AGENDA
LEXINGTON COUNTY COUNCIL
Committee Meetings
Tuesday, August 28, 2007
Second Floor - County Administration Building
212 South Lake Drive, Lexington, SC 29072
Telephone - 803-785-8103 -- FAX 803-785-8101

***Times are tentatively scheduled committee meetings that may run behind or ahead of schedule; therefore, the times could change by as much as 30 minutes.**

1:00 p.m. - 1:25 p.m. - Planning & Administration

(1) Community Development Block Grant (CDBG) Program Consolidated Annual Performance and Evaluation Report Program Year 2006 (July 1, 2006 - June 30, 2007) Community Development - George Bistany, CDBG Administrator ..... **A**
(2) Zoning Map Amendment M07-06 - 1629 Lake Murray Blvd., Columbia - 2nd Reading..... **B**
(3) Zoning Map Amendment M07-07 - Both Sides of Rhett Road, Columbia - 2nd Reading..... **C**
(4) Approval of Minutes - Meeting of July 24, 2007 ..... **D**
(5) Old Business/New Business
(6) Adjournment

1:25 p.m. - 1:35 p.m. - Justice

(1) School Resource Officers - Dr. Lee Bollman, Chief Instructional Services Officer - Lexington/Richland School District 5
(2) Approval of Minutes - Meeting of July 24, 2007 ..... **E**
(3) Old Business/New Business
(4) Adjournment

1:35 p.m. - 1:50 p.m. - Health & Human Services

(1) FEMA/Assistance to Firefighters SAFER Grant Application - Public Safety/Fire Service - Chief Russell Rawl, Fire Service Coordinator..... **F**
(2) Ordinance 07-03 - An Ordinance Amending the Animal Control Ordinance - Animal Services - Joe Mergo, Director ..... **G**
(3) Appointment of Animal Control Officer - Animal Services - Joe Mergo, Director..... **H**
(4) Approval of Minutes - Meeting of July 24, 2007 ..... **I**
(5) Old Business/New Business
(6) Adjournment

1:50 p.m. - 3:20 p.m. - Public Works

(1) Skipping of the Pavement of Roads - The Honorable Jake Knotts
(2) EPA Resolution - Ozone Standards Comments - Myra Reece, Bureau Chief of Air Quality for DHEC ..... **J**
(3) Bennington Court Extension Update - Public Works, John Fechtel, Director ..... **K**
(4) Land Development Guidelines Update - Public Works - Sheri Armstrong, Stormwater Manager ..... **L**
(5) SCDOT SMP ’08 Bid - Public Works - John Fechtel, Director ..... **M**
(6) Stormwater Fees - Motorsport Complex - Public Works - John Fechtel, Director ..... **N**
(7) Turning Lanes - Sandhills Collection Station - Public Works - John Fechtel, Director ..... **O**
(8) Approval of Minutes - Meeting of July 24, 2007 ..... **P**
(9) Old Business/New Business – Private Roads, Road Maintenance Fee Ordinance, Alternate Funding Sources
(10) Adjournment

3:20 p.m. - 3:30 p.m. - Airport

(1) Pilots Advisory Committee - Katherine Hubbard, County Administrator
(2) Approval of Minutes - Meeting of July 24, 2007 ..... **Q**
(3) Old Business/New Business
(4) Adjournment

3:30 p.m. - 4:15 p.m. - Committee of the Whole

(1) Fire Service Leadership Update - Public Safety/Fire Service - Perry Bailey ..... **R**
(2) Midlands Authority for Conventions, Sports & Tourism Overview - Richard A. Luber, President & CEO
(3) Ground Maintenance/Landscaping Committee Report - Katherine Hubbard, County Administrator
(4) Approval of Minutes - Meeting of July 24, 2007 ..... **S**
(5) Old Business/New Business - Revised Building Use and Naming Policy
(6) Adjournment

Planning & Administration
J. Jeffcoat, Chairman
S. Davis, V Chairman
D. Summers
J. Carrigg, Jr.
B. Banning, Sr.
B. Derrick

Justice
B. Banning, Sr., Chairman
J. Kinard, V Chairman
S. Davis
B. Keisler
B. Derrick

Health & Human Services
J. Carrigg, Jr., Chairman
J. Jeffcoat, V Chairman
D. Summers
B. Keisler
B. Banning, Sr.
B. Derrick

Public Works
D. Summers, Chairman
T. Cullum, V Chairman
B. Keisler
J. Carrigg, Jr.
B. Derrick

Airport
T. Cullum, Chairman
J. Carrigg, Jr., V Chairman
J. Kinard
D. Summers
B. Derrick

Committee of the Whole
B. Derrick, Chairman
D. Summers, V Chairman
J. Kinard
S. Davis
B. Keisler
J. Jeffcoat
J. Carrigg, Sr.
B. Banning
T. Cullum

A G E N D A
LEXINGTON COUNTY COUNCIL
Tuesday, August 28, 2007
Second Floor - Dorothy K. Black Council Chambers - County Administration Building
212 South Lake Drive, Lexington, South Carolina 29072
Telephone - 803-785-8103 FAX - 803-785-8101

4:30 P.M. - COUNCIL CHAMBERS

Call to Order/Invocation
Pledge of Allegiance

Employee Recognition - Katherine Hubbard, County Administrator
Employee of the Quarter

Appointments ..... **T**

Resolution
(1) EPA Resolution - Ozone Standards **- Tab J**

Bids/Purchases/RFPs
(1) Fleet Vehicle Replacement/Addition - Fleet Services ..... **U**
(2) Fleet Vehicle Replacement - Public Safety/EMS ..... **V**
(3) Fleet Vehicle Additions/Replacements - Sheriff's Department ..... **W**
(4) Fuelmaster Site Upgrades, Nozzle Chips & Vehicle Modules - Fleet Services & Motor Pool ..... **X**
(5) Tractor with Slope Mower - Public Works ..... **Y**
(6) Two (2) New Dump Trucks and Two (2) New Pickup Trucks - Fleet Vehicle Replacements - Public Works ..... **Z**
(7) Dell Laptops Replacements/Addition - Various Departments - Information Services **1**
(8) Secure Socket Layer Virtual Private Network Appliance – Information Services **2**
(9) Computer Reservation System, Licenses, Installation, and Training - Sole Source – Library Services **3**
(10) Microsoft Volume Licenses - Library Services **4**
(11) Personal Computers and Monitors - Library Services **5**
(12) Panasonic Laptops and Accessories - Sheriff's Department **6**
(13) Dell Image Data Storage Server - Solicitor's Office **7**
(14) Medical Supplies - Term Contract - Public Safety/EMS **8**

(15) Motorola Portable VHF Monitor/Receivers - Public Safety/Fire Service **9**
(16) Thermal Imaging Cameras - Sole Source - Public Safety/Fire Service **10**
(17) Request for Approval to Utilize Competitive Sealed Proposal Process for Jail Health Care Contract - Sheriff's Department.....**11**

Chairman's Report

Administrator's Report

Approval of Minutes - Meeting of June 26, 2007.....**12**

Zoning Amendment
(1) Zoning Map Amendment M07-08 - 1731 Bush River Rd., Columbia - Announcement of 1st Reading **13**

Committee Reports
Planning & Administration, J. Jeffcoat, Chairman
(1) Zoning Map Amendment M07-06 - 1629 Lake Murray Blvd., Columbia - 2nd Reading - **Tab B**
(2) Zoning Map Amendment M07-07 - Both Sides of Rhett Road, Columbia - 2nd Reading - 2nd Reading - **Tab C**

Justice, B. Banning, Chairman
(1) School Resource Officers (Tentative)

Health & Human Services, J. Carrigg, Jr., Chairman
(1) Ordinance 07-10 - An Ordinance to Determine the Number of Pets Located in Lexington County **14**
(2) Appointment of Animal Control Officer - **Tab H**
(3) Supplemental Appropriation for Project Pet.....**15**
(4) FEMA/Assistance to Firefighters SAFER Grant Application - **Tab F**

Public Works, D. Summers, Chairman
(1) Land Development Guidelines Update - **Tab L**

(2) SCDOT SMP ’08 Bid **- Tab M**
(3) Stormwater Fees - Motorsport Complex **- Tab N**
(4) Turning Lanes **-** Sandhills Collection Station **- Tab O**

Ordinances

(1) Ordinance 07-03 - An Ordinance Amending the Animal Control Ordinance - 2nd Reading - **Tab G**
(2) Ordinance 07-07 - An Ordinance Authorizing the Execution and Delivery of a Fee in Lieu of Tax and Incentive Agreement Between Lexington County and Otis Spunkmeyer, Inc - 3rd and Final Reading.....**16**
(3) Ordinance 07-09 - An Ordinance Amending Ordinance No. 05-15 (Ordinance Governing False Fire Alarms) - 2nd Reading **17**
(4) Ordinance 07-10 - An Ordinance to Determine the Number of Pets Located in Lexington County - 1st Reading **18**
(5) Ordinance 07-11 - An Ordinance Adopting a Supplemental Appropriation for Fiscal Year 2007-2008 - 1st Reading.....**19**
(6) Ordinance 07-12 - An Ordinance Approving the Conveyance of Real Estate from the County of Lexington to Peggy Williamson - 2nd Reading.....**20**

6:00 P.M. - Public Hearings

(1) Impact Fees - Corley Mill Fire Station.....**21**

Budget Amendment Resolutions

OLD BUSINESS/NEW BUSINESS

EXECUTIVE SESSION/LEGAL BRIEFING

MATTERS REQUIRING A VOTE AS A RESULT OF EXECUTIVE SESSION

ADJOURNMENT

GOALS

1. **Provide for public services to citizens of Lexington County.**
2. **Manage growth to meet needs of Lexington County.**
3. **Appropriate required funding to meet Strategic Plan.**

County of Lexington

Community Development Department
212 South Lake Drive—Suite 401
Lexington, SC 29072
Phone: (803) 785-8121
Fax: (803) 785-8188

MEMORANDUM

To: Planning and Administration Committee
Lexington County Council

Through: Katherine Hubbard, County Administrator

From: Ronald T. Scott, Community Development Director

Date: August 17, 2007

Subject: Community Development Block Grant (CDBG) Program
Consolidated Annual Performance and Evaluation Report
Program Year 2006 (July 1, 2006 – June 30, 2007)

The County's seventh year of participation in the Community Development Block Grant Program ended on June 30, 2007. Year-end reporting requirements include the submission of a narrative report on goals accomplished in conjunction with our 5-year Consolidated Plan and financial reports for the year.

Prior to submission to HUD, this report is made available for public comment for 15 days and is presented at a public hearing. The 15-day comment period begins August 16, 2007 and will end August 31, 2007. The public hearing is scheduled for Thursday, August 30, 2007 at 12:00 pm in Council Chambers. Following the public hearing and comment period, any comments received are incorporated into the report and the final report is submitted to HUD. The report is due no later than September 28, 2007.

The CAPER is being submitted to County Council for information purposes. Approval is not expressly required, as the activities have already been approved through the Consolidated Plan and Annual Action Plan process. Attached is a summary that provides information on some of the program year accomplishments. A complete copy of the report is available if the committee desires to review the full document. Staff will be prepared to review highlights of the report at the Planning and Administration Committee meeting on August 28, 2007.

Lexington County Community Development Block Grant

Consolidated Annual Performance Evaluation Report Summary

July 1, 2006 - June 30, 2007

The United States Department of Housing and Urban Development (HUD) requires consolidated planning and reporting of all communities as a condition of receiving federal grants for housing and community development including the Community Development Block Grant (CDBG). At the end of each fiscal year, CDBG recipient communities across the Country report to their citizens and elected officials how they have utilized their grant funds to improve the community and the lives of the people who live in it. The Consolidated Annual Performance and Evaluation Report (CAPER) is the HUD-prescribed vehicle for providing that information.

Lexington County has successfully completed the second year of the County's Five-Year Consolidated Plan. Activities undertaken during this period reflect the goals and objectives as stated in the County's Five-Year Consolidated Plan for 2005 to 2009 and the 2006 One-Year Action Plan. The Community Development Department is pleased to report effective performance on meeting project objectives in Program Year 2006. The County will continue its efforts to be effective stewards of federal funds in the service of its residents.

Accomplishment Highlights

- ★ **Total Expenditures: $1,831,311**
- ★ **Successful Expenditure Timeliness:** The County's CDBG program expended $705,000+ more than required to meet HUD's requirement for expending CDBG funds in a timely manner. This excellent rate of compliance was noted by HUD in their written report to the County this year.

PROJECTS COMPLETED

- ☞ **Greater Columbia Community Relations Council ($41,060):** This fair housing education project improved knowledge of fair housing issues in low and moderate income areas of the County.
- ☞ **Old Barnwell Road Water ($158,636):** This water line construction project installed 6,500 LF of 8" PVC along Old Barnwell Road from Walnut Creek Drive to Shirway Road providing new water service to residents and improving fire protection.
- ☞ **Princeton Road Water ($200,000):** This water line construction project installed 5,500 LF 12" water line along Princeton Road between Ramblin Road and Edmund Highway providing new water service to residents and improving fire protection.
- ☞ **LMI Code Enforcement ($105,892):** This project provided funds to the Lexington County Sheriff's Department to hire two new code enforcement officers to address code issues in low and moderate income areas of the County.
- ☞ **Sistercare ($12,000):** The $12,000 award was leveraged with other funds the agency receives and allowed them to operate their Lexington County shelter all twelve months of the year.

PROJECTS NEARING COMPLETION

- Law Enforcement Center at Airport
- Sharpe's Hill Fire Station
- 2006 Minor Home Repair
- Double Branch Neighborhood Water

COUNTY OF LEXINGTON, SOUTH CAROLINA

Community Development
County Administration Building, 4th Floor
212 South Lake Drive, Lexington, SC 29072
(803)785-8121

ZONING MAP AMENDMENT APPLICATION # **M07-06**

Address and/or description of the property for which the amendment is requested:

1629 Lake Murray Blvd., Columbia 29212

Zoning Classifications: (Current) C1 - Neighborhood Commercial (Proposed) ID - Intensive Development

TMS#: 001998-02-045 Property Owner: Jo-Lin's, Inc.

Reason for the request: I am wishing to relocate my sign company to this location and am also conidering some speculative development in conjunction with my business.

Even though this request will be carefully reviewed and considered, the burden of proving the need for the amendment rests with the applicant.

Date of Application: 5/14/07 Applicant: Owner ☐ Agent ☒

Phone #(s): work (803) 407-9284 _____ _____

Signature: _____ Printed Name: Barry Johns

Street/Mailing Address: 1247-B Lake Murray Blvd., Irmo 29063

5/14/07	Application Received
7/05/07	Newspaper Advertisement
7/09/07	Notices Mailed

5/17/07	Fee Receipted
7/05/07	Property Posted
8/16/07	Planning Commission

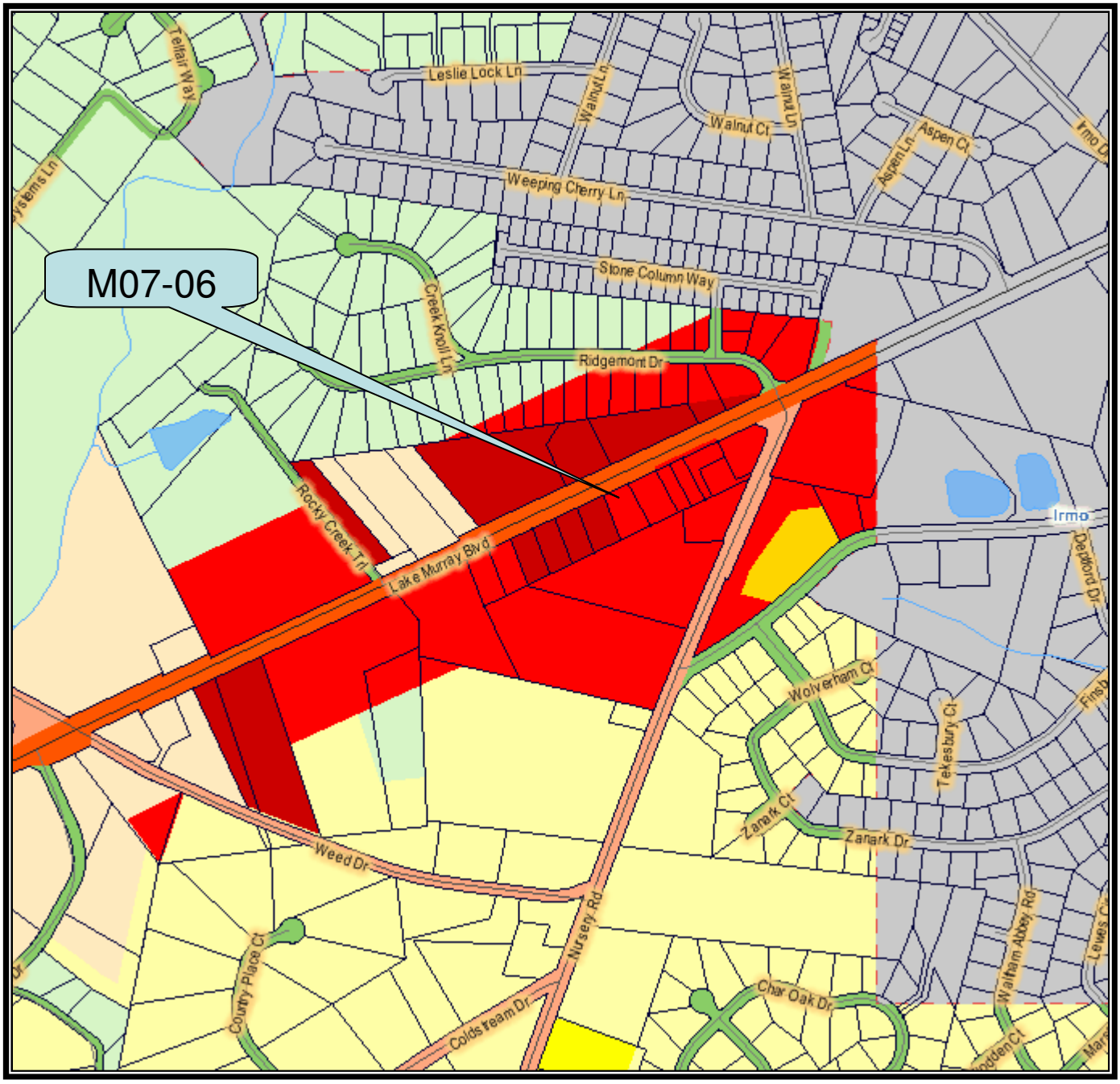
Planning Commission Recommendation: 6 – 0 for approval

6/12/07	First Reading	7/24/07	Public Hearing		Second Reading		Third Reading

Results: _____

_____

Zoning Map Amendment Application M07-06



ZONING LEGEND

	I - Interstate			RL5 – Residential Local 5			ID – Intensive Development
	A – Arterial Road			RL6 – Residential Local 6			PD – Planned Development
	C – Collector Road			LC – Limited Commercial			R1 – Low Density Residential
	L – Local Road			C1 – Neighborhood Commercial			R2 – Medium Density Residential
	LL – Limited Local Road			C2 – General Commercial			R3 – High Density Residential
	RL4 – Residential Local 4			D - Development			RD – Restrictive Development

COUNTY OF LEXINGTON, SOUTH CAROLINA

Community Development
County Administration Building, 4th Floor
212 South Lake Drive, Lexington, SC 29072
(803)785-8121

ZONING MAP AMENDMENT APPLICATION # **M07-07**

Address and/or description of the property for which the amendment is requested:

Both sides of Rhett Road, Columbia SC 29210

Zoning Classifications: (Current) R1 (Proposed) ID

TMS#: 002899-01-018 Property Owner: Taylor, Dressler & Koeing, LLC

Reason for the request: Zoning amendment request to improve the 4.15 acres to office/flex space use.

Even though this request will be carefully reviewed and considered, the burden of proving the need for the amendment rests with the applicant.

Date of Application: 05/17/07 Applicant: Owner ☒ Agent ☐

Phone #(s): work (803) 463-6054 _____ _____

Signature: _____ Printed Name: Eric Dressler

Street/Mailing Address: 1612 Riveria Drive, West Columbia SC 29169

5/17/07	Application Received		5/17/07	Fee Receipted
7/05/07	Newspaper Advertisement		7/05/07	Property Posted
7/09/07	Notices Mailed			Planning Commission

Planning Commission Recommendation: _____

_____

6/12/07	First Reading	7/24/07	Public Hearing	Second Reading	Third Reading

Results: _____

_____

August 1, 2007

Eric Dressler of Taylor Dressler & Koenig, LLC
1612 Riviera Drive,
West Columbia, South Carolina 29169

County of Lexington, South Carolina
Community Development
County Administration Building 4th Floor Suite 401
212 South Lake Drive, Lexington, SC 29072

Dear Mr. Matt McPherson

To whom it may concern:

Please withdraw zoning to map admenment MO7-07.
Request to Rezone both sides of Rhett Road, Columbia, South Carolina 29210

Thank you,

Eric Dressler

RECEIVED
AUG 0 2 2007
LEXINGTON COUNTY
COMMUNITY DEVELOPMENT

The Committee Minutes are left out intentionally until approved by the Committee. Upon the Committee's approval, the minutes will be available on the Internet.

The Committee Minutes are left out intentionally until approved by the Committee. Upon the Committee's approval, the minutes will be available on the Internet.

COUNTY OF LEXINGTON
Grant Request Summary Form

Title of Grant: **FEMA/ASSISTANCE TO FIREFIGHTERS SAFER GRANT PROGRAM**

Fund: _____ FEMA/SAFER GRANT PROGRAM **Department:** 131500 PS/FIRE SERVICE
No. *Title* *No.* *Title*

Type of Summary: **Grant Application** X **Grant Award** _____

Grant Overview:
The goal of this grant is to provide funding to assist fire departments in increasing their staffing and deployment capabilities in an effort to more adequately respond to emergencies. This grant specifically identifies funding for combination volunteer and paid departments for the recruitment and retention of volunteer firefighters.

Grant Period: 12 months to _____ * 12 Months from the award date. (No set dates)

Responsible Departmental Grant Personnel: Russell Rawl, Fire Service Coordinator

Date Grant Information Released: August 9, 2007 **Date Grant Application Due:** August 31, 2007

Grant Expenditures (Please attach a detailed budget with Excel spreadsheet, Overview, Line Item Narratives, etc.):

Personnel	$ 244,000.00
Operating	$ 56,000.00
Capital	
Total	$ 300,000.00

Local Match Required: **Yes** [ ] **No** [X]

If Yes, What is the Percentage / Amount: _____ _____
% *$ Amount*

Requirements at the End of this Grant (please explain in detail):

None, this is an annual recurring grant and will have to be applied for again next year.

Dept. Preparer:	RR	8/13/2007
Dept. Approval:	RR	8/13/2007
Finance Approval:	AD	8/15/2007
	Initials	*Date*

F:\windows\excel2k\forms\grants\blankgrantsummaryform.xls
Last Updated: 12/13/06 By: AD

County of Lexington
Department of Public Safety

FIRE SERVICE DIVISION

MEMORANDUM

August 13, 2007

TO: Adam Dubose
Grants Coordinator

FROM: Russell R. Rawl RR
Fire Service Coordinator

RE: SAFER Grant Request

The U. S. Department of Homeland Security / FEMA Assistance to Firefighters Grant Program is accepting applications for SAFER (Staffing for Adequate Fire and Emergency Response) Grants. The goal of this grant is to provide funding to assist fire departments in increasing their staffing and deployment capabilities in an effort to more adequately respond to emergencies.

This grant specifically identifies funding for combination volunteer and paid departments for the recruitment and retention of volunteer firefighters. The application period is July 30, 2007 to August 31, 2007. There are no matching funds required.

If approved a grant request would be submitted for the following:

• Volunteer Subsistence, FICA Costs, Workers Compensation	$244,000
• Disability Insurance	$ 5,000
• Uniforms	$ 24,000
• Physicals / IDC	$ 27,000
Total	$300,000

I appreciate your assistance and if you need any additional information, please let me know.

212 South Lake Drive Suite 502 • Lexington, South Carolina • 29072
Phone (803) 785-8287 Fax (803) 785-8589
E-Mail: lcfs@lex-co.com

COUNTY OF LEXINGTON
FEMA/SAFER GRANT PROGRAM
Annual Budget
Fiscal Year - 2007-08

Object Code	Revenue Account Title	Actual 2005-06	11 Months Received Thru May 2006-07	Amended Budget Thru May 2006-07	Projected Revenues Thru Jun 2006-07	Requested 2007-08	Approved 2007-08
	*** FEMA/SAFER GRANT PROGRAM**						
	Revenues: (Organization - 000000)						
457000	Federal Grant Income	0	0	0	0	300,000	
	**** Total Revenue**	0	0	0	0	300,000	
	*****Total Appropriation**				0	300,000	
	FUND BALANCE Beginning of Year				0	0	
	FUND BALANCE - Projected End of Year				0	0	

Fund:
Division: Public Safety
Organization: 131500 - Fire Service

Object Code	Expenditure Classification	2005-06 Expenditure	2006-07 Expenditure (May)	2006-07 Amended (May)	2007-08 Requested	*BUDGET* 2007-08 Recommend	2007-08 Approved
	Personnel						
516100	Volunteer Subsistence	0	0	0	226000	226000	
511112	FICA Cost - Non-Employees	0	0	0	17300	17300	
516130	Workers Compensation	0	0	0	700	700	
	*** Total Personnel**	**0**	**0**	**0**	**244,000**	**244,000**	
	Operating Expenses						
520201	Physical Fitness Program	0	0	0	21,000	21,000	
521401	Infectious Disease Control Supplies	0	0	0	6,000	6,000	
524300	Volunteer Fireman Disability Insurance	0	0	0	5,000	5,000	
525600	Uniforms & Clothing	0	0	0	24,000	24,000	
	*** Total Operating**	**0**	**0**	**0**	**56,000**	**56,000**	
	**** Total Personnel & Operating**	**0**	**0**	**0**	**300,000**	**300,000**	
	Capital						
	**** Total Capital**	**0**	**0**	**0**	**0**	**0**	
	***** Total Budget Appropriation**	**0**	**0**	**0**	**300,000**	**300,000**	

VOLUNTEER SERVICES PROGRAM SUMMARY

This program provides for compensating the Fire Service's Volunteer Staff of 280 for responding to emergency calls, attending training programs. Also provided is Workers Compensation and supplemental disability insurance.

516100 – Volunteer Subsistence
511112 – FICA Cost – Non Employees
516130 – Workers Compensation – Non Employees $244,000

$10.00 per fire call
$10.00 per 4 hour block of training

520201 – Physical Fitness Program $21,000

OSHA Regulation 1910.156, Fire Brigades, Section 2, Personnel, states, effective September 15, 1990, personnel who are expected to do interior structural firefighting are to be physically capable of performing these duties. Personnel with known heart disease, epilepsy, or emphysema are not allowed to participate, unless physician certifies the person is physically capable of performing these duties. Also, OSHA Regulation 1910.120, Hazardous Waste Operations and Emergency Response, requires hazardous materials team members to have annual physicals.

$300.00 per Physicals for 70 Volunteers = $21,000

521401 – Infectious Disease Control Supplies $6,000

This will provide for the infectious disease control program that has been implemented by the Fire Service to comply with OSHA 1910.1030, which outlines protective measures for employees who may be exposed to bloodborne disease causing agents (includes vaccinations and protective equipment). Cost projections are a follows:

Hepatitis B Vaccinations $50 x 3 shots = $125
Titer = $20
Post Exposure Follow Up = $100
(not covered by Workers' Comp)

524300 – Volunteer Fireman Disability Insurance $5,000

Disability Insurance

525600 – Uniforms & Clothing $24,000

Uniforms 60 @ $400 ea = $24,000

ORDINANCE NO. 07-03

AN ORDINANCE AMENDING THE ANIMAL CONTROL ORDINANCE.

BE IT ORDAINED BY THE COUNTY COUNCIL OF LEXINGTON COUNTY, SOUTH CAROLINA, AS FOLLOWS:

The following shall be added to Section 10-31—Definitions:

Section 1. **Shelter** – Shall be defined as a structure appropriately sized for the ~~animal~~ pet to stand or lie in a normal manner. The structure must have a roof, three sides, appropriate sized opening for ingress and egress and a dry floor so as to protect the ~~animal~~ pet from the elements of weather.

Section 2. The following section shall be added as Section 10.41 and current 10.41 shall be renumbered as Section 10.42 and current Section 10.42 shall be renumbered as 10.43

(a) No person shall sell, trade, barter, auction, lease, rent, give away, or display for commercial purpose, any pet, on any roadside, public right-of-way, public property, commercial parking lot or sidewalk, ~~or at any flea market,~~ fair or carnival.

(b) No Person shall offer a pet as an inducement to purchase a product, commodity or service.

(c) A flea market pet sale vendor must:
1. Possess a valid registration with Lexington County Animal Services.
2. Display, at all times, the Lexington County Animal Services' registration certificate at the booth.
3. Permit kennel and booth inspections by Lexington County Animal Services upon request.

(d) Licensed pet shops, commercial kennels, county animal shelters, and licensed pet rescue organizations may be exempt from the requirements of this section with prior written approval from the animal services director or designee. The written approval document must be kept on site and produced upon request to law enforcement and code enforcement personnel.

Section 3. Section 10.41(d) [herein amended to be 10.42(d)] is amended to add the following sentence to the end of this subsection:

Further, after reasonable attempts to capture and/or restrain unsuccessfully a pet in violation of ~~any~~ section 10-34 Restraint and Confinement ~~of this article~~ (by physical means and/or trapping), as a last resort, petition the Magistrate to have the pet destroyed.

This Ordinance shall become effective upon its enactment.

Enacted this ____ day of _____, 2007.

LEXINGTON COUNTY, SOUTH CAROLINA

_____
William C. Derrick
Chairman, County Council

(SEAL)

ATTEST:

_____
Clerk to Council

Date of First Reading: _____
Date of Second Reading: _____
Date of Public Hearing: _____
Date of Third Reading: _____

LEXINGTON COUNTY
ANIMAL SERVICES

321 Ball Park Rd. Lexington, SC 29072
(803) 785-8149
Fax #(803) 785-8561

Flea Market Pet Vendor Application

Business Name: _____ Phone #: _____

Business Address: _____

_____

Name of Flea Market: _____ Booth #: _____

Address of Flea Market: _____

_____

Phone Number of Flea Market: _____

Federal Tax I.D. #: _____

South Carolina Tax Retail License #: _____

Applicant Name: _____ SCDL#: _____

Applicant Address: _____

_____

Home Phone #: _____ Cell #: _____

Address of Kennels: _____

_____

Breeds of Pets to be sold: _____

_____

_____

Name of Veterinarian: _____ Phone #: _____

Address: _____

_____

To the best of my knowledge the above information is correct. I consent to random inspections of kennels and booth by Lexington County Animal Services.

_____ _____

Signature Date

_____

Print

INTEROFFICE MEMORANDUM—ANIMAL SERVICES

TO: COUNTY COUNCIL

THROUGH: KATHERINE HUBBARD, COUNTY ADMINISTRATOR

FROM: JOE MERGO III, DIRECTOR SOLID WASTE & ANIMAL SERVICES

SUBJECT: APPOINTMENT OF CODE ENFORCEMENT OFFICER

DATE: 8/22/2007

CC: CHRIS FOLSOM

Lexington County hired Mr. Brad Rogers on May 7, 2007 in the position of Animal Control Officer. I respectfully request Mr. Rogers, being duly qualified, be appointed as a Lexington County Code Enforcement Officer.

The Committee Minutes are left out intentionally until approved by the Committee. Upon the Committee's approval, the minutes will be available on the Internet.

R E S O L U T I O N

A RESOLUTION TO ENCOURAGE THE U.S. ENVIRONMENTAL PROTECTION AGENCY TO MAINTAIN THE CURRENT NATIONAL AMBIENT AIR QUALITY STANDARD FOR THE GROUND-LEVEL OZONE; TO ENCOURAGE THE EPA TO CONTINUE THE EARLY ACTION COMPACT PROGRAM; TO REQUEST THAT STATE AND FEDERAL GOVERNMENTS MAXIMIZE THE IMPACT ON LOCAL, STATE AND NATIONAL AIR QUALITY BY PURSUING MEANINGFUL REGULATIONS THAT ARE BEYOND THE JURISDICTION OF MUNICIPAL AND COUNTY GOVERNMENTS AND TO SUPPORT LOCAL GOVERNMENTS IN THEIR ATTEMPT TO IMPROVE AIR QUALITY AT THE LOCAL LEVEL; TO REAFFIRM LEXINGTON COUNTY COUNCIL'S COMMITMENT TO IMPROVING AIR QUALITY IN THE CENTRAL MIDLANDS REGION; AND TO ENCOURAGE THE CITIZENS AND BUSINESSES OF LEXINGTON COUNTY TO ACT IN A MANNER THAT WILL PRESERVE AND PROTECT THE QUALITY OF THE AIR IN OUR COMMUNITY.

WHEREAS, in 1997, the U.S. Environmental Protection Agency (EPA), acting under the authority of the Clean Air Act, replaced the one-hour ground-level ozone standard with an eight-hour standard of 0.08 parts per million to reflect new evidence that exposure to ground-level ozone over extended periods of time has a negative impact on public health; and

WHEREAS, in 2002, Lexington County joined forty-four other counties in the State of South Carolina as part of the 8-hour Ozone Early Action Compact Program (EAC), an innovative effort that gives local communities an opportunity to bring about "cleaner air sooner" than mandated by federal regulations; and

WHEREAS, in 2004, Lexington County was designated by the EPA as non-attainment under the new eight-hour standard for ground-level ozone; however, the effective date of this designation was deferred until December 31, 2007, due to the county's participation in the EAC process; and

WHEREAS, under the EAC process, Lexington County has undertaken substantial efforts to improve air quality in the region, including: adoption of revised outdoor burning standards; participating in a regional multi-model transportation study; adopted the Smart Highways Program through the Central Midland Council of Governments; providing educational and outreach materials to the community; adoption of an air quality policy in April 2004; installing anti-idling controls on large trucks in our fleet; replacing existing fleet vehicles with flex-fuel and hybrid vehicles; participating in regional emission-reducing activities such as car care events, gas can exchanges, and the 2007 Lexington-Richland Electric Lawn Mower Exchange; and

WHEREAS, data from the South Carolina Department of Health and Environmental Control (SCDHEC) for the years 1998 through 2006 shows an eighty-seven percent (87%) decrease in the number of days that ozone monitors in the Columbia nonattainment area exceeded the federal ozone standard; and

WHEREAS, SCDHEC data also shows that the three-year average of fourth-highest ozone concentrations in the Columbia nonattainment area has decreased from 0.096 parts per million for the years 1998, 1999, and 2000, to 0.083 parts per million for the years 2004, 2005, and 2006, a decrease of 13.5%. Due to rounding, the Columbia nonattainment area is on pace to be in attainment with the current ground-level ozone standard by the deadline of December 31, 2007; and

WHEREAS, on July 11, 2007, the EPA published in the *Federal Register* a proposal to lower the current eight-hour ozone standard to a level within the range of 0.070 and 0.075 parts per million. The public will have ninety days to comment on the proposed rule, and a final rule is expected to be published by the agency in March 2008; and

WHEREAS, estimates show that a new standard of 0.075 parts per million would place at least 400 counties in nonattainment nationwide, while a standard of 0.070 parts per million would place at least 530 counties

in nonattainment. These estimates exclude counties that do not have ozone monitors, even though many of these counties will also be pulled into nonattainment due to ozone levels in neighboring counties; and

WHEREAS, in addition to the public health implications, the penalties for failing to meet the federal ground-level ozone standard, including Transportation Conformity and New Source Review requirements, place a significant burden on a county's ability to improve its transportation infrastructure, recruit new industry, and expand existing industry; and

WHEREAS, in 2001, the U.S. Supreme Court ruled that the Clean Air Act "unambiguously bars cost considerations" from being taken into account when setting National Ambient Air Quality Standards, placing a substantial economic burden on local governments as they strive to comply with federal regulations; and

WHEREAS, the regulatory authority over major contributors to ground-level ozone, such as automobile and power plant emissions, generally lies outside the jurisdiction of local governments; the Clean Air Interstate Rule will reduce power plant emission, starting 2009. EPA should wait to see the effects of this rule before lowering standards; and

NOW, THEREFORE, BE IT RESOLVED that we, Lexington County Council, on behalf of the citizens and businesses of Lexington County, does hereby encourage the U.S. Environmental Protection Agency to maintain the current National Ambient Air Quality Standard for ground-level ozone at 0.08 parts per million; and

BE IT FURTHER RESOLVED that Lexington County Council encourages the EPA to continue to give local governments the opportunity to avoid federal sanctions by agreeing to take proactive measures as part of an early action compact program; and

BE IT FURTHER RESOLVED that the Lexington County Council does hereby request that state and federal governments maximize the impact on local, state and national air quality by pursuing meaningful regulations that are generally beyond the jurisdiction of municipal and county governments, and further, to provide local governments with the necessary resources to improve air quality at the local level; and

BE IT FURTHER RESOLVED that Lexington County Council does hereby reaffirm its commitment to protect the health and wellbeing of the citizens of Lexington County by taking proactive steps to improve air quality in the Central Midlands Region of South Carolina; and

BE IT FURTHER RESOLVED that the Lexington County Council urges the citizens, businesses, industries and other air quality stakeholders of Lexington County to act in a manner that will preserve and protect the quality of the air in our community; and

BE IT FURTHER RESOLVED that a copy of this resolution shall be submitted to the U.S. Environmental Protection Agency during the ninety day public comment period for proposed changes to the federal ozone standard, and that this resolution shall also be submitted to all members representing Lexington County in the United States Congress and the South Carolina State Legislature.

ADOPTED THIS the _____ day of _____, 2007.

_____	_____
William C. "Billy" Derrick, Chairman	Debra B. "Debbie" Summers, Vice Chairman
_____	_____
James E. "Jim" Kinard, Jr.	George H. "Smokey" Davis
_____	_____
Bobby C. Keisler	Johnny W. Jeffcoat
_____	_____
John W. Carrigg, Jr.	William B. Banning, Sr.
_____	
M. Todd Cullum	

ATTEST:

_____

Diana W. Burnett, Clerk

COUNTY OF LEXINGTON

PUBLIC WORKS DEPARTMENT

ENGINEERING

MEMORANDUM

DATE: August 20, 2007

TO: Katherine Hubbard
County Administrator

FROM: John Fechtel, Public Works Director
Assistant County Administrator

RE: Bennington Court Extension - Update

At the May 22, 2007 County Council meeting, the attached memorandum regarding Bennington Court Extension was approved. On page two of the memorandum, at the end of the first paragraph, it is noted that the approval was contingent upon all property owners signing the required right-of-way documents, meaning they would voluntarily donate the right-of-way at no cost to the County. Two mobile homes would need to be relocated for the project to move forward.

At this time, there are at least two or more property owners who will not sign the required documents for the right-of-way acquisition of their property without compensation. It appears that the Town of Chapin may either pay for the right-of-way or use their power of eminent domain to secure the right-of-way.

Based on the recent occurrences and the original agreement not meeting the requirements of County Council's approval of May 22, we felt Council should be made aware of this.

Attachment (1)

/lh

COUNTY OF LEXINGTON

PUBLIC WORKS DEPARTMENT

ENGINEERING

MEMORANDUM

DATE: May 14, 2007

TO: Katherine Hubbard, County Administrator

FROM: John Fechtel, Public Works Director
Assistant County Administrator

RE: Bennington Court Extension

We have been meeting for several months with the Town of Chapin, Councilman Johnny Jeffcoat, Our Lady of the Lake Catholic Church and others about the possibility of paving a portion of the proposed Amick's Ferry Road / Lexington Avenue connector. The proposed connector is the result of a study by Central Midlands Council of Government of the Columbia Avenue (S32-48) corridor and a Town of Chapin road improvements plan.

The plan of connecting Amick's Ferry Road to Lexington Avenue would normally follow the COATS approval and funding process except for Chapin United Methodist Church's expansion plans. Chapin United Methodist Church plans to break ground in July and plans to use their northern property line as a driveway. They have been very considerate, as well as the other two property owners, in considering this proposal. All parties involved recognize that the County would not pay for the right-of-way.

Based on the church's construction schedule and funding consideration, I am recommending that the County approach the project in two phases. The first phase will be from Lexington Avenue to the last entrance to Chapin United Methodist Church parking lot. The second phase will be from the parking lot to Amick's Ferry Road once it is approved and funded through COATS, which may take several years.

The attached cost estimate (Exhibit "A") shows two (2) prices:

Contractor: $551,927.09
County: $287,014.35

With Chapin United Methodist Church contributing $100,000.00 to the project, $187,014.35 is needed in "C" Funds. We can use $125,000.00 from FY 06-07 "C" Fund Special Projects and $62,014.35 from FY 06-07 "C" Fund Economic Development.

It is my recommendation that County Council approve Phase I of this project with Public Works performing the work. We believe this would give COATS the incentive to fund Phase 2 due to this local contribution. Also attached is a location map (Exhibit "B") and a detailed map (Exhibit "C") of the project. This approval will be contingent on all affected property owners signing the required right-of-way documents.

As a special note, there will be several moving/relocation costs (mobile homes) that are on the Bower's property that will require funding in Phase 2 through the COATS funding.

Attachments

/lh

From: Sheri Armstrong [sarmstrong@lex-co.com]
Sent: Friday, August 17, 2007 3:09 PM
To: lharmon@lex-co.com
Subject: August 28th Council Meeting Notes

August 28th Council Meeting

Design Manual: Changes since the July Council Meeting

- **Chapter 1-General Information-** Added the following words to the definition list: redevelopment, non-erosive

- **Chapter 2-Land Disturbance Permit Submittal & Application Procedures**
  Acronyms: Land Disturbance Permit (LDP), Public Works Stormwater Division (PW/SWD)
  Section 2.5-Plan Review-Currently a twenty (20) working day approve, deny or issue comment to the applicant.

- **Chapter 3-Design Requirements**
  Several items throughout Chapter 3 have been moved to improve the read of this document.
  Section 3.3.7c-Water Quantity Requirements (Water Quantity)- The design engineer shall sign the following statement, "The increased flows will not have a significant adverse impact on the downstream and adjacent properties".
  Section 3.3.2.8-Design Procedures (Water Quantity)- Concentrated flow from any discharge point shall be returned to the overland flow condition.

Section **3.4.4Water Quality Buffer Requirements**

A water quality buffer area is a strip of undisturbed native vegetation that borders streams, rivers, ponds, lakes, wetlands, and seeps. Buffer areas are most effective when stormwater runoff is flowing as shallow

sheet flow rather than in concentrated flow conveyance. Therefore, it is critical that design include management practices that result in stormwater runoff flowing through the buffer areas as shallow sheet flow.

3.4.4.1 General requirements

Water quality buffer areas are required along all perennial and intermittent streams, waterways, and wetlands as identified on a 7.5 USGS quadrangle map, USACE, or as determined by the PW/SWD.

1. In areas where a floodway profile has been computed as part of an approved flood study, the buffer area shall be the width of the floodway plus at least fifty (50) feet perpendicular from the edge of the floodway on each side of the waterway, or one hundred (100) feet perpendicular from the top of bank on each side of the waterway, whichever is greater.

2. In areas where a floodway profile has not been computed as part of an approved flood study, the buffer area shall be at least fifty (50) feet perpendicular from the top of bank on each side of the waterway.

3. For delineated wetlands, the buffer area shall consist of the extent of the delineated wetlands plus twenty (25) feet extending perpendicular beyond the wetland edge.

3.4.4.2 Water quality buffer width adjustments

Adjustments to the buffer width shall be made for the following conditions:

1. If there are 15% to 24% slopes which are within the required buffer area, the buffer width must be adjusted to include additional twenty (20) feet on each side of the waterway.

2. If there are 25% or greater slopes which are within the required buffer area width, the buffer width must be adjusted to include additional fifty (50) feet.

3. If the adjacent land use involves drain fields from on-site sewage disposal and treatment system (i.e., septic systems), subsurface discharges from a wastewater treatment plant, or land application of bio-solids or animal waste, the buffer area width must be adjusted to include an additional fifty (50) feet.

4. If the land use or activity involves the storage of hazardous substances or petroleum facilities, the buffer area width must be adjusted to include an additional 100 feet.

5. If the land use or activity involves raised septic systems or animal feedlot operations, the buffer area width must be adjusted to include an additional 200 feet.

6. If the land use or activity involves solid waste landfills or junkyards, the buffer area width must be adjusted to include an additional 250 feet.

3.4.4.3 Water quality buffer management and maintenance

The function of the water quality buffer area is to protect the physical and ecological integrity of the waterway, to reduce flooding potential, and to filter runoff from residential and commercial development.

1. Management of the water quality buffer areas include specific limitations on alteration of the natural conditions. The following practices and activities are restricted within the water quality buffer area, except with prior approval of PW/SWD.

a. Clearing or grubbing of existing vegetation,

b. Soil disturbance by grading, stripping, or other

practices,

c. Filling or dumping, and

d. Use, storage, or application of pesticides, herbicides, and fertilizers.

2. The following structures, practices, and activities are permitted in the water quality buffer area, subject to the prior approval of the PW/SWD.

a. Stream crossing, paths, and utilities

i. An analysis needs to be conducted to ensure that no economically feasible alternative is available,

ii. The right of way should be the minimum width needed to allow for maintenance access and installation,

iii. The angle of a crossing shall be perpendicular to the stream or buffer in order to minimize clearing requirements,

iv. The minimum number of crossing shall be used within each development, and no more than one crossing is allowed for every 1000 linear feet of buffer area. Where possible, the design of roadways and lots within a development shall be aligned such that all streams are either to the rear or the side of individual lots, never along the front.

b. Individual trees within the water quality buffer area may be removed if in danger of falling, causing damage to dwellings or other structures, or causing blockage of the stream. The root wad or stump shall be left in place, where feasible, to maintain soil stability.

3. All water quality buffer areas must be protected during development activities. Prior to the initiation of development activities, ensure adequate visibility of the water quality buffer area by

staking and flagging. Permanent boundary markers, in the form of signage approved by PW/SWD shall be installed prior to the completion of the development activities.

1. All water quality buffer areas shall be maintained through a declaration of protective covenant, which is required to be submitted for approval by the PW/SWD. The covenant shall be recorded in the registry of deeds and shall run with the land and continue in perpetuity.

2. All lease agreements must contain a notation regarding the presence and location of the protective covenants for water quality buffer areas, and shall contain information on the management and maintenance requirements for the water quality buffer areas fro any new resident.

3. All water quality buffer areas shall be noted on all plans and plats for recording. The extent of the buffer shall be shown by metes and bounds and labeled as "Water Quality Buffer Area". Provide notation that "There shall be no clearing, grading, construction or disturbance of soil and/or native vegetation except as permitted by the PW/SWD". Also, " Any water quality buffer area shown hereon is subject to protective covenants which may be found in the Registry of Deeds.

Section 3.5- Acronym: Sediment and Erosion Control Plan (SECP) point shall be returned to the overland flow condition.

Section 3.5.2.8f-Design Requirements (Sediment and Erosion Control)- Temporary structural control may be removed after final stabilization of all disturbed areas.

Section 3.6.3c Stormwater Drainage System Design (Culverts and Outlets)- Outfalls must discharge through a natural buffer area a minimum of fifty (50) feet in width from the property line and must go through some type of energy dissipater to slow the velocity of water.

Sect. 3.8.1(l)-Floodplain Provisions- The risk to developments downstream of any dam in Lexington County shall be determined using a dam breach analysis method and the subsequent inundation zones determined by a dam breach hydrograph and flood routings. If

the inundation zone is not available or undefined, a dam breach analysis will be required by the developer. The dam breach analysis method will be the “Sunny day” failure scenario for complete dam failure while the impoundment level is at the principal spillway crest. The dam breach hydrograph must be developed using BREACH, HEC-HMS or HEC-RAS (unsteady flow), DAMBRK software programs, or an approved equal. Flood routings must be performed using HEC-RAS (unsteady flow), FLDWAV and DAMBRK. The developer shall be responsible for determining the dam breach parameters so a breach outflow hydrograph can be developed and that resultant hydrograph routed downstream through the area of new development. The inundation zones within the new development will be treated as floodways under the Lexington County Stormwater Ordinance and all development in these areas will apply as such. As there are no tangible criteria for the requirement of a dam break analysis each downstream development will have to be determined on a case-by-case basis by the Floodplain Manager and/or the Plan Review Engineer. A preliminary breach routing analysis may be required to determine if the development will be effected by the breach.

- **Chapter 4-Road Design Requirements**

  Sect. 4.3.3-Exisitng Non-Paved Dirt Roads- Any development entering a non-paved dirt road shall be required to improve the existing dirt road to accommodate the proposed average daily traffic (ADT) design. This shall require the developer to obtain all necessary right of ways from property owners from the entrance of the new development to the nearest publicly maintained paved road of equal or greater classification.

- **Chapter 5-Inspection and Enforcement-**No changes to this Chapter.

- **Chapter 6-Refrences-**No changes to this Chapter
  References

Appendices

Low Impact Development (LID)

During the July Council presentation, updates of the Land Development Manual, Council asked that I look into mandatory LID design criteria for all projects in Lexington County. Several ideas where brought into discussion and I would like to inform Council of the requirements that will be addressing LID and are being proposed in the Land Development Manual. The following are a list of some of these items:

1. Forebays - provide water quality benefits by removing large percentages of coarse sediments, debris, and other pollutants. Forebays are required on all sites 5 acres and greater.

2. First Flush Treatment – provide water quality by treating the first 1" of runoff. The runoff associated with the beginning of a storm event is believed to contain the most highly concentrated pollutants. All sites 5 acres and greater must treat the first flush.

3. Buffers - A water quality buffer area is a strip of undisturbed native vegetation that borders streams, rivers, ponds, lakes, wetlands, and seeps. This buffer aids in the filtering of the pollutants. Buffer areas are most effective when stormwater runoff is flowing as shallow sheet flow rather than in concentrated flow conveyance.

4. Special Protection Areas - Projects located in these areas will be required additional to provide criteria as to the impairment that is associated with the area.

5. Clear Cutting Limitations- Limit areas that are being developed to clear cut only 10 acres at a time. The first 10 acres will need stabilization before the next

10 acres are allowed to be cleared.

6. Reduction of road right-of-way and impervious road riding surface.

Council asked if these new guidelines are going to stop the public complaints that are associated with stormwater runoff. When practices listed above are implemented only time will tell. The requirements in the Ordinance and Manual are going to change the way our engineers design, and make our developers consider a more natural approach to development.

LEXINGTON COUNTY

LAND DEVELOPMENT MANUAL

LEXINGTON COUNTY

PUBLIC WORKS STORMWATER DIVISION

REVISED: SEPTEMBER 2007

REVISIONS

DATE	REVISION
JANUARY 2000	1ST EDITION – DEVELOPMENT GUIDELINES DEVELOPED
SEPTEMBER 2007	2ND EDITION – DEVELOPMENT GUIDELINES RENAMED LAND DEVELOPMENT MANUAL.

TABLE OF CONTENTS

CHAPTER 1 – GENERAL

1.1 Purpose 1-1

1.2 Scope 1-2

1.3 Description and Use of the Manual 1-3

1.4 Manual Organization 1-4

1.5 Authorization 1-4

1.5.1 Stormwater Related Regulations and Permits 1-4

1.5.1.1 Clean Water Act 1-4

1.5.1.2 South Carolina Pollution Control Act 1-4

1.5.1.3 South Carolina Stormwater Management and Sediment Reduction Act 1-5

1.5.1.4 NPDES Permit for Stormwater Discharges Associated with Industrial Activity 1-5

1.5.1.5 NPDES General Permit SCS6300001 1-5

1.5.1.6 Lexington County ordinances, regulations, and standards 1-6

1.6 Updates to the Design Manual 1-7

1.7 Stormwater Management 1-7

1.7.1 Effects of Development on Watershed Hydrology 1-8

1.7.2 Steps to Successful Stormwater Management Plans 1-9

1.7.3 Innovative Design Approach 1-9

1.7.4 Best Management Practices and Site Planning Process 1-10

1.7.4.1 Maintaining site resources and natural undisturbed areas 1-10
1.7.4.2 Lower impact site layout techniques 1-11
1.7.4.3 Minimization of impervious cover 1-11
1.7.4.4 Utilization of natural features for stormwater management 1-12

1.7.4.5 Engineered/proprietary devices 1-12

1.8 Engineering Design Accountability 1-13

1.9 Legal Aspects 1-13

1.10 Language and Interpretation of Text 1-14

1.11 Contact Information 1-14

1.12 Definitions 1-15

CHAPTER 2 - LAND DISTURBANCE PERMITTING PROCEDURES

2.1 Land Disturbance Permits 2-1

2.2 Pre-Submittal Process 2-2

2.2.1 Stormwater Concept Plan 2.2

2.2.2 Pre-submittal meeting 2-3

2.3 Land Disturbance Permit Application Submittal 2-3

2.4 Permit Submittal Requirements 2-4

2.4.1 Small Commercial Disturbance Permit 2-4

2.4.2 General Land Disturbance Permit 2-4

2.5 Plan Review Process 2-13

2.6 Project Construction 2-14

2.6.1 Transfer of Land Disturbance and/or NPDES Permit Coverage ... 2-14

2.6.2 Inspection and Maintenance 2-15

2.7 As-Builts 2-15

2.8 Final Inspections 2-15

2.9 Exemptions 2-16
2.10 Other Authorizations or Requirements 2-16
2.11 Expiration of Permit 2-17
2.12 Responsibility of Permit Holder 2-17
2.13 Cases Requiring Planning Commission Approval 2-17
2.14 Waivers 2-17
2.15 Non-flood Plain Variances 2-18
2.16 Encroachment Permits 2-18
2.17 Easements 2-18
2.17.1 Storm drain pipe easements 2-18
2.17.2 Open channel easements 2-19
2.17.3 Pond easements 2-19
2.17.4 Natural waterbody easements 2-19
2.17.5 Other stormwater facilities and BMP maintenance 2-19
2.17.6 Offsite easements 2-19
2.18 Stormwater Facility Maintenance 2-20
2.18.1 Maintenance Responsibility 2-20
2.18.2 Maintenance 2-20

CHAPTER 3 - DESIGN REQUIREMENTS

3.1 General requirements 3-1
3.2 Hydrologic computation requirements 3-3
3.2.1 Inputs 3-4

3.2.2 Recommended methodologies 3-4

3.2.3 Hydrographs 3-6

3.3 Water quantity control requirements 3-6

3.3.1 Accepted quantity controls 3-8

3.3.2 Design procedures 3-9

3.4 Water quality control requirements 3-10

3.4.1 Characterization of urban stormwater runoff quality 3-10

3.4.1.1 Suspended solids 3-11

3.4.1.2 Oxygen demanding matter and bacteria 3-11

3.4.1.3 Nutrients 3-13

3.4.2 Accepted water quality BMPs 3-13

3.4.3 Design Requirements 3-17

3.4.3.1 General requirements 3-17

3.4.3.2 Design procedures 3-18

3.4.4 Water Quality Buffer Requirement 3-21

3.4.4.1 General requirements 3-21

3.4.4.2 Water quality width adjustments 3-21

3.4.4.3 Water quality buffer management and maintenance 3-22

3.5 Erosion prevention and sediment control requirements ... 3-23

3.5.1 Allowed EPSC BMPs 3-24

3.5.1.1 Erosion prevention measures 3-24

3.5.1.2 Temporary sediment control measures 3-25

3.5.1.3 Runoff control and conveyance measures 3-26

3.5.1.4 Temporary vegetation 3-26

3.5.1.5 Permanent vegetation 3-28

3.5.2 Design requirements 3-32

3.5.2.1 General requirements 3-32

3.5.2.2 Design procedures 3-36

3.6 Stormwater drainage system design 3-36

3.7 Open channel design 3-43

3.8 Floodplain provisions 3-45

3.9 Special protection areas 3-65

3.9.1 Flooding problem areas 3-65

3.9.2 Areas associated with TMDLs and impaired waters 3-65

3.9.3 Lake Murray 3-66

CHAPTER 4 – ROAD DESIGN

4.1 General 4-1

4.1.1 Classification 4-1

4.1.2 Average Daily Traffic (ADT) 4-1

4.1.3 Design for Road Cross Section and Related Factors 4-2

4.1.4 Surfacing 4-3

4.1.4.1 Weather restrictions 4-3

4.1.5 Groundwater 4-3

4.1.6 Underdrains 4-4

4.1.7 Compaction 4-4

4.1.7.1 Subgrade 4-4

4.1.7.2 Base course 4-4

4.1.7.3 Proctors 4-4

4.1.8 Slopes 4-4

4.2 Patching and cuts of paved areas 4-4

4.3 Right-Of-Way 4-5

4.3.1 Proposed Paved County/Private Roads 4-5

4.3.2 Existing Paved County Roads 4-5

4.3.3 Existing Non-Paved Dirt Roads 4-5

4.3.4 Cul-de-sacs 4-5

4.3.5 Staking 4-5

4.4 Additional design criteria 4-6

4.4.1 Catch basin locations 4-7

4.4.2 Water and sewer line locations 4-7

4.4.3 Sidewalks 4-7

4.4.4 Dead end streets 4-7

4.4.5 Street Access 4-7

4.4.6 Service Restrictions 4-7

4.4.7 Left Turn lanes 4-7

4.4.8 Concrete Keys 4-8

4.4.9 Alley Ways 4-8

4.5 Measuring Sight Distances 4-8

4.6 Intersection design 4-8

4.7 Horizontal curves 4-10

4.8 Superelevation 4-10

4.9 Vertical curves 4-10

4.10 Road Entrance Islands/Cul-de-sacs 4-11

4.11 Traffic, Regulatory, and Street Signs 4-12

4.12 Traffic Impact Studies 4-17

4.12.1 Study Scope 4-17

4.12.2 Traffic Study Elements 4-18

CHAPTER 5 – INSPECTION AND ENFORCEMENT

5.1 Stormwater Management Inspector Authority 5-1

5.2 Stormwater Management Inspector Responsibility 5-2

5.3 Self Inspections 5-3

5.3.1 Inspection During Construction 5-3

5.3.2 Permanent Structure Maintenance 5-4

5.4 Corrective orders 5-4

5.5 Notice of Violation and Stop-Work Orders 5-5

5.5.1 Issuing violations 5-5

5.6 Working without a permit 5-6

5.7 Civil citations 5-6

5.8 Criminal penalties 5-7

CHAPTER 6 – REFERENCES

APPENDIX A – APPLICATION FORMS

APPENDIX B – SCDHEC BMP HANDBOOK

APPENDIX C – NPDES PERMITS

APPENDIX D – SOILS MAP

APPENDIX E – AGREEMENTS & CERTIFICATIONS

APPENDIX F – TMDLS AND IMPAIRED WATERS MAP

APPENDIX G – SWPPP CHECKLIST AND TEMPLATE

APPENDIX H – FLOWCHARTS

APPENDIX I – STANDARD DETAILS

APPENDIX J – BMP USES

APPENDIX K – REVIEW CHECKLIST

APPENDIX L – INSPECTOR CHECKLIST

APPENDIX M – AS-BUILT CHECKLIST

APPENDIX N – COMPLIANCE FORMS

LIST OF TABLES

Table 2.1: Storm drain pipe easements 2-19

Table 3.1: Design storm precipitation data for Lexington County, South Carolina 3-3

Table 3.2: Recommended methodologies based on land disturbance area 3-3

Table 3.3: Recommended hydrologic methods for designing various stormwater managment systems and controls 3-4

Table 3.4: Accepted quantity controls 3-8

Table 3.5: Typical stormwater pollutants and sources 3-11
Table 3.6: Average Pollutant Loading for Various Land Uses (mg/l) 3-14
Table 3.7: Accepted quality controls 3-15
Table 3.8: Limited structural controls 3-16
Table 3.9: Erosion Prevention BMP Suggested Uses 3-24
Table 3.10: Temporary Sediment Control BMP Suggested Uses 3-25
Table 3.11: Runoff Control and Conveyance BMP Suggested Uses 3-26
Table 3.12: Temporary vegetation schedule 3-27
Table 3.13: Temporary vegetation schedule for steep slopes/cut slopes 3-28
Table 3.14: Permanent vegetation schedule 3-30
Table 3.15: Permanent vegetation schedule for steep slopes/cut slopes 3-31
Table 3.16: Native species that can be used on non-critical, level sites in Lexington County, SC 3-31
Table 3.17: Maximum permissible velocities for vegetated channels 3-44
Table 4.1: ADT Generation 4-1
Table 4.2: Design Thickness (compacted) Criteria 4-2
Table 4.3: Additional Design Criteria 4-6
Table 4.4: Criteria for measuring sight distance 4-8
Table 4.5: Intersection Design Guidelines 4-9
Table 4.6: Minimum Horizontal Curve Radii 4-10
Table 4.7: Superelevation Runoff 4-10

LIST OF ABBREVIATIONS

BMP	Best Management Practice
SECP	Sediment and Erosion Control Plan
PW/SWD	Public Works Department Stormwater Division
RC	Residential collector road
LC/I	Light Commercial/industrial road
R/L	Residential local road
NPDES	National Pollutant Discharge Elimination System
SCDHEC	South Carolina Department of Health and Environmental Control
SCS	Soil Conservation Service (now NRCS–Natural Resources Conservation Service)

TMDL Total Maximum Daily Load

CHAPTER 1 – GENERAL

1.1 Purpose

The purpose of the Land Development Manual is to establish minimum standards for design and construction of site grading and land development and re-development projects within the unincorporated areas of Lexington County and other municipalities as approved by the Lexington County Council. This document contains the policies and procedures used by the Lexington County Public Works Stormwater Division (PW/SWD) to interpret and implement the Lexington County Subdivision Regulations and the Storm Water Management Ordinance. The manual provides parameters and criteria for addressing some of the specific issues which must be resolved during the planning, designing, and construction phases of land development. The minimum standards for site and land development are intended to protect and promote the general welfare of all citizens by accomplishing these goals:

1. Clearly document the land disturbance permit application requirements and approval process;

2. Require the design and construction of safe and durable streets, right-of-ways, driveways and parking lots;

3. Require the design and construction of stormwater drainage systems that maintain to the maximum extent practicable a site's pre-development drainage characteristics in terms of flow rates, runoff volume, and pollutant load/concentrations;

4. Require complete and accurate designs and construction documents to ensure grading and property issues are addressed;

5. Require land disturbance projects to contain the necessary measures to control erosion and sediment during construction;

6. Require land disturbance projects to contain the necessary measures to reduce stormwater pollution and protect water quality through good design features, maintenance requirements, and encouragement of the latest stormwater treatment technologies (engineered devices) and approaches (e.g. Low Impact Development, or LID);

7. Provide general information on avenues to improve water quality, prevent illicit discharges, and minimize stormwater runoff impacts due to increased flow volumes, peak discharge rates, and pollutant loads from disturbed areas;

8. Prevent the alteration, diversions, or disturbance of watercourses that lie within a special flood hazard area without the prior approval from the Federal Emergency Management Agency through submittals of LOMRs, No-rise certifications, or other appropriate documentation. Development in the floodplain shall be

discouraged until all other possible locations have been exhausted and a reasonable and necessary use exists to develop in the floodplain. The PW/SWD shall be notified of any and all plans to develop areas within a floodplain;

9. Protect wetlands. All wetlands shall be delineated and verified by the US Army Corps of Engineers (USACE) and protected to the maximum extent possible or mitigated through other projects/mitigation banks. No disturbance of wetlands shall be allowed unless proper approval has been received from the USACE and Lexington County has been notified of such approval. Disturbance includes, but is not limited to, draining, grading, filling, discharging untreated stormwater runoff, and removal of vegetation.

In the sections below, the minimum standards and other submittal information required to obtain a land disturbance permit is provided. In developments where they are fully complied with (that is, no deviations are required), the review process can be completed in a relatively straightforward manner, often with no questions asked nor any additional information requested; in developments where deviations/exceptions are required, the submitting developer/engineer should include rationale/justification to support the desired changes. Proposed deviations from the standards will be considered on a case by case basis.

It must be recognized that some tracts of land are simply not economically feasible for certain types of development. In other cases, certain types of development may be economically feasible, but prohibited by ordinance measures such as restrictive zoning districts and road classification, or the 100-year floodway designations. Therefore, coordination with County staff is encouraged during the initial concept and planning stages of a development, before significant resources are committed privately. Pre-submittal meetings are required with our offices for that purpose. It is Lexington County's desire to provide safe, adequate, maintainable, and attractive infrastructure essential for the planned development within our borders.

Every effort has been made to cover the common conditions and information needed by those involved in land development activities, however, the requirements in this Manual and the County Ordinances should be reviewed carefully to ensure that all requirements are being met. In the event of a conflict, the Stormwater Management Ordinance and Land Development Manual govern in areas related to stormwater and protection of citizens from changes in stormwater due to the impacts of development. The Subdivision Regulations shall govern over conflicts related to the subdivision of property. If the Stormwater Management Ordinance, Land Development Manual, or Subdivision Regulations fail to resolve all conflicts, the PW/SWD has the authority to settle any such issues related to stormwater management.

1.2 Scope

The scope of the Land Development Manual is limited to the requirements for submitting site plans and related projects to the PW/SWD. The PW/SWD is only one part of the Lexington County review process, as is explained further in Chapter 2. State and federal agencies may have additional requirements other than those listed. The Land Development Manual is not intended as a textbook or a comprehensive engineering design reference. Site plans, details, calculations,

construction specifications, and other technical documents must be designed and sealed by a professional engineer or Tier B Land Surveyor, as appropriate, registered in the state of South Carolina, with sufficient knowledge and experience to accomplish all design elements of the site plan. Most types of engineering calculations are not explained or defined within the Land Development Manual, either due to the very complex nature of the subject matter or the fact that the design equations and methods are well-known to most competent practicing engineers who claim expertise in the area of land development. The Manual contains several references to some of the most common technical design manuals, such as the Natural Resources Conservation Service's (NRCS) TR-55 and South Carolina Department of Health and Environmental Control's (SCDHEC) BMP Manual, and where such information can be found.

In addition to technical design, submitted projects must also meet federal and state standards for health and safety. For instance, trenching and excavations must satisfy OSHA standards in 29 CFR 1926 Subpart P - Excavations. Scaffolding and temporary work platforms must also meet OSHA standards. Traffic signs must be designed to meet FHWA and AASHTO requirements unless otherwise specified in this manual. Consideration for public safety must be emphasized throughout the design process.

1.3 Description and Use of the Manual

The Manual is developed under the assumption that the user possesses a basic understanding of stormwater control design, construction, or land development depending on the user's particular area of expertise. The Manual provides those groups and others with required information for and proper formatting of application packages on proposed land disturbance activities in Lexington County. Users of this Manual who are not justly qualified by education or experience in the fields of stormwater control design, construction, or land development should consult with a qualified professional in one or more of these areas prior to planning for land disturbance activities.

This Manual is not intended to be a systematic design methodology that addresses every land development situation that may occur in Lexington County nor is it a detailed reference for the various methods and procedures used in the design process. The application of engineering principles and judgment combined with the information contained within this and other referenced material are necessary to successfully complete the planning, design, and preparation of documents for acquiring a land disturbance permit. References to guidance documents from federal, state, and local agencies are given throughout the Manual to provide additional information to users.

This Manual is not intended to restrain or inhibit engineering creativity, freedom of design, or the need for engineering judgment. When shown to be applicable, it is encouraged that new procedures, techniques, and innovative stormwater BMPs be submitted with supporting documentation. However the use of such approaches should be substantiated with submitted documentation by design professionals showing that the proposed design is equal to, or exceeds the traditional procedures in terms of performance and economic feasibility.

1.4 Manual Organization

The Manual contains six chapters, organized to present recommended technical and engineering procedures along with the criteria needed to comply with the State of South Carolina's Stormwater Management and Sediment Reduction Act, the NPDES Permit NO SCS030000, and Lexington County's Stormwater Management Ordinance. This chapter provides information on Lexington County's Authority to develop and enforce design requirements along with several legal matters, some background information on stormwater management and its importance, and definitions for terms used throughout the Manual. Chapter 2 describes the application process for obtaining a land disturbance permit. Chapter 3 contains specific water quantity and quality design criteria and the flood plain management requirements. Chapter 4 contains road design requirements. Chapter 5 describes the inspection and enforcement process. Chapter 6 contains references for designing components of the stormwater management system.

1.5 Authorization

This Manual has been prepared under the direction of the PW/SWD, which has been granted the authority to develop engineering design standards and enact programs and policies to ensure compliance with State and Federal laws for the purposes described above. A detailed description of the law, regulations, and assigned authorizations to Lexington County is provided below.

1.5.1 Stormwater Related Regulations and Permits

1.5.1.1 Clean Water Act

Federal Water Pollution Act, as amended by the Clean Water Act (CWA) requires the reduction of water pollution and gave EPA the congressional authority to develop programs to improve the health of navigable waters. EPA in response developed regulations that created a program of discharge permits as part of the National Pollutant Discharge Elimination System (NPDES) to regulate point source from a variety of discharges. The 1987 amendments to the CWA extended NPDES permits to industrial discharges, including stormwater runoff associated with land disturbing activity. The 1987 CWA Amendments also require NPDES permitting for stormwater runoff from urbanized areas. A municipal separate storm sewer system (MS4) NPDES permit is required based on population. Authority to administer the NPDES permit program was delegated to state agencies, such as SCDHEC, the EPA.

1.5.1.2 South Carolina Pollution Control Act

The South Carolina Pollution Control Act (PCA) S.C. was originally enacted in 1950 and was last amended in 1970 during the initial stages of the environmental movement. It was written very broadly and is applicable to essentially any activity that could negatively impact the environment by requiring attainment of a permit and implementation of measures to mitigate potential impacts.

1.5.1.3 South Carolina Stormwater Management and Sediment Reduction Act

The South Carolina Stormwater Management and Sediment Reduction Act of 1991 (SMSRA) S.C. Code Ann. §§ 48-14-10 et seq. was enacted to address the increase in stormwater runoff rate and quantity, the decrease of rainwater infiltration, and the increase in erosion associated with the extensive urban development that has been occurring throughout the state. Lexington County was authorized to implement the requirements of this Act and its associated regulations through delegated review, development and implementation of a Stormwater Management Program (SWMP), and other measures deemed necessary. The Act gave legislative authority to SCHEC to enact programs to meets its purpose. This authority has also been given the local governments to administer the necessary steps to address stormwater impacts on waters of the State.

1.5.1.4 NPDES Permit for Stormwater Discharges Associated with Industrial Activity

All stormwater runoff from "industrial activities" is considered an illegal discharge without an NPDES Stormwater Permit (SCR100000). These permits require certain industries to develop and implement a Stormwater Pollution Prevention Plan (SWPPP), which must include appropriate BMPs to minimize pollution to the receiving natural waterbodies. There are two general types of industrial activity permits: "construction related" and "other". Coverage under the NPDES General Permit for Stormwater Discharges from Large and Small Construction Activities is required for all construction sites that disturb one (1) or more acres of land. The requirements for obtaining and complying with this type of permit are the focus of this Manual.

1.5.1.5 NPDES General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (Permit No.: SCR030000)

Lexington County is required to have a National Pollutant Discharge Elimination System (NPDES) permit to discharge stormwater from the municipal separate storm sewer system (MS4). Because land disturbance activities contribute to the discharge of pollutants, the NPDES permit requires that Lexington County encourage, promote, and implement certain practices, programs, and procedures for the purpose of reducing or limiting discharge of pollutants to waters of the State. This permit was issued by SCDHEC in accordance with the provisions of the Stormwater Management and Sediment Reduction Act of South Carolina. The permit requires that Lexington County develop and implement a Stormwater Management Program to control the discharge of pollutants from its MS4 to the maximum extent practicable (MEP). The Stormwater Management Program has several components that must be met and this Manual provides partial compliance with several, including construction and post-construction management, and public education.

Note: As of the release date of this manual, it was unknown if Lexington County would be covered by this permit or an individual MS4 permit. The permit number above may change when Lexington County is covered by the NPDES permit. A copy of this permit is provided in Appendix C.

1.5.1.6 Lexington County ordinances, regulations, and standards

Lexington County has developed and adopted ordinances and standards, largely based on State and Federal regulations, specifically to address concerns associated with uncontrolled stormwater runoff. The principal ordinances and standards for the County that affect the land development selection of stormwater control measures are:

1. Stormwater Management Ordinance: Established the engineering design standards and land disturbance criteria for obtaining a land disturbance permit within Lexington County. The PW/SWD was authorized by this ordinance to develop all necessary regulations, as detailed in this Land Development Manual for properly controlling stormwater runoff and mitigating existing and future impacts;

2. Zoning Ordinance: Issues that may be impacted by this Ordinance when designing stormwater management systems include but are not limited to: limits on building density, buffer and setback requirements, parking lot islands and required spaces. Applicants should specifically check to make sure a desired development type is allowed in the planned location;

3. Landscape Ordinance: The Landscape Ordinance may affect stormwater management system designs through tree protection requirements, planting species selection, and screening requirements for ponds and other BMPs. This will typically be more crucial for commercial developments, however, all applicants are encouraged to contact the landscape Administrator for more information and specific requirements;

    a. Lexington County Comprehensive Plan – Ordinance #99-1: This document is a compilation of the County's land use planning goals and objectives. The plan covers all the previous policies adopted for the various planning areas of the County as well as the inclusion of new needs and issues which have arisen in recent years. These goals are changed by County Council through amendment of the ordinance at any regularly scheduled meeting with the Department of Planning and Development responsible for maintaining the current status of these strategies. The goals and objectives cover protection from flooding, protection of water quality, safe and efficient transportation facilities, airport investments, and many land use planning issues.

    b. Subdivision Regulations: These regulations authored by the Planning Commission describe the process and procedures for the subdivision of property in Lexington County. These regulations are available on the County webpage, http://www.lex-co.com, for review.

This Manual has been prepared under the direction of the PW/SWD, which has been granted the authority to administer the stormwater management and sediment control plan review, approval/disapproval, and inspection by SCDHEC. By satisfying the requirements outlined in

this Manual, the resulting design is expected to be in compliance with the provisions of the South Carolina Stormwater Management and Sediment Reduction Act of 1991.

Lexington County is required to comply with the NPDES General Permit for stormwater discharges.

Lexington County has been granted the authority to administer the stormwater management and sediment control plan review and approval/disapproval, and the inspections during construction and maintenance inspection components of the South Carolina Stormwater Management and Sediment Reduction Program to handle the following responsibilities:

1. Comply with all Federal and State regulatory requirements imposed by the NPDES Permit in accordance with the Clean Water Act to manage stormwater discharges from systems within Lexington County to waters of the state;

2. Conduct all activities necessary to carry out the stormwater management programs and other requirements included in the NPDES General Permit, SCS0000000, adopted on March 1st, 2006;

3. Maintain the stormwater system consistent with provisions of NPDES General Permit, and pursue the necessary means and resources required to fulfilling this responsibility;

4. Direct and oversee the continuous implementation and direct and ensure compliance with the NPDES General Permit.

1.6 Updates to the Design Manual

This Manual is intended to be a dynamic document. As design technology and criteria evolve or change or it becomes evident that additional measures are needed to ensure the public general welfare, the Manual will be updated as needed. Updates will always include oversight by process that involved a stakeholders group and other. This manual can also be found on the Lexington County website at http://www.lex-co.com/Departments/publicworks/stormwater.html.

1.7 Stormwater Management

Development has the potential to alter the natural drainage patterns, flow rates, and volumes of water in the environment. Development can directly or indirectly change the physical, chemical, and biological conditions of natural waterways. When land is developed, the natural hydrology of the watershed is disrupted. Traditional stormwater systems facilitated the efficient removal of not just runoff, but associated pollutants into receiving waters. Clearing removes vegetation that intercepts and slows rainfall runoff. Grading removes the benefits of topsoil, compacts the subsoil, and fills in depressions that provide natural storage. As a result of land development, infiltration is decreased and rainfall that once seeped into the ground runs off the surface at an accelerated rate.

In the following sections, further descriptions are provided on the impact of land development projects, and the measures that can be employed to mitigate such impacts.

1.7.1 Effects of Development on Watershed Hydrology

Development and urbanization have the following impacts on receiving waterbodies:

1. Changes to Stream Flow;
    a. Increased runoff volumes;
    b. Increased peak runoff discharges;
    c. Greater runoff velocities;
    d. Increased flooding frequency;
    e. Lower dry weather flows (base flow);
2. Changes to Stream Geometry;
    a. Stream channel enlargement and erosion;
    b. Stream down cutting;
    c. Changes in channel bed due to sedimentation;
    d. Increase in floodplain elevation;
3. Degradation of Aquatic Habitat;
    a. Degradation of habitat structure;
    b. Decline in stream biological functions;
4. Water Quality Impacts;
    a. Reduced oxygen in streams;
    b. Microbial contamination;
    c. Hydrocarbons and toxic materials;
    d. Sedimentation;
5. Property Damage and Safety Concerns;
6. Unsightly Aesthetic Stream Channel Conditions and Restricted Use of Recreational Waters

1.7.2 Steps to Successful Stormwater Management Plans

Proper planning is necessary to ensure that stormwater management is considered and fully integrated at the various stages of the site-development process. This involves a comprehensive approach to site planning and a thorough understanding of the physical characteristics and resources associated with the project site. This planning includes addressing each of the following categories:

1. Storm water quantity controls;
2. Erosion and sediment control;
3. Storm water quality controls;
4. Storm water conveyance controls;
5. Maintenance schedules for construction and post construction activities.

The design of successful stormwater management plans involves adhering to the following principles, where applicable:

1. Pre-submittal site meeting/site visit;
2. Review of site development requirements;
3. Detailed site analysis and supporting calculations;
4. Creation of a Stormwater Concept Plan;
5. Design aspects of the stormwater management plans;
6. Approval and completion of the land disturbance permit application.

In Chapter 2, the procedure for submitting a complete land disturbance permit application is provided.

1.7.3 Innovative Design Approach

When designing for land disturbance activities, the design must address the following four categories of control: water quantity (flood control), design storm control (rate and volume), erosion prevention and sediment control, and pollution control (water quality standards, long-term). If an innovative stormwater design approach is to be used, the design professional should take the following considerations in mind, in addition to meeting these categories of control:

1. Stormwater quantity and quality are best controlled at the source of the problem by reducing the potential maximum amount of runoff and pollutants. Source control will typically be more economical in order to treat the first flush of a

storm event since a simple BMP for a large area will only treat the first flush from the closest portions of the site;

2. Best management practices (BMPs) implement stormwater management by using simple, structural and nonstructural methods along with or in place of traditional stormwater management structures when applicable;

3. Equaling or exceeding traditional stormwater management designs in terms of performance (rate/volume attenuation, pollutant removal) and economic feasibility (long-term) are essential to a proposed concept's eventual approval.

Innovative approaches to site design are more of a source control for stormwater runoff – the site design practices limit the amount of runoff generated as well as incorporate BMPs within the design for quantity and quality control. These types of design concepts are described in detail in several sources including*:* Georgia Stormwater Manual, Volume 1: Policy Guidebook, First Edition, Atlanta Regional Commission, August 2001; and, Low-Impact Development Design Manual, Prince George's County Maryland (1999a, 1999b). Some general concepts from these sources are provided in the following sections.

1.7.4 Best Management Practices and Site Planning Process

The first step in addressing stormwater management begins in the site planning and design stage of the development project. By implementing BMPs during the site planning process, the amount of runoff and pollutants generated from a site can be reduced by minimizing the amount of impervious area and utilizing natural on-site treatments. The minimizing of adverse stormwater runoff impacts by the use of BMPs and site planning should be a major consideration for a design professional.

The reduction of runoff volumes and stormwater pollutants reduces the total number and size of stormwater management controls that must be implemented under the guidelines set forth in this Manual. BMPs reduce the amount of total post-development impervious areas and maintain natural characteristics of the pre-development site conditions. Therefore, the post-development curve number and time of concentrations are maintained more closely to the pre-development conditions. This reduces the overall hydrologic and hydraulic impact of the development.

1.7.4.1 Maintaining site resources and natural undisturbed areas

Conservation of site resources and natural undisturbed areas helps to reduce the post development runoff volume and provide areas for natural stormwater management. Some natural site resources that should be maintained include, but are not limited to:

1. Natural drainageways;

2. Vegetated buffer areas along natural waterways;

3. Floodplains;

4. Areas of undisturbed vegetation;

5. Low areas within the site terrain;

6. Natural forested infiltration areas;

7. Wetlands.

1.7.4.2 Lower impact site layout techniques

Lower impact site layout techniques involve identifying and analyzing the location and configuration of structures on the site to be developed. Where applicable, the following options that create lower impacts layouts should be used:

1. Fit the design layout to follow the natural contours of the site to minimize clearing and grading and preserve natural drainage ways and patterns;

2. Limit the amount of clearing and grading by identifying the smallest possible area on the site that would require land disturbance;

3. Place development areas on the least sensitive areas of the site and avoid steeply sloped areas when possible;

4. Utilize nontraditional designs to reduce the overall imperviousness of the site by providing more undisturbed open space by minimizing clear-cutting;

5. Consider the utilization of cisterns and rain barrels to collect stormwater for reuse;

6. Level Spreader or other energy dissipation devices should be used at all discharge points. Level spreader should also be considered for discharge points into ponds and other basin-type BMPs.

1.7.4.3 Minimization of impervious cover

The minimization of total impervious area directly relates to a reduction in stormwater runoff volume and the associated pollutants from a development site. The amount of impervious cover on a site can be reduced by the following techniques where applicable:

1. Reduce building footprints by constructing some buildings as multi-story;

2. Reduce parking lot areas and use porous pavement surfaces for desired overflow parking where feasible;

3. Increase the amount of vegetated parking lot “islands” that can also be utilized for stormwater management practices such as Bioretention areas;

4. Disconnect impervious surfaces by directing runoff to adjacent pervious areas so that runoff can be filtered and infiltrated;

1.7.4.4 Utilization of natural features for stormwater management

Traditional stormwater drainage design does not utilize the natural drainage patterns of the site from the pre-developed state. Structural stormwater drainage controls are traditionally designed to quickly remove stormwater runoff from the site without utilizing any of the natural storage areas. These natural drainage areas should be considered as potential stormwater drainage systems. These natural areas can be utilized in the following ways where applicable:

1. Vegetated buffers and undisturbed areas on the site are useful to control sheet flow (not concentrated flows) by providing infiltration, runoff velocity reduction, and pollutant removal;

2. Various natural drainageways should be maintained and not disturbed to provide a natural stormwater drainage system to carry runoff to a natural outlet. The use of natural drainageways allows for more storage of stormwater runoff, lower peak flow rates, a reduction in erosive runoff velocities, and the capture and treatment of pollutants;

3. Use vegetated swales instead of curb and gutter applications where applicable. This application allows for more storage of stormwater runoff, lower peak flow rates, a reduction in erosive runoff velocities, and the capture and treatment of pollutants which does not occur with curb and gutter systems;

4. Where ditched roadways are not practical, curb and gutter systems may be combined with vegetated swales at outfalls to provide added water quality benefits versus the traditional piped outfall designs;

5. When applicable, direct rooftop runoff to pervious natural areas for water quality treatment and infiltration instead of connecting rooftop drains to roadways and other structural stormwater conveyance systems;

6. Consider the elimination of curb and gutter systems and utilize ditches, swales and other infiltration methods along roadways;

1.7.4.5 Engineered/proprietary devices

Lexington County is aware of the potential benefit in using a number of engineered devices currently available on the market, such as treatment devices such as baffle boxes, cartridge filters, bioretention, erosion control devices such as socks and tubes, and advanced vegetation producing methodologies. The PW/SWD will evaluate any and all such devices specified for a given product and require for each appropriate drawings, specifications, and discussions as to the applicability of the product, expected performance, and required maintenance. The PW/SWD reserves the right to request that certain devices be installed.

1.8 Engineering Design Accountability

The Land Development Manual will assist engineers, plan reviewers, inspectors, and contractors in the design and layout of most land disturbance projects. However, this manual does not replace or otherwise excuse the need for professional engineering judgment and knowledge. The user of this manual is hereby cautioned that many aspects of engineering design must be considered, including but not limited to:

1. Public health and safety;
2. Site-specific conditions or unusual features of project site that warrant special designs;
3. Current versions of design texts, manuals, technical documents and research.

The design engineer (with assistance from other design professionals as needed) is expected to thoroughly investigate field conditions and coordinate all design efforts with Lexington County. Construction plans must be stamped and signed by a professional engineer actively licensed in the state of South Carolina, unless otherwise stated in this Manual. The design professional must have sufficient education and experience to perform a complete and thorough design of each element shown on the construction plans, and must also have complete control to change or alter plans during the design phase. The professional's stamp is a public guarantee that his design has the highest regard for health and safety, protects the environment (air, soil, water) to the maximum degree possible, and serves the interests of the general public within Lexington County. Lexington County requires a certain level of design expertise for stormwater calculations and flooding analyses. Stormwater design criteria are based upon current scientific knowledge and engineering judgment. It should be realized by engineering designers that floods and flooding may occur at any time due to any number of factors beyond the reasonable control of the County, such as: greater amounts of precipitation or different rainfall patterns than used in design storms, wet soil conditions, debris or blockage of key stormwater channels, high groundwater tables, etc.

1.9 Legal Aspects

If any portion of the Land Development Manual is ruled to be invalid or unconstitutional by any court with adequate jurisdiction over Lexington County, then such portion shall be considered to have been selectively removed from this manual without affecting the manual's overall applicability and legal standing to the land disturbance process. The Land Development Manual will be revised on a periodic basis to reflect known changes to laws and regulations. All local, state and federal laws and regulations shall be considered when interpreting provisions within the Land Development Manual. In each instance, the more restrictive requirement shall govern unless sound engineering judgment can determine and prove that the more restrictive requirement would be otherwise unnecessary. In most instances, laws and regulations that are phrased more explicitly shall apply over those items that are not phrased as precisely.

1.10 Language and Interpretation of Text

The following language rules are applicable to the Land Development Manual:

1. The imperative case is always mandatory. The words "shall" and "must" are always mandatory. These actions must be performed unless sufficient engineering justification is submitted to County officials within the Stormwater Engineering Division and written approval has been specifically granted. The word "should" indicates an action that is highly recommended under most conditions. The word "may" indicates an allowable action or choice that is usually beneficial in meeting the minimum county requirements;

2. Use of the singular or plural case of a noun will not affect the applicability of this manual, or any other law, regulation, or ordinance, unless the context of the sentence specifically indicates that the singular/plural case affects the intended use or function on a scientific or engineering basis. The use of a singular or plural noun does not necessarily indicate whether to design or construct a single unit or multiple units;

3. Any reference to the PW/SWD shall mean the duly authorized representatives, sections or employees under the Director's supervision who have the delegated responsibility. Areas of delegated responsibility may include, but is not limited to: review and approval of plans, review and approval of survey plats, definition of standards or requirements, approval of special conditions, review and issuance of permits, inspections and field investigations, enforcement actions, issuing notices of violation, conduct of public meetings, etc.

4. The use of "and" shall imply conjunction of items in lists of required elements, in which all items must be complied with. The use of "or" shall imply the disconnection of items in lists of required elements, in which either or one of the items in the list must be complied with.

1.11 Contact Information

The following Lexington County personnel should be contacted for any questions, clarifications, or other information not in this manual.

Primary contact for stormwater issues:

Public Works Director
440 Ballpark Road
Lexington, South Carolina 29072
(803) 785-8201

Stormwater Manager
440 Ballpark Road
Lexington, South Carolina 29072

(803) 785-8117

Environmental Coordinator
440 Ballpark Road
Lexington, South Carolina 29072
(803) 785-8634

Submittal address

Lexington County Community Development Department
212 South Lake Drive
Lexington, South Carolina 29072
(803) 785-8121
(803) 785-8188 (fax)
CDCustomerService@lex-co.com.

1.12 Definitions

Words used in this Manual shall have their customary meanings as determined by the standard dictionary definition except for the following specific words and terms which are herein defined or are otherwise defined in the Lexington County Stormwater Management Ordinance. In any case, the PW/SWD shall have the right to define or interpret any other word or term contained within this Manual. Definitions not included in the list below or in the Ordinance shall be as defined in authorizing regulations listed in Section 1.5 or in applicable FEMA regulations. The rules of verbal construction found in the Stormwater Management Ordinance apply to this Manual.

1. Adverse impact: any modifications, alterations or effects on a feature or characteristics of community lands or waters which are or may potentially be harmful or injurious to human health, welfare, safety to property or which unreasonably interfere with the enjoyment of life or property. The term includes secondary and cumulative, as well as direct impacts.

2. As-Builts: the set of construction drawings showing the final location and condition of all new or altered buildings, infrastructure and topography. As-builts drawing must be submitted for all projects regulated by the PW/SWD. For the purposes of this manual, the term as-builts shall be synonymous with record drawing.

3. Base Flood Elevation: the elevation of the flood having a one percent chance of being equaled or exceeded in any given year.

4. Basement: that portion of a building having its floor subgrade (below ground level) on all sides.

5. Building: (1) a relatively permanent enclosed construction over a plot of land, having a roof and usually windows and often more than one level, used for any of

a wide variety of activities, as living, entertaining, or manufacturing; (2) anything built or constructed; (3) the act, business, or practice of constructing houses, office buildings, etc.

6. Critical development: development that is critical to the communities public health and safety, is essential to the orderly functioning of a community, is used to store or produce highly volatile, toxic or water-reactive materials, or house occupants that may be insufficiently mobile to avoid loss of life or injury. Examples of critical development include jails, hospitals, schools, fire stations, nursing homes, wastewater treatment facilities, water plants, certain manufacturing facilities, and gas/oil/propane storage facilities.

7. Culvert: enclosed symmetrical channel of comparatively short length installed to convey water from one side of an embankment to the other, typically under a roadway, and mainly used to divert stream or rainfall runoff to prevent erosion or flooding on highways.

8. Contour: an imaginary line, or its representation on a contour (topographic) map, joining points of equal elevation.

9. "Defined" Natural Drainage Channel: a natural drainage channel depicted on the Lexington County Soil Survey.

10. Detention: the collection and storage of stormwater runoff in a surface or sub-surface facility for subsequent controlled discharge to a watercourse or water body.

11. Development: the improvement of land or altering of the land use. This includes new development and re-development.

12. Ditch: a drainage channel in earth created by natural or artificial means to convey surface and/or subsurface water, flowing continuously or intermittently.

13. Drainage: a general term applied to the removal of surface or subsurface water from a given area either by gravity via natural means or by systems constructed so to remove water, and is commonly applied herein to surface water.

14. Drainage Facility: any component of the drainage system.

15. Drainage System: the surface and/or subsurface system which collects and conveys stormwater and surface water, and includes all watercourses, waterbodies, and wetlands.

16. Elevation: height in feet above a given known datum, such as mean sea level.

17. Embankment or Fill: a deposit of soil, rock or other material placed by man.

18. Flood: a temporary rise in the level of water which results in the inundation of areas not ordinarily covered by water.

a. Two (2) year flood: The flood having a fifty (50) percent chance of being equaled or exceeded in any given year.

b. Five (5) year flood: The flood having a twenty (20) percent chance of being equaled or exceeded in any given year.

c. Ten (10) year flood: The flood having a ten (10) percent chance of being equaled or exceeded in any given year.

d. Twenty-five (25) year flood: The flood having a four (4) percent chance of being equaled or exceeded in any given year.

e. Fifty (50) year flood: The flood having a two (2) percent chance of being equaled or exceeded in any given year.

f. One hundred (100) year flood: The flood having a one (1) percent chance of being equaled or exceeded in any given year.

19. Floodplain: any land area susceptible to being inundated by flood waters resulting from a flood with a return of 100 years or less.

20. Floodway: the channel of river or watercourse, and the adjacent land areas, that must be reserved in order to discharge a flood within a return frequency of 100 years without cumulatively increasing the water surface elevation more than one (1) foot.

21. Grading: any displacement of soil by stripping, excavating, filling, stockpiling, or any combination thereof, including the land in its excavated or filled state.

22. Impervious surface: a surface which has been compacted or covered with a layer of material so that it is highly resistant to infiltration by water. The term includes most conventionally surfaced streets, roofs, sidewalks, parking lots, and other similar structures.

23. Lexington County Inspector: any staff of the PW/SWD that is a Certified Erosion Prevention and Sediment Control Inspector (CEPSCI) or equal certification. CEPSCI is a program conducted by Clemson University Extension and approved by SCDHEC.

24. Non-erosive: a flow condition that does not cause erosion. Soil types and slopes should be considered in determining if a flow condition will cause erosion.

25. Outlet facility: stormwater management facility designed to regulate the elevation, rate, and volume of stormwater discharge from detention facilities.

26. Post-Development conditions: those conditions which are expected to exist, or do exist, after alteration, of the natural topography, vegetation, and rate, volume or direction of stormwater runoff, (resulting from development activity).

27. Pre-Development conditions: those conditions, in terms of the existing topography, vegetation and rate, volume or direction of stormwater runoff, which exist at the time the applicant submits an application form for a land disturbance permit or Waiver.

28. Project: improvements and structures proposed by the applicant to be constructed on a defined site as part of a common plan of development.

29. Proof-rolling: a form of quality control or compaction verification in "virgin-cut" areas; usually performed with a loaded dump truck.

30. Rate: volume of water passing a point per unit of times, generally expressed in cubic feet per second (cfs).

31. Re-development: any project such as expansion or addition that results in additional impervious area. Re-development projects greater than 5,000 ft^2 must be permitted.

32. Retention: the collection and storage of stormwater runoff without subsequent discharge to surface waters.

33. Retrofit: the process of altering an existing drainage system to function properly or more efficiently that currently exists. Retrofitting will be a common method used by the County to address TMDLs (retrofitting systems to include a water quality/runoff treatment device.

34. Runoff: that part of rainfall that is not absorbed into the sites but flows over the site as surface waters.

35. Sediment: fine, particulate material, whether mineral or organic, that is in suspension and is being transported, or has been transported, from its site of origin by water or air.

36. Sedimentation: the process which operates at or near the surface of the ground, or deposits soils, debris and other materials either on other ground surfaces or in the waterbody.

37. Sedimentation Facility: any structure or area which is designed to retain suspended sediments from collected stormwater runoff, to include sediment basins.

38. Site: any tract, lot, or parcel of land or combination of tracts, lots, or parcels of land which are in common ownership, or are contiguous and in diverse ownership where development is to be performed as part of a unit, subdivision, or project.

39. Special flood hazard Area (SFHA): an area having special flood, mudflow, or flood-related erosion hazards, and shown on a Flood Hazard Boundary Map or a Flood Insurance Rate Map as Zone A, AO, A1-A30, AE, A99, AH, AR, AR/A,

AR/AE, AR/AH, AR/AO, AR/A1-A30, V1-V30, VE, or V. For the purpose of determining Community Rating System premium discounts, all AR and A99 zones are treated as non-SFHAs.

40. Stormwater Management System (or Drainage System): the surface and subsurface system for the removal of water from the land, including both the natural elements of streams, marshes, swales, and ponds, whether of an intermittent or continuous nature, and the man-made element which includes culverts, detention/retention facilities and the storm sewer system, further defined as:

    a. Minor Drainage System: all street drainage, curb and gutters, pipe systems, culverts, ditches and channels which drain less than 40 acres.

    b. Collector System: all drainage systems draining at least 40 acres but less than 100 acres.

    c. Major Drainage System: all drainage systems draining at least 100 acres but less than 300 acres.

    d. Flood Plain System: all natural channels, creeks or rivers draining more than 300 acres.

41. Storm Frequency: rate of likely recurrence of a rainstorm (see Flood definition for further detail). Stormwater Management Plan: a drainage system plan which fully indicates necessary land management and treatment measures, including a timetable of the schedule for their installation, which will effectively minimize soil erosion and sedimentation and which is approved as provided herein for application to a particular area or parcel of ground. This plan includes the technical report containing all engineering calculations and construction drawings.

42. Structures: anything constructed or erected, the use of which requires a location on the ground, or attached to something having a location on the ground, including, but not limited to, tennis courts, swimming pools, fences, and buildings.

43. Subdivision: the division of a tract of land or of a parcel of land into two (2) or more lots, building sites, or other divisions, for the purpose, whether immediate or future, of sale, legacy, or building developments which includes any of the following:

    a. The creation of a new county road or the alteration of an existing road

    b. The need for drainage, sedimentation or flood control measures,

    c. The installation of a water delivery system, or

d. The installation of a sewerage system.

Subdivisions shall not include the division of a tract of land wherein each lot created is equal to the standards of the Lexington County Health Department regarding the use of individual wells and septic tanks and does not involve any of the activities referenced in items (a) through (d) above. When appropriate to the context, the term subdivision relates to the process of subdividing or to the land area subdivided.

44. Vegetation: all plant growth, especially trees, shrubs, mosses, and grasses.

45. Virgin-cut: a cut or excavation into natural ground, which has not been exposed for more than 90 days.

46. Watercourse: any natural or man-made conveyance used to transport runoff from one location to the next.

47. Wetlands: those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

CHAPTER 2 - LAND DISTURBANCE PERMITTING PROCEDURES

This chapter provides developers, owners, engineers, contractors, and others with information on how to obtain a Land Disturbance Permit (LDP) as required by Public Works Stormwater Division (PW/SWD). This section describes conditions when a LDP is needed, the types of permits that apply to different situations, application package requirements, and when waivers of such requirements are applicable. General information on stormwater planning and its importance is also provided. These requirements must be met prior to any land disturbing activities and before a LDP will be issued. PW/SWD has been granted authority to enforce such requirements, issue permits, and can penalize those that fail to comply. PW/SWD has, at its discretion, the authority to clarify as it sees fit, any situation not adequately covered by these regulations. PW/SWD may impose further restrictions as necessary to ensure the health, safety, and general welfare of the citizens of Lexington County, the economic viability of the community, and the prevention of environmental degradation.

The focus of this application process is for proper development planning, design, and assuring the applicant takes the appropriate steps necessary to control the discharge of stormwater, sediment, and other pollutants during and after land disturbing activities. This process is intended to ensure comprehensive planning, foster communication among the various parties, and comply with environmental regulations pertaining to stormwater management.

Unless otherwise provided within the Stormwater Management Ordinance or this Manual, the surface of land in Lexington County shall not be disturbed or altered for any purpose. No major drainage channel shall be impeded or encroached upon, nor any alteration or encroachment of a flood area, except in accordance with a LDP approved by the PW/SWD. Land disturbance activities cannot commence prior to issuance of a LDP. Waivers may be granted upon determination that the integrity of the Stormwater Management Ordinance and the provisions of this Manual will not be violated by such action. The procedure for waiver submission and approval is covered in Section 2.14.

2.1 Land Disturbance Permits

It shall be the responsibility of the applicant to determine the appropriate permit and process to use; however, PW/SWD has the authority to require a specific permit level as necessary to protect the citizens of Lexington County, surrounding property, the County's existing drainage system, and WoS. The following are two types of LDP issued by Lexington County:

1. Small Commercial Disturbance Permit: for land disturbing activities on commercial properties that disturbs less than one acre. Any commercial re-development projects disturbing less than one acre also fall under this level. The PW/SWD has the right to require a General LDP for these type projects, to be determined on a case by case basis.

2. General Land Disturbance Permit: for activities disturbing greater than or equal to one acre, whether commercial or residential.

The construction of a single-family residential structure that is part of a larger common development will require the building permit applicant to become a permit holder under the General LDP issued to the original applicant. The construction of a single-family residential structure that is not part of a larger common development, but disturbs greater than one acre must receive a General LDP.

The construction of a single-family residential structure not part of a common development disturbing less than one acre shall not require a General LDP. Instead, each building permit applicant shall be required to complete and certify, as part of the building permit application, that erosion control measures will be installed and maintained. The appropriate application shall be part of the building permit application process.

Utility companies are not exempt from NPDES requirements. When applicable, Lexington County must regulate utility projects just as any other type of construction. However, since many utility projects are small, linear, and underground, there is often little or no long-term impact compared with other construction types.

The procedure for applying for a LDP is slightly different depending on the size and scope of the activity. The flow chart shown in Appendix H provides additional guidance on the application process. In general, the procedure for the Small Commercial Permit will require less detail than the General LDP. The different submittal components are detailed in the following sections.

2.2 Pre-Submittal process

2.2.1 Stormwater Concept Plan

The Concept Plan should be submitted to the PW/SWD. For General LDP, a Stormwater Concept Plan should be included as part of the pre-submittal meeting. Small Commercial Applications may skip this step unless requested by the PW/SWD. This Concept Plan gives the design professional the opportunity to propose a site layout and stormwater controls to PW/SWD. The PW/SWD may exempt the requirement for a concept plan for a General LDP application on a case-by-case basis.

The concept plan may be preliminary sketch of the site and shall contain the following items, when applicable:

1. A preliminary sketch of the site showing the layout;

2. Vicinity map;

3. Pre- and post-development runoff patterns and discharge points;

4. Location(s)/distances to WoS and all other existing natural features such as wetlands, ponds, lakes, floodplains, and stream buffers;

5. Location(s) of existing and proposed roads, buildings, utilities, parking areas and other impervious surfaces;

6. Lexington County's GIS topography

Upon submittal and discussion of the Concept Plan and related concerns, the applicant may create and submit a complete LDP application.

2.2.2 Pre-submittal meeting

The pre-submittal meeting should be set up in conjunction with the submission of the Concept Plan. This meeting should take place at the site to be developed. This meeting allows all of the entities involved in the land development process to understand the stormwater management requirements and identify the areas on the site that will require the most attention to meet the requirements of the regulations. This meeting is designed to establish a partnership between all of the entities involved, and provide an understanding of the development requirements for the specific site. PW/SWD reserves the right to request a pre-submittal meeting for Small Commercial Permit applicants.

In addition, the applicant should be prepared to discuss the following items, when applicable:

1. All modeling methodologies to be used;

2. Applicability of any adopted Total Maximum Daily Loads (TMDLs) or other water quality concerns that may impact the allowable pollutant load that can be discharged;

3. Preliminary waiver or variance requests;

4. Others as requested by the PW/SWD.

2.3 Land Disturbance Permit Application Submittal

The original permit application submittal shall be made to the Lexington County Community Development Department. The submittal package is then distributed to other County departments for their review. The Community Development Department should be contacted for a complete list of those department's requirements.

The remainder of this document describes the procedures and submittal requirements of PW/SWD. The PW/SWD will require applicants that need permit coverage from a state or federal agency to have such permits in hand prior to permit issuance (e.g. NPDES permit, 401 certifications, and Navigable Waters permit from the US Army Corps of Engineers, etc.).

2.4 Permit Submittal Requirements

2.4.1 Small Commercial Disturbance Permit

This permit may be issued as defined in Section 2.1. The following items should be submitted for this permit type.

1. Application Form for Small Commercial Disturbance:

   This application form is listed in Appendix A. All information requested shall be complete. The original application and signature shall be submitted in the permit application package.

2. Site Narrative: The narrative should describe the site in general, the purposes of the land disturbance, existing and proposed runoff patterns, outfalls, and upstream runon, critical downstream areas, potential problems with adjacent properties, and receiving waterbodies. Any access, easement, and/or agreements shall be adequately defined.

3. Project Sketch: A sketch to accompany the narrative project area showing:

   a. Location of all existing and proposed stormwater management control facilities and outfalls (a 1:24,000 scale USGS topographic map is recommended for this portion), 100-year floodplain as presented on FIRM maps, and general topography and WoS in relation to proposed project,

   b. Necessary measures for energy dissipation, proper design of fill slopes and embankments, and channel stabilization,

   c. Sediment and erosion control plan showing the location of all erosion and sediment control facilities,

   d. Construction limits and sequence during and after construction,

2.4.2 General Land Disturbance Permit

This permit may be issued as defined in Section 2.1. The following submittal requirements must be provided to receive this permit.

1. **Application Form for General Land Disturbance Activities**:

   This is a dual SCDHEC/Lexington County application as shown in Appendix A that serves as the NOI to SCDHEC and Lexington County. All information requested shall be complete. The original application with signatures shall be submitted in the permit application package.

2. **Site Narrative:**

A narrative should be submitted with the permit application describing the site in general, purposes of the land disturbance, topographic and soil information, adjacent properties and owners, waterbodies receiving stormwater runoff (existing and proposed), existing water quality and flooding issues, and anticipated impacts and benefits. If applicable, the narrative should also contain justification for variances, waivers, or other special conditions of the site. Wetland and/or WoS disturbance issues should be discussed along with detail on the status of necessary permit application to the USACE and/or SCDHEC.

3. Technical Report:

The technical report should be prepared upon receiving acceptance of the stormwater concept plan and as part of the application package. This shall consist of maps, narratives, supporting design calculations for the proposed stormwater system and sediment and erosion control measures used during construction. The technical report includes, but is not limited to, the following sections, when applicable:

a. Pre and Post development hydrologic analysis and calculations that determine the existing stormwater runoff volumes, peak flow rates, flow velocities, and pollutant loads. Such information shall be provided for all delineated sub basins/discharge points;

b. The project shall control stormwater quantity and quality as defined in Chapter 3;

c. Stormwater management system design to include:

i. Narrative describing the stormwater management system, methodologies to be used in their design, existing and proposed runoff patterns, outfalls, upstream runoff, and critical downstream areas,

ii. Location of all existing and proposed stormwater management control facilities and outfalls (a 1:24,000 scale USGS topographic map is recommended for this portion),

iii. Supporting calculations that justify that the system meets Lexington County and NPDES General Permit requirements, including but not limited to: hydrographs, stage-storage volumes, routing of hydrographs, stage-discharge values for water quantity and water quality control facilities, design calculations and elevations for all stormwater conveyance systems, strategy for controlling runoff pollutants, pollutant loads in compliance with any TMDLs, estimates of trapping efficiencies of each BMP used and long term maintenance requirements of each, design details and specifications, pipe capacity and velocity calculations, open

channel capacity and velocity calculations, and water surface elevations,

iv. Design should also contain measures for energy dissipation, proper design of fill slopes, embankments, and channel stabilization,

v. Maintenance schedules and details for each permanent stormwater management facility, if applicable.

d. Special Protection Areas: narrative should include description of how the project will comply with the applicable criteria for these areas;

e. Sediment and erosion control plan: narrative should include description of the erosion and sediment control facilities selected:

i. Location of all erosion and sediment control facilities and BMPs,

ii. Resulting design calculations, trapping efficiencies, maintenance schedules, and details for all sediment control facilities,

iii. Explanation/discussion of models used in the design,

f. Downstream analysis calculations showing the effect of post-development design flows on downstream stormwater conveyance systems and channels;

g. Where any watercourse that lies within a special flood hazard area will be altered or relocated as a result of proposed development, the application for a LDP shall include a detailed flood study. A detailed study is also required if development is to occur in an approximate A zone of the regulated floodplain covering 5 lots or 50 acres, whichever is less, or if development is to occur in the floodway;

h. If constructing a medium or high hazard dam, as defined in the state's Dam Safety Act, then a dam breach analysis shall be submitted as defined in Chapter 3;

i. Location of identified 100-year floodplain as presented on FIRM maps;

j. Location map showing topography and WoS in relation to proposed project;

k. Delineation of any wetlands/WoS (approval by USACE and or SCDHEC should have been achieved or applied for);

l. Identification and classification of all soil types expected to be encountered or used at the development site;

m. Presentation of existing and proposed contours at the development site;

n. General description of the adjacent property and description of existing structures, buildings, and other fixed improvements located on surrounding properties;

o. Construction limits and sequence during and after construction;

p. Site access (easements);

q. A USGS map with the site outlined and the direction of flow to the nearest waterbody

4. Construction Plans

One (1) complete set of certified and signed construction plans and specifications are to be turned in at the LDP application submittal.

Additional sets of certified and signed construction plans and specifications will be requested by the PW/SWD when the review is complete.

The information required on the construction plans shall include, but are not limited to the following list. Some items may be included in other components of the permit application package, but should be adequately noted.

a. Plan sheets/drawings shall be a standard size of 24" X 36";

b. The following lists the required items that shall be disclosed within the set of plans. Other items may be requested by PW/SWD on a case-by-case basis:

i. North arrow and correct scale,

ii. Property lines, tax map numbers, adjacent landowners' names, and land use conditions,

iii. Legend,

iv. Registered Professional Engineer's seal,

v. Certificate of Authorization seal, as appropriate,

vi. Existing and proposed contours and land uses no larger than 2 foot intervals extending 100 feet outside the boundary lines. Contours are to be tied to a known datum no assumed elevations are allowed,

vii. 100-yr floodplain contour line and associated floodway (FEMA and County),

viii. Limits of disturbed area,

ix. Delineation of wetlands and/or WoS,

x. Easements,

xi. Road and stormwater system profiles with existing and proposed ground elevations,

xii. Construction sequence (include implementation of all stormwater and sediment and erosion controls in the first phase of construction),

xiii. Locations and details of all temporary and permanent control measures,

xiv. Locations and details of all sediment and erosion control measures,

xv. Grassing and stabilization specifications and schedule,

xvi. Maintenance requirements (for temporary and permanent controls, grassing, etc.),

xvii. Construction entrance/exit with detail,

xviii. Tree protection, preservation, overall landscaping plan with appropriate species selection and screening for ponds, and other components as required by the Landscaping Ordinance,

xix. Details and specifications of all necessary construction components,

xx. Standard notes,

(1) If necessary, slopes which exceed eight (8) vertical feet should be stabilized with synthetic or vegetative mats, in addition to hydroseeding. It may be necessary to install temporary slope drains during construction. Temporary berms may be needed until the slope is brought to grade.

(2) Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than fourteen (14) days after work has ceased, except as stated below.

(3) Where stabilization by the 14th day is precluded by snow cover or frozen ground conditions, stabilization measures must be initiated as soon as practicable. Where construction activity on a portion of the site is temporarily ceased, and earth-disturbing activities will be resumed

within 14 days, temporary stabilization measures do not have to be initiated on that portion of the site.

(4) All sediment and erosion control devices shall be inspected every seven (7) days. Damaged or ineffective devices shall be repaired or replaced, as necessary.

OR

All sediment and erosion control devices shall be inspected at least once every fourteen (14) calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater. Damaged or ineffective devices shall be repaired or replaced, as necessary.

(5) Provide silt fence and/or other control devices, as may be required, to control erosion during utility construction. All disturbed areas shall be cleaned, graded, and stabilized with grassing immediately after the utility installation.

(6) All erosion control devices shall be properly maintained during all phases of construction until the completion of all construction activities and all disturbed areas have been stabilized. Additional control devices may be required during construction in order to control erosion and/or offsite sedimentation. All temporary control devices shall be removed once construction is complete and the site is stabilized.

(7) The contractor must take necessary action to minimize the tracking of mud onto the paved roadway construction areas. The contractor shall daily remove mud/soil from pavement, as may be required.

(8) Residential subdivisions require erosion control features for infrastructure as well as for individual lot construction. Individual property owners shall follow these plans during construction or provide an individual plan meeting section R.72-307 of the Stormwater Management and Sediment Reduction Act.

(9) Temporary diversion berms and/or ditches will be provided as needed during construction to protect work areas from upslope runoff and/or to divert sediment laden water to appropriate traps or stable outlets.

(10) All waters of the State (WoS), including wetlands, are to be flagged or otherwise clearly marked in the field. A double row of silt fence is to be installed in all areas where a 50-foot buffer can't be maintained between the disturbed area and all WoS. A 10-foot buffer should be maintained between the last row of silt fence and all WoS.

(11) Litter, construction debris, oils, fuels, and building products with significant potential for impact (such as stockpiles of freshly treated lumber) and construction chemicals that could be exposed to storm water must be prevented from becoming a pollutant source in stormwater discharges.

xxi. The cover sheet shall contain, at the minimum, the following items:

(1) Project Name,

(2) Engineers Contact Information (name, mailing address, telephone, fax),

(3) Developers Contact Information (name, mailing, address, telephone, fax),

(4) Location Map (North arrow, project outline and labeled names of roads, tax map number), and

(5) Table of Contents,

(6) Room in lower right corner for approval stamp

xxii. Sight distances,

xxiii. Location of existing roads and/or commercial drives across from the proposed access entrance(s),

xxiv. Show that all fill slopes are stabilized,

xxv. Drainage areas (both on and off-site) with characteristics

c. In addition subdivisions projects should include:

i. lot layout/site plan and staking,

ii. acreage, utilities (water and sanitary sewer),

iii. traffic patterns with temporary (construction) and permanent traffic signage.

While some of these items lend themselves to combining on a single sheet/drawing, care should be taken to ensure that plans are not overcrowded/cluttered;

d. Roadways shall be shown on plan/profile sheets. These sheets shall contain curve radii, grades, crossline pipes, catch basins, utility crossings, and other data associated with the roadway. The top half of the plan/profile sheet should contain the plan view and the bottom half should contain the profile. The preferred scale is either one (1) inch equals 50 feet horizontally with a corresponding vertical scale of one (1) inch equals five (5) feet or one (1) inch equals 100 feet horizontally with a corresponding vertical scale of one (1) inch equals ten (10) feet;

e. All available or used benchmarks shall be shown on this or other applicable sheet. At least one (1) benchmark shall be available or established on/near (within survey instrument sight distance) the site. The benchmark shall be referenced to mean sea level (M.S.L.). If necessary, PW/SWD will assist in locating the nearest established Benchmark;

f. Specifications for all components of the construction activities related to grading, utilities, sediment and erosion control, temporary and permanent vegetation, water quality BMPs, etc.;

5. Stormwater Pollution Prevention Plan (SWPPP):

A SWPPP is a site specific document that identifies sources of stormwater pollution on a construction site, describes practices that will be used to reduce pollutants in stormwater discharges and identifies procedures the applicant will implement in order to comply the conditions of the LDP. The SWPPP shall also include descriptions of the site and of each major phase of planned activity, the roles and responsibilities of contractors and subcontractors, and the inspection schedule and logs. Modifications to the construction plans and associated stormwater prevention activities should also be documented in the SWPPP. An effective SWPPP should contain the following items:

a. Cover/Title Page

b. Project and SWPPP contact information

c. Site and activity description including site map

d. Identification of potential pollutant sources

e. Description of controls to reduce pollutants

f. Maintenance/inspection procedures

g. Records of inspections and follow-up maintenance of BMPs

h. SWPPP amendments

i. SWPPP certifications

j. Copy of the SCDHEC Construction General Permit

A SWPPP is required for projects that disturb greater than or equal to one acre. The SWPPP needs to be submitted as part of the permit application package for PW/SWD. Further guidance can be found in the United States Environmental Protection Agency's (EPA) document entitled, "Developing your Stormwater Pollution Prevention Plan: A Guide for Construction Sites" (2007). The SWPPP requirement applies to both development and re-development sites. The SWPPP must be kept on the construction site during all phases of construction. A checklist for SWPPP components is provided in Appendix G, as is a template for an applicant's use.

6. Fees:

All required fees (except the NPDES fee) should be submitted with the permit application package. Contact the PW/SWD for further guidance on fee schedule. The details of the fees are listed below:

a. For all land disturbing activities, the following fees apply:

Residential Subdivision Construction	
Plan Review	$575 and $12 per additional lot
Additional Plan Revisions (after 1st)	$575
Construction Inspections	$1150 and $12 per additional lot
Re-inspections (all, after 2nd inspection)	$230

Commercial Construction	
Project Review	$575 and $115 per disturbed acre or portion thereof
Additional Plan Revisions	$288
Small Commercial Permits only	$288
Commercial Project Inspections	$1150 and $115 per disturbed acre or portion thereof
Re-inspections (all after 2nd inspection)	$230

Fees are subject to change per approval from the Lexington County Council.

b. NPDES: For all land disturbing activities involving one (1) or more, an NPDES General Permit coverage fee of $125.00 applies in addition to the Lexington County review/inspection fees listed below. This fee will be forwarded on to SCHDEC by Lexington County after the plan review has been approved.

7. Maintenance Schedules and Agreements:

When stormwater management facilities and system components are to be maintained by an owner, lessee, or other designated party, Lexington County must be given assurance that such activities will be conducted. This is to be established using legally binding agreements that require maintenance during and after construction, creation of maintenance schedules for all stormwater system components, and designation of the responsible parties in perpetuity. A copy of all maintenance agreements are listed in the Appendix E.

2.5 Plan Review Process

Once the package is received by the PW/SWD, the Division shall have twenty (20) working days to approve, deny or issue comments to the applicant. If notice is not given to the applicant or if action is not taken by the end of the 20th working day period, the application package will be considered approved by Lexington County without review. If a project is considered approved without review the roads and storm drainage system shall not be taken into the Lexington County maintenance system and will be considered privately maintained. Lexington County reserves the right to correspond with the applicant on separate portions of application package (i.e. first comments/request for information may only address erosion control measures). This will most likely occur due to internal time and labor constraints. The review checklists used by the PW/SWD are provided in Appendix K.

If review comments or a request for further information is required or a denial is issued, a letter detailing these issues will be mailed to the applicant. Prior to replying to this letter, a meeting between the PW/SWD, engineer and developer is required. This meeting is to address the issues listed in the letter mailed to the applicant. This meeting is not to serve as a re-submittal review. The applicant cannot resubmit plans until after this meeting has taken place. No new fees are needed.

Revisions are submitted directly to the PW/SWD. Once received the Division has 20 working days to review, approve or deny. If notice is not given to the applicant or if action is not taken by the end of the respective time period, the application package will be considered approved without review.

If the revisions did not contain all necessary information, correspondence will be made by the PW/SWD to the applicant/engineer. The applicant must then reply with the requested information. This constitutes a second revision and requires an additional review fee. This process will continue until all information needed by the PW/SWD has been received, with each request constituting another review that requires an additional review fee.

Once the review is complete, the PW/SWD will begin the process of permit approval and issuance. For Small Commercial Disturbance Permit applications and General LDP applications disturbing less than one acre, Lexington County will issue a permit and approval letter to the applicant. If the project is located within a municipality, the permit will be forwarded directly to the municipality, and they will distributed the permit to the applicant.

For General LDP applications disturbing one or more acres, the PW/SWD will request by phone or in writing for the applicant/engineer to submit the additional full sets of construction drawings and the NPDES permit coverage fee. The County's approval letter, the application for the General permit and the permit coverage fee will then be forwarded to SCDHEC for coverage under the NPDES General Permit for Stormwater Discharges from Large and Small Construction Activities. SCDHEC may request additional information from the applicant. Any such requests will be submitted directly from SCHDEC. The applicant shall copy Lexington County on any such submittals. Review time is dictated by SCHDEC. Once all information requested by SCDHEC has been satisfied, a letter will be mailed to the applicant granting coverage under the NPDES Construction General Permit. The applicant must then notify the PW/SWD that NPDES permit coverage has been granted by DHEC. Once the PW/SWD is notified the General LDP can be issued by the PW/SWD. If the project is located in a municipality, that has adopted the Lexington County Stormwater Ordinance, the General LDP will be forwarded to the municipality to distribute the permit to the applicant. The applicant is responsible for obtaining approval from other County Departments (Zoning, Landscaping, etc.). Approval for these components is beyond the responsibility of the PW/SWD. At the end of this process, the owner will have two permits, one from SCDHEC (NPDES), and one from Lexington County.

The PW/SWD reserves the right to deny coverage if an application fails to conform with the provisions of the Stormwater Management Ordinance and/or this Manual.

2.6 Project Construction

The applicant shall notify the PW/SWD 48 hours before construction begins. A pre-construction conference shall be required for all sites obtaining a General LDP. Construction activities must adhere to the provisions agreed to in the approved LDP. Any substantial revisions to the approved General LDP shall be submitted in writing to PW/SWD along with any subsequent fees. Such changes shall not be implemented until approval is given. Revisions may not be made for Small Commercial LDP without prior approval from the PW/SWD.

The owner is required to maintain at least one copy of all approved permits, technical reports, construction documents and SWPPP onsite at all times during construction. The LDP shall be posted in a visible location on the site. PW/SWD will conduct inspections during the construction phase. Frequency and specific times and dates of these inspections will be done at the discretion of PW/SWD. More information on inspections is given in Chapter 5. During construction, the owner or designated representative (contractor) will conduct inspections of all temporary sediment and erosion controls on the site in accordance with the submitted and approved maintenance schedule.

2.6.1 Transfer of Land Disturbance and/or NPDES Permit Coverage

1. If the permit holder wishes to transfer the permit coverage to a new entity, written documentation from the engineer of record and the permit holder must be submitted to the PW/SWD. The engineer of record must submit new plans with certifications signed by the new permit holder. If a bond has been issued for the

project it must be shown that the bond has been transferred to the new permit holder before the permit can be transferred. The transfer of ownership form can be found in Appendix E.

2. When a developer readies a piece of property for a new subdivision by performing grading activities, utility installation, building of roads, then sells a lot or group of lots over to a homebuilder(s), then the homebuilder must sign a certification stating that they accept responsibility under the original General LDP. A copy of this certification can be found in Appendix E and is also provided by the Community Development Department Building Division when a building permit is applied for.

3. The process of transferring NPDES Permit coverage is determined by SCDHEC.

2.6.2 Inspections and Maintenance

Inspections shall be performed as listed in the approved SWPPP document. Maintenance shall be performed as listed in the approved SWPPP document. Records of inspections and maintenance actions will be made in accordance with this permit and be available at all times during construction.

2.7 As-Builts

1. **Residential**: It is recommended that as-built drawings be submitted and approved before the submittal of a final plat. The owner shall submit as-built drawings showing the final location of all utilities, location of buildings if applicable, roads, profiles and calculations, etc. as found in the as-built checklist listed in Appendix M. As-built drawings should also delineate any buried material. The as-built drawings shall contain the Lexington County As-Built Certification. If the project is located in a municipality, then two complete sets must be submitted. Once as-builts have been approved, the PW/SWD will conduct a final inspection.

2. **Commercial**: Once the stormwater management facility(s) have been installed an as-built survey must be submitted for each facility on the site. Routing calculations, which include pond volume, outlet detail design, stage storage discharge, cross section of emergency spillway, the 2 through 25 and 100-year storm events calculations, etc. shall also be provided with the survey. This shall be submitted before a final inspection can occur.

2.8 Final Inspections

A final inspection may be requested after the as-built surveys have been approved. The owner shall correct any problems found during the final inspection. Corrections made after the final inspection that differ from the approved as-built drawings shall result in a revision of the as-built

drawings. Upon confirming any such corrections are completed, all disturbed areas, including stormwater management facilities shall be permanently stabilized before the site is considered ready for occupancy. PW/SWD will release all remaining bonds. This terminates the applicant's responsibilities under the LDP. PW/SWD shall receive as-builts prior to:

1. Use or occupancy of any site,
2. Acceptance of any road into the County inventory,
3. Release of any bond held by the County, and
4. Further land subdivision of parcels within the project areas.

For homebuilders who became a General LDP holder or who received an individual LDP, the certificate of occupancy for the home will not be released until the site has reached final stabilization and all temporary sediment and erosion control structures have been removed.

2.9 Exemptions

1. The provisions of this section shall not apply to those items that are exempt in SC Reg. 72-302a.
2. Construction activities of the S. C. Department of Transportation (SCDOT) conforming to the requirements of 1976 SC Code of Laws Section 48-18-70 and corresponding Regulation 72-400. SCDOT is responsible for obtaining approval from SCDHEC.

2.10 Other Authorization or Requirements

Where any authorization, bonds, special requirements, or other securities are required by applicable laws, regulations or ordinances for any part of the proposed work to be done under the permit, the applicant shall, upon request, furnish PW/SWD with satisfactory evidence that such requirements have been met before approving a LDP application. The list below contains some of the potential examples of additional authorizations or requirements when proposed to disturb land within Lexington County. Others may be applicable. It shall be the responsibility of the applicant to determine if other authorizations or requirements are applicable, however the pre-submittal meeting will be helpful in establishing such additional necessities exist.

1. Planning Commission approval (see Section 2.13);
2. Special Protection Areas Regulations (these are typically for areas with known flooding or water quality problems). More information is provided in Chapter 3;
3. USACE/SCDHEC permits for disturbance of all wetlands/WoS,. Wetland delineation documentation must be provided by USACE;

4. Documentation for exemptions to the requirements in the Stormwater Management Ordinance or this Manual should be clear and justified;

5. Applicants shall have obtained all necessary offsite easements needed for roads, utilities, etc.

6. All encroachment permits shall be authorized;

7. Any necessary stormwater discharge agreements shall be recorded;

8. Stormwater management facility maintenance agreement;

2.11 Expiration of Permit

A LDP will remain valid for up to five (5) years from the date of approval. A project will be considered expired after five (5) years has elapsed from the approval date. The project will also be expired if a project is inactive for a period of twelve (12) consecutive months. Requests for an extension of the permit must be submitted to the PW/SWD. Extensions will be reviewed on a case-by-case basis.

2.12 Responsibility of Permit Holder

During any land disturbance operation, the permit holder shall be responsible for carrying out the proposed work in accordance with the permit, approved plans, specifications, time schedules, and in compliance with all requirements of the Stormwater Management Ordinance and this Manual.

2.13 Cases Requiring Planning Commission Approval

Certain subdivisions of land must be reviewed and approved by the Lexington County Planning Commission before a LDP or waiver can be issued. Such projects include Private Road Subdivisions, Planned Cluster Subdivisions, Innovative Developments, and those subdivisions requiring a variance under the Subdivision Regulations and/or County Ordinances. The specifics of the regulations and the process for land subdivision is given in the separate legal document titled “Subdivision Regulations”.

2.14 Waivers

PW/SWD may grant waivers from the requirements of the Stormwater Management Ordinance and this Manual for individual land disturbances. Waivers for stormwater management are listed in SC Reg. 72-302b.

2.15 Non-floodplain Variances

The Planning Commission may, upon request, grant variances or exceptions to any of the provisions of this Manual, provided such variance or exception is in harmony with the general purpose and intent of the Stormwater Management Ordinance and this Manual. A written request for a variance shall be provided to the Planning Commission and shall state the specific variance(s) sought and the reason(s) with supporting data for their request. The Planning Commission may request and consider the opinion of PW/SWD before deciding upon any variance. Any request for variance shall be clearly stated in the LDP application. Procedures for variances related to floodplain management issues are covered Chapter 3.

2.16 Encroachment Permits

An Encroachment Permit, which controls the impacts of traffic, storm drainage, and sediment entering a public road right-of-way, must be obtained from the SCDOT and/or the Lexington County PW/SWD before construction begins. Applicants should be aware of Lexington County zoning requirements, which may differ from SCDOT's.

A copy of an Encroachment Permit application(s) to SCDOT must be included in the LDP application package. This is allowed because SCDOT will not approve an encroachment unless the LDP has been approved. It is the applicant's responsibility to comply with all SCDOT Encroachment Permit application requirements.

2.17 Easements

The following section provides the required easement widths for various components of the stormwater system. In all cases, there will be an allowance for offset easements, in which the pipe, channel, or other stormwater system component does not necessarily have to be in the middle of the easement width, but may be offset to allow for certain construction needs.

2.17.1 Storm drain pipe Easements

Drainage easements shall provide adequate room for maintenance equipment to operate. Table 2.1 provides required minimum drainage easement widths for some of the more typical situations:

Table 2.1-Storm drain pipe easements

Pipe size (in)	Maximum depth to invert (ft)	Width of drainage easement (ft)
18	3.5	15
24	5.0	20
36	6.0	24

Pipe size (in)	Maximum depth to invert (ft)	Width of drainage easement (ft)
54	7.0	30
72	9.0	36

[Notes: (1) For depths greater than shown, add two (2) feet for each additional foot to the invert.
(2) For larger pipe sizes and/or multiple lines of pipe easement width shall be as determined by the PW/SWD.]

2.17.2 Open channel Easements

A minimum easement width for an open channel/ditch is 24 feet. For channels greater than 4 feet wide and/or 4 feet deeps, the drainage easement width shall be increased by two (2) feet for each additional foot of width and/or depth.

2.17.3 Pond Easements

For all ponds dedicated to Lexington County, a minimum access easement of 20 feet shall be provided to the pond (toe of outside slope) from a public facility (road, parcel, etc.) or some other access acceptable to the PW/SWD. The pond easement shall also include a minimum 10 foot wide strip around the perimeter of all detention and retention facilities extending from the outside toe of the pond berm, as well as a 10 foot all-weather riding surface on the top of the pond berm. The review by the PW/SWD will include check to make sure this access for basin maintenance is sufficient for the pond and surrounding area (e.g. slopes not too steep).

2.17.4 Natural waterbody Easements

The PW/SWD requires that an easement be established for all drainage ways, streams, channels, or other waterbodies. The width of the easement will be determined after depending on site inspection.

2.17.5 Other Stormwater Facilities & BMP Easements

All other structures used for the control of stormwater runoff (quantity or quality) not otherwise covered above, shall have an easement for access and maintenance that is a minimum of 20 feet beyond the boundary of any such structure on all sides. PW/SWD may request or allow other easements widths on a case-by-case basis given site constraints or special conditions.

2.17.6 Offsite Easements

Any required off-site easements shall be obtained prior to LDP approval. Any work done without a proper and adequate easement(s) shall be at the Developer's own risk; no Bonded Plat or Final Plat approval can be granted for subdivisions until adequate written documentation is provided which verifies the validity of the easement(s). Non-subdivision projects shall provide validation of necessary easements before a LDP will be issued.

2.18 Stormwater Facility Maintenance

2.18.1 Maintenance Responsibility

Residential: Maintenance of stormwater management facilities in new and re-development projects including all pipes, inlets, and other components of the stormwater system shall, in most cases, be the responsibility of the PW/SWD.

If it is not the intent of Lexington County to take over maintenance then this responsibility remains with the developer, Home Owners Association (HOA) or other entity.

For any project, the owner of a portion or the entire stormwater system shall be clearly designated before a LDP will be issued. Maintenance responsibilities shall also be recorded on the final plat. Ownership shall imply responsibility for maintaining the stormwater system, including all ponds and other BMPs used for controlling runoff quantity and quality. Ownership does not imply that the owner(s) may in any way alter the size, or function of any component of the stormwater system without consent from PW/SWD. Owners found altering such components will be required to remove any alterations or pay for expenses incurred by PW/SWD to do the same.

In the event that property is abandoned, PW/SWD will assume responsibility for maintenance of the stormwater system until such time the property is purchased by another entity.

To deal with the possibility of an HOA dissolving in the future, PW/SWD requires as part of the LDP application, certain bylaws of the HOA. These include: require the HOA to include provisions in their recorded declaration to ensure membership is mandatory, ensure the HOA has lien authority and maintains adequate funding at all times, and that it cannot dissolve without another entity accepting maintenance responsibility for the stormwater system. A General LDP will not be issued until PW/SWD has received the stormwater management facility maintenance agreement.

Commercial: In new and re-development projects, ownership of the entire stormwater system (conveyances, as well as all BMPs, ponds, etc.) shall belong to the owner, or a lessee(s).

2.18.2 Maintenance

Each component of the stormwater management system (pipes, inlets, BMPs) shall have a maintenance plan (activities and associated schedule) as part of the application package for a LDP. The plan shall also cover temporary measures used during construction in addition to the long term maintenance of the system. These details may be covered in the Stormwater Pollution Prevention Plans, or SWPPP, if required, but must be included somewhere in the permit application. Suggested maintenance activities and recurrence intervals for water quality BMPs are discussed and referenced in Chapter 3.

In addition, the owner, and lessee if applicable, will enter into a permanent maintenance agreement with Lexington County. This legal document, called *A Covenant for Permanent*

Maintenance of Stormwater Facilities (CPMSF), is recorded in the permanent land records with the Lexington County Register of Deeds, in addition to being fully described on the final plat. The CPMSF document is prepared by the Stormwater Division using information supplied by the property owner, and must be signed and executed prior to the issuance of a LDP.

The Covenant allows for maintenance responsibility to be performed by a lessee or other temporary partner. However, the owner must also be listed. Ownership by an HOA is also covered.

PW/SWD will inspect a system as it deems necessary to ensure maintenance is being performed both during construction and after.

More detail is provided in Chapter 5 on maintenance procedures and requirements.

CHAPTER 3 - DESIGN REQUIREMENTS

This chapter provides engineers, designers, developers, and others with the necessary information to assist with the development of systems that will control the rate, volume, and pollutants released from a new or re-development projects. The Public Works Stormwater Division (PW/SWD) has been authorized by law or agreement to enforce this design requirement. These design requirements have been developed based on common Best Management Practice and reference State and Federal regulations, engineering publications, and other municipal and academic guidance.

It is an overall goal of this Chapter to provide a set of design standards that will result in effective stormwater management. The purpose of the goal is to mitigate the impact of land development on existing/natural hydrologic and hydraulic processes, as well as attempt to prevent further degradation of the water resources in Lexington County through proper planning and design. The design professional is encouraged to use all means necessary to develop land in a manner consistent with County Ordinances and this Manual. Specific methods and applications not covered in this section should be discussed with the PW/SWD for applicability.

3.1 General Requirements

General requirements for all stormwater systems will include, but not limited to the following:

1. Site designs shall minimize the generation of stormwater and maximize pervious areas for stormwater treatment. Designs shall also include:

    a. Knowing the major characteristics of the land area and kinds of soil helps in identifying and evaluating potential drainage problems. Select portions of the site where the drainage pattern, topography, and soils are favorable for the intended use.

    b. Exposing the smallest practical area of land for the least possible time during development. This includes preserving natural buffers and phasing of disturbed areas.

    c. Limiting the drainage area to all BMPs. Specific maximum contributing areas to BMPs are provided later in this chapter.

    d. Retaining and protecting natural vegetation. Topsoil should be saved and used in the stabilization process. Permanent vegetative cover shall be established as soon as practicable during the development process.

    e. Using plant cover, mulching, hydroseeding and BMPs for sediment and erosion control during and after construction.

2. Annual groundwater recharge rates should be maintained to the maximum extent practical by promoting infiltration through the use of structural and non-structural methods.

3. Stormwater runoff generated from development shall be controlled to pre-developed conditions. These conditions include rates, volume, and quality.

4. Stormwater runoff generated from development shall be treated through the use of structural and/or non-structural practices.

5. Stormwater discharges to special protection areas with sensitive resources are subject to additional performance criteria (See Section 3.9).

6. All privately owned stormwater facilities shall have a maintenance covenant. This covenant is to be recorded with the Register of Deeds in Lexington County (See Chapter 5)

7. Re-development is governed by the same design criteria as new developments.

8. Sediment basins and other BMPs shall be used during construction to remove heavy sediment loads from stormwater runoff leaving the disturbed area. The use of matting suspended on steel posts to form baffles is highly recommended to aid with trapping suspended sediments in these basins.

9. Erosion protection and sediment control shall be installed on the perimeter of the site, along all waterbodies, and other steep of susceptible areas before clearing begins. Erosion protection and sediment control measures shall be maintained throughout construction process.

10. Sediment shall be kept out of closed systems to the maximum extent practicable. Closed systems shall be clear of all sediment prior to the final inspection by Lexington County.

11. As practicable, discolored water should be treated before release from a detention pond as recommended by the Lexington County Soil and Water Conservation District.

12. If wetlands/Waters of the State are suspected to exist on a property, they should be investigated and delineated by a qualified consultant. If wetlands are present, Lexington County will not issue a Land Disturbance Permit without a confirmation or denial letter from the US Army Corps of Engineers (USACE).

13. All stormwater management and sediment control practices shall be designed, constructed, and maintained with consideration for the proper control of mosquitoes and other vectors.

14. The entire watershed that drains to a particular design point shall be included in determining the appropriate design storm. All drainage systems regardless of size

or classification shall be analyzed and revised as necessary to ensure that overflow of the system due the 100-year storm event would not result in a likelihood of dwelling flooding, property damage or public access and/or utility interruption. All computations shall be based on the contributing watershed, not just the project area or disturbed area. Classification of stormwater systems are as follows:

a. Minor Drainage Systems: 0 - <40 Acres

All drainage systems that carry less than 40 acres of stormwater runoff shall be designed to carry flows resulting from a ten (10) - year storm event. Ditches and channels must be designed for the twenty-five (25) - year storm event.

b. Collector Systems: 40 - <100 Acres

All drainage systems that carry at least 40 acres but less than 100 acres shall be designed to carry flows resulting from a twenty-five (25) - year storm event.

c. Major Drainage Systems: 100 - <300 Acres

All drainage systems that carry at least 100 acres but less than 300 acres, shall be designed to carry a flow resulting from a fifty (50)-year storm event. Encroachment upon Major Drainage Channels and the adjacent overflow land shall be avoided to the extent possible.

d. County or FEMA Floodplains: 300 and more Acres

Bridges and culverts being constructed in natural channels, creeks, or rivers draining more than 300 acres, shall be designed to carry a flow resulting from a one-hundred (100)-year storm event. Encroachment upon these channels shall be avoided to the maximum extent practicable.

The Floodplain provisions in section 3.8 shall apply, where applicable, to drainage systems which drain 300 or more acres.

3.2 Hydrologic Computation Requirements

All hydrologic computations shall be completed using volume-based hydrograph methods acceptable to the PW/SWD. The design storm duration for these computations shall be the 24-hour storm event and a SCS Type II distribution with a 0.1-hour duration time increment. Typical hydrologic inputs include, but are not limited to the following:

1. Precipitation depth or intensity,

2. NRCS soil classification and hydrologic soil group (Lexington County soils information can be found at www.lex-co.com),

3. Land use and appropriate Curve Numbers,

4. Time of concentration, and

5. Hydrographs.

All hydrologic computations shall be presented in an easily reviewable format. This format shall include pre- and post-development runoff rates and volumes.

The remainder of this section will provide basic information for the hydrologic calculations. As discussed, the intent of the Manual is not to provide detail on every aspect of hydrologic computations, their limitations, assumptions, appropriateness of use, but rather general guidance on generally accepted standards. This Manual does, however, reference suggested materials as necessary for detailed discussion of related topics.

3.2.1 Precipitation Depths/Intensities

The precipitation depths/intensities corresponding to various return periods to be used for projects in Lexington County are shown in Table 3.1.

Table 3.1: Design storm precipitation data for Lexington County, South Carolina

Design Storm Event	First-Flush	1-yr	2-yr	5-yr	10-yr	25-yr	50-yr	100-yr
Intensity (inches/24 hours)	1st ½" or 1" of runoff	3.1	3.6	4.5	5.3	6.4	7.3	8.3

3.2.2 Recommended Methodologies

The PW/SWD recommended methods and corresponding design circumstances are listed in Table 3.2 and 3.3 below. If other methods are used, approval must first be given by PW/SWD. Complete source documentation must be submitted for approval.

Table 3.2: Recommended methodologies based on land disturbance area

Method	Size Limitations*	Comments
(Modified) Rational Method	0 – 2 Acres	Acceptable for sizing individual culverts or storm drains that are not part of a pipe network or system. Not to be used for storage design.
"SCS Method" (TR-55)	0 – 2000 Acres	Used for estimating peak flows from urban areas.

USGS Regression Equation	> 2000 Acres	Used for estimating peak flows for all design applications for areas between 2,000 and 16,000 acres and estimating hydrographs for all design applications for areas between 128 and 16,000 acres.

*Size limitations refer to the subwatershed size to the point where a stormwater system component (i.e., culvert, inlet, BMP) is located.

Details of Rational Method and Modified Rational Method can be found in Chow (1988), ASCE (1996), USDA (1996), and Mays (2001). Documentation on the commonly used SCS (or NRCS) Method can be found on the US Department of Agriculture website (http://www.wcc.nrcs.usda.gov/hydro/hydro-tools-models-tr55.html). The USGS regression equations for South Carolina can be obtained from the US Geological Survey website (http://water.usgs.gov/osw/programs/nffpubs.html). Haan, C. T., Barfield, B. J., and Hayes, J. C. (1995) and USDT (1996, 2001) can also be referenced for greater detail on hydrology calculations and assumptions.

Table 3.3: Recommended hydrologic methods for designing various stormwater managment systems and controls

Method	Rational Method	SCS Method	USGS Equations
Extreme Flood Protection		+	+
Storage/Sedimentation Facilities		+	+
Outlet Structures		+	+
Gutter Flow and Inlets	+	+	
Storm Drain Pipes	+	+	+
Culverts	+	+	+
Small Ditches	+	+	+
Open Channels		+	+
Energy Dissipation		+	+

Soil types in Lexington County range from sands and sandy clays to clays. Appendix D contains a soil map of Lexington County. Existing land use and corresponding runoff potential factors should be obtained from the site visit and other appropriate sources. Appropriate runoff potential factors can be found in several of the references listed in the Chapter 6.

Methods for calculating the time of concentration and abstraction are numerous. However, a minimum time of concentration of six (6) minutes shall be used for all hydrologic calculations. See references given above for the suggested methodologies for information on these calculations.

Hydrographs should be used to evaluate entire systems by routing storm events through pipe or storage systems. The use of a hydrograph will provide better insight into system performance

than simply using the peak discharge. Lexington County will accept commonly used computer models. New models may be accepted with appropriate documentation.

3.3 Water Quantity Control Requirements

Water quantity control is an integral component of overall stormwater management. Its purpose is to negate the effects of stormwater runoff associate with land use changes due to development during storm events. The following design criteria are established for water quantity control.

1. All permanent stormwater management facilities associated with new and redevelopments shall be designed and constructed to detain the excess runoff volume difference between the pre-development and post-development conditions for the 2 and 10-year 24-hour storm events for a period of 24-hours. To assist with design constraints, a tolerance may be given for peak flow rate matching for all storm events. A discussion on design procedures are presented in Section 3.3.2.

2. Post-development discharge rates shall not exceed pre-development discharge rates for the 2, 5, 10, and 25-year frequency 24-hour duration storm events. The same hydrologic procedures shall be used in determining both the pre-development and post-development peak flow rates.

3. Post-development discharge velocities shall be reduced to provide non-erosive flow velocities from structures, channels or other control measures, or equal the pre-development 10-year 24-hour storm event flow velocities, whichever is less. These should be considered onsite in addition to 600 ft downstream from the proposed project.

4. For post construction the detention volume from all controls shall be drained from the structure within 72 hours. During construction detention volumes can be temporarily stored to allow settling of particles. During construction basins can be temporarily undercut to handle sediment storage. Upon project finalization pond elevations must be per the approved plans.

5. Infiltration devices shall be required on those sites which do not currently discharge stormwater runoff or have no existing outlet. In such cases, in the post-development condition, devices shall be designed to infiltrate the runoff volume equivalent to the 5-year storm event. For evaluating storm events with a return interval greater than 5 years, the discharge rate from the site shall be limited to (not exceed) that of a site of equivalent size and slope with a SCS Curve Number equal to 39. See Section 3.8.7 for more information.

6. Watersheds that have documented water quantity problems may have more stringent or modified design criteria determined by the PW/SWD or as dictated by State and Federal Regulations. Some examples of variable criteria include but are not limited to:

a. Post-development discharge rates from the entire development area not exceeding pre-development discharge rates for storm frequencies greater than the 25-year storm event,

b. Post-development discharge volumes from the entire development area not exceeding pre-development discharge volumes for storm frequencies smaller than the 2-year storm event,

c. Reduction of peak flow rates below pre-development levels,

d. Downstream channel, culvert, or property improvements.

7. Water quality waivers may be granted on a case-by-case basis. Final approval of a waiver request will be given at the discretion of the PW/SWD. A water quantity waiver doesn't excuse water quality considerations. A project may be eligible for a waiver from the stormwater management requirements for water quantity control if the applicant can justly verify the following items;

   a. The proposed project will not create any significant adverse effects on the receiving storm water system downstream of the property, and

   b. The imposition of peak flow rate or volume control for stormwater management would create, aggravate, or accelerate downstream flooding or cause a detrimental impact to the downstream ecosystem.

   c. The design engineer shall sign the following statement, "The increased flows will not have a significant adverse impact on the downstream and adjacent properties".

8. An analysis shall be required for all development sites disturbing more than 2 acres to determine the impacts on downstream areas based on the 10-, and 100-year 24-hour storm events unless a waiver or variance is granted. Downstream analysis shall determine whether the design storm events of interest cause or increase flooding, pollution, or erosion impacts to downstream properties, road crossings, and others areas as directed by the PW/SWD. Applications for permit coverage should discuss this impact, the degree of the impact, and potential solutions. The analysis criteria shall include, but is not limited to:

   a. Existing land use curve numbers shall be used for developed areas outside of the project area.

   b. The weighted curve number for the developed portion of the site shall be used for all undeveloped upstream areas.

   c. Flows should be routed using an accepted hydrologic and hydraulic method.

d. Hydraulic step-backwater calculations (Corps of Engineer's HEC-2 or HEC-RAS models or equivalent) may be required by the PW/SWD based on several factors, such as the severity of potential impact and location of project.

e. The discussions should include the severity of impact on any upstream and proposed storm water quantity or quality structure.

If the downstream analysis determines that the development of a particular site does contribute to flooding, pollution, or erosion problems, then appropriate controls shall be implemented:

9. All quantity controls that are also used for water quality control shall have a forebay or screening vault for removal of debris and coarse sediments. The benefit of the forebay is that it inhibits the main wet pond from filling up with large particles, therefore allowing the main pond to maintain its original design volume.

a. Forebays shall be placed upstream of the main pond storage area.

b. Unless a separate vault is to be used for the forebay, the forebay shall be separated from the larger detention are by barriers or baffles that may be constructed of earth, stones, riprap, gabions, or geotextiles. The barrier and/or baffles act as a trap for coarse sediments and minimize their movement into the main pond.

c. Maintenance of forebays will be needed more frequently than the main storage area and all designs, maintenance schedules should consider this need.

10. Documentation on the design, installation, and maintenance of stormwater quantity facilities can be found in Paine, J., and Akan, A., (2001), ASCE & WEF (1994), and Mays (2001).

3.3.1 Accepted Quantity Controls

Detention structural controls are used for providing water quantity control and are typically used downstream of other minor structural controls. These structures are designed to provide channel protection, overbank flood protection, and protection against adverse downstream impacts that are related to the increase in peak flow rates and flow volumes from land disturbing activities. Detention structural stormwater controls accepted by PW/SWD are shown in Table 3.4.

Table 3.4: Accepted quantity controls

General Structural Control	Description
Dry Detention/Dry Extended Basins	Dry detention basins and dry extended detention basins are surface storage facilities

General Structural Control	Description
	intended to provide temporary storage of stormwater runoff and releasing it at a designed flow rate to reduce downstream water quantity impacts. These structures are designed to completely drain to a dry condition within 72 hours.
Wet Storm Water Detention Basins • Wet Pond • Wet Extended Detention Pond • Micropool Extended Detention Pond • Multiple Pond System	Wet detention basins are constructed stormwater basins that have a permanent pool or micropool of water. Runoff from each rain event is detained above the permanent pool and released at a designed flow rate to reduce downstream water quantity impacts. Permanent pool depths must be ≥ 4 feet to reduce mosquito breeding.
Multi-purpose Detention Areas	Multi-purpose detention areas are used for one or more specific activities such as parking areas and rooftops. These areas are used to provide temporary storage of runoff. Some of the multi-purpose area such as infiltration trenches or bio-retention areas may also be used for water quality purposes.
Underground Detention	Underground detention is used as an alternative to surface dry-detention basins. They are used in areas that are space-limited where there is not enough adequate land to provide the required detention volume. The underground storage utilizes tanks, vaults, and buried pipes to supply the required storage volume.
Infiltration Basins	Infiltration basins are used to remove runoff from the flow path into the ground. They are used in areas that currently do not discharge stormwater or create runoff only during large storm events.

3.3.2 Design Procedures

This section provides the general procedures for the design of stormwater quantity structures. The following items shall be required for the design of these structures and routing flows through them:

1. Compute the inflow hydrograph for the structure for the 2, 5, 10, 25, and 100-year 24-hour storm events for both the existing and proposed conditions. From this,

determine peak flow rates for each storm. Also compute volume from existing conditions for the 2 and 10-year storm events.

2. Compute a stage-storage relationship for the proposed structure. A stage storage-curve defines the relationship between the depth of water and storage volume within the detention facility. Stage-storage and stage-discharge calculations should be included in the engineering calculations.

3. Compute stage-discharge relationship of the outlet control structure(s). A stage-discharge curve defines the flow capacity of a structure at a given stage or elevation. Also compute outlet barrel capacity and discharge velocity for energy dissipation design.

4. Perform routing calculations for the 2, 5, 10, 25, and 100-year storm events.

5. Determine the cumulative volume released from the facility at the end of 24-hours.

6. Compare the two volumes and two peak discharges. The volume released from the pond for the 10-year storm event should be less than or equal to the pre-development conditions. The peak discharge rate from the pond should less than or equal to the peak discharge rate for the pre-development conditions for the 2, 5, 10, and 25-year storm events, unless the PW/SWD allows a tolerance for peak flow matching. Finally, check to make sure the discharge hydrograph from the 100-year storm event does not overtop the banks of the facility.

7. Evaluate the control structure outlet flow velocity and provide velocity control and channel stabilization. Drawings and details should be provided for outlet structures and basin.

8. Concentrated flow from any discharge point shall be returned to the overland flow condition.

3.4 Water Quality Control Requirements

Water quality control is an integral and required component of overall stormwater management systems to preserve the water resources of Lexington County. New development and re-development projects must include controls that treat or otherwise limit the discharge of pollutants. These requirements are due to state and federal requirements. Because this is a requirement of stormwater design, this section provides background information, references, and design standards addressing water quality.

3.4.1 Background of Urban Storm Water Runoff Quality

Table 3.5 provides information on the major sources and associated pollutants that impact the waters of Lexington County.

Table 3.5: Typical stormwater pollutants and sources

Pollutant Source	Pollutants of Concern
Erosion	Sediments and attached soil nutrients (numerous nitrogen and phosphorus forms), organic matter, and other adsorbed pollutants.
Atmospheric Deposition	Hydrocarbons emitted from automobiles, dust, metals, nutrients, and other chemicals released from industrial and commercial activities.
Roadways/Transportation related areas	Hydrocarbons emitted from automobiles, dust, metals,
Construction Sites	Sediment, metals, paint, and wood preservatives.
Manufactured Products (Industrial land uses)	Heavy metals, phenols, and oils from automobiles, Zinc and Cadmium from tire wear.
Lawn and Landscape Maintenance	Fertilizer and pesticides.
Plants and Animals	Plant debris, animal excrement.
Septic Tanks	Coliform bacteria, nitrogen, NO_3.
Non-Storm Water Connections	Sanitary sewage, industrial wastewater, commercial discharge, and construction activities.
Accidental Spills	Pollutants of concern depend on the nature of the spill.
Animal Waste Management	Coliform bacteria, nitrates, and phosphorus.
Pesticide Applications	Pollutants of concern depend on the pesticide being used and the type of crop or pest being treated.
Land Disturbance Agriculture	Sediment and attached soil nutrients, organic matter, and other adsorbed pollutants.
Fertilizer Applications	Nitrogen and phosphorus.

Source: U.S. Environmental Protection Agency, June 1992.

3.4.1.1 Suspended solids

The most prevalent form of stormwater pollution is the presence of suspended matter that is either eroded by stormwater or washed off paved surfaces by stormwater. Suspended solids increase the turbidity of the receiving water, thereby reducing the penetration of light, resulting in decreased activity and growth of photosynthetic organisms. Also, elevated concentrations of suspended sediment alters stream nutrient biogeochemistry which impacts nutrient adsorption and desorption, processes very important to control over primary production and overall ecosystem health (Lee, 1996; Dent and Henry, 1999). The increased turbidity also detracts from the aesthetics of natural waters. In addition, the clogging of fish gills has been attributed to the presence of suspended solids. Combined sewer overflows typically contain high suspended solids concentrations. The solids that settle in the receiving water pose long-term threats resulting from their oxygen demand and gradual accumulation of toxic substances (Moffa, 1990), as well as reducing primary production. Sedimentation and other forms of physical separation are often an effective means of removing suspended solids from stormwater.

Sediment is derived from a variety of sources, including erosion from disturbed areas, washoff of sediment deposited on impervious areas, and detachment of sediment due to the increased stream power that comes from increased flow rates and flow durations with urbanization. A significant number of models are available to predict total suspended solids (TSS) contributions from "clean" sediment (i.e. no attached potential pollutants), but few of the models have parameters specific to urbanized areas. Most of the models were developed to deal with agricultural soils, and their application to urban areas is limited.

Models that do have capabilities that have been used for predicting urban clean sediment include SWMM, SEDPRO, SWAT, and SEDCAD models. For the models to be effectively utilized in sizing BMPs, predictions must be made of time varying quantities as well as the size distribution. Those distributions must be of the aggregated particles, not just the primary particles.

3.4.1.2 Oxygen demanding matter and bacteria

Sufficient levels of dissolved oxygen (DO) in the water column are necessary to maintain aquatic life, growth, and reproductive activity, as well as to maintain aerobic conditions. The introduction of stormwater containing oxygen-demanding organic matter can impair the receiving water quality by reducing the DO levels such that it is unable to sustain certain forms of aquatic life and can further cause the water to become foul. Bacteria enter the stormwater drainage system typically from the washoff of animal feces and organic matter from the catchment surface, possibly even disturbed soil. Bacteria also may enter the stormwater system and ultimately natural waters through leaking sewer systems (lateral connections, manholes, and industrial or commercial drains, etc.) and malfunctioning septic system, all of which are termed illicit discharges and illegal by Lexington County Stormwater Management Ordinance. Organic matter, usually in the form of vegetation and detritus, is carried through the conveyance system by the stormwater. Pathogenic bacteria and viruses in stormwater discharges pose human health threats. The removal of pathogenic bacteria is achieved primarily through the process of biological decay and physical-chemical disinfection where practiced. Presence of such bacteria is assumed based on the detection of indicator bacteria such as fecal coliforms or E-coli. The

reduction of bacteria in waters of the State has been the focus of TMDL efforts by SCHDEC to date.

3.4.1.3 Nutrients

Nitrogen and phosphorus are plant nutrients that promote the growth of plants and protista such as algae, and are the second leading stressor of impaired rivers and streams and the leading stressor of impaired lakes (US EPA, 1997). Such nutrients contribute to the eutrophication of water bodies resulting in a list of associated liabilities such as decreased oxygen supply, alteration of aquatic life, decreased recreational value (Novotny, 1985).

Nutrients are typically derived from agricultural runoff as well as runoff from chemicals applied to lawns in urbanized areas, runoff from industrial sites, municipal wastewaters (of more concern for combined sewer overflows), or dry fall onto impervious surfaces that is later washed into stormwater. Model studies indicate that the increase in nutrient loading due to increased imperviousness will be dramatic. For example, the increase in the Maryland Chesapeake Bay watershed due to increased urbanization is expected to range from 2 to 20 times the current load, depending on whether residential development is highly restricted or unrestricted (Houlahan, 1992). Nutrients can be removed from stormwater prior to discharge through biological uptake such as by plantings in stormwater quality control ponds.

Most models of nutrient loadings that have an extensive data base included have been based on agricultural and forest operations. These have applicability to washoff from fertilized lawns and forested areas but not to the impervious areas. Models of nutrient loading in urban runoff are typically based on washoff type calculations or user-defined loadings and concentrations, all of which require user-defined constants and relatively simple. A relatively new model called IDEAL, has additional treatment procedures for nutrients loads and removal using isothermic relationships that define adsorbed to dissolved nutrient ratios.

3.4.2 Accepted Water Quality BMPs

In selecting a BMP(s), it is most important to know what pollutants need to be treated to meet water quality goals. With proper planning, installation, and maintenance, BMPs are expected to reduce pollutant loads to receiving waters, reduce erosion, and provide health and safety benefits. Table 3.6 are average pollutant loadings for various land uses.

Table 3.6. Average Pollutant Loading for Various Land Uses (mg/l)

Land Use	Pollutant Loading (mg/l)											
	BOD	COD	TSS	TDS	TP	DP	TKN	NO2 / NO3	Pb	Cu	Zn	Cd
Forest/ Rural Open	3	27	51	415	0.11	0.03	0.94	0.80	0.000	0.000	0.000	0.000
Urban	3	27	51	415	0.11	0.03	0.94	0.80	0.014	0.000	0.040	0.001
Agricultural/ Pasture	3	53	145	415	0.37	0.09	1.92	4.06	0.000	0.000	0.000	0.000
Low Density Residential	38	124	70	144	0.52	0.27	3.32	1.83	0.057	0.026	0.161	0.004
Medium Density Residential	38	124	70	144	0.52	0.27	3.32	1.83	0.180	0.047	0.176	0.004
High Density Residential	14	79	97	189	0.24	0.08	1.17	2.12	0.041	0.033	0.218	0.003
Commercial	21	80	77	294	0.33	0.17	1.74	1.23	0.049	0.037	0.156	0.003
Industrial	24	85	149	202	0.32	0.11	2.08	1.89	0.072	0.058	0.671	0.005
Highways	24	103	141	294	0.43	0.22	1.82	0.83	0.049	0.037	0.156	0.003
Water/ Wetlands	4	6	6	12	0.08	0.04	0.79	0.59	0.011	0.007	0.003	0.001

Adapted from NURP (1983), Horner et. al (1994), and Cave et. Al. (1994)

BOD	=	Biochemical Oxygen Demand	TKN	=	Total Kjeldahl Nitrogen
COD	=	Chemical Oxygen Demand	NO_2/NO_3	=	Nitrates / Nitrites
TSS	=	Total Suspended Solids	Pb	=	Lead
TDS	=	Total Dissolved Solids	Cu	=	Copper
TP	=	Total Phosphorus	Zn	=	Zinc
DP	=	Dissolved Phosphorus	Cd	=	Cadmium

Fecal coliform (FC) concentrations were not provided in the table above due to the large variability. Guidance from SCHDEC and NURP (1983) should be sought when estimating existing and post-development bacteria loads and the reduction requirements.

Lexington County's current approved list of stormwater quality BMPs are listed in Table 3.7. References to BMP selection, effectiveness, and design can be found in SCDHEC (2005), ARC

(2001), Schueler (1987), and WEF & ASCE (1998). Guidance on applying BMPs into LID approaches can be found in PGC (1999 a and b). SCDHEC (2005) is provided in Appendix B.

Table 3.7: Accepted quality controls

General Structural Control	Description
Wet Ponds	Wet stormwater ponds are constructed stormwater basins that have a permanent pool or micropool of water. Runoff from each rain event is detained and treated in the pool, and released at a designed rate.
Stormwater Wetlands	Stormwater wetlands are natural or constructed systems used for stormwater management. Stormwater wetlands consist of a combination of shallow marsh areas, open water and semi-wet areas above the permanent water surface.
Bioretention Areas	Bioretention areas are shallow stormwater basins or landscaped areas that utilize engineered soils and vegetation to capture and treat stormwater runoff. Runoff may be returned to the conveyance system or partially exfiltrate into the soil.
Sand Filters	Sand filters are multi-chamber structures designed to treat stormwater runoff through filtration, using a sand bed as its primary filter media. Filtered runoff may be returned to the conveyance system or partially exfiltrate into the soil.
Infiltration Trenches	An infiltration trench is an excavated trench filled with stone aggregate used to capture and allow infiltration of stormwater runoff into the surrounding soils from the bottom and sides of the trench.
Enhanced Grassed Swales	Enhanced swales are vegetated open channels that are explicitly designed and constructed to capture and treat stormwater runoff within dry or wet cells formed by check dams or other structures.
Engineered Devices • Vortex Separator • Baffles • Cartridges • Skimmers • Bioretention • Gravity Oil-Grit Separator • Filter Material • Sedimentation • Inlet inserts • Constructed wetland uptake.	Pre-fabricated controls use the movement of stormwater runoff through a specially designed structure to remove target pollutants. They are typically used on smaller commercial sites and urban hotspots. There are numerous commercial vendors of these structures, but there is limited data on the performance of these structures. Until further research is done and substantial removal efficiencies are published, these structures may require monitoring.

Some structural BMPs have limited applications and are recommended to be used in conjunction with other BMPs. Limited application controls may be used within a system of water quality controls and are very effective pre-treatment structures for the controls listed in Table 3.7. Limited application structural controls should be designed and used only in development situations where regular maintenance is guaranteed. Types of limited stormwater controls are shown in Table 3.8.

Table 3.8: Limited structural controls

Limited Structural Control	Description
Vegetated Filters • Filter Strip • Grassed Channels and Swales	Both filter strips and grassed channels provide filtering of stormwater runoff as it flows across the vegetation. However, by themselves these controls do not consistently obtain adequate sediment and pollutant removal. Both filter strips and vegetated channels shall be used as pretreatment measures or part of a treatment system approach.
Submerged Gravel Wetland Systems	Submerged gravel wetlands use wetland plants in a submerged gravel or crushed rock media to remove stormwater runoff pollutants. These systems should only be used in mid- to high- density environments where other structural controls will be utilized.
Small Sand Filters • Surface Sand Filter • Perimeter Sand Filter	Sand filters are multi-chamber structures designed to treat stormwater runoff through filtration, using a sand bed as its primary filter media. Filtered runoff may be returned to the conveyance system or partially exfiltrated into the soil.
Porous Paver Systems	Porous paver systems consist of open void paver units laid on gravel subgrade to promote stormwater infiltration. Porous pavers provide water quality and quantity benefits.

Regardless of the control, maintenance schedules should be included for each BMP proposed. This will provide adequate planning and cost allocation to the owner and Lexington County.

3.4.3 Design Requirements

3.4.3.1 General Requirements

The following design criteria are established for water quality control and shall be incorporated by the use of BMPs for a given project area unless a specific water quality waiver is granted by the PW/SWD. Incorporation of these requirements shall constitute adequate control of the discharge of pollutants.

1. All sites which disturb five (5) acres or greater shall have permanent BMPs installed. Stormwater discharges to special protection areas with sensitive resources are subject to additional performance criteria (See Section 3.9).

2. Permanent water quality ponds and water quality structures having a permanent pool elevation shall be designed to store the first ½-inch of runoff from the contributing area of the site and release the accumulated water quality volume (WQV) over a minimum period of 24-hours.

3. Permanent water quality structures not having a permanent pool elevation shall be designed to store the first 1-inch of runoff from the contributing area of the site and release the WQV over a minimum period of 24-hours.

4. Engineered devices that are designed to treat the runoff volume from a project area may be substituted for a permanent water quality pond, if appropriate.

5. BMPs used strictly for water quality that will be capturing five (5) or more acres shall have a pretreatment device as part of the BMP or treatment system. This may include forebays, vaults, or other devices that remove debris and coarser sediments from the drainage system.

6. Projects that discharge either directly or indirectly into an impaired waterbody as determined by the existence of an adopted TMDL by SCDHEC or through SCDHEC's listing of the waterbody on the latest 303(d) list shall be required to reduce pollutant loads so as to meet applicable water quality standards. More background information is covered in Section 3.9. This will require the installation and implementation of measures which are expected to adequately reduce pollutant loads to levels required by the TMDL or prevent future impairments as required by the current 303(d) list.

   If the site disturbs less than 25 acres, an evaluation of the BMPs chosen to control the release of pollutants must be provided. Such evaluations may reference published values on BMP effectiveness. If greater than 25 acres, a comprehensive quantitative and qualitative analysis shall be provided, and include at a minimum calculations that show:

a. a sites pollutant load for all pollutants of concern (see Table 3.5),

b. the trapping effectiveness of the chosen BMPs based on County rainfall statistics and soil types, and

c. the runoff discharged through the last water quality BMP shall have a water quality level equal to or better than the in-stream standard or as required by an applicable TMDL.

7. All BMPs must have a maintenance plan. Suggested schedules and routine activities are provided in SCDHEC (2005).

8. A credit system may be available from the PW/SWD that offers alternatives on how a site meets these water quality requirements. However, state minimum stormwater criteria must be met.

9. The PW/SWD reserves the right to require specific effluent limits for any pollutant from a site if necessary to ensure the water quality standards and other local, state, and federal water quality regulations are met. The PW/SWD also reserves the right to not allow credits at certain sites.

10. Disconnected roof drains/impervious are areas directing stormwater runoff from rooftops towards pervious areas where it is allowed to filter through vegetation and other landscaped material and infiltrate into the soil.

11. Grass and porous pavements allow for the reduction of paved areas by incorporating areas that are infrequently used, providing water quality benefits through increased infiltration. Grass and porous pavements should be avoided in high vehicular traffic areas.

12. Literature, signage, or other documentation shall be provided to owners and HOAs to educate and train themselves on the impact they can have on water quality and the activities necessary to maintain structural controls, as appropriate. These efforts are particularly critical in LID designs.

3.4.3.2 Design Procedures

1. Determine an appropriate, accepted BMP(s) needed for the site, considering the land use, pollutants of concern (Table 3.5), soils, maintenance requirements, and location in relation to waters of the State and any impairments that may exist.

2. If the receiving water of the project is impaired or has an adopted TMDL the applicant must show that water quality standards are being met for the impairment. This analysis must be quantitative and qualitative for sites that disturb more than 25 acres. The appropriate steps include:

   a. Calculate the load for the pollutant(s) of concern. Another possible equation is the Schuler Simple Method (Schueler 1987). This method is

based on an extensive database obtained in Washington, D.C. for the National Urban Runoff Program (NURP). The Simple Method estimates pollutant loads from urban development by the following equation:

$$L = 0.227(Q \ P_j \ R_v \ C \ A) \qquad \text{Equation 1}$$

Where:

L = Pollutant load in pounds per desired time interval,
Q = Runoff depth,
½-inch for wet ponds, some wetlands,
1-inch for all other BMPs,
P_j = Fraction of rainfall events over the time interval that produce runoff
P_j = 1 for a single event
P_j = 0.9 for larger time intervals (months, years),
R_v = Volumetric runoff coefficient expressing the fraction of rainfall converted to runoff (See Equation 2),
C = Event mean pollutant concentration in mg/l (See Table 3.6),
A = Total area of site in acres (areas < 640 acres are recommended for this method).

The most important factor affecting the volumetric runoff coefficient (**R_v**) is the imperviousness of the watershed, **I**, in percent. An empirical relationship was developed that relates **R_v** and I as:

$$R_v = 0.05 + 0.09(I) \qquad \text{Equation 2}$$

The rainfall depth, P, was chosen such that a large percentage of storm events will be captured, with larger events only partially captured or bypassed. Greater than 80% of the average annual rainfall amount in Lexington County occurs from storm events with a total depth equal to or greater than 1-inch. The 1-inch from pervious areas is the result of approximately 4.5-inches of total rainfall, but it only takes a rainfall of 1.2 inches on impervious surfaces.

Other loading functions, such as in SEDPRO and SEDCAD for eroded particles or common buildup and washoff equations may be used.

b. Select appropriate BMPs from Tables 3.7 and the BMP Uses tables in the Appendix J.

c. Compute BMP effectiveness for removing pollutants of concern, showing at a minimum that the concentration of the pollutants of concern from the last BMP meets applicable water quality standards.

3. For other applicable sites and for the design of all BMPs, the minimum design criteria in section 3.4.3.1.1-5 must be met.

   a. If the BMP is to capture runoff from 5 or more acres, design a forebay or vault. Guidance on this aspect can be found in SCDHEC (2005) and ARC (2001).

   b. Calculate the water quality volume using the following equation.

$$WQV = \frac{Q * DA}{12} \qquad \text{Equation 3}$$

   Where:
   WQV = Water quality volume (acre-feet)
   Q = runoff depth inches (½ for permanent pool structures, 1.0 for dry structures)
   DA = Drainage area to water quality BMP (acres). Runoff from the entire site must be captured in a water quality BMP, unless otherwise allowed by the PW/SWD (e.g. credits).

   c. Compute the inflow hydrograph for the structure for 1-inch or ½-inch, 24-hour storm event, as necessary, for the proposed condition. Note – this is the 1-inch **runoff** event.

   d. Unless already known from the quantity calculations detailed in section 3.3.2, compute stage-storage and stage-discharge relationships of the outlet control structure(s).

   e. Perform routing calculations for the 1-inch or ½-inch, 24-hour storm event through the BMP. These may be done by hand, or may be done by using a storage routing computer model.

   f. Determine if the entire volume from the 1-inch or ½-inch, 24-hour storm event was released before the 24-hour point. If is does, the outlet is too large. Resize outlet structure.

   g. Repeat Steps d-f until entire volume is not released prior to 24-hours. This procedure is commonly accomplished using a low-flow orifice and the 2-year discharge level is not reached.

   h. For engineered devices, alternative calculations other than detailed here should be provided. SCDHEC has accepted some such devices as providing adequate treatment as compared to capturing and detaining the 1-inch storm event.

   i. Provide all calculations in submittal package in a cohesive, easy to follow organization.

3.4.4 Water Quality Buffer Requirements

A water quality buffer area is a strip of undisturbed native vegetation that borders streams, rivers, ponds, lakes, wetlands, and seeps. Buffer areas are most effective when stormwater runoff is flowing as shallow sheet flow rather than in concentrated flow conveyance. Therefore, it is critical that design include management practices that result in stormwater runoff flowing through the buffer areas as shallow sheet flow. Buffers are required along all shorelines, wetlands, and all perennial and intermittent streams shown on a USGS Quadrangle Topographic Map or as determined by the PW/SWD.

3.4.4.1 General requirements

A water quality buffer areas are required along all perennial and intermittent stream waterways and wetlands as identified on a 7.5 USGS quadrangle map, USACE, or as determined by the PW/SWD.

1. In areas where a floodway profile has been computed as part of an approved flood study, the buffer area shall be the width of the floodway plus at least fifty (50) feet perpendicular from the edge of the floodway on each side of the waterway, or one hundred (100) feet perpendicular from the top of bank on each side of the waterway, whichever is greater.

2. In areas where a floodway profile has not been computed as part of an approved flood study, the buffer area shall be at least fifty (50) feet perpendicular from the top of bank on each side of the waterway.

3. For delineated wetlands, the buffer area shall consist of the extent of the delineated wetlands plus twenty (25) feet extending perpendicular beyond the wetland edge.

3.4.4.2 Water quality buffer width adjustments

Adjustments to the buffer width shall be made for the following conditions:

1. If there are 15% to 24% slopes which are within the required buffer area, the buffer width must be adjusted to include additional twenty (20) feet on each side of the waterway.

2. If there are 25% or greater slopes which are within the required buffer area width, the buffer width must be adjusted to include additional fifty (50) feet.

3. If the adjacent land use involves drain fields from on-site sewage disposal and treatment system (i.e., septic systems), subsurface discharges from a wastewater treatment plant, or land application of bio-solids or animal waste, the buffer area width must be adjusted to include an additional fifty (50) feet.

4. If the land use or activity involves the storage of hazardous substances or petroleum facilities, the buffer area width must be adjusted to include an additional 100 feet.

5. If the land use or activity involves raised septic systems or animal feedlot operations, the buffer area width must be adjusted to include an additional 200 feet.

6. If the land use or activity involves solid waste landfills or junkyards, the buffer area width must be adjusted to include an additional 250 feet.

3.4.4.3 Water quality buffer management and maintenance

The function of the water quality buffer area is to protect the physical and ecological integrity of the waterway, to reduce flooding potential, and to filter runoff from residential and commercial development.

1. Management of the water quality buffer areas include specific limitations on alteration of the natural conditions. The following practices and activities are restricted within the water quality buffer area, except with prior approval of PW/SWD.

    a. Clearing or grubbing of existing vegetation,

    b. Soil disturbance by grading, stripping, or other practices,

    c. Filling or dumping, and

    d. Use, storage, or application of pesticides, herbicides, and fertilizers.

2. The following structures, practices, and activities are permitted in the water quality buffer area, subject to the prior approval of the PW/SWD.

    a. Stream crossing, paths, and utilities

        i. An analysis needs to be conducted to ensure that no economically feasible alternative is available,

        ii. The right of way should be the minimum width needed to allow for maintenance access and installation,

        iii. The angle of a crossing shall be perpendicular to the stream or buffer in order to minimize clearing requirements,

        iv. The minimum number of crossing shall be used within each development, and no more than one crossing is allowed for every 1000 linear feet of buffer area. Where possible, the design of

roadways and lots within a development shall be aligned such that all streams are either to the rear or the side of individual lots, never along the front.

b. Individual trees within the water quality buffer area may be removed if in danger of falling, causing damage to dwellings or other structures, or causing blockage of the stream. The root wad or stump shall be left in place, where feasible, to maintain soil stability.

3. All water quality buffer areas must be protected during development activities. Prior to the initiation of development activities, ensure adequate visibility of the water quality buffer area by staking and flagging. Permanent boundary markers, in the form of signage approved by PW/SWD shall be installed prior to the completion of the development activities.

4. All water quality buffer areas shall be maintained through a declaration of protective covenant, which is required to be submitted for approval by the PW/SWD. The covenant shall be recorded in the registry of deeds and shall run with the land and continue in perpetuity.

5. All lease agreements must contain a notation regarding the presence and location of the protective covenants for water quality buffer areas, and shall contain information on the management and maintenance requirements for the water quality buffer areas fro any new resident.

6. All water quality buffer areas shall be noted on all plans and plats for recording. The extent of the buffer shall be shown by metes and bounds and labeled as "Water Quality Buffer Area". Provide notation that "There shall be no clearing, grading, construction or disturbance of soil and/or native vegetation except as permitted by the PW/SWD". Also, " Any water quality buffer area shown hereon is subject to protective covenants which may be found in the Registry of Deeds.

3.5 Sediment and Erosion Control Requirements

PW/SWD requires that a sediment and erosion control plan (SECP) be submitted and approved prior to initiating construction on land disturbing activities that are in excess of 5,000 square feet, require a building permit, or as otherwise directed by PW/SWD. This plan describes the practices and controls that will be used during and after construction to meet the following goals:

1. Minimize the extent and duration of disturbed soil exposure,

2. Protect off-site and downstream locations, drainage systems and natural waterways from the impacts of erosion and sedimentation,

3. Limit the exit velocities of the flow leaving the site to non-erosive or pre-development conditions, and

4. Design and implement an ongoing inspection and maintenance plan.

3.5.1 Allowed SECP BMPs

The various types of SECP BMPs that are acceptable for use in Lexington County are presented in this section. These fall into the following categories: erosion prevention measures, temporary sediment control measures, runoff controls and conveyance measures and temporary and permanent vegetation measures.

3.5.1.1 Erosion prevention measures

Erosion prevention measures shall be used during and after construction. Measures that fall into this category along with their preferred application are provided in Table 3.9. Details on each of these measures are not discussed in detail in the Manual. Guidance documents that should be referenced as necessary include: SCDHEC (2003), Haan, C. T., Barfield, B. J., and Hayes, J. C. (1995) and Shwab, Glenn O. and Richard K. Frevert (1985). Other practices, such as engineered devices, will be allowed as long as sufficient evidence is presented as to its effectiveness. Standard drawings, if available, can be found in Appendix I.

Table 3.9 Erosion Prevention BMP Suggested Uses

BMP	Slope Protection	Waterway Protection	Surface Protection	Enclosed Drainage	Large Flat Areas	Borrow Areas	Adjacent Properties
Erosion Prevention Measures	X	X	X	X	X	X	X
Surface Roughening	X		X				
Bench Terracing	X		X				
Temporary Seeding	X		X		X	X	X
Mulching	X				X	X	
Erosion Control Blankets (ECB) and Turf Reinforcement Mats (TRM)	X	X	X			X	
Final Stabilization	X		X		X		X
Topsoiling			X		X		
Permanent Seeding and Planting of Grasses	X		X		X		X
Permanent Ground Cover Plants	X		X				X
Sodding	X		X		X		X
Riprap or Aggregate	X	X	X				
Outlet Protection		X		X			X
Dust Control					X	X	X
Polyacrylamide (PAMs)	X		X	X	X	X	X

3.5.1.2 Temporary sediment control measures

Lexington County emphasizes preventative measures as the main control to protect against erosion, both during and following construction. However, there are typically instances where erosion prevention measures alone do not provide sufficient control. For these situations, temporary sediment controls shall be implemented to control the migration of eroded sediment off site. The sediment control measures are typically only applicable as practices for use during construction. One or more of the measures should be utilized as appropriate during the project's construction phase. Table 3.10 contains a list of some of the suggested controls of this type along with their intended use. Details on these and others measures are not discussed in detail in the Manual, however, guidance can be found in Haan, Barfield, and Hayes (1995) and Appendix C in SCDHEC (2003). Other practices, such as engineered devices, will be allowed as long as sufficient evidence is presented as to it effectiveness. Standard drawings, if available, can be found in the Appendix I.

Table 3.10 Temporary Sediment Control BMP Suggested Uses

BMP	Slope Protection	Waterway Protection	Surface Protection	Enclosed Drainage	Large Flat Areas	Borrow Areas	Adjacent Properties
Temporary Sediment Control Structures	X	X	X	X	X	X	X
Storage Volumes and Maintenance Schedules		X		X			X
Temporary Sediment Basin		X	X	X			X
Multipurpose Basin		X	X	X			X
Temporary Sediment Trap		X	X				X
Silt Fence	X	X					X
Rock Ditch Check			X				X
Stabilized Construction Entrance					X		X
Storm Drain Inlet Protection		X		X			X
Vegetated Filter Strips		X					X
Rock Sediment Dike		X	X				X

3.5.1.3 Runoff controls and conveyance measures

This category of SECP BMPs should be used as necessary during and following construction. Suggested varieties and their corresponding uses are provided in Table 3.11.

Table 3.11 Runoff Control and Conveyance BMP Suggested Uses

BMP	Slope Protection	Waterway Protection	Surface Protection	Enclosed Drainage	Large Flat Areas	Borrow Areas	Adjacent Properties
Pipe Slope Drains	X		X				
Temporary Stream Crossing		X	X				X
Runoff Conveyance Measures	X					X	X
Construction De-watering		X		X	X	X	
Level Spreader			X		X		X
Subsurface Drains			X		X		

3.5.1.4 Temporary vegetation

Plant Selection

Plant seed selection should be based on the type of soil and the season of the year in which the planting is to be done. Tables 3.12 and 3.13 should be used if you plan to use conventional tillage methods (plowing, seedbed preparation, hydroseeding, etc). If you need a fast growing crop to nurse your permanent specie or species, then use the mix rate. Failure to carefully follow agronomic recommendations often result in an inadequate stand of temporary vegetation that provides little or no erosion control.

Tillage

If the area has been recently plowed, no tillage is required other than raking or surface roughening to break any crust that has formed and to leave a textured surface. If the soil is compacted less than 6-inches, it should be disked for optimal germination.

Soil Testing

Information and test provider is available from the PW/SWD and the Soil and Water Conservation District Office.

Lime

Lime is not required for temporary seeding unless a soil test shows that the soil pH is below 5.0. It may be desirable to apply lime during the temporary seeding operation to benefit the long-term permanent seeding. Apply a minimum of 1.5 tons of Lime/acre (70 pounds per 1000 square feet) if it is to be used.

Fertilizer

A minimum of 500 pounds per acre of 10-10-10 fertilizer (11.5 pounds per 1000 square feet) or equivalent should be applied during temporary seeding unless a soil test indicates a different requirement. Fertilizer and lime (if used) should be incorporated into the top 4-6 inches of the soil by disking or other means where conditions allow.

Seeding

The surface of the soil should be loosened just before broadcasting the seed. Seed should be applied evenly by the most convenient method available for the type of seed to be used and the location of the temporary seeding. Typical application methods include but are not limited to cyclone seeders, rotary spreaders, drop spreaders, broadcast spreaders, hand spreaders, cultipacker seeder, and hydro-seeders. Cover applied seed by raking or dragging a chain, and then lightly firm the area with a roller or cultipacker.

Mulching

Mulch should be used in all permanently seeded areas to retain soil moisture and reduce erosion during establishment of vegetation. The mulch should be applied evenly in such a manner that it provides a minimum of 75% coverage. Typical mulch applications include straw, wood chips, bark, wood fibers, compost much or hydro-mulches. The most commonly accepted mulch used in conjunction with temporary seeding is small grain straw. This straw should be dry and free from mold damage and noxious weeds. The straw may need to be anchored with netting or emulsions to prevent it from being blown or washed away. The straw mulch may be applied by hand or machine at the rate 1.5 - 2 tons per acre (90 pounds per 1000 square feet). Frequent inspections are necessary to check that conditions for growth are good.

Irrigation

Seeded areas should be kept adequately moist. Irrigate the seeded area if normal rainfall is not adequate for the germination and growth of seedlings. Water seeded areas at controlled rates that are less than the rate at which the soil can absorb water to prevent runoff. Runoff of irrigation water wastes water and can cause erosion.

Re-seeding

Areas where the plants do not grow quickly, thick enough, or adequately to prevent erosion should be re-seeded with temporary grasses as soon as such areas are identified.

Table 3.12 Temporary vegetation schedule

Species	**Rates (lbs/acre)**	**Optimum Dates to Plant**	Remarks
Browntop Millet (Alone)	40	April 20 - August 15	Quick, Dense Cover
Browntop Millet (Mix)*	10	April 20 - August 15	Quick, Dense Cover

Species	Rates (lbs/acre)	Optimum Dates to Plant	Remarks
Rye Grain (Alone)	56	February - March, August 15 - November 20	Quick Cover
Rye Grain (Mix)*	10	February - March, August 15 - November 20	Quick Cover
Rye Grass (Alone)	50	August 10 - October 10	Competitive, Dense
Rye Grass (Mix)*	8	August 10 - October 10	Competitive, Dense

* For details on mixes consult the Lexington Soil and Water Conservation District, (803) 359-3165 ext. 3.

Table 3.13 Temporary vegetation for steep slopes/cut slopes

Species	Rates (lbs/acre)	Optimum Dates to Plant	Remarks
Weeping Lovegrass (Alone)	4	April - July 20	Quick cover, deep roots, likes dry sites, seldom used alone, clumps
Weeping Lovegrass (Mix)*	2	April - July 20	Quick cover, deep roots, likes dry sites, seldom used alone, clumps

* For details on mixes consult the Lexington Soil and Water Conservation District, (803) 359-3165 ext. 3.

3.5.1.5 Permanent vegetation

Plant Selection

Plant seed selection should be based on the type of soil, the season of the year in which the planting is to be done, and the needs and desires of the permanent land user. Tables 3.14 and 3.15 should be used to select the desired species to be planted. Failure to carefully follow agronomic recommendations often result in an inadequate stand of permanent vegetation that provides little or no erosion control. The rates in Tables 3.14 and 3.15 are based on purity and germination standards required for certification.

The following notes apply to Tables 3.14 and 3.15.

1. In mixtures with temporary cover, the full seeding rate of permanent cover shall be used.

2. Mix means 2 or more long term species plus short term species. For dates other than optimum, call the Lexington Soil and Water Conservation District, (803) 359-3165 ext. 3.

3. A legume, such as a clover, crown vetch, and serecia should be used where it is possible.

4. The appropriate inoculants should be used.

Topsoil

If the surface soil of the seedbed is not adequate for plant growth, topsoil should be applied.

Tillage

If the area has been recently plowed, no tillage is required other than raking or Surface Roughening to break any crust that has formed and to leave a textured surface. If the soil is compacted less than 6-inches, it should be disked for optimal germination. If the soil is compacted more than 6-inches, it should be sub-soiled and disked.

Soil Testing

Information and test provider is available from the PW/SWD and the Soil and Water Conservation District Office.

Lime

Unless a specific soil test indicates otherwise, apply 1½ tons of ground course textured agricultural limestone per acre (70 pounds per 1000 square feet).

Fertilizer

A minimum of 1000 pounds per acre of a complete 10-10-10 fertilizer (23 pounds per 1000 square feet) or equivalent should be applied during permanent seeding of grasses unless a soil test indicates a different requirement. Fertilizer and lime (if used) should be incorporated into the top 4-6 inches of the soil by disking or other means where conditions allow. Do not mix the lime and the fertilizer prior to the field application.

Seeding

The surface of the soil should be loosened just before broadcasting the seed. Seed should be evenly applied by the most convenient method available for the type of seed to be applied. Typical application methods include but are not limited to cyclone seeders, rotary spreaders, drop spreaders, broadcast spreaders, hand spreaders, cultipacker seeder, and hydro-seeders. Cover applied seed by raking or dragging a chain or brush mat, and then lightly firm the area with a roller or cultipacker. Do not roll seed that is applied with a hydro-seeder and hydro-mulch.

Mulching

All permanent seeded areas should be covered with mulch immediately upon completion of the seeding application to retain soil moisture and reduce erosion during establishment of vegetation. The mulch should be applied evenly in such a manner that it provides a minimum of 75% coverage. Typical mulch applications include straw, wood chips, bark, wood fiber, and compost mulch. The most commonly accepted mulch used in conjunction with permanent seeding is small grain straw. This straw should be dry and free from mold damage and noxious weeds. The straw may need to be anchored with netting or asphalt emulsions to prevent it from being blown or washed away. The straw mulch may be applied by hand or machine at the rate 2 tons per acre (90 pounds per 1000 square feet). Frequent inspections are necessary to check that conditions for growth are good.

Irrigation

Permanent seeded areas should be kept adequately moist, especially late in the specific growing season. Irrigate the seeded area if normal rainfall is not adequate for the germination and growth of seedlings. Water seeded areas at controlled rates that are less than the rate at which the soil can absorb water to prevent runoff. Runoff of irrigation water wastes water and can cause erosion.

Re-seeding

Inspect permanently seeded areas for failure, make necessary repairs and re-seed or overseed within the same growing season if possible. If the grass cover is sparse or patchy, re-evaluate the choice of grass and quantities of lime and fertilizer applied. If the permanent seeding has less than 40% cover, have the soil tested to determine any acidity or nutrient deficiency problems.

Final stabilization by permanent seeding of the site requires that it be covered by a 70% coverage rate.

Post-Stabilization

Once areas are stabilized they can be converted to native species or for establishing on non-critical, level sites. Table 3.16 lists some native species of Lexington County that can be used.

Table 3.14 Permanent vegetation schedule

Species	**Rates (lbs/acre)**	**Optimum Dates to Plant**	Remarks
Bahia Grass (Alone)	40	March 20 - June 15	Slow to become established
Bahia Grass (Mix)*	30	March 20 - June 15	Slow to become established
Bermuda Grass (Hulled) (Alone)	8-12	April - July 15	Quick cover, Sod forming, partial winter kill

Species	Rates (lbs/acre)	Optimum Dates to Plant	Remarks
Bermuda Grass (Hulled) (Mix)*	4-6	April - July 15	Quick cover, Sod forming, partial winter kill
Fescue, Tall (KY31) Alone	40	August 15 - October	Seldom seeded alone, not for dry or wet sites
Fescue, Tall (KY31) Mix*	20	August 15 - October	Seldom seeded alone, not for dry or wet sites
Sericea Lespedeza (Scarified) Alone or Mix*, (Innoculate with EL Innoculant)	40	April - June	Good for slopes, cuts, and fills that require low maintenance
Ladino Clover (Mix* only), (Innoculate with AB Innoculant)	2	August 20 - October	Naturally adds nitrogen

* For details on mixes consult the Lexington Soil and Water Conservation District, (803) 359-3165 ext. 3.

Table 3.15 Permanent vegetation schedule for steep slopes/cut slopes

Species	Rates (lbs/acre)	Optimum Dates to Plant	Remarks
Weeping Lovegrass (Alone)	4	April – July 20	Quick cover, deep roots, likes dry sites, seldom used alone, clumps
Weeping Lovegrass (Mix)*	2	April – July 20	Quick cover, deep roots, likes dry sites, seldom used alone, clumps
Crownvetch (Mix*) (Innoculate with Type M Innoculant)	8-10	March - April	2 years to establish, no mowing, green all year, 20” maximum height

* For details on mixes consult the Lexington Soil and Water Conservation District, (803) 359-3165 ext. 3.

Table 3.16 Native species that can be used on non-critical, level sites in Lexington County, SC

Species	Rates (lbs/acre)	Optimum Dates to Plant	Remarks
Switchgrass (Mix* with Legumes)	10, PLS**	February 10 – April 20	Mix with Serecia at 30 lbs/acre
Indian Grass (Mix)*	8, PLS**	February – April 20	Mix with Serecia at 30 lbs/acre

Little Bluestem, (Mix*)	8, PLS**	February 10 – April	

* For details on mixes consult the Lexington Soil and Water Conservation District, (803) 359-3165 ext. 3.
**Pure Live Seed

3.5.2 Design Requirements

3.5.2.1 General Requirements

1. SECP plans shall be developed to achieve an eighty (80) percent sediment trapping efficiency. When a site is denuded of vegetation, the structural and nonstructural SECP measures are designed to trap eighty (80) percent of the total suspended solids (TSS) or 0.5 ML/L peak settable solids concentration (SSC), which ever is less, that are generated by the site. The design storm event associated with this level of control is the 10-year, 24-hour SCS Type II storm event. Calculations shall be provided to show adherence to this criteria.

2. A sediment basin is required when ten (10) or more acres of disturbed land area drain to a single outlet point. Such basins shall be designed to have a design effluent concentration of 0.5 mg/L peak SSC or 80 percent trapping efficiency, whichever is less. These basins shall be limited to controlling runoff for a maximum of thirty (30) acres. Sediment traps shall not have more than five (5) acres draining to them.

   Activities that disturb between one (1) and five (5) acres of land area that do not drain to a single outlet point may incorporate practices other than a sediment basin to achieve an equivalent trapping efficiency.

3. Silt fencing shall be placed at the toe of all fill slopes and soil berms. When used on cleared and/or graded areas silt fence shall not have more than ¼ acre draining per 100 feet of silt fence length. The maximum slope length draining to the fence is 100 feet and the maximum gradient draining to the fence is 2H:1V.

4. The following nonstructural site management practices shall be utilized on the plans where applicable:

   a. Minimize site disturbance to preserve and maintain existing vegetative cover,

   b. Limit the number of temporary access points to the site,

   c. Protect off-site and downstream locations, drainage systems and natural waterways from the impacts of sedimentation and erosion,

   d. Phase and sequence construction activities to limit the extent and duration of disturbed soil exposure to 10 acres and 14 days, respectively, and

e. Implement an ongoing inspection and maintenance plan. Suggested maintenance schedules are given in SCDHEC (2005).

5. Sediment storage volumes shall be calculated for all sediment controls to determine the required clean out frequencies and maintenance schedules. The Universal Soil Loss Equation (USLE) and subsequent modifications or other acceptable methods that determine sediment yield may be used to predict the required sediment storage volumes for specific sediment control structures.

6. To encourage the development and testing of innovative alternative SECP BMPs, alternative management practices that are not included in the Manual may be allowed upon review and approval by the PW/SWD. To use an alternative BMP, the design professional shall submit substantial evidence that the proposed measure will perform at least equivalent to currently approved BMPs contained in the Manual. Evidence may include, but is not limited to:

   a. Supporting hydraulic and trapping efficiency calculations.

   b. Peer-review by a panel of licensed professional engineers.

   c. Research results as reported in professional journals.

   d. Manufacturer literature.

7. Detailed SECPs shall comply to the maximum extent practicable with the following specific standards and review criteria:

   a. Sediment tracking control shall be implemented using stabilized construction entrances that are to be located and utilized at all points of ingress/egress on a construction site. The transfer of soil, mud, and dust onto roads shall be prevented.

   b. Crossings of waterways during construction should be minimized and must be approved by the PW/SWD and the USACE. Encroachment into stream buffers, riparian areas, and wetlands should be avoided when possible.

   c. Topsoil shall be stockpiled and preserved from erosion or dispersal both during and after site grading operations when applicable.

   d. Where construction or land disturbing activities will or have temporarily ceased on any portion of a site, temporary site stabilization measures shall be required as soon as practicable, but no later than fourteen (14) calendar days after the activity has ceased. Hydroseeding as often as possible is encouraged. Stabilization of disturbed areas is one of the best approaches for sediment and erosion control.

e. All slopes must be stabilized though grassing, hydroseeding, synthetic or vegetative matting, diversion berms, temporary slope drains, etc. and must be performed within 2 working days after the necessary grading has been achieved.

f. Final stabilization of the site shall be required within fourteen (14) calendar days of construction completion. Final stabilization is defined as having a density of 70% density permanent vegetation across 100 percent of the site.

g. Temporary structural controls installed during construction shall be designed to accomplish maximum stabilization and sediment and erosion control. These structures shall be installed, maintained, and removed according to the specifications set forth in this Manual. Temporary structural controls may be removed after permanent controls have been installed.

h. All permanent structural controls, including drainage facilities such as channels, storm drainage inlets, and detention basins, shall be cleaned out as part of the project closeout/Notice of Termination (NOT) process.

i. Linear projects (utility lines, road construction, etc.) over, under, or along a waterbody shall include measures and controls which adequately protect the water body from undue impact. Such work shall not be performed without approval from USACE/SCDHEC. In addition, such work should be coordinated with the installation of sediment and erosion control measures so that disruption is minimized. Every effort should be made to install utilities during the initial construction phases. Trench sharing is encouraged to the extent practicable. For all linear projects, where the utility contractor disturbs the site where temporary or permanent vegetation has been established, it shall be the responsibility of the utility contractor to re-vegetate the disturbed area. This shall include compaction within the trenches.

8. The grading plan should include the following general measures as a minimum:

a. For maintenance purposes, the finished cut and fill slopes to be vegetated with grass and shall not be steeper than 3H:1V. Steeper slopes should be avoided or have adequate walls installed.

b. Cuts or fills shall not be closer than twenty (20) feet of property lines as to endanger adjoining property without adequately protecting such properties against erosion, sedimentation, slippage, settlement, subsidence, or other damages.

c. Subsurface drainage should be provided in areas having a high water table to intercept seepage that would affect slope stability, bearing strength or create undesirable wetness.

d. No fill shall be placed where it can slide or wash onto another property.

e. Fill shall not be placed adjacent to channel banks where it can create bank failure, reduce the capacity of the stream, or result in downstream sediment deposition.

f. All borrow and disposal areas should be included as part of the grading plan.

g. Adequate channels should be provided to safely convey increased runoff from the developed area to an adequate outlet without causing significant channel degradation, or increased off-site flooding.

h. The site should be graded to direct flows to appropriate controls.

9. SECP plan shall have the following information contained with in a cohesive, easy to follow organization:

a. Location of all sediment and erosion control structures on construction documents,

b. Delineation of all buffers, sensitive features (wetlands, streams, ponds, existing stormwater structures, etc.), and potential sediment sources that could affect these areas,

c. Installation sequencing and maintenance schedules for all SEPC BMPs during and after construction,

d. Provisions to preserve topsoil and limit the amount of total disturbed area,

e. Details of site grading,

f. Design details and computations for all SEPC structures,

g. Protection of all storm drain inlets and outlets,

h. For sites which disturb more than five (5) acres, a list or calculation of the trapping efficiency for all SECP BMPs, as applicable,

i. For sites which disturb greater than five (5) acres, calculations of required sediment storage volumes for all SECP BMPs, as applicable,

j. Explanation of any computer models or software used with summaries and/or notes on the output data,

k. Location of temporary and permanent soil disposal areas, haul roads, and construction staging areas to minimize erosion, sediment transport, and disturbance to existing vegetation, and

l. All necessary certifications by the person responsible for the activity. This includes the NOI application and maintenance covenants.

m. Proper preparation of the SECP and the SWPPP, if necessary, by a registered engineer, landscape architect, Tier B land surveyor, or other qualified Federal Government employee.

3.5.2.2 Design procedures

The design procedures will vary depending on the SECP BMP installed. SCDHEC has two handbooks, the BMP Handbook (SCDHEC 2005) and the Stormwater Management and Sediment Control Handbook (SCDHEC 2003) that provide the procedures and equations needed to design the EPSC BMPs listed in Tables 3.9 – 3.16. Proper design must be complemented with proper installation and routine maintenance in order for BMPs to be effective and adhere to the provisions of this Manual.

3.6 Stormwater Drainage System Design

This section provides the design requirements for various storm drainage/collection system components including:

1. Storm drainage pipes:

   a. Storm drainage lines shall be staked at each box or at intervals that would be sufficient to check alignment and grade of the construction with the approved plans. The use of lasers to augment control is encouraged.

   b. The minimum size storm drainage pipe allowable shall be fifteen (15) inches in diameter.

   c. The minimum allowable slope for storm drainage pipe shall be one-half of one (1) percent (0.005 ft/ft) or a minimum flow velocity of three (3) feet per second at all flow levels. Maximum allowable slope for storm drainage pipe is twenty (20) percent (0.20 ft/ft).

   d. Side property line drainage ditches shall be piped to the right-of-way at a minimum. Drainage system installation must be such that stormwater discharge is not concentrated on adjacent property owners and the velocities below erodable limits for the soils at the discharge point. At pipe outfalls, this normally requires the use of a rip-rap apron, placed on filter fabric and lightly grouted, for a minimum distance equal to or greater than six (6) pipe diameters.

e. Type and class of storm drainage pipe, as well as the construction of pipe culverts, shall be in accordance with Sections 714 and 715 of the SCDOT specifications. The proposed use of any type of storm drainage pipes other than RCP shall be considered on a case by case basis.

f. A minimum of one (1) foot of cover shall be provided for RCP storm drainage pipe; for RC and LC/I roads, pipe shall be placed at least six (6) inches below the base course. See Chapter 4 – Road Design for specific information on road classes and other related information.

g. Storm drainage pipe shall be placed to minimize length running under pavement. Where it is necessary for a pipe to cross the roadway, it preferably shall be placed at a ninety (90) degree angle, and in no case at less than forty-five (45) degrees. All cross lines in the roadway shall be compacted in 12" lifts to 95% Standard Proctor maximum density and to 100% Standard on the last 12".

h. Any "open" storm drainage cross line pipe shall extend out to the toe of the roadway embankment; in no case will the end of the pipe be within five (5) feet of the roadway shoulder.

i. Storm drainage pipe discharging into a drainage channel shall intersect the channel in a manner such that the interior angles measured from their centerlines of flow, is greater than, or at most equal to ninety (90) degrees. Rip-rap, or other suitable protection, is required from the outlet point to the bottom of the channel and on the opposite channel bank to prevent scour and erosion.

j. Storm drainage pipe discharging into a wet pond or lake shall have the discharge invert above the permanent pool elevation. Rip-rap or other energy dissipation structures shall be placed from the outlet point to pool level.

k. A maintenance access point shall be available within every 300 feet for 15-18" diameter pipe, every 400 feet for 24" pipe, and every 500 feet for larger storm drainage lines.

l. The 100-year 24-hour storm event shall be used to check all drainage designs for local flooding, and possible flood hazards at adjacent structures and/or property.

m. Hydraulic grade line and head loss calculations for determining water surface elevations shall be performed for connections to existing systems.

n. Calculations should be performed for the appropriate design storm event.

o. For storm drainage systems with less than 10 connections, Manning's Equation shall be acceptable for sizing the capacity of drain pipes for non-submerged conditions where the free water surface elevation is below the crown of the pipes.

p. Storm drain profile plots should be included in the set of construction plans.

q. Storm drainage systems shall be designed to convey stormwater runoff by gravity flow unless otherwise approved.

r. For very flat flow lines, flow velocities shall increase progressively throughout the system. Upper reaches of the pipe system may have flatter slopes than the lower end of the system.

s. Minimum fill cover on all pipes shall be 1-foot, unless stated otherwise by a pipe manufacturer or the PW/SWD. The maximum cover shall be based on the design loads which are calculated from pipe shape, size, material, and location (See Section 4.0)

2. Culverts:

a. Proper consideration of inlet and outlet control shall be given in the design of culverts and outlets.

b. The pipe, appurtenant entrance and outlet structure should properly account for water, bed-load, and floating debris at all stages of flow.

c. There should be no unnecessary or excessive cause of property damage.

d. The outlet should be designed to resist undermining and washout.

e. Culvert selection techniques can range from solving empirical formulas, to using nomographs and charts, to comprehensive mathematical analysis for specific hydraulic conditions. Other widely accepted models may be used, but must be approved by the PW/SWD. Designs shall be based upon SCDOT requirements where applicable.

f. Additional hydraulic capacity shall be required as necessary to prevent backwater effects that may adversely impact upstream property or structures.

g. A complete study of culverts and design considerations is provided in USDOT 2001a.

3. Headwalls and Outlets:

All exposed ends of pipes shall be protected by a flared end section (limited to pipes 36" or less in diameter) or one of the following type headwalls:

a. A concrete or brick headwall plastered with grout is preferred; it is required on culvert ends located in major drainage channels as previously defined. An acceptable design detail is provided in Appendix I.

b. A rip-rap headwall is acceptable for pipes 24" or less in a number of situations. If used, it should conform to the standard details provided in Appendix I. Note that this technique requires the use of both filter fabric and grout.

c. Outfalls must discharge through a natural buffer area a minimum of fifty (50) feet in width from the property line and must go through some type of energy dissipater to slow the velocity of water.

d. Outlets will not be allowed to discharge on fill slopes.

4. Energy Dissipation:

a. All outlets should be sufficiently stabilized. Calculations shall be provided justifying the design and material used (e.g. riprap aprons geometry and diameter).

b. If riprap aprons are used, filter fabric is to be installed beneath all riprap.

c. Level spreaders, plunge pools, etc. shall be properly designed and installed at the proposed outlet(s).

5. Catch basins, yard inlets, manholes, and junction boxes:

a. Materials and construction shall be as specified in Section 719 of the SCDOT specifications.

b. Side inlet catch basins or junction boxes (see details in Appendix I) with concrete covers shall have a metal ring and manhole lid cast within the top for easy access (e.g. pull holes in lid).

c. When the depth of a catch basin or junction box exceeds four (4) feet, rungs/steps shall be provided for ascent and descent (Steps are to be ASTM-C-478, or equivalent).

d. The box top shall be a minimum of three (3) feet by three (3) feet. Sides shall be plastered with grout.

e. All pipes entering or leaving shall not protrude more than four (4) inches into the box.

All roadway catch basins shall be Modified Florida Type Catch Basins, with details as shown in Appendix I.

f. Yard inlets shall be designed to accommodate a given flow such that ponded water is removed within 24 hours, does not cause flooding to adjacent buildings or other interests. As long as these criterion are met, the depth of ponded water is allowed to exceed the top of the manhole lid by no more than 6 inches for the appropriate design storm.

g. It is desirable to locate catch basins outside curve radii. If this is not reasonably possible, the catch basin shall be set back an extra foot and the face of the catch basin shall be parallel to a chord joining the two points on the curve radius located by projecting lines from the sides of the catch basin box.

h. Catch basins shall contain a minimum drop of 0.2 feet from invert in to invert out.

i. Floors are to be of concrete and contain "formed troughs" to help channel flow.

j. Within a catch basin, the elevation at the crown of any inlet pipe shall be equal to or greater than the crown of the outlet pipe.

k. Catch basins shall be field staked to ensure proper catch basin inlet alignment with the street gutter line.

l. Area around all catch basins shall be backfilled in 12" lifts, compacted to 95% Standard Proctor maximum density.

m. Inlet protection shall be provided at all inlets into the stormwater system during construction and until project closure procedures have been completed or notification from the PW/SWD has been given stating that an acceptable level of stabilization has been achieved. Guidance on design, installation and maintenance of inlet protection can be found in SCDOT (2005).

n. Inlet spacing shall be based partly on the maximum spread of water into the road way. For the appropriate design storm, at least one full travel lane width must be available during the rain event for all residential collector (RC) and light commercial/industrial (LC/I) roads. Only ½ of a travel lane is necessary for residential/local (RL) road. Inlets upgrade of a road intersection, sag inlets, or the last inlet for a given system must be designed with sufficient capacity to handle the entire flow, such that there is no flow through/bypass.

o. Maximum depth in which the water may pond above or around an inlet must not threaten surrounding permanent structures or facilities including vehicular or pedestrian traffic.

p. Inlets placed in roadway gutter lines must be spaced to prevent flow from entering road intersections and to not exceed a maximum spread of 6-feet, or one-half of a travel lane, whichever is greater, and based on maximum inlet capacity.

q. In depth design procedures for inlet and storm sewer design may be found in AASHTO (1999), USDT (2001b), Mays, L., (2001), and Yen (2001).

r. All manhole lids and catch basins shall contain the Lexington County water quality logo. Contact the PW/SWD for information on how to obtain lids.

6. Detention/Retention Structures:

a. A pond's outside toe of slope shall be no closer than 20' from property boundary. Natural areas surrounding the outlet of the pond shall not be impacted by stormwater discharges.

b. All ponds shall have an emergency spillway designed to hold and safely pass the 100-year storm event. Earthen emergency spillways shall be designed so as not to overtop during the 25-year storm event. Larger ponds which fall under the purview of the Dams and Reservoirs Safety Act must comply with those regulations.

c. Ponds shall have a six (6) feet tall security fence around the perimeter of the pond parcel. The PW/SWD may relax this requirement if the pond is to be privately maintained.

d. Underground detention facilities shall be designed to account for periodic maintenance and in accordance with manufacturer recommendations.

e. Any development that uses a parking area or other feature for detention storage capacity shall clearly identify the limits and depths of the expected detention pool.

f. Basin configurations which create stagnant water conditions are to be avoided.

g. Ponds with vegetated embankments shall be less than 15-feet in height and shall have side slopes no steeper than 3H:1V. Embankments protected with erosion control blankets or turf reinforcement matting shall be no steeper than 2H:1V. Geotechnical slope stability analysis is required for slopes greater than 10-feet in height and embankments that have steeper slope than those indicated above. Access inside a pond shall be provided with at least one side slope at 3H:1V or flatter.

h. A minimum freeboard of 1-foot above the 100-year 24-hour design storm high water elevation shall be provided for all impoundments. The SC

Dam Safety Act may impose other restrictions and requirements on dam owners. SCDHEC should be contacted for further information.

i. The bottom of detention structures shall be graded towards the outlet structure(s) to prevent standing water conditions. A minimum 0.5% bottom slope and 3:1 side slope are recommended.

j. The maximum depth of permanent storage facilities with a permanent pool shall be determined by site conditions, design constraints, and environmental needs. The facility should provide a permanent pool of water with a depth sufficient to discourage weed and mosquito growth without creating undue potential for anaerobic bottom conditions. A depth of 4- to 8-feet is reasonable unless SCDNR requirements dictate otherwise. Aeration or other means shall be used as necessary to prevent anaerobic conditions (unless used to remove nutrients). SCDNR shall be contacted when aquatic habitat is required.

k. Infiltration basins. The following other criteria, based primarily on SC Code of Regulation Section 72-307.C requirements, shall be followed in the design of infiltration systems:

i. Areas draining to these practices must be stabilized and vegetative filters established prior to runoff entering the system. Infiltration practices shall not be used if a suspended solids filter system does not accompany the practice. If vegetation is the intended filter, there shall be, at least a 20 foot length of vegetative filter prior to stormwater runoff entering the infiltration practice. Forebays or other engineered devices for sediment removal may be prudent;

ii. Each system shall be designed to prevent clogging by fine material and for ease of maintenance;

iii. The bottom of the infiltration practice shall be at least 0.5 feet above the seasonal high water table, whether perched or regional, determined by direct piezometer measurements which can be demonstrated to be representative of the maximum height of the water table on an annual basis during years of normal precipitation, or by the depth in the soil at which mottling first occurs;

iv. The infiltration practice shall be designed to completely drain off water within 72 hours;

v. Soils must have adequate permeability to allow water to infiltrate. Infiltration practices are limited to soils having an infiltration rate of least 0.30 inches per hour. If the infiltration rate is greater than 0.3 but less than 2.0 inches/hour, then an underdrain system must be installed. Initial consideration will be based on a review of the

appropriate soil survey, and proposed depths of excavation. The soil survey may serve as a basis for rejection. On-site soil borings and textural classifications must be accomplished to verify the actual site and seasonal high water table conditions when infiltration is to be utilized;

vi. Infiltration practices greater than three feet deep shall be located at least 25 feet from basement walls;

vii. Infiltration practices designed to handle runoff from areas with a high potential for polluting groundwater shall be a minimum of 150 feet from any public or private water supply well;

viii. The design of an infiltration practice shall provide a properly sized overflow or bypass for larger storm events. Measures to provide a non-erosive velocity of flow along its length and at the outfall shall also be included as necessary. Additional control devices will typically be necessary prior to a release to a watercourse to meet water quality requirements;

ix. The slope of the bottom of the infiltration practice shall not exceed five percent. Also, the practice shall not be installed in fill material as piping along the fill/natural ground interface may cause slope failure;

x. An infiltration practice shall not be installed on or atop a slope whose natural or existing angle of incline exceeds 20 percent.

xi. If an underdrain system is required, clean outs will be provided at a minimum, every 100 feet along the infiltration practice to allow for access and maintenance.

xii. In cases where such criteria or limitations make the use of infiltration devices inappropriate, but no discharge currently leaves a given site, the runoff volume from the 5-year storm event shall still be detained on the site. The PW/SWD should be contacted for guidance on the appropriate controls to employ and to discuss the feasibility of development.

3.7 Open Channel Hydraulics

Open channels shall include all permanent storm drainage channels including swales and diversions. These storm drainage systems shall be designed based upon the following criteria:

1. All open channels are to be uniform and shall be stabilized to prevent erosion in a manner approved by the PW/SWD. A number of acceptable techniques are shown in the current version of the SCDHEC (2005).

2. The design of open channels shall be based on Manning's Formula where backwater effects from obstructions and/or tailwater is not present. Flow velocities must be non-erosive to soils present or the channel surfaces must be adequately lined, e.g., rip-rap, concrete. All channels in clayey soils shall be limited to a maximum flow velocity of five (5) feet per second. All channels in sandy soils shall be limited to a maximum flow velocity of 2.5 feet per second.

3. The minimum channel grade shall be 0.005 ft/ft, unless supporting calculations show that there will be no pools or standing water areas formed in the channels at smaller slopes.

4. Design conditions can be assumed to be steady, uniform flow.

5. Except for roadside ditches, the side slopes of grassed lined channels without erosion control blankets or turf reinforcement matting shall be no steeper than 3H to 1V.

6. Channels may be designed with multiple stage levels with a low flow section to carry the 2-year storm event and a high flow section to carry storms of larger frequencies.

7. Lexington County allows vegetated channels. Guidance on the design of these type channels can be found in Haan et. al. (1995) or by using computer software that is capable of calculating channel stability and capacity (See Table 3.17).

8. Additional hydraulic capacity may be required to prevent adverse impacts on adjacent property or the existing drainage system(s).

Table 3.17 Maximum permissible velocities for vegetated channels

	Permissible Velocity (ft./sec.)*					
	Erosion Resistant Soils % Slope			Easily Eroded Soils % Slope		
Cover	0-5	5-10	> 10	0-5	5-10	> 10
Bermuda Grass	8	7	6	6	5	4
Bahia Buffalo Grass Blue Gamma Centipede Grass Tall Fescue Kentucky Bluegrass Red Canary Grass	7	6	5	5	4	3
Grass-legume Mixture	5	4	NR	4	3	NR
Lespedeza Sericea						

Cover	Permissible Velocity (ft./sec.)*					
	Erosion Resistant Soils % Slope			Easily Eroded Soils % Slope		
	0-5	5-10	> 10	0-5	5-10	> 10
Weeping Lovegrass Kudzu Alfalfa Small Grains Temporary Vegetation	3.5	NR	NR	2.5	NR	NR

* Allow velocities over 5 ft/sec only where good cover and maintenance will be provided. If poor vegetation exists due to shade, climate, soils or other factors, the permissible velocity shall be reduced by 50 percent.
NR = Not Recommended
Sources: Elementary Soil and Water Engineering, Shwab et. al. and Hann et. al. (1995)

General guidance on open channel design can be found in USDT (1996, 2001).

3.8 Floodplain Provisions

The goal of this section of the Manual is to provide an overview of the requirements and procedures for proposed land development occurring in or altering of the 100-year floodplain (floodplain) and floodway. Development is defined by FEMA as any man-made change to improved or unimproved property including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations. For situations not addressed in this manual, the Lexington County Floodplain Manager may refer to various South Carolina Flood Mitigation Program and FEMA publications, policies and guidelines.

1. General Standards. Development may not occur in the floodplain where alternative locations exist due to the inherent hazards and risks involved. Before approval for development in the floodplain is given, the applicant shall demonstrate that new structures cannot be located out of the floodplain and that encroachments onto the floodplain are minimized. In all areas of special flood hazard, the following provisions are required:

    a. Anchoring - All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure;

    b. Flood Resistant Materials and Equipment - All new construction and substantial improvements shall be constructed with flood resistant materials and utility equipment resistant to flood damage;

    c. Minimize Flood Damage - All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damages;

d. Critical Development – All critical type developments, as defined by this Manual, shall be elevated to the 500 year flood elevation or be elevated to the highest known historical flood elevation (where records are available), whichever is greater. If no data exists establishing the 500 year flood elevation or the highest known historical flood elevation, the applicant shall provide a hydrologic and hydraulic engineering analysis that generates 500 year flood elevation data;

e. Utilities - Electrical, ventilation, plumbing, heating and air conditioning equipment (including ductwork), and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of the base flood plus 2 ft. This requirement does not preclude the installation of outdoor faucets for shower heads, sinks, hoses, etc., as long as cut off devices and back flow devices are installed to prevent contamination to the service components and thereby minimize any flood damages to the building;

f. Water Supply Systems - All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system;

g. Sanitary Sewage Systems – New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters; On-site waste disposal systems shall be located and constructed to avoid impairment to or infiltration of floodwaters during flooding;

h. Gas Or Liquid Storage Tanks – All gas or liquid storage tanks, either located above ground or buried, shall be anchored to prevent flotation or lateral movement resulting from hydrodynamic and hydrostatic loads;

i. Alteration, Repair, Reconstruction, Or Improvements - Any alteration, repair, reconstruction, or improvement to a structure that is in compliance with the provisions of the Stormwater Management Ordinance and this Manual shall be defined as Development.

j. American with Disabilities Act (ADA). A building must meet the specific standards for floodplain construction outlined in Section 2 below as well as any applicable ADA requirements. The ADA is not justification for issuing a variance or otherwise waiving these requirements. Also, the cost of improvements required to meet the ADA provisions shall be included in the costs of the improvements for calculating substantial improvement.

k. Outlet structures and emergency spillways for all controls, other than a retention or detention pond engineered as part of a stormwater system (e.g. flood control structure), that impede, encroach or alter a major drainage

channel or floodplain, must be capable of accommodating stormwater runoff from a 100-year storm event based on built-out conditions for the watershed

l. The risk to developments downstream of any dam in Lexington County shall be determined using a dam breach analysis method and the subsequent inundation zones determined by a dam breach hydrograph and flood routings. If the inundation zone is not available or undefined, a dam breach analysis will be required by the developer. The dam breach analysis method will be the "Sunny day" failure scenario for complete dam failure while the impoundment level is at the principal spillway crest. The dam breach hydrograph must be developed using BREACH, HEC-HMS or HEC-RAS (unsteady flow), DAMBRK software programs, or an approved equal. Flood routings must be performed using HEC-RAS (unsteady flow), FLDWAV and DAMBRK. The developer shall be responsible for determining the dam breach parameters so a breach outflow hydrograph can be developed and that resultant hydrograph routed downstream through the area of new development. The inundation zones within the new development will be treated as floodways under the Lexington County Stormwater Ordinance and all development in these areas will apply as such. As there are no tangible criteria for the requirement of a dam break analysis each downstream development will have to be determined on a case-by-case basis by the Floodplain Manager and/or the Plan Review Engineer. A preliminary breach routing analysis may be required to determine if the development will be effected by the breach.

m. All natural channels, creeks or rivers draining more than 300 acres. Encroachment upon these channels and the adjacent overflow land shall be avoided as much as possible. All unavoidable improvements such as culverts or bridges along these channels shall be designed to carry a flow resulting from a one hundred (100) year frequency storm.

If there are no detailed Flood Studies and Base Flood Elevations available in these areas, the applicant shall provide a detailed flood study delineating the 100-year flood plain and the floodway will be shown on the engineering plans and also on the final plat if applicable. In a subdivision, as defined by the Lexington County Subdivision Regulations, the property lines shall stop at the floodway line and the floodway shall be dedicated to Lexington County. In all other development activities, the plan shall identify all drainage ways.

2. Specific Standards. In all areas of special flood hazard (Zones A, AE, AH, AO, and A1-30,) where base flood elevation data has been provided, the following provisions are required:

a. Residential Construction. New construction or substantial improvement of

any residential structure (including manufactured homes) shall have the lowest floor, including basement, elevated to at least two (2) feet above the 100-year frequency flood elevation. If a building pad is used, the ground shall be sloped from the pad down to the 100-year frequency flood elevation over a distance of ten or more feet. In addition, all new construction and substantial improvements of residential structures have all mechanical and utility equipment, and air conditioner units, hot water heaters, washers, dryers, other similar equipment and their operating components, designed and/or elevated, to at least two (2) foot above the 100-year frequency flood elevation, to prevent water from entering or accumulating in its components. Under limited circumstances flood proofing (i.e. placement in water tight cases) may be allowed. No basements are permitted. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with the elevated buildings requirements in Section 2.d.

b. Non-Residential Construction. New construction or substantial improvement of any commercial, industrial, or non-residential structure (including manufactured homes) shall have the lowest floor elevated no lower than 2 feet above the level of the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with the elevated buildings requirements in Section d.3. No basements are permitted. Structures located in A-zones may be flood proofed in lieu of elevation provided that all areas of the structure below the required elevation are watertight with walls substantially impermeable to the passage of water, using structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered, professional engineer or architect shall certify that the standards of this subsection are satisfied. A variance may be considered for wet-flood proofing agricultural structures. Agricultural structures not meeting the wet-flood proofing criteria must meet the non-residential construction standards and all other applicable provisions of this manual. Structures that are flood proofed are required to have an approved maintenance plan. If manual flood proofing devices such as gates are utilized, then the maintenance plan must contain an annual exercise. The floodplain manager must approve the maintenance plan and notification of the annual exercise shall be provided.

c. Manufactured Homes:

i. Manufactured homes that are placed or substantially improved on sites outside a manufactured home park or subdivision, in a new manufactured home park or sub-division, in an expansion to an existing manufactured home park or subdivision, or in an existing

manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood, must be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated no lower than 2 feet above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement;

ii. Manufactured homes that are to be placed or substantially improved on sites in an existing manufactured home park or subdivision that are not subject to the provisions for residential construction in this manual must be elevated so that the lowest floor of the manufactured home is elevated no lower 2 feet than above the base flood elevation, and be securely anchored to an adequately anchored foundation to resist flotation, collapse, and lateral movement;

iii. Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement. For the purpose of this requirement, manufactured homes must be anchored to resist flotation, collapse, or lateral movement in accordance with Section 19-425.39 of the *South Carolina Manufactured Housing Board Regulations*, effective date May 25, 1990, as amended. Additionally, when the elevation requirement would be met by an elevation of the chassis at least 36 inches or less above the grade at the sight, reinforced piers or other foundation elements of at least equivalent strength shall support the chassis. When the elevation of the chassis is above 36 inches in height an engineering certification is required;

d. Elevated Buildings. New construction or substantial improvements of elevated buildings that include fully enclosed areas that are usable solely for the parking of vehicles, building access, or limited storage in an area other than a basement, and which are subject to flooding shall be designed to preclude finished space and be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters.

i. Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:

(1) Provide a minimum of two openings on different walls having a *total net area* of not less than one square inch for every square foot of enclosed area subject to flooding. The total net area is the total area of the opening minus the area of the louvers when open;

(2) The bottom of all openings shall be no higher than one foot above grade;

(3) Openings may be equipped with screens, louvers, valves, or other coverings or devices provided they permit the automatic flow of floodwaters in both directions;

(4) Fill placed around foundation walls must be graded so that the enclosed area can drain away from structure.

ii. Hazardous Velocities. Hydrodynamic pressure must be considered in the design of any foundation system where velocity waters or the potential for debris flow exists. If flood velocities are excessive (greater than 5 feet per second), foundation systems other than solid foundations walls should be considered so that obstructions to damaging flood flows are minimized;

iii. Enclosures below Base Flood Elevation (BFE):

(1) Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator);

(2) The interior portion of such enclosed area shall not be partitioned or finished into separate rooms, except to enclose a single storage area and must be void of utilities except for essential lighting as required, and cannot be temperature controlled;

(3) One wet location switch and/or outlet connected to a ground fault interrupt breaker may be installed below the required lowest floor elevation;

(4) All construction materials below the required lowest floor elevation should be of flood resistant materials and shall be constructed with no more than two (2) solid walls.

e. Floodways. Located within areas of special flood hazard are areas designated as floodways. The floodway is an extremely hazardous area due to the velocity of floodwaters that carry debris and potential projectiles and has erosion potential and may or may not be shown on the Flood Insurance Rate Map. The following provisions shall apply within such areas:

i. No encroachments, including fill, new construction, substantial

improvements, or other development shall be permitted in the floodway. Floodways may or may not be shown on the Flood Insurance Rate Maps (FIRM). In areas where floodways are not shown on the FIRM maps or stop short of a subject property, the Floodplain Manager will determine the floodway limits. This may be accomplished by extending the limits to the adjacent property, by a study done by the applicant and approved by the Floodplain Manager, by an existing or new study by the County or by relocating the proposed development sufficiently away from the waterway;

ii. If part a is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions;

iii. Stream crossings for any purpose (i.e. timber harvesting operations), if temporary, shall be permitted in accordance with floodway requirements and the temporary development provisions. Otherwise, the development shall comply with all applicable flood hazard reduction provisions of this section.

iv. No manufactured homes shall be permitted, except in an existing manufactured home park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring and the elevation standards are met;

v. Permissible uses within floodways may include: general farming, pasture, outdoor plant nurseries, horticulture, forestry, wildlife sanctuary, game farm, and other similar agricultural, wildlife, and related uses. Also, lawns, gardens, play areas, picnic grounds, and hiking and horseback riding trails are acceptable uses, provided that they do not employ structures or fill. Substantial development of a permissible use may require a no-impact certification. The uses listed in this subsection are permissible only if and to the extent that they do not cause any increase in base flood elevations or changes to the floodway configuration;

vi. Floodways that are created when converting an Approximate Zone (A) area to a detailed study area (AE) and that are located within new development shall be dedicated to the County via fee-simple or conservation easements;

vii. All floodway delineations that are created when converting an Approximate Zone (A) area to a detailed study area (AE) will be based on maximum ½ foot surcharge.

f. Recreational Vehicles:

i. A recreational vehicle is ready for highway use if it is:

(1) On wheels or jacking system;

(2) Attached to the site only by quick-disconnect type utilities and security devices;

(3) Has no permanently attached additions.

ii. Recreational vehicles placed on sites shall either be:

(1) On site for fewer than 180 consecutive days;

(2) Fully licensed and ready for highway use, or meet the development permit and certification requirements of Stormwater Management Ordinance, general standards outlined in Section 1, and manufacture homes standards in Section 2.c.

g. Map Revision Activities – The National Flood Insurance Program requires flood data to be reviewed and approved by FEMA. This ensures that flood maps, studies and other data identified accurately represent flooding conditions such that appropriate floodplain management criteria are based on current data.

Lexington County has determined that it is appropriate to require consideration of future land use conditions when preparing flood insurance studies. Hydraulic modeling shall be prepared using both conditions. The existing conditions model shall be used to modify the current effective FIRM; however, for purposes of Lexington County floodplain management, the County shall use the higher of the two (2) base flood elevations.

The following map change activities are identified:

i. Requirement to Submit Technical Data:

(1) For all development proposals that impact floodway delineations or base flood elevations, the applicant shall ensure that technical data reflecting such changes are submitted to the Lexington County Floodplain Manager. These development proposals include:

(a) Floodway encroachments that increase or decrease base flood elevations or alter floodway boundaries;

(b) Fill sites to be used for the placement of proposed structures where the applicant desires to remove the site from the special flood hazard area;

(c) Alteration of watercourses that result in a relocation or elimination of the special flood hazard area, including the placement of culverts;

(d) Subdivision or large scale development proposals requiring the establishment of base flood elevations.

(2) It is the responsibility of the applicant to have technical data prepared in a format required for a Conditional Letter of Map Revision or Letter of Map Revision, and submitted to FEMA. Submittal and processing fees for these map revisions shall also be the responsibility of the applicant;

(3) The Floodplain Manager shall require a Conditional Letter of Map Revision meeting the requirements of 44 CFR Part 65 prior to the issuance of a floodplain development permit for:

(a) Proposed floodway encroachments that increase the base flood elevation;

(b) Proposed development which increases the base flood elevation by more than one foot in areas where FEMA has provided base flood elevations but no floodway.

(4) Approvals issued by the Floodplain Manager shall be conditioned upon the applicant obtaining a Conditional Letter of Map Revision from FEMA for any development proposal;

(5) Within sixty (60) days of completion of construction, it is the responsibility of the applicant to have technical data and as-built drawings prepared in a format required for a Letter of Map Revision, and submitted to FEMA. Submittal and processing fees for these map revisions shall also be the responsibility of the applicant.

ii. Floodplain study general criteria - All floodplain studies shall follow the guidelines and procedures as set forth by the National Flood Insurance Program (NFIP) and Lexington County. The general criteria and requirements have been established to help

clarify the procedures related to performing floodplain studies in Lexington County are as follows:

(1) The project must be consistent with applicable State and Federal regulations;

(2) A professional engineer registered in the State of South Carolina shall prepare all studies;

(3) All hydraulic computer models acceptable by FEMA for use in floodplain studies can be used;

(4) The floodplain analysis shall include the 10-, 50-, 100-, and 500-year, 24-hour storm events;

(5) Hydrologic analyses should utilize projected future land use conditions based on the most updated data within the desired watershed;

(6) Backwater conditions, local obstructions, bridges, culverts, and stormwater conveyance systems shall be considered;

(7) Digital data shall have the following characteristics:

(a) Horizontal datum: NAD83 (1986) or referenced to the datum contained on the current effective FIRM;

(b) Coordinate system: UTM Zone 17;

(c) Vertical datum: NAVD29;

(d) Units: international feet;

(8) Data capture methods must result in new data meeting State and FEMA horizontal and vertical accuracy standards. See the current edition of FEMA's "Guidelines and Specifications for Study Contractors" for more information.

(9) Calculated flood boundaries shall be submitted in a digital format that is compatible with Lexington County's GIS data.

(10) Submitted information must include:

(a) FIRM panel number(s) that cover the project area and their latest date(s) and whether any portion of the project lies within a Special Flood Hazard Area;

(b) The application must be signed and stamped by a South Carolina Registered Engineer, Surveyor, or other qualified Federal Government employees and the applicant must sign the application;

(c) Hydrologic and hydraulic analyses must be contained in a report describing the study methodology, a listing of all assumptions (e.g., rationale for Manning's 'n' values, reasons for revising hydrology, source of topographic information and land use), bridge and cross section data, and a brief description of the project;

(d) All projects being submitted to FEMA must have a completed FEMA MT-1 or MT-2 form as appropriate. These forms can be obtained from the following:

FEMA Region IV
3003 Chamblee Tucker Road
Atlanta, Georgia 30341
(770.220.5400)
www.fema.gov

The South Carolina Department of Natural Resources
Flood Mitigation Program
2221 Devine Street, Suite 222
Columbia, South Carolina 29205
(803.734.9103)

h. Accessory Structures:

i. A detached accessory structure or garage which is greater than 500 square feet must comply with the requirements as outlined in FEMA's Technical Bulletin 7-93 *Wet Floodproofing Requirements or be elevated in accordance with Article IV Section B(1) and B (4) or dry flood proofed in accordance with Article IV B (2)*;

ii. When an accessory structure greater than 500 square feet is to be placed in the floodplain, the following additional criteria shall be met:

(1) Accessory structures shall not be used for human habitation (including work, sleeping, living, cooking, or restroom areas);

(2) Accessory structures shall be designed to have low flood damage potential;

(3) Accessory structures shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters;

(4) Accessory structures shall be firmly anchored to prevent flotation, collapse, or lateral movement of the structure;

(5) Service facilities such as electrical and heating equipment shall be installed in accordance with Section 1;

(6) Openings to relieve hydrostatic pressure during a flood shall be provided below base flood elevation in conformance with Section 2.d.

i. Swimming Pool Utility Equipment Rooms:

If the building can not be built at or above the BFE, because of functionality of the equipment then a structure to house the utilities for the pool may be built below the BFE with the following provisions:

i. Meet the requirements for accessory structures;

ii. The utilities must be anchored to prevent flotation and shall be designed to prevent water from entering or accumulating within the components during conditions of the base flood;

iii. A variance may be granted to allow wet flood proofing of the structure.

j. Elevators:

i. Install a float switch system or another system that provides the same level of safety is necessary for all elevators where there is a potential for the elevator cab to descend below the BFE during a flood per FEMA's Technical Bulletin 4-93 Elevator Installation for Buildings Located in Special Flood Hazard Areas;

ii. All equipment that may have to be installed below the BFE such as counter weight roller guides, compensation cable and pulleys, and oil buffers for traction elevators and the jack assembly for a hydraulic elevator must be constructed using flood-resistant materials where possible per FEMA's Technical Bulletin 4-93 Elevator Installation for Buildings Located in Special Flood Hazard Areas.

k. Temporary Development.

Certain types of structures (e.g. fruit stands, construction site offices, portable toilets, etc.) may be situated temporarily on flood-prone property without having to comply with the elevation or flood proofing criteria, respectively, provided that the following criteria are met:

i. All applicants must submit to the floodplain manager, prior to the issuance of the development permit, a written plan for the removal of any temporary structures or development in the event of a hurricane or flash flood warning notification. The plan shall be reviewed and approved in writing, and must include the following information:

(1) A specified time period for which the temporary use will be permitted;

(2) The name, address and phone number of the individual responsible for the removal of temporary structures or development;

(3) The time frame prior to the event at which any structures will be removed (i.e. minimum of 72 hours before landfall of a hurricane which threatens Lexington County or immediately upon flood warning notification);

(4) A copy of the contract or other suitable instrument with a trucking company to insure the availability of removal equipment when needed;

(5) Designation, accompanied by documentation, of a location outside the floodplain to which any temporary structure will be moved;

(6) A determination of permanent structures which would be adversely affected by increased flooding upstream or downstream, and a method for covering this liability, such as a performance bond;

(7) A plan to restore the area to its natural condition once the temporary permit expires or the temporary use is terminated, whichever is first.

ii. The structure is mobile, or can be made so, and is capable of being removed from the site with a maximum of four (4) hours warning;

iii. The structure will not remain on the property for more than 180 days.

l. Fill.

An applicant shall demonstrate that fill is the only alternative to raising the building to meet the residential and non-residential construction requirements, and that the amount of fill used will not affect the flood storage capacity or adversely affect adjacent properties. The following provisions shall apply to all fill placed in the special flood hazard area:

i. Fill may not be placed in wetlands without the required state and federal permits;

ii. Fill must consist of soil and rock materials only. Landfills, rubble fills, dumps, and sanitary fills are not permitted in the floodplain;

iii. Fill used to support structures must comply with ASTM Standard D-698, and its suitability to support structures certified by a registered, professional engineer;

iv. Fill slopes shall be no greater than two horizontal to one vertical. Flatter slopes may be required where velocities may result in erosion;

v. The use of fill shall not increase flooding or cause drainage problems on neighboring properties;

vi. Will meet the requirements of FEMA Technical Bulletin 10-01, *Ensuring That Structures Built On Fill In Or Near Special Flood Hazard Areas Are Reasonable Safe From Flooding.*

m. Standards for Subdivision Proposals within Special Flood Hazard Areas.

i. All subdivision proposals shall be consistent with the need to minimize flood damage and are subject to all applicable standards in these regulations;

ii. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage;

iii. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage;

iv. In all areas of special flood hazard where base flood elevation data are not available, the applicant shall provide a hydrologic and

hydraulic engineering analysis that generates base flood elevations and designated floodways for all subdivision proposals and other proposed developments containing at least 50 lots or 5 acres, whichever is less. If the site is less than 1000' to the downstream detailed study area, then BFEs and floodways must be established within the subject property and to the limits of the detailed study. If the site is greater than 1,000 feet, but less than 3,000 feet from a downstream detailed study area, then BFEs must be established to the limits of the detailed study area and a floodway must be established within the subject property, only. If the site is greater than 3,000 feet from a detailed study area, then BFEs and a floodway must be established within the subject property, only.;

v. If the areas of special flood hazard is identified as an area of open space and is deeded as such then a hydrologic and hydraulic engineering analysis that generates base flood elevations for the subdivision proposal would not be required;

vi. The applicant shall meet the requirement to submit technical data to FEMA in Section 2.g. when a hydrologic and hydraulic analysis is completed that generates base flood elevations;

3. Standards for Streams without Established Base Flood Elevations and/or Floodways: Located within the areas of special flood hazard (Zones A), are small streams where no base flood data has been provided or where no floodways have been identified. The following provisions apply to single lot construction within such areas:

a. No encroachments, including fill, new construction, substantial improvements or new development shall be permitted within 50 feet of the stream bank unless certification with supporting technical data by a registered, professional engineer is provided demonstrating that such encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge;

b. If part a is satisfied and base flood elevation data is available from other sources, all new construction and substantial improvements within such areas shall comply with all applicable flood hazard ordinance provisions and shall be elevated or flood proofed in accordance with elevations established in accordance with the Stormwater Management Ordinance;

c. Data from preliminary, draft, and final Flood Insurance Studies constitutes best available data. Refer to FEMA Floodplain Management Technical Bulletin 1-98 *Use of Flood Insurance Study (FIS) Data as Available Data*. If an appeal is pending on the study in accordance with 44 CFR Ch. 1, Part 67.5 and 67.6, the data does not have to be used;

d. When base flood elevation data is not available from a federal, State, or other source one of the following methods may be used to determine a BFE. For further information regarding the methods for determining BFEs listed below refer to FEMA's manual *Managing Floodplain Development in Approximate Zone A Areas*:

i. Contour Interpolation:

(1) Superimpose approximate Zone A boundaries onto a topographic map and estimate a BFE;

(2) Add one-half of the contour interval of the topographic map that is used to the BFE.

ii. Data Extrapolation - A BFE can be determined if a site within 500 feet upstream of a reach of a stream reach for which a 100-year profile has been computed by detailed methods, and the floodplain and channel bottom slope characteristics are relatively similar to the downstream reaches.

Hydrologic and Hydraulic Calculations - Perform hydrologic and hydraulic calculations to determine BFEs using FEMA approved methods and software.

4. Standards for Streams with Established Base Flood Elevations but without Floodways. Along rivers and streams where Base Flood Elevation (BFE) data is provided but neither floodway are identified for a Special Flood Hazard Area on the FIRM or in the FIS. The following provision applies within such areas.

No encroachments, including fill, new construction, substantial improvements, or other development, shall be permitted unless certification with supporting technical data by a registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one-half foot at any point within the community.

5. Standards for Areas of Shallow Flooding (AO Zones). Located within the areas of special flood hazard, are areas designated as shallow flooding. The following provisions shall apply within such areas:

a. All new construction and substantial improvements of residential structures shall have the lowest floor elevated to the depth number specified on the Flood Insurance Rate Map, in feet, above the highest adjacent grade. If no depth number is specified, the lowest floor shall be elevated at least four (4) feet above the highest adjacent grade;

b. All new construction and substantial improvements of non-residential structures shall:

i. Have the lowest floor elevated to the depth number specified on the Flood Insurance Rate Map, in feet, above the highest adjacent grade. If no depth number is specified, the lowest floor shall be elevated at least four (4) feet above the highest adjacent grade;

ii. Be completely flood proofed together with attendant utility and sanitary facilities to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

6. Historic Structures.

Variances may be issued for the repair of rehabilitation of historic structures upon the determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.

7. Agricultural Structures.

Variances may be issued to wet flood proof an agricultural structure in accordance with Technical Bulletin 7-93, *Wet Flood proofing Requirements for Structures Located in Special Flood Hazard Areas in accordance with the National Flood Insurance Program*, document number FIA-TB-7, dated 12/93, and available from the Federal Emergency Management Agency. In order to minimize flood damages during the base flood and the threat to public health and safety, the structure must meet the following standards:

a. Use of the structure must be limited to agricultural purposes as listed below:

i. Pole frame buildings with open or closed sides used exclusively for the storage of farm machinery and equipment;

ii. Steel grain bins and steel frame corncribs;

iii. General-purpose barns for the temporary feeding of livestock that are open on at least one side;

iv. For livestock confinement buildings, poultry houses, dairy operations, and similar livestock operations, variances may not be issued for structures that were substantially damaged. New construction or substantial improvement of such structures must

meet the elevation requirements of Article IV.B.2 of this ordinance;

v. Detached garages and storage sheds solely used for parking and limited storage in connection with agricultural uses only, which are no greater than 500 square feet in area.

b. The agricultural structure must be built or rebuilt, in the case of an existing building that is substantially damaged, with flood-resistant materials for the exterior and interior building components and elements below the base flood elevation;

c. The agricultural structure must be adequately anchored to prevent flotation, collapse, or lateral movement. All of the structure's components must be capable of resisting specific flood-related forces including hydrostatic, buoyancy, hydrodynamic, and debris impact forces. Where flood velocities exceed 5 feet per second, fast-flowing floodwaters can exert considerable pressure on the building's enclosure walls or foundation walls;

d. The agricultural structure must meet the venting requirement of Section 2 of this ordinance;

e. Any mechanical, electrical, or other utility equipment must be located above the base flood elevation so that they are contained within a watertight, flood proofed enclosure that is capable of resisting damage during flood conditions;

f. The agricultural structure must comply with the floodway encroachment provisions of this manual;

g. Major equipment, machinery, or other contents must be protected. Such protection may include protective watertight flood proofed areas within the building, the use of equipment hoists for readily elevating contents, permanently elevating contents on pedestals or shelves above the base flood elevation, or determining that property owners can safely remove contents without risk to lives and that the contents will be located to a specified site out of the floodplain in accordance with the temporary development provisions of this manual.

8. Considerations

In passing upon such applications, the appeal board shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this ordinance, and:

a. the danger that materials may be swept onto other lands to the injury of

others;

b. the danger to life and property due to flooding or erosion damage, and the safety of access to the property in times of flood for ordinary and emergency vehicles;

c. the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

d. the importance of the services provided by the proposed facility to the community;

e. the necessity to the facility of a waterfront location, where applicable;

f. the availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;

g. the compatibility of the proposed use with existing and anticipated development, and the relationship of the proposed use to the comprehensive plan and floodplain management program for that area;

h. the expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site,

i. the costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, and streets and bridges and,

j. Agricultural structures must be located in wide, expansive floodplain areas, where no other alternative location for the agricultural structure exists. The applicant must demonstrate that the entire farm acreage, consisting of a contiguous parcel of land on which the structure is to be located, must be in the Special Flood Hazard Area and no other alternative locations for the structure are available.

9. Findings.

Findings listed above shall be submitted to the appeal board, in writing, and included in the application for a variance. Additionally, comments from the Department of Natural Resources, Land, Water and Conservation Division, State Coordinator's Office, must be taken into account and included in the permit file.

10. Floodways.

Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result unless a CLOMR is obtained prior to issuance of the variance. In order to insure the project is built in compliance with the CLOMR for which the variance is granted the applicant must provide a bond for 100% of the cost to perform the development.

11. Conditions.

Upon consideration of the factors listed above and the purposes of this ordinance, the appeal board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this ordinance. The following conditions shall apply to all variances:

a. Variances may not be issued when the variance will make the structure in violation of other federal, State, or local laws, regulations, or ordinances.

b. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

c. Variances shall only be issued upon a showing of good and sufficient cause, a determination that failure to grant the variance would result in exceptional hardship, and a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

d. Any applicant to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation and the elevation to which the structure is to be built and a written statement that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation. Such notification shall be maintained with a record of all variance actions.

e. The local administrator shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.

f. Variances shall not be issued for un-permitted development or other development that is not in compliance with the provisions of this ordinance. Violations must be corrected in accordance with Article III.F.5 of this ordinance.

3.9 Special Protection Areas

In an effort to address some of the most critical water resource problems that exist in the County, Special Protection Areas have been established. Those wishing to develop or redevelop lands within these protected areas will be required to comply with the minimum standards listed in the preceding sections as well as a more stringent set of design criteria detailed below. These generally focus on either a water quantity or a water quality problem. Maps showing these areas are being posted on the County website, http://www.lex-co.com/GIS/Index.html. Until such time that maps are made available to the public, the PW/SWD will inform permit applicants on whether or not a proposed project is required to comply with additional design criteria listed in the following sections. The maps are not included in the manual due to expected changes in the designated areas, particularly those associated with TMDLs.

3.9.1 Flooding Problem Areas

Flooding problem areas exist in locations around the County where development densities have increased to the point that stormwater controls have become overwhelmed, or where controls were never adequately designed or installed to control runoff. The lack of maintenance is also suspected to be contributing to some of the frequent flooding. In an effort to relieve existing flooding problems, the following list of design criteria will be required in designated areas. These areas are expected to change with time. The requirement in conjunction with the enforcement of other design criteria listed in the sections above, are expected to assist in reducing these problem areas.

1. The post-development, peak discharge rates is restricted to ½ the pre-development rates for the 2, 5, 10 and 25-year storm events or to the downstream system capacity, whichever is less.

2. The post-development runoff volumes for the 2 and 10-year storm events above the pre-development level shall be stored for a period of 24-hours on average before release.

Additional criteria may be established on a case by case basis.

3.9.2 Areas Associated with TMDLs and Impaired Waterbodies

In conjunction with the NPDES permitting program, SCDHEC, through delegated responsibility from EPA, must identify and mitigate impaired waterbodies. Impaired waterbodies are identified through a monitoring program, the results of which are compared against water quality standards developed to protect designated uses of individual waterbodies. Waterbodies that are not meeting water quality standards cannot be designated as fishing, swimming, recreation, and/or aquatic life areas. In accordance with Section 303 of the Clean Water Act states must release a bi-annual report of impaired waterbodies. Waters listed on the 303(d) list will eventually have a TMDL developed, which represents the daily amount of a particular pollutant that a waterbody can receive and still meet the water quality standard for its designated use(s). An established TMDL in Lexington County will require that a plan be implemented that uses structural and nonstructural BMPs to reduce the current loading to either a certain total load or by a percentage.

The plans to address the TMDLs will contain provisions for both existing and future land uses. In an effort to counter the potential reduction of water quality with new development, the following list of design criteria shall be followed for all project within Special Protection Areas associated with TMDLs. See Appendix F for a map. Those areas affected will change as additional TMDLs are adopted. A more current map may be obtained from the PW/SWD or on the County's webpage.

Section 3.4 contains a list of design procedures to follow.

3.9.3 Lake Murray

Lake Murray is a vital water resource for Lexington County, providing a vast habitat for aquatic life, as well as a drinking source for much of the midlands of South Carolina. Since the 1950s, lakefront property has been developed under the direction of South Carolina Electric & Gas (SCE&G). With this development has come an increased need to address water quality and erosion issues. In an effort to address these issues, a set of criteria listed below, in addition to the requirements detailed in this Manual, will be enforced for all new development and re-development projects on or near Lake Murray. These design requirements shall specifically apply to stormwater runoff from all new development and re-development projects that is discharged directly into the lake or is discharged within 50 feet of the 360' contour and inside the SCE&G Project Boundary Line (PBL).

The specific design requirements are as follows:

1. Water Quality:

    a. All sites which disturb greater than one acre shall have a permanent water quality BMP in place to treat at least the first 1-inch of runoff from the contributing area. This volume shall be held for a minimum period of 24-hours. The storage volume of these water quality structures shall be designed to accommodate at least 1-inch of runoff from the entire site. The water quality volume (WQV) necessary in a given structure used for runoff treatment refers to the first 1-inch multiplied by the contributing area. The 24-hour detention period shall be measured from the centroid of the inflow hydrograph to the centroid of the outflow hydrograph. If an engineered device is to be used, the design of such device shall be based on the flow rate and discharge associated with a one-year storm event and the detention time shall not necessarily apply.

    b. Due to lake boundary topography, it may be impractical to route all impervious areas to a water quality BMP. In such cases, exemptions for roof area and sidewalks may be allowed. However, the water quality volume in the BMP must reflect that from the entire site (i.e. greater than 1-inch will be treated from other impervious areas). In no cases are roads and parking areas exempt.

c. A pretreatment device such as a forebay or vault, to remove debris and large sediments shall be constructed either as part of the water quality BMP or as a separate device.

d. Developments with a commercial land use or a parking lot which exceeds 2,000 ft^2 must include the ability to capture hydrocarbons either in pretreatment or in the main BMP(s).

2. Erosion Prevention:

All discharge points shall include energy dissipation features which reduce velocity to a non-erosive state. The use of level spreaders to dissipate energy and create a sheetflow discharge pattern is preferred over a single, large discharge pipe/channel. All energy dissipation measures shall be installed above the 360' contour.

CHAPTER 4 - ROAD DESIGN

4.1 General

The design criteria in this chapter pertain to roads that are going to be maintained by Lexington County. All Lexington County roads shall be constructed in accordance to the South Carolina Department of Transportation (SCDOT) specifications, or as otherwise specified in this Manual. Paving and proof rolling of roads are to be pre-scheduled with Lexington County inspectors or an independent laboratory approved by Lexington County. A service life of twenty (20) years is expected for new roads with minimum maintenance. All new roads shall have a warranty/guarantee to the design and performance of the streets and storm drainage system, to the satisfaction of the Public Works Stormwater Division (PW/SWD), for a period of two (2) year after the final plat approval.

4.1.1 Classification

Design guidelines are provided for the following road categories: residential/local (RL), residential collector (RC), and light commercial/industrial (LC/I). The design for arterials and other type roads, such as private alleys, which don't fit into one of these three categories, must be approved by the PW/SWD on a case by case basis; design for other roads should be based on the expected traffic load and a complete soils report. A collector (RC) or commercial/industrial (LC/I) classified road cannot empty into a lesser category road, such as residential local (RL).

4.1.2 Average Daily Traffic (ADT)

ADT for residential roads can be estimated using the projected generation rates per dwelling unit shown in Table 4.1.

Table 4.1: ADT Generation

Dwelling Unit	ADT Rate
Single-family detached	10.0
Duplex (twin), Multiplex, Townhouse, etc	8.1
Planned Unit Development	7.8
Apartment, Mobile Home	5.4
Retirement Village	3.3

ADT "break points": 2000 ADT (e.g., 200 single-family detached units) is the break point from RL to RC roads. 4000 ADT is the break point from RC to arterial roads. Road classification for engineering may differ from zoning road classifications.

4.1.3 Design for Road Cross Section and Related Factors

The developer is given a choice of including or not including a complete soils report and detailed road thickness design as part of his engineering plans and specifications. Appendix I contain standard details for typical road cross sections. Two sets of design criteria are provided in Table 4.2. The first provides required thickness for a submittal without a complete soils report for each road classification. The second column provides the minimum thickness allowable when supported by a complete soils report and a detailed road design for a reduced design criteria CONVINCINGLY SUPPORT the reduced design thickness. (Note: A complete soils report shall include at a minimum, but is not limited to (1) a "CBR"on each soil type and (2) a grain size analysis and "Atterberg Limit" determination for each different soil type).

Table 4.2: Design Thickness (compacted) Criteria

Course	Residential/ Local		Residential Collector		Light Commercial/ Industrial	
	Without soils report	With soils report	Without soils report	With soils report	Without soils report	With soils report
Surface						
Hot Plant Mix	2"	15"	3"	2"	3"	2"
Triple Surface Treatment	SCDHPT specs	SCDHPT specs	SCDHPT specs	SCDHP T specs	SCDHPT specs	SCDHPT specs
Base W/ Plant Mix*		Clay Sand				
Macadam	8"	8/6"	9"	7"	10"	7"
Sand-Clay	10"	10/8"	12"	10"	N/A	N/A
Prepared Subgrade	12"	6"	12"	6"	12"	6"
Full Depth Paving Requirements						
Prepared Subgrade	12"	6"	12"	6"	12"	6"
AC Base Course	3"	2.5"	4"	3"	4"	3"
AC Binder Course	2"	1.75"	3"	2"	3"	2"
AC Surface Course	1.25"	1.25"	1.5"	1.25"	1.5"	1.25"

*Base on subgrade higher value, clay lower value sand.

1. May use soil cement for subgrade or base. Must have a soils engineer design and monitor. Need prior approval from PW/SWD.

2. Lexington County may require the developer or contractor to provide up to three (3) corings per development and/or at least one (1) per 300 feet of road whichever is greater.

3. Placement of binder course should immediately follow placement of black base (within 24 hours) and no traffic shall be permitted on the black base.

4. Sand-clay base must meet the minimum requirements for SCDOT base material. Developer shall have the pit pre-approved by a soils engineer and then tested again after in place on site.

5. Full depth asphalt (minimum 6") must be placed from right of way to any existing road.

    a. All materials used in the base and surface courses must meet all SCDOT Specifications for quality and gradation.

    b. Triple surface treatment will not be used in conjunction with curbing.

    c. Must use tacking agent between cold layers of asphalt.

    d. Must tack between all concrete surfaces and asphalt.

    e. Must provide positive drainage toward the curb.

    f. Must tack all soil cement surfaces.

4.1.4 Surfacing

Surface course shall consist of asphaltic concrete (Type I) or triple surface treatment (Type I). Triple surface treatment surface course will only be used on "valley gutter" or "farm to market" roads. Alternative surfaces to be considered on a case by case basis.

4.1.4.1 Weather restrictions

Plant mix base/binder courses may be placed throughout the year as long as the roadway is properly prepared and the surface temperature is at least forty-five (45) degrees and rising. Specific prior approval from the PW/SWD is required before placing AC surface. Triple surface treatment shall only be placed within the time frames specified in the SCDOT Specifications, normally from March 15 to October 15 each year.

4.1.5 Ground water

The seasonal high water table shall be at least thirty-six (36) inches below the base course.

4.1.6 Underdrains

Subsurface drainage is to be provided in areas having a seasonal high water table (particularly in cut areas) to intercept seepage that would affect slope stability, bearing strength or create undesirable wetness. Place underdrain system directly behind the curb of all islands and discharge into drainage box.

4.1.7 Compaction

Compaction shall be required from within the proposed right of ways. All compaction testing whether subgrade, base, utilities shall be inspected by either an independent lab approved by Lexington County or PW/SWD personnel

4.1.7.1 Subgrade

The subgrade shall be compacted to a distance at least eighteen (18) inches outside the back of curbing or the top of the back slope for the valley gutter section. Finished subgrade must meet the same section criteria as the finished base course (proper crown or cross-slope). Subgrade compaction to a minimum of 95% of a standard proctor ASTM-D698. The top 12" of subgrade must be 100% of a standard proctor ASTM-D698.

Proof rolls are required for curbing with a motor grader require a motor grader for road a triaxial dump truck with a minimum of 18 ton loading.

4.1.7.2 Base course

Base course shall be compacted to a minimum of 95% modified proctor ASTM D-1557. Proof rolls are required before the placement of any lift of asphalt.

The base course shall be compacted to a distance at least six (6) inches outside the valley gutter or as shown on the approved typical cross section for other type roadways.

4.1.7.3 Proctors

A minimum of one (1) proctor for the subgrade and one (1) proctor for the base course shall be provided for each different source of material used.

4.1.8 Slopes

Slopes on cuts or fills shall not be steeper than 2:1.

4.2 Patching and cuts of paved areas

When required, these areas shall be cut out in a rectangular shape and following the placement of bedding material (if required), backfilled with stone, compacted in accordance with Section

4.1.7, and a light coat of tack applied around the edges of the cut out area and a surface course of the appropriate thickness placed. Full depth asphalt may be used if compacted accordingly and in two (2) inch lifts.

4.3 Right-Of-Way

4.3.1 Proposed Paved County/Private Roads

The minimum right-of-way for a Lexington County road is fifty (50) feet. This is sufficient for any RL and/or two-lane road with pavement width equal to or less than thirty (30) feet and one which is not reasonably expected to require subsequent widening. A uniform right-of-way width should be maintained on the outside edge of pavement around islands and/or medians and at intersections. A minimum of a sixty-six (66) foot right-of-way is required for any wider or higher order road. Lesser R/W may be used with special criteria using the road design detail shown in Appendix I. If reduced right of way is proposed with additional requirements such as tree planting, sidewalks, and parking areas will be required as per reduced right of way detail.

.

4.3.2 Existing Paved County Roads

Any development encompassing existing County Roads which do not have the standard fifty (50) foot right-of-way shall dedicate this standard 50 foot width to Lexington County in order to proceed; for tracts lying only on one (1) side of such an existing County Road, a twenty-five (25) foot right-of-way, measured from the existing road centerline shall be dedicated to Lexington County. Proposed road cannot exceed classification of the existing County road.

4.3.3 Existing Non-Paved Dirt Roads

Any development entering a non-paved dirt road shall be required to improve the existing dirt road to accommodate the proposed average daily traffic (ADT) design. This shall require the developer to obtain all necessary right of ways from property owners from the entrance of the new development to the nearest publicly maintained paved road of equal or greater classification.

4.3.4 Cul-de-sacs

Minimum right-of-way radius for a cul-de-sac is fifty (50) feet. If a uniform right-of-way is not maintained around the cul-de-sac, there must be a smooth transition joining the different widths and the minimum right-of-way outside the edge of pavement at any point shall be ten (10) feet. Temporary cul-de-sacs shall not be designed/approved on engineered drawings.

4.3.5 Staking

Street right-of-way shall be staked at intervals that are sufficient to check alignment and grade of the construction with the approved plans. Each stake shall display station number and cut or fill information. Maximum staking interval (preferably each side of the right-of-way) shall be one hundred (100) feet. Staking in curved areas shall be at fifty (50) foot intervals.

4.3.6 Irrigation

No irrigation system is to be installed in the right-of-way by the developer, builder, or homeowner.

4.4 Additional Design Criteria

Table 4.3: Additional Design Criteria

Design Criteria	Residential/ Local	Residential Collector	Light Commercial/ Industrial
Design Speed (mph)	30	40	50
Maximum stopping Distance (ft)	200	300	300
Maximum Grade (%)	15	12	12
Minimum Grade (%)	0.5	0.5	0.5
Minimum Tangent b/t reversing curves (ft)	50	100	100
Curb Types			
B-Barrier	OK	K	OK
R- Rolled	OK	OK	OK
VG – Valley Gutter	OK	NA	NA
None	OK	NA	NA
Pavement Width			
With Barrier curbing (ft)	25	27	27
With Rolled curbing (ft)	25	36	36
With Valley Gutter curbing (ft)	28	36	NA
With no curbing (ft)	22	36	NA

1. Design speed may be reduced due to topography and reduced stopping sight distance with the approval of the PW/SWD.

2. See Tables 4-4 and 4-5.

3. "Farm to market" roads without curbing is allowed for road design. Lot widths are not specified but shall be reviewed with the PW/SWD as to the minimum allowed per individual project. Road installation shall include paved driveway aprons and pertinent storm drainage pipe. See driveway detail in Appendix I.

4. Measured from back of curbing to back of curbing or from edge of pavement to edge of pavement on roads w/o curbing.

4.4.1 Catch basin locations

Catch basins shall be located outside intersection curve radii. Catch basins should generally be located on the uphill side of intersections to intercept runoff before it gets into the intersection. Catch basins should be located so to not interfere with driveway and island locations.

4.4.2 Water and sewer line locations

Where it is necessary for pipes to cross the roadway, the length of water and sewer lines running under pavement shall be minimized. Utility lines should be placed at a ninety (90) degree angle with the roadway centerline, if possible, but in no case less than forty-five (45) degrees. Manholes and valves shall not be located in the pavement area.

4.4.3 Sidewalks

Sidewalks within the road R.O.W. shall be maintained and designed per ADA specifications. Lexington County shall not be responsible for maintenance of sidewalks.

4.4.4 Dead end streets

All dead end streets shall terminate in a cul-de-sac, “T” or “Y” per details. Any street greater than 2,000 feet shall have an intermediate turnaround.

4.4.5 Street Access

Each residential development with 200 lots shall have two or more access points to roads of equal or higher classification. Developments greater than 400 lots shall be required to submit a traffic impact study, for acceleration/deceleration lanes, etc. This coordination shall be with SCDOT. Commercial development access points shall be restricted per Lexington County zoning and SCDOT. Interconnectivity is highly suggested for commercial design.

4.4.6 Service Restrictions

A residential collector shall not have driveways if the 27 foot roadway is used. If residential access cannot be avoided and/or limited street parking is foreseen, a 36 foot wide roadway with rolled curb shall be provided.

4.4.7 Left Turn Lanes

A residential development with 200 or greater lots shall provide a left turn lane in the existing subdivision. Development less than 200 lots that access an arterial or certain collector roads, a left turn lane must be provided. A smooth transition shall be provided for the turning lane; the turning lane shall have a minimum length of fifty (50) feet. Painted and stipping arrows shall meet SCDOT requirements.

4.4.8 Concrete Keys

A concrete key, twelve (12) inches wide and twelve (12) inches deep, shall be placed at the end of any pavement section expected to be extended by the Developer within seven (7) days or paving. Concrete keys are temporary and shall be removed prior to paving future roads.

4.4.9 Alley Ways

Home Owner's Association (HOA) shall own/maintain alleyways and all pertinent storm drainage systems. Alleyways shall have a minimum twelve (12) foot width and shall ingress/egress onto a public road or shall terminate with an approved cul-de-sac, "Y", or "T". Alleyways shall not be named. Lots with alleyway access must also have a public or private road frontage. The common area for alleyways shall be equal to or greater than the riding surface.

4.5 Measuring Sight Distances

The criteria for measuring sight distances are shown in Table 4.4. The site line must remain within all R/Ws.

Table 4.4: Criteria for measuring sight distance

Criteria	Height above Road Surface
Height of driver's eye	3.5'
Stopping sight distance object	0.5'
Intersection sight distance object	4.25'

Un-posted dirt road sight distance shall be determined with the PW/SWD.

4.6 Intersection Design

Table 4.5: Intersection Design Guidelines

Item	Value
Minimum angle of intersection	75 (90 is preferred)
Maximum grade within tangent length approaching intersection area	5%
Minimum tangent length (to edge of pavement) approaching intersection (each leg)	50' (RL), 100' (RC or LC/I)
Minimum curb radius: a. RL to RL b. RL to RC or LC/I c. RL to Arterial c. RC or LC/I to RC or LC/I d. Entering cul-de-sac	 25' 30' 50' 50' 50'
Minimum centerline offset of adjacent intersection: a. RL to RL b. RL to RC or LC/I c. RC or LC/I to RC or LC/I d. RL to Arterial	 150' 175' 200' 200'

1. A "three-quarter" cul-de-sac ("blow-out") can be used at sharp corners where the minimum horizontal curve radius cannot be met and/or there is no road intersection.

2. At intersections where there is no catch basin at each radius, the engineer shall provide a "blow-up" of the intersection and show spot grades at critical points. Sufficient information should be provided for construction guidance and to show that positive drainage will be achieved.

3. Intersection Sight Distance. Minimum intersection sight distance is found by multiplying the speed limit of the road which is being accessed by tan (10), e.g., for a speed limit of 35 MPH--the intersection sight distance is 350 feet. The resulting sight triangles, obtained by measuring from a point fifteen (15) feet from the edge of the pavement of the road being accessed to the points providing the minimum intersection sight distance in each direction, must be kept clear of all vegetation, walls or structures for a height of between two and one-half (2.5) feet and then ten (10) feet for vision of motorists, pedestrians and other users. A

sketch of these "sight distance triangles" is shown in Appendix I The site line must remain within all R/Ws. Dirt roads to use a speed limit of 45 MPH.

4. Proposed road centerlines shall line up with existing road centerlines per Table 4.6.

4.7 Horizontal curves

A horizontal curve will be installed when the roadway alignment has a deflection angle exceeding ten (10) degrees. Minimum radii are shown in table below.

Table 4.6: Minimum Horizontal Curve Radii

ADT	RL	RC or LC/I
1-250	110	175
251-500	150	200
501-750	175	225
751-1000	200	250
1001-2000	200	300
2001+	an	TBD*

* To be determined by the PW/SWD on a case by case basis.

4.8 Superelevation

RL roads do not normally require superelevation. Where superelevation is used on RC or LC/I roads, the maximum cross slope shall be 0.08 foot per foot with adequate length of runoff for design speed.

Table 4.7: Superelevation Runoff

Superelevation Rate, e	Length of Runoff (ft) for Design Speed (mph) of			
	20	30	40	50
0.02	50	100	125	150
0.04	60	100	125	150
0.06	95	110	125	150
0.08	125	145	170	190

4.9 Vertical curves

All changes in vertical grade, where the algebraic difference in grade exceeds two (2) percent, shall be connected by vertical (crest/sag) curves. The minimum length of any vertical curve shall be one hundred (100) feet. Design should be based on the formulas and graphs provided in Appendix I. Shall be less than 100' when intersecting with a SCDOT roadway.

4.10 Road Entrance Islands/Cul-de-sacs

1. The nose of the island shall be located at a distance of twelve (12) feet from the edge of the existing road pavement.

2. There shall be a normal fifteen (15) foot wide pavement section for one way traffic an each side of the entrance island, measured from back of curb BOC to BOC unless there is a turning lane.

3. Vegetation and structures in islands shall not interfere with intersection sight distance requirements. Perpetual maintenance responsibility must be assumed by a private entity.

4. Expulsion type barrier curbing (see detail in Appendix I) is required around the entire circumference of the island. Pavement shall be sloped so runoff is directed away from the island and into the storm drainage system.

5. All islands are required to have French underdrain system. The underdrain is normally located behind the barrier curb for its entire circumference (although on narrow islands, a single drain running the length of the island in the center may suffice) and tied to a storm drainage system (see detail in Appendix I). A solid pipe shall be used under roadways at a depth of three (3) foot.

6. Traffic control signs, as specified by the South Carolina Manual on Uniform Traffic Control Devices may be required. See Section 6 for additional guidance.

7. The island shall end before the location of the planned driveway for the first lot on each side of the island.

8. Gated community shall provide a minimum of 200' of staging road from access to gate.

9. An island is permitted only in a one-way "left offset" or "centered" design (see details in Appendix I). Note that the dimensions shown in the details are minimums.

10. A normal twenty (20) foot wide pavement section for one way traffic on each side of the island, measured from BOC to BOC, is required for a cul-de-sac.

11. Minimum inside curb radius shall be twenty-five (25) feet with a minimum radius of five (5) feet for the nose of the island; minimum outside curb radius shall be forty-five (45) feet with a return radius of fifty (50) feet for a cul-de-sac.

12. Horizontal and vertical alignment of the roadway shall provide the minimum stopping sight distance as determined by the design speed.

13. Traffic Circles/Roundabouts shall be allowed as shown in standard details provided in Appendix I.

4.11 Traffic, Regulatory, and Street Signage

1. Lexington County shall be responsible for the procurement and installation of all traffic control, regulatory, and street signs, except in those cases where the developer obtains approval from the PW/SWD to use customized signs.

   Note: Custom signs, designed to accentuate a development "theme" may be approved on a case to case basis. For developments with standard signage, the developer shall pay the calculated "signage fee". Contact the PW/SWD for the fee schedule.

2. Street names and signs. A street name and appropriate signs shall be provided for each publicity maintained road in Lexington County and for any private road which accesses three (3) or more property owners – providing the property is not accessible from any other road.

   a. Duplication of any existing name will not be allowed, in part or as a whole. This includes one of two or more words pronounced alike but different in meaning and spelling.

   b. The requested name shall consist of no more than thirteen (13) letters, and/or spaces (not including the suffix).

   c. Any long road with several intersecting streets shall only have one name.

   d. Dead end roads shall have a suffix of "Court", "Lane or "Place" so as not to be misleading to an emergency vehicle looking for a cut-through to another street.

   e. Streets having suffixes of "Circle must have two (2) intersections with other streets.

   f. Abbreviations will not be allowed.

3. Standard Assemblies.

   a. General - The sign assembly shall consist of two (2) double faced street signs mounted on a two and one-half (2 ½") O.D. galvanized steel round post. One (1) assembly will be required for T-Type and Cross-Type Intersections. Include names of both roads at intersection.

   b. Signs - Each sign plate shall be X-truded 6" x 24", 30" or 36". The sign material shall be aluminum 0.080 gauge. Background facings for the signs shall be No. 2277 Green Scotchlite™ Reflectorized Sheeting or Equivalent and shall cover the entire sign. The street name legend shall be made with 4" Series "C" letters. The designation of Avenue, Street, Road, Drive, etc., shall be abbreviated and shall be made with 2" Series "C" letters. Periods will not be used after the abbreviations. Painted and/or beaded signs will not be acceptable.

   c. Posts - The sign posts shall be Schedule 40, 2 ½" O.D. wall thickness 0.156 inches, galvanized steel pipe no less that 10' in length.

   d. Brackets - The brackets shall be cast aluminum and in two (2) parts, a cap and a spacer. The cap shall fit over the top of the pipe and have a slot in its top to hold the Street Name Sign. The spacer shall be made with two (2) slots at 90 degrees to each other to fit over one Street Name Sign and to hold the other. The bracket parts shall be provided with Allen Head Set Screws to hold the entire assembly together on the post.

   e. Installation

      i. Each installation shall consist of two (2) double faced street name signs mounted one above the other on top of a 2 ½" O. D. galvanized steel pipe.

      ii. Cross-type and T-type intersection shall have one (1) sign assembly. Where the intersection has more than four (4) street legs, more than one (1) sign assembly will be required.

      iii. The installation shall not be closer to the edge of the pavement than six (6) feet nor more than twelve (12) feet from the pavement edge.

      iv. The bottom of the sins shall be seven (7) feet above the center line finished grade of the street.

      v. The two and one –half (2.5) inch galvanized steel post shall be encased in concrete for a distance of three (3) inches, completely around it and for a depth of eighteen (18) inches below ground.

4. Custom Signs - The dimensions and readability for custom signs must equal or exceed those specified for "standard" assemblies. Installation shall be consistent with that described above for "standard" assemblies.

5. Traffic Control and Regulatory Signs. (Note: Size, shape, and color of "customized" traffic control and/or regulatory signs cannot be modified from that shown in the South Carolina Manual on Uniform Traffic Control Devices.)

   a. Placement /Location.

      i. Standardization of position cannot always be attained in practice; however, the general rule is to locate signs on the right hand side of the roadway, where the driver is most likely to look for them. The sign assembly shall be placed not less than three (3') feet, but not more than six (6') feet from the traveled way. The clearance from the bottom of the sign to the ground shall be five (5') feet. Posts are to be two (2) pounds per foot, painted "U" Type Channels.

      ii. If there is any question about placement/location, the PW/SWD will determine location.

      iii. For "customized" signage, the proposed traffic control and street sign locations shall be submitted as a part of the engineering plans.

   b. Traffic Control Sign Standards.

      i. The sign assembly shall consist of a sign and a post. The sign shall meet the standard requirement of the South Carolina Department of Highways and Public Transportation standards for size and shape. (They are found in the Manual for Uniform Traffic Control Devices.) The sign shall be covered with engineer grade Scotchlite™ reflective sheeting or equivalent. Standard signs are to be of metal construction and at least .080 gauge thickness. Signs are to be erected on posts no less than ten (10') feet in length.

      ii. Sign posts and their foundations and sign mountings shall be constructed so as to hold signs in a proper and permanent position, to resist swaying in the wind or displacement by acts of vandalism.

   c. Regulatory Signs

      i. Stop Sign - A "Stop" sign shall be placed at the intersection of two or more roads. The road(s) of less importance shall be the road to stop and yield right-of-way.

Number	Size	Class
R1-1-30	30” x 30”	Local
R1-1-48	48” x 48”	Collector

Background: Red – Reflectorized.
Legend and Borders: White – Reflectorized

ii. Yield Sign - Use of a “Yield” sign must be approved by the Planning Engineer. Since it does not require all vehicles to stop, it should only be used where visibility of other approaching traffic is good from the approach on which the yield sign is proposed.

Number	Size	Class
R1-2-36	36”x36”x36”	Standard
R1-2-48	48”x48”x48”	Major

Background: White – Reflectorized
Legend and Border: Red – Reflectorized

d. Warning Signs - Warning signs shall be erected in accordance with the general requirements for sign position. Since warning signs are primarily for the protection of the driver who is unacquainted with the road, it is very important that care be given to their positioning.

i. Dead End Signs - The “Dead End” sign is intended for use to notify motorists that the road or street terminates some distance beyond the sign. The sign should be located at the last intersection of a public road or street with the dead end street.

The Dead End sign will be used only where the terminus of the dead end road is within approximately 1,000 feet of the intersection. Where the road terminus is greater that 1,000 feet from the intersection, the road will not be considered a dead end road, and the advance warning of its terminus will be given in accordance with the provisions for the Road End warning sign.

The Dead End sign should be erected on the right side of the road or street, approximately 25-50 feet beyond the intersection, and facing traffic entering the dead end road or street.

Number	Size	Class
W14-1-30	30” x 30”	Local

Background: Yellow-Reflectorized
Legend and Border: White

ii. Road End Signs - The "Road Ends" warning sign is intended for use in advance of the terminus of a road or street except where the terminus is within 1,000 feet of an intersection, in which case a Dead End warning sign should be erected at the intersection and this sign should be omitted. When the Road Ends warning sign is used it should be followed by a Road Ends regulatory sign (F11-5-36), at the terminus of the road or street.

Number	Size	Class
W14-1a-30	30" x 30"	Local

Background: Yellow – Reflectorized
Legend and Border: Black

iii. Stop Ahead Signs - A "Stop Ahead" sign is intended for use upon approaching a Stop sign that is not visible for sufficient distance to permit the driver to bring his vehicle to a stop at the Stop Sign. Obstruction(s) causing the limited visibility may be permanent or intermittent.

Number	Size	Class
W3-1-36	36" x 36"	Local
W3-1-48	48" x 48"	Collector

Background: Yellow – Reflectorized
Arrow and Border: Black
Symbol: White Border on Red Background – Reflectorized

iv. Yield Ahead Signs - A "Yield Ahead" sign is intended for use upon approaching a Yield sign that is not visible for sufficient distance to permit the driver to bring his vehicle to a stop at the Yield sign. Obstructions(s) causing the limited visibility may be permanent or intermittent.

Number	Size	Class
W3-2-36	36" x 36"	Local
W3-2-48	48" x 48"	Collector

Background: Yellow – Reflectorized
Arrow and Border: Black
Symbol: White Margin, Red Border on White Background – Reflectorized

v. Bridge End Markers - "Bridge End" Markers should be used to mark the end of bridges for approaching traffic. On a two-lane roadway one Bridge End Marker should be used on each side of the bridge. On a divided multi-lane roadway, one Bridge End

Marker should be used on each side of the approach end of each bridge. On a multi-lane facility where the roadways carrying opposing traffic are separated only by a raised median and only one bridge exists, one Bridge End Marker should be used on the right side of each end of the bridge.

Number	Size	Class
W18-1R-12	12" x 36"	Local
W18-1L-12	12" x 36"	Local

Yellow Stripes – Reflectorized
Alternate Stripes – Black

vi. Other Warning Signs - Warning signs other than those specified may be required under special conditions. Warning signs should conform with the general specifications for shape, color, and placement of warning signs.

The applications of such signs are sufficiently apparent as to require no detailed specifications. (They are found in The South Carolina Manual For Uniform Traffic Control Devices.)

vii. Privately Maintained Roads Signs - Privately maintained road signs shall be placed on the end of the street sign or a separate sign/post. Yellow background with black lettering.

4.12 Traffic Impact Studies

A traffic impact study shall be required for new and re-development projects projected to generate 100 or more peak hour vehicle trips based on trip generation rates from the latest edition of the Institute of Transportation Engineers Trip Generation Manual. In addition, PW/SWD may request that an impact study be developed for other projects likely to have a significant impact on transportation capacity, transportation levels of service, or traffic safety in the vicinity of the proposed project. SCDOT may also require such a study, which may or may not coincide with the County's requirement. It is the applicant's responsibility to comply with all SCDOT traffic study requirements.

If a study is required by the County and/or SCDOT, it shall be submitted with the land disturbance permit application and shall include a site plan showing traffic circulation and parking as well as proposed points of ingress and egress . A preliminary, unapproved plan to SCDOT may be submitted with land disturbance permit application, but must be approved by SCDOT prior to the issuance of the land disturbance permit.

4.12.1 Study Scope

When a traffic impact study is required, the type and scope of the study shall be determined during a scoping meeting with the Community Development and the PW/SWD. The meeting may also involve representatives of or request assessments from other agencies and departments. The elements to be determined during the scoping session shall include:

1. Type of Study: The possible types of reports include: a letter report, full traffic impact analysis report or special report (e.g., sight distance survey);

2. Definition of Impact Area: The points of access and key streets and intersections that may be affected by development of the subject tract constitute the impact area. Traffic recorder and turning movement assessment locations shall be determined;

3. Period of Analysis: Periods of analysis may include daily traffic or a.m., p.m. or weekend peak hour;

4. Analysis Scenarios: Scenarios for analysis include: existing conditions, opening year conditions with and without development, and 10 years after opening with and without development;

5. Process; Process for determining trip generation and distribution including: trip generation category, diversion assumptions and distribution assumptions;

6. Growth Rate Assumption: The rate of growth assumed in background traffic assumptions;

7. Pipeline Development: Developments in the area that have been approved or are under review.

4.12.2 Traffic Study Elements

A letter report or special report shall include those elements agreed upon in the scoping meeting. A full traffic impact study shall include the following elements:

1. Existing Condition Survey

    a. Street System Description: The street system shall be described including geometric features, lane usage, traffic control, signage, sight distances and adjacent uses and curb cuts;

    b. Traffic Volumes: Existing traffic volumes shall be provided for the impact area including both AADT (Average Annual Daily Traffic) and "Design" peak hour volumes. AADT may be derived from current counts of the SCDOT (if available) and peak hour volumes shall be done from field counts. Data shall be adjusted for daily and seasonal variations. Turning

movement counts for the peak hour shall be provided for critical intersections. Peak hour periods shall be as determined at the scoping meeting;

c. Capacity Analysis: Existing capacity of signalized and unsignalized intersections;

d. Other: Other items may be required at the discretion of the PW/SWD depending upon the type and scale of the project. These may include but are not limited to: queue length analysis, pedestrian counts, accident data, traffic speeds (both 50th and 85th percentile), and stopping sight distances.

2. Future without Development

Capacity analysis is to be provided for opening year and plus ten-year for key intersections (and roadway segments where appropriate) without the development but including any planned developments. The analysis shall be based upon the Highway Capacity Manual or other methodologies approved in advance by the PW/SWD.

3. Future with Development

a. Projections of the daily and peak hour traffic generation of the project shall be made using the latest edition of the Institute of Transportation Engineers Trip Generation manual unless the PW/SWD determines that locally derived data will provide more accurate forecasts. Data from similar facilities may be used where the information is not available from the Institute of Transportation Engineers;

b. The projected trips shall be distributed onto the road network as agreed in the scoping meeting;

c. Capacity analysis for opening year and plus ten-year for key intersections (and roadway segments where appropriate);

d. Special analysis as may be required to determine warrants for signalization, minimum safe sight distances, gap analysis, turning radius requirements, queue length analysis, turning lane length analysis, curb cut locations or similar requirements.

4. Mitigation Plan

Where the analysis indicates that the project will create deficiencies in the impact area, improvements shall be recommended which shall include projected cost estimates. The design of improvements shall be in accordance with specifications of the PW/SWD and, where appropriate, the South Carolina Department of Transportation. Where a Decision-Making Body determines that a mitigation plan is not adequate to address the traffic

impacts of the project, it may serve as a basis for denial of the rezoning, preliminary plat or planned development request.

5. Consultants

The PW/SWD may require that a mutually agreed upon independent consultant be hired by the County to perform required traffic impact studies or to review all or part of a study prepared by the applicant's consultants. The PW/SWD is authorized to administer the contracts for such consultants.

a. The PW/SWD shall determine the scope of services to be performed by the independent consultant and receive a cost estimate of such services.

b. The applicant shall provide an amount equal to the estimate to the PW/SWD, who will deposit the amount in an escrow or special account set up for this purpose. Any funds not used for the independent consultant shall be returned to the applicant in a timely manner without interest.

c. The PW/SWD may require additional fees for the independent review if: the Decision-Making Body expands the scope of the required review; the applicant substantially amends the application; additional meetings involving the consultants are requested by the applicant; the consultant's appearance is requested at Planning Commission or County Council meetings beyond what was initially anticipated; or the consultant's attendance is required at meetings with regional, state, or federal agencies or boards which were not anticipated in the earlier scope of services.

CHAPTER 5 INSPECTIONS & ENFORCEMENT

This chapter establishes inspection and enforcement guidelines to be followed for inspections of stormwater management and stormwater quality facilities.

5.1 Stormwater Management Inspector Authority

Public Works Stormwater Division (PW/SWD) Inspectors are authorized by the Lexington County Stormwater Management Ordinance to inspect construction sites and enforce the requirements of this Manual. The inspectors shall be:

1. Authorized to conduct inspections and file reports for periodic inspections as necessary during land disturbing activities to assure compliance with the approved Stormwater Pollution Prevention Plan (SWPPP), Land Disturbance Permit (LDP), construction plans, and/or Lexington County Stormwater Management Ordinance.

2. Authorized to furnish the permit holder or other authorized agent the results of inspection in a timely manner after the completion of each inspection.

3. Authorized to issue a Corrective Order to the permit holder or other authorized agent when any portion of the site work does not comply with the approved SWPPP, LDP, construction plans and/or Lexington County Stormwater Management Ordinance. This will be the first and only warning before a Notice of Violations (NOV) is issued.

4. Authorized to issue a NOV, along with proposed penalties, to the permit holder or other authorized agent. This will occur when any portion of the site work does not comply with the approved SWPPP, LDP, construction plans and/or Lexington County Stormwater Management Ordinance after action has not been taken to remedy an issued Corrective Order.

5. Authorized to issue a Stop Work Order (SWO) as the result of unsafe conditions, working without a permit, unsatisfactory work or other non-compliance. A SWO will be issued when previous requests by PW/SWD to remedy a situation(s) (Corrective Orders, NOVs, etc.) have not been followed with appropriate and prompt corrective action.

6. Authorized to issue a Civil Citation as a result of unsafe conditions, non-compliance with a SWO, unsatisfactory work, other non-compliance.

7. Authorized to perform a final inspection upon the completion of the stormwater system to determine if the completed work is constructed in accordance with the approved SWPPP, LDP, construction plans, and/or Lexington County Stormwater Management Ordinance.

8. Authorized to conduct post-construction inspections and file reports for periodic inspections as necessary to assure all permanent maintenance facilities are operating according to the SWPPP, LDP, construction plans, and/or Lexington County Stormwater Management Ordinance.

5.2 Stormwater Management Inspector Responsibility

PW/SWD Inspectors shall conduct periodic site inspections on all land disturbing activities and sites that have post-development permanent water quality BMP facilities. The permit holder or other authorized agent shall notify the PW/SWD Inspector at least forty-eight (48) hours before the initiation of construction. The permit holder must also notify the PW/SWD Inspector upon project completion when a final inspection shall be conducted to ensure compliance with the approved LDP. PW/SWD Inspectors shall enforce the following inspection items:

1. Ensure that the approved SWPPP, LDP and construction plans are on the project site and being properly followed and implemented.

2. Ensure that active construction sites are inspected for compliance with the approved SWPPP, LDP, construction plans, and/or Lexington County Stormwater Management Ordinance.

3. Ensure that permanent maintenance is being performed in accordance with the maintenance schedules as approved with the LDP.

4. Provide the permit holder or other authorized agent a written inspection report either by hand delivery, fax or certified letter after inspections where a deficiency was noted. The following items will be noted in the inspection report:

    a. Date and location of the site inspection,

    b. Whether the approved SWPPP, LDP and construction plans are on site and have been properly implemented and maintained,

    c. Deficiencies of the approved SWPPP, LDP, construction plans, and/or Lexington County Stormwater Management Ordinance, and

    d. Corrective action to be taken and corresponding date for the action to be completed.

5. Provide the permit holder or other authorized agent a written permanent maintenance inspection report either by hand delivery, fax or certified letter after inspections where a deficiency was noted. The following items will be noted in the inspection report:

    a. Date and location of the site inspection,

b. Whether the maintenance activities have been property implemented and completed,

c. Maintenance deficiencies, and

d. Corrective action to be taken and corresponding date for the action to be completed.

6. Prior to beginning a post-construction inspection of permanent maintenance, PW/SWD Inspectors shall:

a. Contact the owner of the facility and notify when an inspection is to be performed. All maintenance inspections shall be conducted at reasonable times. If the owner cannot be contacted, the inspection shall be performed and a report shall be sent to the owner,

b. Upon refusal by any property owner to allow an inspector to enter or continue and inspection, the inspector shall terminate the inspection or confine the inspection to areas where no objections are raised. The PW/SWD Inspector shall immediately report the refusal and grounds to the PW/SWD. The PW/SWD shall promptly seek the appropriate compulsory process, and

c. Notify the person financially responsible for the land disturbing activities or for permanent maintenance in writing within 3 working days when a violation(s) is observed. Both Corrective Orders and NOVs will include the following information:

i. Nature of the violations,

ii. Proposed penalty,

iii. Required corrective actions, and

iv. The time period for adequately correcting the violations.

The inspector also has the freedom to make unscheduled inspections to assure compliance with the plans or agreed to maintenance schedules.

In the case of an immediate threat to life and/or property, or any other emergency the PW/SWD may employ the necessary labor and materials to perform the required work as expeditiously as possible. The owner shall reimburse all costs, including administrative costs, to the PW/SWD associated with correcting the problem.

5.3 Self Inspections

In accordance with NPDES General Permit for Stormwater Discharges from Large and Small Construction Activities, Lexington County Stormwater Management Ordinance and this Manual, contractors and owners are responsible for conducting inspections during and after construction. Specific requirements for these inspections are provided in the following sections.

5.3.1 Inspection During Construction

Inspections shall be conducted for each stormwater management BMP shown on the construction plans in accordance with the NPDES Construction General Permit, as it relates to frequency, qualifications of the inspector, and documentation. Copies of inspection reports must be inserted in the SWPPP and be made available to PW/SWD Inspectors upon request. Copies of these reports, certifications, and other documentations shall be submitted to the PW/SWD in accordance with the NPDES Construction General Permit.

5.3.2 Permanent Structure Maintenance

The purpose of maintenance inspections is to ensure that permanent stormwater management BMPs are working properly and remain functional. In accordance with the maintenance covenant and schedule agreed to by the owner or lessee, all components of the stormwater system shall be maintained. Records of such activities shall be kept for a period of five (5) years and made available upon request by PW/SWD.

5.4 Corrective Orders

The purpose of the Corrective Order is to notify the permit holder or other authorized agent of deficiencies noted during inspections. Corrective Orders shall be submitted in writing, but a verbal notice may be given if it shall result in immediate compliance. In either case, the PW/SWD Inspector shall give written notice to the violator within three (3) working days of the inspection.

Corrective Orders are to be issued when the permit holder or authorized agent is required to make changes to stormwater management controls and procedures that satisfy the stormwater design plans and specifications. The notice shall set forth the nature of the corrections required and the time allotted to make the necessary changes or repairs.

All Corrective Orders shall be noted in the project file. A compliance date and mailing address for sending needed information shall be supplied.

Corrective Orders may be issued in such cases as:

1. Failure to comply with the stormwater design plans. This may include incorrect measurements, improper materials, improper installation and/or failing to follow proper procedures.

2. Failure to properly maintain permanent stormwater structures.

3. Failure to comply with deficiencies noted in a final inspection:

    a. The final inspection shall list all deficiencies that must be corrected before the development project is complete, and

    b. The final inspection shall provide compliance date, and request a letter of certification or "As-built." The permit holder or other authorized agent shall contact a PW/SWD Inspector to request a re-inspection after completing the corrections of the initial final inspection.

The primary intent of the Corrective Order is to give a warning and provide a reasonable timeframe for the permit holder to get a problem resolved prior to PW/SWD taking more a drastic action. This due process is not to be a suggestion that may or may not be addressed, but is instead meant to be a fair approach for all parties involved. The template the PW/SWD will use for these instances is provided in Appendix N.

5.5 Notice of Violation and Stop Work Orders

The purpose of issuing Notice of Violations and Stop Work Orders is to gain compliance with Corrective Orders issued and/or gain compliance with the Lexington County Stormwater Management Ordinance.

5.5.1 Issuing Violations

The PW/SWM Inspector shall issue a NOV to a permit holder, contractor, and/or other authorized agent upon findings of non-compliance of the SWPPP, LDP, construction plans and/or Lexington County Stormwater Management Ordinance. In most cases, a Corrective Order is used for the first offense. Subsequent non-compliance with the Stormwater Management Ordinance or failure to complete the items on the Corrective Order within a specified time period will result in a Notice of Violation followed by a SWO. The templates the PW/SWD will use for these instances is provided in Appendix N.

For violations that do not involve the safety of life, or an imminent threat of serious damage to the environment and public or private property, NOVs and SWOs may be issued for, but is not limited to, the following:

1. Failure to notify the PW/SWD before beginning work on the next phase of a development project.

    a. Any work that has been placed without a required inspection approval shall be certified in writing by a registered design professional before the next phase of construction shall begin.

b. PW/SWD reserves the right to require a PW/SWD Inspector to inspect all facilities that have not been viewed due to the permit holder 's failure to notify the PW/SWD before work began. This is done at the sole expense of the permit holder. Any deficiencies that need to be corrected before work starts again shall be listed and given a compliance date. The permit holder shall be notified to call for future inspections.

c. Failure to provide certification for completed stormwater structures. If an engineer's certification or "As-built" is not received by the compliance date as requested by a previously issued Corrective Order, a NOV will be sent requesting the certification from the permit holder or other authorized agent.

2. Failure to have work inspected, and approved before continuing work on the project.

3. Failure to have sediment and erosion controls in place, improper installation, and/or improper maintenance. If excavation has been initiated and sediment and erosion controls BMPs are not in place, or are not working to protect sediment from the leaving the development site, a NOV shall be sent with a directive to install the BMPs, correct the deficiency immediately or face a SWO for the entire site.

4. Construction not in accordance with the approved plans.

   a. A Corrective Order stating the activities to be corrected, and a compliance date shall be issued.

   b. If the correction work hasn't been completed by the compliance date, a NOV shall be issued stating:

      i. Three additional working days are allowed,

      ii. A Stop Work Order may be issued, and

      iii. Citations may be issued.

5. Working without grading, building, or other applicable permits.

   a. Stop Work Order shall be issued directing the owner to obtain the required permits, and

   b. The Stop Work Order shall state that failure to comply may result in the suspension or revocation of any remaining permits issued for the site and/or civil citations being issued.

6. Failure to properly maintain permanent stormwater structures.

5.6 Working Without a Permit

Any person that proceeds with land disturbing activities on a site that requires a Stormwater Management Plan and/or LDP without first submitting a plan and obtaining a permit shall automatically have a SWO placed on the development. If the SWO is issued for not obtaining a LDP, a $200 fee will be charged. All review and inspection fees for that project will be double the normal amount of applicable fees. Payment of fees and other applicable penalties must be complete prior to lifting the SWO. The SWO may allow or require correction of violations, but no other project activities my resume until the SWO has been lifted by the PW/SWD.

5.7 Civil Citations

The issuance of Civil Citations by the Inspector may be made for the following situations:

1. When a SWO has been issued, and work continues in defiance of the order.

2. On abandoned sites where no work has been taking place, and continued non-compliance with a NOV may result in the issuance of repeat citations.

3. When repeated, recurring violations take place at the same development site or when repeated recurring violations take place by the same responsible party. Each day that a violation remains uncorrected constitutes a separate applicable violation.

Violations may subject the permit holder to Civil Penalties of not more than $1,087 for each violation. Each separate day of a violation constitutes a new and separate violation.

Citations shall be hand delivered when possible. When it is not possible, the Citation shall be sent by Certified Mail. Permit Holders, owners, agents, permittees, lessees, builders, contractors, developers, firms, corporations, or partnerships listed on permit application or tax record may be cited under this provision.

5.8 Criminal Penalties

In addition to any applicable civil penalties, any person who negligently, willfully, or intentionally violates any provision of the Stormwater Management Ordinance shall be guilty of a misdemeanor and shall be punished within the jurisdictional limits of the magistrate's court. Each day of a violation shall constitute a new and separate offense.

CHAPTER 6 REFERENCES

This chapter lists the various references used in the manual and if available, websites where they can be retrieved.

ASCE, (1996). *Hydrology Handbook*. ASCE Manuals and Reports of Engineering Practice No. 28.

ASCE & WEF, (1994). *Design and Construction of Urban Stormwater Management Systems*. ASCE Manuals and Reports of Engineering Practice No. 77, WEF Manual of Practice No. FD-20.

American Association of State Highway and Transportation Officials, (1999). "Model Drainage Manual."

Atlanta Regional Commission, (2001) "Georgia Stormwater Management Manual- Volume 1: Stormwater Policy Guidebook, 1st Edition.

Atlanta Regional Commission, (2001) "Georgia Stormwater Management Manual- Volume 2: Technical Handbook, 1st Edition.

Chow, V.T., Maidment, D., and Mays L., (1988). *Applied Hydrology*. McGraw-Hill, NY.

Haan, C. T., Barfield, B. J., and Hayes, J. C., (1995). *Design Hydrology and Sedimentology for Small Catchments*. Academic Press, San Diego, Ca.

FEMA, (1998). *Federal Guidelines for Dam Safety*. Interagency Committee on Dam Safety, http://www.fema.gov/fima/damsafe/eap_toc.shtm.

Mays, L., (2001). "Hydrology for Drainage System Design and Analysis," in L. W. Mays, ed., *Storm Water Collection Systems Design Handbook*. McGraw-Hill, NY, p. 1-1 – 1-53.

Paine, J., and Akan, A., (2001). "Design of Detention Systems," in L. W. Mays, ed., *Storm water Collection Systems Design Handbook*. McGraw-Hill, NY, p. 7-1 – 7-66.

Prince George's County, (1999a). "Low-Impact Development Design Strategies - An Integrated Design Approach." Department of Environmental Resources, Programs and Planning Division, Prince George's County, Maryland.

Prince George's County, (1999b). "Low-Impact Development Hydraulic Analysis." Department of Environmental Resources, Programs and Planning Division, Prince George's County, Maryland.

Richland County, (2001). "Section 4 – Storm Drainage Design Standards." Richland County Land Development Requirements, Richland County, South Carolina.

South Carolina Department of Health and Environmental Control, (2005). "Storm Water Management BMP Handbook." Prepared by the Bureau of Water and OCRM.

South Carolina Department of Health and Environmental Control, (2003). "Stormwater Management and Sediment Control Handbook for Land Disturbance Activities." Prepared by the Bureau of Water and OCRM.

Schueler, T. R. (1987). "Controlling Urban Runoff: A Practical Manual for Planning and Designing Urban BMPs," Metropolitan Washington Council of Governments.

Shwab, Glenn O. and Richard K. Frevert, (1985). *Elementary Soil and Water Engineering*. John Wiley & Sons, New York, New York.

U.S. Environmental Protection Agency, June 1992.

United States Department of Agriculture, (1986). "Urban Hydrology for Small Watersheds." *Technical Release No. 55*, 2nd Edition, Natural Resources Conservation Service, Conservation Engineering Division, Washington D.C.

United States Department of Transportation, (1996). "Highway Hydrology – Hydraulic Design Series # 2." Federal Highway Administration, Publication # FHWA-SA-96-067.

United States Department of Transportation, (2001). "Introduction to Highway Hydrology – Hydraulic Design Series # 4." Federal Highway Administration, Publication # FHWA NHI 01-019.

United States Department of Transportation, (2001a). "Hydraulic Design of Highway Culverts – Hydraulic Design Series # 5." Federal Highway Administration, Publication # FHWA-NHI-01-020.

United States Department of Transportation, (2001b). "Urban Drainage Design Manual – Hydraulic Engineering Circular # 22." Federal Highway Administration, Publication # FHWA-NHI-01-021.

WEF & ASCE, (1998). *Urban Runoff Quality Management*, WEF Manual of Practice No. 23, ASCE Manual and Report on Engineering Practice No. 87.

Yen, B., (2001). "Hydraulics of Sewer Systems," in L. W. Mays, ed., *Storm Water Collection Systems Design Handbook*. McGraw-Hill, NY, p. 6-1 – 6-113.

COUNTY OF LEXINGTON

PUBLIC WORKS DEPARTMENT

ENGINEERING

MEMORANDUM

DATE: August 16, 2007

TO: Katherine Hubbard
County Administrator

FROM: John Fechtel, Public Works Director
Assistant County Administrator

RE: SCDOT SMP '08 Bid

The attached letter from SCDOT reflects the results of their bid on the SMP (State Match Program) '08 Project approved by County Council on March 27, 2007. The total cost of the project with a 5% contingency is $749,915.52 or $98,084.48 below their original estimate of $848,000.00. Our 50% share is $374,957.76 or $49,042.24 below our original commitment of $424,000.00. As indicated in the attached Exhibit A, the contract will cover roads 21 through 39 as approved.

We recommend County Council concur with SCDOT's bid and three (3) payments of $124,985.92 will be remitted on the dates indicated. Please present to the Public Works Committee on August 28, 2007 and report out that evening for Council's consideration.

Encl: Attachments

August 16, 2007

July 10, 2007 Letting - "C" Construction Program
File No. 32.170801 – C Pin No. 36472 –SMP 08
Lexington County

Mr. William C. "Billy" Derrick
Chairman - Lexington County Council
212 South Lake Drive
Lexington, SC 29072

Dear Mr. Derrick:

I have revised the programmed information in the chart below based on the previously committed amounts. This does not change your anticipated payment amount or payment schedule, but I wanted to be sure that you had the accurate information for your records. The previously committed amount was $848,000.00 with the SCDOT and Lexington County splitting the cost 50/50. With the low bid and contingency at $749,915.52, this project came in under by $98,084.48. My previous letter incorrectly stated that the project was under by $74,444.47 than the $848,000.00 in commitments. The following is a breakdown of the cost:

PIN	Programmed Amount	Contract Low Bid (Quantities)	5% Contingency	Total Cost	Additional Funds Needed
36472 MT01 State 36472 CP01 CTC	$ 424,000.00 $ 424,000.00	$ 714,205.26	$ 35,710.26	$ 749,915.52	(-$98,084.48)

As shown above, the actual low bid received from C.R. Jackson, Inc., for plan quantities was $714,205.26 with an estimated completion date of December 31, 2007. The total cost of this project, after a 5% contingency fee is $749,915.52. The CTC's portion of the contract is $374,957.76.

Please submit a check in the amount of **$374,957.76** made payable to SCDOT and sent to my attention at 955 Park Street, Columbia, SC 29202. Since Lexington County Council does not meet before August 28, 2007, I have extended the deadline to **September 3, 2007**. Lexington County may also choose to make payments of **$124,985.92**, with the first payment being due on **September 3, 2007**. The next payment will not be due until **October 8, 2007** in the amount of **$124,985.92**. The 3rd and final payment will be due on **November 19, 2007** in the amount of **$124,985.92**. .

My fax number is (803) 737-3590, and you may reach me at (803) 737-1365 with any questions or concerns. Once again, thank you for your patience, and I apologize for any confusion that this may have caused.

Sincerely,

Julie P. Barker, P.E.
"C" Program Engineer

JPB:rlm
File:PC/JPB

File No. 32.170801 – C PIN 36472

cc: Lexington County Director of Public Works – John Fechtel

Exhibit A

SCDOT Recommendation for CTC Resurfacing - Lexington Office

PROPOSED RESURFACING LIST FROM SCDOT FOR THE SMP(07-08) MATCH

									RUNING COST	CTC APPROVAL
6	20	***S-169	Belo Road	Barr R.	End of Pavement	1.32	$0	$0	$0	NO
9	21	S-358	Wilkinson St.	Poplar St.	Dunbar Rd.	0.34	$63,495	$186,750	$63,495	YES
9	22	S-359	Vine Street	State St.	Sunnyside Dr.	0.51	$95,243	$186,750	$158,738	YES
9	23	S-506	James Street	Frink St.	Hemlock St.	0.27	$50,423	$186,750	$209,160	YES
9	24	S-509	Forrest Street	Frink St.	Oak St.	0.20	$37,350	$186,750	$246,510	YES
9	25	S-424	Granby Street	Wilkinson St.	Ann St.	0.15	$28,013	$186,750	$274,523	YES
9	26	S-456	Granby Street	Ann St.	Dunbar Rd.	0.19	$35,483	$186,750	$310,005	YES
9	27	S-994	Dogwood St.	Taylor Rd.	Haynes St.	0.31	$57,893	$186,750	$367,898	YES
9	28	S-1057	Cypress St.	Oak St.	End State Maint.	0.13	$24,278	$186,750	$392,176	YES
9	29	S-1158	Pine Street	Forrest St.	Cypress St.	0.09	$16,808	$186,750	$408,983	YES
9	30	S-369	Still Hopes Dr.	Knox Abbott	End State Maint.	0.10	$18,675	$186,750	$427,658	YES
9	31	S-406	"F" Avenue	9th Street	12th Street	0.38	$70,965	$186,750	$498,623	YES
8	32	S-804	Williams St.	Platt Springs	Charleston Hwy.	0.43	$80,303	$186,750	$578,925	YES
9	33	S-1119	Cherry Lane	North Eden Dr.	Dogwood St.	0.15	$28,013	$186,750	$606,938	YES
9	34	S-1120	Laurel Lane	North Eden Dr.	Dogwood St.	0.10	$18,675	$186,750	$625,613	YES
7	35	S-1300	Tara Trail	Ashland Rd.	Green Ridge Rd.	0.62	$115,785	$186,750	$741,398	YES
7	36	S-1298	Gardendale Dr.	Ashland Rd.	Rolling Green Rd.	0.29	$54,158	$186,750	$795,555	YES
7	37	S-1670	Rusty Barn Rd.	Nursery Rd.	Stephenson Ln.	0.14	$26,145	$186,750	$821,700	YES
7	38	S-1750	Yarmouth Dr.	Brookshire Dr.	Kettering Dr.	0.11	$20,543	$186,750	$842,243	YES
7	39	S-1557	Rolling View Ln.	St. Andrews Rd.	Gardendale Dr.	0.03	$5,603	$186,750	$847,846	YES

COUNTY OF LEXINGTON

PUBLIC WORKS DEPARTMENT

ENGINEERING

MEMORANDUM

DATE: August 20, 2007

TO: Katherine Hubbard
County Administrator

FROM: John Fechtel, Public Works Director
Assistant County Administrator

RE: Stormwater Fees – Motorsport Complex

Mr. Lonnie Keisler has purchased approximately 200 acres of which about 86 acres will be disturbed and the remaining will be left natural. Mr. Keisler plans to construct a driving course for go-karts, ATV's (all-terrain vehicles) and Motorcross and will be using various techniques including Low Impact Development. It appears there will not be a stormwater discharge from this site.

The major concern Mr. Keisler has expressed is the stormwater review and inspection fees that total about $20,000.00 on this site. In comparison, if the property were sub-divided with four residential lots per disturbed acre (total 344 lots on 86 acres), his stormwater fees would be approximately $10,000.00. Mr. Keisler has been informed that County Council approves all fees.

It appears that the commercial development fees are higher than the residential in that the residential project would require 9.5 lots per acre to equate to the same fee. Staff had researched this issue several years ago and it appeared to be consistent with some of the larger counties fees, but no comparison has been made since.

Mr. Keisler stated that he thought the fee for his project is high ($20,000.00) and that $10,000.00 would be more appropriate. I related to Mr. Keisler that I would present this to the Public Works Committee for their consideration.

Our fee schedule (attached) uses a base fee plus $12.00 per lot for residential or $115.00 per acre for commercial property.

Please present this to the Public Works Committee on August 28 and report out that evening for Council's consideration.

Attachment (1)

/lh

Lexington County Fees

Proposed Construction Plan Review and Inspection Fees		
Subdivision Plan Review Flat Fee = $575.00 Plus $12.00 per Lot		
	Items Covered	Fees
	Predevelopment Review Meeting	Covered by Submittal Fees
	First Review & First Resubmittal	Covered by Submittal Fees
	As-Builts: First Review & First Resubmittal	Covered by Submittal Fees
	Sediment and Erosion Permit	$575.00
	Additional Plan Revisions	$575.00
Subdivision Construction Inspections Fees = $1150.00 plus $12.00 per Lot		
	Pre-Construction Meeting	Covered by Submittal Fees
	Clearing & Grubbing	Covered by Submittal Fees
	Rough Grading	Covered by Submittal Fees
	Drainage	Covered by Submittal Fees
	Base	Covered by Submittal Fees
	Binder and/or Surfacing Asphalt	Covered by Submittal Fees
	Final Inspection	Covered by Submittal Fees
	Final Inspection Signoff	Covered by Submittal Fees
	All reinspections (After the second inspection)	$230.00
Commercial Project Review Fees = $575.00 plus $115.00 per Acre		
	Predevelopment Review Meeting	Covered by Submittal Fees
	First Review & First Resubmittal	Covered by Submittal Fees
	As-Builts: First Review & First Resubmittal	Covered by Submittal Fees
	Additional Plan Revisions	$288.00
	Land Disturbance Permit Level II	$288.00
Commercial Project Inspection Fees = $1150.00 plus $115.00 per Acre		
	Pre-Construction Meeting	Covered by Submittal Fees
	Final Inspection	Covered by Submittal Fees
	Final Inspection Signoff	Covered by Submittal Fees
	All reinspections (After the second inspection)	$230.00

COUNTY OF LEXINGTON

PUBLIC WORKS DEPARTMENT

ENGINEERING

M E M O R A N D U M

DATE: August 20, 2007

TO: Katherine Hubbard
County Administrator

FROM: John Fechtel, Public Works Director
Assistant County Administrator

RE: Turning Lanes – Sandhills Collection Station

We have been contacted by the SCDOT District 1 Maintenance Engineer concerning a safety hazard at the Sandhills collection station. The collection station was relocated to the 321 Landfill several years ago and SCDOT has concerns about the high incident of accidents involving citizens turning into the station from both directions. The initial review of our encroachment permit for this site did not include adding turn lanes to this facility.

SCDOT has asked that we construct turn lanes at this site and have provided us with the project plans. In addition, SCDOT will assist with the necessary traffic control devices and reimburse the County the estimated $15,000.00 for materials (asphalt and concrete pipe).

We recommend County Council concur with SCDOT's request that Public Works perform the work with SCDOT reimbursing the County the estimated $15,000.00 for materials. Please present this to the Public Works Committee on August 28, 2007 and report out that evening for Council's consideration.

/lh

The Committee Minutes are left out intentionally until approved by the Committee. Upon the Committee's approval, the minutes will be available on the Internet.

The Committee Minutes are left out intentionally until approved by the Committee. Upon the Committee's approval, the minutes will be available on the Internet.

Lexington County Fire Service

List of Modules for Fire Service Policies and Guidelines

	Number	Date		Title
	ADM-001			Mission Statement
	ADM-002			Standard Operating Procedures Manual
	ADM-003			Administrative Procedures (membership, etc.)
	ADM-004			VACANT
	ADM-005			Safety Program (In-House)
	ADM-006			Training Requirements
	ADM-007			Infectious Disease Control
	ADM-008			Hazardous Communications
	ADM-009			Uniform and Personal Appearance
	ADM-010			Outdoor Burn Ordinance
	ADM-011			False Alarm Ordinance
	ADM-012			Equipment (bunker gear, extinguishers, etc.)
	ADM-013			Fire House Procedures
	ADM-014			Public Safety Chaplains and Trauma Procedures
	ADM-015			Fire Prevention
	ADM-016			Volunteer Incentive Program
	ADM-017			Personnel Information Updates
	ADM-018			Station Family Visit
	ADM-019			Maintenance in Stations
	ADM-020			Public Information Officer
	ADM-021			Fundraisers
	OPS-001			Command Structure
	OPS-002			Accountability Procedures
	OPS-003			Rapid Intervention Team
	OPS-004			Respiratory Protection Procedures
	OPS-005			Vehicle Operations Procedures(POV response, etc.)
	OPS-006			Radio/Communications Procedures
	OPS-007			First Responder Procedures
	OPS-008			Post Incident Analysis
	OPS-009			Daily Duties
	OPS-010			Special Considerations for Incident Responses
	OPS-011			Arson Team Procedures/Crime Scene Procedures
	OPS-012			Pre-fire Survey
	OPS-013			Emergency Operations Procedures

The Committee Minutes are left out intentionally until approved by the Committee. Upon the Committee's approval, the minutes will be available on the Internet.

APPOINTMENTS - BOARDS & COMMISSIONS

August 28, 2007

BILLY DERRICK

Museum – Bill Shumpert (Resignation effective 7/23/07) Term expires 11/1/09 – letter attached

SMOKEY DAVIS

Children's Shelter - David S. Hipp – Term expired 06/30/06 – Not eligible for reappointment
Board of Zoning Appeals - Bryan Clemenz (Resignation effective 03/20/07) Term expires 12/31/07
Planning Commission – Earl E. McLeod, Jr. – Term expires 8/26/07 – Eligible for reappointment; Nomination form for Andrew White attached.
Library Board – Christopher "Brant" Taylor – Term expires 09/26/07 – Eligible for reappointment

DEBBIE SUMMERS

Library Board – Mary N. Kerr – Term expires 09/26/07 – Eligible for reappointment

BOBBY KEISLER

Library Board – Fremont Huggins – Term expires 09/26/07 – Not eligible for reappointment

JOHNNY JEFFCOAT

Museum Commission - Sandra Burdett – Term expired 11/01/05 – Not eligible for reappointment
Assessment Appeals Board – Beth Dorn Lindardt – Term expires 09/21/07 – Eligible for reappointment

JOHN CARRIGG

Assessment Appeals Board – Vacant – Term expired 09/21/06
Museum Commission – Vacant – Term expired 11/01/06
Board of Zoning Appeals – Malcolm Dennis (Resignation effective 01/01/07) – Term expires 12/31/09
Planning Commission – Robert A. Wilbur – Term expires 8/26/07 – Not eligible for reappointment
Library Board – David Fellows – Term expires 09/26/07 – Eligible for reappointment

BILL BANNING

Planning Commission – William E. Unthank, Jr. – Term expires 8/26/07 – Eligible for reappointment

TODD CULLUM

Library Board - Ray Sharpe – Term expires 09/26/07 – Eligible for reappointment

AIKEN/BARNWELL/LEXINGTON COUNTIES COMMUNITY ACTION COMMISSION, INC.

Juanice Aaron - Term expired 12/31/05 - Eligible for reappointment

BUILDING CODE BOARD OF APPEALS

Plumbing – Ashton B. Shuler – Term expired 8/13/07 – Eligible for reappointment
Gas/Mechanical – Marvin Smith – Term expired 8/13/07 – Eligible for reappointment
Building Industry – Ernie Magaro, Jr. – Term expired 8/13/07 – Eligible for reappointment
At-Large – Richard C. Key – Term expired 8/13/07 – Eligible for reappointment

CENTRAL MIDLANDS COUNCIL OF GOVERNMENTS

Melanie P. Ellerbe – Term expired 06/15/07 – Not eligible for reappointment
Vacant – Term expires 06/15/2007

CULTURAL COUNCIL OF RICHLAND AND LEXINGTON COUNTIES

John Carrigg – Term expired – Not eligible for reappointment

LEXINGTON COUNTY COUNCIL
BOARD/COMMISSION NOMINATION FORM

Name of Board/Commission: Planning Commission

Nominee: Andrew D. Wilford

Address: 631 Brenda Ct. Lexington, SC 29072

Employed by: Self-employed

Address: P.O. Box 12021 Columbia, SC 29211

Home Telephone: (803) 951-3411 Business Telephone: (803) 256-5093

Mobile Phone: (803) 622-7975 Beeper Number:

Fax Number: (803) 256-5093

Is nominee aware of board/commission activities and responsibilities: Yes

Background information (include education, community service activities, previous service on county boards/commissions or any other boards/commissions on which you are currently serving):

B.S. Finance, Clemson University
Elder Saxe Gotha Presbyterian Church
S.C. State Chamber of Commerce Legislative Affairs Committee
Past President, Homebuilders Association of Greater Columbia
District Vice-President, Homebuilders Association of South Carolina
Director, National Association of Homebuilders
Past Chairman, Legislative Committee, Homebuilders Association of S.C.
Past Member, Peoria, Arizona Economic Development Board
Former Scoutmaster, Troop 1, Beaufort, S.C.

Submitted by: Smokey Sarvis Lexington County Council

Council District Number: 3 Telephone 803-785-8103

Date: 8-20-07 FAX - 803- 785-8101

dot/wpdocs/council/nominationform.wpd (11/9/05)

JUL 2007 RECEIVED LEXINGTON COUNTY COUNCIL LEXINGTON, S.C.

cc: Billy
8-1-07 9

Monday, July 23, 2007

The Honorable William C. Derrick
County Council
212 South Lake Drive
Lexington, S.C. 29072

Dear Billy,

This letter is in reference to our telephone conversation today, Mon. July 23, 2007. I appreciate you sponsoring my appointment to the Lexington County Museum Board last December, but I will no longer be willing to serve the remaining time on my term. This resignation will be effective per our telephone conversation as of today.

Very truly yours,

Bill Schumpert

JUL 2007
RECEIVED
LEXINGTON COUNTY
COUNCIL
LEXINGTON, S.C.

#2

COUNTY OF LEXINGTON
Procurement Services

MEMORANDUM
(O) 785-8166
(F) 785-2240

DATE: August 6, 2007

TO: Katherine L. Hubbard
County Administrator

FROM: Sheila R. Fulmer, CPPB
Procurement Services

SUBJECT: **Fleet Vehicle Replacement/Addition – Fleet Services**

We are in receipt of requisitions for the purchase of two (2) 2008 Ford F-250 ¾ Ton 2WD Service Trucks with Body for Fleet Services. Each vehicle requested is being purchased from Vic Bailey Ford through the South Carolina State Contract Number 07-S7328-A12800. These vehicles are recommended and approved in accordance with the Fleet Management Policy by Ellis Gammons, Fleet Manager.

The total cost for both vehicles including applicable sales tax is $48,922.00.

Funds are appropriated in the following accounts:

1000-111400-5A8053	¾ Ton 2WD	Service Truck & Body - Replacement	$21,972.00
1000-111400-5A8059	¾ Ton 2WD	Service Truck & Body - Addition	$26,950.00

I concur with the above recommendation and further recommend that these purchases be placed on County Council's agenda for their next scheduled meeting on August 28, 2007.

copy: Larry Porth, Director of Finance/Assistant County Administrator
Ellis Gammons, Fleet Manager

COUNTY OF LEXINGTON
Procurement Services

MEMORANDUM

(O) 785-8385
(F) 785-2240

DATE: August 15, 2007

TO: Katherine L. Hubbard
County Administrator

THROUGH: Sheila R. Fulmer, CPPB
Procurement Manager

FROM: Janice A. Bell, CPPB
Procurement Officer

SUBJECT: **Fleet Vehicle Replacement – Public Safety/EMS**

We are in receipt of a purchase request for one (1) new 2008 Ford F-250 ¾ Ton 4WD Extended Cab Pickup Truck for Public Safety/EMS. This vehicle is being purchased from Dick Smith Ford through South Carolina State Contract Number 07-S7328-A12758. The vehicle will require the installation of emergency equipment which will be purchased from West Chatham Warning Devices through County Contract #C05011-02/09/05B. The campertop and bed liner will be purchased from Hudson Brothers. This vehicle is recommended and approved in accordance with the Fleet Management Policy by Ellis Gammons, Fleet Manager. The total cost including applicable sales tax for this truck is $24,894.39.

It is recommended that the award be made to multiple vendors as follows:

Dick Smith Ford	$22,511.00
West Chatham Warning Devices	1,245.48
Hudson Brothers	1,137.91

Funds are appropriated in the following account:

1000-131400-5A8128	(1) Vehicle – Quick Response	$24,894.39

I concur with the above recommendation and further recommend that these purchases be placed on County Council's agenda for their next scheduled meeting on August 28, 2007.

Attachment

copy: Larry Porth, Director of Finance/Assistant County Administrator
Chief Bruce Rucker, Assistant Sheriff / Director of Public Safety & Homeland Security
Chief Brian Hood, EMS Coordinator
Ellis Gammons, Fleet Manager

COUNTY OF LEXINGTON
Procurement Services

MEMORANDUM

(O) 785-8385
(F) 785-2240

DATE: August 14, 2007

TO: Katherine L. Hubbard
County Administrator

THROUGH: Sheila R. Fulmer, CPPB
Procurement Manager

FROM: Janice A. Bell, CPPB
Procurement Officer

SUBJECT: **Fleet Vehicle Additions/Replacements – Sheriff's Department**

We are in receipt of purchase requests for twenty-four (24) fleet vehicle additions/replacements for the Sheriff's Department. All vehicles requested are being purchased through the appropriate South Carolina State Contract. The vehicles will require emergency equipment, which is available from Palmetto Distributors through the South Carolina State Contract Number 05-S6656-A1104. The installation of the emergency equipment and accessories will be purchased from Light-N-Up through County Contract Number C05011-02/09/05B. These vehicles are recommended and approved in accordance with the Fleet Management Policy by Ellis Gammons, Fleet Manager.

The cost for each vehicle including any emergency equipment and accessories is shown on the attached list. The total cost including applicable sales tax for all vehicles is $547,717.67.

An ABT will be submitted to have appropriate funding for these vehicles. Upon approval, funds will be appropriated in the accounts listed on the attachment.

I concur with the above recommendation and further recommend that these purchases be placed on County Council's agenda for their next scheduled meeting on August 28, 2007.

Attachment

copy: Larry Porth, Director of Finance/Assistant County Administrator
Sheriff James Metts
Chief Bruce Rucker, Assistant Sheriff / Director of Public Safety & Homeland Security
Chief Keith Kirchner, Assistant Sheriff
Colonel Alan Paavel, Sheriff's Department
Sylvia Dillon, Sheriff's Department
Ellis Gammons, Fleet Manager

VEHICLES FOR SHERIFF'S DEPARTMENT

08/14/07
jab

Account Code	Vehicle Description	Budget Narrative	Vehicle Cost	Emergency Equipment Cost	Installation	Total	Total of Account Code	Budgeted Amount
1000-151100-5A8194	2008 Chevrolet Impala Sedan	(3) Unmarked Vehicles W/Equipment	$15,445.00	$1,005.70	$240.00	$16,690.70	$54,953.30	$69,720.00
	2008 Ford F-150 1/2 Ton 2WD Pickup Truck		$14,841.00	$990.30	$240.00	$16,071.30		
	2008 Ford Crown Victoria Patrol Sedan		$20,961.00	$990.30	$240.00	$22,191.30		
1000-151200-5A8198	2008 Ford Crown Victoria Unmarked Sedans	(4) Unmarked Vehicles W/Equipment	$83,844.00	$3,961.18	$960.00	$88,765.18	$88,765.18	$92,960.00
1000-151200-5A8360	2008 Chevrolet Tahoe 4WD Utility Vehicle	(2) Sport Utility Vehicles 4WD	$34,357.00	$2,125.26	$240.00	$36,722.26	$56,533.57	$60,480.00
	2008 Ford Escape 4WD Utility Vehicle		$18,610.00	$961.31	$240.00	$19,811.31		
1000-151300-5A8207	2008 Chevrolet Impala Sedan	(1) Unmarked Vehicle W/Equipment	$15,445.00	$1,005.70	$240.00	$16,690.70	$16,690.70	$23,240.00
1000-151300-5A8209	2008 Ford F-240 Crew Cab Pickup Truck	(1) Pickup W/Equipment	$30,068.00	$2,384.85	$240.00	$32,692.85	32,692.85	$33,240.00
2411-151200-5A8243	2008 Ford Crown Victoria Sedan	(1) Unmarked Vehicle	$20,961.00	$990.30	$240.00	$22,191.30	$22,191.30	$29,240.00
2437-151200-5A8244	2008 Ford Crown Victoria Marked Patrol Sedan	(3) Vehicle & Accessories	$64,698.00	$3,554.69	$720.00	$68,972.69	$68,972.69	$66,000.00
2633-151200-5A7235	2008 Ford Crown Victoria Marked Patrol Sedan	(1) Marked Vehicle W/Equipment	$21,566.00	$1,184.90	$240.00	$22,990.90	$22,990.90	$22,200.00
2633-151200-5A8281	2008 Ford Crown Victoria Marked Patrol Sedan	(2) Marked Vehicles W/Equipment	$43,132.00	$2,369.79	$480.00	$45,981.79	$45,981.79	$46,480.00
2634-151200-5A7240	2008 Ford Crown Victoria Marked Patrol Sedan	(1) Marked Vehicle W/Equipment - Replacement	$21,566.00	$1,184.90	$240.00	$22,990.90	$22,990.90	$22,200.00
2634-151200-5A8282	2008 Ford Crown Victoria Marked Patrol Sedan	(2) Marked Vehicles W/Equipment	$43,132.00	$2,369.79	$480.00	$45,981.79	$45,981.79	$46,480.00
2639-151200-5A8283	2008 Ford Crown Victoria Marked Patrol Sedan	(1) Marked Vehicle W/Equipment	$21,566.00	$1,184.90	$240.00	$22,990.90	$22,990.90	$23,240.00
2640-151200-5A8284	2008 Ford Crown Victoria Marked Patrol Sedan	(1) Marked Vehicle W/Equipment	$21,566.00	$1,184.90	$240.00	$22,990.90	$22,990.90	$23,240.00
2641-151200-5A8285	2008 Ford Crown Victoria Marked Patrol Sedan	(1) Marked Vehicle W/Equipment	$21,566.00	$1,184.90	$240.00	$22,990.90	$22,990.90	$23,240.00

COUNTY OF LEXINGTON
Procurement Services

MEMORANDUM
(O) 785-8385
(F) 785-2240

DATE: August 13, 2007

TO: Katherine L. Hubbard
County Administrator

THROUGH: Sheila R. Fulmer, CPPB
Procurement Manager

FROM: Janice A. Bell, CPPB
Procurement Officer

SUBJECT: **Fuelmaster Site Upgrades, Nozzle Chips & Vehicle Modules**
Fleet Services & Motor Pool

We received a requisition for the purchase of Fuelmaster Site Upgrades, Nozzle Chips and Vehicle Modules for Fleet Services & Motor Pool. This has been deemed a Sole Source and will be purchased directly from the manufacturer (Syn-Tech Systems).

This project will upgrade eight (8) of our eleven (11) original Fuelmaster sites located around the County. The twenty-six (26) vehicle modules will be installed on our motor pool vehicles, which will eliminate the need for manual data entry when re-fueling. This will provide us with accurate data that will be transferred into our Fuelmaster system. The total cost of this equipment and accessories including applicable tax is $27,555.97.

Funds are appropriated in the following accounts:

1000-111400-5A8056	Fleet Services
(8) Upgrade Fuel Sites (20) Nozzles	$22,049.00
6590-111500-5A8353	Motor Pool Fund
(26) Fuelmaster Vehicle Modules	$5,506.97

I concur with the above recommendation and further recommend that this purchase be placed on County Council's agenda for their next scheduled meeting on August 28, 2007.

copy: Larry Porth, Director of Finance/Assistant County Administrator
Ellis Gammons, Fleet Manager

COUNTY OF LEXINGTON
Procurement Services

MEMORANDUM

(O) 785-8385
(F) 785-2240

DATE: August 16, 2007

TO: Katherine L. Hubbard
County Administrator

THROUGH: Sheila R. Fulmer, CPPB
Procurement Manager

FROM: Janice A. Bell, CPPB
Procurement Officer

SUBJECT: **Tractor with Slope Mower – Public Works Department**

We are in receipt of a purchase request for one (1) Tractor with Slope Mower for the Public Works Department. This equipment is being purchased from Blanchard Machinery through South Carolina State Contract Number 05-S6476-A10098. This tractor will be replacing a 1987 Ferguson Tractor and is recommended and approved in accordance with the Fleet Management Policy by Ellis Gammons, Fleet Manager. The total cost including applicable sales tax is $81,855.00.

Funds are appropriated in the following account:

1000-121300-5A8073	(1) Tractor with Slope Mower	$81,855.00

I concur with the above recommendation and further recommend that this purchase be placed on County Council's agenda for their next scheduled meeting on August 28, 2007.

Attachment

copy: Larry Porth, Director of Finance/Assistant County Administrator
John Fechtel, Director of Public Works/Assistant County Administrator
Ellis Gammons, Fleet Manager

COUNTY OF LEXINGTON
Procurement Services

MEMORANDUM
(O) 785-8385
(F) 785-2240

DATE: August 15, 2007

TO: Katherine L. Hubbard
County Administrator

THROUGH: Sheila R. Fulmer, CPPB
Procurement Manager

FROM: Janice A. Bell, CPPB
Procurement Officer

SUBJECT: **Two (2) New Dump Trucks and Two (2) New Pickup Trucks**
Bid No. B08001-08/14/07B
Public Works Department / Fleet Vehicle Replacements

Competitive bids were solicited and advertised for two (2) New Dump Trucks and two (2) New Pickup Trucks for the Public Works Department. These replacements are recommended and approved in accordance with the Fleet Management Policy by Ellis Gammons, Fleet Manager. We received nine (9) bids of which one (1) was a no bid (see attached bid tabulation). Ellis Gammons, Fleet Manager; John Fechtel, Director of Public Works/Assistant County Administrator; and Janice A. Bell, Procurement Officer evaluated the bids. The total cost including applicable sales tax is $208,684.00.

It is recommended that the award be made to multiple vendors as the lowest bidders, meeting specifications as follows:

Columbia Freightliner	$88,035.00
Burns Automotive	$56,445.00
Keeter Motor	$64,204.00

Funds are appropriated in the following accounts:

1000-121300-5A8070	(1) Tandem Dump Truck	$88,035.00
1000-121300-5A8071	(2) Crew Cab Pickup Trucks	$56,445.00
1000-121300-5A8074	(1) Single Axle Dump Truck	$64,204.00

I concur with the above recommendation and further recommend that this bid be placed on County Council's agenda for their next scheduled meeting on August 28, 2007.

Attachment

copy: Larry Porth, Director of Finance/Assistant County Administrator
John Fechtel, Director of Public Works/Assistant County Administrator
Ellis Gammons, Fleet Manager

County of Lexington

Bid Tabulation

B08001-08/14/07B

DUMP AND PICKUP TRUCKS

		Volvo and GMC Truck Ctr		Carolina Intl Trucks		Walterboro Motor Sales	
Quantity	Description	Unit Price	Total	Unit Price	Total	Unit Price	Total
1	Tandem Dump Truck	$98,030.02	$98,030.02	No Bid		No Bid	
1	Optional transmission						
1	Ford Pickup Truck w/pickup bed	No Bid		No Bid		$25,852.00	$25,852.00
1	Ford Pickup Truck w/service body	No Bid		No Bid		$31,013.00	$31,013.00
1	Single Axle Dump Truck	$70,016.63	$70,016.63	No Bid			

		Burns Automotive		Bob Bennett Ford		Keeter Motor	
Quantity	Description	Unit Price	Total	Unit Price	Total	Unit Price	Total
1	Tandem Dump Truck	No Bid		No Bid		No Bid	
1	Optional transmission						
1	Ford Pickup Truck w/pickup bed	$25,645.00	$25,645.00	$33,032.00	$33,032.00	$26,314.00	$26,314.00
1	Ford Pickup Truck w/service body	$30,200.00	$30,200.00	$37,781.00	$37,781.00	$30,934.00	$30,934.00
1	Single Axle Dump Truck	$67,230.00	$67,230.00	No Bid		$63,904.00	$63,904.00

		Columbia Freightliner		Dick Smith Ford		Peterbilt of Florence		Peterbilt of Florence-Alt	
Quantity	Description	Unit Price	Total	Unit Price	Total	Unit Price	Total	Unit Price	Total
1	Tandem Dump Truck	$87,735.00	$87,735.00	No Bid		$93,769.86	$93,769.86	$74,093.86	$74,093.86
1	Optional transmission	$12,600.00	$12,600.00			$15,114.00	$15,114.00	$6,573.00	$6,573.00
1	Ford Pickup Truck w/pickup bed	No Bid		$30,590.00	$30,590.00	No Bid		No Bid	
1	Ford Pickup Truck w/service body	No Bid		$30,590.00	$30,590.00	No Bid		No Bid	
1	Single Axle Dump Truck	No Bid		$69,186.00	$69,186.00	No Bid		No Bid	

Bids opened: August 14, 2007

Janice A. Bell, CPPB

COUNTY OF LEXINGTON
Procurement Services

MEMORANDUM
(O) 785-8166
(F) 785-2240

DATE: August 17, 2007

TO: Katherine L. Hubbard
County Administrator

FROM: Sheila R. Fulmer, CPPB
Procurement Manager

SUBJECT: **Dell Laptops Replacements/Addition – Various Departments**
Information Services

We have received a purchase request for five (5) Dell Laptops for various departments. Two of the five laptops include docking stations. These will be purchased directly from the manufacturer (Dell) through the South Carolina State Contract #05-S6656-A11104.

Mike Ujcich, Chief Information Officer, and Jim Schafer, Information Technology Manager, have reviewed and recommended this purchase.

The total cost including applicable sales tax is $7,722.58.

Funds are appropriated in the following accounts:

1000-141600-5A8180	Master-In-Equity	One Laptop (Replacement)	$1,482.22
1000-141100-5A8142	Clerk of Court	One Laptop (Replacement)	$1,482.22
1000-101500-5A8008	Human Resources	One Laptop (Addition)	$1,482.22
2950-101700-5A8315	Delinquent Tax	One Laptop with docking station (Replacement)	$1,637.96
2600-141100-5A8302	Clerk of Court	One Laptop with docking station (Replacement)	$1,637.96

I concur with the above recommendation and further recommend that this purchase be placed on County Council's agenda for their next scheduled meeting on August 28, 2007.

copy: Larry Porth, Director of Finance/Assistant County Administrator
Jim Schafer, Information Technology Manager

COUNTY OF LEXINGTON
Procurement Services

MEMORANDUM
(O) 785-8166
(F) 785-2240

DATE: August 17, 2007

TO: Katherine L. Hubbard
County Administrator

FROM: Sheila R. Fulmer, CPPB
Procurement Manager

SUBJECT: **Secure Socket Layer Virtual Private Network Appliance**
Information Services

We have received a purchase request for one (1) Secure Socket Layer (SSL) Virtual Private Network (VPN) Appliance for the Department of Information Services. This will be purchased directly from the manufacturer (Dell) through the South Carolina State Contract #05-S6656-A11104.

The purchase will provide for an additional 50 concurrent connections for additional secure remote access to county network resources (we currently have 50). These connections will support a variety of e-business operations of county departments (such as access to electronic pay vouchers by employees from their homes) as well as secure connections by Information Services employees and third-party contractors for maintenance of county IT resources from remote locations. Also included is a failover VPN appliance, installed, to keep SSL VPN services going if the primary appliance fails.

The total cost including applicable sales tax is $14,356.17.

Funds are appropriated in the following account:

1000-102100-5A8040	SSL VPN Appliance	$14,356.17

I concur with the above recommendation and further recommend that this purchase be placed on County Council's agenda for their next scheduled meeting on August 28, 2007.

copy: Larry Porth, Director of Finance/Assistant County Administrator
Jim Schafer, Information Technology Manager
Mike Ujcich, Chief Information Officer

COUNTY OF LEXINGTON
Procurement Services

MEMORANDUM
(O) 785-8166
(F) 785-2240

DATE: August 16, 2007

TO: Katherine L. Hubbard
County Administrator

FROM: Sheila R. Fulmer, CPPB
Procurement Manager

SUBJECT: **Computer Reservation System, Licenses, Installation, and Training - Sole Source Library Services**

We have received a purchase request for the purchase of a Computer Reservation System including licenses, installation, and training from Library Services. This system will allow the public to reserve a public computer at the largest branches and coordinate time management for each usage. This will replace a system that is currently done by hand, which cannot accurately keep up with the heavy demand for public computer use.

Mike Ujcich, Chief Information Officer, and Jim Schafer, Information Technology Manager, have reviewed and recommended this purchase. This purchase has been deemed a sole source, as it must integrate into the existing Print Management System. This will be purchased from Interface Electronics for a total cost including licenses, installation, training and applicable taxes of $12,050.70.

Funds are appropriated in the following account:

2330-230099-5A8226	PC Reservation System	$12,050.70

I concur with the above recommendation and further recommend that this purchase be placed on County Council's agenda for their next scheduled meeting on August 28, 2007.

copy: Larry Porth, Director of Finance/Assistant County Administrator
Dan MacNeill, Director Library Services
Jim Schafer, Information Technology Manager

COUNTY OF LEXINGTON
Procurement Services

MEMORANDUM
(O) 785-8166
(F) 785-2240

DATE: August 16, 2007

TO: Katherine L. Hubbard
County Administrator

FROM: Sheila R. Fulmer, CPPB
Procurement Manager

SUBJECT: **Microsoft Volume Licenses - Library Services**

We have received a purchase request for the purchase of fifty-five (55) Microsoft Office Professional Volume Licenses for Library Services. This purchase will provide uniform software throughout the library system. The software will be purchased from Software House International through South Carolina State Contract #01-S4072-A7243.

Mike Ujcich, Chief Information Officer, and Jim Schafer, Information Technology Manager, have reviewed and recommended this purchase.

The cost of the software is $18,076.07 including applicable sales tax.

Funds are appropriated in the following account:

2330-230099-5A8227	Microsoft Office Professional	$18,076.07

I concur with the above recommendation and further recommend that this purchase be placed on County Council's agenda for their next scheduled meeting on August 28, 2007.

copy: Larry Porth, Director of Finance/Assistant County Administrator
Dan MacNeill, Director Library Services
Jim Schafer, Information Technology Manager

COUNTY OF LEXINGTON
Procurement Services

MEMORANDUM
(O) 785-8166
(F) 785-2240

DATE: August 17, 2007

TO: Katherine L. Hubbard
County Administrator

FROM: Sheila R. Fulmer, CPPB
Procurement Manager

SUBJECT: **Personal Computers and Monitors - Library Services**

We have received a purchase request for forty-four (44) Personal Computers and Monitors from Library Services. These computers will be used in two new facilities being constructed this fiscal year, as well as replacing a number of older machines throughout the system.

Mike Ujcich, Chief Information Officer, and Jim Schafer, Information Technology Manager, have reviewed and recommended this purchase. The computers and monitors will be purchased directly from the manufacturer (Dell) through the South Carolina State Contract #05-S6656-A11104 for a total cost of $34,639.11 including applicable sales tax.

Funds are appropriated in the following account:

2330-230099-5A8377
(44) Personal Computers and Monitors – Library State Funds $34,639.11

I concur with the above recommendation and further recommend that this purchase be placed on County Council's agenda for their next scheduled meeting on August 28, 2007.

copy: Larry Porth, Director of Finance/Assistant County Administrator
Dan MacNeill, Director Library Services
Jim Schafer, Information Technology Manager

COUNTY OF LEXINGTON
Procurement Services

MEMORANDUM
(O) 785-8166
(F) 785-2240

DATE: August 16, 2007

TO: Katherine L. Hubbard
County Administrator

FROM: Sheila R. Fulmer, CPPB
Procurement Manager

SUBJECT: **Panasonic Laptops and Accessories – Sheriff's Department**

We have received a purchase request for three (3) Panasonic Laptops and Accessories for the Sheriff's Department. These laptops will be used to capture incident data for the field reporting system and to retrieve data pertinent to the incident at hand.

The Panasonic Laptops will be purchased from Howard Computers through the South Carolina State Contract #05-S6656-A11320 for a total cost of $10,092.24.

Mike Ujcich, Chief Information Officer, and Jim Schafer, Information Technology Manager, have reviewed and recommended this purchase.

Funds are appropriated in the following accounts:

2437-151200-5A8247 – LE/School Resource Officers - (3) Laptops $10,092.24

I concur with the above recommendation and further recommend that this purchase be placed on County Council's agenda for their next scheduled meeting on August 28, 2007.

copy: Larry Porth, Director of Finance/Assistant County Administrator
Chief Bruce Rucker, Assistant Sheriff/Director of Public Safety and Homeland Security
Colonel Allan Pavvel, Sheriff's Department
Jim Schafer, Information Technology Manager

COUNTY OF LEXINGTON
Procurement Services

MEMORANDUM
(O) 785-8166
(F) 785-2240

DATE: August 22, 2007

TO: Katherine L. Hubbard
County Administrator

FROM: Sheila R. Fulmer, CPPB
Procurement Manager

SUBJECT: Dell Image Data Storage Server – Solicitor's Office

We have received a purchase request for one (1) Dell Image Data Storage Server for the Solicitor's office. The server will be purchased directly from the manufacturer (Dell) through the South Carolina State Contract #05-S6656-A11104.

This server is necessary to handle the increased power needed to meet the imaging requirements within the new case management software system. Mike Ujcich, Chief Information Officer, and Jim Schafer, Information Technology Manager, have reviewed and recommended this purchase.
The total cost including applicable sales tax is $5,661.16.

Funds are available in the following account:

1000-141200-5A8161 – Image Data Storage Server $5,661.16

I concur with the above recommendation and further recommend that this purchase be placed on County Council's agenda for their next scheduled meeting on August 28, 2007.

copy: Larry Porth, Director of Finance/Assistant County Administrator
Jim Schafer, Information Technology Manager
Mike Ujcich, Chief Information Officer
Donald V. Myers, Solicitor
David Reynolds, Solicitor's Office

COUNTY OF LEXINGTON
Procurement Services

MEMORANDUM
(O) 785-8385
(F) 785-2240

DATE: August 9, 2007

TO: Katherine L. Hubbard
County Administrator

THROUGH: Sheila R. Fulmer, CPPB
Procurement Manager

FROM: Janice A. Bell, CPPB
Procurement Officer

SUBJECT: **MEDICAL SUPPLIES – TERM CONTRACT**
BID NO. C07034-06/14/07B

Competitive bids were solicited and advertised for a term contract for Medical Supplies to be ordered as designated by Public Safety/EMS Department.

We received twelve (12) bids of which two (2) were no bids (see attached bid tabulation). Eric Kehl, EMS Logistics Manager and Janice Bell, Procurement Officer evaluated the bids. The low bidders are recommended, except where noted and explained in the attached evaluation report prepared by Eric Kehl. Brian Hood, EMS Coordinator, concurs with this recommendation. The cost of these supplies is based on estimated annual quantities projected for use by the Public Safety/EMS Department. It is recommended that the award be made to multiple vendors as the lowest bidders meeting specifications for an estimated annual value, including sales tax, of $123,041.58 as follows:

Jefferson Medical Items 28, 69, 125, 126	$ 1,128.85
PMI Supply Items 11, 35, 37-39, 59, 78	$ 1,155.28
Tri-Anim Health Services Items 13, 27, 32, 61, 66, 75-76, 80-85, 106-107, 118, 127, 129, 148	$17,481.92
Henry Schein Items 12, 14, 15, 20, 25, 34, 48, 51, 55, 57, 68, 73, 77, 86, 90, 95, 102, 109, 146-147, 149-156	$46,068.51
Kentron Health Care Items 4, 8, 29, 30, 36, 40, 43-45, 49-50, 53, 56, 58, 62, 67, 70-71, 87, 139, 141	$ 2,656.38
Moore Medical Item 1, 2, 9, 10, 21-24, 26, 31, 33, 41-42, 46-47, 52, 63, 72, 74, 88-89, 91, 96-101, 108, 112-115, 117, 128, 130, 133-138	$20,762.69
Southeastern Emergency Medical Item 3,5-7, 16-19, 54, 60, 64-65, 79, 92-94, 103-105, 110-111, 116, 119-124, 131-132, 140, 142-145	$33,787.95

It is our recommendation to award term contracts for the initial period of one (1) year with the option to extend the contracts for four (4) additional one year periods if deemed to be in the best interest of the County. I concur with the above recommendation and further recommend that this bid be placed on County Council agenda for their next scheduled meeting on August 28, 2007.

Attachments

copy: Larry Porth, Director of Finance/Assistant County Administrator
Chief Bruce Rucker, Assistant Sheriff / Director of Public Safety & Homeland Security
Chief Brian Hood, Public Safety / EMS Coordinator
Eric Kehl, EMS Logistics Manager

c07034.bt
jab
6/14/2007

County of Lexington

Bid Tabulation

C07034-06/14/07B

MEDICAL SUPPLIES - TERM CONTRACT

			McKesson Medical		Expert Med Inc		Jefferson Medical		PMI Supply	
Item #	Quantity	Description	Unit Price	Total	Unit Price	Total	Unit Price	Total	Unit Price	Total
1	140	Adult endotracheal #500	No Bid		No Bid		No Bid		$3.20	$448.00
2	6	Ped endotracheal #400	No Bid		No Bid		No Bid		$3.20	$19.20
3	8	Respirator #9210	No Bid		No Bid		No Bid		No Bid	
4	170	Disposable Razor	No Bid		No Bid		No Bid		No Bid	
5	30	Cold compresses	No Bid		No Bid		$10.00	$300.00	$18.00	$540.00
6	100	Transparent dressing	No Bid		No Bid		No Bid		No Bid	
7	48	Sterile dressings	No Bid		No Bid		No Bid		$2.60	$124.80
8	380	Triangular bandages	No Bid		No Bid		$0.28	$106.40	$0.23	$87.40
9	3	Biohazard bag	No Bid		No Bid		No Bid		No Bid	
10	24	Bed pans	No Bid		No Bid		No Bid		$0.95	$22.80
11	66	Shears	No Bid		No Bid		No Bid		$0.75	$49.50
12	18	Pedi Pads	No Bid		No Bid		No Bid		$23.65	$425.70
13	110	Adult oximeter sensors	No Bid		No Bid		No Bid		$13.25	$1,457.50
14	240	Ped. oximeter sensors	No Bid		No Bid		No Bid		$13.25	$3,180.00
15	180	Inf oximeter sensors	No Bid		No Bid		No Bid		$17.20	$3,096.00
16	10	Airway adapter tubes	No Bid		No Bid		No Bid		$68.40	$684.00
17	5	Ped EKG	No Bid		No Bid		No Bid		No Bid	
18	80	Cartridge for V-Vac	No Bid		No Bid		No Bid		$13.25	$1,060.00
19	6	V-Vac Starter Kit	No Bid		No Bid		No Bid		$67.00	$402.00
20	46	Surgilance lancet	No Bid		$18.00	$828.00	No Bid		$15.10	$694.60
21	3	Safety Glide	No Bid		$14.25	$42.75	No Bid		No Bid	
22	5	Safety Glide Needle, 23g	No Bid		$12.95	$64.75	No Bid		$16.00	$80.00
23	6	Safety Glide Needle, 18g	No Bid		No Bid		No Bid		$16.00	$96.00
24	1	Safety Catheter	No Bid		No Bid		No Bid		$91.60	$91.60

			McKesson Medical		Expert Med Inc		Jefferson Medical		PMI Supply	
Item #	Quantity	Description	Unit Price	Total	Unit Price	Total	Unit Price	Total	Unit Price	Total
25	24	Ace Bandage 6"	No Bid		$1.10	$26.40	No Bid		$0.62	$14.88
26	11	Betadine	No Bid		No Bid		No Bid		No Bid	
27	63	Bioclussive	No Bid		No Bid		No Bid		No Bid	
28	12	BP Cuff, Adult	No Bid		No Bid		$6.25	$75.00	$17.50	$210.00
29	6	BP Cuff, Ped	No Bid		No Bid		$7.05	$42.30	$17.50	$105.00
30	6	BP Cuff, Thigh	No Bid		No Bid		No Bid		$26.00	$156.00
31	8	Burn Dressing	No Bid		No Bid		No Bid		No Bid	
32	4,100	Drip Set, 10 Drop	No Bid		No Bid		No Bid		$1.65	$6,765.00
33	12	Drip Set, 60 Drop	No Bid		No Bid		No Bid		$1.90	$22.80
34	5,100	INT Needleless	No Bid		No Bid		No Bid		No Bid	
35	18	Interosseous 15g	No Bid		No Bid		No Bid		$5.95	$107.10
36	18	Interosseous 16g	No Bid		No Bid		No Bid		No Bid	
37	12	Naso-Gastric Tube 12	No Bid		No Bid		No Bid		$0.81	$9.72
38	6	Naso-Gastric Tube 14	No Bid		No Bid		No Bid		$0.81	$4.86
39	12	Naso-Gastric Tube 16	No Bid		No Bid		No Bid		$0.81	$9.72
40	300	Non-Rebreather, Ped	No Bid		No Bid		No Bid		$1.07	$321.00
41	42	Pocket Mask	No Bid		No Bid		No Bid		No Bid	
42	1	Rico Bag	No Bid		No Bid		No Bid		$7.50	$7.50
43	4	Syringe, 10cc	No Bid		$10.00	$40.00	No Bid		No Bid	
44	1	Syringe, 5cc	No Bid		$12.00	$12.00	No Bid		No Bid	
45	6	Syringe, 60cc	No Bid		No Bid		No Bid		No Bid	
46	8	V-Vac Adapter Tip	No Bid		No Bid		No Bid		$17.00	$136.00
47	1	V-Vac Double Male Con	No Bid		No Bid		No Bid		No Bid	
48	5	V-Vac suction catheter	No Bid		No Bid		No Bid		$9.40	$47.00
49	200	Uncuffed Endotrachael	No Bid		No Bid		No Bid		$0.90	$180.00
50	450	Cuffed Endotracheal	No Bid		No Bid		No Bid		$0.98	$441.00
51	75	Disposable Cannister	No Bid		No Bid		No Bid		$2.41	$180.75
52	5	Fluidshield masks	No Bid		$16.00	$80.00	No Bid		$22.10	$110.50
53	2	Tape adhesive cloth	No Bid		No Bid		No Bid		$6.96	$13.92
54	25	Rigid suction tips	No Bid		No Bid		No Bid		$6.00	$150.00
55	600	Hand-held nebulizer	No Bid		No Bid		No Bid		$0.84	$504.00
56	25	1" Surgical tape	No Bid		$8.00	$200.00	No Bid		$11.25	$281.25
57	2,900	EKG Electrodes	No Bid		No Bid		No Bid		$0.50	$1,450.00
58	140	Latex-free 1" torniquet	No Bid		No Bid		No Bid		$3.25	$455.00
59	44	ECG electrodes	No Bid		No Bid		No Bid		$15.75	$693.00

			McKesson Medical		Expert Med Inc		Jefferson Medical		PMI Supply	
Item #	Quantity	Description	Unit Price	Total	Unit Price	Total	Unit Price	Total	Unit Price	Total
60	1	Vacutainer tube holder	No Bid		No Bid		No Bid		No Bid	
61	10	Airway all sizes	No Bid		No Bid		No Bid		$172.50	$1,725.00
62	30	Disposable resusciator	No Bid		No Bid		No Bid		$10.20	$306.00
63	80	Activated charcoal	No Bid		No Bid		No Bid		$8.23	$658.40
64	94	Insta-Glucose	No Bid		No Bid		No Bid		$9.40	$883.60
65	33	Irrigation solution	No Bid		No Bid		No Bid		$36.00	$1,188.00
66	1	IV Catheter 25g	No Bid		No Bid		No Bid		No Bid	
67	90	Nasal Cannnula, Ped	No Bid		No Bid		No Bid		$1.31	$117.90
68	316	Normal Saline .9%	No Bid		$20.20	$6,383.20	No Bid		$39.50	$12,482.00
69	18	Stethoscope	No Bid		No Bid		$2.00	$36.00	No Bid	
70	5	1' Cloth tape	No Bid		No Bid		No Bid		$6.96	$34.80
71	44	2" Cloth tape	No Bid		No Bid		No Bid		$6.96	$306.24
72	133	Convenience Bags	No Bid		No Bid		No Bid		No Bid	
73	390	Ambu Disp Resusiator	No Bid		No Bid		No Bid		$9.20	$3,588.00
74	30	Adult immobilizer	No Bid		No Bid		No Bid		$208.50	$6,255.00
75	240	Adult mask	No Bid		No Bid		No Bid		$0.55	$132.00
76	30	Ped mask	No Bid		No Bid		No Bid		$1.20	$36.00
77	140	Control valve	No Bid		No Bid		No Bid		$0.32	$44.80
78	60	8"X8" burn free dressing	No Bid		No Bid		No Bid		$3.43	$205.80
79	1	Vacutainer	No Bid		No Bid		No Bid		No Bid	
80	1,400	Collar, Cervical, No Neck	No Bid		No Bid		No Bid		$6.15	$8,610.00
81	85	Collar, Cervical, Short	No Bid		No Bid		No Bid		$6.15	$522.75
82	50	Collar, Cervical, Regular	No Bid		No Bid		No Bid		$6.15	$307.50
83	6	Collar, Cervical, Tall	No Bid		No Bid		No Bid		$6.15	$36.90
84	24	Collar, Cevical, Baby	No Bid		No Bid		No Bid		$6.15	$147.60
85	70	Collar, Cevical, Ped	No Bid		No Bid		No Bid		$6.15	$430.50
86	200	Strips	No Bid		No Bid		No Bid		$25.96	$5,192.00
87	12	Aubu Brand Bag	No Bid		No Bid		No Bid		$10.80	$129.60
88	50	Ace Bandage 3"	No Bid		$0.38	$19.00	No Bid		$0.42	$21.00
89	100	Alcohol Swabs	No Bid		$1.85	$185.00	$16.33	$1,633.00	$1.60	$160.00
90	116	Kling 3"	No Bid		$2.35	$272.60	$3.28	$380.48	$1.35	$156.60
91	4	Libricating Gel	No Bid		$5.75	$23.00	No Bid		$7.70	$30.80
92	100	Nasal Cannnula, Adult	No Bid		No Bid		No Bid		$16.50	$1,650.00
93	68	Non-Rebreather, Adult	No Bid		No Bid		No Bid		$45.00	$3,060.00
94	1	Non-Rebreather, Infant	No Bid		No Bid		No Bid		$201.00	$201.00

			McKesson Medical		Expert Med Inc		Jefferson Medical		PMI Supply	
Item #	Quantity	Description	Unit Price	Total	Unit Price	Total	Unit Price	Total	Unit Price	Total
95	1	Normal Saline, .9%	No Bid		No Bid		No Bid		$46.00	$46.00
96	150	Airways, 279-4757EA	No Bid		No Bid		No Bid		$0.13	$19.50
97	50	Airways, 279-4767EA	No Bid		No Bid		No Bid		$0.13	$6.50
98	6	Airways, 279=4717EA	No Bid		No Bid		No Bid		$0.13	$0.78
99	6	Airways, 279-4727EA	No Bid		No Bid		No Bid		$0.13	$0.78
100	30	Airways, 279-4737EA	No Bid		No Bid		No Bid		$0.13	$3.90
101	130	Airways, 279-4747EA	No Bid		No Bid		No Bid		$0.13	$16.90
102	1	Red Top Tube	No Bid		No Bid		No Bid		$13.50	$13.50
103	1	Sterile Gloves, Large	No Bid		$17.39	$17.39	No Bid		No Bid	
104	1	Sterile Gloves, Med	No Bid		$17.39	$17.39	No Bid		No Bid	
105	1	Sterile Gloves, Small	No Bid		$17.39	$17.39	No Bid		No Bid	
106	18	Suction Tubing	No Bid		No Bid		No Bid		No Bid	
107	24	Supply Tubing	No Bid		No Bid		No Bid		$0.80	$19.20
108	7	Tape transpore 1/2"	No Bid		$6.00	$42.00	No Bid		No Bid	
109	1	Vacutainer Adapter	No Bid		No Bid		No Bid		No Bid	
110	162	Intubating Stylet	No Bid		No Bid		No Bid		$1.84	$298.08
111	18	Burn Sheets	No Bid		No Bid		$2.60	$46.80	$3.90	$70.20
112	18	Airways, 792-1-5075-20	No Bid		$4.20	$75.60	No Bid		$2.62	$47.16
113	60	Airways, 792-1-5075-24	No Bid		No Bid		No Bid		$2.62	$157.20
114	100	Airways, 792-1-5075-28	No Bid		No Bid		No Bid		$2.62	$262.00
115	50	Airways, 792-1-5075-30	No Bid		$4.20	$210.00	No Bid		$2.62	$131.00
116	24	OB Kit	No Bid		No Bid		$6.00	$144.00	No Bid	
117	12	Airway 41	No Bid		No Bid		No Bid		$42.50	$510.00
118	12	Airway 37	No Bid		No Bid		No Bid		$42.50	$510.00
119	10	Masks Size 0	No Bid		No Bid		No Bid		$1.60	$16.00
120	10	Masks Size 1	No Bid		No Bid		No Bid		$1.60	$16.00
121	10	Masks Size 2	No Bid		No Bid		No Bid		$1.60	$16.00
122	10	Masks Size 3	No Bid		No Bid		No Bid		$1.60	$16.00
123	20	Masks Size 4	No Bid		No Bid		No Bid		$1.60	$32.00
124	20	Masks Size 5	No Bid		No Bid		No Bid		$1.60	$32.00
125	400	Cardboard Splint 24"	No Bid		No Bid		$1.25	$500.00	$1.40	$560.00
126	300	Cardboard Splint 34"	No Bid		No Bid		$1.48	$444.00	$2.26	$678.00
127	24	Ped Arm Board	No Bid		No Bid		No Bid		$0.80	$19.20
128	500	Polish Remover Pads	No Bid		$3.30	$1,650.00	No Bid		$0.035	$17.50
129	50	Cylinder Wrench	No Bid		No Bid		No Bid		No Bid	

			McKesson Medical		Expert Med Inc		Jefferson Medical		PMI Supply	
Item #	Quantity	Description	Unit Price	Total	Unit Price	Total	Unit Price	Total	Unit Price	Total
130	150	Multi-Trauma Dressing	No Bid		No Bid		$0.98	$147.00	$0.95	$142.50
131	500	Chem/ther Paper	No Bid		No Bid		No Bid		$2.50	$1,250.00
132	100	Medi-Trace Electrodes	No Bid		No Bid		No Bid		$1.25	$125.00
133	12,000	Stretcher Sheet	No Bid		No Bid		No Bid		No Bid	
134	6,000	Pillowcase	No Bid		$0.27	$1,620.00	No Bid		No Bid	
135	120	Nitrile gloves, small	No Bid		$8.12	$974.40	No Bid		$7.90	$948.00
136	500	Nitrile gloves, med	No Bid		$8.12	$4,060.00	No Bid		$7.90	$3,950.00
137	700	Nitrile gloves, large	No Bid		$6.98	$4,886.00	No Bid		$7.90	$5,530.00
138	250	Nitrile gloves, x-large	No Bid		$8.25	$2,062.50	No Bid		$7.90	$1,975.00
139	120	Syringe, 20ml	No Bid		$0.28	$33.60	No Bid		No Bid	
140	12	Restraints	No Bid		No Bid		No Bid		No Bid	
141	8,500	Pad Gauze, 4X4	No Bid		$4.29	$36,465.00	$0.048	$408.00	$0.05	$391.00
142	100	Breathing Circuit	No Bid		No Bid		No Bid		No Bid	
143	12	Emergent mask, small	No Bid		No Bid		No Bid		No Bid	
144	50	Emergent mask, med	No Bid		No Bid		No Bid		No Bid	
145	25	Emergent mask, large	No Bid		No Bid		No Bid		No Bid	
146	24	OPA Solution	No Bid		No Bid		No Bid		No Bid	
147	12	Opa Solution test strip	No Bid		No Bid		No Bid		No Bid	
148	6,000	Blunt Cannula 18g	No Bid		No Bid		No Bid		No Bid	
149	6,000	10cc Normal Saline .9%	No Bid		No Bid		No Bid		No Bid	
150	6,000	Adapter Plug	No Bid		No Bid		No Bid		No Bid	
151	240	Safety Catheter 14	No Bid		No Bid		No Bid		$1.757	$421.68
152	360	Safety Catheter 16	No Bid		No Bid		No Bid		$1.757	$632.52
153	2,800	Safety Catheter 18	No Bid		No Bid		No Bid		$1.757	$4,919.60
154	6,000	Safety Catheter 20	No Bid		No Bid		No Bid		$1.757	$10,542.00
155	1,200	Safety Catheter 22	No Bid		No Bid		No Bid		$1.757	$2,108.40
156	250	Safety Catheter 24	No Bid		No Bid		No Bid		$1.836	$459.00

			Bound Tree Medical		Laerdal		Tri-Anim Health		Medical Products	
Item #	Quantity	Description	Unit Price	Total	Unit Price	Total	Unit Price	Total	Unit Price	Total
1	140	Adult endotracheal #500	$3.11	$435.40	No Bid		$2.70	$378.00	No Bid	
2	6	Ped endotracheal #400	$3.11	$18.66	No Bid		$2.70	$16.20	No Bid	
3	8	Respirator #9210	$21.10	$168.80	No Bid		$13.88	$111.04	No Bid	
4	170	Disposable Razor	$0.39	$66.30	No Bid		$0.37	$62.90	No Bid	
5	30	Cold compresses	$10.26	$307.80	No Bid		$9.25	$277.50	No Bid	
6	100	Transparent dressing	No Bid		No Bid		$0.59	$59.00	No Bid	
7	48	Sterile dressings	$4.53	$217.44	No Bid		$4.56	$218.88	No Bid	
8	380	Triangular bandages	$0.60	$228.00	No Bid		$0.23	$87.40	No Bid	
9	3	Biohazard bag	$2.30	$6.90	No Bid		$1.70	$5.10	No Bid	
10	24	Bed pans	$1.09	$26.16	No Bid		$0.88	$21.12	No Bid	
11	66	Shears	$3.30	$217.80	No Bid		$0.90	$59.40	No Bid	
12	18	Pedi Pads	$28.52	$513.36	No Bid		No Bid		No Bid	
13	110	Adult oximeter sensors	$15.70	$1,727.00	No Bid		$7.00	$770.00	No Bid	
14	240	Ped. oximeter sensors	$7.63	$1,831.20	No Bid		$7.00	$1,680.00	No Bid	
15	180	Inf oximeter sensors	$7.63	$1,373.40	No Bid		$7.00	$1,260.00	No Bid	
16	10	Airway adapter tubes	$75.96	$759.60	No Bid		$71.21	$712.10	No Bid	
17	5	Ped EKG	No Bid		No Bid		$12.06	$60.30	No Bid	
18	80	Cartridge for V-Vac	$14.66	$1,172.80	No Bid		$13.23	$1,058.40	No Bid	
19	6	V-Vac Starter Kit	$75.00	$450.00	No Bid		$68.23	$409.38	No Bid	
20	46	Surgilance lancet	No Bid		No Bid		$15.00	$690.00	No Bid	
21	3	Safety Glide	No Bid		No Bid		$8.53	$25.59	No Bid	
22	5	Safety Glide Needle, 23g	$20.89	$104.45	No Bid		$8.53	$42.65	No Bid	
23	6	Safety Glide Needle, 18g	$17.80	$106.80	No Bid		$8.53	$51.18	No Bid	
24	1	Safety Catheter	$104.50	$104.50	No Bid		$92.50	$92.50	No Bid	
25	24	Ace Bandage 6"	$1.13	$27.12	No Bid		$0.78	$18.72	No Bid	
26	11	Betadine	No Bid		No Bid		$3.19	$35.09	No Bid	
27	63	Bioclussive	$47.44	$2,988.72	No Bid		$30.62	$1,929.06	No Bid	
28	12	BP Cuff, Adult	$8.94	$107.28	No Bid		$14.46	$173.52	No Bid	
29	6	BP Cuff, Ped	$8.94	$53.64	No Bid		$14.46	$86.76	No Bid	
30	6	BP Cuff, Thigh	No Bid		No Bid		$21.13	$126.78	No Bid	
31	8	Burn Dressing	$13.90	$111.20	No Bid		$14.30	$114.40	No Bid	
32	4,100	Drip Set, 10 Drop	$1.79	$7,339.00	No Bid		$1.40	$5,740.00	No Bid	
33	12	Drip Set, 60 Drop	$1.87	$22.44	No Bid		$1.54	$18.48	No Bid	
34	5,100	INT Needleless	No Bid		No Bid		$0.88	$4,488.00	No Bid	
35	18	Interosseous 15g	$10.05	$180.90	No Bid		$13.96	$251.28	No Bid	

			Bound Tree Medical		Laerdal		Tri-Anim Health		Medical Products	
Item #	Quantity	Description	Unit Price	Total	Unit Price	Total	Unit Price	Total	Unit Price	Total
36	18	Interosseous 16g	$14.64	$263.52	No Bid		$12.71	$228.78	No Bid	
37	12	Naso-Gastric Tube 12	$0.81	$9.72	No Bid		$1.08	$12.96	No Bid	
38	6	Naso-Gastric Tube 14	$0.81	$4.86	No Bid		$1.08	$6.48	No Bid	
39	12	Naso-Gastric Tube 16	$0.49	$5.88	No Bid		$1.08	$12.96	No Bid	
40	300	Non-Rebreather, Ped	$1.44	$432.00	No Bid		$1.13	$339.00	No Bid	
41	42	Pocket Mask	No Bid		No Bid		$7.14	$299.88	No Bid	
42	1	Rico Bag	$8.77	$8.77	No Bid		$6.87	$6.87	No Bid	
43	4	Syringe, 10cc	No Bid		No Bid		$10.80	$43.20	No Bid	
44	1	Syringe, 5cc	No Bid		No Bid		$10.34	$10.34	No Bid	
45	6	Syringe, 60cc	No Bid		No Bid		$0.5625	$3.38	No Bid	
46	8	V-Vac Adapter Tip	$17.59	$140.72	No Bid		$15.88	$127.04	No Bid	
47	1	V-Vac Double Male Con	$3.91	$3.91	No Bid		$3.65	$3.65	No Bid	
48	5	V-Vac suction catheter	$9.77	$48.85	No Bid		$8.92	$44.60	No Bid	
49	200	Uncuffed Endotrachael	$1.24	$248.00	No Bid		$0.92	$184.00	No Bid	
50	450	Cuffed Endotracheal	$1.33	$598.50	No Bid		$0.98	$441.00	No Bid	
51	75	Disposable Cannister	$2.29	$171.75	No Bid		$1.97	$147.75	No Bid	
52	5	Fluidshield masks	$24.89	$124.45	No Bid		$18.10	$90.50	No Bid	
53	2	Tape adhesive cloth	$8.52	$17.04	No Bid		$7.50	$15.00	No Bid	
54	25	Rigid suction tips	$11.90	$297.50	No Bid		$4.20	$105.00	No Bid	
55	600	Hand-held nebulizer	No Bid		No Bid		$0.71	$426.00	No Bid	
56	25	1" Surgical tape	$11.60	$290.00	No Bid		$6.10	$152.50	No Bid	
57	2,900	EKG Electrodes	$0.62	$1,808.15	No Bid		$0.56	$1,624.00	No Bid	
58	140	Latex-free 1" torniquet	$1.99	$278.60	No Bid		$1.13	$158.20	No Bid	
59	44	ECG electrodes	$125.30	$5,513.20	No Bid		$134.88	$5,934.72	No Bid	
60	1	Vacutainer tube holder	No Bid		No Bid		No Bid		No Bid	
61	10	Airway all sizes	No Bid		No Bid		$102.50	$1,025.00	No Bid	
62	30	Disposable resusciator	$17.15	$514.50	No Bid		$11.70	$351.00	No Bid	
63	80	Activated charcoal	$9.77	$781.60	No Bid		$9.35	$748.00	No Bid	
64	94	Insta-Glucose	$10.70	$1,005.80	No Bid		$3.34	$313.96	No Bid	
65	33	Irrigation solution	$20.16	$665.28	No Bid		$14.06	$463.98	No Bid	
66	1	IV Catheter 25g	No Bid		No Bid		$11.04	$11.04	No Bid	
67	90	Nasal Cannnula, Ped	$1.75	$157.50	No Bid		$0.49	$44.10	No Bid	
68	316	Normal Saline .9%	$22.32	$7,053.12	No Bid		$14.16	$4,474.56	No Bid	
69	18	Stethoscope	$4.62	$83.16	No Bid		$4.01	$72.18	No Bid	
70	5	1' Cloth tape	$8.52	$42.60	No Bid		$7.50	$37.50	No Bid	

			Bound Tree Medical		Laerdal		Tri-Anim Health		Medical Products	
	Quantity	Description	Unit Price	Total	Unit Price	Total	Unit Price	Total	Unit Price	Total
71	44	2" Cloth tape	$8.52	$374.88	No Bid		$7.50	$330.00	No Bid	
72	133	Convenience Bags	$11.55	$1,536.15	No Bid		$13.80	$1,835.40	No Bid	
73	390	Ambu Disp Resusiator	No Bid		No Bid		$9.11	$3,552.90	No Bid	
74	30	Adult immobilizer	No Bid		No Bid		$205.50	$6,165.00	No Bid	
75	240	Adult mask	No Bid		No Bid		$0.39	$93.60	No Bid	
76	30	Ped mask	No Bid		No Bid		$0.45	$13.50	No Bid	
77	140	Control valve	No Bid		No Bid		$0.31	$43.40	No Bid	
78	60	8"X8" burn free dressing	$7.15	$429.00	No Bid		$3.62	$217.20	No Bid	
79	1	Vacutainer	No Bid		No Bid		$6.91	$6.91	No Bid	
80	1,400	Collar, Cervical, No Neck	$5.78	$8,092.00	No Bid		$3.00	$4,200.00	No Bid	
81	85	Collar, Cervical, Short	$5.78	$491.30	No Bid		$3.00	$255.00	No Bid	
82	50	Collar, Cervical, Regular	$5.78	$289.00	No Bid		$3.00	$150.00	No Bid	
83	6	Collar, Cervical, Tall	$5.78	$34.68	No Bid		$3.00	$18.00	No Bid	
84	24	Collar, Cevical, Baby	$5.78	$138.72	No Bid		$3.00	$72.00	No Bid	
85	70	Collar, Cevical, Ped	$5.78	$404.60	No Bid		$3.00	$210.00	No Bid	
86	200	Strips	$35.07	$7,014.00	No Bid		$32.87	$6,574.00	No Bid	
87	12	Aubu Brand Bag	No Bid		No Bid		$11.70	$140.40	No Bid	
88	50	Ace Bandage 3"	$0.56	$28.00	No Bid		$0.39	$19.50	No Bid	
89	100	Alcohol Swabs	No Bid		No Bid		$1.34	$134.00	No Bid	
90	116	Kling 3"	No Bid		No Bid		$2.90	$336.40	No Bid	
91	4	Libricating Gel	$8.61	$34.44	No Bid		$4.18	$16.72	No Bid	
92	100	Nasal Cannnula, Adult	No Bid		No Bid		$15.50	$1,550.00	No Bid	
93	68	Non-Rebreather, Adult	No Bid		No Bid		$45.50	$3,094.00	No Bid	
94	1	Non-Rebreather, Infant	$69.54	$69.54	No Bid		$70.50	$70.50	No Bid	
95	1	Normal Saline, .9%	$65.88	$65.88	No Bid		$32.56	$32.56	No Bid	
96	150	Airways, 279-4757EA	$0.21	$31.50	No Bid		$0.23	$34.50	No Bid	
97	50	Airways, 279-4767EA	$0.21	$10.50	No Bid		$0.23	$11.50	No Bid	
98	6	Airways, 279=4717EA	$0.21	$1.26	No Bid		$0.23	$1.38	No Bid	
99	6	Airways, 279-4727EA	$0.21	$1.26	No Bid		$0.23	$1.38	No Bid	
100	30	Airways, 279-4737EA	$0.21	$6.30	No Bid		$0.23	$6.90	No Bid	
101	130	Airways, 279-4747EA	$0.21	$27.30	No Bid		$0.23	$29.90	No Bid	
102	1	Red Top Tube	$15.97	$15.97	No Bid		$12.88	$12.88	No Bid	
103	1	Sterile Gloves, Large	No Bid		No Bid		$18.58	$18.58	No Bid	
104	1	Sterile Gloves, Med	No Bid		No Bid		$18.58	$18.58	No Bid	
105	1	Sterile Gloves, Small	No Bid		No Bid		$18.58	$18.58	No Bid	

			Bound Tree Medical		Laerdal		Tri-Anim Health		Medical Products	
Item #	Quantity	Description	Unit Price	Total	Unit Price	Total	Unit Price	Total	Unit Price	Total
106	18	Suction Tubing	$0.88	$15.84	No Bid		$0.64	$11.52	No Bid	
107	24	Supply Tubing	No Bid		No Bid		$0.25	$6.00	No Bid	
108	7	Tape transpore 1/2"	$15.71	$109.97	No Bid		$6.09	$42.63	No Bid	
109	1	Vacutainer Adapter	$13.62	$13.62	No Bid		$11.93	$11.93	No Bid	
110	162	Intubating Stylet	$2.00	$324.00	No Bid		$1.95	$315.90	No Bid	
111	18	Burn Sheets	No Bid		No Bid		$2.80	$50.40	No Bid	
112	18	Airways, 792-1-5075-20	$2.29	$41.22	No Bid		$2.11	$37.98	No Bid	
113	60	Airways, 792-1-5075-24	$2.29	$137.40	No Bid		$2.11	$126.60	No Bid	
114	100	Airways, 792-1-5075-28	$2.29	$229.00	No Bid		$2.11	$211.00	No Bid	
115	50	Airways, 792-1-5075-30	$2.29	$114.50	No Bid		$2.11	$105.50	No Bid	
116	24	OB Kit	$8.92	$214.08	No Bid		$6.00	$144.00	No Bid	
117	12	Airway 41	No Bid		No Bid		$38.00	$456.00	No Bid	
118	12	Airway 37	No Bid		No Bid		$38.00	$456.00	No Bid	
119	10	Masks Size 0	No Bid		No Bid		$1.65	$16.50	No Bid	
120	10	Masks Size 1	No Bid		No Bid		$1.65	$16.50	No Bid	
121	10	Masks Size 2	No Bid		No Bid		$1.65	$16.50	No Bid	
122	10	Masks Size 3	No Bid		No Bid		$1.65	$16.50	No Bid	
123	20	Masks Size 4	No Bid		No Bid		$1.65	$33.00	No Bid	
124	20	Masks Size 5	No Bid		No Bid		$1.65	$33.00	No Bid	
125	400	Cardboard Splint 24"	$1.7264	$690.56	No Bid		$1.36	$544.00	No Bid	
126	300	Cardboard Splint 34"	$2.8036	$841.08	No Bid		$2.24	$672.00	No Bid	
127	24	Ped Arm Board	No Bid		No Bid		$0.48	$11.52	No Bid	
128	500	Polish Remover Pads	$0.0358	$17.90	No Bid		$0.0274	$13.70	No Bid	
129	50	Cylinder Wrench	No Bid		No Bid		$0.32	$16.00	No Bid	
130	150	Multi-Trauma Dressing	$1.54	$231.00	No Bid		$0.93	$139.50	No Bid	
131	500	Chem/ther Paper	No Bid		No Bid		$1.08	$540.00	No Bid	
132	100	Medi-Trace Electrodes	No Bid		No Bid		$1.32	$132.00	No Bid	
133	12,000	Stretcher Sheet	$0.8222	$9,866.40	No Bid		$0.475	$5,700.00	No Bid	
134	6,000	Pillowcase	$0.2818	$1,690.80	No Bid		$0.322	$1,932.00	No Bid	
135	120	Nitrile gloves, small	$8.91	$1,069.20	No Bid		$5.77	$692.40	No Bid	
136	500	Nitrile gloves, med	$8.91	$4,455.00	No Bid		$5.77	$2,885.00	No Bid	
137	700	Nitrile gloves, large	$8.91	$6,237.00	No Bid		$5.77	$4,039.00	No Bid	
138	250	Nitrile gloves, x-large	$8.91	$2,227.50	No Bid		$5.77	$1,442.50	No Bid	
139	120	Syringe, 20ml	No Bid		No Bid		$0.31	$37.20	No Bid	
140	12	Restraints	$3.64	$43.68	No Bid		$3.14	$37.68	No Bid	

			Bound Tree Medical		Laerdal		Tri-Anim Health		Medical Products	
Item #	Quantity	Description	Unit Price	Total	Unit Price	Total	Unit Price	Total	Unit Price	Total
141	8,500	Pad Gauze, 4X4	No Bid		No Bid		$0.0412	$350.20	No Bid	
142	100	Breathing Circuit	$28.54	$2,854.00	No Bid		No Bid		No Bid	
143	12	Emergent mask, small	$7.82	$93.84	No Bid		No Bid		No Bid	
144	50	Emergent mask, med	$5.02	$251.00	No Bid		No Bid		No Bid	
145	25	Emergent mask, large	$10.05	$251.25	No Bid		No Bid		No Bid	
146	24	OPA Solution	$45.71	$1,097.04	No Bid		No Bid		No Bid	
147	12	Opa Solution test strip	No Bid		No Bid		No Bid		No Bid	
148	6,000	Blunt Cannula 18g	No Bid		No Bid		$0.225	$1,350.00	No Bid	
149	6,000	10cc Normal Saline .9%	No Bid		No Bid		$0.5625	$3,375.00	No Bid	
150	6,000	Adapter Plug	No Bid		No Bid		$0.88	$5,280.00	No Bid	
151	240	Safety Catheter 14	No Bid		No Bid		$1.99	$477.60	$1.55	$372.00
152	360	Safety Catheter 16	No Bid		No Bid		$1.99	$716.40	$1.55	$558.00
153	2,800	Safety Catheter 18	No Bid		No Bid		$1.99	$5,572.00	$1.55	$4,340.00
154	6,000	Safety Catheter 20	No Bid		No Bid		$1.99	$11,940.00	$1.55	$9,300.00
155	1,200	Safety Catheter 22	No Bid		No Bid		$1.99	$2,388.00	$1.55	$1,860.00
156	250	Safety Catheter 24	No Bid		No Bid		$1.99	$497.50	$1.61	$402.50

			Henry Schein		Kentron Health Care		Moore Medical		Southeastern Emerg	
Item #	Quantity	Description	Unit Price	Total	Unit Price	Total	Unit Price	Total	Unit Price	Total
1	140	Adult endotracheal #500	$2.86	$400.40	No Bid		$2.47	$345.80	$3.01	$421.40
2	6	Ped endotracheal #400	$2.86	$17.16	No Bid		$2.47	$14.82	$3.01	$18.06
3	8	Respirator #9210	$21.11	$168.88	No Bid		No Bid		$16.50	$132.00
4	170	Disposable Razor	$0.32	$54.40	$0.18	$30.60	$0.264	$44.88	$0.30	$51.00
5	30	Cold compresses	$6.40	$192.00	$13.68	$410.40	$7.28	$218.40	$5.95	$178.50
6	100	Transparent dressing	$2.66	$266.00	No Bid		No Bid		$0.58	$58.00
7	48	Sterile dressings	$3.36	$161.28	$2.50	$120.00	$3.08	$147.84	$1.90	$91.20
8	380	Triangular bandages	$0.21	$79.80	$0.19	$72.20	$0.20	$76.00	$0.21	$79.80
9	3	Biohazard bag	$1.66	$4.98	No Bid		$1.38	$4.14	$1.61	$4.83
10	24	Bed pans	$0.81	$19.44	$1.00	$24.00	$0.71	$17.04	$0.80	$19.20
11	66	Shears	$0.83	$54.78	$0.79	$52.14	$1.11	$73.26	$1.00	$66.00
12	18	Pedi Pads	$21.59	$388.62	No Bid		No Bid		$24.80	$446.40
13	110	Adult oximeter sensors	$7.02	$772.20	No Bid		$13.74	$1,511.40	$12.65	$1,391.50
14	240	Ped. oximeter sensors	$6.77	$1,624.80	No Bid		$13.97	$3,352.80	$13.24	$3,177.60
15	180	Inf oximeter sensors	$6.95	$1,251.00	No Bid		$17.84	$3,211.20	$16.45	$2,961.00
16	10	Airway adapter tubes	$65.89	$658.90	No Bid		No Bid		$64.20	$642.00
17	5	Ped EKG	$9.95	$49.75	No Bid		$10.80	$54.00	$8.20	$41.00
18	80	Cartridge for V-Vac	$14.50	$1,160.00	No Bid		$11.11	$888.80	$10.50	$840.00
19	6	V-Vac Starter Kit	$60.63	$363.78	No Bid		$60.78	$364.68	$59.75	$358.50
20	46	Surgilance lancet	$10.88	$500.48	No Bid		$11.63	$534.98	$12.80	$588.80
21	3	Safety Glide	$17.89	$53.67	No Bid		$17.78	$53.34	$17.64	$52.92
22	5	Safety Glide Needle, 23g	$14.25	$71.25	No Bid		$14.17	$70.85	$14.45	$72.25
23	6	Safety Glide Needle, 18g	$14.18	$85.08	No Bid		$14.17	$85.02	$14.45	$86.70
24	1	Safety Catheter	$80.98	$80.98	No Bid		$79.67	$79.67	$86.45	$86.45
25	24	Ace Bandage 6"	$0.53	$12.72	$0.60	$14.40	$0.59	$14.16	$0.77	$18.48
26	11	Betadine	$5.02	$55.22	No Bid		$2.41	$26.51	$2.95	$32.45
27	63	Bioclussive	$39.41	$2,482.83	$27.50	$1,732.50	$38.38	$2,417.94	$118.70	$7,478.10
28	12	BP Cuff, Adult	$12.01	$144.12	$6.95	$83.40	$8.41	$100.92	$16.90	$202.80
29	6	BP Cuff, Ped	$7.53	$45.18	$6.95	$41.70	$8.41	$50.46	$16.90	$101.40
30	6	BP Cuff, Thigh	$10.03	$60.18	$7.95	$47.70	$20.82	$124.92	$24.00	$144.00
31	8	Burn Dressing	$11.25	$90.00	No Bid		$10.44	$83.52	$14.75	$118.00
32	4,100	Drip Set, 10 Drop	$1.53	$6,273.00	No Bid		$1.41	$5,781.00	$1.48	$6,068.00
33	12	Drip Set, 60 Drop	$1.60	$19.20	No Bid		$1.41	$16.92	$1.55	$18.60
34	5,100	INT Needleless	$0.81	$4,131.00	$1.50	$7,650.00	No Bid		$0.82	$4,182.00
35	18	Interosseous 15g	$8.62	$155.16	$9.50	$171.00	$12.39	$223.02	$8.15	$146.70

			Henry Schein		Kentron Health Care		Moore Medical		Southeastern Emerg	
Item #	Quantity	Description	Unit Price	Total	Unit Price	Total	Unit Price	Total	Unit Price	Total
36	18	Interosseous 16g	$10.57	$190.26	$10.50	$189.00	$10.82	$194.76	$11.60	$208.80
37	12	Naso-Gastric Tube 12	$1.85	$22.20	No Bid		$1.94	$23.28	$1.05	$12.60
38	6	Naso-Gastric Tube 14	$1.86	$11.16	No Bid		$1.94	$11.64	$1.05	$6.30
39	12	Naso-Gastric Tube 16	$1.80	$21.60	No Bid		$1.94	$23.28	$1.05	$12.60
40	300	Non-Rebreather, Ped	$1.13	$339.00	$0.79	$237.00	$1.09	$327.00	$1.00	$300.00
41	42	Pocket Mask	$10.31	$433.02	No Bid		$3.33	$139.86	No Bid	
42	1	Rico Bag	$6.73	$6.73	No Bid		$5.49	$5.49	$6.50	$6.50
43	4	Syringe, 10cc	$10.11	$40.44	$8.00	$32.00	$10.75	$43.00	$10.20	$40.80
44	1	Syringe, 5cc	$11.34	$11.34	$5.00	$5.00	$10.88	$10.88	$10.20	$10.20
45	6	Syringe, 60cc	$0.33	$1.98	$0.30	$1.80	$0.4608	$2.76	$0.41	$2.46
46	8	V-Vac Adapter Tip	$13.96	$111.68	No Bid		$12.91	$103.28	$15.00	$120.00
47	1	V-Vac Double Male Con	$3.36	$3.36	No Bid		$3.22	$3.22	$3.35	$3.35
48	5	V-Vac suction catheter	$7.83	$39.15	No Bid		$7.84	$39.20	$8.35	$41.75
49	200	Uncuffed Endotrachael	$1.13	$226.00	$0.75	$150.00	$1.00	$200.00	$1.05	$210.00
50	450	Cuffed Endotracheal	$1.26	$567.00	$0.95	$427.50	$1.05	$472.50	$1.13	$508.50
51	75	Disposable Cannister	$1.76	$132.00	No Bid		$1.83	$137.25	$1.90	$142.50
52	5	Fluidshield masks	$18.68	$93.40	$13.75	$68.75	$6.69	$33.45	$20.60	$103.00
53	2	Tape adhesive cloth	$6.44	$12.88	$6.25	$12.50	$6.64	$13.28	$6.95	$13.90
54	25	Rigid suction tips	$0.48	$12.00	$0.45	$11.25	No Bid		$0.14	$3.50
55	600	Hand-held nebulizer	$0.56	$336.00	$0.79	$474.00	$0.95	$570.00	$0.83	$498.00
56	25	1" Surgical tape	$8.35	$208.75	$5.40	$135.00	$9.24	$231.00	$9.75	$243.75
57	2,900	EKG Electrodes	$0.43	$1,247.00	$0.33	$957.00	$0.5245	$1,521.05	$10.50	$30,450.00
58	140	Latex-free 1" torniquet	$1.85	$259.00	$0.50	$70.00	$1.524	$213.36	$0.87	$121.80
59	44	ECG electrodes	$23.35	$1,027.40	No Bid		No Bid		$113.51	$4,994.44
60	1	Vacutainer tube holder	$98.91	$98.91	No Bid		No Bid		$21.25	$21.25
61	10	Airway all sizes	$317.81	$3,178.10	$143.00	$1,430.00	$138.60	$1,386.00	$114.00	$1,140.00
62	30	Disposable resusciator	$15.65	$469.50	$9.25	$277.50	$11.91	$357.30	$15.60	$468.00
63	80	Activated charcoal	$1.41	$112.80	No Bid		$7.23	$578.40	$7.78	$622.40
64	94	Insta-Glucose	$8.91	$837.54	No Bid		$9.64	$906.16	$2.97	$279.18
65	33	Irrigation solution	$16.16	$533.28	No Bid		No Bid		$13.20	$435.60
66	1	IV Catheter 25g	$15.22	$15.22	No Bid		No Bid		No Bid	
67	90	Nasal Cannnula, Ped	$0.79	$71.10	$0.39	$35.10	$0.59	$53.10	$0.93	$83.70
68	316	Normal Saline .9%	$9.24	$2,919.84	No Bid		$14.953	$4,725.15	$14.00	$4,424.00
69	18	Stethoscope	$4.47	$80.46	$2.75	$49.50	$2.81	$50.58	$3.60	$64.80
70	5	1' Cloth tape	$6.79	$33.95	$5.90	$29.50	$6.72	$33.60	$6.35	$31.75

			Henry Schein		Kentron Health Care		Moore Medical		Southeastern Emerg	
Item #	Quantity	Description	Unit Price	Total	Unit Price	Total	Unit Price	Total	Unit Price	Total
71	44	2" Cloth tape	$5.92	$260.48	$5.90	$259.60	$6.47	$284.68	$6.35	$279.40
72	133	Convenience Bags	$12.00	$1,596.00	$12.99	$1,727.67	$9.97	$1,326.01	$13.10	$1,742.30
73	390	Ambu Disp Resusiator	$7.46	$2,909.40	$7.95	$3,100.50	$8.03	$3,131.70	$10.00	$3,900.00
74	30	Adult immobilizer	$195.50	$5,865.00	No Bid		$181.50	$5,445.00	$200.00	$6,000.00
75	240	Adult mask	$0.50	$120.00	No Bid		$1.04	$249.60	$0.45	$108.00
76	30	Ped mask	$0.74	$22.20	No Bid		$1.41	$42.30	$0.75	$22.50
77	140	Control valve	$0.17	$23.80	$0.21	$29.40	$0.49	$68.60	$0.25	$35.00
78	60	8"X8" burn free dressing	$4.74	$284.40	No Bid		No Bid		No Bid	
79	1	Vacutainer	$13.10	$13.10	No Bid		$15.09	$15.09	$5.95	$5.95
80	1,400	Collar, Cervical, No Neck	$4.60	$6,440.00	$4.45	$6,230.00	$4.47	$6,258.00	$4.65	$6,510.00
81	85	Collar, Cervical, Short	$4.44	$377.40	$4.45	$378.25	$4.47	$379.95	$4.63	$393.55
82	50	Collar, Cervical, Regular	$4.75	$237.50	$4.45	$222.50	$4.47	$223.50	$4.63	$231.50
83	6	Collar, Cervical, Tall	$4.75	$28.50	$4.45	$26.70	$4.47	$26.82	$4.63	$27.78
84	24	Collar, Cevical, Baby	$3.82	$91.68	$4.45	$106.80	$4.47	$107.28	$4.63	$111.12
85	70	Collar, Cevical, Ped	$4.83	$338.10	$4.45	$311.50	$4.47	$312.90	$4.63	$324.10
86	200	Strips	$19.57	$3,914.00	No Bid		$28.57	$5,714.00	$21.10	$4,220.00
87	12	Aubu Brand Bag	$11.05	$132.60	$8.95	$107.40	$11.38	$136.56	$15.59	$187.08
88	50	Ace Bandage 3"	$0.38	$19.00	$0.35	$17.50	$0.34	$17.00	$0.36	$18.00
89	100	Alcohol Swabs	$1.26	$126.00	$1.59	$159.00	$1.17	$117.00	$1.50	$150.00
90	116	Kling 3"	$2.46	$285.36	$1.35	$156.60	$3.07	$356.12	$2.70	$313.20
91	4	Libricating Gel	$6.11	$24.44	No Bid		$3.21	$12.84	$4.75	$19.00
92	100	Nasal Cannnula, Adult	$21.50	$2,150.00	$16.29	$1,629.00	$17.00	$1,700.00	$12.00	$1,200.00
93	68	Non-Rebreather, Adult	$45.00	$3,060.00	$39.00	$2,652.00	No Bid		$39.00	$2,652.00
94	1	Non-Rebreather, Infant	$194.00	$194.00	$49.00	$49.00	$101.00	$101.00	$45.50	$45.50
95	1	Normal Saline, .9%	$19.20	$19.20	No Bid		$48.96	$48.96	$49.23	$49.23
96	150	Airways, 279-4757EA	$0.20	$30.00	$0.18	$27.00	$0.12	$18.00	$0.13	$19.50
97	50	Airways, 279-4767EA	$0.99	$49.50	$0.18	$9.00	$0.12	$6.00	$0.13	$6.50
98	6	Airways, 279=4717EA	$0.18	$1.08	$0.18	$1.08	$0.12	$0.72	$0.13	$0.78
99	6	Airways, 279-4727EA	$0.19	$1.14	$0.18	$1.08	$0.12	$0.72	$0.13	$0.78
100	30	Airways, 279-4737EA	$0.18	$5.40	$0.18	$5.40	$0.12	$3.60	$0.13	$3.90
101	130	Airways, 279-4747EA	$0.19	$24.70	$0.18	$23.40	$0.12	$15.60	$0.13	$16.90
102	1	Red Top Tube	$11.04	$11.04	No Bid		No Bid		$11.95	$11.95
103	1	Sterile Gloves, Large	$25.24	$25.24	No Bid		$11.39	$11.39	$10.00	$10.00
104	1	Sterile Gloves, Med	$23.03	$23.03	No Bid		$11.39	$11.39	$10.00	$10.00
105	1	Sterile Gloves, Small	$22.77	$22.77	No Bid		$11.39	$11.39	$10.00	$10.00

			Henry Schein		Kentron Health Care		Moore Medical		Southeastern Emerg	
Item #	Quantity	Description	Unit Price	Total	Unit Price	Total	Unit Price	Total	Unit Price	Total
106	18	Suction Tubing	$0.97	$17.46	No Bid		No Bid		$1.03	$18.54
107	24	Supply Tubing	$0.25	$6.00	$0.35	$8.40	No Bid		$0.30	$7.20
108	7	Tape transpore 1/2"	$6.70	$46.90	$6.00	$42.00	$5.53	$38.71	$6.12	$42.84
109	1	Vacutainer Adapter	$10.65	$10.65	No Bid		$12.01	$12.01	$11.15	$11.15
110	162	Intubating Stylet	$2.64	$427.68	$1.95	$315.90	$5.17	$837.54	$1.83	$296.46
111	18	Burn Sheets	$3.07	$55.26	$2.25	$40.50	No Bid		$1.40	$25.20
112	18	Airways, 792-1-5075-20	$2.41	$43.38	$2.50	$45.00	$1.97	$35.46	$2.35	$42.30
113	60	Airways, 792-1-5075-24	$2.23	$133.80	$2.50	$150.00	$1.97	$118.20	$2.35	$141.00
114	100	Airways, 792-1-5075-28	$2.41	$241.00	$2.50	$250.00	$1.97	$197.00	$2.35	$235.00
115	50	Airways, 792-1-5075-30	$2.22	$111.00	$2.50	$125.00	$1.97	$98.50	$2.35	$117.50
116	24	OB Kit	$4.95	$118.80	No Bid		No Bid		$4.10	$98.40
117	12	Airway 41	$40.42	$485.04	$55.00	$660.00	$37.97	$455.64	$38.50	$462.00
118	12	Airway 37	$40.39	$484.68	$55.00	$660.00	$38.84	$466.08	$38.50	$462.00
119	10	Masks Size 0	$1.89	$18.90	$1.85	$18.50	No Bid		$1.55	$15.50
120	10	Masks Size 1	$1.89	$18.90	$1.85	$18.50	No Bid		$1.55	$15.50
121	10	Masks Size 2	$1.90	$19.00	$1.85	$18.50	No Bid		$1.55	$15.50
122	10	Masks Size 3	$1.99	$19.90	$1.85	$18.50	No Bid		$1.55	$15.50
123	20	Masks Size 4	$1.89	$37.80	$1.85	$37.00	No Bid		$1.55	$31.00
124	20	Masks Size 5	$1.90	$38.00	$1.85	$37.00	No Bid		$1.55	$31.00
125	400	Cardboard Splint 24"	$1.50	$600.00	No Bid		$1.53	$612.00	$1.50	$600.00
126	300	Cardboard Splint 34"	$2.43	$729.00	No Bid		No Bid		$2.45	$735.00
127	24	Ped Arm Board	$0.75	$18.00	No Bid		$0.5233	$12.56	$0.70	$16.80
128	500	Polish Remover Pads	$0.03	$15.00	No Bid		$0.0206	$10.30	$0.028	$14.00
129	50	Cylinder Wrench	$0.35	$17.50	No Bid		No Bid		No Bid	
130	150	Multi-Trauma Dressing	$0.89	$133.50	$0.69	$103.50	$0.65	$97.50	$1.23	$184.50
131	500	Chem/ther Paper	$4.51	$2,255.00	$2.25	$1,125.00	No Bid		$41.45	$20,725.00
132	100	Medi-Trace Electrodes	$164.38	$16,438.00	No Bid		$1.29	$129.00	$1.28	$128.00
133	12,000	Stretcher Sheet	$0.39	$4,680.00	$0.41	$4,920.00	$0.332	$3,984.00	$0.43	$5,160.00
134	6,000	Pillowcase	$0.26	$1,560.00	$0.19	$1,140.00	$0.166	$996.00	$0.20	$1,200.00
135	120	Nitrile gloves, small	$4.32	$518.40	No Bid		$3.025	$363.00	$5.11	$613.20
136	500	Nitrile gloves, med	$4.28	$2,140.00	No Bid		$3.025	$1,512.50	$5.11	$2,555.00
137	700	Nitrile gloves, large	$4.30	$3,010.00	No Bid		$3.025	$2,117.50	$5.11	$3,577.00
138	250	Nitrile gloves, x-large	$4.32	$1,080.00	No Bid		$3.025	$756.25	$5.11	$1,277.50
139	120	Syringe, 20ml	$0.28	$33.60	$0.20	$24.00	$0.269	$32.28	$0.28	$33.60
140	12	Restraints	No Bid		No Bid		No Bid		$2.97	$35.64

			Henry Schein		Kentron Health Care		Moore Medical		Southeastern Emerg	
	Quantity	Description	Unit Price	Total	Unit Price	Total	Unit Price	Total	Unit Price	Total
141	8,500	Pad Gauze, 4X4	$0.05	$425.00	$0.035	$297.50	$0.0419	$356.15	$0.039	$331.50
142	100	Breathing Circuit	No Bid		No Bid		No Bid		$26.56	$2,656.00
143	12	Emergent mask, small	No Bid		No Bid		No Bid		$6.22	$74.64
144	50	Emergent mask, med	No Bid		No Bid		No Bid		$4.00	$200.00
145	25	Emergent mask, large	No Bid		No Bid		No Bid		$8.00	$200.00
146	24	OPA Solution	$37.75	$906.00	No Bid		$38.57	$925.68	$39.00	$936.00
147	12	Opa Solution test strip	$13.26	$159.12	No Bid		$13.5400	$162.48	$26.25	$315.00
148	6,000	Blunt Cannula 18g	$0.58	$3,480.00	No Bid		No Bid		$0.23	$1,380.00
149	6,000	10cc Normal Saline .9%	$0.27	$1,620.00	No Bid		No Bid		$0.51	$3,060.00
150	6,000	Adapter Plug	$0.81	$4,860.00	No Bid		No Bid		$0.82	$4,920.00
151	240	Safety Catheter 14	$1.58	$379.20	$1.79	$429.60	$1.872	$449.28	$1.800	$432.00
152	360	Safety Catheter 16	$1.68	$604.80	$1.79	$644.40	$1.872	$673.92	$1.800	$648.00
153	2,800	Safety Catheter 18	$1.41	$3,948.00	$1.79	$5,012.00	$1.872	$5,241.60	$1.800	$5,040.00
154	6,000	Safety Catheter 20	$1.46	$8,760.00	$1.79	$10,740.00	$1.872	$11,232.00	$1.800	$10,800.00
155	1,200	Safety Catheter 22	$1.32	$1,584.00	$1.79	$2,148.00	$1.872	$2,246.40	$1.800	$2,160.00
156	250	Safety Catheter 24	$1.91	$477.50	$1.79	$447.50	$1.988	$497.00	$1.840	$460.00

There is a tie bid for items 37 & 38 between PMI Supply and Bound Tree Medical.
There is a tie bid for item 93 between Kentron Health Care and Southeastern Emergency.
There is a tie bid for item 107 between Tri-Anim Health and Henry Schein.

In order to break a tie bid, Larry Porth, Director of Finance/Assistant County Administrator, flipped a coin in the presence of Janice Bell, Procurement Officer. Items 37 & 38 were awarded to PMI Supply; item 93 was awarded to Southeastern Emergency; and item 107 was awarded to Tri-Anim Health.

Bids Opened: June 14, 2007

Janice A. Bell, CPPB
Procurement Officer

County of Lexington
Department of Public Safety

EMERGENCY MEDICAL SERVICES DIVISION

August 8, 2007

MEMORANDUM

To: **Janice Bell**
Lexington County Procurement Services

From: **Brian Hood**
EMS Director

Re: **Recommendation on Bid # C07034-06/14/07**
Medical Supplies – Term Contract

Janice,

Upon review of these bids with my staff we request that all items be awarded to the lowest bidder in the quantities indicated, with the exception being to the following items:

ITEM # 3 3M Respirator #9210

The bid should be awarded to Southeastern who bid the exact item. Price of this item is for a box of twenty, universal fit. Tri-Anim was the lowest but it was not a universal fit mask.

ITEM # 21 Safety Glide, 1cc Syringe with 25g X 5/8" needle

The lowest bid reflected an alternate item which could pose a safety risk. The item should be awarded to the second lowest bidder Moore Medical, which bid the exact item.

ITEMS # 22 & # 23 Safety Glide Needles 23g & 18g

The lowest bid reflected an alternate item which could pose a safety risk. The item should be award to the second lowest bidder Moore Medical, which bid the exact item.

407 Ballpark Road • Lexington, South Carolina • 29072
Phone (803) 785-8683 Fax (803) 785-8627
E-Mail: lcems@lex-co.com

ITEM # 54 Rigid Suction Tips

The bid from Southeastern reflects a 10 pack, making the cost each to be 0.14 each piece. Henry Schein would be 0.48 and Kentron would be 0.45 each. The item should be awarded to Southeastern.

ITEM # 57 EKG Electrodes

The lowest bid from Kentron is for a product in bulk, not a 3pk as stated. The item should be awarded to the second lowest bidder Henry Schein.

ITEM # 58 Latex-free tourniquet

The bid placed by Kentron reflects a price of 100 pieces. The other bids reflect only a quantity of 10. The item should be awarded to Kentron.

ITEM # 59 Combination Defib/Pacing/ECG

The price from PMI reflects a six pack, making the cost $15.75 each. They should be awarded the item.

ITEM # 63 Activated Charcoal

The lowest bid comes from Henry Schein, however the item number and price is not the item listed for bid. The item should be awarded to Moore Medical.

ITEM # 90 3” Kling Dressing

The lowest price is from Kentron, however this is in a bulk package making the contents not sterile. The item should be awarded to Henry Schein who is the second lowest bidder.

ITEM # 94 Insta Glucose

Tri-Anim shows the lowest bid, however that is priced each. The other vendors quoted a three pack. Tri-Anim isn’t the lowest after you multiply their quote by three. The item should be awarded to Southeastern.

ITEM # 106 Suction Tubing

The two lowest bids are from Henry Schein and BoundTree, however they are for individual pieces. The bid should be awarded to Tri-Anim whose price is for a 100' roll, which can get 15 pieces making the cost 0.64 each.

ITEM # 131 Chemical/Thermal Paper for MRx

The lowest bid companies' sample proved not to work. The second lowest vendor was unable to provide a sample because of problems with their supplier in Austria. The bid should be awarded to Southeastern. The re-quote is attached to this correspondence.

ITEM # 132 Medi-Trace 210 Electrodes

Lowest bid from PMI is a bulk package not single packs. The item should be awarded to second lowest bidder Southeastern.

ITEMS # 135 through 138 Nitrile Gloves sizes sm, med, lg and xlg

The lowest bid is for a box of fifty, not 100 like specified. If you double to price of the fifty it is higher than the second lowest bidder. The item should be awarded to the second lowest bidder which is Henry Schein.

ITEM # 147 Cidex OPA Test Strip

Moore has priced the item per test strip making their bottle $13.54 each. Henry Schein has the lowest per bottle and should be awarded the item.

ITEMS # 151-156 Safety Catheters

The lowest bidders are split between two vendors, Medical Products Supply and Henry Schein. The bulk of the catheters are awarded to Henry Schein, the usage of supplies that would be awarded to Medical Product Supply would not warrant establishing a separate contract for such little volume. We believe the all those items should be awarded to Henry Schein.

407 Ballpark Road • Lexington, South Carolina • 29072
Phone (803) 785-8683 Fax (803) 785-8627
E-Mail: lcems@lex-co.com

Please find below the Companies/Suppliers with the item number they should be awarded through this bid process.

Henry Schein: 12 14 15 20 25 34 48 51 55 57 68 73 77 86

90 95 102 107* 109 146 147 149 150 151 152

153 154 155 156

29 TOTAL ITEMS

Kentron: 4 8 29 30 36 40 43 44 45 49 50 53 56 58 62 67 70

71 87 93* 139 141

22 TOTAL ITEMS

Moore Medical: 1 2 9 10 21 22 23 24 26 31 33 41 42 46 47 52

63 72 74 88 89 91 96 97 98 99 100 101 108 112 113 114 115

117 128 130 133 134 135 136 137 138

42 TOTAL ITEMS

Southeastern Emergency Equipment: 3 5 6 7 16 17 18 19 54 60 64 65

79 92 93* 94 103 104 105 110 111 116 119 120 121 122 123

124 131 132 140 142 143 144 145

35 TOTAL ITEMS

Tri-Anim: 13 27 32 61 66 75 76 80 81 82 83 84 85 106 107* 118

127 129 148

19 TOTAL ITEMS

Jefferson Medical: 28 69 125 126

4 TOTAL ITEMS

407 Ballpark Road • Lexington, South Carolina • 29072
Phone (803) 785-8683 Fax (803) 785-8627
E-Mail: lcems@lex-co.com

PMI: 11 35 37* 38* 59 78

7 TOTAL ITEMS

BOUNDTREE: 37* 38* 39

3 TOTAL ITEMS

* Denotes that item is a tie with another vendor.

Thank you for assistance in this matter, any questions or if I can be of help, please feel free to call me.

407 Ballpark Road • Lexington, South Carolina • 29072
Phone (803) 785-8683 Fax (803) 785-8627
E-Mail: lcems@lex-co.com

COUNTY OF LEXINGTON
Procurement Services

MEMORANDUM
(O) 785-8385
(F) 785-2240

DATE: August 16, 2007

TO: Katherine L. Hubbard
County Administrator

THROUGH: Sheila R. Fulmer, CPPB
Procurement Manager

FROM: Janice A. Bell, CPPB
Procurement Officer

SUBJECT: **Motorola Portable VHF Monitor/Receivers**
Public Safety/Fire Service

We received a purchase request for twenty-two (22) Motorola Portable VHF Monitor/Receivers for Public Safety/Fire Service Department. These monitor/receivers will be purchased directly from the manufacturer (Motorola) through the South Carolina State Contract #OIR2002.07.

Monitors are utilized to alert personnel of an emergency call. Each of the approximately 400 firefighters is issued a monitor. Many of the existing units are approaching 20 years old and are in need of being replaced. Additional monitors are required in order to meet an increase in personnel, as well as replace monitors that are lost, stolen, damaged, or no longer serviceable. The total cost of these monitor/receivers including applicable tax is $11,496.94.

Funds are appropriated in the following account:

1000-131500-5A8131	(22) Monitors/Receivers	$11,496.94

I concur with the above recommendation and further recommend that this purchase be placed on County Council's agenda for their next scheduled meeting on August 28, 2007.

copy: Larry Porth, Director of Finance/Assistant County Administrator
Chief Bruce Rucker, Assistant Sheriff / Director of Public Safety & Homeland Security
Chief Russell Rawl, Fire Service Coordinator

COUNTY OF LEXINGTON
Procurement Services

MEMORANDUM
(O) 785-8166
(F) 785-2240

DATE: August 16, 2007

TO: Katherine L. Hubbard
County Administrator

FROM: Sheila R. Fulmer, CPPB
Procurement Manager

SUBJECT: **Thermal Imaging Cameras - Sole Source**
Public Safety/Fire Service

We have received a purchase request for the purchase of two (2) Thermal Imaging Cameras for Public Safety/Fire Service. This equipment will be used by fire service and law enforcement responders in Lexington County to assist them in the performance of their duties during periods of limited visibility. The cameras will allow responders to see through smoke, fog, and during night operations.

This purchase has been deemed a sole source and will be purchased from the authorized distributor, Wally's Fire and Safety for a total amount including applicable tax of $19,260.00. The County has standardized with Bullard Imaging Cameras for compatibility with existing units for servicing, parts, and training.

Funds are available in the following account:

1000-131500-5A8136 (2) Thermal Imaging Cameras $19,260.00

I concur with the above recommendation and further recommend that this purchase be placed on County Council's agenda for their next scheduled meeting on August 28, 2007.

copy: Larry Porth, Director of Finance/Assistant County Administrator
Bruce Rucker, Assistant Sheriff/Director of Public Safety and Homeland Security
Russell Rawl, Fire Service Coordinator

COUNTY OF LEXINGTON
Procurement Services

MEMORANDUM

(O) 785-8385
(F) 785-2240

DATE: August 8, 2007

TO: Katherine L. Hubbard
County Administrator

THROUGH: Sheila R. Fulmer, CPPB
Procurement Manager

FROM: Janice A. Bell, CPPB
Procurement Officer

SUBJECT: **Request for Approval to Utilize Competitive Sealed Proposal Process for Jail Health Care Contract – Sheriff's Department**

We are requesting the use of the Request for Proposals (RFP) process in order to seek competitive proposals from potential qualified bidders for providing Health Care Service for the Lexington County Detention Center. The current contract for Health Care Service provided by Prison Health Services, Inc. expires September 30, 2007.

The previous method of solicitation was through the RFP process. We feel that due to the scope of this project, it would not be practical or to our advantage to write up a comprehensive set of specifications that may limit our resources or restrict competition. In selecting a contractor, it will also be advantageous to consider other award criteria in addition to cost. Proposals shall be reviewed and evaluated by a review panel based upon specific evaluation factors.

It is our recommendation that we utilize the competitive sealed proposal procedure established in the County ordinance. In accordance with this ordinance, approval for use of this procedure must be obtained from County Council. We further recommend that this request be presented to County Council at their next scheduled meeting on August 28, 2007.

copy: Larry Porth, Director of Finance/Assistant County Administrator
Sheriff James R. Metts
Chief Bruce Rucker, Assistant Sheriff / Director of Public Safety & Homeland Security
Colonel Alan Paavel, Sheriff's Department
Sylvia Dillon, Sheriff's Department
Captain Joe Quig
Captain Ron O'Neill

Minutes are left out intentionally until approved by Lexington County Council. Upon Council's approval, the minutes will be available on the Internet.

COUNTY OF LEXINGTON, SOUTH CAROLINA

Community Development
County Administration Building, 4th Floor
212 South Lake Drive, Suite 401, Lexington, SC 29072
(803)785-8121

ZONING MAP AMENDMENT APPLICATION # M07-08

Address and/or description of the property for which the amendment is requested:

1731 Bush River Road Columbia SC 29210

Zoning Classifications: (Current) R1 (Proposed) C2

TMS#: 003697-05-018 Property Owner: State of South Carolina(Divison of General Services)

Reason for the request: The activity (office) is a legal nonconformity. The proposed change to C2 will allow the activty to become an allowed use. This site was the old Bell South office. It is currently used as an office by S.L.E.D. (South Carolina Law Enforcement Division).

Even though this request will be carefully reviewed and considered, the burden of proving the need for the amendment rests with the applicant.

Date of Application: 6/18/2007 Applicant: Owner ☐ Agent ☐

Phone #(s): work 803-785-8121 _____ _____

Signature: _____ Printed Name: Bruce Hiller, Dev. Administrator

Street/Mailing Address: 212 S. Lake Dr., Ste. 401 Lexington SC 29072

6/18/2007	Application Received		Fee Receipted
	Newspaper Advertisement		Property Posted
	Notices Mailed		Planning Commission

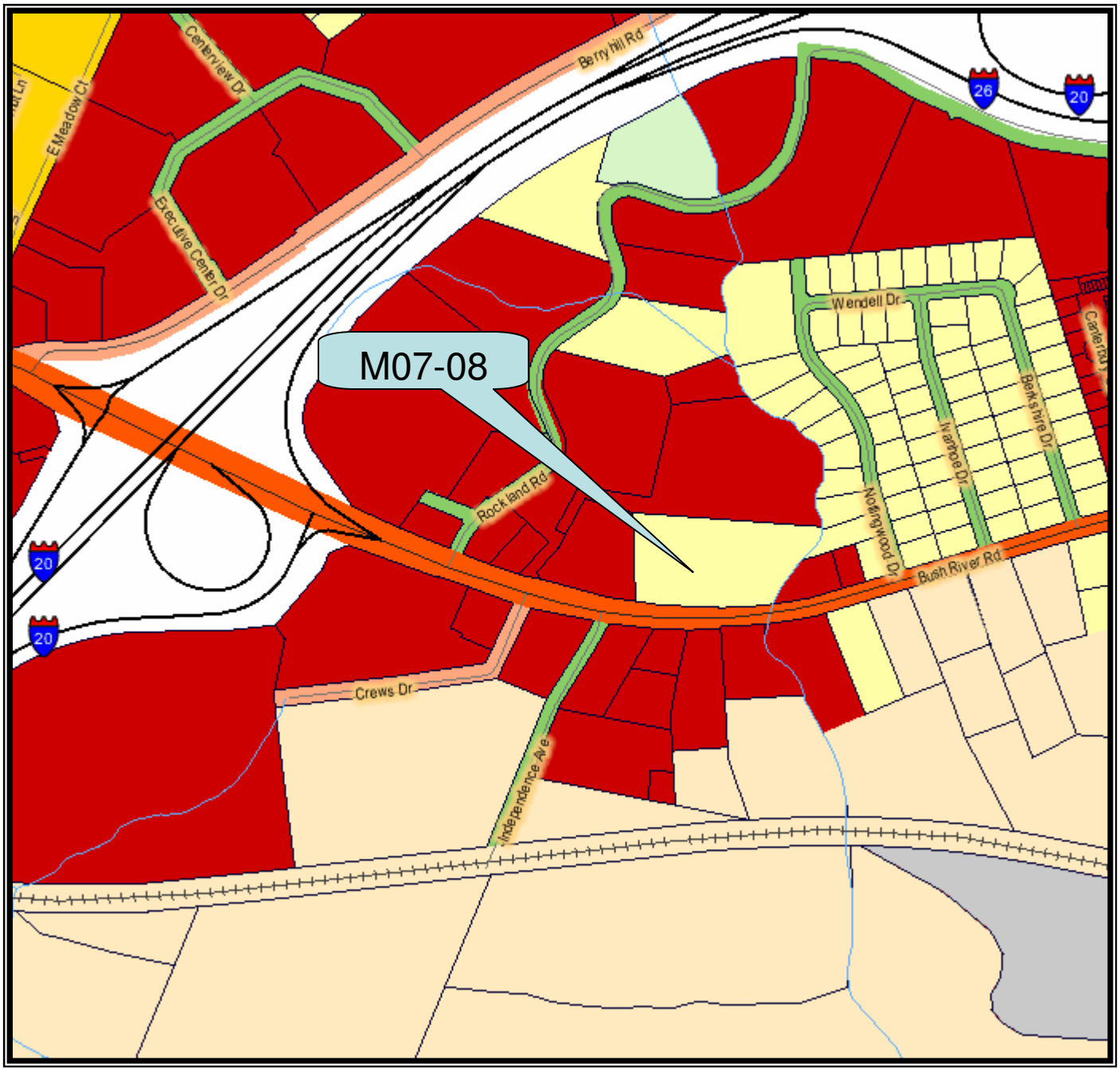
Planning Commission Recommendation: _____

8/28/07	First Reading		Public Hearing		Second Reading		Third Reading

Results: _____

_____

Zoning Map Amendment Application M07-08



ZONING LEGEND

	I - Interstate		RL5 – Residential Local 5		ID – Intensive Development
	A – Arterial Road		RL6 – Residential Local 6		PD – Planned Development
	C – Collector Road		LC – Limited Commercial		R1 – Low Density Residential
	L – Local Road		C1 – Neighborhood Commercial		R2 – Medium Density Residential
	LL – Limited Local Road		C2 – General Commercial		R3 – High Density Residential
	RL4 – Residential Local 4		D - Development		RD – Restrictive Development

C O M M I T T E E R E P O R T

RE: Ordinance 07-10 – A Proposed Ordinance to Determine the Number of Pets Located in Lexington County

DATE: July 25, 2007

COMMITTEE: Health & Human Services

MAJORITY REPORT: Yes

The Health & Human Services Committee met on Tuesday, July 24, 2007, to discuss proposed Ordinance 07-10 - An Ordinance to Determine the Number of Pets Located in Lexington County.

The proposed ordinance would require that all pet veterinarians who have a place of business within the County to provide the Lexington County Animal Services Department within 30 days of the effective date of the ordinance with the following information: A) name, sex, breed, age, weight, color, and whether the pet has been spayed or neutered and whether the pet has had a rabies shot; and B) name, address and telephone number of owner. In addition, the veterinarians will be required to submit the above information of additional pets treated on a monthly basis. The proposed ordinance will affect the unincorporated areas of the county and any incorporated area that is under the jurisdiction of the Lexington County Animal Control Ordinance.

The Committee voted unanimously to recommend that full Council proceed with first reading of Ordinance 07-10 - An Ordinance to Determine the Number of Pets Located in Lexington County at the August 28 Council meeting.

C O M M I T T E E R E P O R T

RE: Animal Identification Procedures
Supplemental Appropriation for Project Pet

DATE: July 25, 2007

COMMITTEE: Health & Human Services

MAJORITY REPORT: Yes

The Health & Human Services Committee met on Tuesday, July 24, 2007, to discuss animal identification procedures and during discussions, the Committee discussed a $1.5 million supplemental appropriation for Project Pet.

Project Pet is a private, non-profit organization dedicated to end killing of adoptable animals in local shelters and has indicated they would be able to take the County's animal shelter's cats and dog and save the County money. They have requested a proposed private/public partnership between Project Pet, Richland County and Lexington County for a 25,400 square foot regional Adoption and Outreach/Spay/Neuter Center. Project Pet has previously secured seven acres of land from Lexington County on Bower Parkway to construct this regional facility.

Project Pet will provide the following services: assist people who find animals in distress or who are no longer able to care for their family pet in finding homes for animals, re-homing stray and abandoned animals, spay and neuter, pet identification and licensing, lost and found animals, adoption counseling, behavioral problems, health care assistance, nutrition education, containment issues, local ordinances and regulations, and "Love and Learn" Education for Public and Private School Children. (See attached from 2007/08 Budget Request Proposal.)

The Committee directed staff to secure documentation to contract this plan with Project Pet and obtain funding sources.

The Committee voted to recommend that full Council move forward with a $1.5 million supplemental appropriation to enter into a private/public partnership with Richland County, Lexington County and Project Pet.

Outside Agency
Budget Request

Date: **April 2, 2007**
To: **Katherine Hubbard**
County Administrator
212 South Lake Drive
Lexington, South Carolina 29072

Name of Organization submitting grant request: **Project Pet**

Contact Information: **Denise Wilkinson, Vice President, Board of Directors**
E-mail ddwilkin@bellsouth.net
Phone Number 803-606-4149

Grant Amount: **$1.5 million**

Purpose of Grant:

To support the construction of a 25,400 square foot Adoption and Outreach/Spay/Neuter Center in Lexington County.

1. Organizational Overview:

Project Pet was founded as a private, non-profit organization in 1999 when volunteers from four animal welfare organizations in Columbia, South Carolina joined to reduce pet overpopulation and promote the well being of companion pets in the Midlands of South Carolina.

This people/pet project is dedicated to ending the killing of adoptable animals in local shelters. Since January 2000, with no shelter of its own, Project Pet and its volunteers have retrieved and found loving homes for more than 4500 abandoned, unwanted pets from the Richland and Lexington County animal shelters. Until homes are found, the pets are provided with safe, temporary homes, medical care, training, and social rehabilitation, and are spayed/neutered.

The organization holds adoption events at Columbia's two PetsMart stores, posts listings on its web page and the national *PetFinder* web page, advertises in local newspapers, and participates in local awareness and adoption events. Cats ready for adoption are placed in PetsMart's Luv-A-Pet centers and rotated as needed until adopted.

Project Pet's volunteers – women and men of all ethnic backgrounds and ages – provide a variety of services, from fostering adoptable dogs and cats to administrative responsibilities. An office was established in fall 2003, and in October 2004 Project Pet hired its first staff member – an interim director to administer its programs.

This organization has spearheaded a collaborative community effort to make the Midlands a "no-kill" community. Through meetings and agreements with other area groups, municipalities, and individuals, Project Pet is increasing public awareness of the problem of pet overpopulation.

Project Pet's direct efforts resulted in a 2002 Richland County Council ordinance banning the sale of live animals at flea markets and establishment of a "No More Homeless Pets" South Carolina license plate that funds sterilization of pets from low-income families in every county in the state. Project Pet representatives are currently researching ordinances to ban the sale of live animals at flea markets in Lexington County, prohibit animal abandonment, close area puppy mills, and promote sterilization of companion pets.

In the spring of 2004, Project Pet petitioned Lexington County Council and secured a 25-year, $1-per-year lease of seven acres of land to construct a no-kill Adoption and Outreach Center. From this centrally located, high-traffic commercial property, Project Pet expects to annually serve thousands of homeless dogs and cats and eventually greatly

reduce the expense of animal services to area taxpayers. Project Pet is petitioning Lexington County for a one-time gift toward construction of the adoption facility.

A needs assessment and building program study was completed in October 2004 by Shelter Planners of America. A feasibility study for a pending $4 million capital campaign was performed in 2005 and designs for a 25,400 square foot Adoption and Outreach Center which includes a 2600 square foot Spay/Neuter Medical Center was completed in 2005.

As lead agency of a community coalition, Project Pet submitted a Preliminary Application and has been invited to submit an Adoption Application to Maddie's Fund, a national organization whose mission is to create a no-kill nation. Maddie's Fund is a $293,000,000 Endowment set up by the PeopleSoft family in California. The application process has entailed regular meetings of all members of the Coalition to plan and establish projects for increasing the community's adoption capacity and spay/neuter capacity for low-income families. The coalition has also collaborated with area veterinarians in preparation of their separate spay/neuter Maddie's Fund application. Project Pet plans to submit its final application to Maddie's Fund when the new Project Pet Adoption and Outreach Center opens. If funded, the grant could potentially be between $3.8 & $6 million.

Statement of Experience

Project Pet has demonstrated its ability to run and operate a successful no-kill organization over the last seven years. This is easily proven by the sheer numbers. With only one staff person, the organization averages 800 shelter adoptions a year. When considering staff to adoption ratios, no other animal organization in the Midlands can come close to Project Pet's results/outcomes.

Project Pet currently works strictly with municipal shelters to rescue healthy and treatable animals that would otherwise be euthanized in the shelter system. Once an animal is removed from the shelter system they are taken directly to one of several veterinarian partners to assess the medical status of the animal and to perform Project Pet's standard procedures. Those standard procedures consist of a typical veterinary annual exam as well as all vaccinations appropriate to the animal's age, microchip insertion and spay or neuter if not already done. Because Project Pet recognizes the impact of spay/neuter on the issue of animal overpopulation, no animal at any time under any circumstance is adopted prior to being sterilized.

In addition to these standard procedures Project Pet consistently performs heartworm treatments on all heartworm positive dogs in the organization's system as well as any additional medical procedures needed to adopt a healthy animal to a permanent home.

Project Pet's adoption process is rigorous with the intent of finding the right match for animals so that they are placed in permanent homes with little chance of again finding themselves in a shelter. If at any time through the life of an animal an adopter is unable to keep a companion they adopted from Project Pet, they are contractually obligated to return that animal to the organization. Project Pet guarantees all its animals homes for life.

The Board of Directors of Project Pet recognized the need to pursue actions that would result in a permanent solution to the issue of pet overpopulation and to become a true force for a community-wide solution to the pet overpopulation issue. Continuing down the path of an adoption-focused rescue without a concentrated focus on spay/neuter programming serves only to mask the root cause of the issue.

As such, the Board of Directors pursued the most highly qualified and experienced experts in the animal sheltering industry to become educated on the core issues and necessary courses of action so that Project Pet's mission can do more than simply scratch the surface of the issue at hand. Project Pet is pursuing a permanent solution.

Project Pet sought the expertise of leading agencies, organizations and individuals across the country such as the Richmond SPCA located in Richmond Virginia, the Humane Alliance located in Asheville, North Carolina and the Maddie's Fund organization out of San Francisco, California. Each of these organizations has been nationally recognized as experts in the field of animal sheltering and humane solutions. Project Pet has learned through the use of best practice models set forth by

Grant Application

County of Lexington
Katherine L. Hubbard
County Administrator
212 South Lake Drive
Lexington, South Carolina 29072

Requesting Organization Information

PETS Inc.
300 Orchard Rd.
PO Box 6394
West Columbia, SC 29171

803-739-9333 phone
www.petsinc.org

Contact Person: Donna Casamento
803-414-1244 direct line
803-256-6944 fax
donna@petsinc.org

Mission Statement: Our mission is to substantially reduce animal population and suffering by assisting people who find animals in distress or who are no longer able to care for their family pets. Our services are not limited to a single aspect (such as spay/neuter) but have been carefully designed to address the full range of animal welfare concerns including:

- Re-homing Stray & Abandoned Animals
- Spay & Neuter
- Pet Identification & Licensing
- Lost & Found Animals
- Adoption Counseling
- Behavioral Problems
- Health Care Assistance
- Nutrition Education
- Containment Issues
- Local Ordinances & Regulations
- "Love and Learn" Education for Public & Private School Children

Background Information: **PETS, Inc. The Carolinas Humane Society** Established in 1992 by Patricia M. McQueen and Jane Muir Brundage.

PETS, Inc. The Carolinas Humane Society is a private nonprofit organization that assists more than 4,000 families each year in the South Carolina Midlands. We provide a continuum of services ranging from rescue and veterinary care to adoption and training for pet owners regardless of their ability to pay. Our agency also works closely with other animal rescue and placement organizations, local law enforcement, mental health services, nursing homes, SisterCare, LRADAC, and other community programs to assist people with animal related emergencies. You will find us assisting other agencies in such diverse areas as developmental disabilities, state & federal adult pre-trial intervention programs, work-release programs and federal workstudy. Additionally, our programs address issues relative to juvenile justice, positive youth development, education, and work readiness.

Program Description:

PETS, Inc. was established in 1992 to provide discount spay/neuter and adoption services. Since that time we have provided over 32,000 low-cost spays and neuters and rescued and placed in adoptive homes over 27,000 homeless dogs and cats. PETS, Inc. is the premier provider of animal related assistance in South Carolina, and as such attracts 300 visitors each week to our Adoption Center & Shelter. Having moved into our new facility in December of 2006, we are now able to provide a larger, more attractive and healthier environment for animals, visitors, staff and volunteers in part due to the generosity of Lexington County and the grant awarded to us last year. The additional space has enable us to expand our services and increase efficiency.

these organizations that achieving a no-kill community is possible within a seven year period from program implementation. Project Pet is pursuing this best practice model which will include a very aggressive adoption campaign partnered with the local shelters and a very aggressive spay/neuter campaign for low-income families.

Fundraising lies at the heart of any successful non-profit organization's ability to fulfill its mission. Project Pet has a solid history of fundraising success designed to cover all operating expenses and build operating reserves. The organization has consistently operated in the black since day one and current operational fundraising generates in excess of $20,000 per month. In addition to operational fundraising a capital campaign is currently underway to support the construction and operation of the Adoption and Outreach facility raising over $2.3 million to date in private support.

2. Project Budget:

PROJECT PET ADOPTION AND SPAY/NEUTER CLINIC EXPENSES	
ADOPTION FACILITY:	
Administrative & Public Areas	$1,206,500
Animal - Kennel Areas	$537,800
Animal - Treatment Areas	$888,800
Animal - Special Equipment (kennels, cages, etc.)	$147,920
Sub Total	**$2,781,020**
DEVELOPMENT CENTER:	
Animal - Kennel Areas	$262,530
Animal - Special Equipment	$93,000
Sub Total	**$355,530**
SPAY/NEUTER FACILITY	
Spay/Neuter operating areas and examination rooms	**$520,000**
SITE WORK, ARCHITECTURAL AND ENGINEERING, PERMITS	**$343,450**
TOTAL CONSTRUCTION BUDGET	**$4,000,000**
The $1.5 million request is based on a prorata share of the Lexington County per capita human population compared to the Midlands as a whole. The estimated percentage is 43% of the cost of construction.	

3. Anticipated Annual Operating Cost:

PROJECT PET ADOPTION AND OUTREACH CENTER BUDGET OPERATING REVENUE		2 VET SCENARIO COMMENTS
SN Clinic NOI	$390,161	Net Operating Regular Operations
Adoption Fee Revenue	201,748	Current range $85-150; average $117.50; 1717 yr 1 per MF
Petsmart Charities Adoption Revenue	5,588	
TOTAL OPERATING REVENUE	**$597,497**	
Program Expenses		
Advertising - Adoptions	$10,000	
Advertising - Programs	3,500	
Advertising - General	10,000	
Animal Supplies	17,170	All items to run shelter portion of facility-beds, bowls, etc
Animal Meds	34,340	Microchip/Vaccinations/additional medical supply, etc
Automobile Operating Expense	10,000	
Educational Expense	6,500	
Payroll Expense	608,000	
Payroll Taxes	97,280	16% of payroll
Insurance/Benefits	164,160	27% of payroll
Total Program Expense	**$960,950**	
Support Expenses		
Board Expense	$2,000	
Bank Fees	3,000	
Depreciation		
Dues and Subscriptions	1,200	
Legal and Audit	5,000	
Liability Insurance	18,000	
Postage/Delivery	6,000	
Professional Fees	10,000	
Property Taxes	1,000	
Building Repairs/maintenance	800	Year 1 minimal fees
Telephone	8,000	
Travel	2,500	
Electric/Water Utilities	51,888	
Waste Management	3,000	
Volunteer Expense	5,000	
Mortgage	146,765	
Total Support Expense	**$264,153**	
TOTAL EXPENSES	**$1,225,103**	
NET OPERATING INCOME	**$-627,606**	**See Fundraising Synopsis to follow**

FUNDRAISING SYNOPSIS		
FUNDRAISING REVENUE (net of expense)		
Unrestricted Contributions	$300,000	Major Gifts and Grants
Membership Drive	60,000	
Newsletter	40,000	
Online Fundraising	20,000	
Calendar Campaign	20,000	
Newberry Opera House Fundraiser	45,000	
Fur Ball Fundraiser	100,000	
Summer Event Fundraiser	45,000	
TOTAL FUNDRAISING REVENUE	**$630,000**	
NET OPERATING INCOME	**-627,606**	
INCREASE/DECREASE IN NET ASSETS	**$2,394**	

4. **Full Disclosure of Financing Sources: See Attached Letter from Wachovia – Page 6**

5. **Dollars on Hand/Pledged**

Total Board Commitments	**$1,726,500**
Total Public Commitments	**$ 576,302**
Grand Total:	**$2,302,802**

6. **Grant Funding & Terms of Grant:**

Project Pet is requesting a grant in the amount of $1.5 million in the form of a bond. It is the hope of the Organization that the funding for this project will be issued upfront.

Attachments:

Facility Designs: Exhibit A

Board of Directors: Exhibit B

Organizational Chart: Exhibit C

Return on Investment: Exhibit D

2006 Statement of Activities: Exhibit E

Project Pet Initiative

REGIONAL IMPACT

Did you know?

- Over 23,000 companion animals entered the Midlands municipal animal control systems in 2005
- Over 19,000 of these animals were euthanized in this system that same year
- Over $2.5 million a year is spent on Animal Care Services in the Midlands

Project Pet Initiative
Regional Impact

Current Municipal Operations

	Current Annual Animal Control Expenditure	Annual Animal Control Expenditures by 2016 without change	Total Animal Control Dollars Spent over next 10 years
Lexington County	$568,562.00	$706,935.00	$7,057,043.00
Richland County	$883,000.00	$1,097,900.00	$10,959,875.00
City of Columbia	$1,200,000.00	$1,492,049.00	$14,894,508.00
Midlands Community	$2,651,562.00	$3,296,884.00	$32,911,426.00

With Implementation of Project Pet Plan

	Anticipated Annual Animal Control Expenditure	Annual Animal Control Expenditures by 2016	Total Animal Control Dollars Spent over next 10 years
Lexington County	$545,820.00	$362,879.00	$4,936,401.00
Richland County	$847,680.00	$563,565.00	$7,666,432.00
City of Columbia	$1,152,000.00	$765,887.00	$10,418,707.00
Midlands Community	$2,545,500.00	$1,692,331.00	**$23,021,540.00**

Total savings with implementation of Project Pet Plan - Year 10

Lexington County	$2,120,642.00
Richland County	$3,293,443.00
City of Columbia	$4,475,801.00
Midlands Community	**$9,889,886.00**

LEXINGTON COUNTY

CURRENT CONDITIONS - CARRIED FORWARD		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Cumulative Total
Human Population Lexington County with 2% annual increase	2.00%	229,168	233,751	238,426	243,195	248,059	253,020	258,080	263,242	268,507	273,877	279,355	284,942	
Households in Lexington County	2.650	86,476	88,208	89,972	91,772	93,607	95,479	97,389	99,337	101,323	103,350	105,417	107,525	
Animal Population (.568 per Household)	0.568	49,120	50,102	51,104	52,126	53,169	54,232	55,317	56,423	57,552	58,703	59,877	61,074	
Animal Intake Lexington County-Average .173 go to shelters	0.173	8,486	8,656	8,829	9,005	9,186	9,369	9,557	9,748	9,943	10,142	10,344	10,551	
.173=number of intake divided by animal population														
Animal Control Expenditures:														
Lexington County Spends an average of $67 per animal.	67	67	67	67	67	67	67	67	67	67	67	67	67	
spreadsheet assumes 2% inflation expense growth per year	2.00%													
Animal Control Operating Budget Needs:		568,562	579,933	591,532	603,363	615,430	627,738	640,293	653,099	666,161	679,484	693,074	706,935	$ 7,057,043

PROJECTED BENEFIT - CONSERVATIVE	4%													
Animal Intake with Animal Spay/Neuter Campaign 4% Decrease		8,486	8,147	7,821	7,508	7,208	6,919	6,642	6,377	6,122	5,877	5,642	5,416	
Decrease in Lexington County Animal Control Expenditures - ANNUAL:			22,742	21,833	20,959	20,121	19,316	18,544	17,802	17,090	16,406	15,750	15,120	
Decrease in Lexington County Animal Control Expenditures - CUMMULATIVE:			22,742	44,575	65,535	85,656	104,972	123,516	141,318	158,407	174,813	190,563	205,683	
Projected Operating Budget Needs - POST IMPLEMENTATION			545,820	523,987	503,027	482,906	463,590	445,046	427,244	410,155	393,749	377,999	362,879	$ 4,936,401
Difference in Current Conditions Budget and Post Implementation Budget			34,114	67,545	100,335	132,524	164,148	195,247	225,855	256,006	285,736	315,075	344,057	$ 2,120,642

PROJECTED BENEFIT - CONSERVATIVE

TOTAL PROJECTED BENEFITS WITH IMPLEMENTATION OF THE PROJECT PET PLAN:

Intake decreases	4%	annually
Intake Result	-36%	on a cumulative basis
Projected budget of $	706,935	in 2016 (assuming no changes)
Projected budget of $	362,879	in 2016 if Project Pet is implemented
Estimated savings $	**2,120,642**	resulting from Project Pet implementation

The 36% cumulative reduction in animal intake is achieved through the spaying and neutering of 5766 animals per year made possible through the employment of one full-time veterinarian working out of the spay/neuter clinic at the proposed Project Pet facility.
Note that at capacity the facility can accommodate four veterinarians.

PROJECTED BENEFIT - AGGRESSIVE	8%													
Animal Intake with Animal Spay/Neuter Campaign 8% Decrease		8,486	7,807	7,183	6,608	6,079	5,593	5,146	4,734	4,355	4,007	3,686	3,391	
Decrease in Lexington County Animal Control Expenditures - ANNUAL:			45,485	41,846	38,498	35,419	32,585	29,978	27,580	25,374	23,344	21,476	19,758	
Decrease in Lexington County Animal Control Expenditures - CUMMULATIVE:			45,485	87,331	125,830	161,248	193,833	223,812	251,392	276,765	300,109	321,585	341,343	
Projected Operating Budget Needs - POST IMPLEMENTATION			523,077	481,231	442,732	407,314	374,729	344,750	317,170	291,797	268,453	246,977	227,219	$ 3,925,449
Difference in Current Conditions Budget and Post Implementation Budget			56,856	110,301	160,630	208,116	253,010	295,543	335,929	374,364	411,031	446,097	479,717	$ 3,131,594

PROJECTED BENEFIT - AGGRESSIVE

TOTAL PROJECTED BENEFITS WITH IMPLEMENTATION OF THE PROJECT PET PLAN:

Intake decreases	8%	annually
Intake Result	-60%	on a cumulative basis
Projected budget of $	706,935	in 2016 (assuming no changes)
Projected budget of $	227,219	in 2016 if Project Pet is implemented
Estimated savings $	**3,131,594**	resulting from Project Pet implementation

The 60% cumulative reduction in animal intake is achieved through the spaying and neutering of 11532 animals per year made possible through the employment of two full-time veterinarians working out of the spay/neuter clinic at the proposed Project Pet facility.
Note that at capacity the facility can accommodate four veterinarians.

Project Pet Initiative

Lexington IMPACT

The biggest piece of the puzzle:

- 1 vet will be able to spay/neuter 5,766 animals per year in the facility
- 2 vets will be able to spay/neuter 11,532 pets that belong to low income families
- At capacity the Project Pet facility can house 4 full-time veterinarians – that is a possible 23,064 procedures per year!
- Hosting Fee of $1 provided to Lexington County for every animal spay/neutered from Lexington County.
- Adoption Fee provided for every animal pulled from Lexington County Animal Services that is medically ready.

PROJECT PET

Project Pet is a not-for-profit organization with a Board of 37 prominent business and community leaders dedicated to addressing animal overpopulation issues in the Midlands

- Project Pet works directly with municipal animal shelters to pull healthy and treatable animals that would otherwise be euthanized.
- Project Pet ensures that the animals are both physically and mentally restored before placing them in permanent homes.
- Project Pet spays or neuters and fully vaccinates every animal in its care.
- Project Pet currently works through a network of foster homes and donated kennel space due to the lack of a permanent facility.

In 2006, Project Pet rescued 745 animals that would have been euthanized without intervention.

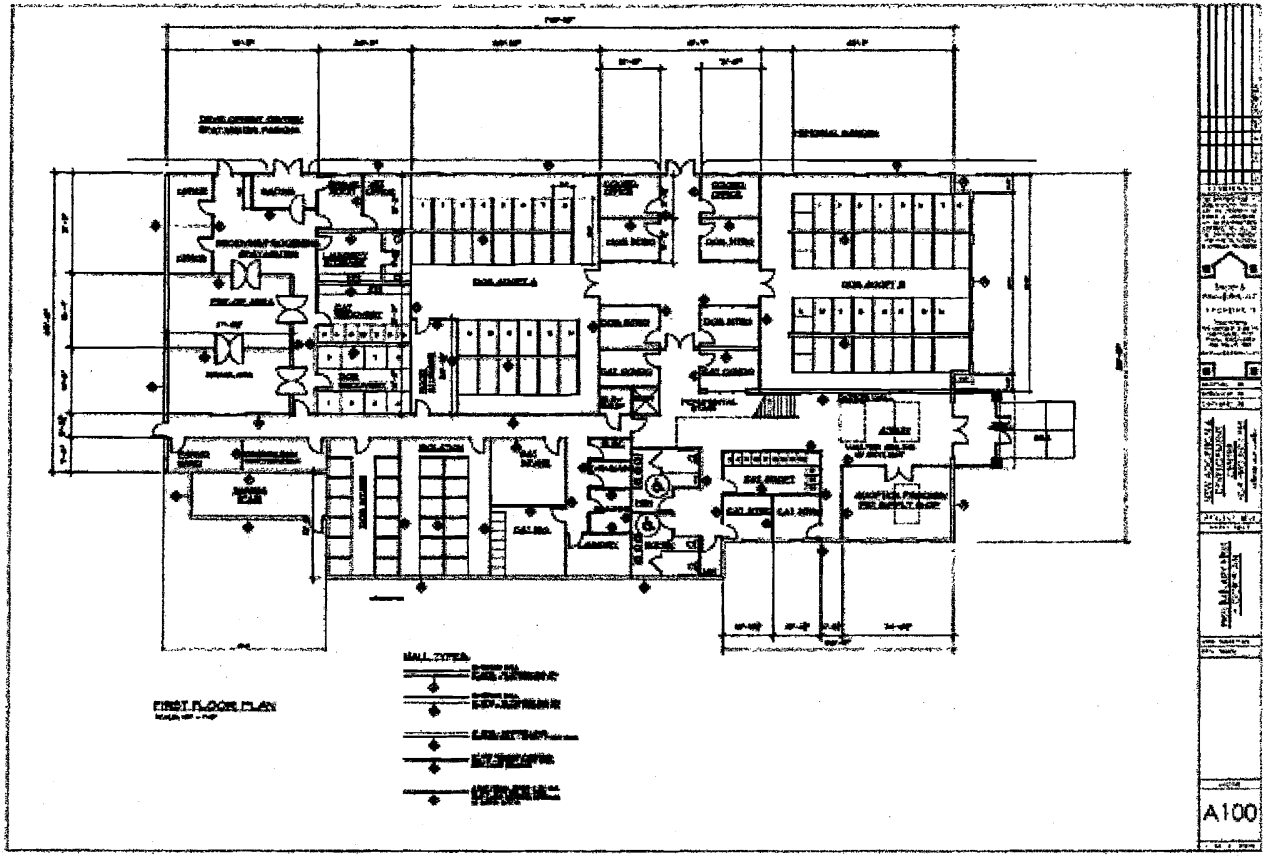
Proposed Adoption and Outreach Center

PROJECT PET

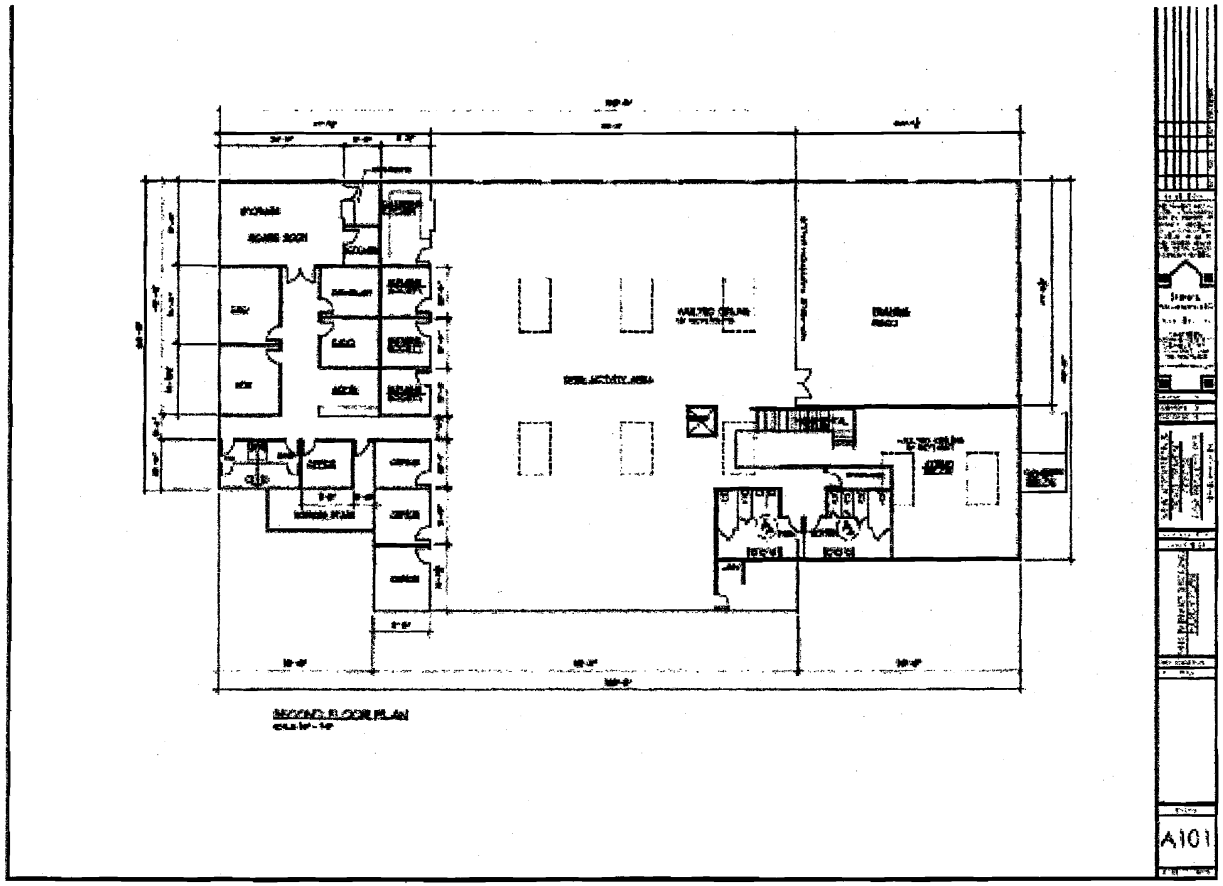
Adoption & Outreach Center

CAMPAIGN FOR A COMPASSIONATE SOLUTION

Spay/Neuter Clinic and Adoption Center



Emergency Animal Shelter, Training and Education Center, Marketing and Administrative Offices



STATE OF SOUTH CAROLINA
COUNTY COUNCIL FOR LEXINGTON COUNTY
ORDINANCE NO. 07-07

AN ORDINANCE AUTHORIZING: (1) THE EXECUTION AND DELIVERY OF A FEE IN LIEU OF TAX AND INCENTIVE AGREEMENT BY AND AMONG LEXINGTON COUNTY, SOUTH CAROLINA (THE "COUNTY"), OTIS SPUNKMEYER, INC. (THE "COMPANY"), PURSUANT TO WHICH THE COUNTY SHALL COVENANT TO ACCEPT CERTAIN NEGOTIATED FEES IN LIEU OF *AD VALOREM* TAXES; (2) THE GRANT OF FUNDS FOR CONSTRUCTION OF CERTAIN INFRASTRUCTURE REQUIREMENTS IN CONNECTION WITH THE ESTABLISHMENT OF MANUFACTURING FACILITIES SERVING THE ECONOMIC DEVELOPMENT OF THE COUNTY; (3) THE BENEFITS OF A MULTI-COUNTY PARK TO BE MADE AVAILABLE TO THE COMPANY; AND (4) OTHER MATTERS RELATING THERETO.

WHEREAS, Lexington County, South Carolina (the "County"), acting by and through its County Council (the "Council"), is authorized and empowered, under and pursuant to the provisions of the Code of Laws of South Carolina, 1976, as amended (the "Code"), particularly Title 12, Chapter 44 thereof (the "Simplified FILOT Act") and Title 4, Chapter 1 of the Code (the "Multi-County Park Act") (collectively, the "Act"): (i) to enter into agreements with certain investors to construct, operate, maintain, and improve industrial and commercial facilities through which the economic development of the State of South Carolina (the "State") will be promoted by inducing industrial and commercial enterprises to locate and remain in the State and thus utilize and employ the manpower, agricultural products, and natural resources of the State; (ii) to covenant with such investors to accept certain fee in lieu of *ad valorem* tax ("FILOT") payments with respect to such properties; (iii) to grant funds for construction of infrastructure requirements in connection with the establishment of manufacturing facilities serving the economic development of the county; and (iv) to create, in conjunction with one or more other counties, a multi-county industrial park in order to afford certain enhanced income tax credits to such investors; and

WHEREAS, Otis Spunkmeyer, Inc., a Delaware corporation, (the "Company") is considering making a significant investment in the County through the acquisition, improvement and equipping of certain manufacturing facilities within the County (the "Project"), and the Company anticipates that, should its plans proceed as expected, it will invest at least Seventeen Million Dollars ($17,000,000) in personal property and Eight Million Dollars ($8,000,000) in real property and will create approximately 72 new full-time jobs within the County by the end of the Initial Compliance Period (defined below); and

WHEREAS, the County has given due consideration to the economic development impact of the Project, has determined on the basis of the information supplied to it by the Company that the Project would subserve the purposes of the Act

and, would be directly and substantially beneficial to the County, the taxing entities of the County and the citizens and residents of the County and, pursuant to a Resolution adopted by the Council on February 13, 2007 (the "Resolution"), has made certain findings in accordance with the provisions of the Act; and

WHEREAS, in accordance with such findings and determinations and in consideration of the jobs and the investment created by the Company, the County wishes to induce the Company to undertake the Project by offering the inducements set forth in the Inducement and Millage Rate Agreement (the "Inducement Agreement") between the County and the Company heretofore approved by the Council by the Resolution; and

WHEREAS, the County and the Company have agreed to the specific terms and conditions of such arrangements as set forth in a Fee in Lieu of Tax and Incentive Agreement among the County and the Company (the "Incentive Agreement") the form of which presented to this meeting, which Incentive Agreement is to be dated as of June 30, 2007 or such other date as the parties may agree; and

WHEREAS, it appears that the Incentive Agreement now before this meeting is in appropriate form and is an appropriate instrument to be executed and delivered by the County for the purposes intended;

NOW, THEREFORE, BE IT ORDAINED by the Council as follows:

Section 1. As contemplated by Section 12-44-40(H) of the Code, the findings and determinations set forth in the Inducement Resolution are hereby ratified and confirmed and the terms and conditions of the Inducement Agreement are hereby ratified and approved; provided, however, that in the event of any inconsistency between the Inducement Agreement and the Incentive Agreement, the provisions of the Incentive Agreement shall control.

Section 2. The County hereby agrees, subject to the investment and other requirements set forth herein and in the Act, to enter into the Incentive Agreement with the Company, whereby the Company will agree to pay a Negotiated FILOT (as defined herein) with respect to the Project in accordance with the terms of such Incentive Agreement. The Incentive Agreement will provide, *inter alia*, the following:

(a) In order to take advantage of the Negotiated FILOT, the Company must invest or cause others to invest at least Seventeen Million Dollars ($17,000,000) in personal property and Eight Million Dollars ($8,000,000) in real property (the "Minimum Contractual Investment Requirement") at the Project during the period commencing with the date of the Company's initial expenditure with respect to the Project, whether before or after the effective date of this Agreement, and ending on the fifth anniversary of the end of the property tax year in which the Company places in service the initial assets comprising the Project (the "Initial Compliance Period").

(b) To encourage the Company to increase its investment in the Project, if the Company meets the Minimum Contractual Investment Requirement by the end of the Initial Compliance Period, the period for completion of the Project shall be extended for two years beyond the Initial Compliance Period (such Initial Compliance Period, as so extended, referred to herein as the "Investment Period"), and the County hereby approves of such extension.

(c) (i) The Company shall pay a fee in lieu of ad valorem taxes calculated as provided in this Section 2(c) (the "Negotiated FILOT") for all property placed in service by the Company as part of the Project during the Investment Period. The annual Negotiated FILOT payments shall commence with respect to the property tax year in which the first assets comprising a part of the Project are placed in service and shall continue for a period of 20 years; provided that, if the Project is placed in service during more than one year, each year's investment during the Investment Period shall be subject to the Negotiated FILOT for a period of 20 years.

(ii) The Negotiated FILOT shall be determined using: (1) an assessment ratio of 7.0%, (2) a millage rate of 274.738 mills, which is the millage rate applicable as of June 30, 2007, and which rate shall be fixed for the entire term of the Incentive Agreement, and (3) the fair market value of the Project, determined in accordance with the Act.

(iii) If the Company fails to invest or cause to be invested an amount equal to the Minimum Contractual Investment Requirement by the end of the Initial Compliance Period, the County shall be entitled to terminate the Incentive Agreement, adjust the incentives provided hereunder prospectively and/or require the Company to pay all or part of the difference between the Negotiated FILOT theretofore paid and the amount which would have been paid but for the Incentive Agreement.

Section 3. The County will diligently take all reasonable acts to insure that the Project will be included, and will remain, within the boundaries of a multi-county industrial or business park pursuant to the provisions of the Multi-County Park Act on terms which provide, for all jobs created by the Company in the County during the Investment Period, any additional jobs tax credits afforded by the laws of the State for projects located in multi-county industrial or business parks.

Section 4. Subject to the County's prerogatives under the law as it pertains to the budget process, the County shall provide grant funds in the amount of Two Hundred Fifty Thousand Dollars ($250,000) to reimburse costs of on-site infrastructure required for the Project, such grant funds to be administered in accordance with the terms of the Incentive Agreement. If the Company fails to maintain or cause to be maintained the Minimum Contractual Investment Requirement during the period commencing with the first year the Minimum Contractual Investment Requirement is met through June 30, 20__, the County shall be entitled to terminate the Incentive Agreement, adjust the incentives provided thereunder prospectively and/or require the Company to repay all or part of such grant. The County also will use its best efforts to secure One Hundred

Thirty-Five Thousand Dollars ($135,000) in funds for infrastructure required for the Project site from "set aside funds" administered by the South Carolina Advisory Coordinating Council for Economic Development.

Section 5. The form, provisions, terms, and conditions of the Incentive Agreement presented to this meeting and filed with the Clerk to Council be and they are hereby approved, and all of the provisions, terms, and conditions thereof are hereby incorporated herein by reference as if the Incentive Agreement were set out in this Ordinance in its entirety. The Incentive Agreement is to be in substantially the form now before this meeting and hereby approved, or with such changes therein as shall not materially adversely affect the rights of the County thereunder and as shall be approved by the officials of the County executing the same, their execution thereof to constitute conclusive evidence of their approval of any and all changes or revisions therein from the form of the Incentive Agreement now before this meeting.

Section 6. The Chairman of the Council and the Clerk to Council, for and on behalf of the County, is hereby authorized, empowered, and directed to do any and all things necessary or proper to effect the execution and delivery of the Incentive Agreement, the performance of all obligations of the County under and pursuant to the Inducement Agreement and the Incentive Agreement, and to carry out the transactions contemplated thereby and by this Ordinance.

Section 7. The provisions of this Ordinance are hereby declared to be separable and if any section, phrase, or provision shall for any reason be declared by a court of competent jurisdiction to be invalid or unenforceable, such declaration shall not affect the validity of the remainder of the sections, phrases, and provisions hereunder.

Section 8. All orders, resolutions, ordinances, and parts thereof in conflict herewith are, to the extent of such conflict, hereby repealed and this Ordinance shall take effect and be in full force from and after its passage and approval.

[End of Ordinance; execution page to follow.]

Enacted and approved this _____ day of _____, 2007.

LEXINGTON COUNTY, SOUTH CAROLINA

By: _____
William C. Derrick, Chairman, County Council
Lexington County, South Carolina

[SEAL]

Attest:

By: _____
Diana W. Burnett, Clerk to County Council
Lexington County, South Carolina

First Reading:	June 12, 2007
Second Reading:	June 26, 2007
Public Hearing:	July 24, 2007
Third Reading:	_____ __, 2007

EXECUTION COPY

FEE IN LIEU OF TAX AND INCENTIVE AGREEMENT

between

LEXINGTON COUNTY, SOUTH CAROLINA

and

OTIS SPUNKMEYER, INC.

Dated as of September 1, 2007

ARTICLE I DEFINITIONS 2

Section 1.01. Definitions 2
Section 1.02. References to Agreement 6

ARTICLE II REPRESENTATIONS AND WARRANTIES 6

Section 2.01. Representations and Warranties by County 6
Section 2.02. Representations and Warranties by Company 7

ARTICLE III COVENANTS OF COUNTY 8

Section 3.01. Agreement to Accept FILOT Payments 8
Section 3.02. Additional County Undertakings 8
Section 3.03. Commensurate Benefits 8

ARTICLE IV COVENANTS OF COMPANY 9

Section 4.01. Investment in Project 9
Section 4.02. Failure to Comply with Investment Commitments 10
Section 4.03. Payment of Administration Expenses 11
Section 4.04. Use of Project for Lawful Activities 11
Section 4.05. Maintenance of Existence 11
Section 4.06. Records and Reports 12

ARTICLE V FEES IN LIEU OF TAXES 13

Section 5.01. Payment of Fees in Lieu of Ad Valorem Taxes 13
Section 5.02. Statutory Lien 17

ARTICLE VI THIRD PARTY ARRANGEMENTS 17

Section 6.01. Conveyance of Liens and Interests; Assignment 17
Section 6.02. Sponsors and Sponsor Affiliates 18

ARTICLE VII TERM; TERMINATION 19

Section 7.01. Term 19
Section 7.02. Termination 19

ARTICLE VIII EVENTS OF DEFAULT AND REMEDIES 19

Section 8.01. Events of Default by Company 19
Section 8.02. Remedies on Event of Default by Company 19
Section 8.03. Defaulted Payments 20

Section 8.04. Application of Monies upon Enforcement of Remedies against Company 20
Section 8.05. Default by County 20

ARTICLE IX MISCELLANEOUS 20

Section 9.01. Rights and Remedies Cumulative 20
Section 9.02. Successors and Assigns 21
Section 9.03. Notices; Demands; Requests 21
Section 9.04. Applicable Law 22
Section 9.05. Entire Understanding 22
Section 9.06. Severability 22
Section 9.07. Headings and Table of Contents; References 22
Section 9.08. Multiple Counterparts 22
Section 9.09. Amendments 22
Section 9.10. Waiver 22
Section 9.11. Further Proceedings 22
EXHIBIT A LEGAL DESCRIPTION A-1

FEE IN LIEU OF TAX AND INCENTIVE AGREEMENT

THIS FEE IN LIEU OF TAX AND INCENTIVE AGREEMENT (this "Agreement" dated as of September 1, 2007, between LEXINGTON COUNTY, SOUTH CAROLINA (the "County"), a body politic and corporate and a political subdivision of the State of South Carolina, and OTIS SPUNKMEYER, INC., a corporation organized and existing under the laws of the State of Delaware, acting for itself, any affiliates or other project sponsors (the "Company");

W I T N E S S E T H:

WHEREAS, Lexington County, South Carolina (the "County"), acting by and through its County Council (the "Council"), is authorized and empowered under and pursuant to the provisions of the Code of Laws of South Carolina, 1976, as amended through the date hereof (the "Code"), particularly Title 12, Chapter 44 (the "Simplified FILOT Act"); and Title 4, Chapter 1 of the Code (the "Multi-County Park Act") (collectively, the "Act"): (i) to enter into agreements with certain investors to construct, operate, maintain, and improve industrial and commercial facilities through which the economic development of the State of South Carolina (the "State") will be promoted by inducing industrial and commercial enterprises to locate and remain in the State and thus utilize and employ the manpower, agricultural products, and natural resources of the State; (ii) to covenant with such investors to accept certain fee in lieu of *ad valorem* tax ("FILOT") payments with respect to such properties; (iii) to grant funds for construction of infrastructure requirements in connection with the establishment of manufacturing facilities serving the economic development of the county; and (iv) to create, in conjunction with one or more other counties, a multi-county industrial park in order to afford certain enhanced income tax credits to such investors; and

WHEREAS, the Company is considering significant investment in the County through the acquisition, improvement and equipping of certain manufacturing facilities within the County (the "Project"), and the Company anticipates that, should its plans proceed as expected, it will invest at least Seventeen Million Dollars ($17,000,000) in personal property and Eight Million Dollars ($8,000,000) in real property and will create approximately 72 new full-time jobs within the County by the end of the Initial Compliance Period (defined below); and

WHEREAS, the County has determined the Project will subserve the purposes of the Act and has made certain findings pertaining thereto in accordance with the Act; and

WHEREAS, in accordance with such findings and determinations and in order to induce the Company to locate the Project in the County, the County adopted a Resolution on February 27, 2007, pursuant to which the County and the Company entered into an Inducement and Millage Rate Agreement ("Inducement Agreement"), whereby the Company agreed to locate the Project within the boundaries of the County and the County agreed to provide the FILOT benefits, a grant of funds for construction of certain infrastructure, and multi-county industrial or business park benefits as described herein; and

WHEREAS, the County determined it is in the best interest of the County to enter into this Agreement with the Company subject to the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the premises; the potential jobs and investment to be created by the Company which contribute to the tax base and the economic welfare of the County; the respective representations and agreements hereinafter contained; and the sum of $10.00 in hand, duly paid by the Company to the County, the receipt and sufficiency of which are hereby acknowledged, the County and the Company agree as follows:

ARTICLE I

DEFINITIONS

Section 1.01. Definitions. In addition to the words and terms elsewhere defined in this Agreement, the following words and terms as used herein and in the preambles hereto shall have the following meanings unless the context or use indicates another or different meaning or intent.

"Act" shall mean, collectively, the FILOT Act and the Multi-County Park Act.

"Administration Expenses" shall mean the reasonable and necessary expenses incurred by the County in the fulfillment of its obligations under this Agreement and in the implementation of its terms and provisions, including attorneys' fees at the hourly rates which are standard for the applicable legal services to the County, but excluding expenses incurred by the County in defending either challenges to the incentives provided herein by third parties or suits brought by the Company under **Section 8.05** hereof; provided, however, that no such expense shall be considered an Administration Expense unless the County and the Company shall have first agreed, prior to the County incurring such expense, as to the maximum amount thereof or as to the basis for which such expenses will be incurred, and that the County shall have furnished to the Company an itemized statement of all expenses incurred and provided, further, that nothing herein shall be construed as prohibiting the County from engaging the counsel of its choice for matters deemed necessary and prudent by the County.

"Agreement" shall mean this Fee in Lieu of Tax and Incentive Agreement as originally executed and from time to time supplemented or amended as permitted herein.

"Code" shall mean the Code of Laws of South Carolina, 1976, as amended through the date hereof unless the context clearly requires otherwise.

"Co-Investor" shall mean any Sponsor or Sponsor Affiliate within the meaning of Sections 12-44-30(A)(18) and (19) of the Code, any Corporate Affiliate of the Company or of any such Sponsor or Sponsor Affiliate, any developer in a build-to-suit arrangement with respect to the Project, any lessor of equipment or other property comprising a part of the Project, any financing entity or other third party investing in or providing funds for the Project. The Company shall notify the County in writing of the identity of any Sponsor, Sponsor Affiliate or other Co-Investor and shall, to the extent the Company and any such Co-Investor intend to extend the benefits of the Negotiated FILOT to property owned by such Co-Investor pursuant to

Section 6.02 hereof, comply with any additional notice requirements, or other applicable provisions, of the Act. As of the date of original execution and delivery of this Agreement, OS Columbia LLC and S&H Brothers, LLC are the only Co-Investors.

"Company" shall mean Otis Spunkmeyer, Inc., a Delaware corporation, and any surviving, resulting, or transferee entity in any merger, consolidation or transfer of assets permitted under **Sections 4.05 or 6.01** hereof or any other assignee hereunder which is designated by the Company and approved by the County.

"Corporate Affiliate" shall mean any corporation, limited liability company, partnership or other Person or entity which owns all or part of the Company or which is owned in whole or in part by the Company or by any partner, shareholder or owner of the Company.

"County" shall mean Lexington County, South Carolina, a body politic and corporate and a political subdivision of the State, and its successors and assigns.

"Council" shall mean the governing body of the County and its successors.

"Deficiency Payment" shall have the meaning specified in **Section 5.01(e)** hereof.

"Department of Revenue" shall mean the South Carolina Department of Revenue.

"Economic Development Property" shall mean each item of real and tangible personal property comprising the Project which is placed in service during the Investment Period and which meets the requirements of Sections 12-44-30(6) and 12-44-40(C) of the Code, excluding specifically any Non-Qualifying Property.

"Event of Default" shall mean an Event of Default, as set forth in **Section 8.01** hereof.

"Existing Property" shall mean property proscribed from becoming Economic Development Property under this Agreement pursuant to Section 12-44-110 of the Code, including without limitation property which has been subject to *ad valorem* taxes in the State prior to commencement of the Investment Period and property included in the Project as part of the repair, alteration, or modification of such previously taxed property; provided, however, that Existing Property shall not include: (a) the Land; (b) property acquired or constructed by or on behalf of the Company during the Investment Period which has not been placed in service in this State prior to the commencement of the Investment Period notwithstanding that *ad valorem* taxes have heretofore been paid with respect to such property; (c) property purchased by or on behalf of the Company during the Investment Period in a transaction other than between any of the entities specified in Section 267(b) of the Internal Revenue Code, as defined under Chapter 6 of Title 12 of the Code as of the time of the transfer, to the extent that the Company invests, or causes to be invested, at least an additional $45,000,000 in the Project, exclusive of the property identified in this subsection (c); or (d) modifications which constitute an expansion of the real property portion of Existing Property, all as determined pursuant to Section 12-44-110 of the Code.

"FILOT" shall mean fee in lieu of *ad valorem* property taxes.

"FILOT Act" shall mean Title 12, Chapter 44 of the Code, as amended through the date hereof.

"FILOT Payments" or "FILOT Revenues" shall mean the payments to be made by the Company pursuant to **Section 5.01** hereof.

"Initial Compliance Period" shall mean the period commencing with the date of the Company's initial expenditure with respect to the Project and ending on the fifth anniversary of the end of the Property Tax Year in which the Company places in service the initial assets comprising the Project**,** all as specified in Section 12-44-30(13) of the Code. The parties anticipate that the initial phase of the Project will be placed in service in the Property Tax Year ending on June 30**,** 2007 and that therefore, the end of the Initial Compliance Period will be June 30, 2012.

"Investment Maintenance Requirement" shall mean aggregate investment in the Project by the Company and all Co-Investors of not less than $8,000,000 in real property and not less than $17,000,000 in personal property during the period commencing with the first year that the Minimum Contractual Investment Requirement is met and ending on June 30, 2011**;** provided that, depreciation shall be disregarded in determining compliance with this requirement. Initial investment in the Project and investment in all Replacement Property and all property added to the Project after the Minimum Contractual Investment Requirement has been met, regardless of whether such property constitutes Economic Development Property, shall count toward this Investment Maintenance Requirement.

"Investment Period" shall mean the period for completion of the Project, which shall be equal to the Initial Compliance Period; provided, however, that, if the aggregate investment in the Project equals or exceeds the Minimum Contractual Investment Requirement on or before the end of the Initial Compliance Period, the Investment Period shall automatically be extended to the seventh anniversary of the end of the Property Tax Year in which the Company places in service the initial assets comprising the Project; provided further that there shall be no extension of the period for meeting the Minimum Statutory Investment Requirement beyond the Initial Compliance Period, all determined as specified in Section 12-44-30(13) of the Code. The parties anticipate the Investment Period as so extended will end on June 30, 2014**.**

"Land" shall mean the land upon which the Project has been or will be constructed, as described in **Exhibit A** attached hereto, as **Exhibit A** may be supplemented from time to time in accordance with the provisions hereof.

"Minimum Contractual Investment Requirement" shall mean investment prior to the end of the Initial Compliance Period of not less than $17,000,000 in personal property and not less than $8,000,000 in real property (without regard to subsequent depreciation) in the aggregate by the Company and any Co-Investor in assets comprising the Project and consisting of property which is subject to either *ad valorem* taxes or FILOT Payments.

"Minimum Statutory Investment Requirement" shall mean investment with respect to the Project by any one of the Company, any other Sponsor or any Sponsor Affiliate of not less than $5,000,000 prior to the end of the Initial Compliance Period.

"Multi-County Park" shall mean the multi-county industrial or business park established pursuant to the Multi-County Park Agreement, and any multi-county industrial or business park which includes the Project and which is designated by the County as such pursuant to any agreement, which supersedes or replaces the initial Multi-County Park Agreement.

"Multi-County Park Act" shall mean Title 4, Chapter 1 of the Code, as amended through the date hereof.

"Multi-County Park Agreement" shall mean that certain Multi-County Park Agreement between the County, and Calhoun County, South Carolina dated as of **December 11, 1995**, as amended, supplemented, or replaced from time to time.

"Negotiated FILOT" or "Negotiated FILOT Payments" shall mean the FILOT payments due pursuant to **Section 5.01** hereof with respect to that portion of the Project consisting of Economic Development Property which qualifies pursuant to the FILOT Act for the negotiated assessment ratio and millage rate described in **Section 5.01(b)(ii)** hereof.

"Non-Qualifying Property" shall mean that portion of the facilities located on the Land and consisting of: (i) Existing Property; (ii) except as to Replacement Property, property which the Company places in service after the end of the Investment Period; and (iii) any other property which fails or ceases to qualify for Negotiated FILOT Payments under the FILOT Act, including without limitation property as to which the Company has terminated the Negotiated FILOT pursuant to **Section 4.01(e)(iii)** hereof.

"Person" shall mean and include any individual, association, unincorporated organization, corporation, partnership, limited liability company, joint venture, or government or agency or political subdivision thereof.

"Project" shall mean: (i) the Land and all buildings, structures, fixtures and other real property improvements constructed thereon; (ii) all machinery, equipment, furnishings and other personal property acquired by or on behalf of the Company for use on or about the Land; and (iii) any Replacement Property; provided, however, except as to Replacement Property, the term Project shall be deemed to include such real property improvements and personal property, whether now existing or hereafter constructed or acquired, only to the extent placed in service during the Investment Period, and the term Project shall be deemed to exclude any Existing Property or other Non-Qualifying Property.

"Property Tax Year" shall mean the annual period which is equal to the fiscal year of the Company, *i.e.*, the period ending on June 30 of each year.

"Released Property" shall include Economic Development Property which is scrapped, sold, disposed of, or released from this Agreement by the Company pursuant to **Section 4.01(e)**

hereof and Section 12-44-50(B) of the Code; any portion of the Economic Development Property constituting infrastructure which the Company dedicates to the public use within the meaning of Section 12-6-3420(C) of the Code; and any Economic Development Property damaged, destroyed, or taken by process of eminent domain and not restored or replaced.

"Replacement Property" shall mean all property installed in or on the Land in substitution of, or as replacement for, any Released Property, regardless of whether such property serves the same function as the property it replaces and regardless of whether more than one piece replaces a single piece of the Project, but only to the extent that such property may be included in the calculation of the Negotiated FILOT pursuant to **Section 5.01(d)** hereof and Section 12-44-60 of the Code.

"Sponsor" and *"Sponsor Affiliate"* shall mean an entity whose investment with respect to the Project will qualify for the Negotiated FILOT pursuant to **Section 6.02** hereof and Sections 12-44-30(A)(18) or (19) and Section 12-44-130 of the Code if the statutory investment requirements are met. Initially, the only Sponsors or Sponsor Affiliates are Otis Spunkmeyer, Inc., OS Columbia LLC and S&H Brothers, LLC.

"State" shall mean the State of South Carolina.

"Term" shall mean the term of this Agreement, as set forth in **Section 7.01** hereof.

"Transfer Provisions" shall mean the provisions of Section 12-44-120 of the Code, as amended through the date hereof.

Section 1.02. References to Agreement. The words "hereof", "herein", "hereunder", and other words of similar import refer to this Agreement as a whole.

ARTICLE II

REPRESENTATIONS AND WARRANTIES

Section 2.01. Representations and Warranties by County. The County makes the following representations and warranties as the basis for the undertakings on its part herein contained:

(a) The County is a body politic and corporate and a political subdivision of the State and is authorized and empowered by the provisions of the Act to enter into the transactions contemplated by this Agreement and to carry out its obligations hereunder. By proper action by the Council, the County has duly authorized the execution and delivery of this Agreement and the Negotiated FILOT Payments and grant funding as set forth herein, the inclusion of the Project in the Multi-County Park, and any and all actions reasonably necessary and appropriate to consummate the transactions contemplated hereby.

(b) The County has determined the Project will subserve the purposes of the Act and has made all other findings of fact required by the Act in connection with the undertaking of the arrangements set forth herein.

(c) This Agreement has been duly authorized, executed and delivered on behalf of the County. The authorization, execution, and delivery of this Agreement and the performance by the County of its obligations hereunder will not, to the best knowledge of the undersigned representatives of the County, conflict with or constitute a breach of, or a default under, any South Carolina law, court or administrative regulation, decree, order, provision of the Constitution or laws of the State relating to the establishment of the County or its affairs, or any material agreement, mortgage, lease, or other instrument to which the County is subject or by which it is bound, nor, to the best knowledge of the undersigned representatives of the County, any existing law or the provisions of the Constitution of the State.

(d) To the best knowledge of the undersigned representatives of the County, no actions, suits, proceedings, inquiries, or investigations are pending or threatened against or affecting the County in any court or before any governmental authority or arbitration board or tribunal, any of which to the best knowledge of the undersigned representatives of the County could materially adversely affect this Agreement or which could, in any way, adversely affect the validity or enforceability of this Agreement or the transactions contemplated hereby.

Section 2.02. Representations and Warranties by Company. The Company makes the following representations and warranties as the basis for the undertakings on its part herein contained:

(a) The Company is a corporation validly existing and in good standing under the laws of the State of Delaware and authorized to do business in the State of South Carolina; has all requisite power to enter into this Agreement and to carry out its obligations hereunder; and by proper action has been duly authorized to execute and deliver this Agreement. The Company's fiscal year end is June 30, and the Company will notify the County of any changes in the fiscal year of the Company.

(b) The Company intends to operate the Project primarily as a manufacturing facility.

(c) The agreements with the County with respect to the FILOT and the Multi-County Park were factors in inducing the Company to locate the Project within the County and the State.

(d) No actions, suits, proceedings, inquiries, or investigations known to the undersigned representatives of the Company are pending or threatened against or affecting the Company in any court or before any governmental authority or arbitration board or tribunal, which could materially adversely affect this Agreement or which could,

in any way, adversely affect the validity or enforceability of this Agreement, or the transactions contemplated hereby.

ARTICLE III

COVENANTS OF COUNTY

Section 3.01. Agreement to Accept FILOT Payments. The County hereby agrees to accept Negotiated FILOT Payments in accordance with **Section 5.01** hereof in lieu of *ad valorem* taxes with respect to that portion of the Project consisting of Economic Development Property until this Agreement expires or is sooner terminated.

Section 3.02. Additional County Undertakings.

(a) The County will designate the Project as part of a Multi-County Park pursuant to the Multi-County Park Act and will, to the extent permitted by law, use its best, reasonable efforts to maintain such designation on terms which provide any additional job tax credits afforded by the laws of the State for projects located within multi-county industrial or business parks for all jobs created by the Company during the Investment Period.

(b) The County hereby agrees, subject to the County's prerogatives under the law as it pertains to the budget process, to provide grant funds in the amount of Two Hundred Fifty Thousand Dollars ($250,000) to reimburse costs of on-site infrastructure required for the Project, such grant funds to be paid to or to the order of the Company upon completion of the building in which the Project will be located.

(c) The County also will use its best efforts to secure One Hundred Thirty-Five Thousand Dollars ($135,000) in grant funds for infrastructure required for the Project site from "set aside funds" administered by the South Carolina Advisory Coordinating Council for Economic Development.

Section 3.03. Commensurate Benefits. The parties acknowledge the intent of this Agreement, in part, is to afford the Company the benefits specified in this Article III in consideration of the Company's decision to locate the Project within the County, and this Agreement has been entered into in reliance upon the enactment of the Act and the County's compliance with the requirements thereof. In the event that a court of competent jurisdiction holds that the Act is unconstitutional or this Agreement or agreements similar in nature to this Agreement are invalid or unenforceable in any material respect, or should the Company determine there is a reasonable doubt as to the validity or enforceability of this Agreement in any material respect, then at the request of the Company, the County agrees to use its best, reasonable efforts to extend to the Company the intended benefits of this Agreement and agrees, if requested, to enter into a lease purchase agreement with the Company pursuant to Section 12-44-160; Title 4, Chapter 29 or Title 4, Chapter 12 of the Code, as applicable, or to take such other steps as may be appropriate to extend to the Company the intended benefits of this Agreement. The Company acknowledges, if a court of competent jurisdiction holds all or part of

the FILOT Act is unconstitutional or otherwise illegal, the FILOT Act provides the Company must transfer the Economic Development Property to the County within 180 days following such determination in order for the Negotiated FILOT benefits to continue to apply. In such lease purchase agreement, the County, upon the conveyance of title to the Project to the County at the expense of the Company, agrees to lease the Project to the Company.

ARTICLE IV

COVENANTS OF COMPANY

Section 4.01. Investment in Project.

(a) The Company hereby agrees to acquire, or cause to be acquired, the Project, as the same shall be determined from time to time by the Company in its sole discretion, and to comply with, or cause to be complied with, the Minimum Contractual Investment Requirement and the Investment Maintenance Requirement. As required by Section 12-44-30(2) of the Code, at least a portion of the assets comprising the Project shall be placed in service no later than the end of the Property Tax Year which is three years from the year in which this Agreement is executed and delivered, *i.e.* the Property Tax Year ending on June 30, 2011.

(b) Expenditures by Co-Investors shall, together with expenditures by the Company, count toward all investment requirements set forth in this Agreement, including, the Minimum Contractual Investment Requirement, the Investment Maintenance Requirement and, to the full extent permitted by the FILOT Act, the Minimum Statutory Investment Requirement. Aggregate investment shall generally be determined by reference to the Property Tax Returns of the Company and any Co-Investor pertaining to the Project and filed with respect to each Property Tax Year during the Investment Period without regard to depreciation.

(c) To encourage the Company to increase its investment in the Project, the County has agreed that, if the aggregate investment in the Project reaches the Minimum Contractual Investment Requirement, the Investment Period shall be automatically extended by two (2) years past the end of the Initial Compliance Period, and the County hereby agrees to such extension. There shall be no extension, however, beyond the Initial Compliance Period of the period for meeting the Minimum Statutory Investment Requirement. As extended, the Investment Period is anticipated to extend through **June 30, 2014**.

(d) The Company and/or its designated Co-Investors shall retain title to its respective portion of the Project throughout the Term of this Agreement, and the Company and any Co-Investor shall have full right to mortgage or encumber the Project in connection with any financing transactions.

(e) The Company shall have the right at any time and from time to time during the Term hereof to undertake any of the following:

(i) The Company may, at its own expense, add to the Project all such real and personal property as the Company in its discretion deems useful or desirable, including Economic Development Property qualifying for the Negotiated FILOT under **Section 5.01** hereof without any limit as to the amount thereof.

(ii) Subject to the provisions of **Sections 4.02(b), 5.01(f)(ii) and 8.01** hereof, in any instance when the Company in its discretion determines any items included in the Project, including any Economic Development Property and any portion of the Land, have become inadequate, obsolete, worn out, unsuitable, undesirable, or unnecessary for operations at the Project, the Company may remove such items or portions of the Land from the Project and sell, trade in, exchange, or otherwise dispose of them as a whole or in part without the consent of the County.

(iii) The Company may, at any time and in its discretion by written notice to the County, remove any Economic Development Property, real or personal, from the Negotiated FILOT set forth in this Agreement and retain such property for use as part of its operations in the County, and thereafter such property will be subject to ad valorem taxes.

(iv) If the Company sells, leases, or otherwise disposes of any portion of, or adds any real property to, the Land, the Company shall deliver to the County, within 30 days thereafter, a new **Exhibit A** to this Agreement.

(v) All Economic Development Property sold, leased or otherwise disposed of under this Section shall be deemed Released Property for purposes of this Agreement.

Section 4.02. Failure to Comply with Investment Commitments.

(a) If the Company fails to comply with the Minimum Contractual Investment Requirement, the Investment Period shall not be extended pursuant to **Section 4.01(c)** above and the County shall have the right to:

(i) terminate or adjust the incentives specified herein prospectively; and

(ii) require the Company to repay all or part of the difference between the Negotiated FILOT theretofore paid and the amount which should have been paid but for this Agreement.

(b) If the Company complies with the Minimum Contractual Investment Requirement, but fails to comply with the Investment Maintenance Requirement, the County shall have the right to:

(i) terminate or adjust the incentives specified herein prospectively; and

(ii) require the Company to repay all or part of the grant made by the County pursuant to **Section 3.02(b)** hereof.

(c) Any amounts due retroactively to the County under this **Section 4.02** shall be paid within one hundred eighty (180) days following receipt by the Company of notice from the County that such amounts are due.

Section 4.03. Payment of Administration Expenses. The Company will reimburse the County from time to time for its Administration Expenses promptly upon written request therefor, but in no event later than sixty (60) days after receiving written notice from the County specifying the nature of such expense and requesting the payment of the same. The County acknowledges it imposes no charges in the nature of impact fees or recurring fees in connection with the incentives authorized by this Agreement, and, aside from the attorneys' fees, the County anticipates no out of pocket expenses in connection with this Agreement and the transactions authorized hereby. The parties understand that counsel to the County has estimated its fees and other expenses for review of this Agreement, the Inducement and Millage Rate Agreement, the Multi-County Park Agreement and all resolutions, ordinances and other documentation related thereto at $5,000.

Section 4.04. Use of Project for Lawful Activities. During the Term of this Agreement, the Company shall use the Project as it deems fit for any lawful purpose.

Section 4.05. Maintenance of Existence. Unless the County shall consent otherwise, which consent shall not be unreasonably withheld, the Company covenants that it will maintain its separate existence and will not dissolve or consolidate with, merge into or transfer, or otherwise dispose of substantially all of its property to any other entity or permit one or more other entities to consolidate with or merge into it or purchase substantially all of its property unless:

(a) the Company shall be the continuing corporation, or the corporation formed by such consolidation or into which the Company is merged or the entity which acquires by conveyance or transfer all or substantially all of the Company's assets shall (i) be an entity organized and existing under the laws of the United States of America or any state thereof or the District of Columbia and qualified to do business in the State; (ii) have a net worth equal to or greater than the net worth of the Company immediately preceding the date of such merger, consolidation or transfer; and (iii) expressly and unconditionally assume, by written agreement supplemental hereto and acceptable to the County as to form and content, every payment obligation of the Company herein and the performance of every covenant of this Agreement on the part of the Company to be performed or observed;

(b) immediately after giving effect to such transaction, no Event or Default, and no event, which, after notice or lapse of time or both, would become an Event of Default, shall have happened and be continuing; and

(c) the Company shall have delivered to the County (i) a certificate of a duly authorized officer of the Company, accompanied by financial statements of the surviving company (if other than the Company) showing compliance with the net worth requirements specified in paragraph (a) above and (ii) an opinion of counsel for the Company and/or counsel to the transferee company, each stating that such consolidation, merger, conveyance or transfer and such supplement to this Agreement comply with this Section and that all conditions precedent herein provided for relating to such transaction have been complied with.

Upon any consolidation or merger or any conveyance or transfer of all or substantially all of the Company's assets in accordance with this Section, the successor corporation formed by such consolidation or into which the Company is merged or to which such conveyance or transfer is made shall succeed to, and be substituted for, and may exercise every right and power of the Company under this Agreement with the same effect as if such successor corporation had been named as the Company herein, and thereafter the Company shall be relieved of all obligations and covenants under this Agreement.

If a consolidation, merger or conveyance or transfer is made as permitted by this Section, the provisions of this Section shall continue in full force and effect and no further consolidation, merger or conveyance or transfer shall be made except in compliance with the provisions of this Section.

The Company acknowledges transfers of this Agreement or Economic Development Property may cause the Economic Development Property to become ineligible for a Negotiated FILOT or result in penalties under the Act absent compliance by the Company with the Transfer Provisions.

Section 4.06. Records and Reports. The Company agrees to maintain such books and records with respect to the Project as will permit the identification of those portions of the Project which it places in service in each Property Tax Year during the Investment Period, the amount of investment with respect thereto, computations of all Negotiated FILOT Payments made hereunder and to comply with all reporting requirements of the State and the County applicable to Economic Development Property under the Act, including without limitation the reports required by 12-44-90 of the Code (collectively, "Filings"); provided, however, that the parties hereby waive in its entirety the requirement under Section 12-44-55 of the Code for a recapitulation of the terms of this Agreement. Specifically, the Company shall provide the following:

(a) Each year during the Term hereof, the Company shall deliver to the County Auditor and the County Assessor a copy of its most recent annual filings made with the Department of Revenue with respect to the Project at the same time as delivery thereof to the Department of Revenue.

(b) The Company shall cause a copy of this Agreement, as well as a copy of the completed Form PT-443 required by the Department of Revenue, to be filed within thirty (30) days after the date of execution and delivery hereof with the County Auditor and the County Assessor of the County and of each county which is a party to the Multi-County Park Agreement, and with the Department of Revenue and shall update such Form PT-443 from time to time to the extent that the information therein is no longer accurate.

Notwithstanding any other provision of this Section, the Company may, by clear, written designation, conspicuously marked, designate with respect to any Filings delivered to the County segments thereof that the Company believes contain proprietary, confidential, or trade secret matters. The County shall comply with all reasonable, written requests made by the Company with respect to maintaining the confidentiality of such designated segments. Except to the extent required by law, the County shall not knowingly and voluntarily release information, which has been designated as confidential or proprietary by the Company.

ARTICLE V

FEES IN LIEU OF TAXES

Section 5.01. Payment of Fees in Lieu of Ad Valorem Taxes.

(a) In accordance with the Act, the parties hereby agree, during the Term hereof, there shall be due annually with respect to that portion of the Project constituting Economic Development Property, whether owned by the Company or by a Sponsor or Sponsor Affiliate, a Negotiated FILOT calculated as set forth in this Section, at the places, in the manner and subject to the penalty assessments prescribed by the County or the Department of Revenue for *ad valorem* taxes. It is anticipated that the initial Negotiated FILOT Payment, which shall be due under current Code requirements on the January 15 following the year in which the County adds the initial Economic Development Property to its tax rolls, will be due on January 15, 2009. If the Company designates any Sponsor or Sponsor Affiliates, as the same shall have been consented to by the County pursuant to **Section 6.02** hereof, the Company must notify the County in writing at the time of such designation as to whether such Sponsor or Sponsor Affiliate shall be primarily liable for the FILOT Payments hereunder. Unless and until such notification is received, and the County consents in writing, the Company shall be primarily liable for all FILOT Payments to the extent set forth hereinabove in this paragraph (a).

(b) Subject to adjustment pursuant to the provisions of this **Section 5.01**, the Negotiated FILOT shall be calculated each year in accordance with the following provisions:

(i) For each annual increment of investment in Economic Development Property, the annual Negotiated FILOT Payments shall be payable for a period of 20 years. Accordingly, if such Economic Development Property is

placed in service during more than one year, each year's investment during the Investment Period shall be subject to the Negotiated FILOT for a period of 20 years.

(ii) The Negotiated FILOT shall be calculated using (1) an assessment ratio of 7%; (2) a millage rate of 274.738 mills, which is the millage rate applicable as of June 30, 2007**,** which rate shall be fixed in accordance with Section 12-44-50(A)(1)(b)(i) of the Code for the entire term of this Agreement; and (3) the fair market value of such Economic Development Property as determined in accordance with Section 12-44-50(A)(1)(c) of the Code, which, for typical arm's length construction or acquisition, uses the original income tax basis for any real property without regard to depreciation or reassessment and the original income tax basis for any personal property less allowable depreciation (except depreciation due to extraordinary obsolescence).

(iii) All such calculations shall take into account all deductions for depreciation or diminution in value allowed by the Code or by the tax laws generally, as well as tax exemptions which would have been applicable if such property were subject to *ad valorem* taxes, except the five-year exemption from County taxes allowed for certain manufacturing, distribution, corporate headquarters and research and development facilities pursuant to Section 3(g) of Article X of the Constitution of the State and Sections 12-37-220(B)(32) and (34) of the Code.

(iv) For purposes of calculating the Negotiated FILOT, the Economic Development Property shall not include any Released Property or Non-Qualifying Property.

(c) The Negotiated FILOT Payments are to be recalculated:

(i) to reduce such payments in the event the Company disposes of any part of the Economic Development Property within the meaning of Section 12-44-50(B) of the Code and as provided in **Section 4.01(e)(ii)** hereof, by the amount applicable to the Released Property;

(ii) to reduce such payments in the event that the Economic Development Property or any portion thereof is damaged or destroyed, lost or stolen, or the subject of condemnation proceedings, which damage, destruction, loss, theft and/or condemnation would substantially impair the value of the Project or such portion thereof;

(iii) to increase such payments in the event the Company adds any Economic Development Property (other than Replacement Property) to the Project; or

(iv) to adjust such payments if the Company elects to convert any portion of the Economic Development Property from the Negotiated FILOT to *ad valorem* taxes, as permitted by **Section 4.01(e)(iii)**.

(d) Upon the Company's installation of any Replacement Property for any Released Property, such Replacement Property shall become subject to Negotiated FILOT Payments to the fullest extent allowed by law, subject to the following rules:

(i) Such Replacement Property does not have to serve the same function as the Released Property it is replacing. Replacement Property is deemed to replace the oldest property subject to the Negotiated FILOT, whether real or personal, which is disposed of in the same Property Tax Year as the Replacement Property is placed in service. Replacement Property qualifies for Negotiated FILOT Payments up to the original income tax basis of the Released Property which it is replacing in the same Property Tax Year. More than one piece of property can replace a single piece of property. To the extent that the income tax basis of the Replacement Property exceeds the original income tax basis of the Released Property which it is replacing, the excess amount is subject to payments equal to the *ad valorem* taxes which would have been paid on such property but for this Agreement. Replacement property is entitled to the Negotiated FILOT Payments for the remaining portion of the twenty-year period applicable to the Released Property.

(ii) The Company shall maintain, or cause to be maintained, records sufficient to identify all Replacement Property, and the Negotiated FILOT Payments with respect thereto shall be calculated using the millage rate and assessment ratio provided on the property it is replacing.

(e) In the event that, for any reason, the FILOT Act and/or the Negotiated FILOT or any portion thereof is, by a court of competent jurisdiction following allowable appeals, declared invalid or unenforceable in whole or in part, or the portion of the Project consisting of Economic Development Property is deemed not to be eligible for a Negotiated FILOT pursuant to the Act in whole or in part, the Company and the County express their intentions that such payments be reformed so as to afford the Company benefits commensurate with those intended under this Agreement as then permitted by law, including without limitation any benefits afforded under Title 4, Chapter 12 and Title 4, Chapter 29 of the Code, as applicable, to the extent allowed by law. Absent the legal authorization to effect such reformation, the Company and the County agree that there shall be due hereunder with respect to the portion of the Economic Development Property affected by such circumstances *ad valorem* taxes and that, to the extent permitted by law, the Company shall be entitled: (1) to enjoy the five-year exemption from *ad valorem* taxes (or fees in lieu of taxes) provided by Article X, Section 3 of the Constitution of the State, and any other exemption allowed by law; (2) to enjoy all allowable depreciation; and (3) to receive all other tax credits which would be due if the Company were obligated to pay *ad valorem* taxes hereunder. To the extent that under

such circumstances the Negotiated FILOT Payments hereunder are subject to retroactive adjustment, then there shall be due and payable with respect to the portion of the Economic Development Property in question an amount equal to the difference between the Negotiated FILOT Payments theretofore actually paid and the amount which would have been paid as *ad valorem* taxes, together with interest on such deficiency as provided in Section 12-54-25(D) of the Code (a "Deficiency Payment").

(f)

(i) In the event that the investment in the Project is insufficient to satisfy the Minimum Statutory Investment Requirement, then all Negotiated FILOT Payments shall revert retroactively to *ad valorem* taxes, calculated as set forth in paragraph (e) above, and a Deficiency Payment shall be due and payable with respect to FILOT Payments theretofore made. In the event that the aggregate investment in the Project does not exceed $10,000,000 by the end of the Initial Compliance Period and any Sponsor or Sponsor Affiliate does not satisfy the Minimum Statutory Investment Requirement solely through its own direct investment in the Project, then the Negotiated FILOT Payments with respect to that portion of the Project owned by such Sponsor or Sponsor Affiliate shall revert retroactively to *ad valorem* taxes calculated as set forth in paragraph (e) above, and such Sponsor or Sponsor Affiliate shall owe a Deficiency Payment with respect to FILOT Payments theretofore made as to such portion of the Project. To the extent necessary to collect a Deficiency Payment under this clause (i) due to failure to satisfy the Minimum Statutory Investment Requirement, Section 12-44-140(D) of the Code provides that any statute of limitations that might apply pursuant to Section 12-54-85 of the Code is suspended.

(ii) In the event that the Company's investment in the Project based on an income tax basis without regard to depreciation falls below the Minimum Statutory Investment Requirement, the Project shall thereafter be subject to *ad valorem* taxes, calculated as set forth in paragraph (e) above.

(iii) If the investment in the Project does not comply with the Minimum Contractual Investment Requirement or the Investment Maintenance Requirement, then the County shall have the rights specified in **Section 4.02** hereof.

(iv) In accordance with the provisions of **Sections 4.01(b)** and **6.02** hereof, except for Existing Property, the fair market value of all property utilized by the Company at the Project site, whether owned by the Company outright or utilized by the Company pursuant to any financing agreement or any lease or other arrangement with any Co-Investor and whether or not subject to this Agreement, shall be counted toward all investment obligations under this Agreement, including, to the extent permitted by law, investment obligations under the Act.

(g) Except as otherwise set forth in this Agreement or as otherwise required by the Act, any amounts due to the County under this **Section 5.01** as a Deficiency Payment or other retroactive payment shall be paid within one hundred eighty (180) days following receipt by the Company of notice from the County that such a Deficiency Payment or other retroactive payment is due. Notwithstanding termination of this Agreement, the County shall have the same rights to receive payment for any retroactive *ad valorem* taxes, Deficiency Payments, interest or penalties, and the same enforcement rights as it would have with respect to *ad valorem* taxes, and the County's rights arising under this **Section 5.01** prior to the time of such termination shall survive any such termination.

Section 5.02. Statutory Lien. The parties acknowledge the County's right to receive FILOT Revenues hereunder shall have a statutory lien with respect to the Economic Development Property pursuant to Section 12-44-90(E) of the Code and Title 12, Chapter 54 of the Code relating to the collection and enforcement of *ad valorem* property taxes.

ARTICLE VI

THIRD PARTY ARRANGEMENTS

Section 6.01. Conveyance of Liens and Interests; Assignment. The Company may at any time (a) transfer all or any of its rights and interests hereunder or with respect to all or any part of the Economic Development Property to any Person; or (b) enter into any lending, financing, leasing, security, or similar arrangement or succession of such arrangements with any financing entity or other Person with respect to this Agreement or all or any part of the Economic Development Property, including without limitation any sale-leaseback, equipment lease, build-to-suit lease, synthetic lease, nordic lease, defeased tax benefit or transfer lease, assignment, sublease or similar arrangement or succession of such arrangements, regardless of the identity of the income tax owner of such Economic Development Property, as long as the transferee in any such arrangement leases the Economic Development Property in question to the Company or any of its Corporate Affiliates or operates such assets for the Company or any of its Corporate Affiliates or is leasing such the Economic Development Property in question from the Company or any of its Corporate Affiliates. In order to preserve the benefits of the Negotiated FILOT hereunder with respect to property so transferred: (i) except in connection with any transfer to an Corporate Affiliate of the Company, or transfers pursuant to clause (b) above (as to which such transfers the County hereby consents), the Company shall first obtain the written consent of the County; (ii) except when a financing entity which is the income tax owner of all or part of the Economic Development Property is the transferee pursuant to clause (b) above and such financing entity assumes in writing the obligations of the Company hereunder, or when the County consents in writing or when the transfer relates to Released Property pursuant to **Section 4.01(e)** hereof, no such transfer shall affect or reduce any of the obligations of the Company hereunder; (iii) to the extent the transferee or financing entity shall become obligated to pay make Negotiated FILOT payments hereunder, the transferee shall assume the then current basis of the Company (or prior transferee) in the Economic Development Property transferred; (iv) the Company, transferee or financing entity shall, within sixty (60) days thereof, furnish or cause to

be furnished to the County and the Department of Revenue a true and complete copy of any such transfer agreement; and (v) the Company and the transferee shall comply with all other requirements of the Transfer Provisions.

Subject to County consent when required herein, and at the Company's expense, the County agrees to execute such further agreements, documents, and instruments as may be reasonably required to effectuate the assumption by any such transferee of all or part of the rights of the Company under this Agreement and/or any release of the Company pursuant to this **Section 6.01**.

The Company acknowledges such a transfer of an interest under this Agreement or in the Economic Development Property may cause all or part of the Economic Development Property to become ineligible for a Negotiated FILOT or result in penalties under the Act absent compliance by the Company with the Transfer Provisions.

Section 6.02. Sponsors and Sponsor Affiliates. The Company may designate from time to time Sponsors or Sponsor Affiliates pursuant to the provisions of Sections 12-44-30(18) or (19), respectively, and Section 12-44-130 of the Code, which Sponsors or Sponsor Affiliates shall be Persons who join with the Company and make investments with respect to the Project, or who participate in the financing of such investments, who agree to be bound by the terms and provisions of this Agreement and who shall be Corporate Affiliates of the Company or other Persons described in **Section 6.01(b)** hereof. All other Sponsors or Sponsor Affiliates who otherwise meet the requirements of Section 12-44-30 (18) or (19) and Section 12-44-130 of the Code must be approved by Resolution of the County Council. To the extent that a Sponsor or Sponsor Affiliate invests an amount equal to the Minimum Statutory Investment Requirement at the Project prior to the end of the Initial Compliance Period the investment by such Sponsor or Sponsor Affiliate shall qualify for the Negotiated FILOT payable under **Section 5.01** hereof (subject to the other conditions set forth therein) in accordance with Section 12-44-30(18) of the Code. To the extent that the aggregate investment in the Project prior to the end of the Initial Compliance Period by the Company, all Sponsors and Sponsor Affiliates and, to the extent provided by law, other Co-Investors exceeds $10,000,000 as provided in Section 12-44-30(18) of the Code, all investment by such Sponsors and Sponsor Affiliates during the Investment Period shall qualify for the Negotiated FILOT pursuant to **Section 5.01** of this Agreement (subject to the other conditions set forth therein) regardless of whether each such entity invested amounts equal to the Statutory Minimum Requirement. The Company shall provide the County and the Department of Revenue with written notice of any Sponsor or Sponsor Affiliate designated pursuant to this **Section 6.02** within ninety (90) days after the end of the calendar year during which any such Sponsor or Sponsor Affiliate has placed in service assets to be used in connection with the Project, all in accordance with Section 12-44-130(B) of the Code.

ARTICLE VII

TERM; TERMINATION

Section 7.01. Term. Unless sooner terminated pursuant to the terms and provisions herein contained, this Agreement shall be and remain in full force and effect for a term commencing on the date on which the Company executes this Agreement, and ending at midnight on the day the last Negotiated FILOT Payment is made hereunder.

Section 7.02. Termination. The County and the Company may agree to terminate this Agreement at any time, or the Company, may, at its option, terminate this Agreement at any time, in which event the Project shall be subject to *ad valorem* taxes from the date of termination. As provided in **Sections 4.02, 5.01(f) and 8.01** of this Agreement, the County may terminate this Agreement if the Company fails to comply, or cause compliance with, the Minimum Contractual Investment Requirement, the Investment Maintenance Requirement or the Minimum Statutory Investment Requirement.

ARTICLE VIII

EVENTS OF DEFAULT AND REMEDIES

Section 8.01. Events of Default by Company. Any one or more of the following events (herein called an "Event of Default", or collectively "Events of Default") shall constitute an Event of Default by the Company:

(a) if default shall be made in the due and punctual payment of any Negotiated FILOT Payments, which default shall not have been cured within thirty (30) days following receipt of written notice of such default from the County; or

(b) if default shall be made by the Company in the due performance of or compliance with any of the terms hereof, other than those referred to in the foregoing paragraph (a), and such default shall continue for ninety (90) days after the County shall have given the Company written notice of such default; provided, the County may, in its discretion, grant the Company a longer period of time as necessary to cure such default if the Company proceeds with due diligence to cure such default; provided however, that no Event of Default shall exist under this agreement during any period when there is pending, before any judicial or administrative tribunal having jurisdiction, any proceeding in which the Company has contested the occurrence of such default.

Failure to meet any investment requirements set forth herein shall not be deemed to be an Event of Default under this Agreement, but may terminate certain benefits hereunder or obligate the Company to make certain additional payments to the County, all as set forth in **Sections 4.02** and **5.01(f)** hereof.

Section 8.02. Remedies on Event of Default by Company. Upon the occurrence of any Event of Default, the County may exercise any of the following remedies:

(a) terminate this Agreement by delivery of written notice to the Company not less than sixty (60) days prior to the termination date specified therein;

(b) have access to and inspect, examine, and make copies of the books, records, and accounts of the Company pertaining to the construction, acquisition, or maintenance of the Project or calculation of the Negotiated FILOT pursuant hereto as provided in **Section 4.06** hereof; or

(c) take whatever action at law or in equity as may appear necessary or desirable to collect the amount then due or enforce the County's rights hereunder, it being the express intent of the parties that the County, without limitation, shall have the same remedies available by law to collect FILOT Payments as if they were delinquent *ad valorem* tax payments, including execution upon the lien referred to in **Section 5.02** hereof.

Section 8.03. Defaulted Payments. In the event the Company should fail to make any of the payments required under this Agreement, the item or installment so in default shall continue as an obligation of the Company until the amount in default shall have been fully paid. If any such default relates to its obligations to make FILOT Payments hereunder, the Company agrees to pay the same with interest thereon at the rate per annum provided by the Code for late payment of *ad valorem* taxes together with any penalties provided by the Code for late payment of *ad valorem* taxes, all as provided in Section 12-44-90 of the Code.

Section 8.04. Application of Monies upon Enforcement of Remedies against Company. Any monies received by the County upon enforcement of its rights hereunder shall be applied as follows: first, to the reasonable costs associated with such enforcement proceedings; second, to pay Administration Expenses; and third, to pay the Negotiated FILOT in accordance with **Section 5.01** hereof.

Section 8.05. Default by County. Upon the default of the County in the performance of any of its obligations hereunder, the Company may take whatever action at law or in equity as may appear necessary or desirable to enforce its rights under this Agreement, including without limitation a suit for *mandamus* or specific performance.

ARTICLE IX

MISCELLANEOUS

Section 9.01. Rights and Remedies Cumulative. Each right, power, and remedy of the County or of the Company provided for in this Agreement shall be cumulative and concurrent and shall be in addition to every other right, power, or remedy provided for in this Agreement or now or hereafter existing at law or in equity, in any jurisdiction where such rights, powers, and remedies are sought to be enforced; and the exercise by the County or by the Company of any one or more of the rights, powers, or remedies provided for in this Agreement or now or hereafter existing at law or in equity or by statute or otherwise shall not preclude the

simultaneous or later exercise by the County or by the Company of any or all such other rights, powers, or remedies.

Section 9.02. Successors and Assigns. The terms and provisions of this Agreement shall be binding upon and inure to the benefit of the parties hereto, any Sponsor or Sponsor Affiliates designated pursuant to **Section 6.02** hereof and their respective successors and assigns as permitted hereunder.

Section 9.03. Notices; Demands; Requests. All notices, demands, and requests to be given or made hereunder to or by the County or the Company shall be in writing and shall be deemed to be properly given or made if sent by United States first class mail, postage prepaid, or via facsimile transmission or reputable courier service, to the following persons and addresses or to such other persons and places as may be designated in writing by such party.

(a) As to the County:

Lexington County
Attn.: County Administrator
212 S. Lake Drive
Lexington, South Carolina 29072
Phone: 803-785-8100
Fax: 803-785-8101
Email: khubbard@lex-co.com

(b) with a copy (which shall not constitute notice) to:

Jeffery M. Anderson, Esquire
Lexington County Attorney
P.O. Box 489
140 E. Main Street
Lexington, South Carolina 29071-0489
Phone: 803-359-2512
Fax: 803-359-7478
Email: jeff@oldcourthouse.com

(c) As to the Company:

Otis Spunkmeyer, Inc.
Attn.: Chief Financial Officer
14490 Catalina Street
San Leandro, CA 94577
Phone: 510-667-3821
Fax: 510-667-3844
Email: sricks@spunkmeyer.com

(d) with a copy (which shall not constitute notice) to:

April C. Lucas, Esq.
Nexsen Pruet, LLC
1230 Main Street, Suite 700
Columbia, South Carolina 29201
Phone: 803-771-8900
Fax: 803-253-8277
Email: alucas@nexsenpruet.com

Section 9.04. Applicable Law. This Agreement shall be governed by and construed in accordance with the laws of the State. To the extent of any conflict between the provisions of this Agreement and the Act, the Act controls.

Section 9.05. Entire Understanding. This Agreement expresses the entire understanding and all agreements of the parties hereto with each other, and neither party hereto has made or shall be bound by any agreement or any representation to the other party which is not expressly set forth in this Agreement or in certificates delivered in connection with the execution and delivery hereof.

Section 9.06. Severability. In the event that any clause or provisions of this Agreement shall be held to be invalid by any court of competent jurisdiction, the invalidity of such clause or provision shall not affect any of the remaining provisions hereof.

Section 9.07. Headings and Table of Contents; References. The headings of the Agreement and any Table of Contents annexed hereto are for convenience of reference only and shall not define or limit the provisions hereof or affect the meaning or interpretation hereof. All references in this Agreement to particular articles or Sections or paragraphs of this Agreement are references to the designated articles or Sections or paragraphs of this Agreement.

Section 9.08. Multiple Counterparts. This Agreement may be executed in multiple counterparts, each of which shall be an original but all of which shall constitute but one and the same instrument.

Section 9.09. Amendments. Subject to the limitations set forth in Section 12-44-40(J)(2) of the Act, this Agreement may be amended, or the rights and interest of the parties hereunder surrendered, only by a writing signed by both parties.

Section 9.10. Waiver. Either party may waive compliance by the other party with any term or condition of this Agreement only in a writing signed by the waiving party.

Section 9.11. Further Proceedings. The parties intend any action to be taken hereinafter by the County pursuant to the express provisions of this Agreement may be undertaken by the Chairman of the Council without necessity of further proceedings. To the extent additional proceedings are required by law, however, the County agrees to undertake

all such steps as may be reasonably required or appropriate to effectuate the intent of this Agreement.

[Execution Pages to Follow]

IN WITNESS WHEREOF, the parties hereto, each after due authorization, have executed this Fee in Lieu of Tax and Incentive Agreement to be effective as of the date first written above.

LEXINGTON COUNTY, SOUTH CAROLINA

By: _____
William C. Derrick, Chairman, County Council
Lexington County, South Carolina

[SEAL]

Attest:

By: _____
Diana W. Burnett, Clerk to County Council
Lexington County, South Carolina

OTIS SPUNKMEYER, INC.

By: _____
Name: _____
Title: _____

EXHIBIT A
LEGAL DESCRIPTION

Beginning at the intersection of the western margin of the right-of-way of Overland Drive (Interstate Hwy. 1-26 Frontage Road) with the centerline of Dunbar Road; thence running along the western margin of the right-of-way of Overland Drive (Interstate Hwy. 1-26 Frontage Road) approximately 0.25 mile to a ½" Rebar at the Point of Beginning (P.O.B.); thence turning and running along property that is now for formerly of Interstate Investors and property that is now or formerly of Roy F. Dooley S76°37'00"W for a distance of 1318.68 feet to a 2" Axle; thence turning and running along property that is now or formerly of Roy F. Dooley N13°26'43"W for a distance of 694.77 feet to a ½" Rebar; thence turning and running along property that is now or formerly of Dixie Specialty Company, Inc., the following bearings and distances N76°36'09"E for a distance of 1285.44 feet to a ½" Rebar, S13°22'57"E for a distance of 30.04 feet to a ½" Rebar and N76°35'40"E for a distance of 100.00 feet to a ½" Rebar; thence turning and running along the western margin to the right-of-way of Overland Drive (Interstate Hwy. 1-26 Frontage Road) in a curved line with the following two segments: an arc distance of 311.46 feet, a radius of 1379.09 feet, a cord bearing of S00°27'09"E and a chord distance of 310.89 feet to a ½" Rebar and an arc distance of 212.93 feet, a radius of 1379.09 feet, a cord bearing S11°20'44"E and a chord distance of 212.72 feet to a ½" Rebar; thence continuing along the western margin of the right-of-way of Overland Drive (Interstate Hwy. 1-26 Frontage Road) S17°37'45"E for a distance of 150.00 feet to a ½" Rebar at the Point of Beginning (P.O.B.)

Ordinance No.: 07-09

AN ORDINANCE AMENDING ORDINANCE NO. 05-15 (ORDINANCE GOVERNING FALSE FIRE ALARMS)

Whereas the County enacted a False Alarm Ordinance in 2005; and

Whereas, the County has determined that there need to be some modifications to the existing False Alarm Ordinance;

Now therefore pursuant to the authority granted by the Constitution of the State of South Carolina and the General Assembly of the State of South Carolina, be it enacted by the County Council of Lexington County as follows:

Section 1: Definitions Shall be Amended as Follows:

A) The definition of *Alarm malfunction* is deleted in its entirety.

~~*Alarm malfunction* means the activation of security or fire alarm system which results in the response by law enforcement or public safety caused by mechanical failure, malfunction, improper installation, or lack of proper maintenance, or any other response for which the responding personnel are unable to gain access to the premises for any reason, or are unable to determine the apparent cause of the alarm activation.~~

B) *False alarm* is amended to read as follows:

False alarm means the activation of any security or fire alarm system which results in the response of law enforcement or public safety to the alarm location, caused by mechanical or electronic failure, malfunction, improper installation of the alarm system. The negligence or intentional misuse of the system by the owner or his or her employees, servants, agents or any other activation not caused by forced entry, attempted forced entry or criminal act ~~exclusive of alarm malfunctions as defined above.~~ An activated alarm in not considered a false alarm in the alarm is activated due to malicious cause beyond the control of the owner, or to acts of God beyond the control of the owner such as lightning strikes or severe weather conditions.

C) *False Alarm Coordinator*:

False Alarm Coordinator means a person or persons designated by the County Administrator and Sheriff of Lexington County, to administer, control and review false alarm reduction efforts and administer the provisions of this ordinance.

Section 2: Section 3; Duty of owner, occupant, or lessee of premises:

(b) is Amended to read:

(b) Owners or lessees of existing alarm systems shall have 30 days from installation or modification to comply with the above notice requirements. ~~Further, within ninety (90) days of the adoption of this ordinance, all owners and lessees of alarms systems must notify Lexington County Communications of the location of their alarms system, the name of the monitoring company, and provide a minimum of three key holders available to respond to the location at any time during the day or night upon request.~~

(e) is Amended to read as follows:

(e) The owner or lessee of every place of business which utilizes an alarm system shall provide, visible from the exterior of such business and adjacent to the main entrance, a minimum of three current working telephone numbers of persons o be notified in case of emergency or in lieu thereof have on file with the alarm monitoring company for the alarm system, ~~County Communications~~, three current working telephone numbers of persons to be notified in a case of emergency.

(f) **Is deleted in its entirety and is amended to read as follows:**

~~In the event of an alarm activation deemed by the responding department to be the result of an alarm malfunction, the owner will be served an "alarm cause and corrective action" form by the responding department, indicating that the activation was deemed to be the result of a malfunction, and requiring the owner to return the completed "alarm cause and corrective action" form within 20 days of such alarm activation which can verify to the satisfaction of the responding department official that the alarm system in question has actually been examined by an alarm technician and that a bona fide attempt has been made to identify and correct any defect of design, installation or operation of the alarm system which was identifiable as the cause of the alarm malfunction. Failure to return an "alarm cause and corrective action" form within such 20 day period which is satisfactory to the responding department official will result in assessment against the owner of a fine of $100.00 for the alarm malfunction.~~

(f) When any three or more false alarms occur by an alarm system at the same premises in one calendar year, upon written request by the false alarm coordinator, the alarm user or owner shall submit to the false alarm coordinator a letter specifying what corrective action has been taken to prevent future false alarms.

Section 3: The False Alarm Fee Chart under Section 5 (a) is amended to read as follows:

Number of false alarm	Fee per false alarm
Third	$25.00~~$ 50.00~~
Fourth	75.00
Fifth	100.00
Sixth, Seventh, Eighth, and Ninth ~~and above~~	$150.00 ~~200.00 each~~
Tenth and above	$300.00 each

Section (b) under Section 5 is deleted in its entirety:

~~(b) Alarm malfunction administrative fee. As to all alarm malfunctions responded to by law enforcement or public safety, the owner shall be assessed an administrative fee of $100.00, unless within 20 days he returned to the responding department an "alarm cause and corrective action" form deemed satisfactory by the responding department official.~~

~~For those alarm malfunctions that the owner returned a satisfactory "alarm cause and corrective action" form, alarm malfunctions furing each calendar year shall be exempt from any fees in excess of the administrative fee schedule set forth in this subsection. In those cases in which the owner provided the department official with a satisfactory "alarm cause and corrective action" form, the following administrative fee shall be paid.~~

~~ADMINISTRATIVE FEE SCHEDULE~~

~~Number of false alarm malfunctions~~	Fee
~~Third~~	~~$25.00~~
~~Fourth~~	~~$25.00~~
~~Fifth~~	~~$25.00~~
~~Sixth and above~~	~~$25.00~~

A new Section (b) shall be added to read as follows:

(b) It is the responsibility of each alarm owner to monitor the occurrences of false alarms on its premises. After the false alarm coordinator has recorded two false alarm occurrences within a calendar for a given alarm user, the false alarm coordinator shall notify the alarm user, in writing, by first class mail or hand delivery, that additional alarm occurrences will result in the imposition of fees in accordance with the above fee schedule. Failure to receive such notification does not waive or nullify any fees.

Such fees will be invoiced periodically as determined by the false alarm coordinator.

The subsequent subsections of Section 5 shall be renumbered accordingly.

Section (e) is added as follows:

(e) If cancellation occurs from the alarm monitoring company prior to law enforcement/fire personnel arriving at the scene, this is not a False Alarm for the purpose of fees, and no fees will be assessed.

Section 4: Section 6 (a) (1) is amended to read as follows:

(1) Failure to make all requirements or pay the fees provided for in this chapter within 120 ~~15~~ days of the charging of the fees; or

Section 6 (a) (2) is deleted in its entirety.

~~(2) Failure of the owner to provide a written alarm cause and corrective action form as required by this chapter; or~~

Section 6(a) (3) is amended to read as follows:

(2) ~~(3)~~ A false alarm ~~or alarm malfunction~~ at a premises for which a fee is charged pursuant to this chapter as a result of the failure of the owner to take corrective action to eliminate the cause of the false alarm; or

The remaining numbers of Section 6 are renumbered to correspond with the changes.

Section 5: Section 7 (a) and 7(b) are amended to read as follows:

(a) The county administrator or designee will serve as hearing officer for appeals from owners that have been noticed to disconnect or deactivate an alarm system or have been assessed fees for ~~alarm malfunctions or~~ false alarms. If the county manager elects a designee to serve as hearing officer, that designee shall not be with the sheriff's or public safety departments.

(b) An appeal must be in writing, submitted to county administration, stating the reasons why the order to disconnect or deactivate should be withdrawn, and shall be made within 15 days of the date of the notice to disconnect or receipt of any

false alarm ~~malfunction~~ report. The alarm user shall have the burden of proof by preponderance of the evidence.

Ordinance No.: 05-15

AN ORDINANCE GOVERNING FALSE ALARMS

Pursuant to the authority granted by the Constitution of the State of South Carolina and the General Assembly of the State of South Carolina, be it enacted by the County Council of Lexington County as follows:

Section 1: Purpose

This article is intended to protect the health, safety and welfare of the people of Lexington County by minimizing the misuse of law enforcement, fire, rescue and emergency medical service resources caused by false alarms and telephone alarm devices, thereby allowing these resources to be accessible and available in the event these resources are needed by members of the community.

Section 2: Definitions

Unless it is clear from the context that another meaning is intended, the following words when used in this article shall have the meanings attributed to them by this section:

Alarm businesses means a business for which any individual, partnership, corporation or other entity engaged in selling, leasing, maintaining, servicing, repairing, altering, replacing, moving or installing or monitoring any alarm system or causing to be sold, leased, maintained, serviced, repaired, altered, replaced, moved, installed or monitored, any alarm system in or on any building, structure or facility either privately or publicly owned.

~~*Alarm malfunction* means the activation of security or fire alarm system which results in the response by law enforcement or public safety caused by mechanical failure, malfunction, improper installation, or lack of proper maintenance, or any other response for which the responding personnel are unable to gain access to the premises for any reason, or are unable to determine the apparent cause of the alarm activation.~~

Comment [DED1]: Delete seperate alarm malfunction and fee schedule - to be inlnded as false alarm

Alarm monitoring agency means any business as that has the responsibility of monitoring alarm systems.

Alarm systems shall mean a fire or security alarm system.

Alarm system technician means any person who inspects, installs, repairs or performs maintenance on alarm systems.

Automatic telephone dialing device or *digital alarm communicator system* means an alarm system which automatically sends a prerecorded voice message or coded signal over a regular telephone line by direct connection or otherwise, indicating the existence of the emergency situation that the alarm system is designed to detect.

Disconnection means to deactivate the alarm system so that notification of an activated alarm does not reach the Lexington County Communications Center for the purpose of dispatching a call for service to that activated alarm.

False alarm means the activation of any security or fire alarm system which results in the response of law enforcement or public safety to the alarm location, caused by mechanical or electronic failure, malfunction, improper installation of the alarm system, the negligence or intentional misuse of the system by the owner or his or her employees, servants, agents or any other activation not caused by forced entry, attempted forced entry or criminal act ~~exclusive of alarm malfunctions as defined above,~~ An activated alarm is not considered a false alarm if the alarm is activated due to malicious cause beyond the control of the owner, or to acts of God beyond the control of the owner such as lightning strikes or severe weather conditions.

Comment [DED2]: Addition to clearly note that a response is required to be counted as false alarm

Comment [DED3]: Addition of Malfunction Alarm to be included as False Alarm.

Comment [DED4]: Delete Alarm Malfunction as separate from False Alarm

False Alarm Coordinator means a person or persons designated by the County Administrator and Sheriff of Lexington County, to administer, control and review false alarm reduction efforts and administer the provisions of this ordinance.

Comment [DED5]: Addition to identify person managing false alarm program and needed for new provisions.

Fire alarm system shall mean any mechanical, electrical or radio-controlled device designed to emit a sound or transmit a signal or message when activated or any such device that emits a sound and transmits a signal or message when activated because of smoke, heat or fire. Without limiting the generality to the foregoing, alarm systems shall be deemed to include audible alarms at the site of the installation of the detection device, proprietor alarms and automatic telephone direct dial devices or digital alarm communicator systems. A single station smoke detector shall not be deemed to be an alarm system under this article.

Key holder/emergency contact means the person(s) designated in writing by the owner of the alarm system as a holder of keys to the alarm system who is thereby authorized to respond to an activated alarm of the owner.

Law enforcement means the Lexington County Sheriff's Department.

Lessee means any person who has possession of premises of an owner.

Owner means any person who owns the premises in which an alarm system is installed or the person(s) who lease, operate, occupy or manage the premises.

Public safety means the department of public safety which includes fire rescue and emergency medical services.

Security alarm system means any mechanical, electrical or radio-controlled device which is designed to be used for the detection of any unauthorized entry into a building, structure or facility, or for alerting others of the commission of an unlawful act within a building, structure or facility or both, which emits a sound or transmits a signal or message when activated.

Section 3: Duty of owner, occupant, or lessee of premises.

(a) Newly installed or substantially modified systems shall be allowed to operate for a period of 30 days from the date of installation or modification without penalty for false alarms, provided the sheriff's department and department of public safety are notified of the installation or the modification in advance of same.

(b) Owners or lessees of existing alarm systems shall have 30 days from installation or

modification to comply with the above notice requirements. ~~Further, within ninety (90) days of the adoption of this ordinance, all owners and lessees of alarms systems must notify Lexington County Communications of the location of their alarms system, the name of the monitoring company, and provide a minimum of three key holders available to respond to the location at any time during the day or night upon request.~~

Comment [DED6]: Delete requirement for County Communications to track this information – impossible to enforce and difficult to manage.

(c) Prior to any testing of any alarm system, the owner or lessees shall notify law enforcement and public safety.

(d) Owners or lessees of any alarm system shall provide response to the alarm location, when requested, in order to reset or disable the alarm system within thirty minutes of notification. Failure to provide such response shall result in a charge of $50.00 for each such occurrence. Repeated failure to provide a response shall result in disconnection of the alarm system and no response from either law enforcement or public safety as further provided herein unless such response is otherwise required by law.

(e) The owner or lessee of every place of business which utilizes an alarm system shall provide, visible from the exterior of such business and adjacent to the main entrance, a minimum of three current working telephone numbers of persons to be notified in case of emergency or in lieu thereof have on file with the alarm monitoring company for the alarm system. ~~County Communications,~~ three current working telephone numbers of persons to be notified in a case of emergency.

Comment [DED7]: Add so that County Communications does not have to manage this information.

Comment [DED8]: Delete this, place responsibility on alarm monitoring company.

~~(f) In the event of an alarm activation deemed by the responding department to be the result of an alarm malfunction, the owner will be served an "alarm cause and corrective action" form by the responding department, indicating that the activation was deemed to be the result of a malfunction, and requiring the owner to return the completed "alarm cause and corrective action" form within 20 days of such alarm activation which can verify to the satisfaction of the responding department official that the alarm system in question has actually been examined by an alarm technician and that a bona fide attempt has been made to identify and correct any defect of design, installation or operation of the alarm system which was identifiable as the cause of the alarm malfunction. Failure to return an "alarm cause and corrective action" form within such 20 day period which is satisfactory to the responding department official will result in assessment against the owner of a fine of $100.00 for the alarm malfunction.~~

~~The "alarm and corrective action form" service may be accomplished by posting in First Class Mail to the alarm activation location or hand delivered to the location by a sheriff's deputy or other suitable person.~~

Comment [DED9]: Delete separate alarm malfunction language and cause and corrective action form responsibility. Cause and Corrective action forms are difficult to manage and track as currently required.

(f) When any three or more false alarms occur by an alarm system at the same premises in one calendar year, upon written request by the false alarm coordinator, the alarm user or owner shall submit to the false alarm coordinator a letter specifying what corrective action has been taken to prevent future false alarms.

Comment [DED10]: Add language for corrective action form at request of false alarm coordinator.

Section 4: Requirements of alarm monitoring agency.

(a) All alarm monitoring agencies are required to furnish the responding department with the following information when dispatching or reporting an alarm:

(1) Give the name of the monitoring agency;
(2) Give the name or identification number of the reporting operator;
(3) Give a call back telephone number of the monitoring agency;
(4) Give the name of business or homeowner and address of the activated alarm;
(5) If a call has been made to a keyholder, the keyholder's name and estimated time of arrival; and
(6) Any other information that may be necessary or required by the individual responding agencies.

(b) It shall be the duty of all alarm businesses to furnish at their expense the most current copy of the Lexington County Alarm Ordinance to their existing customers within 60 days of adoption of ordinance and immediately to all new alarm users upon adoption of this ordinance.

Section 5: Fees charged; ~~alarm malfunctions and~~ false alarms.

Comment [DED11]: Delete alarm malfunction language, included as false alarm.

(a) *False alarm fee.* No fee shall be assessed for the first two false alarms at the same premises responded to by law enforcement or public safety during each calendar year. Thereafter, the following fees shall be paid by the owner for each false alarm at the same premises during such calendar year:

Number of false alarm	Fee per false alarm
Third	$25.00 ~~$ 60.00~~
Fourth	$75.00
Fifth	$100.00
Sixth, Seventh, Eighth, and Ninth ~~and above~~	$150.00 ~~$200.00~~ each
Tenth and above	$300.00 each

~~(b) *Alarm malfunction administrative fee.* As to all alarm malfunctions responded to by law enforcement or public safety, the owner shall be assessed an administrative fee of $100.00, unless within 20 days he returned to the responding department an "alarm cause and corrective action" form deemed satisfactory by the responding department official.~~

~~For those alarm malfunctions that the owner returned a satisfactory "alarm cause and corrective action" form, alarm malfunctions during each calendar year shall be exempt from any fees in~~

Comment [DED12]: Merge alarm malfunction and false alarm fee schedule and increase fees for chronic alarms. Changes will help with collection and deterrence. One fee schedule will also significantly clear up much confusion.

Comment [DED13]: Delete alarm malfunction language and fee schedule.

~~excess of the administrative fee schedule set forth in this subsection. In those cases in which the owner provided the department official with a satisfactory "alarm cause and corrective action" form, the following administrative fee shall be paid.~~

~~ADMINISTRATIVE FEE SCHEDULE~~

~~Number of alarm malfunctions~~	~~Fee~~
~~Third .....~~	~~$25.00~~
~~Fourth .....~~	~~25.00~~
~~Fifth .....~~	~~25.00~~
~~Sixth and above .....~~	~~50.00 each~~

(a) It is the responsibility of each alarm owner to monitor the occurrences of false alarms on its premises. After the false alarm coordinator has recorded two false alarm occurrences within a calendar year for a given alarm user, the false alarm coordinator shall notify the alarm user, in writing, by first class mail or hand delivery, that additional alarm occurrences will result in the imposition of fees in accordance with the above fee schedule. Failure to receive such notification does not waive or nullify any fees.

Such fees will be invoiced periodically as determined by the false alarm coordinator.

(b~~e~~) Should any fee assessed pursuant to this chapter remain unpaid in excess of 90 days from the date the charge is billed, a collection fee in the amount of 35 percent on the outstanding balance shall be assessed and shall be payable by the owner of the premises in addition to the original fee. The owner shall be responsible for any legal fees or costs incurred by the county in enforcement of this chapter.

(c~~d~~) For the purposes of determining the number of false alarms for the above code sections, only one (1) activation may be counted in a twenty-four hour period.

(d) If cancellation occurs from the alarm monitoring company prior to law enforcement / fire personnel arriving at the scene, this is not a False Alarm for the purpose of fees, and no fees will be assessed.

Comment [DED14]: Add language to require alarm coordinator to send warning letter before billing. This is currently being done with door hangers and warning letters.

Comment [DED15]: Change letter from c to b

Comment [DED16]: Change letter from d to c

Comment [DED17]: Add language to clearly state that response is required for alarm to be counted as false.

Section 6: Disconnection of alarm system.

(a) Except for premises protected by an alarm system as required by law, the sheriff's department or public safety is authorized to order the disconnection or deactivation of any alarm system by written notice to the owner of the premises wherein an alarm system is installed for any of the following reasons:

(1) Failure to make all requirements or pay the fees provided for in this chapter within 120~~15~~ days of the charging of the fees; or

Comment [DED18]: Change to 120 – instead of 15 days. Takes a while to track and bill alarm owner especially for chain businesses.

~~(2) Failure of the owner to provide a written alarm cause and corrective action form as required by this chapter; or~~

(2) ~~(3)~~ A false alarm ~~or alarm malfunction~~ at a premises for which a fee is charged pursuant to this chapter as a result of the failure of the owner to take corrective action to eliminate the cause of the false alarm; or

(3) ~~(4)~~ The failure of a person notified pursuant to this chapter to appear within one hour after being noticed to respond, if such failure to timely appear occurs four or more times within a calendar year.

(b) The written notice issued by the sheriff's department or public safety to disconnect or deactivate shall be mailed to the owner and shall specify the date on which the owner shall be required to disconnect or deactivate the alarm system, which date shall be at least 15 days following the date of the notice. The owner may appeal the order to disconnect pursuant to section seven.

(c) The Sheriff's Department may suspend response to any alarm received from a location which has an order to disconnect or deactivate its alarm system as described herein unless there is a separate indication that a crime is in progress.

Section 7: Appeal

(a) The county administrator or designee will serve as hearing officer for appeals from owners that have been noticed to disconnect or deactivate an alarm system or have been assessed fees for ~~alarm malfunctions or~~ false alarms. If the county manager elects a designee to serve as hearing officer, that designee shall not be with the sheriff's or public safety departments.

(b) An appeal must be in writing, submitted to county administration, stating the reasons why the order to disconnect or deactivate should be withdrawn, and shall be made within 15 days of the date of the notice to disconnect or receipt of any false alarm ~~malfunction~~ report. The alarm user shall have the burden of proof by preponderance of the evidence.

(c) The hearing officer shall send notice of hearing to the owner within 15 days prior to the appeal hearing and shall make written findings available to the alarm owner, law enforcement or public safety within ten days from the date the hearing is concluded.

(d) If the hearing officer affirms the order to disconnect or deactivate an alarm system, the owner shall have five days following the mailing or the written decision of the hearing officer within which to comply with the order.

Section 8: Failure to disconnect or unauthorized reconnection of the alarm system

It shall be a violation of this Code for any person to fail to disconnect or deactivate an alarm system which has been ordered disconnected or deactivated pursuant to section six, including those situations in which the hearing officer has affirmed the order to disconnect or deactivate. It shall be a violation of this Code for any person to reconnect an alarm system which has been disconnected or deactivated pursuant to the order of the sheriff's department or public safety, unless the reconnection of the alarm system is authorized pursuant to section nine hereof.

Comment [DED19]: Delete cause and corrective action form requirement.

Comment [DED20]: Delete alarm malfunction language.

Comment [DED21]: Delete alarm malfunction language.

Comment [DED22]: Delete alarm malfunction language

Section 9: Reconnection of alarm systems

Law enforcement or public safety shall have the right to inspect the alarm system and test same prior to rescinding the order to disconnect or deactivate. Before any reconnection of an alarm system and after the order to disconnect such system, a reconnection fee of $25.00 shall be assessed.

Section 10: Automatic telephone dialing alarm device or digital alarm communicator system

(a) It shall be a violation of this Code for any person to install, maintain, operate or use any automatic telephone dialing alarm device or digital alarm communicator system within the county if the system requires connection to the emergency communications center for law enforcement or public safety.

(b) It shall be unlawful for any person to install, maintain, operate or use any automatic telephone dialing alarm device or digital alarm communicator system within the county unless the system is currently approved by the Federal Communications Commission (FCC), and has been approved by law enforcement or public safety, unless otherwise required by law.

(c) Any person who violates the provisions of this section shall be punished as the provided for in section 1 – 8 of the County Code of Ordinance.

Section 11: Audible sound systems

All new or existing audible sound systems shall sound no longer than fifteen minutes for residential and for businesses, unless otherwise required by underwriter's laboratories or law.

Section 12: Penalty and enforcement

Any person who violates any provision of this section shall be guilty of an offense against the county and shall be punished as provided in section 1-8 of the Code of Ordinances. The provisions of this section may be enforced either by prosecution as a misdemeanor through Magistrate's Court of Lexington County or by any other legal or equitable form of action.

Section 13: Alarm system operations

The county, its officers, employees and agents shall not assume any duty or responsibility for the installation, maintenance, operation, repair or effectiveness of any privately owned alarm system, those duties and responsibilities being solely those of the owner of the premises. Additionally, it shall be the responsibility of the owner of the premises to silence an activated alarm and thereafter reset the same. The county shall not provide, nor make available, the services of its sheriff's department or department of public safety to be an emergency communications center for use by owners as a central location for alarm system receiving equipment.

Section 14: Governmental Immunity

Alarm registration is not intended to, nor will it, create a contract, duty or obligation, either

expressed or implied of response. Any and all liability and consequential damage resulting from the failure to respond to a notification is hereby disclaimed and any and all governmental immunity as provided by law is retained. By utilizing an alarm system, the alarm user acknowledges that law enforcement response may be influenced by factors such as the availability of law enforcement units, priority of calls, weather conditions, traffic conditions, emergency conditions, staffing levels, and prior response history.

Section 15: Severability

The provisions of the Ordinance are severable. If a court determines that any part or portion of this Ordinance is invalid or that the application of any part of this Ordinance to any person or circumstance is invalid, the remaining provisions and the application of those provisions to other persons or circumstances are not affected by that decision.

Section 16: False Fire Alarm Ordinance Repealed

The provisions of Section 30-66 through 30-71, entitled Fire Alarm Systems, are being repealed in their entirety and replaced with the provision as set forth herein.

Lexington County False Alarm Ordinance Revisions

Since the implementation of the Lexington False Alarm ordinance in May of 2006, false alarms have reduced dramatically. This reduction has saved hundreds of hours of law enforcement and fire personnel response time allowing them to be available for higher priority calls. However, some issues have come to light regarding the false alarm ordinance which makes some components very difficult to administer. Changes to the ordinance are recommended in order to enhance effectiveness, clarity, and make it easier to enforce with available personnel. Changes to the ordinance align into three main categories:

1) ***Removal of "Alarm Malfunctions" and include with "False Alarms"***

2) ***Add language to clarify administrative responsibilities relating to enforcement and notification of false alarms***

3) ***Remove / change parts of the false alarm ordinance that are difficult to manage with current staff and workload***

Removal of "Alarm Malfunctions" and include with "False Alarms"

The first significant change to the false alarm ordinance involves combining alarm malfunctions with false alarms. Having separate definitions and fee schedules causes significant confusion for deputies and citizens. Upon arriving on scene to an activated alarm, personnel must determine if it is a false alarm caused by operator error or a malfunction alarm caused by mechanical failure. Often the alarm owner is not present when the officer makes this determination, so the deputy or fire personnel are unsure of the cause of the alarm, therefore per the current ordinance, it is an alarm malfunction. Once classified as an alarm malfunction the alarm owner must notify their alarm company and have their system tested and return a cause and corrective action form. Many citizens are complaining because this is their first alarm activation for the year and they have to pay $50 to $100 dollars for an alarm technician to check the system and still may find nothing wrong. The alarm companies do not like this part of the ordinance because if no determination regarding the cause of the alarm, then by default we classify it as an "alarm malfunction". Alarm companies get angry customers calling them because the Sheriff or Fire Department has left a warning about a malfunctioning alarm, when in reality; the system may not be malfunctioning but experiencing a power surge, insect problems or operator error. However, this makes the alarm companies appear to customers they have installed a faulty alarm system.

To enforce and administer the current ordinance with alarm malfunctions separate from false alarms is challenging. Most time spent enforcing the current false alarm ordinance involves sending warning letters, verifying alarm occurrences and dealing with billing issues. Current staffing does not allow for effective tracking and verification for completed cause and corrective action forms. Because we can not account for the cause and corrective action forms and the fee schedule for alarm malfunctions is significantly lower than false alarms, the ordinance has little deterrent affect on alarm malfunctions.

Currently, there are separate fee schedules for alarm malfunctions and false alarms. Because there is no provision for combined count of false and malfunction alarms, it often occurs someone will have two false alarms and two malfunction alarms and then be billed for their third consecutive malfunction alarm, their fifth total alarm (2 False Alarms + 3 Malfunction Alarms). As a result, under this scenario someone would be fined $25.00 for their fifth alarm. I believe the

intent of the ordinance is for the fee schedule to start at the third alarm and the recommended changes to combine malfunction with false alarms would accomplish this objective.

Approximately 90% of the phone calls received about the alarm ordinance are citizens wanting to notify us their activated alarm was a false alarm and not a malfunction alarm. Combining the two alarm types into one "false alarm" definition would significantly reduce phone calls from citizens, most confusion with the ordinance, and dissatisfaction by the alarm companies.

Changes to clarify the administrative responsibilities relating to enforcement and notification of false alarms

There are other recommended additions to the ordinance which help clarify administrative responsibilities for false alarms. It is recommended to remove the cause and corrective action form as a component to malfunction alarms, however there should be a corrective action letter required at the request of the false alarm coordinator to determine if the alarm location should be placed on a do not respond list as required by Section 6: Part A, paragraph 3. This section states in summary if corrective action is not taken to eliminate the cause of the false alarm then the alarm system can be deactivated or placed on a do not respond list.

The current ordinance does not outline any type of warning or notification of false alarms to the citizens. To enforce the ordinance in good faith and fairness to the alarm owners, recommended additions to the ordinance include notification of false alarms and written warnings of fee impositions. This warning and notification is currently being accomplished through false alarm door hangers and warning letters.

Another recommended addition to the ordinance states that proper cancellation of false alarms and / or no response by law enforcement or fire personnel will not result in a fine. This language is needed because many citizens and businesses have expressed concerns that they have followed proper alarm cancellation procedures but the fire department still responds to their location. This clarification will help answer many questions and reaffirm to these individuals they will not be billed for this response.

The addition to the ordinance identifying the "False Alarm Coordinator" is necessary due to the added language outlining the administrative responsibilities.

Remove / change parts of the false alarm ordinance that are difficult to manage with current staff and workload

When the original ordinance was passed, there was no way to anticipate the workload required to make this program a success. After one year of enforcement and implementation it is clear some parts of the ordinance are difficult to administer and manage and not necessary for success. To have sections of an ordinance that are not enforced can cause confusion and for that reason should be removed, if possible, when the opportunity is available. One of these sections includes a requirement by alarm owners to notify Lexington County Communications of the location of their system, the name of the monitoring company, and provide three key holders. There is no way to know when a new system is being installed, almost impossible for County Communications to track new accounts and this information is not needed for any aspect of the ordinance. Most of the time, this information is collected when an alarm is received by County Communications and they are talking with the alarm monitoring company. It is not necessary for the alarm owner to provide this information ninety days after installation since the alarm monitoring companies will provide it for every activated alarm.

The ordinance also requires alarm owners with alarms at businesses to provide three names and telephone numbers of individuals to be contacted in case of an emergency. This information could be extremely valuable and necessary in a disaster but should not be a requirement of a false alarm ordinance but rather some type of business license. It would be very

difficult for County Communications to locate all of these alarm systems and owners and manage this information. Currently if we need this information we can find the alarm monitoring company and request they make contact with the business owner. This information is not needed for the success of the false alarm reduction program.

Summary

The false alarm ordinance by any measure can be considered a success with significant reductions in false alarms and an established program with limited complaints from citizens. The recommended changes will help resolve some of these complaints and significantly assist with the administration of the ordinance. These changes will increase the effectiveness of the ordinance by an estimated 5% in additional false alarm reductions but as important is the substantial reduction in administrative responsibilities which will allow for more efforts to be directed towards proactive false alarm reduction efforts and public education campaigns.

COUNTY OF LEXINGTON, SOUTH CAROLINA

ORDINANCE NO. 07-10

AN ORDINANCE TO DETERMINE THE NUMBER OF PETS LOCATED IN LEXINGTON COUNTY.

Pursuant to the authority granted by the Constitution of the State of South Carolina and General Assembly of the State of South Carolina, be it ordained and enacted by the Lexington County Council as follows:

WHEREAS, the County of Lexington does not presently have a means to determine the number of ~~animals~~ pets that are located in Lexington County; and

WHEREAS, it would serve the public interest for the County to establish a database as to the number of pets that are located in Lexington County;

NOW, THEREFORE, be it ordained and enacted by the Lexington County Council as follows:

SECTION 1. Recording Requirement for Pet Veterinarians.

All licensed veterinarians that provide rabies vaccinations within the county shall transmit complete and legible copies of all rabies vaccination certificates for the previous 6 months to the County Animal Services' Coordinator within 30 days from the effective date of this Ordinance. The rabies vaccination certificate shall include:

(a) Name, sex, breed, age, weight, color, and whether the pet has been spayed or neutered and ~~whether the pet has had a rabies shot~~;

(b) Name, address and telephone number of owner.

The above information of additional pets vaccinated for rabies by the veterinarians shall be submitted by the 10th day of each month for the previous month's vaccinations thereafter.

SECTION 2. Jurisdiction.

This Ordinance shall be effective within the unincorporated areas of the County and any incorporated area that is under the jurisdiction of the Lexington County Animal Control Ordinance.

SECTION 3. Effective date.

This Ordinance shall be effective upon its enactment.

Enacted this _____ day of _____, 2007.

_____
William C. Derrick, Chairman

ATTEST:

_____
_____, Clerk

First Reading:_____

Second Reading:_____

Public Hearing:_____

Third & Final Reading:_____

Filed w/Clerk of Court:_____

ORDINANCE 07-11

AN ORDINANCE ADOPTING A SUPPLEMENTAL APPROPRIATION FOR FISCAL YEAR 2007-2008

Pursuant to the authority granted by the Constitution of the State of South Carolina and General Assembly of the State of South Carolina, be it ordained and enacted by the Lexington County Council as follows:

Section 1. Findings: Since the adoption of the annual budget for the Fiscal Year 2007-2008, County Council has determined that additional funding needs to be appropriated to meet certain needs of the County for Fiscal Year 2007-2008. County Council has further determined that additional appropriations may be made from the General Fund balance into specific accounts so as to meet any additional Fiscal Year 2007-2008 obligations of Lexington County.

NOW, THEREFORE, be it enacted by the County Council of Lexington County as follows:

County Council hereby makes a supplemental appropriation not to exceed the sum of $1,500,000.00 (One Million, Five Hundred Thousand and No/100 Dollars) from the County General Fund balance to be used for the benefit of controlling the Lexington County pet population.

Enacted this _____ day of _____, 2007.

_____
William C. "Billy" Derrick, Chairman

ATTEST:

_____
Diana W. Burnett, Clerk

First Reading:
Second Reading:
Public Hearing:
Third & Final Reading:
Files w/Clerk of Court:

COUNTY OF LEXINGTON, SOUTH CAROLINA

ORDINANCE NO. 07-12

AN ORDINANCE APPROVING THE CONVEYANCE OF REAL ESTATE FROM THE COUNTY OF LEXINGTON TO PEGGY WILLIAMSON.

WHEREAS, the County of Lexington (hereinafter "the County") is the owner of the property located in the Town of Swansea that was formerly used as a library; and

WHEREAS, the Swansea Library has been moved to a new location, and the County has no need for the existing building and property; and

WHEREAS, the County of Lexington deems it to be in the public's best interest to sell the subject property to the highest bidder;

NOW, THEREFORE, pursuant to the authority granted by South Carolina Code § 6-25-128, be it ordained and enacted by the Lexington County Council as follows:

Section 1. The Lexington County Council hereby approves the Contract of Sale attached hereto as Exhibit A and the conveyance of the property described therein to Peggy Williamson.

Section 2. The Chairman of the Lexington County Council is authorized and directed to execute and deliver a Deed and any other closing documents necessary to complete the sale of the property described in the Contract of Sale attached hereto as Exhibit A to Peggy Williamson.

Enacted this _____ day of _____, 2007.

_____
William C. Derrick, Chairman

ATTEST:

_____
_____, Clerk

First Reading:_____

Second Reading:_____

Public Hearing:_____

Third & Final Reading:_____

Filed w/Clerk of Court:_____

STATE OF SOUTH CAROLINA)
) **CONTRACT OF SALE**
COUNTY OF LEXINGTON)

AGREEMENT made this _____ day of _____, 2007, by and between **Peggy Williamson** (hereinafter referred to as "Purchaser") and **County of Lexington, South Carolina** (hereinafter referred to as "Seller"):

1. OFFER AND DESCRIPTION. Purchaser agrees to buy and Seller agrees to sell all that certain piece, parcel or lot of land, situated in the County of Lexington, State of South Carolina, more particularly described as follows:

> That certain Lot A as shown on Plat recorded in the Office of the Register of Deeds for Lexington County in Plat Book 197 at page 65. This being the identical property conveyed to County of Lexington, South Carolina by Deed recorded in the Office of the Register of Deeds for Lexington County in Deed Book 1650 at page 288.
>
> TMS # 013020-05-006

This sale is being made and the conveyance of title is to be made subject to all covenants of record including but not limited to easements and restrictions of record (provided such covenants do not make the title unmarketable) and to all applicable governmental statutes, ordinances, rules and regulations.

2. CONSIDERATION. The purchase price for the real property above described is Thirty-six Thousand One Hundred and no/100 ($36,100.00) Dollars, payable at closing.

3. DATE OF CLOSING. The closing date for this transaction shall be within thirty (30) days from the date Seller obtains approval from the Lexington County Council to sell the subject property to the Purchaser.

4. OFFER TO PURCHASE TO REMAIN OPEN. The parties hereto agree that the offer to purchase the subject property shall remain open for a period of ninety (90) days

following the execution of this Contract of Sale by the Purchaser in order to allow the Seller sufficient time to proceed with its legally required process of selling property. The Purchaser understands that the Seller must follow statutory procedures to approve and execute this Contract. Therefore, Purchaser shall not revoke this offer to purchase until Seller has had opportunity and time to follow this procedure, which shall be no later than sixty (60) days after execution by Purchaser.

5. CLOSING COSTS. It is understood and agreed that the Purchaser will pay for deed stamps and any and all other closing costs connected with the closing of this transaction.

6. CONDITION OF PROPERTY. Seller represents that it is not aware of and has not caused to be put any hazardous substances on or in the groundwater of the subject property. "Hazardous substances" is defined as any substances on the list of hazardous substances by DHEC. The property is sold in "as is" condition.

7. CONVEYANCE. The Seller agrees to convey by marketable title and deliver a proper limited warranty deed, free of encumbrances, except as stated herein, upon completion of this Contract. In the event marketable title cannot be given, Seller shall have no obligation to cure such defect, the Contract shall be voided, and Purchaser shall be refunded any earnest money paid. Purchaser shall be responsible for any costs that Purchaser may have incurred.

8. FAÇADE IMPROVEMENT. Purchaser shall comply with all terms of the Façade Improvement Agreement signed by the County.

9. DEFAULT. In the event the Purchaser fails or defaults, then any sums paid by it under this Contract shall remain the property of the Seller, and Seller may pursue any

available legal remedies. In the event of default by Seller, Purchaser may pursue any remedy available at law or in equity except as otherwise provided herein in the event of a title defect. In the event litigation is commenced to enforce any rights under this agreement or to pursue any other remedy available to either party, all reasonable legal expenses and other direct costs of litigation of the prevailing party shall be paid by the other party.

10. BROKERAGE COMMISSION. There are no brokers involved in this transaction.

11. SURVIVAL. The terms of this Contract shall survive the closing.

12. ENTIRE AGREEMENT. This agreement supersedes any and all understandings and agreements between the parties and constitutes the sole and entire agreement between the parties. No oral agreement or representations prior hereto shall be included herein unless set forth in writing. Any change to this Contract shall be in writing.

WITNESS the hands and seals of the Seller and Purchaser this _____ day of _____, 2007.

WITNESSES:

_____

_____
As to Purchaser

PURCHASER:

_____
Peggy Williamson

SELLER:

County of Lexington, South Carolina

By:_____
Name:_____
Title:_____

_____

_____
As to Seller

Impact Fees – Corley Mill Fire Station

This particular capital project has received additional interest with respect to the use of impact fees. It was included in the original Impact Fee Study completed in May of 2005 and the calculations have now been updated to include development from 2005 and 2006. In the original study the Planning Commission recommended adding commercial square footage calculations to the residential dwelling unit formula used to estimate possible fees, and that has been done.

Because the various databases used by county departments are designed for purposes other than impact fee calculations, the square footage numbers are a little more of an estimate than the dwelling unit counts. However, they should still be good enough for a "go/no go" decision on this project.

The latest budget and expenditures for this capital project are as follows:

Fire Station			***1,114,982***
	Land	***438,326***	
	Station	***548,416***	
	Landscaping, etc.	***5,000***	
	Tap fees, etc.	***10,000***	
	Exterior Lighting	***4,000***	
	Generator	***20,000***	
	Site work	***65,000***	
	Architectural Fees	***24,240***	
Pumper			***329,000***
Tanker			***238,000***
		Total	***$1,681,982***

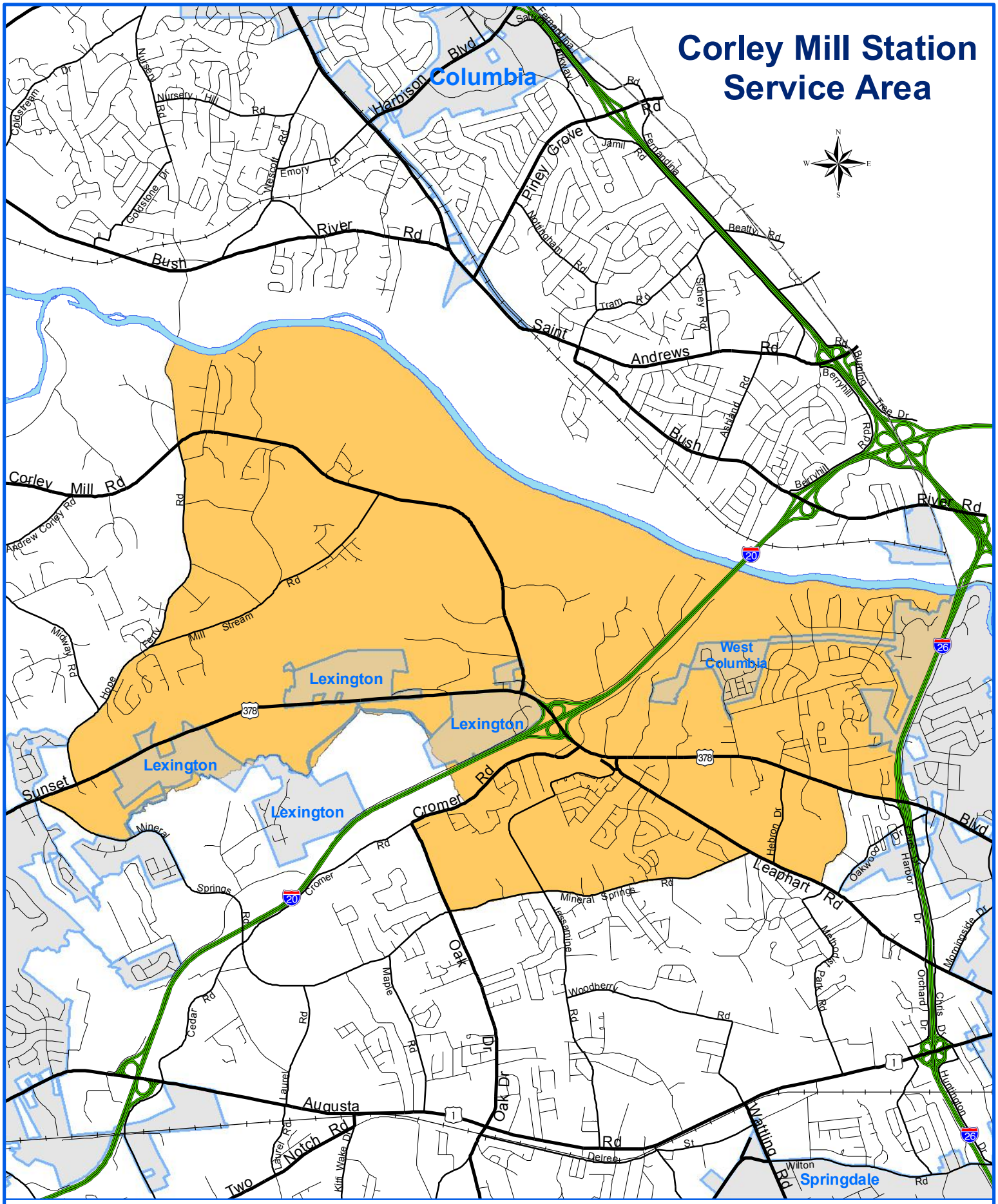
It is assumed that the expenditures can be justified as having a 20-year life, so the fee calculations are projected using 20 years of estimated growth. There would have to be an analysis done every year to insure that the fees are generating the expected revenue. At several points during the 20 years, the fees would probably have to be increased or decreased based on actual income.

The procedure used to divide the fees between residential and commercial was simply something the County staff created. An impact fee consultant, who is going to be essential on this project, may advise Lexington County to use a different method. However, none of this would change the amount of revenue, just the source.

Note that this service area involves lands annexed by West Columbia and Lexington so an impact fee ordinance would also have to be adopted and implemented by them to cover the entire project.

Enclosures: Map of Service Area Boundary
Chart of housing unit data
Impact Fee calculations (assuming a 20-year life)
SC Development Impact Fee Act

Corley Mill Station Service Area



Map Produced By Lexington County Department of Planning & GIS 2007

View County Maps Online: www.lex-co.com

Link: GIS Property Mapping & Data Services

0 0.5 1 1.5 2 Miles

Map Datum: S.C. State Plane, Nad 1983, Zone 3900
Map Date: 06/04/2007
Lexington County Planning & GIS

Corley Mill Fire Station Service Area

2000 Census					New Housing Units Permitted							# of Housing Units as of Jan. 1, 2007	7-year Growth (2000-2006)	
Tract	Block Group	Block	Population	Housing Units	2000	2001	2002	2003	2004	2005	2006		# of New Housing Units	Average # of New Housing Units per year
Service Area Totals			6,517	2,787	21	37	24	31	70	134	418	3,522	735	105.00
021014	1	1000	3	2	0	0	0	0	0	0	0	2	0	0.00
020506	2	2001	432	237	0	0	0	0	0	0	0	237	0	0.00
020506	2	2000	0	0	0	0	0	0	0	27	80	107	107	15.29
021014	1	1021	0	0	0	0	0	0	0	0	0	0	0	0.00
020507	1	1000	17	7	0	0	0	0	0	0	0	7	0	0.00
020507	1	1001	442	192	8	19	0	0	0	0	0	219	27	3.86
020507	1	1016	13	5	0	0	0	0	0	0	1	6	1	0.14
020507	1	1012	69	27	0	0	0	0	0	0	0	27	0	0.00
021007	1	1007	32	12	0	0	0	0	0	0	0	12	0	0.00
020506	1	1009	97	44	0	0	0	0	0	1	0	45	1	0.14
021014	1	1019	0	0	0	1	0	0	0	79	1	81	81	11.57
020506	2	2002	6	4	0	0	0	0	0	0	0	4	0	0.00
020506	1	1003	0	0	0	0	0	0	0	0	0	0	0	0.00
020506	1	1024	36	18	0	0	1	0	0	0	0	19	1	0.14
020506	1	1000	11	7	1	1	0	0	1	0	0	10	3	0.43
020506	1	1012	5	2	0	0	0	0	0	0	0	2	0	0.00
021014	1	1024	1	2	0	0	0	0	0	0	0	2	0	0.00
020506	2	2007	0	0	0	0	0	0	0	0	0	0	0	0.00
020506	2	2011	10	5	0	0	0	0	0	0	0	5	0	0.00
020506	1	1006	5	3	0	0	0	0	0	0	0	3	0	0.00
021014	1	1001	168	64	0	1	1	0	0	0	0	66	2	0.29
021014	1	1009	18	5	0	0	0	0	0	0	0	5	0	0.00
021014	1	1008	18	8	0	0	0	0	0	0	0	8	0	0.00
021014	1	1010	58	21	0	0	0	0	0	0	0	21	0	0.00
020506	1	1005	45	19	1	0	0	0	0	0	0	20	1	0.14
021014	1	1011	36	14	0	0	0	1	0	0	0	15	1	0.14
021014	1	1012	117	45	1	5	5	20	18	1	0	95	50	7.14
021014	1	1013	43	16	0	0	1	0	1	0	0	18	2	0.29
021014	1	1016	101	29	0	0	0	0	0	0	0	29	0	0.00
021014	1	1998	0	0	0	0	0	0	0	0	2	2	2	0.29
020506	1	1004	97	42	2	3	2	4	1	0	0	54	12	1.71
021014	1	1015	41	20	1	0	0	0	0	0	0	21	1	0.14
020506	1	1007	0	0	0	0	0	0	0	0	0	0	0	0.00
021014	1	1014	124	41	0	0	0	0	0	0	280	321	280	40.00
020506	1	1001	505	241	0	3	1	0	15	0	0	260	19	2.71
020506	1	1011	74	35	0	0	1	1	0	0	0	37	2	0.29
020506	1	1008	49	17	0	0	0	0	0	0	0	17	0	0.00
020506	1	1010	68	27	0	0	0	0	0	0	0	27	0	0.00
020506	1	1019	12	6	0	0	0	0	0	0	0	6	0	0.00
020506	1	1020	44	16	0	0	0	0	0	0	0	16	0	0.00
020506	1	1016	26	10	0	0	0	0	0	0	0	10	0	0.00
020506	1	1021	40	12	0	0	0	0	0	0	0	12	0	0.00
020506	1	1015	34	13	0	0	0	0	0	0	0	13	0	0.00
020506	1	1017	74	32	1	1	0	0	0	0	0	34	2	0.29
020506	1	1002	5	3	0	0	0	1	0	0	0	4	1	0.14
020506	1	1022	50	20	0	0	0	0	0	0	0	20	0	0.00
020506	1	1018	56	16	0	0	0	0	0	0	0	16	0	0.00
020506	1	1025	51	17	0	0	0	0	0	12	0	29	12	1.71
020506	1	1013	0	0	0	0	0	0	0	0	0	0	0	0.00
020506	1	1023	32	15	0	0	0	0	0	0	0	15	0	0.00
020506	1	1014	13	5	0	1	0	0	1	0	0	7	2	0.29
021014	1	1022	0	2	0	0	0	0	0	0	0	2	0	0.00
021014	1	1020	0	0	0	0	0	0	0	0	0	0	0	0.00
020506	2	2003	655	180	2	0	2	1	1	0	0	186	6	0.86
020506	2	2008	65	56	0	0	0	0	0	0	0	56	0	0.00
021014	1	1017	0	9	0	0	0	0	0	0	0	9	0	0.00
020506	2	2012	64	52	0	0	5	2	5	0	0	64	12	1.71

021014	1	1018	43	0	0	0	0	0	0	0	0	0	0	0.00
021014	1	1025	318	151	3	0	0	0	0	1	0	155	4	0.57
021014	1	1023	0	1	0	0	0	0	0	0	0	1	0	0.00
020506	2	2006	17	11	0	1	0	0	0	0	0	12	1	0.14
021007	1	1001	10	3	0	0	0	0	0	0	0	3	0	0.00
020506	2	2004	14	8	0	0	0	0	0	0	0	8	0	0.00
021007	1	1002	12	7	0	0	0	0	0	0	0	7	0	0.00
020506	2	2005	48	24	0	0	0	0	0	0	0	24	0	0.00
020506	2	2013	17	6	0	0	0	0	0	0	0	6	0	0.00
020506	2	2009	0	0	0	0	0	0	0	0	0	0	0	0.00
021007	1	1000	4	1	0	0	0	0	0	0	0	1	0	0.00
020506	3	3015	0	0	0	0	0	0	0	0	0	0	0	0.00
020506	2	2010	10	5	0	0	0	0	0	0	0	5	0	0.00
021007	1	1004	128	50	0	0	1	0	0	0	0	51	1	0.14
020506	3	3013	34	26	0	1	0	0	27	0	0	54	28	4.00
020506	3	3014	47	28	0	0	0	0	0	0	0	28	0	0.00
021007	1	1003	44	13	0	0	0	0	0	0	0	13	0	0.00
020506	3	3012	120	7	0	0	0	0	0	0	0	7	0	0.00
020507	1	1010	365	213	0	0	0	0	0	0	0	213	0	0.00
020507	1	1011	45	26	0	0	0	0	0	0	0	26	0	0.00
020507	1	1008	204	81	0	0	0	0	0	0	0	81	0	0.00
021007	1	1005	114	46	0	0	0	0	0	0	0	46	0	0.00
020506	3	3011	39	20	0	0	0	0	0	0	0	20	0	0.00
020507	1	1007	47	20	0	0	0	0	0	0	1	21	1	0.14
020507	1	1009	71	29	0	0	0	0	0	0	0	29	0	0.00
021007	1	1006	180	58	0	0	2	1	0	0	0	61	3	0.43
020507	1	1015	57	17	0	0	0	0	0	0	0	17	0	0.00
020507	1	1021	39	17	0	0	0	0	0	0	0	17	0	0.00
020507	1	1014	21	7	0	0	0	0	0	0	0	7	0	0.00
020507	1	1013	33	14	0	0	0	0	0	0	0	14	0	0.00
020507	1	1006	63	25	0	0	0	0	0	5	0	30	5	0.71
020507	1	Bloc	87	33	0	0	0	0	0	0	0	33	0	0.00
020507	1	1005	65	29	0	0	0	0	0	0	0	29	0	0.00
021007	1	1008	0	2	0	0	0	0	0	0	0	2	0	0.00
020507	1	1019	7	3	0	0	0	0	0	0	0	3	0	0.00
020507	1	1002	24	9	0	0	0	0	0	0	0	9	0	0.00
020507	1	1018	0	0	0	0	0	0	0	0	0	0	0	0.00
020507	1	1003	63	29	0	0	0	0	0	0	0	29	0	0.00
020507	1	1004	24	11	0	0	0	0	0	0	13	24	13	1.86
020507	1	1017	133	77	1	0	2	0	0	0	0	80	3	0.43
021007	1	1009	8	5	0	0	0	0	0	8	40	53	48	6.86

Preliminary Impact Fee Calculations (20-year life)
for
Corley Mill Fire Station and Equipment

Number of Dwelling Units			Growth as a % of 2027 Dwelling Units	% Growth *X* Total Cost* ($1,182,602)	÷	Growth	=	Impact Fee
2007	2027	Growth						
3,522	*5,622*	*2,100*	*37.35%*	*$441,702*	÷	*2,100*	=	***$210.33*** *per dwelling unit*

Commercial Square Footage			Growth as a % of 2027 Square Footage	% Growth *X* Total Cost* ($499,380)	÷	Growth	=	Impact Fee
2007	2027	Growth						
2,686,626	*4,036,626*	*1,350,000*	*33.44%*	*$166,993*	÷	*1,350,000*	=	***$.1237*** *per square foot*

Total ***$608,695***

$608,695 ÷ 20 years = $30,435 per year

* The Total Cost of the project has been divided between the residential dwelling units and commercial square footage in the following manner:

5,622 dwelling units ***X*** 1,700 square feet = 9,557,400 square feet of residential

9,557,400 square feet of residential + 4,036,626 square feet of commercial = 13,594,026 total square feet

9,557,400 ÷ 13,594,026 = 70.31% ***X*** $1,681,982 = **$1,182,602 (Cost assigned to residential)**

4,036,626 ÷ 13,594,026 = 29.69% ***X*** $1,681,982 = **$499,380 (Cost assigned to commercial)**

ARTICLE 9.

DEVELOPMENT IMPACT FEES

SECTION 6-1-910. Short title.

This article may be cited as the "South Carolina Development Impact Fee Act".

SECTION 6-1-920. Definitions.

As used in this article:

(1) "Affordable housing" means housing affordable to families whose incomes do not exceed eighty percent of the median income for the service area or areas within the jurisdiction of the governmental entity.

(2) "Capital improvements" means improvements with a useful life of five years or more, by new construction or other action, which increase or increased the service capacity of a public facility.

(3) "Capital improvements plan" means a plan that identifies capital improvements for which development impact fees may be used as a funding source.

(4) "Connection charges" and "hookup charges" mean charges for the actual cost of connecting a property to a public water or public sewer system, limited to labor and materials involved in making pipe connections, installation of water meters, and other actual costs.

(5) "Developer" means an individual or corporation, partnership, or other entity undertaking development.

(6) "Development" means construction or installation of a new building or structure, or a change in use of a building or structure, any of which creates additional demand and need for public facilities. A building or structure shall include, but not be limited to, modular buildings and manufactured housing. "Development" does not include alterations made to existing single-family homes.

(7) "Development approval" means a document from a governmental entity which authorizes the commencement of a development.

(8) "Development impact fee" or "impact fee" means a payment of money imposed as a condition of development approval to pay a proportionate share of the cost of system improvements needed to serve the people utilizing the improvements. The term does not include:

(a) a charge or fee to pay the administrative, plan review, or inspection costs associated with permits required for development;

(b) connection or hookup charges;

(c) amounts collected from a developer in a transaction in which the governmental entity has incurred expenses in constructing capital improvements for the development if the owner or

developer has agreed to be financially responsible for the construction or installation of the capital improvements;

(d) fees authorized by Article 3 of this chapter.

(9) “Development permit” means a permit issued for construction on or development of land when no subsequent building permit issued pursuant to Chapter 9 of Title 6 is required.

(10) “Fee payor” means the individual or legal entity that pays or is required to pay a development impact fee.

(11) “Governmental entity” means a county, as provided in Chapter 9, Title 4, and a municipality, as defined in Section 5-1-20.

(12) “Incidental benefits” are benefits which accrue to a property as a secondary result or as a minor consequence of the provision of public facilities to another property.

(13) “Land use assumptions” means a description of the service area and projections of land uses, densities, intensities, and population in the service area over at least a ten-year period.

(14) “Level of service” means a measure of the relationship between service capacity and service demand for public facilities.

(15) “Local planning commission” means the entity created pursuant to Article 1, Chapter 29, Title 6.

(16) “Project” means a particular development on an identified parcel of land.

(17) “Proportionate share” means that portion of the cost of system improvements determined pursuant to Section 6-1-990 which reasonably relates to the service demands and needs of the project.

(18) “Public facilities” means:

(a) water supply production, treatment, laboratory, engineering, administration, storage, and transmission facilities;

(b) wastewater collection, treatment, laboratory, engineering, administration, and disposal facilities;

(c) solid waste and recycling collection, treatment, and disposal facilities;

(d) roads, streets, and bridges including, but not limited to, rights-of-way and traffic signals;

(e) storm water transmission, retention, detention, treatment, and disposal facilities and flood control facilities;

(f) public safety facilities, including law enforcement, fire, emergency medical and rescue, and street lighting facilities;

(g) capital equipment and vehicles, with an individual unit purchase price of not less than one hundred thousand dollars including, but not limited to, equipment and vehicles used in the

delivery of public safety services, emergency preparedness services, collection and disposal of solid waste, and storm water management and control;

(h) parks, libraries, and recreational facilities.

(19) “Service area” means, based on sound planning or engineering principles, or both, a defined geographic area in which specific public facilities provide service to development within the area defined. Provided, however, that no provision in this article may be interpreted to alter, enlarge, or reduce the service area or boundaries of a political subdivision which is authorized or set by law.

(20) “Service unit” means a standardized measure of consumption, use, generation, or discharge attributable to an individual unit of development calculated in accordance with generally accepted engineering or planning standards for a particular category of capital improvements.

(21) “System improvements” means capital improvements to public facilities which are designed to provide service to a service area.

(22) “System improvement costs” means costs incurred for construction or reconstruction of system improvements, including design, acquisition, engineering, and other costs attributable to the improvements, and also including the costs of providing additional public facilities needed to serve new growth and development. System improvement costs do not include:

(a) construction, acquisition, or expansion of public facilities other than capital improvements identified in the capital improvements plan;

(b) repair, operation, or maintenance of existing or new capital improvements;

(c) upgrading, updating, expanding, or replacing existing capital improvements to serve existing development in order to meet stricter safety, efficiency, environmental, or regulatory standards;

(d) upgrading, updating, expanding, or replacing existing capital improvements to provide better service to existing development;

(e) administrative and operating costs of the governmental entity; or

(f) principal payments and interest or other finance charges on bonds or other indebtedness except financial obligations issued by or on behalf of the governmental entity to finance capital improvements identified in the capital improvements plan.

SECTION 6-1-930. Developmental impact fee.

(A)(1) Only a governmental entity that has a comprehensive plan, as provided in Chapter 29 of this title, and which complies with the requirements of this article may impose a development impact fee. If a governmental entity has not adopted a comprehensive plan, but has adopted a capital improvements plan which substantially complies with the requirements of Section 6-1-960(B), then it may impose a development impact fee. A governmental entity may not impose an impact fee, regardless of how it is designated, except as provided in this article. However, a special purpose district or public service district which (a) provides fire protection services or

recreation services, (b) was created by act of the General Assembly prior to 1973, and (c) had the power to impose development impact fees prior to the effective date of this section is not prohibited from imposing development impact fees.

(2) Before imposing a development impact fee on residential units, a governmental entity shall prepare a report which estimates the effect of recovering capital costs through impact fees on the availability of affordable housing within the political jurisdiction of the governmental entity.

(B)(1) An impact fee may be imposed and collected by the governmental entity only upon the passage of an ordinance approved by a positive majority, as defined in Article 3 of this chapter.

(2) The amount of the development impact fee must be based on actual improvement costs or reasonable estimates of the costs, supported by sound engineering studies.

(3) An ordinance authorizing the imposition of a development impact fee must:

(a) establish a procedure for timely processing of applications for determinations by the governmental entity of development impact fees applicable to all property subject to impact fees and for the timely processing of applications for individual assessment of development impact fees, credits, or reimbursements allowed or paid under this article;

(b) include a description of acceptable levels of service for system improvements; and

(c) provide for the termination of the impact fee.

(C) A governmental entity shall prepare and publish an annual report describing the amount of all impact fees collected, appropriated, or spent during the preceding year by category of public facility and service area.

(D) Payment of an impact fee may result in an incidental benefit to property owners or developers within the service area other than the fee payor, except that an impact fee that results in benefits to property owners or developers within the service area, other than the fee payor, in an amount which is greater than incidental benefits is prohibited.

SECTION 6-1-940. Amount of impact fee.

A governmental entity imposing an impact fee must provide in the impact fee ordinance the amount of impact fee due for each unit of development in a project for which an individual building permit or certificate of occupancy is issued. The governmental entity is bound by the amount of impact fee specified in the ordinance and may not charge higher or additional impact fees for the same purpose unless the number of service units increases or the scope of the development changes and the amount of additional impact fees is limited to the amount attributable to the additional service units or change in scope of the development. The impact fee ordinance must:

(1) include an explanation of the calculation of the impact fee, including an explanation of the factors considered pursuant to this article;

(2) specify the system improvements for which the impact fee is intended to be used;

(3) inform the developer that he may pay a project's proportionate share of system improvement costs by payment of impact fees according to the fee schedule as full and complete payment of the developer's proportionate share of system improvements costs;

(4) inform the fee payor that:

(a) he may negotiate and contract for facilities or services with the governmental entity in lieu of the development impact fee as defined in Section 6-1-1050;

(b) he has the right of appeal, as provided in Section 6-1-1030;

(c) the impact fee must be paid no earlier than the time of issuance of the building permit or issuance of a development permit if no building permit is required.

SECTION 6-1-950. Procedure for adoption of ordinance imposing impact fees.

(A) The governing body of a governmental entity begins the process for adoption of an ordinance imposing an impact fee by enacting a resolution directing the local planning commission to conduct the studies and to recommend an impact fee ordinance, developed in accordance with the requirements of this article. Under no circumstances may the governing body of a governmental entity impose an impact fee for any public facility which has been paid for entirely by the developer.

(B) Upon receipt of the resolution enacted pursuant to subsection (A), the local planning commission shall develop, within the time designated in the resolution, and make recommendations to the governmental entity for a capital improvements plan and impact fees by service unit. The local planning commission shall prepare and adopt its recommendations in the same manner and using the same procedures as those used for developing recommendations for a comprehensive plan as provided in Article 3, Chapter 29, Title 6, except as otherwise provided in this article. The commission shall review and update the capital improvements plan and impact fees in the same manner and on the same review cycle as the governmental entity's comprehensive plan or elements of it.

SECTION 6-1-960. Recommended capital improvements plan; notice; contents of plan.

(A) The local planning commission shall recommend to the governmental entity a capital improvements plan which may be adopted by the governmental entity by ordinance. The recommendations of the commission are not binding on the governmental entity, which may amend or alter the plan. After reasonable public notice, a public hearing must be held before final action to adopt the ordinance approving the capital improvements plan. The notice must be published not less than thirty days before the time of the hearing in at least one newspaper of general circulation in the county. The notice must advise the public of the time and place of the hearing, that a copy of the capital improvements plan is available for public inspection in the offices of the governmental entity, and that members of the public will be given an opportunity to be heard.

(B) The capital improvements plan must contain:

(1) a general description of all existing public facilities, and their existing deficiencies, within the service area or areas of the governmental entity, a reasonable estimate of all costs, and a plan to develop the funding resources, including existing sources of revenues, related to curing the existing deficiencies including, but not limited to, the upgrading, updating, improving, expanding, or replacing of these facilities to meet existing needs and usage;

(2) an analysis of the total capacity, the level of current usage, and commitments for usage of capacity of existing public facilities, which must be prepared by a qualified professional using generally accepted principles and professional standards;

(3) a description of the land use assumptions;

(4) a definitive table establishing the specific service unit for each category of system improvements and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including residential, commercial, agricultural, and industrial, as appropriate;

(5) a description of all system improvements and their costs necessitated by and attributable to new development in the service area, based on the approved land use assumptions, to provide a level of service not to exceed the level of service currently existing in the community or service area, unless a different or higher level of service is required by law, court order, or safety consideration;

(6) the total number of service units necessitated by and attributable to new development within the service area based on the land use assumptions and calculated in accordance with generally accepted engineering or planning criteria;

(7) the projected demand for system improvements required by new service units projected over a reasonable period of time not to exceed twenty years;

(8) identification of all sources and levels of funding available to the governmental entity for the financing of the system improvements; and

(9) a schedule setting forth estimated dates for commencing and completing construction of all improvements identified in the capital improvements plan.

(C) Changes in the capital improvements plan must be approved in the same manner as approval of the original plan.

SECTION 6-1-970. Exemptions from impact fees.

The following structures or activities are exempt from impact fees:

(1) rebuilding the same amount of floor space of a structure that was destroyed by fire or other catastrophe;

(2) remodeling or repairing a structure that does not result in an increase in the number of service units;

(3) replacing a residential unit, including a manufactured home, with another residential unit on

the same lot, if the number of service units does not increase;

(4) placing a construction trailer or office on a lot during the period of construction on the lot;

(5) constructing an addition on a residential structure which does not increase the number of service units;

(6) adding uses that are typically accessory to residential uses, such as a tennis court or a clubhouse, unless it is demonstrated clearly that the use creates a significant impact on the system's capacity; and

(7) all or part of a particular development project if:

(a) the project is determined to create affordable housing; and

(b) the exempt development's proportionate share of system improvements is funded through a revenue source other than development impact fees.

SECTION 6-1-980. Calculation of impact fees.

(A) The impact fee for each service unit may not exceed the amount determined by dividing the costs of the capital improvements by the total number of projected service units that potentially could use the capital improvement. If the number of new service units projected over a reasonable period of time is less than the total number of new service units shown by the approved land use assumptions at full development of the service area, the maximum impact fee for each service unit must be calculated by dividing the costs of the part of the capital improvements necessitated by and attributable to the projected new service units by the total projected new service units.

(B) An impact fee must be calculated in accordance with generally accepted accounting principles.

SECTION 6-1-990. Maximum impact fee; proportionate share of costs of improvements to serve new development.

(A) The impact fee imposed upon a fee payor may not exceed a proportionate share of the costs incurred by the governmental entity in providing system improvements to serve the new development. The proportionate share is the cost attributable to the development after the governmental entity reduces the amount to be imposed by the following factors:

(1) appropriate credit, offset, or contribution of money, dedication of land, or construction of system improvements; and

(2) all other sources of funding the system improvements including funds obtained from economic development incentives or grants secured which are not required to be repaid.

(B) In determining the proportionate share of the cost of system improvements to be paid, the governmental entity imposing the impact fee must consider the:

(1) cost of existing system improvements resulting from new development within the service area or areas;

(2) means by which existing system improvements have been financed;

(3) extent to which the new development contributes to the cost of system improvements;

(4) extent to which the new development is required to contribute to the cost of existing system improvements in the future;

(5) extent to which the new development is required to provide system improvements, without charge to other properties within the service area or areas;

(6) time and price differentials inherent in a fair comparison of fees paid at different times; and

(7) availability of other sources of funding system improvements including, but not limited to, user charges, general tax levies, intergovernmental transfers, and special taxation.

SECTION 6-1-1000. Fair compensation or reimbursement of developers for costs, dedication of land or oversize facilities.

A developer required to pay a development impact fee may not be required to pay more than his proportionate share of the costs of the project, including the payment of money or contribution or dedication of land, or to oversize his facilities for use of others outside of the project without fair compensation or reimbursement.

SECTION 6-1-1010. Accounting; expenditures.

(A) Revenues from all development impact fees must be maintained in one or more interest-bearing accounts. Accounting records must be maintained for each category of system improvements and the service area in which the fees are collected. Interest earned on development impact fees must be considered funds of the account on which it is earned, and must be subject to all restrictions placed on the use of impact fees pursuant to the provisions of this article.

(B) Expenditures of development impact fees must be made only for the category of system improvements and within or for the benefit of the service area for which the impact fee was imposed as shown by the capital improvements plan and as authorized in this article. Impact fees may not be used for:

(1) a purpose other than system improvement costs to create additional improvements to serve new growth;

(2) a category of system improvements other than that for which they were collected; or

(3) the benefit of service areas other than the area for which they were imposed.

SECTION 6-1-1020. Refunds of impact fees.

(A) An impact fee must be refunded to the owner of record of property on which a development impact fee has been paid if:

(1) the impact fees have not been expended within three years of the date they were scheduled to be expended on a first-in, first-out basis; or

(2) a building permit or permit for installation of a manufactured home is denied.

(B) When the right to a refund exists, the governmental entity shall send a refund to the owner of record within ninety days after it is determined by the entity that a refund is due.

(C) A refund must include the pro rata portion of interest earned while on deposit in the impact fee account.

(D) A person entitled to a refund has standing to sue for a refund pursuant to this article if there has not been a timely payment of a refund pursuant to subsection (B) of this section.

SECTION 6-1-1030. Appeals.

(A) A governmental entity which adopts a development impact fee ordinance shall provide for administrative appeals by the developer or fee payor.

(B) A fee payor may pay a development impact fee under protest. A fee payor making the payment is not estopped from exercising the right of appeal provided in this article, nor is the fee payor estopped from receiving a refund of an amount considered to have been illegally collected. Instead of making a payment of an impact fee under protest, a fee payor, at his option, may post a bond or submit an irrevocable letter of credit for the amount of impact fees due, pending the outcome of an appeal.

(C) A governmental entity which adopts a development impact fee ordinance shall provide for mediation by a qualified independent party, upon voluntary agreement by both the fee payor and the governmental entity, to address a disagreement related to the impact fee for proposed development. Participation in mediation does not preclude the fee payor from pursuing other remedies provided for in this section or otherwise available by law.

SECTION 6-1-1040. Collection of development impact fees.

A governmental entity may provide in a development impact fee ordinance the method for collection of development impact fees including, but not limited to:

(1) additions to the fee for reasonable interest and penalties for nonpayment or late payment;

(2) withholding of the certificate of occupancy, or building permit if no certificate of occupancy is required, until the development impact fee is paid;

(3) withholding of utility services until the development impact fee is paid; and

(4) imposing liens for failure to pay timely a development impact fee.

SECTION 6-1-1050. Permissible agreements for payments or construction or installation of improvements by fee payors and developers; credits and reimbursements.

A fee payor and developer may enter into an agreement with a governmental entity, including an agreement entered into pursuant to the South Carolina Local Government Development Agreement Act, providing for payments instead of impact fees for facilities or services. That agreement may provide for the construction or installation of system improvements by the fee payor or developer and for credits or reimbursements for costs incurred by a fee payor or developer including interproject transfers of credits or reimbursement for project improvements which are used or shared by more than one development project. An impact fee may not be imposed on a fee payor or developer who has entered into an agreement as described in this section.

SECTION 6-1-1060. Article shall not affect existing laws.

(A) The provisions of this article do not repeal existing laws authorizing a governmental entity to impose fees or require contributions or property dedications for capital improvements. A development impact fee adopted in accordance with existing laws before the enactment of this article is not affected until termination of the development impact fee. A subsequent change or reenactment of the development impact fee must comply with the provisions of this article. Requirements for developers to pay in whole or in part for system improvements may be imposed by governmental entities only by way of impact fees imposed pursuant to the ordinance.

(B) Notwithstanding another provision of this article, property for which a valid building permit or certificate of occupancy has been issued or construction has commenced before the effective date of a development impact fee ordinance is not subject to additional development impact fees.

SECTION 6-1-1070. Shared funding among units of government; agreements.

(A) If the proposed system improvements include the improvement of public facilities under the jurisdiction of another unit of government including, but not limited to, a special purpose district that does not provide water and wastewater utilities, a school district, and a public service district, an agreement between the governmental entity and other unit of government must specify the reasonable share of funding by each unit. The governmental entity authorized to impose impact fees may not assume more than its reasonable share of funding joint improvements, nor may another unit of government which is not authorized to impose impact fees do so unless the expenditure is pursuant to an agreement under Section 6-1-1050 of this section.

(B) A governmental entity may enter into an agreement with another unit of government including, but not limited to, a special purpose district that does not provide water and wastewater utilities, a school district, and a public service district, that has the responsibility of providing the service for which an impact fee may be imposed. The determination of the amount of the impact fee for the contracting governmental entity must be made in the same manner and is subject to the same procedures and limitations as provided in this article. The agreement must

provide for the collection of the impact fee by the governmental entity and for the expenditure of the impact fee by another unit of government including, but not limited to, a special purpose district that does not provide water and wastewater utilities, a school district, and a public services district unless otherwise provided by contract.

SECTION 6-1-1080. Exemptions; water or wastewater utilities.

The provisions of this chapter do not apply to a development impact fee for water or wastewater utilities, or both, imposed by a city, county, commissioners of public works, special purpose district, or nonprofit corporation organized pursuant to Chapter 35 or 36 of Title 33, except that in order to impose a development impact fee for water or wastewater utilities, or both, the city, county, commissioners of public works, special purpose district or nonprofit corporation organized pursuant to Chapter 35 or 36 of Title 33 must:

(1) have a capital improvements plan before imposition of the development impact fee; and

(2) prepare a report to be made public before imposition of the development impact fee, which shall include, but not be limited to, an explanation of the basis, use, calculation, and method of collection of the development impact fee; and

(3) enact the fee in accordance with the requirements of Article 3 of this chapter.

SECTION 6-1-1090. Annexations by municipalities.

A county development impact fee ordinance imposed in an area which is annexed by a municipality is not affected by this article until the development impact fee terminates, unless the municipality assumes any liability which is to be paid with the impact fee revenue.

SECTION 6-1-2000. Taxation or revenue authority by political subdivisions.

This article shall not create, grant, or confer any new or additional taxing or revenue raising authority to a political subdivision which was not specifically granted to that entity by a previous act of the General Assembly.

SECTION 6-1-2010. Compliance with public notice or public hearing requirements.

Compliance with any requirement for public notice or public hearing in this article is considered to be in compliance with any other public notice or public hearing requirement otherwise applicable including, but not limited to, the provisions of Chapter 4, Title 30, and Article 3 of this chapter.