JENNINGS TOYOTA

LEE DISTRICT · FAIRFAX COUNTY, VIRGINIA

GENERALIZED DEVELOPMENT PLAN/ SPECIAL EXCEPTION PLAT

NOTES

1. OWNER/APPLICANT:

   JENNINGS BUSINESS PARK, LLC
   C/O MICHAEL F. JENNINGS
   8570 AMHERST AVENUE
   SPRINGFIELD, VIRGINIA 22150

2. THE PROPERTY SHOWN ON THIS PLAN IS IDENTIFIED ON THE FAIRFAX COUNTY ZONING MAP AS 090-4-01, PARCELS 6A AND 7. THE PROPERTY IS APPROXIMATELY ±2,810,943 SQUARE FEET OR ±64.53 ACRES.

3. THE SITE IS CURRENTLY ZONED R-1, RESIDENTIAL DISTRICT AND R-3, RESIDENTIAL DISTRICT. THE REZONING APPLICATION REQUESTS THE SITE BE REZONED TO C-8, HIGHWAY COMMERCIAL DISTRICT AND REQUIRES A SPECIAL EXCEPTION, FOR A PORTION OF PARCEL 6A, TO ALLOW FOR A VEHICLE SALE, RENTAL AND ANCILLARY SERVICE ESTABLISHMENT AND LIGHT AND MAJOR VEHICLE SERVICE ESTABLISHMENTS.

4. THE PROPOSED DEVELOPMENT WILL MEET THE PARKING REQUIREMENTS OF ARTICLE 11 OF THE ZONING ORDINANCE AS MAY BE MODIFIED BY SECTION 47-300 OF THE ZONING ORDINANCE. PARKING SHALL BE PROVIDED IN COMBINATION OF A PROPOSED BELOW GRADE PARKING STRUCTURE AND SURFACE SPACES.

5. THE BOUNDARY AND TOPOGRAPHIC INFORMATION IS FROM FIELD RUN AND AERIAL SURVEY BY WALTER L. PHILLIPS, INC. CONTOUR INTERVAL IS TWO (2) FEET.

6. THE PROPOSED DEVELOPMENT IS LOCATED ADJACENT TO RAILROAD TRACKS TO THE EAST; I-5 ZONED LAND TO THE SOUTH; AND I-3 ZONED LAND TO THE NORTH. PARCEL 7 IS PLANNED TO BE AN ACTIVE RECREATION AREA. THEREFORE, THE PROPOSED DEVELOPMENT WILL NOT POSE ANY ADVERSE IMPACTS ON THE ADJACENT PROPERTIES OR NEIGHBORING PROPERTIES.

7. IT IS ANTICIPATED THAT DEVELOPMENT OF THIS PROJECT WILL OCCUR IMMEDIATELY FOLLOWING COUNTY APPROVAL OF THE SITE PLAN.

8. THERE ARE NO SPECIAL AMENITIES PROPOSED WITH THIS DEVELOPMENT WITH THE EXCEPTION OF THE RECREATIONAL FIELD.

9. THE SITE IS SERVED BY PUBLIC WATER AND SEWER. THIS APPLICATION PROPOSES AN EXTENSION OF THE EXISTING WATERLINE IN LOISDALE ROAD. PROPOSED SANITARY SEWER AND WATER IMPROVEMENTS WILL BE CONSTRUCTED WITH THE PROJECT.

10. THERE IS A RESOURCE PROTECTION AREA DELINEATED ON A PORTION OF PARCEL 7. THERE IS NO RESOURCE PROTECTION AREA OR ENVIRONMENTAL QUALITY CORRIDORS, AS DEFINED, DELINEATED ON PARCEL 6A.

11. THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP FOR FAIRFAX COUNTY, VIRGINIA, COMMUNITY-PANEL NUMBERS 515525 0125 D, EFFECTIVE DATE MARCH 5, 1990, DESIGNATES THE PROPERTY AS BEING IN ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN.

12. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO GRAVES LOCATED ON THE SITE.

13. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO UTILITY EASEMENTS HAVING A WIDTH OF 25 FEET OR MORE ON THE PROPERTY.

14. THIS PROPOSED DEVELOPMENT COMPLIES WITH THE CURRENT COMPREHENSIVE PLAN RECOMMENDATION.

15. A PHASE I ENVIRONMENTAL IMPACT STATEMENT HAS BEEN CONDUCTED ON THE PROPERTY AND THE APPLICANT HAS BEEN ACCEPTED INTO THE VOLUNTARY REMEDIATION PROGRAM.

16. THERE ARE NO SCENIC ASSETS OR NATURAL FEATURES ON THIS PROPERTY DESERVING OF PROTECTION AND/OR PRESERVATION.

17. THE PROPOSED APPLICATION CONFORMS TO THE PROVISIONS OF ALL APPLICABLE ORDINANCES, REGULATIONS, AND ADOPTED STANDARDS, EXCEPT AS NOTED WAIVERS/MODIFICATIONS SECTION.

18. ALL EXISTING STRUCTURES ONSITE ARE TO BE REMOVED.

19. 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 DESIGN AND SITE PLAN APPROVAL PROCESS; HOWEVER, THE FINAL CONSTRUCTION DRAWINGS SHALL BE IN SUBSTANTIAL CONFORMANCE WITH THIS PLAN.

20. AN ACCESSORY CAR WASH IS LOCATED IN THE LOWER LEVEL OF THE BUILDING.

21. PARKING FOR THE RECREATIONAL FIELD WILL BE PROVIDED IN THE NORTH EAST CORNER OF PARCEL 6A AND WILL BE EITHER SHARED BETWEEN THE DEALERSHIP AND FAIRFAX COUNTY PARK AUTHORITY (FCPA) PER AN AGREEMENT BETWEEN THE OWNER/APPLICANT AND FCPA, OR SHALL BE PROVIDED TO THE FCPA BY THE OWNER/APPLICANT.

22. SOLAR PANELS, WIND TURBINES, AND/OR SIMILAR MECHANICAL APPURTENANCES MAY BE ADDED TO THE ROOFTOP OF THE DEALERSHIP AT ANY TIME, SUBJECT TO SECTION 2-508 OF THE ZONING ORDINANCE.

23. IN ACCORDANCE WITH A DECEMBER 11, 2000 BOS RESOLUTION, "PARK, RECREATION OR OPEN SPACE SHOULD BE DEEDED DIRECTLY TO THE FAIRFAX COUNTY PARK AUTHORITY WITHOUT FIRST BEING DEEDED TO THE BOARD."

ZONING TABULATION

EXISTING ZONE: R-1, RESIDENTIAL DISTRICT, 1 DU/AC & R-3, RESIDENTIAL DISTRICT, 3 DU/AC
PROPOSED ZONE: C-8, COMMERCIAL HIGHWAY DISTRICT

	REQUIRED	PROVIDED
MIN LOT AREA	40,000 SF	±2,810,943 SF OR ±64.53 AC (PRE-DEDICATED SITE AREA) ±191,576 SF OR ±3.34 AC (RESERVATION AREA) ±1,008,350 SF OR ±23.17 AC (SPECIAL EXCEPTION AREA) ±2,330 SF OR ±0.05 AC (DEDICATION AREA)
MIN LOT WIDTH	200 FT	±2,195 FT
MAX BLD HT	40 FT	±40 FT
MIN YARD REQUIREMENTS		
FRONT	45' ABP, BUT NOT LESS THAN 40 FT	±158 FT (BUILDING) ±157 FT (CANOPY)
SIDE	NONE	N/A
REAR	20 FT	±630 FT
MAX FAR	0.50	±0.04 (SITE AREA) ±0.09 (SPECIAL EXCEPTION AREA) ±.088 (ENTIRE SITE AREA) ±.50X (SPECIAL EXCEPTION AREA)
OPEN SPACE	15%	

AREA TABULATION

TOTAL SITE AREA: ±2,810,943 SF

PROP. BUILDING AREA:

LOWER LEVEL	=	±22,000 GSF
FIRST LEVEL	=	±68,000 GSF
TOTAL PROP. BUILDING AREA	=	±90,000 GSF
PROP. F.A.R.	=	±0.04

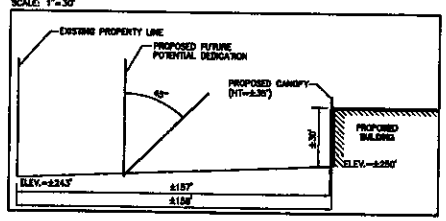
TOTAL SPECIAL EXCEPTION AREA: ±1,008,350 SF

PROP. BUILDING AREA:

LOWER LEVEL	=	±22,000 GSF
FIRST LEVEL	=	±68,000 GSF
TOTAL PROP. BUILDING AREA	=	±90,000 GSF
PROP. F.A.R.	=	±0.09

LOISDALE ROAD FRONT YARD ANGLE BULK PLANE

SCALE: 1"=30'



PARKING TABULATION

REQUIRED PARKING

USE: VEHICLE SALE, RENTAL AND ANCILLARY SERVICE ESTABLISHMENT
RATIO: 1 SPACE/500 SF OF ENCLOSED SALES FLOOR AREA,
PLUS 1 SPACE/2500 SF OF OPEN SALES DISPLAY LOT AREA,
PLUS 2 SPACES/SERVICE BAY, PLUS 1 SPACE/ EMPLOYEE

±8,000 SF OF ENCLOSED SALES FLOOR AREA = 16 SPACES
±12,000 SF OF OPEN SALES DISPLAY LOT AREA = 5 SPACES
±57 SERVICE BAYS = 114 SPACES
±200 EMPLOYEES = 200 SPACES

TOTAL PARKING REQUIRED = 335 SPACES

PROPOSED PARKING

PARKING PROVIDED = ±342 PARKING SPACES (INCL. 13 HC) *

* THE ±342 PARKING SPACES PROVIDED DOES NOT INCLUDE THE ±549 PARKING SPACES DESIGNATED FOR VEHICLE STORAGE AND THE ±79 PARKING SPACES DESIGNATED FOR VEHICLE DISPLAY, FOR A TOTAL OF ±630 PARKING SPACES.

LOADING TABULATION

REQUIRED LOADING

USE: VEHICLE SALE, RENTAL AND ANCILLARY SERVICE ESTABLISHMENT
RATIO: 1 SPACE FOR THE FIRST 5,000 SF OF GROSS FLOOR AREA
PLUS 1 SPACE FOR EACH ADDITIONAL 30,000 SF OR MAJOR FRACTION THEREOF

±90,000 SF - 5,000 SF = 85,000 SF

85,000/30,000 = 2.83 SPACES
5,000 = 1 SPACE
3.83 SPACES

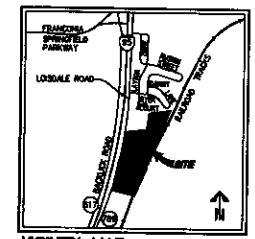
TOTAL LOADING REQUIRED = 4 SPACES

PROPOSED LOADING

LOADING PROVIDED = 4 SPACES

WAIVERS REQUESTED

1. A WAIVER OF THE BARRIER REQUIREMENT ALONG THE NORTHERN PROPERTY LINE IS REQUESTED.
2. A WAIVER OF THE MINOR PAVED TRAIL RUNNING EAST/WEST TO THE CSX RAILROAD TRACKS ON PARCEL 6A IS REQUESTED.



VICINITY MAP SCALE: 1"=2000'

SHEET INDEX

1. COVER SHEET
2. EXISTING CONDITIONS EXHIBIT/EXISTING VEGETATION MAP
3. OVERALL PLAN
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6. SITE DETAILS
6A. TRUCK MOVEMENTS EXHIBIT
7. CONCEPTUAL LANDSCAPE PLAN
8. RPA REVEGETATION PLAN/TREE PRESERVATION CANOPY
9. CONCEPTUAL LANDSCAPE PLAN NOTES AND DETAILS
10. PRELIMINARY STORMWATER MANAGEMENT/BEST MANAGEMENT PRACTICES/OUTFALL ANALYSIS
11. PRELIMINARY STORMWATER MANAGEMENT/BEST MANAGEMENT PRACTICES/OUTFALL ANALYSIS
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13. DETAILS PLAN
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WALSH COLUCCI LUBELEY EMRICH & WALSH PC

GOROVE/SLADE ASSOCIATES, INC.
Transportation Planners and Engineers

WALTER L. PHILLIPS
INCORPORATED
CIVIL ENGINEERS LAND SURVEYORS PLANNERS LANDSCAPE ARCHITECTS
207 PARK AVENUE, FALLS CHURCH, VIRGINIA 22046
(703) 532-6183, FAX (703) 533-1301 WLPINC.COM

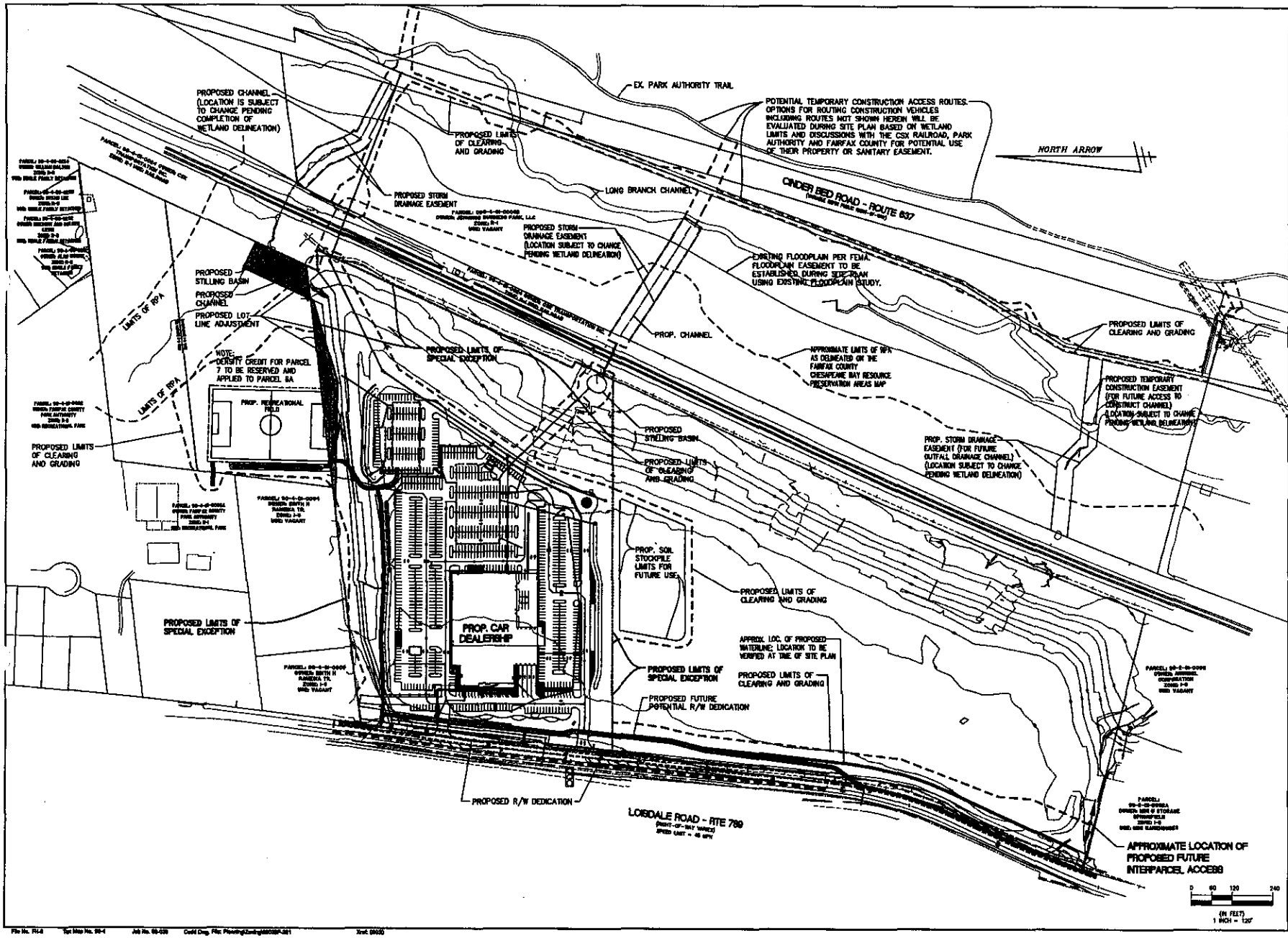
SCALE: AS NOTED DRAWN: MRW

NO.	DESCRIPTION	DATE	REV BY	APPROVED	DATE

REVISION APPROVED BY

COVER SHEET

JENNINGS TOYOTA
LEE DISTRICT
FAIRFAX COUNTY, VIRGINIA



OVERALL PLAN

JENNINGS TOYOTA

LEE DISTRICT

FAIRFAX COUNTY, VIRGINIA

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
WLPINC.COM

SCALE: 1" = 120'

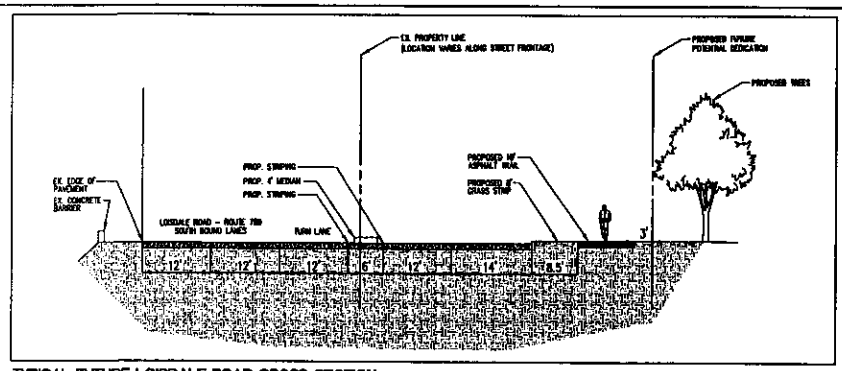
DATE: 2/18/10; REV. 8/2/10; 7/28/10; 10/1/10

DRAWN: MRW

REVISION APPROVED BY

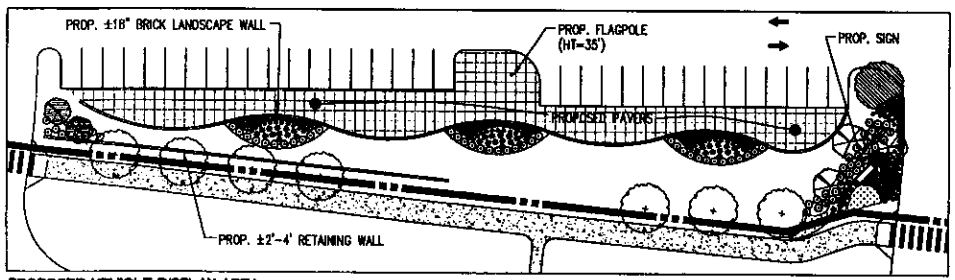
NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

SHEET: 3 of 14



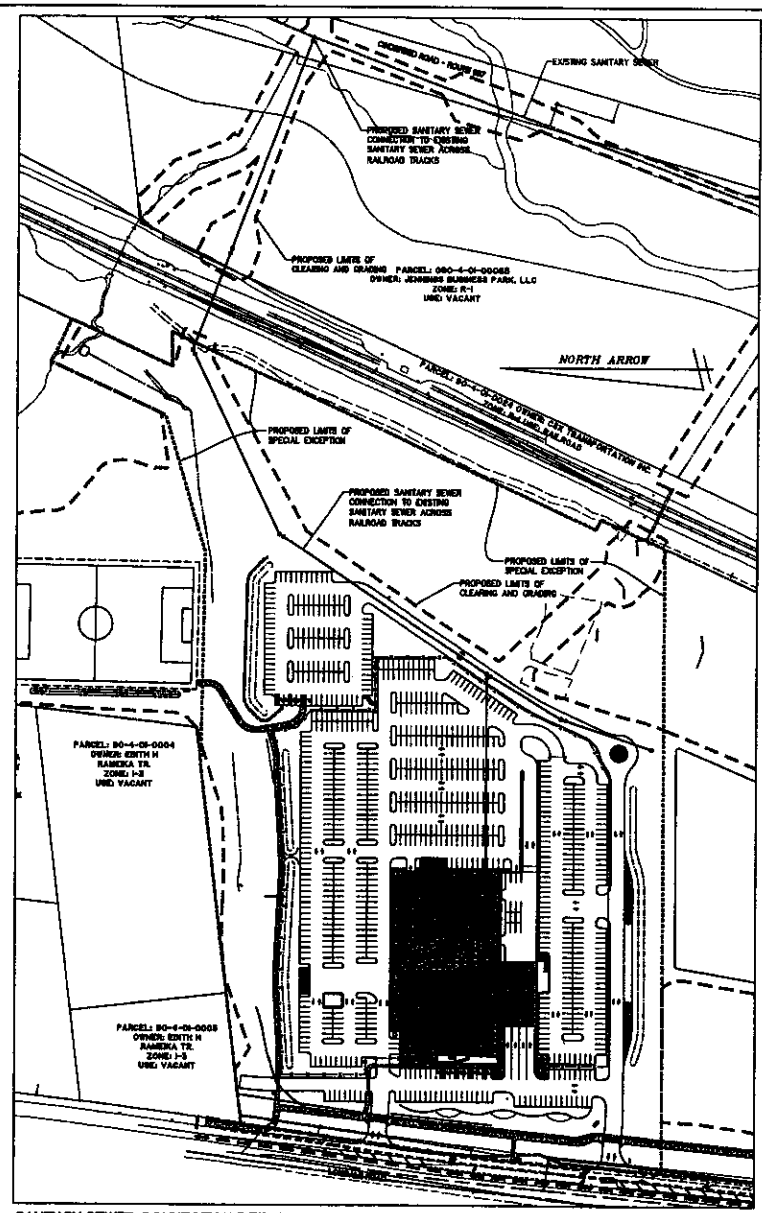
TYPICAL FUTURE LOISDALE ROAD CROSS-SECTION

SCALE: 1" = 10'



PROPOSED VEHICLE DISPLAY AREA

SCALE: 1" = 25'



SANITARY SEWER CONNECTION DETAIL

SCALE: 1"=100'

SITE DETAILS

JENNINGS TOYOTA

LEE DISTRICT

FAIRFAX COUNTY, VIRGINIA

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SCALE: AS NOTED

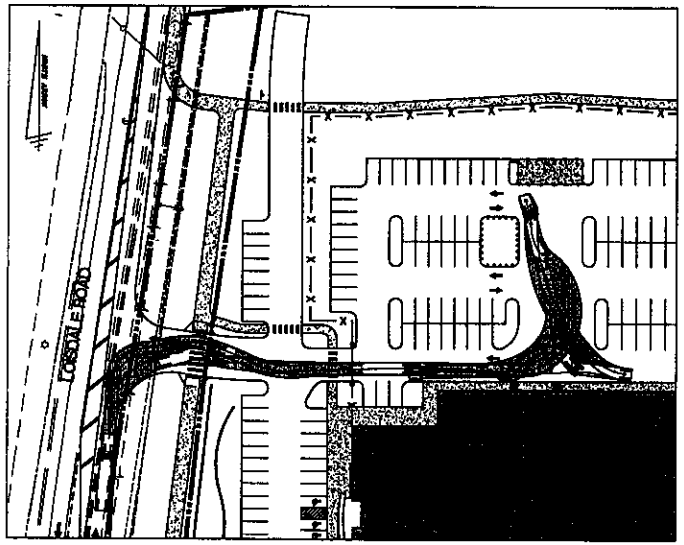
DRAWN: MRW

REVISION APPROVED BY

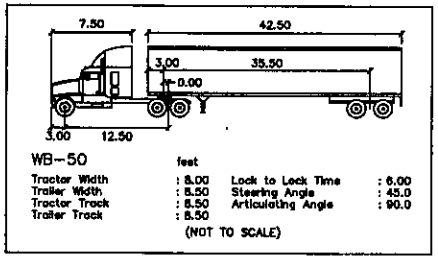
NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

File No. FH-6 Tax Map No. 90-4 Job No. 08-036 Cadd Dwg. File: Planning\Zoning\08036P-0301 Sheet 08030

SHEET: 5 of 14



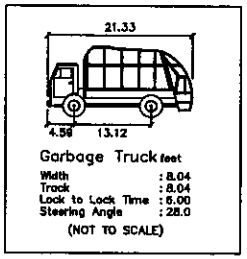
TRUCK MOVEMENT FOR WB-50 DELIVERY TRUCK - (NORTH LOISDALE ENTRANCE)



WB-50 feet

Tractor Width	: 8.00	Lock to Lock Time	: 6.00
Trailer Width	: 8.50	Steering Angle	: 45.0
Tractor Track	: 8.50	Articulating Angle	: 90.0
Trailer Track	: 8.50		

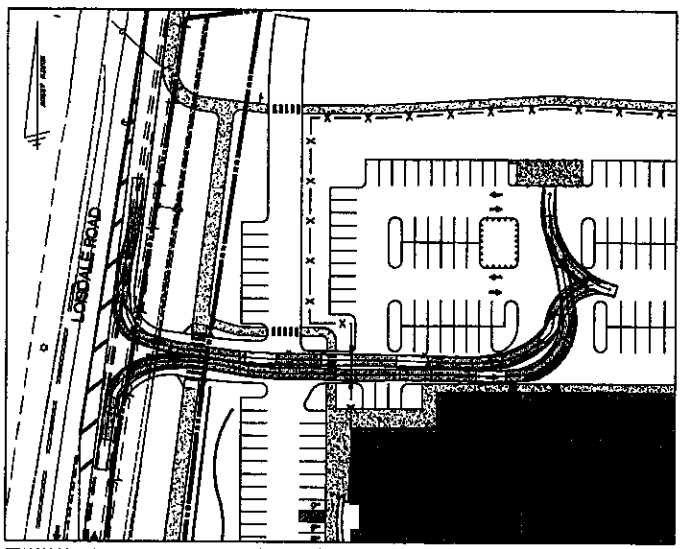
(NOT TO SCALE)



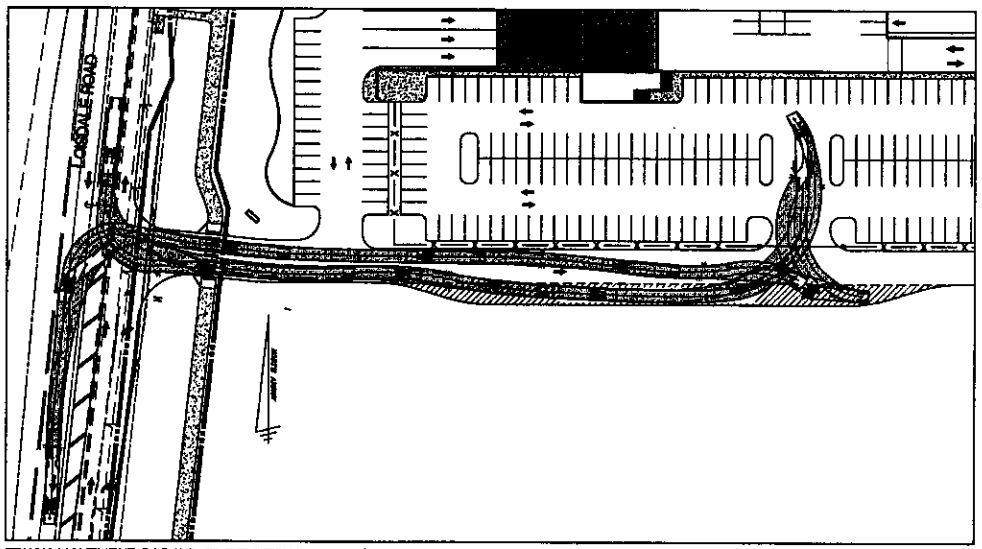
Garbage Truck feet

Width	: 8.04
Track	: 8.04
Lock to Lock Time	: 6.00
Steering Angle	: 28.0

(NOT TO SCALE)



TRUCK MOVEMENT FOR GARBAGE TRUCK - (NORTH LOISDALE ENTRANCE)



TRUCK MOVEMENT FOR WB-50 DELIVERY TRUCK - (SOUTH LOISDALE ENTRANCE)

TRUCK MOVEMENTS EXHIBIT

JENNINGS TOYOTA

LEE DISTRICT

FAIRFAX COUNTY, VIRGINIA

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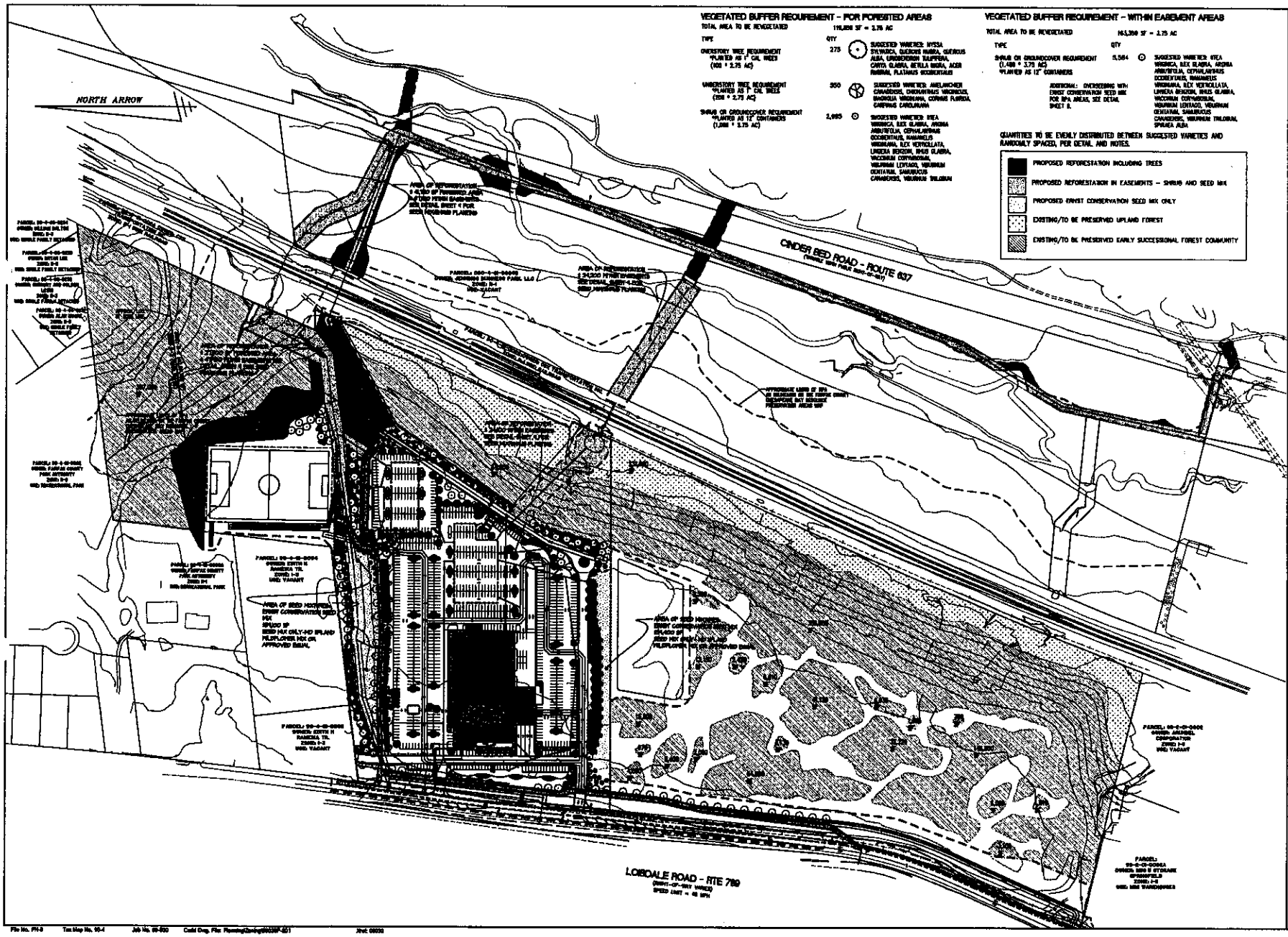
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-8163 FAX (703) 532-1301 WLPINC.COM

SCALE: 1" = 40'

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

REVISION APPROVED BY



RPA RE-VEGETATION PLAN/ TREE PRESERVATION CANOPY

JENNINGS TOYOTA

LEE DISTRICT

FAIRFAX COUNTY, VIRGINIA

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

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207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-9163 FAX (703) 532-1901 WLPINC.COM

SCALE: 1" = 100'
DATE: 3/19/08 REV: 6/26/08, 7/28/08, 9/30/08, 10/7/08
DRAWN: MPW

SHEET: 8 of 14

STORMWATER MANAGEMENT COMPUTATIONS

I. SITE AREA

TOTAL SITE AREA = 33.31 AC

OUTFALL NUMBER 1

II. PRE-DEVELOPMENT (SITE OUTFALL 1)

A. CONTRIBUTING AREAS
17.44 AC. GREEN AREA
0.00 AC. ROOFS, PAVED AREAS
17.44 AC.

B. WEIGHTED C = 0.30

C. TIME OF CONCENTRATION = 18 MINUTES

D. RUNOFF: Q2 = (0.30)(3.6)(17.44) = 18.84 CFS
Q10 = (0.30)(4.8)(17.44) = 25.11 CFS

II. POST-DEVELOPMENT (SITE OUTFALL 1)

POST-DEVELOPMENT UNDETAINED

A. CONTRIBUTING AREAS
14.89 AC. @ C=0.30 (GREEN SPACE)
0.28 AC. @ C=0.90 (PAVED AREAS)
15.17 AC.

B. WEIGHTED C:
$\frac{(14.89)(0.30)+(0.28)(0.90)}{15.17} = 0.31$

C. TIME OF CONCENTRATION = 18 MINUTES

D. RUNOFF: Q2 = (0.31)(3.6)(15.17) = 16.93 CFS
Q10 = (0.31)(4.8)(15.17) = 22.57 CFS

POST-DEVELOPMENT TO DETENTION

A. CONTRIBUTING AREAS
0.74 AC. @ C=0.30 (GREEN AREA)
2.23 AC. @ C=0.90 (ROOFS, PAVED AREAS)
2.97 AC.

B. WEIGHTED C
$\frac{(0.74)(0.30)+(2.23)(0.90)}{2.97}$ 0.75

C. TIME OF CONCENTRATION = 5 MINUTES

D. RUNOFF: Q2 = (0.75)(5.45)(2.97) = 12.14 CFS
Q10 = (0.75)(7.27)(2.97) = 16.19 CFS

THIS RUNOFF WILL BE RETAINED IN AN UNDERGROUND DETENTION FACILITY SO THE TOTAL PEAK RELEASE RATE OF RUNOFF TO OUTFALL NUMBER 1 WILL BE LESS THAN PRE-DEVELOPMENT

OUTFALL NUMBER 2

II. PRE-DEVELOPMENT (SITE OUTFALL 2)

A. CONTRIBUTING AREAS
15.25 AC. GREEN AREA
0.00 AC. ROOFS, PAVED AREAS
15.25 AC.

B. WEIGHTED C = 0.30

C. TIME OF CONCENTRATION = 29 MINUTES

D. RUNOFF: Q2 = (0.30)(2.76)(15.25) = 12.63 CFS
Q10 = (0.30)(3.71)(15.25) = 16.97 CFS

II. POST-DEVELOPMENT (SITE OUTFALL 2)

POST-DEVELOPMENT UNDETAINED

A. CONTRIBUTING AREAS
5.49 AC. @ C=0.30 (GREEN SPACE)
0.00 AC. @ C=0.90 (PAVED AREAS)
5.49 AC.

B. WEIGHTED C = 0.30

C. TIME OF CONCENTRATION = 23 MINUTES

D. RUNOFF: Q2 = (0.30)(3.02)(5.49) = 4.97 CFS
Q10 = (0.30)(4.03)(5.49) = 6.64 CFS

POST-DEVELOPMENT TO DETENTION

A. CONTRIBUTING AREAS
1.06 AC. @ C=0.30 (GREEN AREA)
8.31 AC. @ C=0.90 (ROOFS, PAVED AREAS)
9.37 AC.

B. WEIGHTED C
$\frac{(1.06)(0.30)+(8.31)(0.90)}{9.37} = 0.83$

C. TIME OF CONCENTRATION = 5 MINUTES

D. RUNOFF: Q2 = (0.83)(5.45)(9.37) = 42.39 CFS
Q10 = (0.83)(7.27)(9.37) = 56.54 CFS

THIS RUNOFF WILL BE RETAINED IN AN UNDERGROUND DETENTION FACILITY SO THE TOTAL PEAK RELEASE RATE OF RUNOFF TO OUTFALL NUMBER 2 WILL BE LESS THAN PRE-DEVELOPMENT

BMP COMPUTATIONS

WATERSHED INFORMATION

PART 1 – LIST ALL OF SUBAREAS & "C" FACTORS USED IN THE BMP COMPUTATIONS

(1)	DESCRIPTION	(2) "C"	(3) ACRES
A2,5	ONSITE CONTROLLED (VEGETATED SWALES)	0.71	3.91
*	ONSITE CONTROLLED (OPEN SPACE)	0.30	7.80
A9	ONSITE CONTROLLED (FILTERRA)	0.71	0.25
A4	ONSITE CONTROLLED (STORMFILTERS OR BAYFILTERS)	0.88	5.81
A1,6,7,8,10,11	ONSITE UNCONTROLLED	0.39	15.54
			33.31

* PARTS OF AREAS A1 AND A10

PART 2 – COMPUTE THE AVERAGE "C" FACTOR FOR THE ENTIRE SITE

(A) AREA OF SITE (a) 33.31 AC

(B) SUBAREA DESIGNATION

(1)	"C" (2)		ACRES (3)	PRODUCT (4)
A2,5	0.71	X	3.91	= 2.78
	0.30	X	7.80	= 2.28
A9	0.71	X	0.25	= 0.18
A4	0.88	X	5.61	= 4.94
A1,6,7,8,10,11	0.39	X	15.94	= 6.22
			(b)	16.38

(C) WEIGHTED "C" FACTOR (b)/(a) =16.38 / 33.31 = 0.49

PART 3 – COMPUTE THE TOTAL PHOSPHOROUS REMOVAL FOR THE SITE

SUBAREA DESIGNATION (1)	BMP TYPE (2)	EFFICIENCY EFF (%) (3)		AREA RATIO (4)		"C" FACTOR (5)		PRODUCT (6)
A2,5	VEGETATED SWALES (TREATING 1.0 IN.)	65	x	3.91/33.31	x	0.71/0.49	=	11.06
	OPEN SPACE	100	x	7.80/33.31	x	0.30/0.49	=	13.97
A9	FILTERRA (TREATING 0.5 IN.)	50	x	0.25/33.31	x	0.71/0.49	=	0.54
A4	STORMFILTERS OR BAYFILTERS	50	x	5.81/33.31	x	0.88/0.49	=	15.12
								40.69

DETERMINE COMPLIANCE WITH PHOSPHORUS REMOVAL REQUIREMENT

(A) SELECT REQUIREMENT 40%

- 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 =

IF LINE 3(e) 40.69% > LINE 4 (a) 40%, THEN PHOSPHOROUS REMOVAL IS SATISFIED.

BMP/SWM NARRATIVE

THE ENTIRE SITE CURRENTLY CONTAINS NO IMPERVIOUS AREA. THE PRE-DEVELOPMENT IMPERVIOUS AREA OF 0.00 AC. WILL BE INCREASED TO 10.8 AC. POST-DEVELOPMENT. THERE IS A 40.0% PHOSPHOROUS REMOVAL REQUIREMENT BASED ON THE CHESAPEAKE BAY PRESERVATION ORDINANCE REQUIREMENTS FOR NEW DEVELOPMENT. THE PHOSPHOROUS REMOVAL REQUIREMENT IS PROPOSED TO BE MET THROUGH THE USE OF A FILTERRA, STORMFILTERS OR BAYFILTERS, AND VEGETATED SWALES LOCATED ALONG THE NORTH AND SOUTH PERIMETERS OF THE SURFACE PARKING LOT. THE SWALES WILL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE FAIRFAX COUNTY PFM TO TREAT THE FIRST 1.0 INCH OF RUNOFF. RUNOFF WILL SHEET FLOW OFF PAVED AREAS INTO THE SWALES. FURTHER BMP CREDIT WILL BE ACHIEVED BY PLACING OPEN SPACE ON PARCELS 6A AND 7 BETWEEN THE DEVELOPED PART OF THE SITE AND THE CSX RAILROAD IN A CONSERVATION EASEMENT. THE BMP DESIGN WILL BE FINALIZED AT THE TIME OF SITE PLAN. THE NUMBER, LOCATION AND DESIGN OF VEGETATED SWALE FACILITIES MAY BE ALTERED AT THE TIME OF SITE PLAN PENDING FINAL DESIGN.

THE SITE AREA CORRESPONDS TO PARCEL 7 AND THE LIMITS OF THE SPECIAL EXCEPTION ON PARCEL 6A LESS THE DEDICATION AND RESERVATION AREAS. AT THE REQUEST OF THE PARK AUTHORITY, A SOCCER FIELD WILL BE CONSTRUCTED ON PARCEL 7. OPEN DRAINAGE CHANNELS WILL BE CONSTRUCTED ON PARCEL 6B TO THE EAST OF THE SITE TO MEET FAIRFAX COUNTY OUTFALL REQUIREMENTS. ALSO, A SANITARY SEWER WILL BE INSTALLED ON PARCEL 6B. NO IMPERVIOUS AREA IS PROPOSED TO BE CONSTRUCTED ON THE OFF-SITE PARCELS 7 AND 6B SO THEY DO NOT REQUIRE STORMWATER MANAGEMENT MEASURES. THE PRE-DEVELOPMENT PEAK RELEASE RATES FROM THE SITE TO OUTFALL NUMBER 1 ARE 18.84 CFS AND 25.11 CFS FOR THE 2 YEAR AND 10 YEAR STORMS RESPECTIVELY. FOR OUTFALL NUMBER 2, THEY ARE 12.63 CFS AND 16.97 RESPECTIVELY. THE 2-YEAR AND 10-YEAR PEAK RELEASE RATES OF POST-DEVELOPED RUNOFF WILL BE KEPT BELOW PRE-DEVELOPED RATES FOR EACH OUTFALL PER COUNTY REQUIREMENTS BY DETAINING THE RUNOFF IN UNDERGROUND DETENTION FACILITIES.

OVERLAND RELIEF NARRATIVE

IN THE EVENT THE STORM SEWERS AND/OR SWALES BECOME BLOCKED OR OVER CAPACITY OVERLAND RELIEF WILL FLOW TOWARDS THE EAST OVER CONSERVED OPEN SPACE TO THE CULVERTS UNDER THE ADJACENT CSX RAILROAD. FROM THERE THE RUNOFF WILL FLOW IN PROPOSED OPEN CHANNELS TO THE LONG BRANCH CHANNEL.

IT IS IN THE OPINION OF THE SUBMITTING ENGINEER THAT THE 100 YEAR OVERLAND RELIEF RESULTING FROM THIS DEVELOPMENT IS ADEQUATE.

PARCEL 7 BMP COMPUTATION

PARCEL 7 IS INCLUDED AS PART OF THE SITE IN THE STORMWATER MANAGEMENT AND BMP COMPUTATIONS SHOWN ON THIS SHEET. THE 4.50 AC. CONSERVATION EASEMENT FOR OPEN SPACE TO BE CREATED ON PARCEL 7 WILL SATISFY THE BMP REQUIREMENT FOR PARCEL 7 ALONE AND NOT PARCEL 6B. THE FOLLOWING COMPUTATION DEMONSTRATES THAT THE OPEN SPACE CONSERVATION EASEMENT PROVIDES THE 40% PHOSPHOROUS REMOVAL REQUIRED FOR NEW DEVELOPMENT.

SUBAREA DESIGNATION (1)	BMP TYPE (2)	EFFICIENCY EFF (%) (3)	AREA RATIO (4)	"C" FACTOR (5)	PRODUCT (6)
	OPEN SPACE	100	4.50/11.00	0.30/0.30	40.83

STORMWATER MANAGEMENT CHECKLIST

☑ 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)
UNDERGROUND VAULT 1	2.97	0	2.97	16,000	96,000	N/A
UNDERGROUND VAULT 2	8.37	0	8.37	26,000	160,000	N/A
Totals						

☑ 4. Onsite drainage channels, outfalls and pipe systems are shown on Sheet 3,5,11. 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 N/A. Type of maintenance access road surface noted on the plat is N/A.

☑ 6. Landscaping and tree preservation shown in and near the stormwater management facility is shown on Sheet 7,8.

☑ 7. A "stormwater management narrative" which contains a description of how detention and best management practices requirements will be met is provided on Sheet 10.

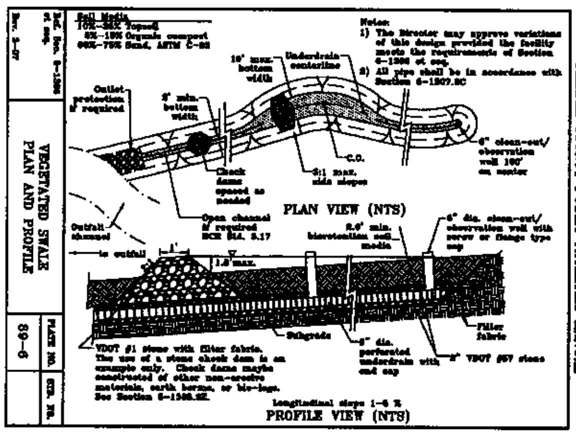
☑ 8. A description of the existing conditions of each numbered site outfall extended downstream from the site to a point which is at least 100 times the site area or which has a drainage area of at least one square mile (640 acres) is provided on Sheet 11.

☑ 9. A description of how the outfall requirements, including contributing drainage areas of the Public Facilities Manual will be satisfied is provided on Sheet 11.

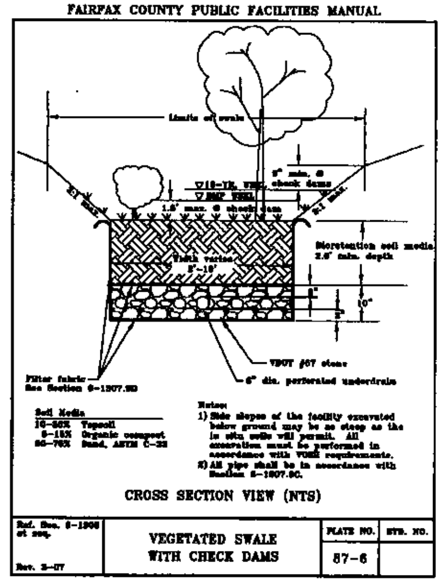
☑ 10. Existing topography with maximum contour intervals of two (2) feet and a note as to whether it is an air survey or field run is provided on Sheets 1,2.

☐ 11. A submission waiver is requested for N/A

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



FAIRFAX COUNTY PUBLIC FACILITIES MANUAL



PRELIMINARY STORMWATER MANAGEMENT / BEST MANAGEMENT PRACTICES / OUTFALL ANALYSIS

JENNINGS TOYOTA

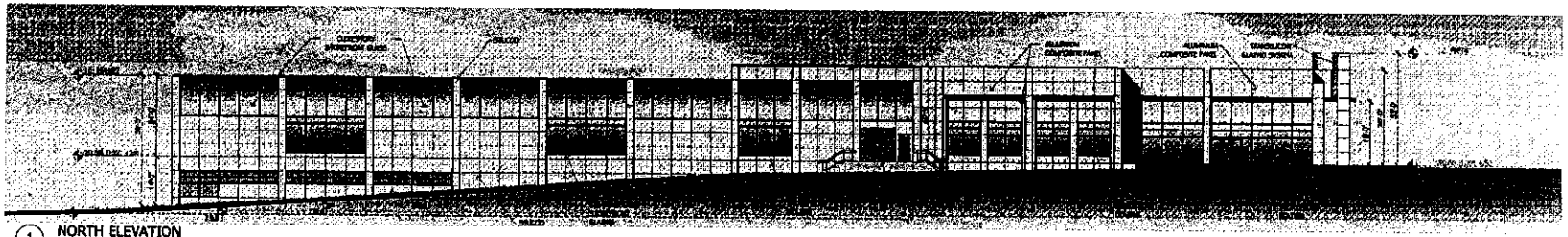
LEE DISTRICT

FAIRFAX COUNTY, VIRGINIA

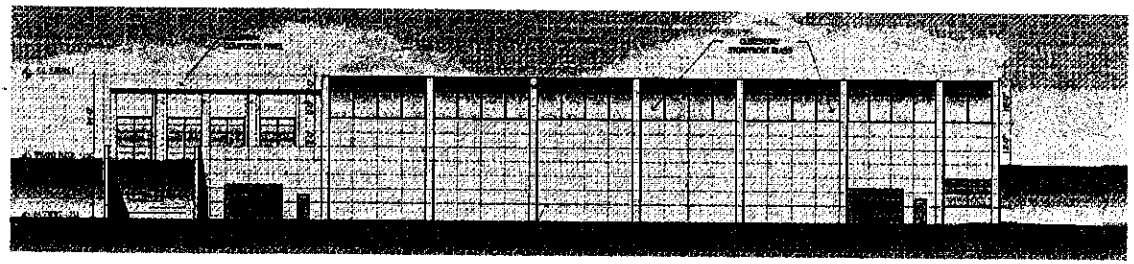
REVISION APPROVED BY					
NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

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

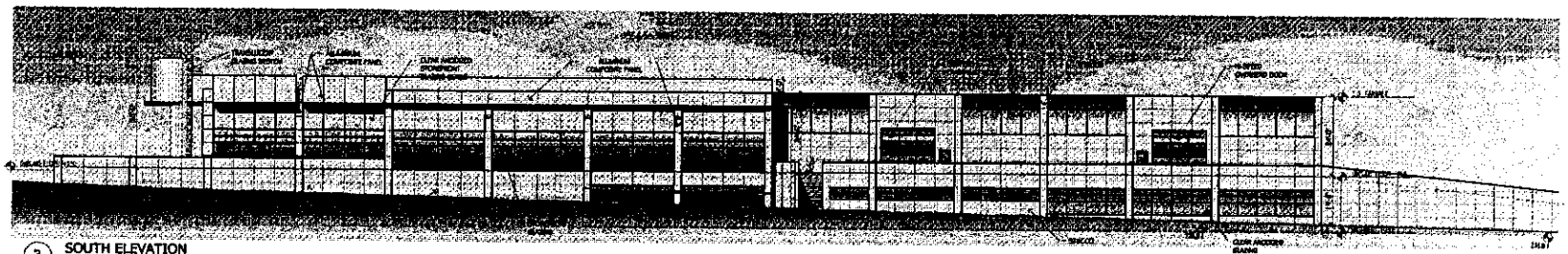
SCALE: AS NOTED
DATE: 2/19/10; REV. 6/8/10; 7/29/10; 9/20/10; 10/1/10
DRAWN: MRW



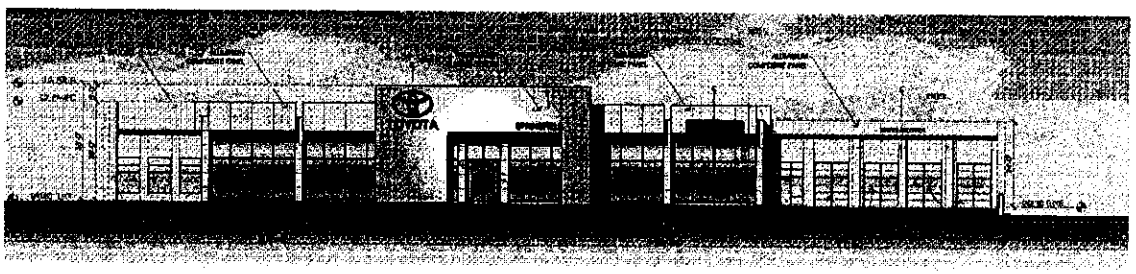
1 NORTH ELEVATION



2 EAST ELEVATION



3 SOUTH ELEVATION



4 WEST ELEVATION

PDG
PennryDesignGroup
6120 Woodmont Avenue
Suite 400
Bethesda, Maryland 20814
Tel: 301.652.2760
Fax: 301.657.2001
www.pennrydesigngroup.com

Project Number
10.TYS001a.00

Jennings Toyota

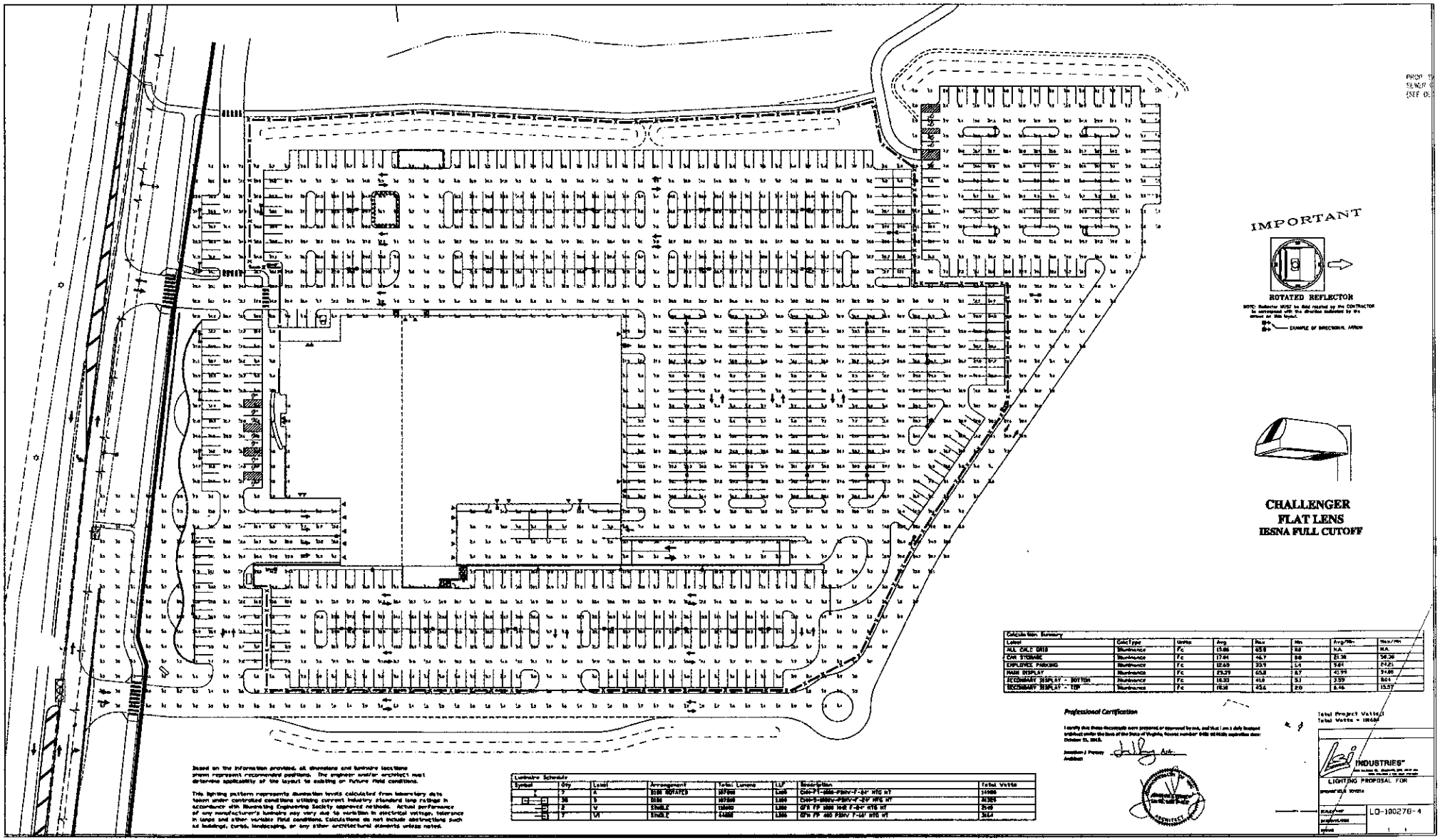
Loisdale Road, Fairfax County, VA

Architectural Elevations

September 20, 2010

Springfield Toyota
6970 Amherst Ave
Springfield, VA - 22150
M. 703.355.1400
F. 703.280.1443
www.springfieldtoyota.com

0 4' 8' 16' 32'
1/16"=1'-0"



IMPORTANT

ROTATED REFLECTOR

NOTE: Reflector MUST be field rotated by the CONTRACTOR in accordance with the direction indicated by the arrows on this layout.

EXAMPLE OF DIRECTIONAL ARROW

CHALLENGER
FLAT LENS
IESNA FULL CUTOFF

Calculation Summary								
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
ALL CALC GRID	Maintenance	Fc	15.86	65.8	0.0	N.A.	N.A.
CAR STORAGE	Maintenance	Fc	17.04	46.7	0.8	21.30	58.38
EMPLOYEE PARKING	Maintenance	Fc	12.69	32.9	1.4	9.01	23.51
MAIN DISPLAY	Maintenance	Fc	29.29	65.8	0.7	41.99	94.00
SECONDARY DISPLAY - BOTTOM	Maintenance	Fc	18.30	41.0	5.1	3.59	8.04
SECONDARY DISPLAY - TOP	Maintenance	Fc	18.16	45.6	2.9	6.26	15.57

Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and/or architect must determine applicability of the layout to existing or future field conditions.

This lighting pattern represents illumination levels calculated from laboratory data taken under controlled conditions utilizing current industry standard lamp ratings in accordance with Illuminating Engineering Society approved methods. Actual performance of any manufacturer's luminaire may vary due to variation in electrical voltage, tolerance in lamps and other variable field conditions. Calculations do not include obstructions such as buildings, curbs, landscaping, or any other architectural elements unless noted.

Luminaire Schedule							
Symbol	Qty	Label	Arrangement	Total Lumens	LLF	Description	Total Watts
	7	A	SINGLE ROTATED	107000	1.000	CHA-T1-400-PSMV-F-90° MTG HT	31400
	36	B	SINGLE	107000	1.000	CHA-T1-400-PSMV-F-90° MTG HT	31400
	2	V	SINGLE	108000	1.000	GPA TP 400 MH F-90° MTG HT	3140
	7	VA	SINGLE	54000	1.000	GPA PP 400 PSMV F-90° MTG HT	3140

Professional Certification

I certify that these documents were prepared or approved by me, and that I am a duly licensed architect under the laws of the State of Virginia, license number 0401 expiration date October 31, 2010.

Jonathan J Penney
Architect

Total Project Watts
Total Watts = 186660

LIGHTING PROPOSAL FOR

PROPERTY FILE TOYOTA

LO-100276-4

PENNEY DESIGN GROUP

10.TYS001a.00

Jennings Toyota

Loisdale Road, Fairfax County, VA

Site Photometric Plan

September 20, 2010

Springfield Toyota

1"=40'