pinus strobus	Eastern white pine	10"	10'	75%	53%
962	Pinus strobus	Eastern white pine	9"	9'	75%	56%
963	Pinus strobus	Eastern white pine	9"	9'	75%	44%
964	Pinus strobus	Eastern white pine	11"	11'	75%	44%
965	Pinus strobus	Eastern white pine	13"	13'	75%	38%
966	Pinus strobus	Eastern white pine	18"	18'	75%	41%
967	Fraxinus americana	White ash	15"	15'	60%	47%
968	Ulmus americana	American elm	14"	14'	65%	47%
969	Acer saccharinum	Silver maple	15"	15'	60%	72%
970	dead	Dead	13"	0'	0%	0%
971	Acer saccharinum	Silver maple	28"	28'	60%	53%
972	Juglans nigra	Black walnut	8"	8'	80%	28%
973	Acer saccharinum	Silver maple	9"	9'	60%	56%
974	Acer saccharinum	Silver maple	38"	57'	60%	56%
975	Acer saccharinum	Silver maple	40"	60'	60%	50%

Westlawn Tree Inventory
Tree Survey Information Completed by Walter L. Phillips
Arborist: Kathy von Bredow ISA#MA-4729A

Tree #	Botanical Name	Common Name	Size (DBH)	Critical Root Zone (CRZ)	Species Rating	Condition %
976	Acer saccharinum	Silver maple	38"	57'	60%	59%
977	Acer saccharinum	Silver maple	32"	48'	60%	56%
978	Pinus strobus	Eastern white pine	11"	11'	75%	63%
979	Juniperus virginiana	Eastern redcedar	10"	10'	85%	50%
980	Acer saccharinum	Silver maple	33"	50'	60%	63%
981	Ulmus americana	American elm	26"	26'	65%	41%
982	Fraxinus pennsylvanica	Green ash	26"	26'	60%	53%
983	Fraxinus pennsylvanica	Green ash	18"	18'	60%	50%
984	Ulmus americana	American elm	20"	20'	65%	50%
985	Fraxinus pennsylvanica	Green ash	9"	9'	60%	56%
986	Liriodendron tulipifera	Yellow-poplar	20"	20'	80%	63%
987	Juglans nigra	Black walnut	11"	11'	80%	59%
988	Ulmus americana	American elm	14"	14'	65%	34%
989	Malus spp.	Crabapple spp.	9"	9'	70%	38%
990	Juglans nigra	Black walnut	9"	9'	80%	72%
991	Morus rubra	Red mulberry	48"	72'	40%	44%
992	Juglans nigra	Black walnut	11"	11'	80%	66%
993	Robinia pseudoacacia	Black locust	33"	50'	65%	38%
994	Morus rubra	Red mulberry	24"	24'	40%	56%
995	Morus rubra	Red mulberry	23"	23'	40%	53%
996	Juglans nigra	Black walnut	20"	20'	80%	63%
997						0%
998						0%
999						0%
1000	Juniperus virginiana	Eastern redcedar	7"	8'	85%	53%
1001	Morus rubra	Red mulberry	19"	19'	40%	41%
1002	Juniperus virginiana	Eastern redcedar	6"	8'	85%	47%
1003	Morus rubra	Red mulberry	12"	12'	40%	44%
1004	Morus rubra	Red mulberry	11"	11'	40%	47%
1005	Dead	Dead	6"	0'	0%	0%
1006	Robinia pseudoacacia	Black locust	6"	8'	65%	25%
1007	Robinia pseudoacacia	Black locust	6"	8'	65%	31%
1008	Pinus strobus	Eastern white pine	6"	8'	75%	59%
1009	Acer saccharinum	Silver maple	19"	19'	60%	63%
1010	Albizia julibrissin	Mimosa	10"	10'	30%	72%
1011	Pyrus calleryana	Callery pear	12"	12'	20%	59%
1012	Pyrus calleryana	Callery pear	13"	13'	20%	59%
1013	dead	Dead	14"	0'	0%	0%

NOTE:

WITH THE EXCEPTION OF TREES # 1011 AND 1012 (BOTH BRADFORD PEARS) ALL TREES ARE WITHIN A COUNTY STORM SEWER EASEMENT/FLOODPLAIN, THEREFORE, NO TREE CANOPY CREDIT HAS BEEN TAKEN FOR ANY OF THE TREES LISTED ABOVE. THE APPLICANT INTENDS TO COORDINATE WITH THE COUNTY ON INVASIVE SPECIES REMOVAL AND SUPPLEMENTAL PLANTINGS.

URBAN FOREST MANAGEMENT
POLICY ON LANDSCAPE IMPLEMENTATION
January 1, 2009

This compilation of selected portions of the Public Facilities Manual is intended to summarize and clarify regulations pertaining to the implementation of landscape plans on development sites subject to review and inspection by the County. Included are regulations governing the most common areas of noncompliance experienced by staff in the course of conducting landscape inspections, and a brief summary of the policy regarding seasonal landscape deferrals.

Tree Species and Size

1. Trees and shrubs that are planted shall be of the species and size specified on the approved plans. There shall be no deviations from the approved sizes specified except as approved by Fairfax County Urban Forest Management (UFMD). (PFM 12-0705.1A)

2. All trees and shrubs shall meet the standards for sizes and quality specified in the American Association of Nurserymen's American Standard for Nursery Stock, (ANSI Z60.1-1996). See attachment #1. (PFM 12-0705.1B)

Species Substitutions

3. Species substitutions within the tree categories listed in Table 12.19 are generally accepted unless otherwise specified by proffered conditions, development conditions, special exceptions, or special permits. Any tree substitution shall also be in conformance with the following. (PFM 12-0705.1C)
   a. ***Plant Diversity*** - The use of substitutions shall not result in any species making up more than 10 percent of the total number of trees required to be planted on the site. (PFM 12-0514.1L)
   b. ***Authorization*** - A letter signed by the permittee shall be provided to UFMD acknowledging any proposed substitutions to trees and shrubs shown on the approved plans. (PFM 12-0705.1C(2))
   c. ***Substitutions Outside of Tree Category*** - Substitution of a tree shown on the approved plan from one tree category, as listed in PFM Table 12.19, with a tree from a different category shall require a revision to the approved plan. (PFM 12-0805.1C(3))
   d. ***Species Suitability*** - Substituted species must be suited to the post-development conditions of the planting location for which it is intended. (PFM 12-0601.1E)
   e. *Additional Tree Cover Credit* - In cases where additional tree cover credit has been given, no tree substitutions shall be made except as approved by the Urban Forest Management. Examples of additional credit include the following: Air Quality, PFM 12-0509.4B(1); Energy Conservation, PFM 12-0509.4B(2); Water Quality, PFM 12-0509.4B(3); Wildlife Benefits, PFM 12-0509.4B(4); Native Trees, PFM 12-0509.4B(5)

Planting Locations

4. Planting locations of all trees on the site shall be in substantial conformance with the approved plan. UFMD acknowledges that not all trees may be optimally located, as shown on the plan, and encourage input from Permittees and their landscape professionals regarding proposed improvements that might be implemented. Any substantive deviations from the approved plan that are made in the field must be approved by UFMD and shall be in conformance with the following:
   a. ***Planting Area*** - At least the minimum size planting area shall be provided for each tree according to its projected 10-year tree cover area as found in Table 12.7. (PFM 12-0601.1B)
   b. ***Environmental Conditions*** - Light, moisture, and other conditions affecting the health and viability of the tree at the field location shall be suitable for the species. (PFM 12-0601.1E)

   c. ***Compacted Soil*** – If planting in areas that have been previously compacted, the soil shall be properly prepared (tilled and amended as needed based on soil samples) to a depth of 12 inches, prior to installation of landscape material. Soil within individual planting holes shall not be amended. (PFM 12-0705.3B)
   d. ***Restrictive Barriers*** - Trees shall be planted no closer than four feet from any restrictive barrier. (PFM 12-0509.4E(5)
   d. ***Spacing*** - Trees shall be spaced so that the outer limit of their projected 10-year tree cover area, as indicated in Table 12.19, does not significantly overlap, or as determined appropriate by UFMD for site conditions and to promote long-term survival. (PFM 12-0509.4E(6))
   e. ***Easements*** - Trees for tree cover credit shall not be planted within any existing or proposed public utility easement or within five feet of storm drainage easements that contain pipes. In addition, trees shall not be planted in an area that will interfere with existing or proposed utilities or with maintenance of the utility, as determined by the Director of DPWES. (PFM 12-0514.6B)

Staking and Guying

5. Staking and guying should only be implemented where site conditions warrant their use. Planted trees should be assessed individually and staking and guying installed only as required. Conditions where staking and guying may be necessary to ensure stability include: windy locations, steep slopes, or where vandalism may be a concern. All staking and guying material must be removed within one year of plant installation (PFM 12-0705.3C)

Seasonal Landscape Deferrals

6. A Seasonal Landscape Deferral may be granted when seasonal or weather-related conditions, such as excessively wet soil, extended periods of drought, or frozen ground, substantially reduce the survivability of the plant material, as determined by the Urban Forest Management. A request for a landscape deferral will not be granted for landscaping required prior to the issuance of a RUP or Non-RUP when seasonal or weather-related conditions on the site plan do not preclude planting. Lack of species availability may justify the approval of a Seasonal Landscape Deferral when specific plant species are required by proffers or conditions.

7. The party responsible for the placement of the performance bond and conservation deposit for the project shall act as the Applicant for this seasonal deferral. Seasonal Landscape Deferral request forms can be obtained from the Environmental and Facilities Inspections Division or the Urban Forest Management.

8. At the time of final inspection for release of performance bond and conservation deposit, all of the plant material is inspected. Plant material previously inspected, as part of the process to release any deferral deposit that may have existed, is not exempt from this final inspection. All plant material must be healthy and in good condition.

Requirements Prior to Approval of RUP/Non-RUP

9. The landscaping and screening requirements of Article 13 or of any approved proffered condition, special permit, special exception or variance must be completed prior to approval of any Residential or Non-Residential Use Permit; provided, however, that completion of the requirements may be delayed when justification satisfactory to the Director is provided; such justification shall include an agreement and bond with surety satisfactory to the Director for completion in accordance with a firm schedule for timely completion. (ZO 18-704.3) See Seasonal Landscape Deferrals above.

Application No RZ 2009-MA-011 Staff T.Strunk
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (CDP) (FDP)
SEE PROFFERS DATED Mar 4, 2010
Date of (BOS) (PC) approval Mar 9, 2010

Sheet 6 of 19
Concur. w/ SEA 95-M-039: dev cond. dated 3-2-2010

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(703) 532-6163 FAX (703) 533-1301

DRAWN: MRW
DATE: 1/16/09; REV.: 4/29/09, 8/10/09; REV.: 10/16/09, 11/12/09, 12/2/09, 2/5/10
SCALE: NTS

PROFESSIONAL ENGINEER — COMMONWEALTH OF VIRGINIA — JEFFREY J. STUCHELL Lic. No.031215 — 2/5/10

NO.	DESCRIPTION	DATE	REV. BY	APPROVED

REVISION APPROVED BY

TREE PRESERVATION NOTES

WESTLAWN SHOPPING CENTER AND BILL PAGE HONDA
MASON DISTRICT
FAIRFAX COUNTY, VIRGINIA

Virginia Cooperative Extension

REPRINTED 2004

Horticulture

PUBLICATION 430-295

Tree and Shrub Planting Guidelines

*Bonnie Lee Appleton and Susan French**

Plant and Site Selection

Select trees and shrubs well-adapted to conditions of individual planting sites. Poorly-sited plants are doomed from the start, no matter how carefully they're planted.

Test soil drainage before planting. Dig a test hole as deep as your planting hole and fill with water. If water drains at a rate of less than one inch per hour, consider installing drainage to carry water away from the planting hole base, or moving or raising the planting site (berm construction).

Also **consider using more water-tolerant species.** For trees, try red maple, sycamore, bald cypress, willow oak, or river birch. For shrubs, try inkberry, redtwig dogwood and buttonbush. Avoid dogwoods, azaleas, boxwoods, Japanese hollies, and other plants that don't like "wet feet" where drainage is poor.

Examine soil for compaction before planting. If soils are compacted, consider replacement with a good loam soil, or incorporation of several inches of an organic material such as composted yard waste to a depth of at least 8 inches over the entire planting area. **Do not incorporate small quantities of sand** - compaction will increase and drainage decrease.

Site Preparation

Dig shallow planting holes two to three times as wide as the root ball. Wide, shallow holes encourage horizontal root growth that trees and shrubs naturally produce.

In well-drained soil, **dig holes as deep as the root ball.** In poorly-drained heavy clay soil, dig holes one to two inches shallower than the root ball. Cover the exposed root ball top with mulch.

Don't dig holes deeper than root balls or put loose soil beneath roots because loose soil will compact over time, leaving trees and shrubs planted too deep. Widen holes near the soil surface where most root growth occurs. Score walls of machine-dug (auger, backhoe) holes to prevent glazing.

Backfill holes with existing unamended soil. Do not incorporate organic matter such as peatmoss into backfill for individual planting holes. Differences in soil pore sizes will be created causing problems with water movement and root growth between the root ball, planting hole, and surrounding soil.

Backfill half the soil, then **water thoroughly to settle out air pockets.** Finish backfilling, then water again. Cover any exposed root ball tops with mulch.

Incorporate slow-release granular fertilizers into backfill soil to provide nitrogen, or if a soil test indicates a need for phosphorus or potassium. **Avoid using fast-release agronomic fertilizers that can dehydrate tree roots.** Use no more than 1# actual nitrogen per 1,000 ft. of planting hole surface. (Example - if using 18-6-12 with a 5' diameter hole, incorporate 0.3 oz. per planting hole.)

Tree and Shrub Preparation

Closely inspect the wrapping around root balls of B&B (balled and burlapped) trees and shrubs. Growers use many synthetic materials, as well as burlap treated to retard degradation, to wrap root balls. Many of these materials will not degrade. To insure root growth into surrounding soil, **remove pinning nails or rope lacing, then cut away or drop the wrapping material to the bottom of the planting hole**, backfilling over it.

Wire baskets used to protect root balls degrade very slowly underground. **Remove the top 8-12 inches of wire** to keep equipment from getting caught in wire loops, and surface roots from girdling.

Remove all rope, whether jute or nylon, from trunks. Again, degradation is slow or nonexistent, and ropes can girdle trunks and roots.

Remove plastic containers from container-grown trees and shrubs. For plants in fiber pots, break away the top or remove the pot entirely. Many fiber pots are coated to extend their shelf life, but this slows degradation below ground and retards root extension.

If roots are circling around the root ball exterior, cut through the roots in a few places. Cutting helps prevent circling roots from eventually girdling the trunk. Select trees grown in containers with vertical ribs or a copper-treatment on the interior container wall. These container modifications and treatments minimize circling root formation.

Tree Care After Planting

Remove tags and labels from trees and shrubs to prevent girdling branches and trunks.

Good follow-up watering helps promote root growth. Drip irrigation systems and water reservoir devices can facilitate watering.

Mulch, but don't over mulch newly planted trees and shrubs. **Two to three inches of mulch is best** - less if a fine material, more if coarse. Use either organic mulches (shredded or chunk pine bark, pine straw, composts) or inorganic mulches (volcanic and river rocks).

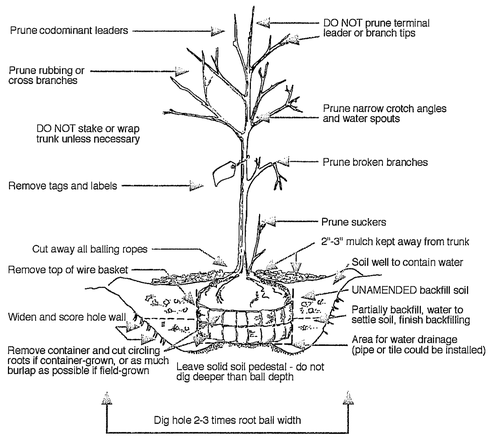
Keep mulch from touching tree trunks and shrub stems. This prevents disease and rodent problems if using organic mulches, and bark abrasion if using inorganic mulches.

Don't use black plastic beneath mulch around trees and shrubs because it blocks air and water exchange. For added weed control, use landscape fabrics that resist weed root penetration. Apply only one to two inches of mulch atop fabrics to prevent weeds from growing in the mulch.

Only stake trees with large crowns, or those situated on windy sites or where people may push them over. Stake for a maximum of one year. Allow trees a slight amount of flex rather than holding them rigidly in place. Use guying or attaching material that won't damage the bark. To prevent trunk girdling, remove all guying material after one year.

Most trees should not have their trunks wrapped. Wrapping often increases insect, disease, and water damage to trunks. Thin-barked trees planted in spring or summer into hot or paved areas may benefit from wrapping if a white wrap is used. To avoid trunk girdling, do not attach wraps with wire, nylon rope, plastic ties, or electrical tape. If wraps must be used, remove within one year.

For protection against animal or equipment damage, install guards to protect the trunk. Be sure the guards are loose-fitting and permit air circulation.



*Extension Specialist and Extension Technician, respectively; AREC, Hampton Roads; Virginia Tech

Virginia Tech — VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

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Lennis W. Lyons, Administrator, 1890 Extension Program, Virginia State, Petersburg.
VT/0604/430pp/0000S

VIRGINIA STATE UNIVERSITY

Table 12.12 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 preceding the 10-year tree canopy calculations	SEE TABLE 12.3 (SHEET 4)	see § 12-0507.2 for list of required elements and worksheet
B. Tree Canopy Requirement			
B1	Identify gross site area =	364,252 SF	§ 12-0510.1A
B2	Subtract area dedicated to parks, road frontage, and	±8,680 SF	§ 12-0510.1B
B3	Subtract area of exemptions = (THIS INCLUDES FLOODPLAIN/STORM EASEMENT AREA)	±48,726 SF	§ 12-0510.1C(1) through § 12-0510.1C(6)
B4	Adjusted gross site area (B1 – B2) =	±306,846 SF	
B5	Identify site's zoning and/or use	C–6	
B6	Percentage of 10-year tree canopy required =	10%	§ 12-509.1 and Table 12.4
B7	Area of 10-year tree canopy required (B4 x B5) =	±30,685 SF	
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	N/A	Sheet number
C. Tree Preservation			
C1	Tree Preservation Target Area =	0	
C2	Total canopy area meeting standards of § 12-0200 =	0	
C3	C2 x 1.25 =	0	§ 12-0509.3B
C4	Total canopy area provided by unique or valuable forest or woodland communities =	0	
C5	C4 x 1.5 =	0	§ 12-0509.3B(1)
C6	Total of canopy area provided by "Heritage," "Memorial," "Specimen," or "Street" trees =	0	
C7	C6 x 1.5 to 3.0 =	0	§ 12-0509.3B(2)
C8	Canopy area of trees within Resource Protection Areas and 100-year floodplains =	±48,726 SF*	
C9	C8 x 1.0 =	N/A	§ 12-0509.3C(1)
C10	Total of C3, C5, C7 and C9 =	N/A	If area of C10 is less than B7 remainder of requirement must be met through tree planting - go to D
D. Tree Planting			
D1	Area of canopy to be met through tree planting (B7-C10) =	±33,600 SF	
D2	Area of canopy Planted for air quality benefits =	TBD	
D3	x 1.5 =	TBD	§ 12-0509.4B(1)
D4	Area of canopy planted for energy conservation =	TBD	
D5	x 1.5 =	TBD	§ 12-0509.4B(2)
D6	Area of canopy planted for water quality benefits =	TBD	
D7	x 1.25 =	TBD	§ 12-0509.4B(3
D8	Area of canopy planted for wildlife benefits =	TBD	
D9	x 1.5 =	TBD	§ 12-0509.4B(4)
D10	Area of canopy provide by native trees =	TBD	
D11	x 1.5 =	TBD	§ 12-0509.4B(5)
D12	Area of canopy provided by improved cultivars and varieties =	TBD	
D13	X1.25	TBD	§ 12-0509.4B(6)
D14	Area of canopy provided through tree seedlings =	TBD	§ 12-0509.4D(1)
	x1.0	TBD	
D15	Area of canopy provided through native shrubs or woody seed mix =	TBD	§ 12-0509.4D(1)(a)
	x1.0	TBD	§ 12-0509.4D(1)(a)
D16	Percentage of D14 represented by D15=	TBD	Must not exceed 33% of D14
D17	Total of canopy area provided through tree planting =	±33,600 SF	
D18	Is an offsite planting relief requested?	NO	Yes or No
D19	Tree Bank or Tree Fund?	NO	§ 12-0511
D20	Canopy area requested to be provided through offsite banking or tree fund	0	
D21	Amount to be deposited into the Tree Preservation and Planting Fund	0	
E. Total of 10-year Tree Canopy Provided			
E1	Total of canopy area provided through tree preservation (C10) =	0	
E2	Total of canopy area provided through tree planting (D17) =	±33,600 SF	
E3	Total of canopy area provided through offsite mechanism (D19) =	0	
E4	Total of 10-year Tree Canopy Provided =	±33,600 SF	Total of E1 through E3. Area should meet or exceed area in B6

* WITHIN FLOODPLAIN AND COUNTY EASEMENT, NO CREDIT TAKEN

NOTE:

SPECIES OF TREE AND RELATED CATEGORY (SUCH AS DESIRABLE SPECIES, NATIVE, AND WILDLIFE CREDITS) WILL BE DETERMINED AT TIME OF SITE PLAN. PLANT TOTALS LISTED DO NOT INCLUDE ANY ADDITIONAL CREDITS FOR THE CATEGORIES LISTED ABOVE.

Application No RZ 2009-MA-011 Staff T.Strunk
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (CDP) (FDP)
SEE PROFFERS DATED Mar 4, 2010
Date of (BOS) (PC) approval Mar 9, 2010

Sheet 7 of 19
Concur. w/ SEA 95-M-039: dev cond. dated 3-2-2010

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(703) 532-6163 FAX (703) 533-1901 WWW.WLPINC.COM

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DRAWN: MRW
SCALE: NTS

COMMONWEALTH OF VIRGINIA — JEFFREY J. STUCHEL — Lic. No.031215 — PROFESSIONAL ENGINEER — 2/5/10

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY:	APPROVED	DATE

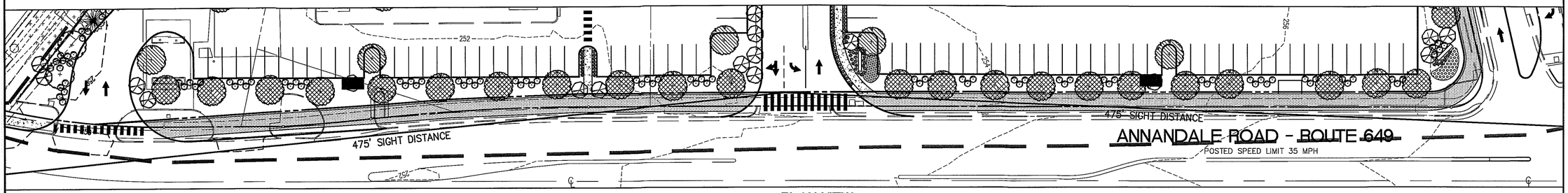
LANDSCAPE NOTES

WESTLAWN SHOPPING CENTER AND BILL PAGE HONDA

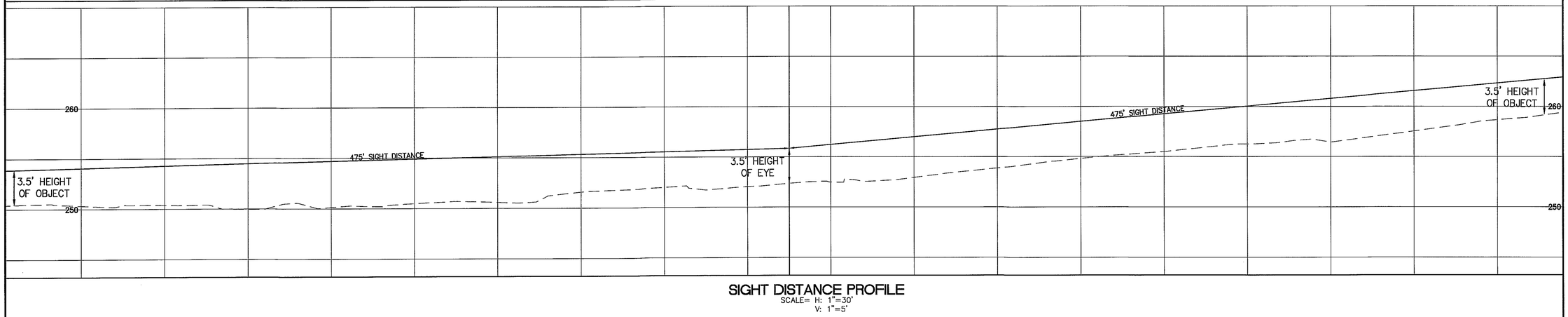
MASON DISTRICT

FAIRFAX COUNTY, VIRGINIA

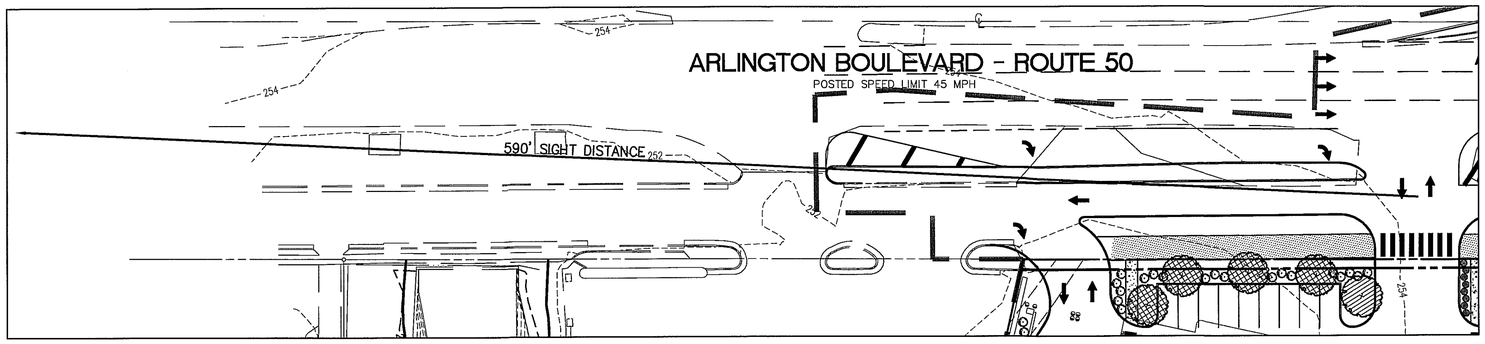
File No. FC-16 Tax Map No. 50-4 Job No. 91084 Cadd Dwg. File: GDP\91084_GDP Xref:



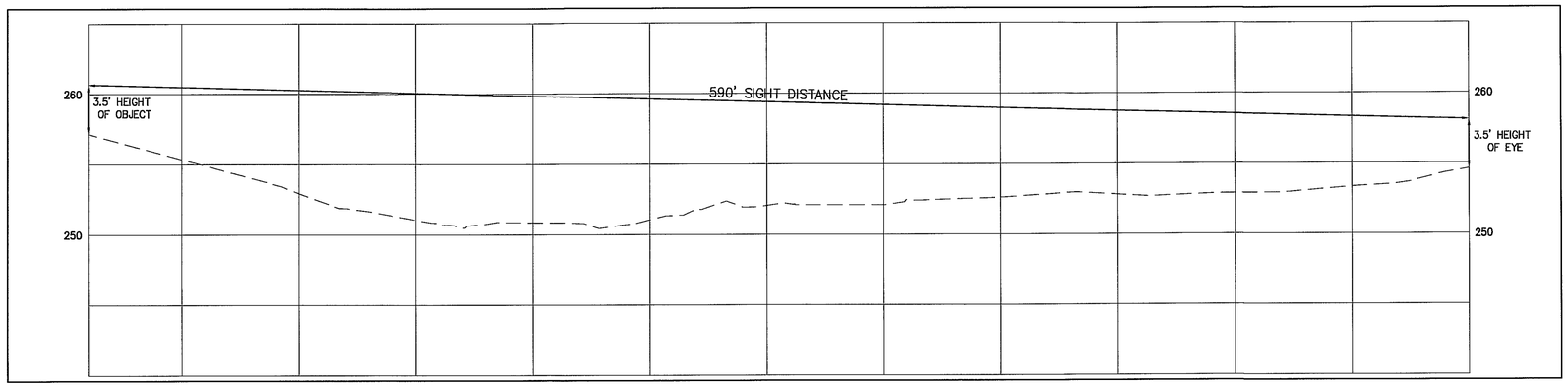
PLAN VIEW
SCALE= 1"=30'



SIGHT DISTANCE PROFILE
SCALE= H: 1"=30'
V: 1"=5'



PLAN VIEW
SCALE= 1"=30'



SIGHT DISTANCE PROFILE
SCALE= H: 1"=30'
V: 1"=5'

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REV. 10/16/09; 11/12/09; 1/12/10; 2/5/10
DRAWN: MRW
SCALE: AS NOTED

COMMONWEALTH OF VIRGINIA
JEFFREY J. STUCHELL
Lic. No.031215
PROFESSIONAL ENGINEER
2/5/10

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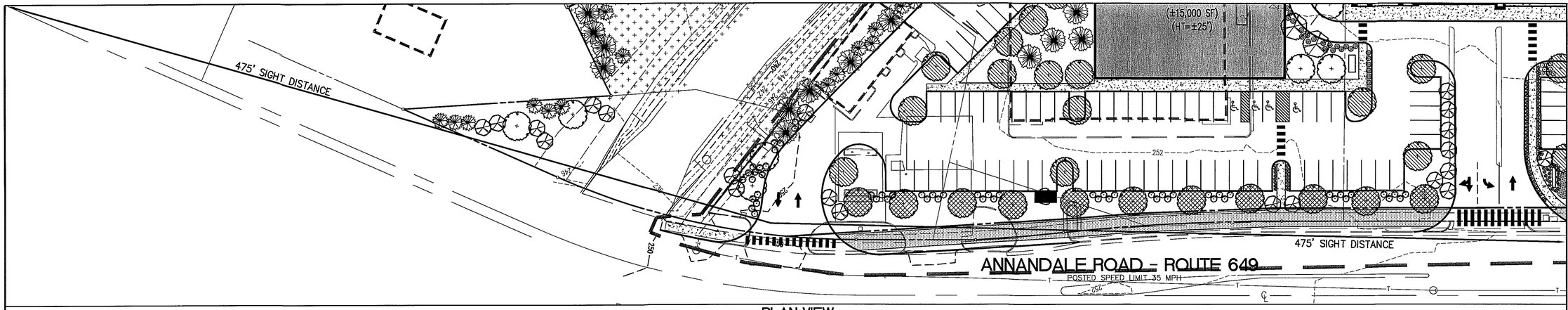
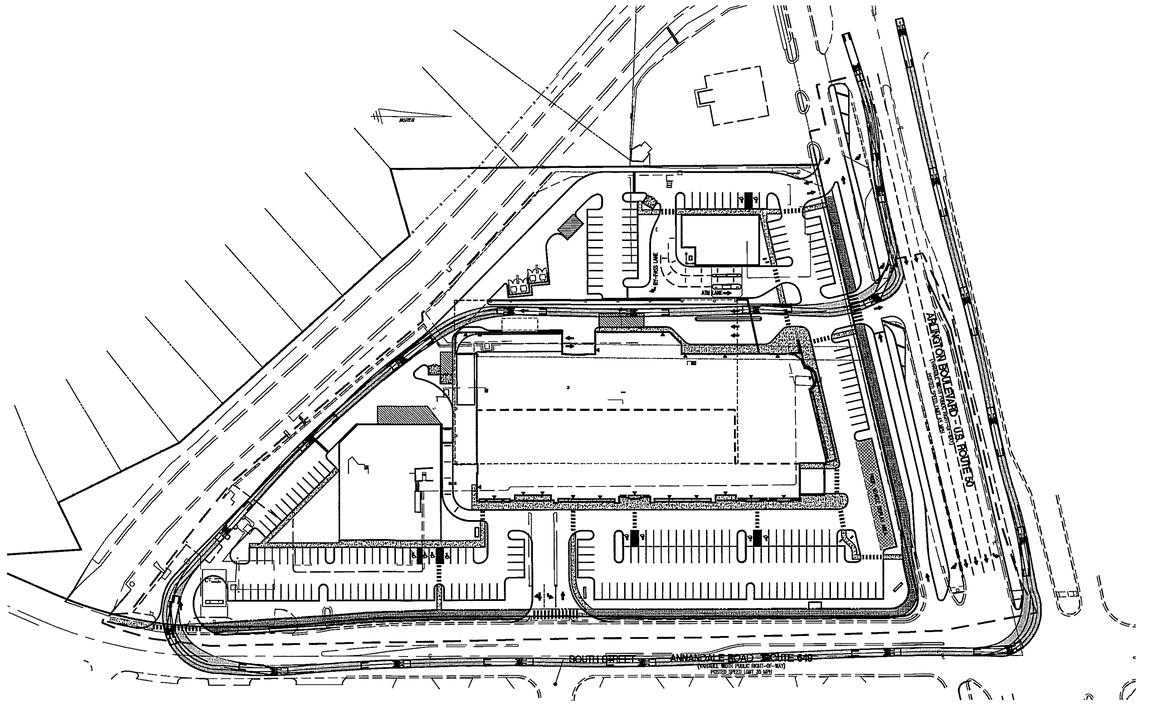
PRELIMINARY SIGHT DISTANCE PROFILES

WESTLAWN SHOPPING CENTER AND BILL PAGE HONDA

MASON DISTRICT
FAIRFAX COUNTY, VIRGINIA

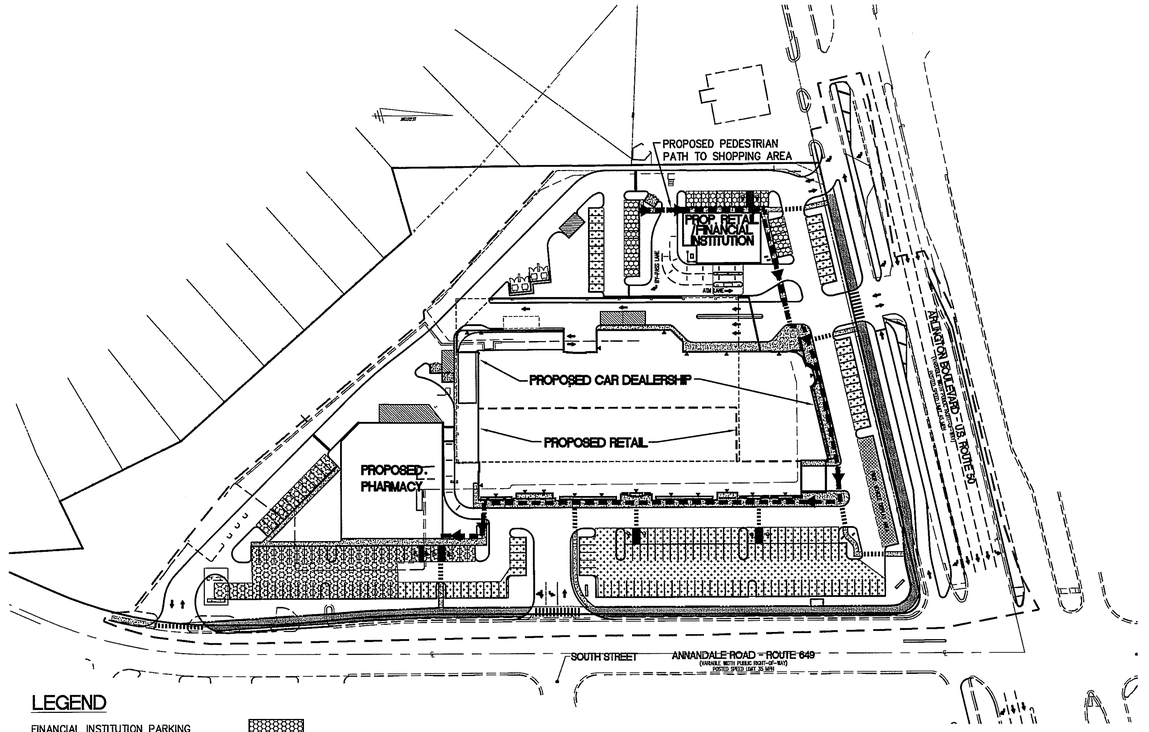
File No. FG-16 Tax Map No. 50-4 Job No. 91084 Cadd Dwg. File: GDP\91084_SD Xref:


475' SIGHT DISTANCE
(±15,000 SF)
(HT=±25')
252
252
252



DELIVERY TRUCK CIRCULATION DETAIL

(NOT TO SCALE)



LEGEND

- FINANCIAL INSTITUTION PARKING
- PHARMACY PARKING
- RETAIL PARKING
- PEDESTRIAN PATH TO SHOPPING AREA

PARKING ALLOCATION DETAIL

(NOT TO SCALE)

NOTE: ALL PARKING WILL BE SHARED THROUGHOUT THE SITE. WITH THE EXCEPTION OF THE STRUCTURED PARKING, WHICH WILL BE RESTRICTED TO DEALERSHIP USES ONLY

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Sheet 10 of 19
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SCALE: AS NOTED DRAWN: MRW

COMMONWEALTH OF VIRGINIA JEFFREY J. STUCHELL Lic. No.032125 PROFESSIONAL ENGINEER 2/5/10

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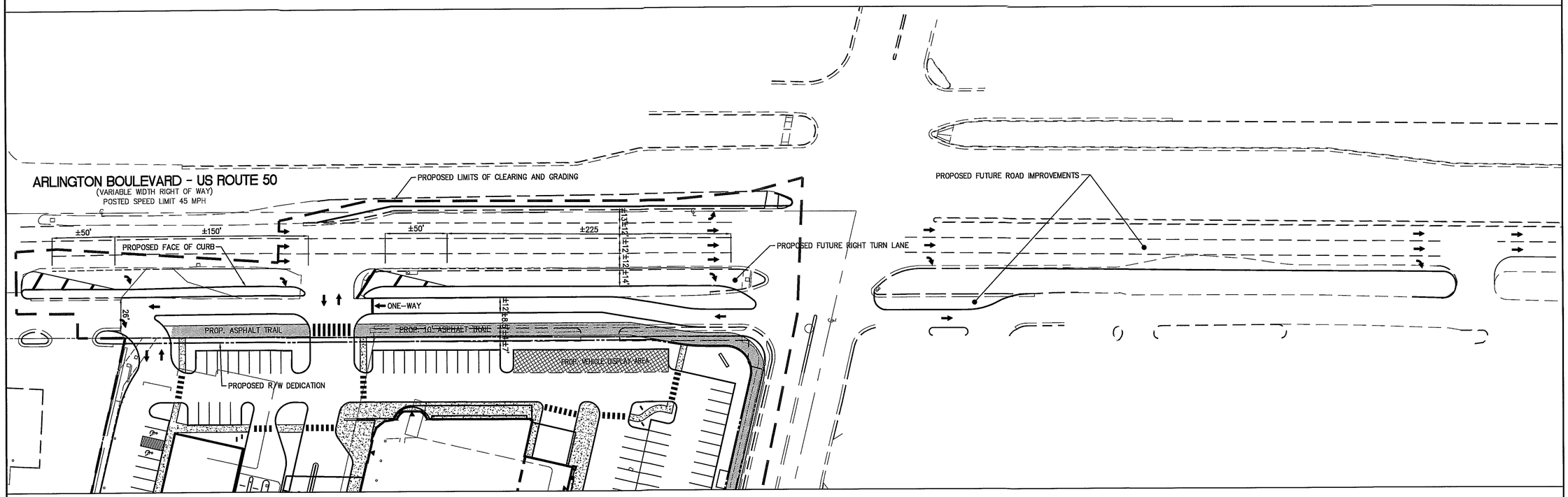
TRUCK PATH AND PARKING ALLOCATION DETAILS

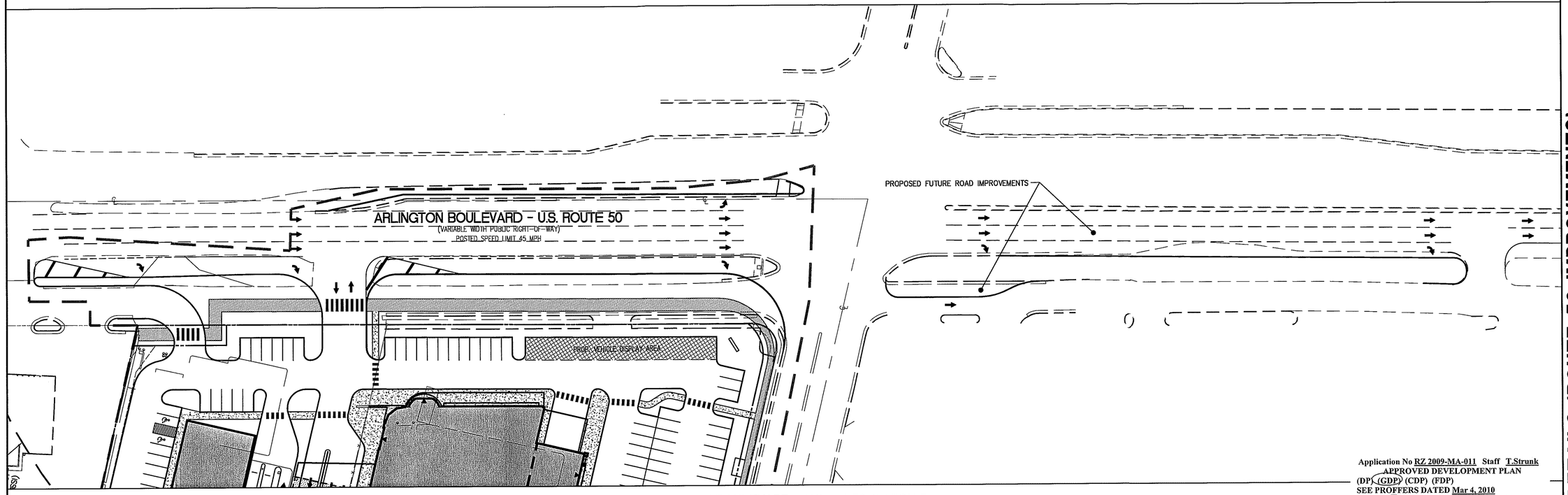
WESTLAWN SHOPPING CENTER AND BILL PAGE HONDA
MASON DISTRICT
FAIRFAX COUNTY, VIRGINIA

SHEET: 10 OF 17

File No. FC-16 Tax Map No. 50-4 Job No. 91084 Cadd Dwg. File: GDP\91084_DETAILS Xref:



ARLINGTON BOULEVARD - ROUTE 50 OPTION A
(ONE-WAY WEST BOUND SERVICE DRIVE)
(SCALE: 1"=40')



ARLINGTON BOULEVARD - ROUTE 50 OPTION B
(REMOVE EXISTING SERVICE DRIVE)
(SCALE: 1"=40')

Application No RZ 2009-MA-011 Staff T.Strunk
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DRAWN: MRW
SCALE: 1"=30'

JEFFREY J. STUCHEL Lic. No.031215 2/5/10
PROFESSIONAL ENGINEER

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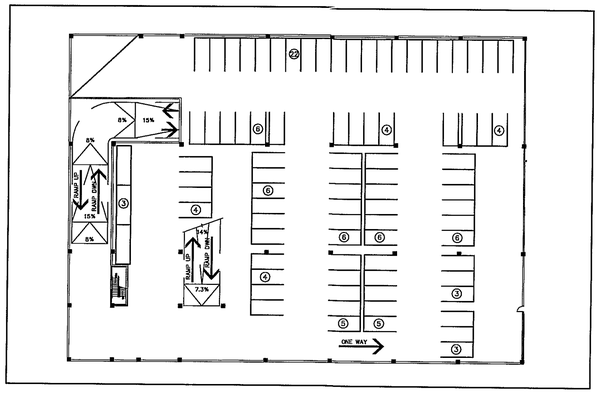
SITE DETAILS (ROUTE 50 IMPROVEMENTS)

WESTLAWN SHOPPING CENTER AND BILL PAGE HONDA

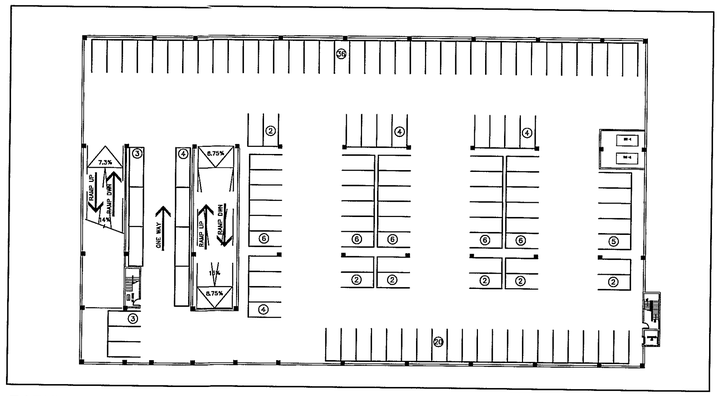
MASON DISTRICT
FAIRFAX COUNTY, VIRGINIA

File No. FC-16 Tax Map No. 50-4 Job No. 91084 Cadd Dwg. File: GDP\91084_DETAILS Xref:



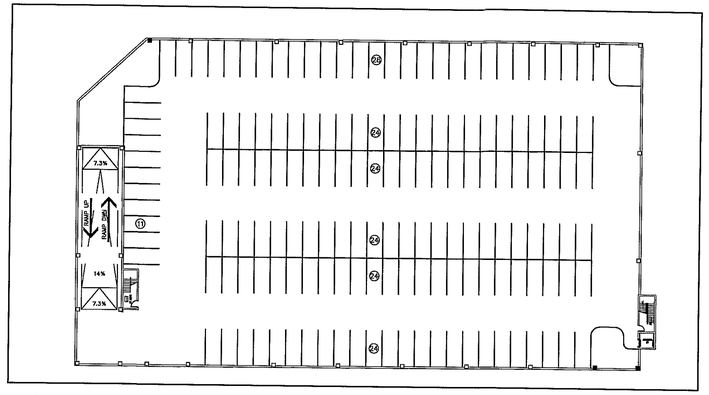
PARKING GARAGE LEVEL ONE
(±87 PARKING SPACES)

NOT TO SCALE (PROVIDED BY ARCHITECT)



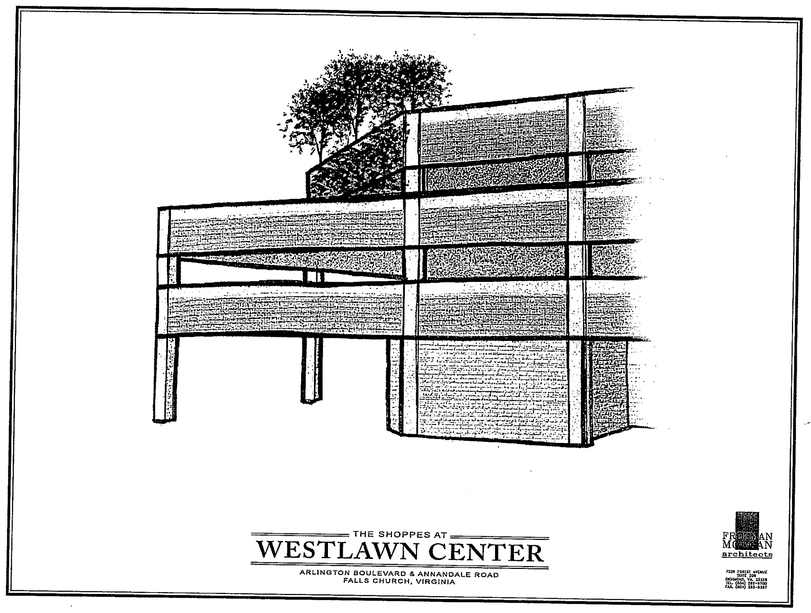
PARKING GARAGE LEVEL TWO
(±125 PARKING SPACES)

NOT TO SCALE (PROVIDED BY ARCHITECT)



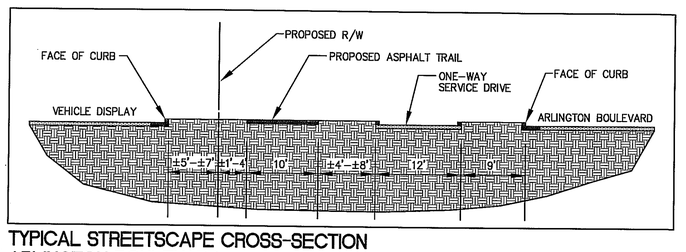
PARKING GARAGE LEVEL THREE
(VEHICLE STORAGE ONLY)

NOT TO SCALE (PROVIDED BY ARCHITECT)



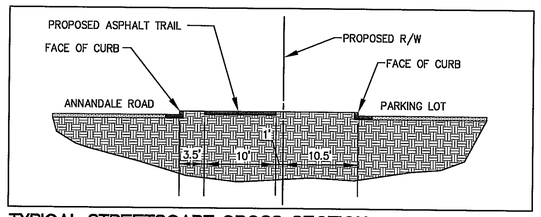
PARKING GARAGE STEPBACK DETAIL
FOR ILLUSTRATIVE PURPOSES ONLY

NOT TO SCALE



TYPICAL STREETSCAPE CROSS-SECTION
ARLINGTON BOULEVARD

SCALE: 1"=10'



TYPICAL STREETSCAPE CROSS-SECTION
ANNANDALE ROAD - NORTH OF SOUTH STREET

SCALE: 1"=10'

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SCALE: AS NOTED

COMMONWEALTH OF VIRGINIA
JEFFREY J. STUCHELL
Lic. No.033215
2/5/10
PROFESSIONAL ENGINEER

NO.	DESCRIPTION	DATE	REV. BY	APPROVED

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PARKING GARAGE AND STREETSCAPE DETAILS

WESTLAWN SHOPPING CENTER AND BILL PAGE HONDA

MASON DISTRICT
FAIRFAX COUNTY, VIRGINIA

SHEET: 11A OF 17

PRELIMINARY BMP FACILITY DESIGN CALCULATIONS

PART 1: LIST ALL OF THE SUBAREAS AND "C" FACTORS USED IN THE BMP COMPUTATIONS

SUBAREA DESIGNATION AND DESCRIPTION (1)		"C" (2)	ACRES (3)
A_1	ONSITE DRAINAGE AREA TO BIORETENTION FILTER	0.90	0.62
A_2	ONSITE DRAINAGE AREA TO FILTERRA #1	0.90	0.44
A_3	ONSITE DRAINAGE AREA TO FILTERRA #2	0.90	0.44
A_4	ONSITE UNCONTROLLED	0.80	6.86
	TOTAL SITE AREA		8.36 AC.

PART 2: COMPUTE THE WEIGHTED AVERAGE "C" FACTOR FOR THE SITE

(A) AREA OF THE SITE (a) 8.36 ACRES

(B) WEIGHTED AVERAGE "C" FACTOR= 0.76

(SEE OVERALL SITE DRAINAGE SUMMARY, SWM-OUTFALL SHEET)

PART 3: COMPUTE THE TOTAL PHOSPHORUS REMOVAL FOR THE SITE

SUBAREA DESIGNATION (1)	BMP TYPE (2)	REMOVAL EFF. (%) (3)	AREA RATIO (4)	"C" FACTOR RATIO (5)	PRODUCT (6)
A_1	ONSITE DRAINAGE AREA TO BIORETENTION FILTER	50	x 0.62/8.36	x 0.90/0.76	= 4.39%
A_2	ONSITE DRAINAGE AREA TO FILTERRA #1	40	x 0.44/8.36	x 0.90/0.76	= 2.49%
A_2	ONSITE DRAINAGE AREA TO FILTERRA #2	40	x 0.44/8.36	x 0.90/0.76	= 2.49%
				(a) TOTAL =	9.37%

PART 4: DETERMINE COMPLIANCE WITH PHOSPHORUS REMOVAL REQUIREMENT

(A) SELECT REQUIREMENT (a) −6.36%

* WATER SUPPLY OVERLAY DISTRICT (OCCOQUAN WATERSHED) = 50 %

* CHESAPEAKE BAY PRESERVATION AREA (NEW DEVELOPMENT) = 40 %

* CHESAPEAKE BAY PRESERVATION AREA (REDEVELOPMENT) = [1−0.9 x ("I"PRE/"I"POST)] x 100 = [1−0.9 x (0.91/0.77)] x 100= −6.36%

(B) IF LINE 3(a) 9.37 ≥ LINE 4(a) −6.36 THEN PHOSPHORUS REMOVAL REQUIREMENT IS SATISFIED.

NOTE

THIS SUMMARY IS PRELIMINARY AND SUBJECT TO CHANGE AT TIME OF SITE PLAN.

BMP NARRATIVE

THE PROPOSED CONSTRUCTION IS CONSIDERED REDEVELOPMENT DUE TO THE FACT THAT THERE IS NO NET INCREASE IN IMPERVIOUS AREA IN A RPA AND LESS THAN A 20% INCREASE IN IMPERVIOUS AREA IN A RMA. THE C-FACTOR DECREASES FROM 0.85 PRE-DEVELOPMENT TO 0.76 POST-DEVELOPMENT. THEREFORE, THE PHOSPHORUS REMOVAL REQUIREMENT FOR THIS REDEVELOPMENT IS −6.36% WHICH MEANS THERE IS NO BMP REQUIREMENT. HOWEVER, BMP FACILITIES ARE CURRENTLY PROPOSED ON THIS PLAN. A RAIN GARDEN AS WELL AS TWO FILTERRA TREE BOX FILTERS ARE CURRENTLY PROPOSED FOR A TOTAL PHOSPHORUS REMOVAL OF ±9.37% AS SHOWN IN THE ABOVE COMPUTATIONS. AT TIME OF SITE PLAN, OTHER BMP FACILITIES, SUCH AS PERMEABLE PAVERS, MAY BE PROPOSED TO HELP THE QUALITY OF THE WATER LEAVING THIS SITE.

PRELIMINARY OVERALL SITE DRAINAGE SUMMARY

I. PRE-DEVELOPMENT:

A. TOTAL AREA = 8.36 AC.

CONTRIBUTING AREAS:

7.62 AC. @ 0.90 (IMPERVIOUS AREA ON-SITE)
0.74 AC. @ 0.30 (GREEN AREA ON-SITE)
8.36 AC.

B. WEIGHTED "C":

$$\frac{(7.62)\ (0.90) + (0.74)\ (0.3)}{8.36} = 0.85$$

C. TIME OF CONCENTRATION = 5 MIN.

D. RUNOFF: Q2 = (0.85) (5.45) (8.36) = 38.73 CFS
Q10 = (0.85) (7.27) (8.36) = 51.66 CFS

II. POST-DEVELOPMENT:

A. CONTRIBUTING AREAS:

6.36 AC. @ 0.90 (IMPERVIOUS AREA ONSITE)
2.00 AC. @ 0.30 (GREEN AREA ONSITE)
8.36 AC.

B. WEIGHTED "C":

$$\frac{(6.36)\ (0.90) + (2.00)\ (0.30)}{8.36} = 0.76$$

C. RUNOFF: Q2 = (0.76) (5.45) (8.36) = 34.63 CFS
Q10 = (0.76) (7.27) (8.36) = 46.19 CFS

III. INCREASE:

Q2 = 34.63 − 38.73 = −4.10 CFS
Q10 = 46.19 − 51.66 = −5.47 CFS

NOTE

THIS SUMMARY IS PRELIMINARY AND SUBJECT TO CHANGE AT TIME OF SITE PLAN.

SWM NARRATIVE

THE ALLOWABLE RELEASE FROM THE SITE WITH THE PROPOSED REDEVELOPMENT SHALL BE THE RELEASE FROM THE SITE IN ITS CURRENT DEVELOPED CONDITION. THE 2-YEAR ALLOWABLE RELEASE IS 38.73 CFS AND THE 10-YEAR ALLOWABLE RELEASE IS 51.66 CFS. NO STORM DETENTION IS REQUIRED FOR THIS REDEVELOPMENT AS THE REDEVELOPED SITE HAS A LOWER C-FACTOR AND RUNOFF RATE THAN CURRENTLY EXISTS.

OUTFALL NARRATIVE

THIS SITE IS LOCATED IN THE CAMERON RUN WATERSHED. SITE RUNOFF DRAINS VIA SHEET FLOW, PAVED DITCHES AND STORM SEWER PIPES TO TRIPPS RUN WHICH FLOWS THROUGH THE SITE. WITHIN THE LIMITS OF THE SITE, THE TRIPPS RUN CHANNEL IS IMPROVED WITH CONCRETE AND GROUTED RIP RAP LININGS (SEE TYPICAL SECTION, THIS SHEET). THE EXTENT OF REVIEW FOR ADEQUATE OUTFALL FOR THIS SITE IS LOCATED AT THE POINT WHERE THE CHANNEL LEAVES THE SITE. ALL SITE RUNOFF HAS DRAINED INTO THE CHANNEL BY THIS POINT AND THE TRIPPS RUN DRAINAGE AREA OF 2,185 ACRES EXCEEDS ONE HUNDRED TIMES THE SITE AREA OF 8.36 ACRES.

IT IS IN THE OPINION OF THE SUBMITTING ENGINEER THAT THIS SITE MEETS FAIRFAX COUNTY PFM REQUIREMENTS FOR ADEQUATE OUTFALL. THE EXISTING TRIPPS RUN CHANNEL WAS ANALYZED FOR THE 2-YEAR STORM AND THE FLOW VELOCITIES WERE NOT EROSIVE WITH THE EXISTING CONCRETE AND GROUTED RIP RAP CHANNEL LINING. THE CAPACITY OF THE CHANNEL IS SUFFICIENT TO CONTAIN THE 10-YEAR STORM WITHIN THE CHANNEL'S BED AND BANKS.

DRAINAGE DIVIDES AND CHANNEL INFORMATION WERE DETERMINED USING AVAILABLE RECORD INFORMATION AND TOPOGRAPHY AS WELL AS INFORMATION GATHERED IN THE FIELD. THIS OUTFALL ANALYSIS IS SUBJECT TO CHANGE WITH FINAL ENGINEERING AND WILL BE REEVALUATED AND VERIFIED AT SITE PLAN.

Tripps Run Channel Flow for a 2 Year Frequency Storm:

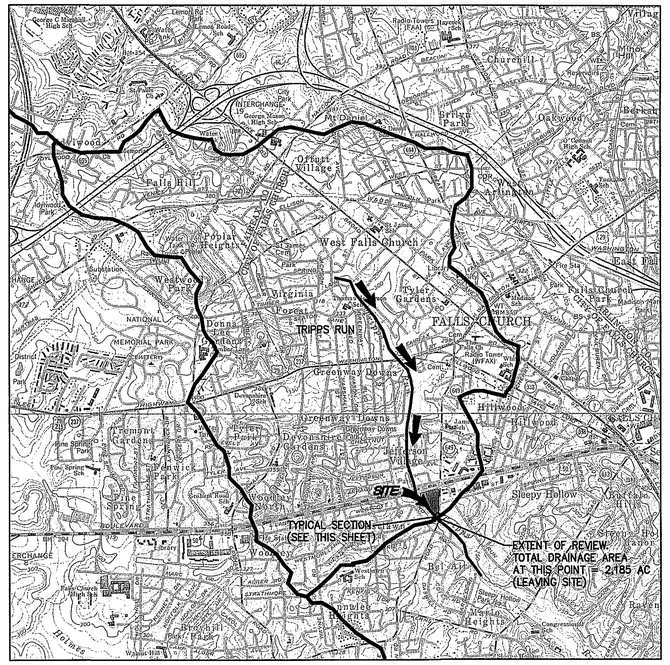
Input Data	
Slope	0.005500 ft/ft
Discharge	5,720.00 cfs

Results	
Mannings Coefficient	0.024
Water Surface Elevation	8.55 ft
Elevation Range	0.00 to 11.00
Flow Area	372.8 ft²
Wetted Perimeter	61.92 ft
Top Width	56.89 ft
Actual Depth	8.55 ft
Critical Elevation	8.82 ft
Critical Slope	0.004890 ft/ft
Velocity	15.34 ft/s
Velocity Head	3.66 ft
Specific Energy	12.21 ft
Froude Number	1.06
Flow Type	Supercritical

Tripps Run Channel Flow for a 10 Year Frequency Storm:

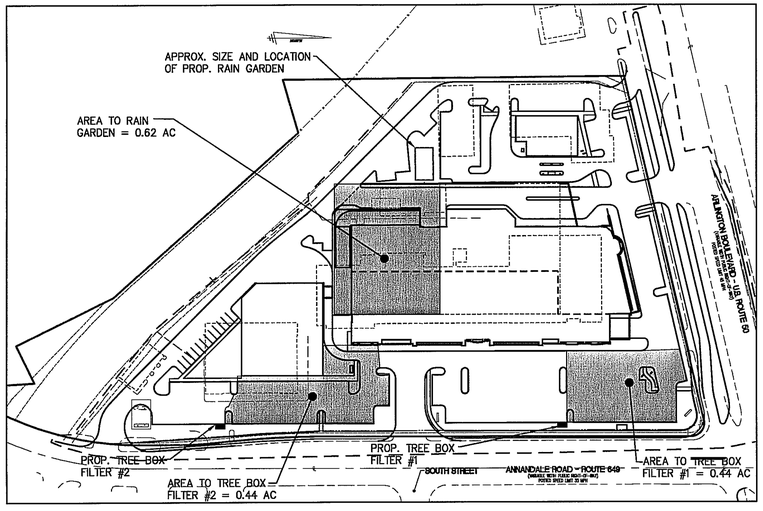
Input Data	
Slope	0.005500 ft/ft
Discharge	2,860.00 cfs

Results	
Mannings Coefficient	0.019
Water Surface Elevation	5.13 ft
Elevation Range	0.00 to 10.00
Flow Area	195.8 ft²
Wetted Perimeter	49.59 ft
Top Width	46.63 ft
Actual Depth	5.13 ft
Critical Elevation	5.88 ft
Critical Slope	0.003369 ft/ft
Velocity	14.61 ft/s
Velocity Head	3.32 ft
Specific Energy	8.44 ft
Froude Number	1.26
Flow Type	Supercritical



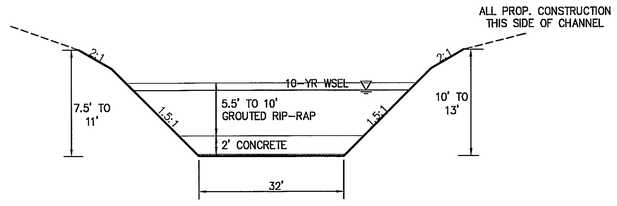
OUTFALL DRAINAGE AREA MAP

SCALE 1"=2000'



BMP FACILITY MAP

SCALE: 1"=100'



EXISTING IMPROVED CHANNEL SECTION

(TYPICAL)
NTS

Application No RZ 2009-MA-011 Staff T.Strunk
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STORMWATER MANAGEMENT CHECKLIST

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)

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

[X] 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 3.

[X] 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)
N/A (e.g. dry pond A, infil. trench, underground vault, etc.)						
Totals						

[X] 4. Onsite drainage channels, outfalls and pipe systems are shown on Sheet 3. 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 N/A. Type of maintenance access road surface noted on the plat is N/A (asphalt, geoblock, gravel, etc.).

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

[X] 7. A 'stormwater management narrative' which contains a description of how detention and best management practices requirements will be met is provided on Sheet 12.

[X] 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 12.

[X] 9. A description of how the outfall requirements, including contributing drainage areas of the Public Facilities Manual will be satisfied is provided on Sheet 12.

[X] 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 1, 2, 3.

[ ] 11. A submission waiver is requested for N/A.

[X] 12. Stormwater management is not required because REDEVELOPED IMPERVIOUS AREA IS LESS THAN EXISTING.

- THE PROPOSED REDEVELOPMENT WILL NOT INCREASE THE IMPERVIOUS RUNOFF FROM THIS PROPERTY. THEREFORE, NO ADDITIONAL DETENTION WILL BE REQUIRED.

PRELIMINARY STORMWATER MANAGEMENT/BEST MANAGEMENT PRACTICES/OUTFALL ANALYSIS

WESTLAWN SHOPPING CENTER AND BILL PAGE HONDA

MASON DISTRICT

FAIRFAX COUNTY, VIRGINIA

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

WALTER L. PHILLIPS
INCORPORATED
CIVIL ENGINEERS LAND SURVEYORS PLANNERS LANDSCAPE ARCHITECTS
207 PARK AVENUE, FALLS CHURCH, VIRGINIA 22046 WWW.WLPINC.COM
(703) 532-6163 FAX (703) 533-1301

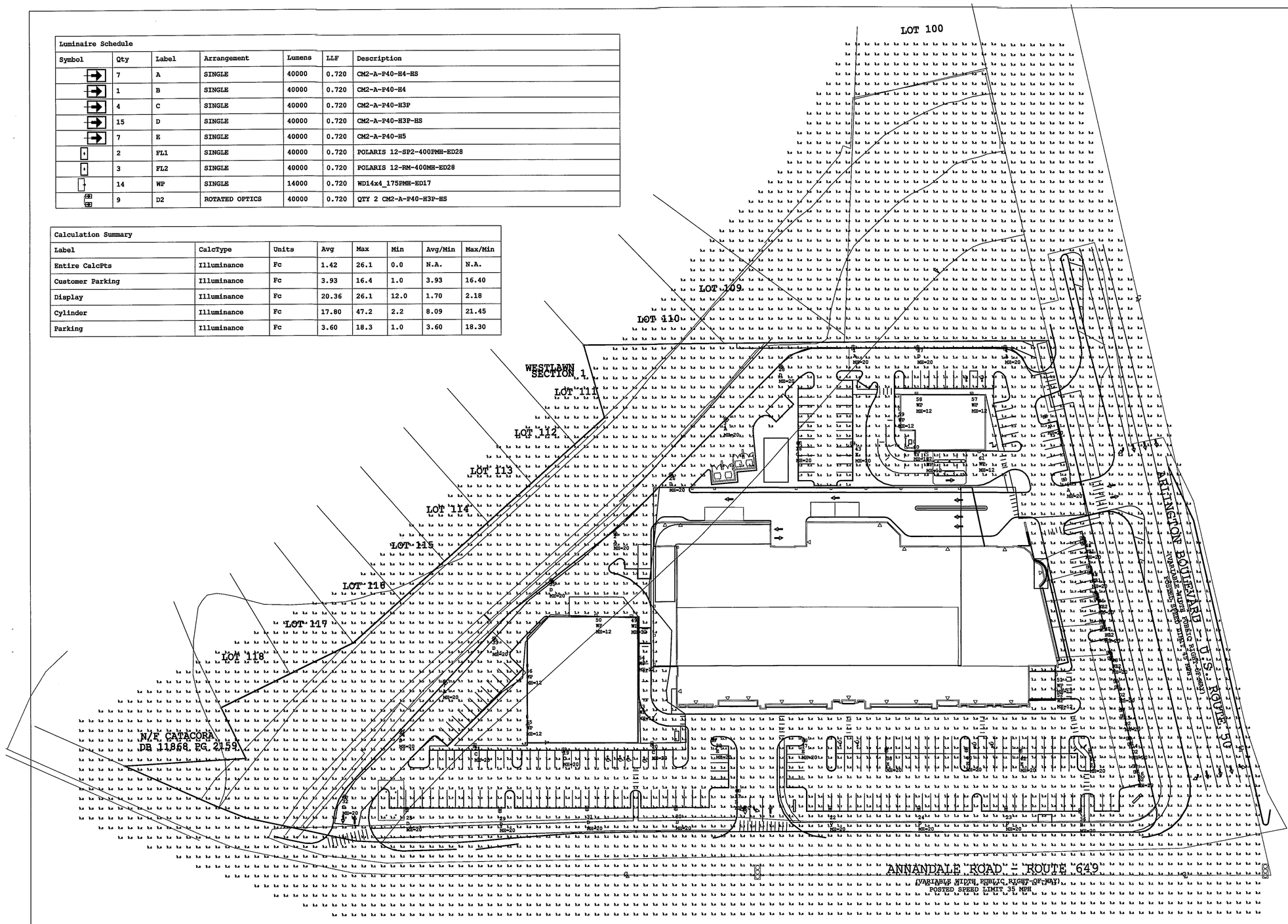
DATE: 3/16/09; REV. 4/29/09; 8/10/09; REV. 10/16/09; 11/12/09; 1/12/10; 2/5/10

SCALE: AS NOTED DRAWN: MRW

COMMONWEALTH OF VIRGINIA JEFFREY L. STICHEL Lic. No.031215 PROFESSIONAL ENGINEER 2/5/10

Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Lumens	LLF	Description
	7	A	SINGLE	40000	0.720	CM2-A-P40-H4-HS
	1	B	SINGLE	40000	0.720	CM2-A-P40-H4
	4	C	SINGLE	40000	0.720	CM2-A-P40-H3P
	15	D	SINGLE	40000	0.720	CM2-A-P40-H3P-HS
	7	E	SINGLE	40000	0.720	CM2-A-P40-H5
	2	FL1	SINGLE	40000	0.720	POLARIS 12-SP2-400PMH-ED28
	3	FL2	SINGLE	40000	0.720	POLARIS 12-RM-400MH-ED28
	14	WP	SINGLE	14000	0.720	WD14x4_175PMH-ED17
	9	D2	ROTATED OPTICS	40000	0.720	QTY 2 CM2-A-P40-H3P-HS

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Entire CalcPts	Illuminance	Fc	1.42	26.1	0.0	N.A.	N.A.
Customer Parking	Illuminance	Fc	3.93	16.4	1.0	3.93	16.40
Display	Illuminance	Fc	20.36	26.1	12.0	1.70	2.18
Cylinder	Illuminance	Fc	17.80	47.2	2.2	8.09	21.45
Parking	Illuminance	Fc	3.60	18.3	1.0	3.60	18.30



Luminaire Location Summary						
LumNo	Label	X	Y	Z	Orient	Tilt
1	A	336.071	406.011	20	270	0
2	A	89.054	217.134	20	303.611	0
3	A	202.818	331.991	20	322.464	0
4	A	492.283	406.011	20	270	0
5	A	536.121	353.686	20	197.519	0
6	A	555.601	268.736	20	193.376	0
7	A	-86.878	64.316	20	313.079	0
17	B	213.341	-50.924	20	0	0
18	C	277.121	305.741	20	0	0
19	C	36.754	-4.969	20	270	0
20	C	127.95	1.104	20	270	0
21	C	-54.54	-0.286	20	270	0
22	D	311.13	-72.652	20	90	0
23	D	492.13	-72.652	20	90	0
24	D	402.13	-72.652	20	90	0
25	D	-124.772	-71.652	20	90	0
26	D	146.763	275.887	20	309.447	0
27	D	402.301	405.675	20	270	0
28	D	259.665	386.617	20	310.261	0
29	D	-28.753	-72.546	20	90	0
30	D	152.422	-70.982	20	90	0
31	D	60.996	-70.758	20	90	0
32	D	-190.58	-54.566	20	337.082	0
33	D	-35.798	108.39	20	314.139	0
34	D	-132.169	13.771	20	315	0
35	D	23.121	169.29	20	311.373	0
36	D	368.434	-75	20	90	0
37	E	282.164	1.093	20	0	0
38	E	369.203	-12.118	20	90	0
39	E	194.102	1.648	20	180	0
40	E	491.38	-11.721	20	90	0
41	E	578.573	-13.484	20	90	0
42	E	307.123	-12.437	20	90	0
43	E	338.258	305.306	20	180	0
44	FL1	574.794	206.039	20	203.943	84.74
45	FL1	581.239	176.215	20	194.526	84.449
46	FL2	587.926	149.132	20	186.396	84.833
47	FL2	594.401	120.056	20	183.849	84.812
48	FL2	601.632	88.308	20	182.691	85.049
49	WP	107.123	130.941	12	90	0
50	WP	70.636	131.411	12	90	0
51	WP	544.994	68.317	12	0	0
52	WP	545.105	52.793	12	0	0
53	WP	114.891	42.376	12	0	0
54	WP	114.891	92.534	12	0	0
55	WP	-1.193	26.626	12	180	0
56	WP	-0.898	79.154	12	180	0
57	WP	457.895	355.919	12	270	0
58	WP	401.078	355.919	12	270	0
59	WP	382.708	349.621	12	180	0
60	WP	398.192	307.053	12	180	0
61	WP	465.407	299.543	12	270	0
62	WP	411.26	295.226	12	270	0
8	D2	609.069	58.809	20	192	0
9	D2	567.926	149.132	20	192	0
10	D2	594.401	120.056	20	192	0
11	D2	574.026	206.086	20	192	0
12	D2	581.239	176.215	20	192	0
13	D2	601.832	88.388	20	192	0
14	D2	622.093	0.211	20	192	0
15	D2	614.759	29.281	20	192	0
16	D2	628.036	-28.312	20	192	0

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Graphic Scale
50 25 0 50 100

SHEET 13 OF 17

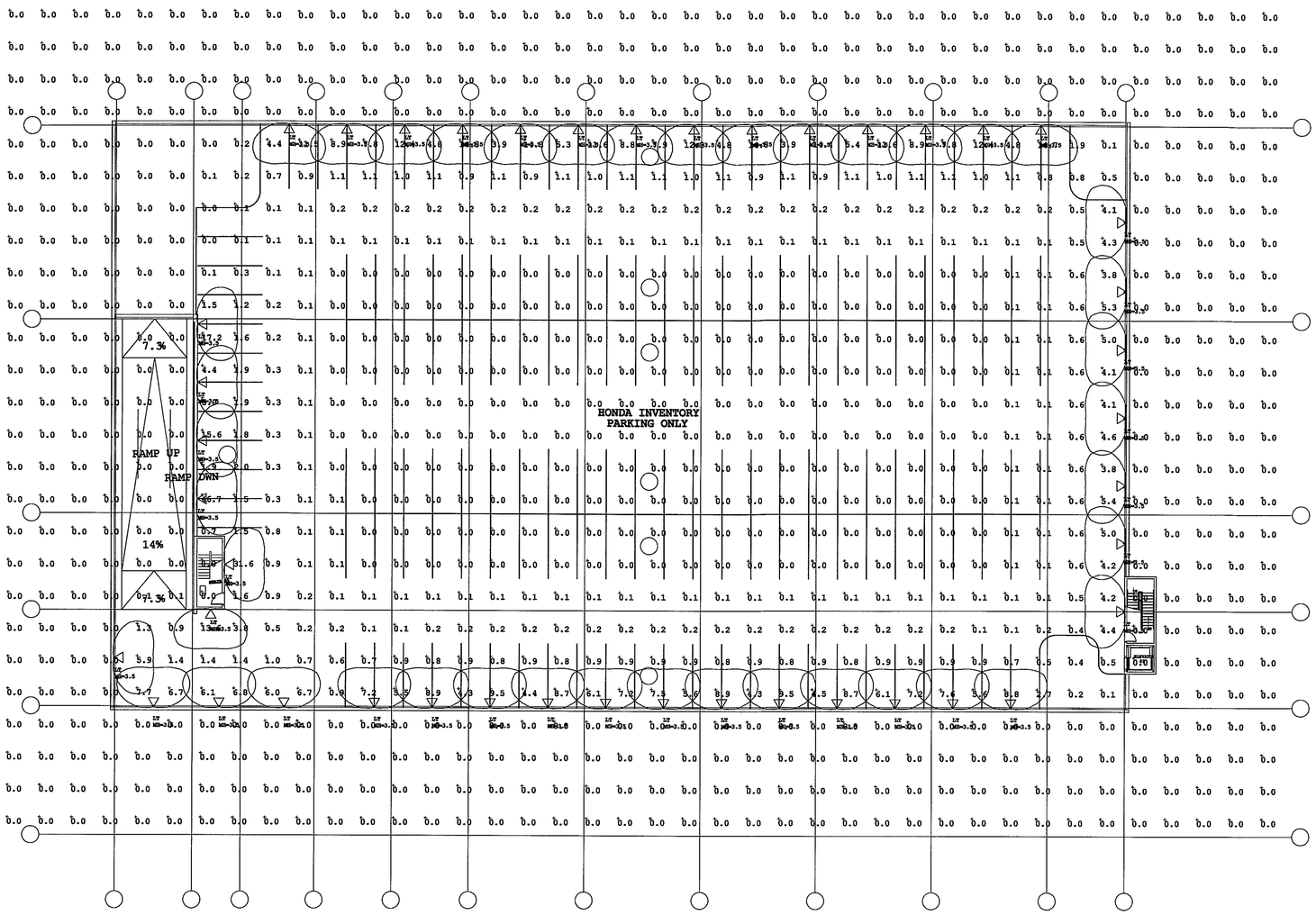
1. THIS LIGHTING DESIGN IS BASED ON LIMITED INFORMATION SUPPLIED BY OTHERS TO HUBBELL LIGHTING. SITE DETAILS PROVIDED HEREON ARE REPRODUCED ONLY AS A VISUALIZATION AID. FIELD DEVIATIONS MAY SIGNIFICANTLY AFFECT PREDICTED PERFORMANCE. PRIOR TO INSTALLATION, CRITICAL SITE INFORMATION (POLE LOCATIONS, ORIENTATION, MOUNTING HEIGHT, ETC.) SHOULD BE COORDINATED WITH THE CONTRACTOR AND/OR SPECIFIER RESPONSIBLE FOR THE PROJECT.
2. LUMINAIRE DATA IS TESTED TO INDUSTRY STANDARDS UNDER LABORATORY CONDITIONS. OPERATING VOLTAGE AND NORMAL MANUFACTURING TOLERANCES OF LAMP, BALLAST, AND LUMINAIRE MAY AFFECT FIELD RESULTS.
3. CONFORMANCE TO FACILITY CODE AND OTHER LOCAL REQUIREMENTS IS THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.

REVISED FROM DRAWING NUMBER(S)	TITLE	SCALE	DATE
	BILL PAGE HONDA GROUND LEVEL	1" = 50'	10/9/2009
		DRWN	APVED
		ALU	
		DRAWING NO.	
		0947149	

HUBBELL®
Hubbell Lighting, Inc.
701 MILLENNIUM BLVD
GREENVILLE, SC
29607

Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Lumens	LLF	Description
→	43	LT	SINGLE	8000	0.720	LLF10_100PMH-ED17

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CalcPts	Illuminance	Fc	1.28	46.7	0.0	N.A.	N.A.
SPILL	Illuminance	Fc	0.00	0.0	0.0	N.A.	N.A.



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SHEET 13A OF 17

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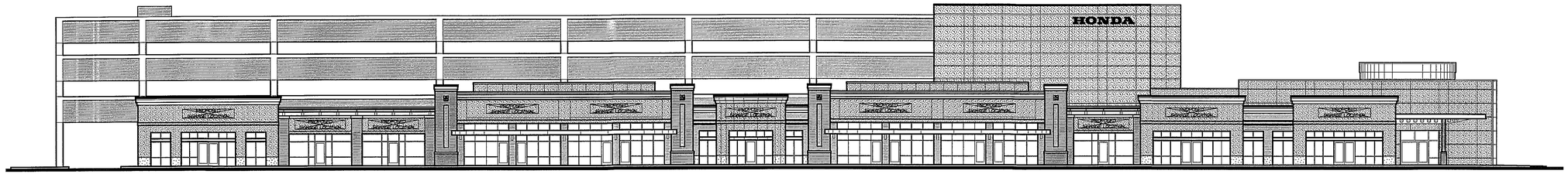
3. CONFORMANCE TO FACILITY CODE AND OTHER LOCAL REQUIREMENTS IS THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.

REVISED FROM DRAWING NUMBER(S)	STYLE
0944102	BILL PAGE HONDA
0944160	
0946948	TOP DECK

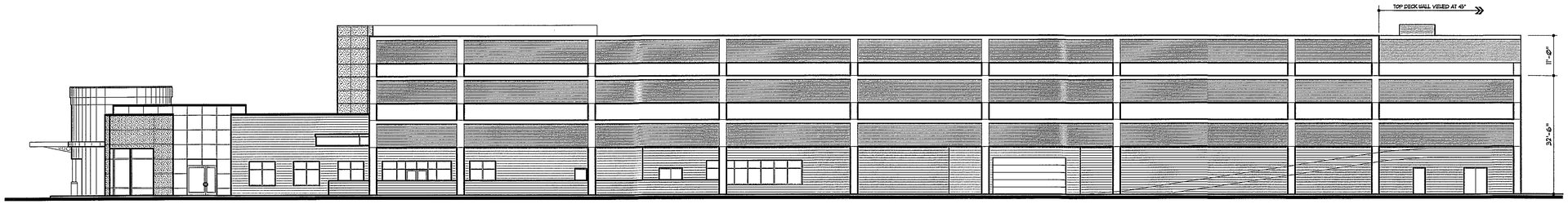
SCALE	DATE
1" = 20'	9/30/2009
DWN	APVD
ALG	
DRAWING NO.	
0947005	

HUBBELL®
Hubbell Lighting, Inc.
701 MILLENNIUM BLVD
GREENVILLE, SC
29607



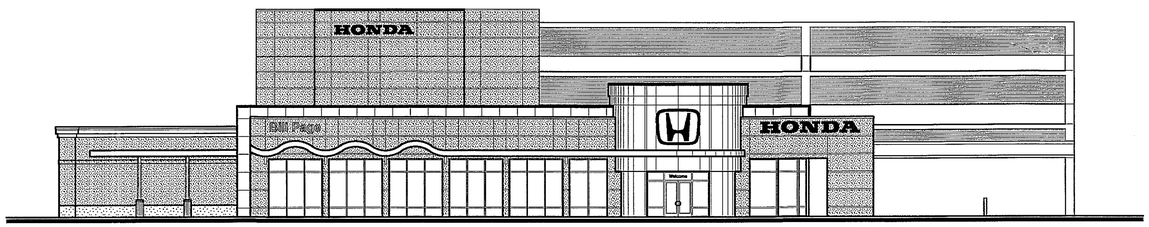
ANNANDALE ROAD (EAST) ELEVATION

SCALE: 1/16" = 1'-0"



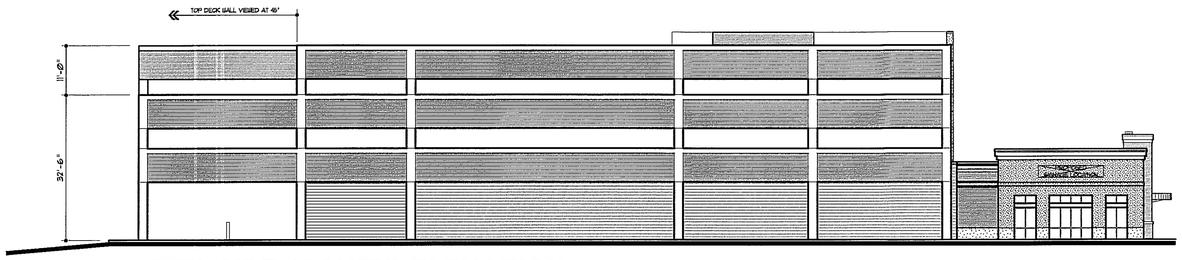
REAR (WEST) ELEVATION

SCALE: 1/16" = 1'-0"



ARLINGTON BOULEVARD (NORTH) ELEVATION

SCALE: 1/16" = 1'-0"



LEFT SIDE (SOUTH) ELEVATION

SCALE: 1/16" = 1'-0"

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FREEMAN MORGAN
architects

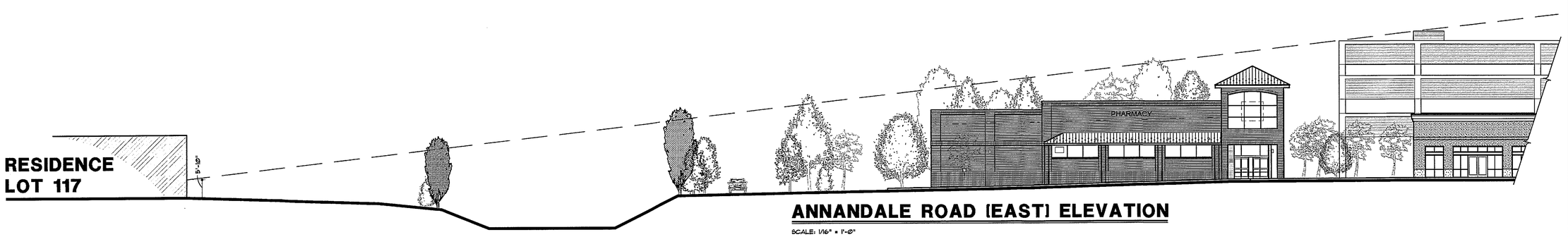
7229 FOREST AVENUE
SUITE 209
RICHMOND, VA. 23226
TEL. (804) 282-9700
FAX. (804) 282-8267

Revisions

EXTERIOR ELEVATIONS

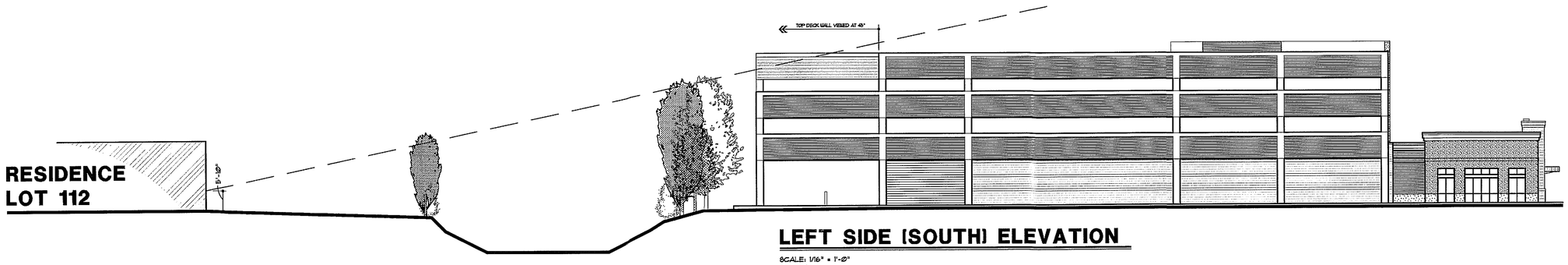
BILL PAGE HONDA
ARLINGTON BOULEVARD & ANNANDALE ROAD
FALLS CHURCH, VIRGINIA

Job 0767
Date 1-10-10
Sheet No.
A3.1



ANNANDALE ROAD (EAST) ELEVATION

SCALE: 1/16" = 1'-0"



LEFT SIDE (SOUTH) ELEVATION

SCALE: 1/16" = 1'-0"

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Revisions

LINE OF SIGHT

BILL PAGE HONDA
ARLINGTON BOULEVARD & ANNANDALE ROAD
FALLS CHURCH, VIRGINIA

Job 0767
Date 1-10-10
Sheet No.

A3.2

WESTLAWN CENTER

ARLINGTON BOULEVARD & ANNANDALE ROAD
FALLS CHURCH, VIRGINIA

FREEMAN MORGAN architects

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WESTLAWN CENTER

ARLINGTON BOULEVARD & ANNANDALE ROAD
FALLS CHURCH, VIRGINIA

FREEMAN MORGAN architects

Application No RZ 2009-MA-011 Staff T.Strunk
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