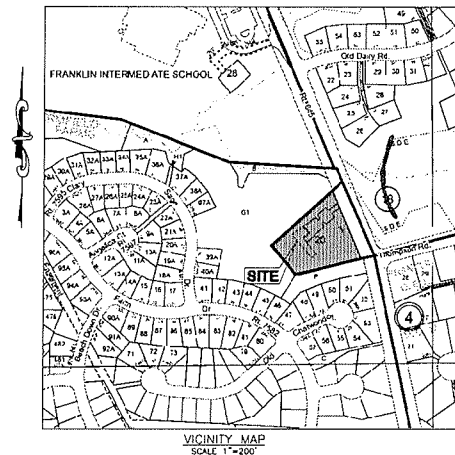


SPECIAL EXCEPTION PLAT MONTESSORI SCHOOL OF FAIRFAX

SULLY DISTRICT
FAIRFAX COUNTY, VIRGINIA

MARCH, 2007

LEGEND	
EXISTING	PROPOSED
EXISTING INTERMEDIATE CONTOUR	PROPOSED INTERMEDIATE CONTOUR
EXISTING CONTOUR INDEX	PROPOSED CONTOUR INDEX
EXISTING EDGE OF PAVEMENT	PROPOSED EDGE OF PAVEMENT
EXISTING CURB AND GUTTER	PROPOSED CURB AND GUTTER
EXISTING MATERIAL P-TILE	PROPOSED EMULSION FROM 60 TO 120 MM
EXISTING DRAINAGE PIPE	PROPOSED MATERIAL P-TILE
EXISTING TELEPHONE LINE	PROPOSED DRAINAGE PIPE
EXISTING ELECTRIC LINE	PROPOSED TELEPHONE LINE
EXISTING JACKBOARD ELECTRIC LINE	PROPOSED ELECTRIC LINE
EXISTING GAS LINE	PROPOSED GAS LINE
EXISTING FENCE	PROPOSED FENCE
EXISTING STORM SEWER	PROPOSED STORM SEWER
EXISTING STORM STRUCTURE	PROPOSED STORM STRUCTURE
EXISTING SANITARY SEWER BY MANHOLE	PROPOSED SANITARY SEWER BY MANHOLE
PROPERTY LINE	PROPOSED CENTER LINE
EXISTING CENTER LINE	LIMITS OF CLEARING AND GRADING
EXISTING STREET	DATE/AGE EVIDENCE
EXISTING TREE LINE	PROPOSED TREE LINE
EXISTING TREE	PROPOSED TREE
EXISTING UTILITY POLE	PROPOSED UTILITY POLE
EXISTING WATER METER	PROPOSED FIRE METER
EXISTING SIGN	WATER METER
EXISTING SPOT ELEVATIONS	PROPOSED SPOT ELEVATIONS
	PROPOSED SIGN
	PARKING INDICATOR
	TRUCKS/TOW NUMBER OF PARKING SPACES
	TEST PIT
	CELESTIAL
	STREET LIGHT
	DOWNHILL SLOPE

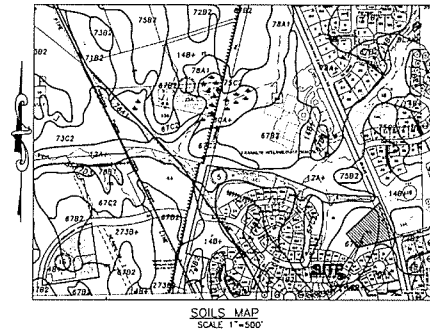


OWNER: MONTESSORI SCHOOL OF FAIRFAX
TAX MAP 34-2 (11) PARCEL 20

ENGINEER: BURY + PARTNERS-VA, INC.
2810 CONCORDE PARKWAY
SUITE 1000
CHANTILLY, VIRGINIA 20151
(703) 768-1000
CONTACT: MARCUS BURDORF, O.P.E.

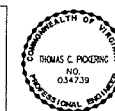
SHEET INDEX:

COVER SHEET	1
EXISTING CONDITION AND DEMOLITION PLAN	2
SITE PLAN	3
SITE TABULATIONS & BULK PLANE	4
LANDSCAPE PLAN	5
PRE & POST-DEVELOPMENT PLAN	6
ADEQUATE OUTFALL AND CROSS SECTIONS	7-8

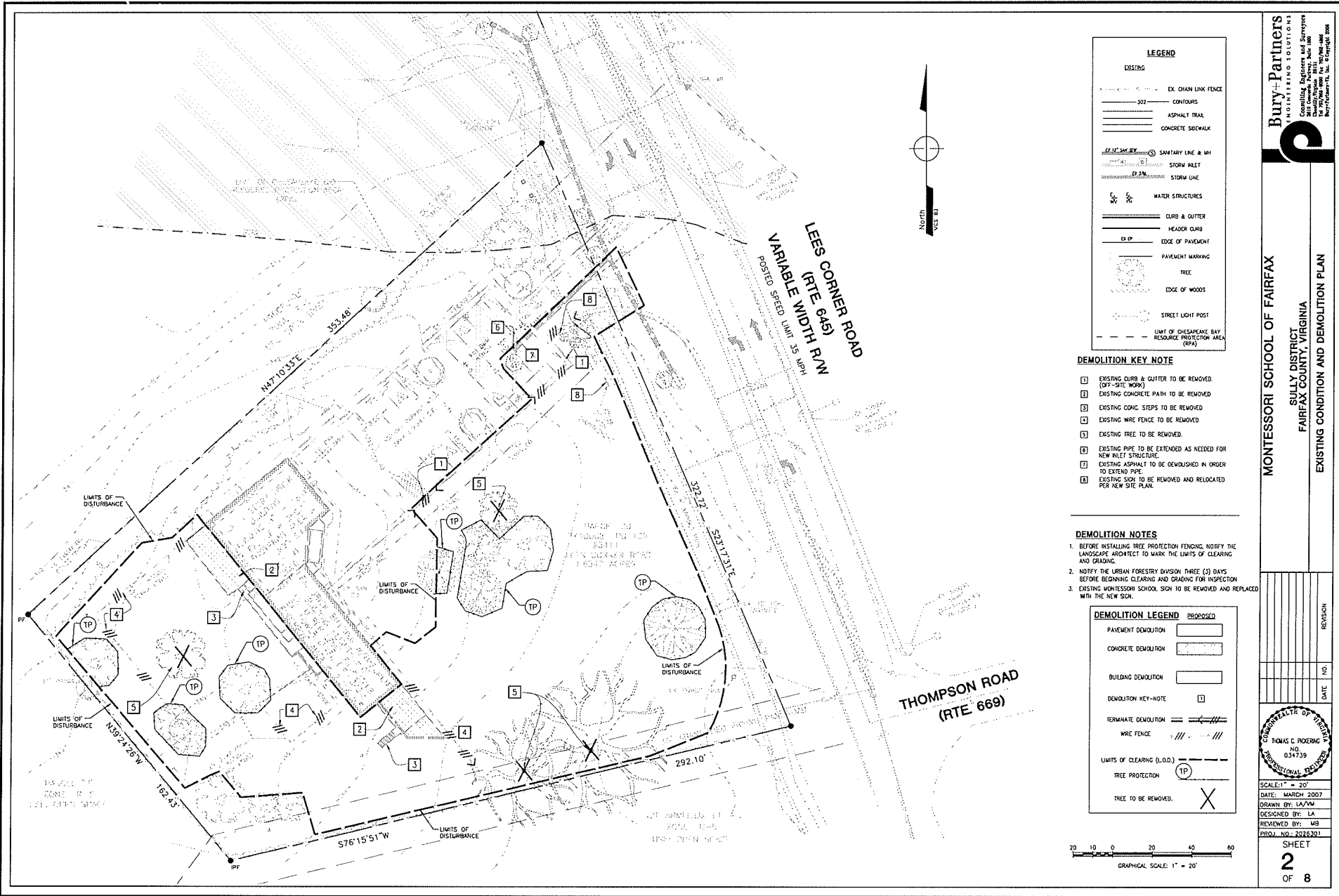


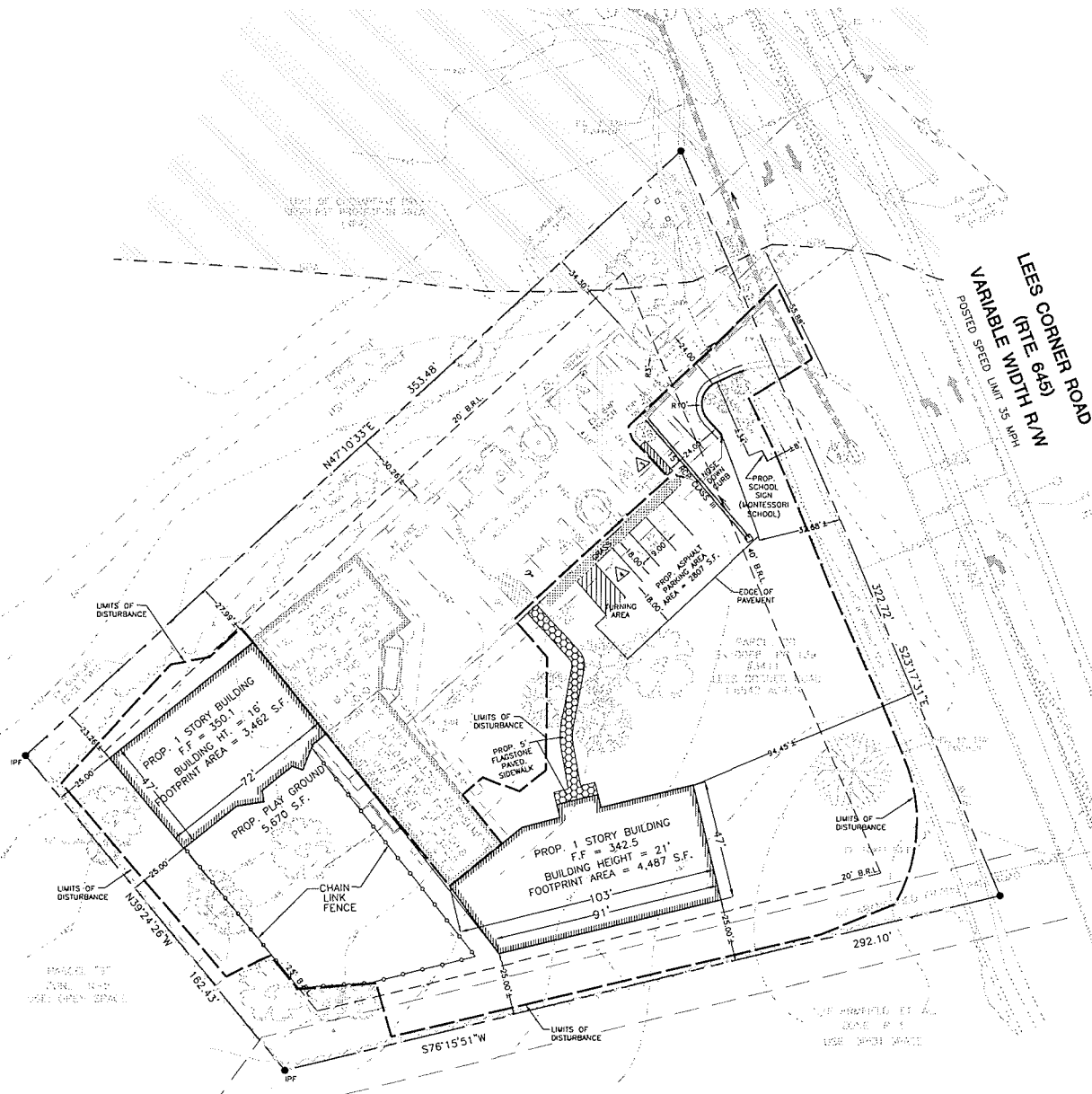
SOILS MAP SOURCE: COUNTY MAP; PRIVATE SOILS SCIENTIST (FOR UNMAPPED SITES)

SOIL ID NUMBERS	SOIL SERIES NAME	FOUNDATION SUPPORT	SUBSURFACE DRAINAGE	SLOPE STABILITY	ERODIBILITY	PROBLEM CLASS
67C2	PEMA FSL	FAIR	GOOD	GOOD	SEVERE	C
14B+	MANASSAS	MARGINAL	FAIR	GOOD	MODERATE	B



SHEET 1 OF 8





- NOTE:**
1. BOUNDARY SURVEY AND FIELD RUN TOPOGRAPHIC SURVEY BY BURY + PARTNERS ENGINEERING SOLUTIONS, INC. (2 FEET CONTOUR INTERVAL).
 2. THE DEVELOPMENT SHALL CONFORM TO THE PROVISIONS OF ALL APPLICABLE ORDINANCES, REGULATIONS AND ADOPTED STANDARDS OF FAIRFAX COUNTY.
 3. THIS PROPERTY HAS CURRENTLY AN ABANDONED WELL ON SITE.
 4. THIS PROPERTY IS CURRENTLY CONNECTED TO PUBLIC SEWER SYSTEM.
 5. THERE IS NO KNOWN GRAY, OBJECT OR STRUCTURE MAKING A PLACE OF BURIAL ON THE SUBJECT SITE.
 6. THERE IS NO FLOOD PLAIN FOUND IN THIS PROPERTY.
 7. STORM WATER MANAGEMENT FACILITY WILL BE PROVIDED AT THE TIME OF SUBMISSION OF THE SITE PLAN ACCORDING TO FAIRFAX COUNTY PUBLIC FACILITY MANUAL.
 8. THERE ARE NO EXISTING UTILITY EASEMENTS KNOWN ON THE PROPERTY.
 9. NEW 'MONTESSORI SCHOOL OF FAIRFAX' SIGN WILL BE BUILT WITH THIS SPECIAL EXCEPTION.
 10. PROPOSED SIGN TO BE IN ACCORDANCE WITH ARTICLE 12 OF THE FAIRFAX COUNTY ZONING ORDINANCE.

Bury + Partners
ENGINEERING SOLUTIONS
Consulting Engineers and Surveyors
3915 Lee Avenue, Suite 100
Falls Church, VA 22044-1000
Tel: 703.796.4000 Fax: 703.796.4001
Bury+Partners-FL, Inc. © Copyright 2006

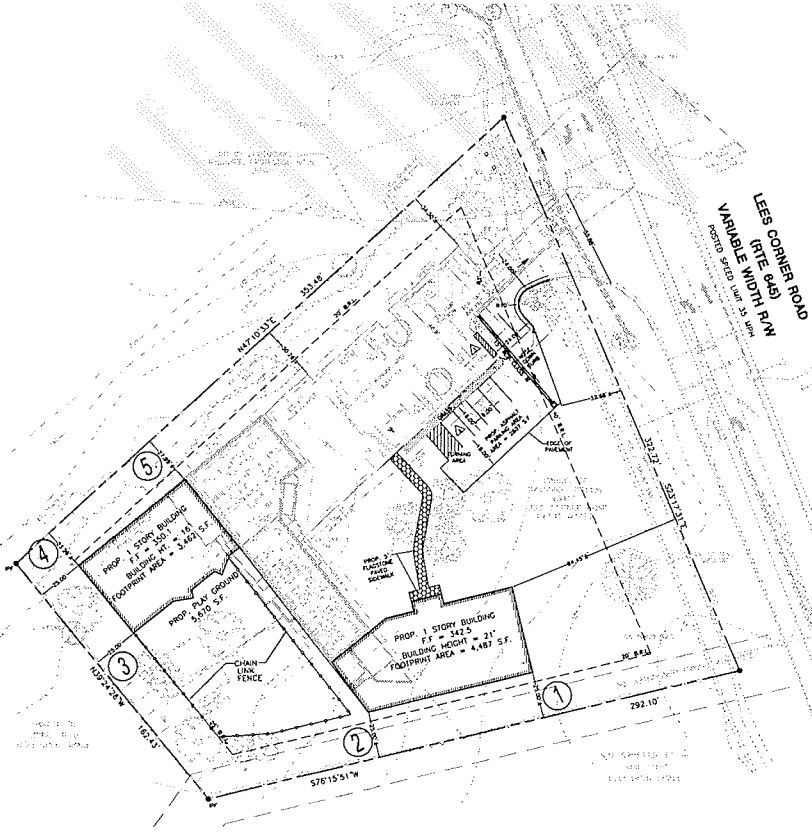
MONTESSORI SCHOOL OF FAIRFAX
SULLY DISTRICT
FAIRFAX COUNTY, VIRGINIA
SITE PLAN

DATE	NO.	REVISION

COMMONWEALTH OF VIRGINIA
THOMAS C. POEBSCH
NO. 0347339
PROFESSIONAL EXPERT

SCALE: 1" = 20'
DATE: MARCH 2007
DRAWN BY: LA/VW
DESIGNED BY: LA
REVIEWED BY: WB
PROJ. NO. 2026201

SHEET
3
OF 8



SITE TABULATIONS:

TOTAL SITE AREA:	1.6542 AC	AFTER DEDICATION TO VDOT FOR ROAD IMPROVEMENTS WITH SITE PLAN NUMBER 9956-SP-01-2 (2001).
AREA OF DEDICATION:	N/A	
ZONING:	R-1	
EXISTING GFA:	4,313 S.F.	
PROPOSED GFA:	7,749 S.F.	

	REQUIRED	PROVIDED
MAX. FAR	0.20	0.17
BUILDING HEIGHT	60' MAX.	21' MAX.
YARDS - FRONT	50' BULK PLANE (40' MIN.)	118' ±
SIDE	45' BULK PLANE (20' MIN.)	23' ±
REAR	45' BULK PLANE (25' MIN.)	25' ±
OPEN SPACE	N/A	0.83 AC (50%)
UNDISTURBED OPEN SPACE	N/A	0.42 AC (25%)

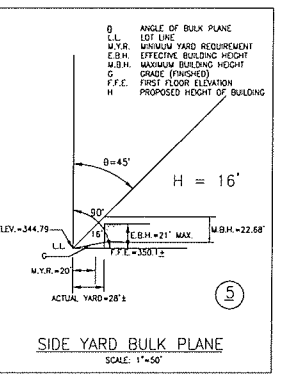
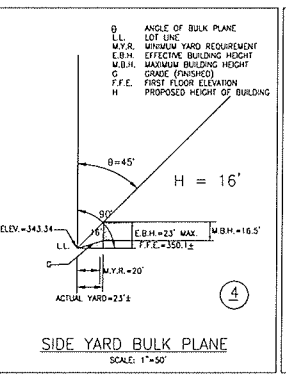
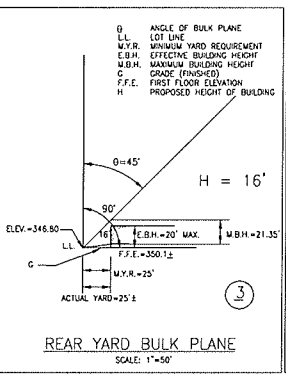
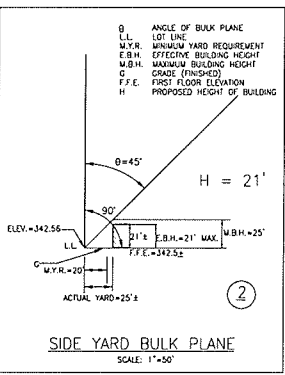
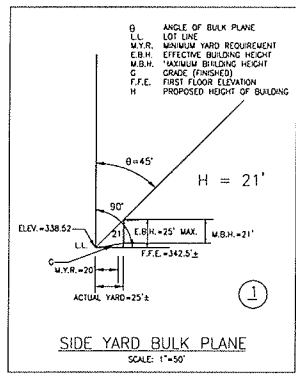
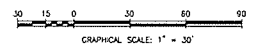
PARKING REQUIRED:

NURSERY SCHOOL 24 CHILDREN = 5 PARKING SPACES REQUIRED (0.19 x 24)
 SCHOOL OF GENERAL EDUCATION = 17 PARKING SPACES REQUIRED (13 EMPLOYEES AND 4 VISITORS)

TOTAL 22 PARKING SPACES REQUIRED.
 TOTAL PARKING PROVIDED : 22 PARKING SPACES

DESCRIPTION

INTERIOR PARKING LOT	5%	10% ±
TREE COVER	20%	25% ±



INTERIOR PARKING LOT LANDSCAPING REQUIRED:

AREA OF EXISTING PARKING LOT: 9247 SF
 AREA OF THE PROPOSED PARKING SPACE: 2807 SF
 TOTAL AREA OF THE PAVING LOT: 12054 SF
 LANDSCAPE REQUIRED: (5%) 603 SF
 LANDSCAPE PROVIDED:
 250 SF X 4 (EX. TREES) = 1000 SF
 TOTAL INTERIOR PARKING LOT LANDSCAPING PROVIDED = 1000 SF (5.4%)
 (INTERIOR LANDSCAPING IS SHADED AS )

TREE COVER CALCULATION

TOTAL SITE AREA: 82,588 SF BUILDING AREA: 12,359 SF
 AREA TO BE COUNTED: 82588-12359 = 70,229 SF
 TREE COVER REQUIRED: 14,046 SF (20%)
 TREE COVER PROVIDED:
 EX. TREES TO REMAIN: 8,950 SF (SHADED AS )
 PROPOSED TREES: 7,425 SF
 TOTAL TREE COVER PROVIDED: 16,361 SF (22%)

TRANSITIONAL SCREENING AND BARRIERS

PROPERTY ZONING: R-1
 ADJACENT PROPERTY ZONING: R-5 (USE: OPEN SPACE WITH EX. WOODS)
 NO TRANSITIONAL SCREENING AND BARRIERS REQUIRED

PERIPHERAL PARKING LOT LANDSCAPING

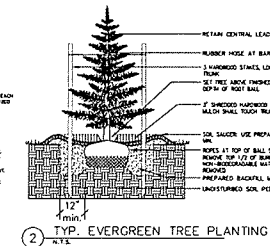
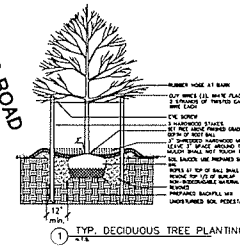
PARKING ADJUTS RIGHT-OF-WAY (LEES CORNER ROAD - RTE 645)
 MIN. LANDSCAPING STRIP REQUIRED: 10 FT
 MIN. LANDSCAPING STRIP PROVIDED: 15 FT
 TOTAL PARKING LINEAR FEET: 65
 TREES REQUIRED: 2 TREES (1 TREE/40 FT)
 TREES PROVIDED: 4 TREES

PLANT SCHEDULE

KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE (HEIGHT / CALIPER)	STOCK TYPE	CREDIT	TOTAL CREDIT
DECIDUOUS SHADE TREES							
AR	8	ACER RUBRUM	RED MAPLE	MIN. 2 1/2" CAL. B&B	250	2000	
OR	9	QUERCUS RUBRA	RED OAK	MIN. 2 1/2" CAL. B&B	250	2250	
ORNAMENTAL TREES							
CK	14	CORNUS KOUSA	KOUSA DOGWOOD	MIN. 2 1/2" CAL. B&B	125	1500	
EVERGREEN TREES							
JV	5	JUNIPERUS VIRGINIANA	EASTERN REDCEDAR	7'-8" HT. B&B	125	625	
PN	6	PINUS NIGRA	AUSTRIAN PINE	7'-8" HT. B&B	175	1050	

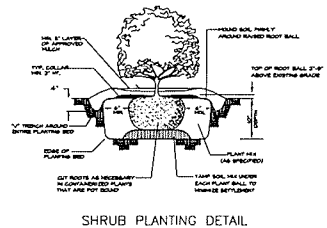
PROPOSED TREE COVER TOTAL: 7425 SQ. FT.

LEES CORNER ROAD
 (RTE 645)
 VARIABLE WIDTH R/W
 POSTED SPEED LIMIT 35 MPH



NOTES:

1. INSTALL TOP OF PLANT BALL 2" OF ABOVE ADJACENT GRADE
2. PLANT PLANTING MIX PROPERLY AND SET IN PLACE IMMEDIATELY AFTER INSTALLATION
3. SOIL SHALL BE MOISTENED WITH WATER IMMEDIATELY AFTER INSTALLATION
4. SEE SPECIFICATIONS FOR OTHER PLANTING REQUIREMENTS



GENERAL LANDSCAPE PLAN NOTES:

1. ALL PLANT MATERIAL AND PLANTING PROCEDURES SHALL BE IN CONFORMANCE WITH CHAPTER 11 OF THE FAIRFAX COUNTY PUBLIC FACILITIES MANUAL (PFM), 1995 EDITION
2. THE CONTRACTOR SHALL VERIFY THE PLANT SPECIES WITH THE SPECIES LISTED IN THE PFM AND CONTACT THE LANDSCAPE ARCHITECT AT 800 AND PARTNERS IF A DISCREPANCY EXISTS. UNLESS SPECIFIED OTHERWISE BY LANDSCAPE ARCHITECT, THE CONTRACTOR SHALL COMPLY WITH THE QUANTITIES AND LOCATIONS AS SHOWN ON THE LANDSCAPE PLAN
3. EXISTING VEGETATION (TREES AND UNDERSTORY VEGETATION) CAN BE RETAINED INSTEAD OF BEING REPLACED WITH SUPPLEMENTAL PLANTING PROVIDED WITH THIS PLAN

NOTE:

TREES TO BE SAVED OR REMOVED PER FAIRFAX COUNTY ARBORIST DECISION

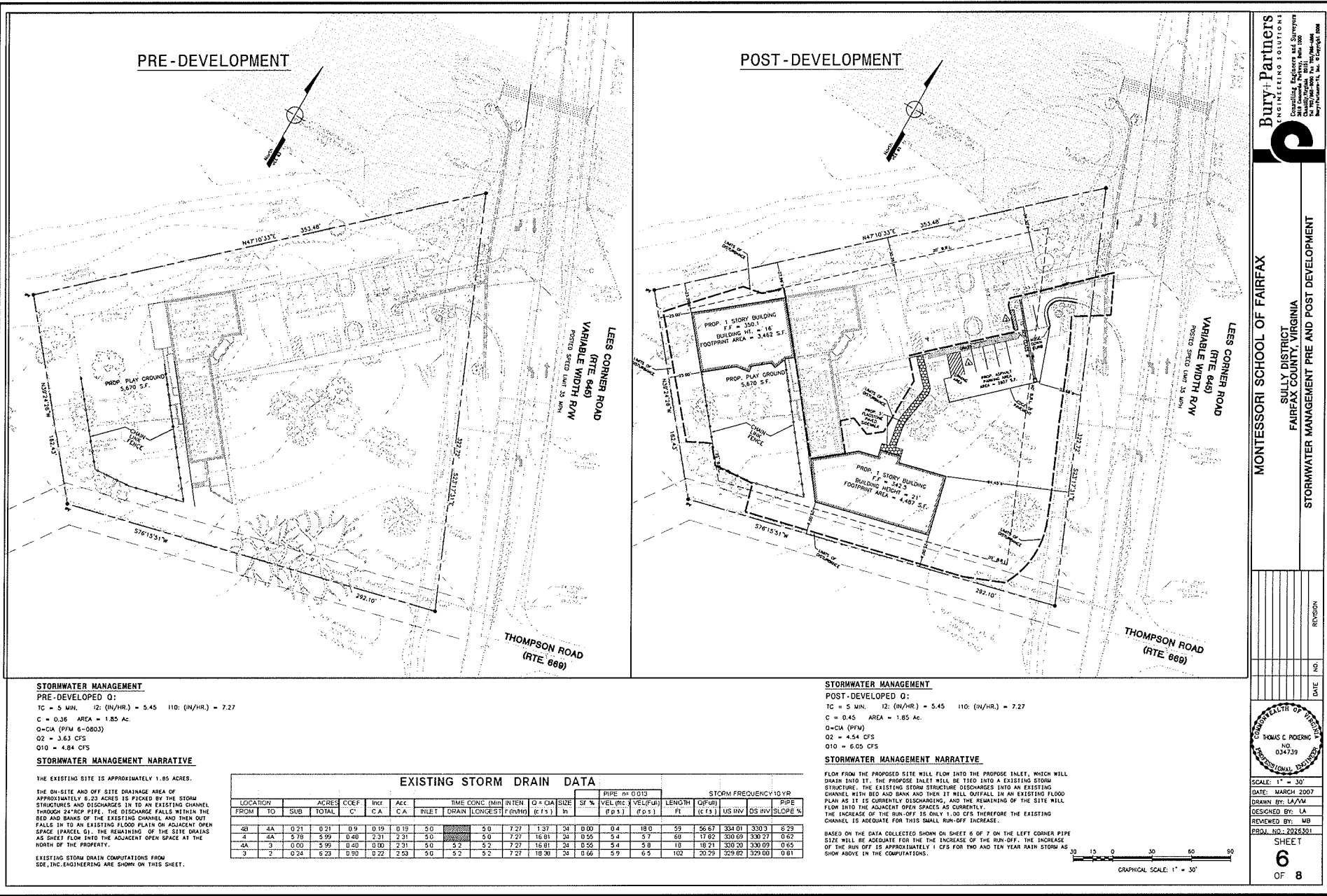
GRAPHICAL SCALE: 1" = 20'

Bury-Partners
 A CONSULTING SOLUTIONS
 Consulting Engineers and Surveyors
 1000 North 17th Street
 Suite 200
 Arlington, VA 22209
 (703) 243-1100
 Fax: (703) 243-1101
 www.bury-partners.com

MONTESSORI SCHOOL OF FAIRFAX
 SULLY DISTRICT
 FAIRFAX COUNTY, VIRGINIA
 LANDSCAPE PLAN

NO.	DATE	REVISION
1	03/17/07	ISSUED FOR PERMIT
2	04/17/07	REVISED PER COMMENTS
3	05/17/07	REVISED PER COMMENTS
4	06/17/07	REVISED PER COMMENTS
5	07/17/07	REVISED PER COMMENTS
6	08/17/07	REVISED PER COMMENTS
7	09/17/07	REVISED PER COMMENTS
8	10/17/07	REVISED PER COMMENTS
9	11/17/07	REVISED PER COMMENTS
10	12/17/07	REVISED PER COMMENTS

SCALE: 1" = 20'
 DATE: MARCH 2007
 DRAWN BY: LA/MB
 DESIGNED BY: LA
 REVIEWED BY: MB
 PROJ. NO.: 2024301
 SHEET
5
 OF 8



STORMWATER MANAGEMENT

PRE-DEVELOPED Q:
TC = 5 MIN. I2: (IN/HR.) = 5.45 I10: (IN/HR.) = 7.27
C = 0.36 AREA = 1.85 Ac.
Q=CIA (PFM 6-0803)
Q2 = 3.63 CFS
Q10 = 4.84 CFS

STORMWATER MANAGEMENT NARRATIVE

THE EXISTING SITE IS APPROXIMATELY 1.85 ACRES.

THE ON-SITE AND OFF-SITE DRAINAGE AREA OF APPROXIMATELY 6.23 ACRES IS PICKED BY THE STORM STRUCTURES AND DISCHARGES IN TO AN EXISTING CHANNEL THROUGH 24" PIPE. THE DISCHARGE FALLS WITHIN THE BED AND BANKS OF THE EXISTING CHANNEL AND THEN DIPS FALLS IN TO AN EXISTING FLOOD PLAIN ON ADJACENT OPEN SPACE (PARCEL G). THE REMAINING OF THE SITE DRAINS AS SHEET FLOW INTO THE ADJACENT OPEN SPACE AT THE NORTH OF THE PROPERTY.

EXISTING STORM DRAIN COMPUTATIONS FROM SDE, INC. ENGINEERING ARE SHOWN ON THIS SHEET.

EXISTING STORM DRAIN DATA

LOCATION		ACRES		COEF		RIS		ACC		TIME CONC. (MIN)		Q = CIA		PIPE		STORM FREQUENCY 10 YR	
FROM	TO	SUB	TOTAL	C'	CA	CA	CA	CA	CA	INLET	DRAIN	LONGEST	F (FPM)	Q (CFS)	IN	LENGTH	Q (CFS)
4B	4A	0.21	0.21	0.9	0.19	0.19	0.19	0.19	0.19	5.0	5.0	7.27	1.37	24	0.00	0.4	18.0
4	4A	5.78	5.99	0.40	2.31	2.31	5.0	5.0	5.0	7.27	16.81	24	0.55	5.4	5.7	68	17.62
4A	3	0.00	5.99	0.40	0.00	2.31	5.0	5.0	5.0	7.27	16.81	24	0.55	5.4	5.9	18	18.21
3	2	0.24	6.23	0.90	0.22	2.53	5.0	5.0	5.0	7.27	18.36	24	0.66	5.9	6.5	102	20.29

STORMWATER MANAGEMENT

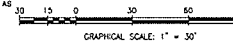
POST-DEVELOPED Q:
TC = 5 MIN. I2: (IN/HR.) = 5.45 I10: (IN/HR.) = 7.27
C = 0.45 AREA = 1.85 Ac.
Q=CIA (PFM)
Q2 = 4.54 CFS
Q10 = 6.05 CFS

STORMWATER MANAGEMENT NARRATIVE

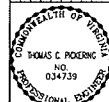
FLOW FROM THE PROPOSED SITE WILL FLOW INTO THE PROPOSED INLET, WHICH WILL DRAIN INTO IT. THE PROPOSED INLET WILL BE TIED INTO A EXISTING STORM STRUCTURE. THE EXISTING STORM STRUCTURE DISCHARGES INTO AN EXISTING CHANNEL WITH BED AND BANK AND THEN IT WILL OUTFALL IN AN EXISTING FLOOD PLAIN AS IT IS CURRENTLY DISCHARGING, AND THE REMAINING OF THE SITE WILL FLOW INTO THE ADJACENT OPEN SPACES AS CURRENTLY.

THE INCREASE OF THE RUN-OFF IS ONLY 1.00 CFS THEREFORE THE EXISTING CHANNEL IS ADEQUATE FOR THIS SMALL RUN-OFF INCREASE.

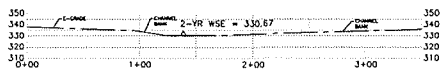
BASED ON THE DATA COLLECTED SHOWN ON SHEET 6 OF 7 ON THE LEFT CORNER PIPE SIZE WILL BE ADEQUATE FOR THE INCREASE OF THE RUN-OFF. THE INCREASE OF THE RUN-OFF IS APPROXIMATELY 1 CFS FOR TWO AND TEN YEAR RAIN STORM AS SHOWN ABOVE IN THE COMPUTATIONS.



REVISION	DATE	NO.



SCALE: 1" = 30'
DATE: MARCH 2007
DRAWN BY: LA/AM
DESIGNED BY: LA
REVIEWED BY: WB
PROJ. NO.: 2025301

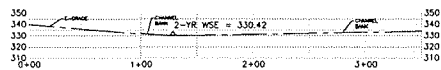


CROSS-SECTION A-A
SCALE H: 1"=50'
V: 1"=50'

CROSS-SECTION A-A

Input Data
Channel Slope 0.01 ft/ft
Discharge 81.90 cfs

Results
Manning's Coefficient 0.030
Water Surface Elevation 330.67 ft
Elevation Range 330.00 to 330.00
Flow Area 31.10 ft²
Wetted Perimeter 60.21 ft
Top Width 60.18 ft
Actual Depth 0.97 ft
Critical Depth 0.59 ft
Critical Slope 0.01872 ft/ft
Velocity 2.40 ft/s
Velocity Head 0.11 ft
Specific Energy 0.78 ft
Froude Number 0.75
Flow Type Subcritical

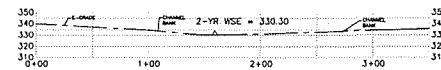


CROSS-SECTION B-B
SCALE H: 1"=50'
V: 1"=50'

CROSS-SECTION B-B

Input Data
Channel Slope 0.010 ft/ft
Discharge 86.18 cfs

Results
Manning's Coefficient 0.030
Water Surface Elevation 330.42 ft
Elevation Range 329.50 to 330.00
Flow Area 28.57 ft²
Wetted Perimeter 60.13 ft
Top Width 60.09 ft
Actual Depth 0.93 ft
Critical Depth 0.92 ft
Critical Slope 0.01743 ft/ft
Velocity 3.02 ft/s
Velocity Head 0.14 ft
Specific Energy 1.07 ft
Froude Number 0.77
Flow Type Subcritical



CROSS-SECTION C-C
SCALE H: 1"=50'
V: 1"=50'

CROSS-SECTION C-C

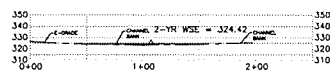
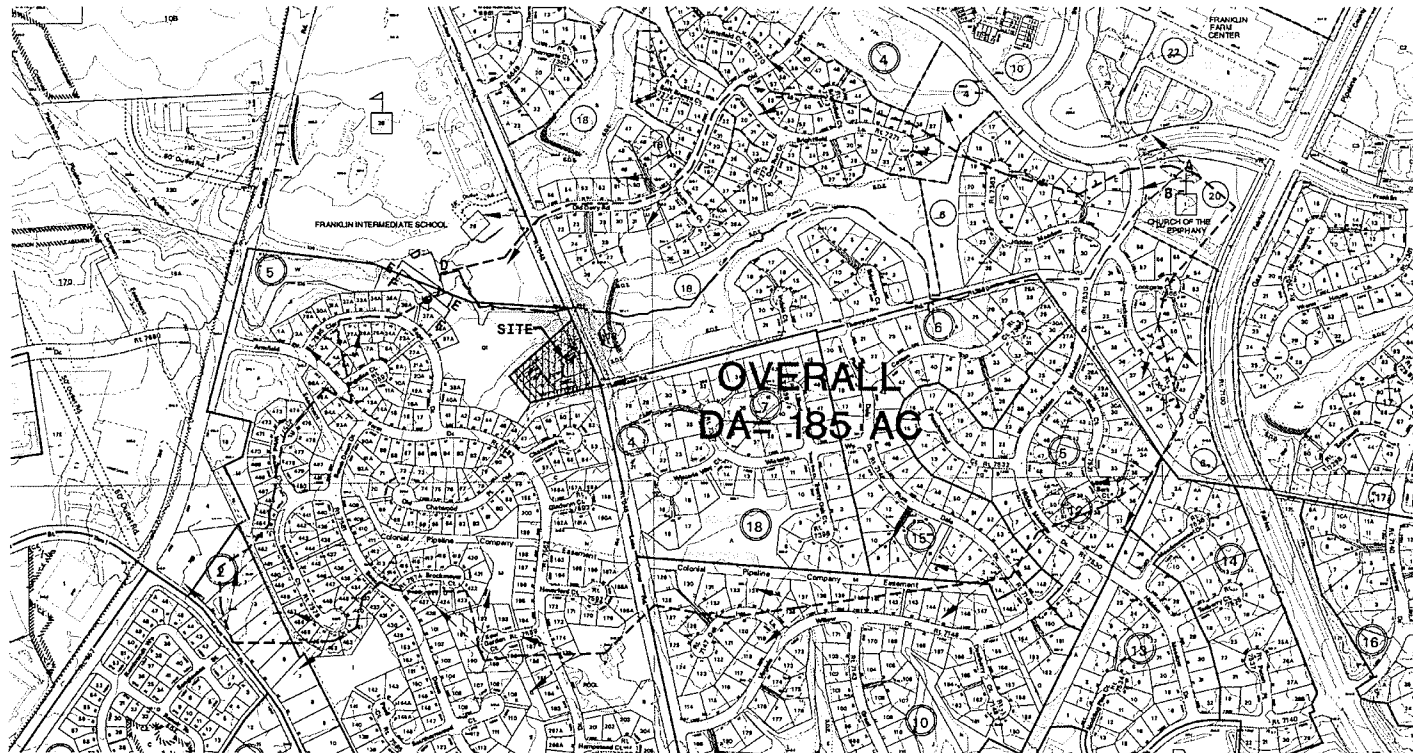
Input Data
Channel Slope 0.010 ft/ft
Discharge 88.57 cfs

Results
Manning's Coefficient 0.030
Water Surface Elevation 330.30 ft
Elevation Range 329.20 to 340.00
Flow Area 26.20 ft²
Wetted Perimeter 46.47 ft
Top Width 46.40 ft
Actual Depth 1.10 ft
Critical Depth 1.00 ft
Critical Slope 0.01643 ft/ft
Velocity 3.38 ft/s
Velocity Head 0.18 ft
Specific Energy 1.28 ft
Froude Number 0.70
Flow Type Subcritical

BMP COMPUTATIONS					
PLEASE REFER TO EXISTING ON APPROVED SITE PLAN (NUMBER 2006 SP-101-01-1) BY SIZE (BMP) (AC)					
Watershed Information					
A1 On-site controlled	0.53	Acres	0.93		
A2 On-site controlled	0.8		0.44		
A3 On-site controlled	0.3		0.1		
A4 Open space undisturbed	0.4		0.38		
A5 On-site uncontrolled					
Weighted Coverage for site					
A1 On-site controlled	0.53	Acres	0.93		
A2 On-site controlled	0.8		0.44		
A3 On-site controlled	0.3		0.1		
A4 Open space undisturbed	0.4		0.38		
A5 On-site uncontrolled					
Total	1.85	Acres	1.0265		
Weighted C Factor					
			0.55081		
Total Phosphorus Removal					
Sub-BMP	% Removal	C Factor	C Factor	Area	Product
Area Type	Efficiency	Rate	Rate	Rate	Rate
A1 Infiltration trench	50	0.94815	0.53	0.50727	23.9942
A2 Infiltration trench	50	0.8	0.44	0.23788	17.1396
A3 Infiltration trench	50	0.3	0.1	0.03085	2.35014
A4 Open space					
A5 Uncontrolled	0				
Total					43.4839
Total % phosphorus removed 61.3935					
Multiply removal efficiency by 0.2					
= 12.27678% of the undisturbed open space					
Drainage	C	Acres	Product		
A1 On-site controlled	0.53	0.93	0.4926		
A2 On-site controlled	0.8	0.44	0.352		
A3 On-site controlled	0.3	0.1	0.03		
Total			0.8748		
Weighted average C factor					
			0.52395		
Multiply area by 0.2					
Infiltration trench design 1 (0.5 in permeable area)					
	0.5	36.3	52.3125	2.41	2788.534 cu ft
Volume of trench					
			2208.530 cu ft		5214.334 cu ft
LENGTH	48.9				
WIDTH	4.2				
DEPTH	4.2 (WITH #5 STOPS)				

NOTE: THE EXISTING INFILTRATION TRENCH CAPACITY IS 5994 CU-FT. IT IS ENGINEER'S OPINION THAT THE EXISTING INFILTRATION TRENCH CAN HANDLE THE VOLUME FROM PROPOSED DEVELOPMENT ON SITE. PLEASE SEE THE COMPUTATIONS.

TO FROM THE TOP CURVE (PLATE 3-8 OF FFX CO.PFW)
0 = CIA (PFM 6-0803)
AREA TO SECTION A-A = 68.50 AC, TC = 32.97 W/M, 1-2yr = 2.66 in/hr, Q = 81.90 CFS
AREA TO SECTION B-B = 72.00 AC, TC = 32.97 W/M, 1-2yr = 2.66 in/hr, Q = 86.19 CFS
AREA TO SECTION C-C = 74.00 AC, TC = 32.97 W/M, 1-2yr = 2.66 in/hr, Q = 88.57 CFS

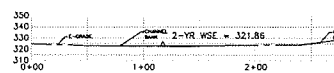


CROSS-SECTION D-D
SCALE: H: 1"=50'
V: 1"=50'

CROSS-SECTION D-D

Input Data
Channel Slope 0.01 ft/ft
Discharge 106.00 cfs

Results
Manning's Coefficient 0.030
Water Surface Elevation 324.42 ft
Elevation Range 323.50 to 326.50
Flow Area 58.92 ft²
Wetted Perimeter 107.07 ft
Top Width 0.92 ft
Actual Depth 0.92 ft
Critical Depth 0.82 ft
Critical Slope 0.01665 ft/ft
Velocity 3.23 ft/s
Velocity Head 0.17 ft
Specific Energy 1.00 ft
Froude Number 0.79
Flow Type Subcritical

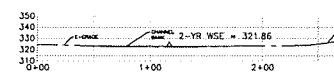


CROSS-SECTION E-E
SCALE: H: 1"=50'
V: 1"=50'

CROSS-SECTION E-E

Input Data
Channel Slope 0.010 ft/ft
Discharge 199.89 cfs

Results
Manning's Coefficient 0.030
Water Surface Elevation 323.43 ft
Elevation Range 322.50 to 328
Flow Area 61.65 ft²
Wetted Perimeter 116.40 ft
Top Width 116.38 ft
Actual Depth 0.92 ft
Critical Depth 0.84 ft
Critical Slope 0.01663 ft/ft
Velocity 3.24 ft/s
Velocity Head 0.16 ft
Specific Energy 1.09 ft
Froude Number 0.79
Flow Type Subcritical



CROSS-SECTION F-F
SCALE: H: 1"=50'
V: 1"=50'

CROSS-SECTION F-F

Input Data
Channel Slope 0.010 ft/ft
Discharge 202.29 cfs

Results
Manning's Coefficient 0.030
Water Surface Elevation 321.86 ft
Elevation Range 320.50 to 331.00
Flow Area 55.65 ft²
Wetted Perimeter 89.46 ft
Top Width 89.42 ft
Actual Depth 1.36 ft
Critical Depth 1.25 ft
Critical Slope 0.01668 ft/ft
Velocity 3.63 ft/s
Velocity Head 0.21 ft
Specific Energy 1.57 ft
Froude Number 0.81
Flow Type Subcritical

OUTFALL NARRATIVE

AS PER FFX COUNTY ZONING ORDINANCE SECTION 16-302L, AND PFM, DRAINAGE AREA OF 100 TIMES THE SITE IS PROVIDED. THE FLOW FROM THE SITE AND TWO STREAMS IN THE DRAINAGE AREA DRAIN TO EAST.

THE EXISTING SITE IS APPROXIMATELY 1.85 ACRES IN AREA. THE NATURAL TERRAIN DIVIDES THIS SITE INTO TWO PARTS AND THE WATER SHEET FLOWS IN BOTH DIRECTIONS.

THE ONSITE AND OFFSITE RUN-OFF OF APPROXIMATELY 6.24 ACRES IS PICKED BY THE STORM STRUCTURES AND THROUGH 24 INCHES RCP PIPE DISCHARGES INTO AN EXISTING CHANNEL WITHIN BED AND BANK AND THEN OUTFALLS IN AN EXISTING FLOODPLAIN ON ADJACENT OPEN SPACE (PARCEL G). THE REMAINING AREA OF THE SITE SHEET FLOWS INTO THE ADJACENT OPEN SPACE AT THE NORTH OF THE PROPERTY.

TC FROM THE 10% CURVE (PLATE 3-B OF FFX CO.PFM)

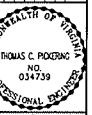
0 - CIA (PFM 6-0003)

AREA TO SECTION A-A = 165 AC, Tc = 32.97 MIN, 1-2yr = 2.66 in/hr, 0 = 196.00 CFS

AREA TO SECTION B-B = 167 AC, Tc = 32.97 MIN, 1-2yr = 2.66 in/hr, 0 = 199.89 CFS

AREA TO SECTION C-C = 169 AC, Tc = 32.97 MIN, 1-2yr = 2.66 in/hr, 0 = 202.29 CFS

NO.	DATE	REVISION
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		



SCALE: 1" = 250'
DATE: MARCH 2007
DRAWN BY: JAP/M
DESIGNED BY: MB
PROJ. NO.: 2026301

SHEET
8
OF 8