



COUNTY OF LEXINGTON

Residential Quality Assurance and Quality Control Checklist



The checklist serves as a guide for submissions to Lexington County. Adherence to additional regulations from other agencies is the responsibility of the design professional. This checklist is not a comprehensive list of all required design criteria for residential design and details. This checklist is not intended to serve as the only QC tool for designers. The goal of this checklist is to provide a baseline tool upon which designers may build their own QC procedures. Provide an electronic copy of the completed and signed checklist with all plan submittals. All site plans, details, calculations, and supporting documents must be prepared and sealed by a Professional Engineer registered in South Carolina.

Project Name: _____
Project Engineer: _____

Date: _____
Design Firm: _____

Each item in this checklist is assigned a primary reviewer based on its primary scope and area of expertise. The primary reviewer is the lead department responsible for ensuring compliance with the requirements outlined for that item. This designation does not preclude other departments—Land Development, Public Works, or Landscape—from reviewing or commenting on items that overlap with their responsibilities or expertise. Items are color coded per the legend to the right. Under the "Engineer Reference" column, include the sheets, range of sheets, or supporting documents where the information in the item number is provided. Use "N/A" for items that are not applicable to the plan set. Check boxes in the columns under "Lex Co Check" are for County personnel only.

Land Development Public Works
 Landscape General Items

Section A: Items Required on all Plan Sheets

Item Group	Item Number	Item Description	Reference	Engineer Reference	Lex Co Check		
					Yes	No	N/A
A1. Items Required on all Plan Sheets	A1.1	North arrow shown	LDM Appx. D Checklist				
	A1.2	Accurately label and display the scale	LDM Appx. D Checklist				
	A1.3	Legend shown and labeled	Lex Co Standard Practice				
	A1.4	Label adjacent properties with owner and tax map number	LDM Appx. D Checklist				
	A1.5	Match lines shown are in agreement with station alignments and appropriate pages	Lex Co Standard Practice				
	A1.6	Label phase lines if applicable	Lex Co Standard Practice				
	A1.7	For projects with more than three plan sub-sheets, provide an overall sheet layout showing key maps and match lines. Include key maps on all plan sub-sheets.	Lex Co Standard Practice				
	A1.8	Label existing and proposed roads on each sheet per the Lexington County Standard Practice	LDM Appx. D Checklist				
	A1.9	Label existing and proposed right-of-way lines. Proposed right-of-way is not needed on existing conditions, demolition, or erosion prevention and sediment control plans.	LDM 10.3.1				
	A1.10	Label lots with numbers. Not needed on existing conditions, demolition, or initial erosion prevention and sediment control plans.	LDM Appx. D Checklist				
	A1.11	Building Footprints provided. Not needed on existing conditions, demolition, or initial erosion prevention and sediment control plans.	LDM Appx. D Checklist				
	A1.12	Engineer address and contact information	LDM Appx. D Checklist				
	A1.13	Engineer's Seal and Certificate of Authorization	LDM Appx. D Checklist				
	A1.14	Ensure labels and design information on the plans are clear, legible, and easily distinguishable at the provided scale	Lex Co Standard Practice				
	A1.15	Revision box in the border with columns for revision number, description, and date	RDM 22.2.8.21				

Section B: Title Sheet

Item Group	Item Number	Item Description	Reference	Engineer Reference	Lex Co Check		
					Yes	No	N/A
B1. Sheet Specific Information	B1.1	Title of Subdivision	LDM Appx. D Checklist				
	B1.2	Municipality and/or County of subdivision location shown below name	LDM Appx. D Checklist				
	B1.3	Owner/subdivider/developer address and contact information	LDM Appx. D Checklist				
	B1.4	Owner's certification signature	LDM Appx. D Checklist				
	B1.5	Designer's certification signature	LDM Appx. D Checklist				
	B1.6	Surveyor address and contact information	LDM Appx. D Checklist				
	B1.7	Utility provider addresses and contact information	LDM Appx. D Checklist				
	B1.8	Date of initial plan submittal	LDM Appx. D Checklist				
	B1.9	Dates of revision plan submittals	LDM Appx. D Checklist				
	B1.10	Roads labeled on vicinity map per the Lexington County Standard Practice	LDM Appx. D Checklist				
	B1.11	Map properly depicts location	LDM Appx. D Checklist				
	B1.12	Project area clearly highlighted on map	LDM Appx. D Checklist				
	B1.13	Label coordinates (latitude and longitude in decimal degrees) of entrance intersection(s)	LDM Appx. D Checklist				
	B1.14	Benchmark Data: horizontal and vertical survey datum information	LDM Appx. D Checklist				

B2. Sheet Index	B2.0	Index with subtotals and total sheets. The following sheet order is preferred to facilitate a more efficient review:	Lex Co Standard Practice				
	B2.1	Cover Sheet	LDM Appx. D Checklist				
	B2.2	General Construction Notes	LDM Appx. D Checklist				
	B2.3	Existing Conditions and Demolition Plan	LDM Appx. D Checklist				
	B2.4	Demolition Plan (as needed)	LDM Appx. D Checklist				
	B2.5	Clearing Plan (as needed)	LOSO 3.2.3				
	B2.6	Surface Waters Protection Plan (as needed)	LDM Appx. D Checklist				
	B2.7	Trophy Tree Survey and Tree Preservation Plan (as needed)	LOSO 4.1.3				
	B2.8	Overall Layout Plan	LDM Appx. D Checklist				
	B2.9	Staking Plan	LDM Appx. D Checklist				
	B2.10	Roadway and Driveway Profiles	LDM Appx. D Checklist				
	B2.11	SCDOT Encroachment Plan (as needed)	LDM Appx. D Checklist				
	B2.12	Traffic Control, Signing, and Pavement Marking Plan	LDM Appx. D Checklist				
	B2.13	Initial - Erosion Prevention and Sediment Control Plan	LDM Appx. D Checklist				
	B2.14	Construction - Erosion Prevention and Sediment Control Plan (as needed)	LDM Appx. D Checklist				
	B2.15	Stabilization - Erosion Prevention and Sediment Control Plan	LDM Appx. D Checklist				
	B2.16	Erosion Prevention and Sediment Control Details	LDM Appx. D Checklist				
	B2.17	Overall Grading and Drainage Plan	LDM Appx. D Checklist				
	B2.18	Grading and Drainage Plan	LDM Appx. D Checklist				
	B2.19	Storm Drainage Profiles	LDM Appx. D Checklist				
	B2.20	Storm Drainage Pond Details	LDM Appx. D Checklist				
	B2.21	Spot Grading Plan	LDM Appx. D Checklist				

B2. Sheet Index	B2.22	Overall Sanitary Sewer Plan	LDM Appx. D Checklist			
	B2.23	Sanitary Sewer Plan	LDM Appx. D Checklist			
	B2.24	Sanitary Sewer Profiles	LDM Appx. D Checklist			
	B2.25	Overall Water Distribution Plan	LDM Appx. D Checklist			
	B2.26	Water Distribution Plan	LDM Appx. D Checklist			
	B2.27	Water Line Profiles	LDM Appx. D Checklist			
	B2.28	Other Utility Plans (as needed)	LDM Appx. D Checklist			
	B2.29	Composite Utility Plan	LDM Appx. D Checklist			
	B2.30	Utility Details	LDM Appx. D Checklist			
	B2.31	Landscape Plan	LDM Appx. D Checklist			
	B2.32	Lighting Plan (as needed)	LDM Appx. D Checklist			
	B2.33	Roundabout detail sheets (as needed)	LDM Appx. D Checklist			
	B2.34	Miscellaneous Details	LDM Appx. D Checklist			

Section C: General Construction Notes

Item Group	Item Number	Item Description	Reference	Engineer Reference	Lex Co Check		
					Yes	No	N/A
C1. General Construction Notes Information	C1.1	General Notes	LDM Appx. D Checklist				
	C1.2	Erosion and Sediment Control Notes	LDM Chapter 6				
	C1.3	Earthwork and Grading Notes (Reach out to Public Works for PDF)	LDM 10.5				
	C1.4	Utility Notes	LDM Appx. D Checklist				
	C1.5	Roadway and Paving Notes (Reach out to Public Works for PDF)	LDM 10.6				
	C1.6	Storm Water Management Notes	LDM Chapter 5				
	C1.7	Landscaping and Revegetation Notes	LOSO				
	C1.8	Construction Practices Notes	LDM Appx. D Checklist				
	C1.9	Construction Sequence Notes (Can be provided on Erosion Prevention and Sediment Control Plans)	LDM Appx. D Checklist				
	C1.10	Traffic Control Notes	SCDOT STD Drawings Sections 601 - 610				
	C1.11	Testing and Inspection Notes (Reach out to Public Works for PDF)	LDM 10.5				
	C1.12	SCDES Standard Notes	SCDES				
	C1.13	SCDOT Notes	ARMS Checklist				
	C1.14	Lexington County Notes	LDM Appx. D Checklist				
	C1.15	Lexington County Public Works General Notes (Reach out to Public Works for PDF)	Lex Co Standard Practice				
	C1.16	Municipality Notes	Municipality References				
	C1.17	Flood Statement	LDM Appx. D Checklist				
	C1.18	Miscellaneous Notes	LDM Appx. D Checklist				

Section D: Existing Conditions and Demolition Plan

Item Group	Item Number	Item Description	Reference	Engineer Reference	Lex Co Check		
					Yes	No	N/A
D1. Existing Information	D1.1	Label speed limits of existing roads	LDM Appx. D Checklist				
	D1.2	Location and size of all significant natural features including water ways and tree masses	LDM Appx. D Checklist				
	D1.3	Identify locations and size of delineated, jurisdictional wetlands	LDM Appx. D Checklist				
	D1.4	Identify and label all existing concentrated flow areas and natural or man-made drainage outfalls	LDM Appx. D Checklist				
	D1.5	Existing water, sewer, storm drainage structures and lines, power poles, overhead utilities and fire hydrants identified	LDM Appx. D Checklist				
	D1.6	Existing easements shown and labeled with width and party responsible for maintenance	Lex Co Standard Practice				
	D1.7	Conduct research on adjacent properties, including reviewing plats, to ensure all existing easements and structures are accurately identified and shown on the existing conditions plan	Lex Co Standard Practice				
	D1.8	Existing contours must be clearly shown and labeled with a minimum interval of 2 feet	LDM Appx. D Checklist				
	D1.9	Surveyor/survey information including survey datum and coordinate system	LDM Appx. D Checklist				
	D1.10	Monuments/benchmarks listed	LDM Appx. D Checklist				

D2. Demolition Information	D2.1	Show limits of disturbance	LDM Appx. D Checklist				
	D2.2	Label removal of existing drainage structures and drainage lines	Lex Co Standard Practice				
	D2.3	Label removal of existing asphalt features	Lex Co Standard Practice				
	D2.4	Label removal of existing concrete features	Lex Co Standard Practice				
	D2.5	Label removal of existing trees	Lex Co Standard Practice				
	D2.6	Label removal of any additional items	Lex Co Standard Practice				

Section E: Overall Layout Plan

Item Group	Item Number	Item Description	Reference	Engineer Reference	Lex Co Check		
					Yes	No	N/A
E1. Overall Layout Information	E1.1	Alignments are shown with tick marks at 50 foot increments. Station labels are not required.	RDM Fig. 22.2-D, 21.1.4				
	E1.2	Show tax map numbers for project and zoning information	LDM Appx. D Checklist				
	E1.3	Show site total area, total lots, and average lot size	Zoning Ordinance 122.10				
	E1.4	Show total number of proposed lots with lot types	Zoning Ordinance 122.10				
	E1.5	List all buffer and setback requirements	Zoning Ord. 23.20, 23.30				
	E1.6	Label common areas, access easements, buffers, and storm drainage ponds	Lex Co Standard Practice				
	E1.7	Show open space calculation	LOSO 4.1				
	E1.8	Show proposed road lengths to the nearest hundredth of a foot	RDM 21.1.4				
	E1.9	Show mail cluster box unit locations	Lex Co Standard Practice RDM 11.9				

Section F: Staking Plan								
Item Group	Item Number	Item Description	Reference	Engineer Reference	Lex Co Check			
					Yes	No	N/A	
F1. Sheet Specific Information	F1.1	Show lot size in square feet	LDM Appx. D Checklist					
	F1.2	Property lines shown with lengths	Subdivision Ord. 4.11					
	F1.3	Right-of-way labeled at beginning and end of each sheet	LDM 10.3.1					
	F1.4	Subdivisions with 150 or more lots must have a minimum of two full unimpeded access points. Additional entrances may be required upon recommendation from a Traffic Impact Study or an encroachment permit review.	LDM 10.3.13					
	F1.5	Dimension all proposed roadway features to convey the intent of the improvements	RDM 22.2.8.7					
F2. Horizontal Geometric Design	F2.1	Alignments and information properly labeled to include, at a minimum, PCs, PTs, and POTs.	RDM Fig. 22.2-D, 21.1.4					
	F2.2	Horizontal curve data includes PI, delta, degree, tangent, length, external, radius	RDM Fig. 22.2-D					
	F2.3	Alignments of all proposed roads and driveways, excluding individual low-volume residential driveways immediately within subdivisions, extend to the center line of any intersecting existing or proposed road	Lex Co Standard Practice					
	F2.4	Label lane widths at beginning and end of each sheet from edge of pavement (EOP) to center line	RDM Fig. 22.2-D					
	F2.5	Label lane widths at beginning and end of tapers	RDM Fig. 22.2-D					
	F2.6	Station numbers provided every 100 feet to the nearest foot and tick marks at 50 foot increments. Show station labels to the hundredths place as necessary.	RDM Fig. 22.2-D					
	F2.7	Lengths and bearings provided for all tangents	Lex Co Standard Practice					
	F2.8	Horizontal curves are provided at every point of intersection of tangents	RDM 5.2					
	F2.9	Horizontal curves meet minimum radius (150 feet or larger)	LDM 10.3.7					
	F2.10	Horizontal curves meet minimum length (three times design speed or larger)	RDM 5.2.5					
	F2.11	Avoid broken-back horizontal curves. Provide a tangent between successive curves of at least 25 times the design speed in length, or replace them with a single simple curve or a compound curve.	RDM 5.2.2.5 AASHTO GB 3.3.13					
	F2.12	Design to accommodate the largest expected vehicle per the SCDOT Roadway Design Manual. Use turning movement programs to confirm compliance in atypical intersections, intersections with islands, and intersections with acute angles. S-BUS-40 is the minimum for residential local roads.	RDM 3.7 RDM 9.2.5 RDM Fig. 9.2-D					
	F2.13	Proposed collector roads shall be planned and coordinated with Lexington County Public Works and designed to meet applicable County, State, and Federal guidelines	LDM Ch. 10, RDM Ch. 15 AASHTO GB Chapter 6					
F3. Intersections	F3.1	Label alignment intersection tie equalities	LDM 10.1.1 RDM 22.2.8.21					
	F3.2	Dimension alignment intersection angles	LDM 10.3.21					
	F3.3	Intersection radii meet the minimum of 25 feet. Intersections and/or driveways with higher percentages of non-passenger vehicle traffic must design the radii per the AASHTO Green Book.	LDM 10.3.21 AASHTO GB 9.6.1.4					
	F3.4	Dimension all radii at the edge of pavement	LDM 10.3.21.2					
	F3.5	Label curb width and type	LDM 10.3.11					
	F3.6	Minimum distance between point of tangency (PT) of a curve and beginning of a radius at the intersection is at least 25 feet	ARMS Fig. 5-19					
	F3.7	The beginning of the radius of a residential driveway is at least 10 feet from point of tangency of the intersecting roadway radius.	ARMS 3C-2					
	F3.8	Four-leg cross type intersections are designed so that opposing approaches line up with each other. Horizontal curves should not end or begin inside of intersections.	RDM Figure 9.2E ARMS Fig. 5-20					
	F3.9	Horizontal curve points of curvature and tangency shall be located outside the physical area of any intersection	AASHTO GB 9.2.3, 9.4					
F4. Sidewalks	F4.1	Sidewalks are outside of proposed Lexington County right-of-way	LC Policy LR 6/27/17					
	F4.2	Label all sidewalks and identify the party responsible for maintenance (e.g., "Maintained by HOA"). Include a note stating Lexington County will not maintain sidewalks. Avoid vague labels like "Privately Maintained."	Lex Co Standard Practice RDM 22.2.5.7					
	F4.3	Label and dimension all non-typical sidewalks	RDM 22.2.8.8					
	F4.4	The running slope of walking surfaces shall not be steeper than 1:20 (5.00%)	ADA 403.3					
	F4.5	ADA sidewalk ramps are provided and labeled	RDM 7.2.8.3					
	F4.6	ADA curb ramps are designed to SCDOT Standard Drawings Section 720-000	SCDOT STD 720-000					
	F4.7	Running slope of curb ramp must not exceed 1:12 (8.33%)	ADA 405.2, 406.1					
	F4.8	Cross slope of sidewalk and ramp runs shall not be steeper than 1:48 (2.08%)	ADA 403.3, 405.3					
	F4.9	The rise for any ramp run shall be 30 inches maximum	ADA 405.6					
	F4.10	The minimum length for any ramp landing shall be 5 feet	ADA Fig. 405.7, 406.4					
	F4.11	Curb ramp flares shall not be steeper than 1:10	ADA 406.3					
	F4.12	Detectable warning domes shall be used on curb ramps	ADA 705					
	F4.13	Curb ramps are not located in a low point	Lex Co Standard Practice					
F5. Other Horizontal Geometric Design Features	F5.1	Design the subdivision left-turn exit in compliance with Lexington County criteria	LDM 10.3.14					
	F5.2	Reverse curves used where the turn lane taper is painted	RDM 9.5.2.2					
	F5.3	Straight tapers used for curb and gutter, and concrete island tapers	RDM 9.5.2.2					
	F5.4	Tapers meet minimum lengths	ARMS Fig. 5-21, Fig. A-8					
	F5.5	Label tapers with station and width callouts	RDM Fig. 22.2-D					
	F5.6	Label curb transitions and provide details (e.g., vertical to rolled, rolled to shoulder)	Lex Co Standard Practice					
	F5.7	Roadway and commercial driveway throats meet the minimum required lengths	ARMS Fig. 3-5					
	F5.8	Driveway spacing meets requirements. This requirement does not apply to individual low-volume residential driveways located within subdivisions.	ARMS Fig. 3-7					
	F5.9	Concrete medians and/or islands are properly designed and labeled	LDM 10.3.17 SCDOT STD 720-105-03					
	F5.10	Minimum median openings provided for abutting properties with adequate sight distance at each location	LDM 10.3.17.1					
	F5.11	Entrance islands are designed per the Land Development Manual Standards	LDM 10.3.17.2					
	F5.12	Cul-de-sacs and turn arounds meet the Land Development Manual Standards	LDM 10.3.18					
	F5.13	On-street parking for mail cluster box units (CBU) follows Lexington County turnout and/or cul-de-sac standards or CBUs are placed in an amenity area	Lex Co STD Drawings					
	F5.14	Label who is to maintain on-street parking. Lexington County will not maintain on-street parking.	Lex Co Standard Practice					
	F5.15	A 20 foot all-weather access road shall be dedicated to Lexington County within the pond parcel. Label entrance gates.	LDM 5.1.3					
	F5.16	Ponds that are to be maintained by Lexington County shall have the following language on staking plan sheets and all plats. "Pond to be dedicated to Lexington County upon recording of final plat."	Lex Co Standard Practice					
	F5.17	Residential developments with 200 or more lots must include a left turn lane at every entrance. Developments with fewer than 200 lots must also provide a left turn lane if accessing an arterial or specific collector roads. Contact Lexington County Public Works to determine if the additional left turn lane is applicable.	LDM 10.3.14					
	F5.18	Concrete keys are placed at the end of any pavement section expected to be extended by the developer in the future	LDM 10.3.15					
	F5.19	Any non-standard horizontal design must be supported by thorough research and modeling to demonstrate the design can safely accommodate two design vehicles passing each other at the design speed for the specified roadway section	Lex Co Standard Practice RDM 2.2.7, 2.2.8, 2.2.11					

F6. Right-of-Way and Easements	F6.1	Any development encompassing existing County Roads which do not have the standard 50 foot right-of-way shall dedicate this standard 50 foot width, or 25 feet on the side to be developed, to Lexington County	LDM 10.3.1.2				
	F6.2	Label all easements with their widths and identify the party responsible for maintenance (e.g., "Maintained by HOA"). Avoid vague labels such as "Privately Maintained."	LDM 5.1				
	F6.3	Easements must not be located within the footprint of any building	Subdivision Ord. 5.22				
	F6.4	Do not show private storm drainage easement hatches within the proposed County right-of-way or within existing or proposed County parcels. Label pipes with a leader or symbol to identify the party responsible for maintenance.	Lex Co Standard Practice				
	F6.5	Lexington County easements or portions of Lexington County easements shall not be shown as hatches inside of any proposed or existing County right-of-way or proposed or existing County parcels	Lex Co Standard Practice				
	F6.6	Easements should be centered on and run parallel to the storm drainage or utility line, with width adjustments made perpendicular to the line as needed	Lex Co Standard Practice				
	F6.7	Show easements with black patterned hatches and provide a legend	Lex Co Standard Practice				
	F6.8	All storm drainage pipe easement widths meet Lexington County requirements	LDM 5.1.1				
	F6.9	Lexington County will maintain storm drainage systems serving proposed County-maintained roadways only and will not assume responsibility for systems on private properties or common areas	Lex Co Standard Practice				
	F6.10	Open channel easement widths meet Lexington County requirements	LDM 5.1.2				
	F6.11	Storm drainage easements are consistent with the storm drainage profile sheets	Lex Co Standard Practice				
	F6.12	If the sight lines extend beyond the roadway right-of-way, sight easements must be provided on affected lots. These easements must be shown on the staking and alignment plan sheets as well as all subdivision plats.	Zoning Ord. 22.15 AASHTO GB 3.2.6.3 AASHTO RDG 10.1.3				
Section G: Roadway and Driveway Profiles							
Item Group	Item Number	Item Description	Reference	Engineer Reference	Lex Co Check		
					Yes	No	N/A
G1. Sheet Specific Information	G1.1	Accurately label and display the horizontal and vertical scale	LDM Appx. D Checklist				
	G1.2	Match lines are shown and labeled with station numbers and other necessary notes	Lex Co Standard Practice				
	G1.3	Profile grid utilized	RDM Fig. 22.2-F				
	G1.4	Station numbers are shown at the bottom of the profile grid	RDM Fig. 22.2-F				
	G1.5	Elevation numbers are shown along the left and right sides of the profile grid	RDM Fig. 22.2-F				
	G1.6	Beginning and ending of profiles are labeled with the necessary identifiers and agree with plan sheets	Lex Co Standard Practice				
G2. Vertical Geometric Design	G2.1	Vertical curves are coordinated with horizontal alignment to avoid compound or unsafe design elements	RDM 6.2.2 AASHTO GB Fig. 3-40				
	G2.2	K-values meet required minimum values	LDM 10.3.8, RDM 6.5				
	G2.3	Vertical curves meet the minimum length of three times the design speed	RDM 6.5.1.2, 6.5.2.2				
	G2.4	Avoid broken-back vertical curves. Provide a tangent between successive curves of at least 25 times the design speed in length, or replace them with a single simple curve or a compound curve.	RDM 6.2.1 AASHTO GB 3.4.6.5				
	G2.5	Grades fall within the acceptable minimum and maximum range	LDM 10.3.9				
	G2.6	Label existing ground profile. A legend is acceptable for this item.	RDM 22.2.8.12				
	G2.7	Label proposed ground profile. A legend is acceptable for this item.	RDM Fig. 22.2-F				
	G2.8	Label all proposed tangent slopes to include before and after match lines	Lex Co Standard Practice				
	G2.9	Label all VPC, VPI, and VPT stations and elevations, vertical curve K-values, lengths, high points, and low points	RDM 22.2.8.5.2				
	G2.10	Label existing and proposed profile elevations at 50 foot intervals at the bottom of the grid for each profile	RDM 22.2.8.5.2				
G3. Intersection Vertical Alignment	G3.1	Landing area and approach grade properly designed	RDM 9.2.7.1				
	G3.2	Sag and crest breaks properly designed	RDM Fig. 9.2-F				
	G3.3	Label all alignment intersection tie equalities	LDM 10.1.1 RDM 22.2.8.21				
	G3.4	Label any existing roadway cross slopes at intersections	Lex Co Standard Practice				
	G3.5	Provide profiles for commercial driveways and residential driveways connecting to existing roads. Low-volume residential driveways within the subdivision are exempt from this requirement.	ARMS Fig. 3-4				
G4. Notes and Utilities	G4.1	Include compaction note on all roadway profile sheets	LDM 4.2.1.7				
	G4.2	Include embankment note on all roadway profile sheets	LDM 10.5				
	G4.3	Storm drainage and utility lines crossings shown on roadway profiles	LDM 4.2.1.6				
	G4.4	Storm drainage and utility lines crossings meet minimum cover requirements	LDM 4.2.1.6				
Section H: Traffic Control, Signing, and Pavement Marking Plan							
Item Group	Item Number	Item Description	Reference	Engineer Reference	Lex Co Check		
					Yes	No	N/A
H1. Sight Distance	H1.1	Ensure stopping sight distance (SSD) is provided and meets the horizontal and vertical minimum requirements (115 feet SSD for 20 MPH design speed) and is shown on the plans where necessary	LDM 10.3.6 RDM 4.1				
	H1.2	Ensure horizontal sight line offset is met and line of sight remains inside of road right-of-way with no obstructions. This includes parking stalls, buildings, walls, trees, and other objects.	LDM 10.3.23 RDM 5.4				
	H1.3	Show intersection sight distance (ISD) triangles on plan sheet for each intersection (225 feet ISD for 20 MPH design speed). Show the complete calculations where adjustments are made to ISD for grades over 3.00%.	ARMS 7B, Fig. 7-23				
	H1.4	Intersection sight distance profiles must be provided for all intersections where the intersection sight distance triangles fall within a horizontal curve or a vertical curve. Use driver and object heights provided in ARMS Section 7B.3.	ARMS 7B.3 AASHTO GB 3.2.6.3, 9.5.2.3				
	H1.5	If the sight lines extend beyond the roadway right-of-way, sight easements must be provided on affected lots. These easements must be shown on the staking and alignment plan sheets as well as all subdivision plats.	Zoning Ord. 22.15 AASHTO GB 3.2.6.3 AASHTO RDG 10.1.3				
	H1.6	View angles from intersection sight distance triangles shall not be smaller than 75 degrees	AASHTO GB 9.3.2.2, 9.5.4 NCHRP 1043 9.5.4				

H2. Traffic Control	H2.1	Alignments are shown with station labels and tick marks at 50 foot increments	RDM Fig. 22.2-D			
	H2.2	Work zone traffic control narrative, drawings, sequencing, and signing comply with SCDOT standard drawings	RDM 22.2.10 SCDOT STD Drawings Sections 601 - 610			
	H2.3	Label proposed signing per SCDOT numbering convention	SCDOT STD 651-115-XX SCDOT Suppl. MUTCD			
	H2.4	Show an "All Roads In Subdivision" sign above the R2-1-20 "Speed Limit" sign at all subdivision entrances	Lex Co Standard Practice			
	H2.5	Install W14-2-30 "No Outlet" sign at the entrance to a subdivision from which there is no other exit	LDM 10.7			
	H2.6	Place "Privately Maintained" signs on all proposed privately maintained street signs	LDM 10.7			
	H2.7	Street signs are placed on the same post as R1-1-36 "Stop" signs	Lex Co Standard Practice			
	H2.8	24 inch wide stop bars are provided 4 feet to 10 feet from the edge of travel at intersections	SCDOT STD 625-305			
	H2.9	Provide a table showing the sign types and quantities for the project. Signage fees are not necessary to show on the table.	LDM 10.7			
	H2.10	Design and label pavement markings per SCDOT standard drawings	RDM 22.2.13 SCDOT STD 625-000			
	H2.11	Left turn lanes shall have a minimum storage length of 50 feet, or longer if recommended by a traffic study. Include turning arrows and painted reverse curve tapers.	LDM 10.3.14 ARMS Fig. A-8 RDM Fig. 9.5-H			
	H2.12	Residential entrances must include at least 50 feet of solid double yellow lines extending from the stop bar	Lex Co Standard Practice			
	H2.13	All pavement markings are noted and/or labeled as thermoplastic	LDM 10.8			

Section I: Erosion Prevention and Sediment Control Plans

Item Group	Item Number	Item Description	Reference	Engineer Reference	Lex Co Check		
					Yes	No	N/A
I1. Sheet Specific Information	I1.1	Storm Water Pollution Prevention Plan submitted to the Lexington County Land Development Department	LDM Chapter 6				
	I1.2	Limits of disturbance shown for each stage	LDM Chapter 6				
	I1.3	Area of disturbance is shown for each stage to the nearest tenth of an acre	LDM Chapter 6				
	I1.4	Erosion Prevention and Sediment Control Plans, at a minimum, shall include the following stages:	LDM Appx. D Checklist				
	I1.5	Initial - Erosion Prevention and Sediment Control Plan	LDM Appx. D Checklist				
	I1.6	Construction - Erosion Prevention and Sediment Control Plan (for land disturbance greater than 10 acres)	LDM Appx. D Checklist				
	I1.7	Stabilization - Erosion Prevention and Sediment Control Plan	LDM Appx. D Checklist				
	I1.8	Existing and proposed contours must be clearly shown and labeled with a minimum interval of 2 feet	LDM Appx. D Checklist				
	I1.9	Construction sequence related to the plan	LDM Appx. D Checklist				
	I1.10	Label proposed drainage structures with structure number and structure type	LDM Appx. D Checklist				
	I1.11	Show individual lot grading	LDM Appx. D Checklist				
	I1.12	All BMPs, whether privately or Lexington County maintained, must be located in appropriate easements and allow easy access for maintenance	LDM 3.2.2.5				
	I1.13	Locations of the following, labeled and referenced in the legend:	LDM Appx. D Checklist				
	I1.14	Concrete wash-out	LDM Appx. D Checklist				
	I1.15	Construction entrance(s)	LDM Appx. D Checklist				
	I1.16	Silt fencing (wire backed/steel posts)	LDM Appx. D Checklist				
	I1.17	Stockpiles of waste, borrow, and/or offsite materials	LDM Appx. D Checklist				
	I1.18	Inlet protection	LDM Appx. D Checklist				
	I1.19	Construction equipment storage areas, including roll-off containers	LDM Chapter 11				
	I1.20	Floodplain/floodway	LDM Appx. D Checklist				
	I1.21	Water quality buffer signs	LDM Appx. D Checklist				
	I1.22	Areas not to be disturbed	LDM Chapter 2 SCDES CGP 72-307				
	I1.23	All Waters of the State (Wetlands/streams/ponds)	LDM Appx. D Checklist				

I2. Pond Information	I2.1	Fore-bay(s)	LDM Appx. D Checklist				
	I2.2	Clean-out stake(s)	LDM Appx. D Checklist				
	I2.3	Baffles	LDM Appx. D Checklist				
	I2.4	Skimmer(s)	LDM Appx. D Checklist				

Section J: Erosion Prevention and Sediment Control Details

Item Group	Item Number	Item Description	Reference	Engineer Reference	Lex Co Check		
					Yes	No	N/A
At a minimum, the following details shall be provided as needed. Other details shall be provided to fully describe the work to be performed on a project.							
J1. Erosion Prevention and Sediment Control Details	J1.1	Fore-bay	Lex Co, SCDES Standards				
	J1.2	Skimmer	Lex Co, SCDES Standards				
	J1.3	Baffles	Lex Co, SCDES Standards				
	J1.4	Tracking	Lex Co, SCDES Standards				
	J1.5	Seeding	Lex Co, SCDES Standards				
	J1.6	Matting with manufacturer's specifications	Lex Co, SCDES Standards				
	J1.7	Berm	Lex Co, SCDES Standards				
	J1.8	Swale	Lex Co, SCDES Standards				
	J1.9	Temporary diversion swale	Lex Co, SCDES Standards				
	J1.10	Slope drain	Lex Co, SCDES Standards				
	J1.11	Velocity dissipater	Lex Co, SCDES Standards				
	J1.12	Level spreader	Lex Co, SCDES Standards				
	J1.13	Inlet protection (before paving)	Lex Co, SCDES Standards				
	J1.14	Inlet protection (after paving)	Lex Co, SCDES Standards				
	J1.15	Silt fence (wire backed)	Lex Co, SCDES Standards				
	J1.16	Silt fence rock outlet	Lex Co, SCDES Standards				
	J1.17	Construction entrance	Lex Co, SCDES Standards				
	J1.18	Clean-out stake	Lex Co, SCDES Standards				
	J1.19	Check dams	Lex Co, SCDES Standards				
	J1.20	Concrete wash-out	Lex Co, SCDES Standards				
	J1.21	Stockpile	Lex Co, SCDES Standards				
	J1.22	Bore pit	Lex Co, SCDES Standards				
	J1.23	Water quality buffer signs	Lex Co, SCDES Standards				
	J1.24	Emergency spillway with elevations	Lex Co, SCDES Standards				
	J1.25	Trash rack outlet structure top (peaked)	Lex Co, SCDES Standards				

Section K: Overall Grading and Drainage Plan								
Item Group	Item Number	Item Description	Reference	Engineer Reference	Lex Co Check			
					Yes	No	N/A	
K1. Sheet Specific Information	K1.1	Existing and proposed contours must be clearly shown and labeled with a minimum interval of 2 feet	Lex Co Standard Practice					
	K1.2	Alignments are shown with station labels and tick marks at 50 foot increments	RDM Fig. 22.2-D					
	K1.3	Label existing drainage features	LDM 10.1.1					
	K1.4	Label proposed drainage structures with structure number and structure type	LDM 10.1.1					
	K1.5	Show proposed drainage pipes. Do not label pipes on the overall grading and drainage plan.	LDM 10.1.1					
	K1.6	Label proposed drainage ponds	LDM 10.1.1					
	K1.7	Show all residential and commercial driveways	LDM 10.3.24					
	K1.8	Remove all temporary BMPs except fore-bays	LDM Appx. D Checklist					
	K1.9	Show all well and septic drain field locations	LDM Appx. D Checklist					

Section L: Grading and Drainage Plan								
Item Group	Item Number	Item Description	Reference	Engineer Reference	Lex Co Check			
					Yes	No	N/A	
L1. Sheet Specific Information	L1.1	Existing and proposed contours shown and labeled at least at 2 foot intervals	Lex Co Standard Practice					
	L1.2	Alignments are shown with station labels and tick marks at 50 foot increments	RDM Fig. 22.2-D					
	L1.3	Label existing drainage features	LDM 10.1.1					
	L1.4	Assess the condition and functionality of existing structures and perform hydraulic analyses of drainage features connecting to the proposed system, both upstream and downstream.	LDM 3.1, 3.2.1.2					
	L1.5	Show all residential and commercial driveways	LDM 10.3.24					
	L1.6	Label all high points and low points along the roadway	Lex Co Standard Practice					
	L1.7	Label all drainage easements with width of easement and identify the party responsible for maintenance (e.g., "HOA Storm Drainage Easement"). Avoid vague labels like "Privately Maintained."	LDM 5.1					
	L1.8	Do not show private drainage easement hatches within the proposed Lexington County right-of-way. Label pipes with a leader or symbol to identify the party responsible for maintenance.	Lex Co Standard Practice					
	L1.9	Remove all temporary BMPs except fore-bays	LDM Appx. D Checklist					
	L1.10	All BMPs, whether privately or Lexington County maintained, must be located in appropriate easements and allow easy access for maintenance	LDM 3.2.2.5					
	L1.11	Show all well and septic drain field locations	LDM Appx. D Checklist					

L2. Drainage Inlets and Structures	L2.1	Label proposed drainage structures with structure number and structure type	LDM 10.1.1					
	L2.2	Structures must be outside of intersection curve radii	LDM 4.2.5.9, 10.3.4					
	L2.3	Catch basins are located on the uphill side of intersections	LDM 10.3.4					
	L2.4	Type 2 catch basins shall be used where the roadway longitudinal slope is equal to or greater than 5.00%	Lex Co Standard Practice					
	L2.5	Storm water box locations, to include the curb flares from the face of inlet to the EOP, shall have a minimum of 3 feet of lateral clearance from a driveway radius and/or flare. Place inlets near lot side property lines at FOC unless impractical.	LDM 10.3.4					
	L2.6	Use only curb opening inlets for roadway drainage, as grate inlets extending into the pavement can hinder subgrade compaction, asphalt placement, and maintenance	LDM 4.2.5.7 FHWA HEC-22 7.1.1					
	L2.7	Permanent water quality BMPs are not allowed in inlet structures	LDM 3.10 Lex Co Standard Practice					
	L2.8	Storm water outside of the road right-of-way shall be intercepted and conveyed in a drainage system upstream of any sidewalk. Storm water flow across sidewalks should be minimized.	AASHTO PED 4.1.4					

L3. Drainage Pipes and Culverts	L3.1	Storm drainage lines show inverts (in and out), diameter, material type, length, slope of pipe, and design flow rate in cubic feet per second. A table format is acceptable.	LDM Appx. D Checklist					
	L3.2	Drainage pipes shall be at least 15 inches in diameter	LDM 4.2.1.2					
	L3.3	Pipe slopes shall be no less than 0.50% or a minimum flow velocity of 3 feet per second	LDM 4.2.1.3					
	L3.4	Type and class of storm drainage pipe shall be in accordance with SCDOT Supplemental Technical Specs Section 714	LDM 4.2.1.5					
	L3.5	Storm drainage pipes that run under curb and gutter, roadway pavement, or through dams shall be reinforced concrete pipe (RCP)	LDM 4.2.1.5 Lex Co Standard Practice					
	L3.6	Pipe is placed perpendicular, that is 90 degrees, to the roadway, and in no case less than 45 degrees	LDM 4.2.1.7					
	L3.7	Culverts shall extend at least 5 feet from the roadway shoulder and to the toe of roadway embankment	LDM 4.2.1.8					
	L3.8	Storm drainage pipes must discharge into drainage channels at a minimum interior angle of 90 degrees. Rip-rap or suitable protection is required at the outlet and opposite channel bank to prevent scour and erosion.	LDM 4.2.1.9					
	L3.9	Storm drainage pipes discharging below the permanent pool of a wet pond must be analyzed to prevent adverse tail water impacts on drainage capacity or flooding. Pipes discharging above the permanent pool require rip-rap or energy dissipation structures to control velocities and minimize erosion or resuspension of solids.	LDM 4.2.1.10					
	L3.10	Provide maintenance access points every 300 feet for 15 inch to 18 inch pipes, every 400 feet for 24 inch pipes, and every 500 feet for larger storm drainage pipes	LDM 4.2.1.11					
	L3.11	Outlet should be designed to resist undermining and washout. Rip-rap aprons, flared end sections, wing walls, or other means shall be sized and specified, as necessary.	LDM 4.2.2.2					
	L3.12	Culvert selection may involve empirical formulas, nomographs, charts, or comprehensive hydraulic analysis. Alternative models are allowed but require Lexington County approval.	LDM 4.2.2.4					
	L3.13	Lexington County storm drainage easements or portions of Lexington County storm drainage easements shall not be shown as hatches inside of any proposed or existing County right-of-way or proposed or existing County parcels	Lex Co Standard Practice					
	L3.14	Drainage pipes and other connections must join at a drainage box such as a catch basin or yard inlet. Products similar to "Inserta Tee Lateral Connection" are not allowed.	Lex Co Standard Practice					

L4. Outlets and Energy Dissipation	L4.1	All exposed ends of pipes shall be protected by a flared end section or a headwall	LDM 4.2.3					
	L4.2	Crossline and sideline pipes shall be beveled on both ends	RDM 20.5.2.4, 20.5.2.5 PPG Chapter 9 Section 11					
	L4.3	Pipes larger than 24 inches require a concrete headwall, while pipes 24 inches or smaller may use a rip-rap headwall	LDM 4.2.3.1, 4.2.3.2					
	L4.4	Outfalls from new development must discharge through a 50 foot natural buffer from the property line where no existing channel exists. An energy dissipater is required to reduce velocity and convert flow to sheet flow before entering the buffer. For discharges into a channel, a stabilized outlet must prevent erosion.	LDM 4.2.3.3, 4.2.6.2					
	L4.5	Outlets are not allowed to discharge on to fill slopes	LDM 4.2.3.4					
	L4.6	All concentrated discharge points shall be sufficiently stabilized, or have energy dissipating devices added	LDM 4.2.4.1					
	L4.7	Include dimensions for all rip-rap aprons. Include exit velocities at the end of pipe and end of rip-rap. This can be provided in a table format.	LDM 4.3.3					
	L4.8	Evaluate the need for guardrail at culvert headwalls. Ensure adequate horizontal clearance and clear zones per AASHTO Roadside Design Guide. Provide a cross section showing clear zone and slopes.	AASHTO RDG					

L5. Ditches and Swales	L5.1	Label ditches and swales including flow arrows	LDM Appx. D Checklist				
	L5.2	Provide design details for each swale configuration (width, depth, side-slopes, and longitudinal slopes). Typical details are not allowed for sites with multiple swale designs. Yard swales (non-collector swales) should refer to typical details on the plans and detail sheets.	4.3.1.1				
	L5.3	Culvert analysis, swale/ditch analysis, and channel lining analysis follow the SCDOT Hydraulic Design Manual Part 2: Requirements for Roadway Drainage. Channels and ditches must be designed for the 25 year storm event.	LDM 4.2.1 HDM Part 2				
	L5.4	Flow velocity maximums are 5 feet per second for clayey soils and 2.5 feet per second for sandy soils	LDM 4.3.3				
	L5.5	Minimum channel grade shall be 0.50%	LDM 4.3.4				
	L5.6	Channels with slopes steeper than 3H:1V must be utilize rolled erosions products or turf reinforcement matting	LDM 4.3.6				

L6. Storm Drainage Ponds	L6.1	Label proposed drainage ponds	LDM 10.1.1				
	L6.2	Minimum of a 10 foot setback provided between property line and a fill slope or retaining wall	LDM 4.2.6.1				
	L6.3	Minimum of a 50 foot buffer provided between property line and drainage outfall	LDM 4.2.6.2				
	L6.4	Emergency spillway provided and designed to safely pass the 100 year storm event	LDM 4.2.6.3				
	L6.5	Reinforced concrete pipe is the only pipe type allowed through pond dams	LDM 4.2.6.4				
	L6.6	Ponds to be dedicated to Lexington County shall have a 6 foot tall fence around the perimeter of the pond parcel with two eight foot swing gates for access to the pond. Show and label these components on the plans.	LDM 4.2.6.5				
	L6.7	Ponds to be dedicated to Lexington County have 20 foot all weather access road to the pond included in the parcel	LDM 5.1.3				
	L6.8	The pond shall include a 10 foot all weather riding surface on the top of the pond dam	LDM 5.1.3				
	L6.9	The pond parcel shall include a minimum 10 foot wide strip around the perimeter of all detention and retention facilities extending from the outside toe of the pond dam. All pond features must have dedicated access for maintenance.	LDM 5.1.3				
	L6.10	Ponds shall avoid creating stagnant water conditions	LDM 4.2.6.8				
	L6.11	Embankments inside ponds shall be less than 15 feet in height	LDM 4.2.6.9				
	L6.12	Pond inner and outer embankment slopes shall be 3H:1V or flatter	LDM 4.2.6.9				
	L6.13	A minimum of 1 foot of freeboard above the 100 year, 24 hour design storm is provided	LDM 4.2.6.10				
	L6.14	Pond bottom is designed and labeled with at least a 0.50% slope	LDM 4.2.6.11				
	L6.15	Include anti-seep collars or cut-off walls for pipes passing through embankments	Lex Co Standard Practice				

Section M: Storm Drainage Profiles							
Item Group	Item Number	Item Description	Reference	Engineer Reference	Lex Co Check		
					Yes	No	N/A
M1. Sheet Specific Information	M1.1	Accurately label and display the horizontal and vertical scale	LDM Appx. D Checklist				
	M1.2	Match lines are shown and labeled with station numbers and other necessary notes	Lex Co Standard Practice				
	M1.3	Profile grid utilized	RDM Fig. 22.2-F				
	M1.4	Station numbers are shown at the bottom of the profile grid	RDM Fig. 22.2-F				
	M1.5	Elevation numbers are shown along the left and right sides of the profile grid	RDM Fig. 22.2-F				

M2. Storm Drainage Profile Design Criteria	M2.1	Each run of pipe or channel shall indicate size, length, material type, design slope, manhole elevation, inlet elevation, invert in and invert out, and design flow in cubic feet per second	LDM Appx. D Checklist Lex Co Standard Practice				
	M2.2	Label existing and proposed drainage structures with structure number and structure type	Lex Co Standard Practice				
	M2.3	Permanent water quality BMPs are not allowed in inlet structures	LDM 3.10				
	M2.4	Sumps in boxes are not allowed. Storm water must travel through the boxes and not be at a standstill.	Lex Co Standard Practice				
	M2.5	The hydraulic grade line for the design storm event shall be shown in all pipes and structures. Label or add to legend.	LDM 4.2				
	M2.6	Pipe slopes shall be no less than 0.50% or a minimum flow velocity of 3 feet per second	LDM 4.2.1.3				
	M2.7	Minimum of 1 foot of cover is provided for storm drainage pipes	LDM 4.2.1.6				
	M2.8	Pipes shall be placed at least 6 inches below the base course	LDM 4.2.1.6				
	M2.9	Drainage structures shall contain a minimum drop of 0.20 feet from invert in to invert out	LDM 4.2.5.10				
	M2.10	The elevation at the crown of any inlet pipe shall be equal to or greater than the crown of the outlet pipe	LDM 4.2.5.12				
	M2.11	Label information of culverts 48 inches and larger on profile per the SCDOT Hydraulic Design Manual Sections 2.3 and 2.4.1. The requirement for hydraulic information will be determined on a case by case basis in consultation with LCPW.	RDM 22.2-F PPG Figure 5-A				
	M2.12	Utility lines meet a vertical clearance of at least 12 inches between storm drainage lines	Lex Co Standard Practice				
	M2.13	Utility lines meet a horizontal clearance of at least 36 inches between storm drainage lines	Lex Co Standard Practice				

M3. Storm Drainage Profile Notes and Labels	M3.1	Include compaction note on all storm drainage profile sheets	LDM 4.2.1.7				
	M3.2	Show all drainage easements with labels to describe maintenance and width	LDM 5.1				
	M3.3	Storm drainage pipe easement widths meet Lexington County requirements	LDM 5.1.1				
	M3.4	Existing ground profile shown and labeled	RDM 22.2.8.12				
	M3.5	Proposed ground profile shown and labeled	RDM Fig. 22.2-F				
	M3.6	All "wet" utility lines shown on storm drainage profiles. Other utilities will be shown on as-built plan sheets.	RDM 6.2.3.3.10				

Section N: Storm Drainage Pond Details							
Item Group	Item Number	Item Description	Reference	Engineer Reference	Lex Co Check		
					Yes	No	N/A
N1. Storm Drainage Pond Details	N1.1	Detail of outlet structure (pre-construction and post-construction configuration) and cross-section of the dam, including elevations and dimensions that correspond to the calculations	LDM 5.1.3 LDM Fig. 3-6 SCDHEC STD WQ-03				
	N1.2	Include outlet structure pre-construction to post-construction configuration directions	LDM 3.9.7				
	N1.3	Sediment fore bays are shown at all pond inlets containing 10% of total flow, individually or collectively.	LDM 3.8.1, 3.10.1.6 LDM Appx. D Checklist GA SWMM 4.5.6				
	N1.4	Inlet structures with headwalls labeled	LDM 4.2.3				
	N1.5	Outlet structures shown along with details for pre-construction and post-construction configurations	LDM Appx. D Checklist				
	N1.6	Orifice diameters for CP _v control of less than 3 inches are not allowed without adequate clogging protection	LDM 3.6.2				
	N1.7	Trash racks or debris screens included on risers	LDM Appx. D Checklist				
	N1.8	Pre-construction pond configuration	LDM 3.9.7.7 LDM Appx. D Checklist				
	N1.9	During construction pond configuration	LDM 3.9.7.7 LDM Appx. D Checklist				
	N1.10	Post construction pond configuration	LDM 3.9.7.7 LDM Appx. D Checklist				
	N1.11	Include dewatering time calculations for the 10 year storm event	LDM Appx. D Checklist				

Section O: Spot Grading Plan								
Item Group	Item Number	Item Description	Reference	Engineer Reference	Lex Co Check			
					Yes	No	N/A	
O1. Sheet Specific Information	O1.1	Building finished floor elevations shown	LDM 11.3.1					
	O1.2	Alignments are shown with station labels and tick marks at 50 foot increments	RDM Fig. 22.2-D					
	O1.3	Label proposed drainage structures with structure number and structure type	Lex Co Standard Practice					
	O1.4	Show proposed drainage pipes	LDM 10.1.1					
	O1.5	Show proposed drainage ponds	LDM 10.1.1					
	O1.6	Label ditches and swale including flow arrows	LDM 10.1.1					
	O1.7	Show all residential and commercial driveways	LDM 10.3.24					
O2. Spot Elevation Labels	O2.1	Label all high points and low points along the roadway	Lex Co Standard Practice					
	O2.2	Label spot grades at the top and bottom of retaining walls	Lex Co Standard Practice					
	O2.3	Label spot grades at the EOP and center line at every 50 foot and 100 foot station between intersections. The need for these specific spot grades will be evaluated on a case by case basis in consultation with LCPW.	LDM 10.1.1					
	O2.4	Label spot grades at the edge of pavement (EOP) for both points of tangency (POT) and the midpoint of each intersection radius. Additionally, label the elevation at the intersection of alignments.	Lex Co Standard Practice					
	O2.5	Label spot grades at the EOP for the entry and exit radii points of tangency (POT), radii midpoints, and the center of cul-de-sacs. Additionally, with the entry/exit leg of the cul-de-sac set as 0 degrees, label spot grades at 90°, 135°, 180°, 225°, and 270° around the cul-de-sac.	Lex Co Standard Practice					
	O2.6	Label spot grades at all turn arounds. This includes all radii POTs and mid points and at the intersection of alignments.	Lex Co Standard Practice					
	O2.7	Label spot grades for points of on-street parking	Lex Co Standard Practice					
	O2.8	Label spot grades on sidewalks to verify compliance with ADA requirements for slopes	Lex Co Standard Practice					
	O2.9	Label spot grades for all four corners of pedestrian curb ramps. Label the slope of the ramp.	Lex Co Standard Practice					
	O2.10	Label spot elevations at key locations in ditches and swales at a minimum of 50 foot increments	Lex Co Standard Practice					
Section P: Utilities								
Item Group	Item Number	Item Description	Reference	Engineer Reference	Lex Co Check			
					Yes	No	N/A	
P1. Required Utility Sheets	P1.1	Overall water distribution plan sheet provided	LDM 10.1.1					
	P1.2	Water distribution plan sheets provided	LDM 10.1.1					
	P1.3	Water line profiles provided	LDM 10.1.1					
	P1.4	Label and show storm drainage and utility lines on water line profiles	LDM 10.1.1					
	P1.5	Overall sanitary sewer system plan sheet provided	LDM 10.1.1					
	P1.6	Sanitary sewer system plan sheets provided	LDM 10.1.1					
	P1.7	Sanitary sewer line profiles provided	LDM 10.1.1					
	P1.8	Label and show storm drainage and utility lines on sanitary sewer line profiles	LDM 10.1.1					
	P1.9	Other overall utility plan sheets provided	LDM 10.1.1					
	P1.10	Other utility plan sheets provided	LDM 10.1.1					
	P1.11	Overall composite utility plan sheet provided	LDM 10.1.1					
	P1.12	Composite utility plan sheets provided	LDM 10.1.1					
	P1.13	Utility detail sheets provided	LDM 10.1.1					
P2. Utility Design and Labels	P2.1	Proposed contours shown at least at 2 foot intervals. Elevation labels are not required.	Lex Co Standard Practice					
	P2.2	Alignments are shown with station labels and tick marks at 50 foot increments	RDM Fig. 22.2-D					
	P2.3	Vertical and lateral clearance between utility lines met	Lex Co Standard Practice SCDES Regulation 61-67					
	P2.4	Show utilities and storm drainage lines on utility profiles	Lex Co Standard Practice					
	P2.5	Show all utility easements with labels to describe maintenance and width	LDM 5.1.3					
	P2.6	No utilities inside of existing or proposed County pond parcels	LDM 5.1.3					
	P2.7	Existing utilities to remain are labeled on plans	LDM 10.1.1					
	P2.8	Utility lines are placed perpendicular, that is 90 degrees, to the roadway, and in no case less than 45 degrees	LDM 10.3.5					
	P2.9	No valves, manholes, or structures are inside the roadway	LDM 10.3.5					
	P2.10	Utility structures shall be located at least 3 feet from the back of curb.	Lex Co Standard Practice					
	P2.11	Lexington County Standard Drawing for Open Cut Repair for Asphalt Pavement is provided and labeled on the plans if needed. Open cuts will not be allowed on any County maintained roadway unless written reasoning and justification is provided and approved by LCPW. Reach out to LCPW for the most recent standard drawing.	Lex Co Standard Practice					
Section Q: Landscape Plan								
Item Group	Item Number	Item Description	Reference	Engineer Reference	Lex Co Check			
					Yes	No	N/A	
Q1. Landscape Layout	Q1.1	Right-of-way lines, storm drainage easements, and utility easements are shown on landscape plans	Lex Co Standard Practice					
	Q1.2	Include and label 50 foot Scenic Corridor buffers (where required)	LOSO 4.1.5					
	Q1.3	Include and label 30 foot Road Corridor buffers (where required)	LOSO 4.1.6					
	Q1.4	Include and label minimum 20 foot Transitional buffer, must be separately platted to count as open space	LOSO 4.1.7					
	Q1.5	Provide revegetation plan for any disturbed buffers and trophy tree mitigation	LOSO 4.1.5, 4.1.6, 4.1.7					
	Q1.6	No parallel utility easements in required buffers, cross access only by limited points	LOSO 4.1.5, 4.1.6, 4.1.7					
	Q1.7	Label type of open space (natural, wooded, landscaped, grassed, undisturbed, amenity, etc.)	LOSO Standard Practice					
	Q1.8	Open space shall be contiguous and proportional throughout development	LOSO 4.1.8					
	Q1.9	Dedicated 20 foot open space access every 10 lots	LOSO 4.1.9					
	Q1.10	Include proposed grading contours and LOD on landscape plan	LOSO Standard Practice					
	Q1.11	Minimum 20 percent open space, additional quantities for Lake Murray Residential District	LOSO 4.1.2, 4.3.1					
Q2. LCPW Landscaping Requirements	Q2.1	Landscaping is not inside proposed or existing easements	LCPW Standard Practice					
	Q2.2	Landscaping is not inside intersection sight distance triangles	LDM 10.3.20					
	Q2.3	Landscaping is not inside stopping sight distance areas	LDM 10.3.6					
	Q2.4	Landscaping is not inside proposed Lexington County easements or Lexington County right-of-way	LCPW Standard Practice					
	Q2.5	Landscaping is not inside existing or proposed Lexington County storm drainage pond parcels	LDM 10.5					

Section R: Miscellaneous Details							
Item Group	Item Number	Item Description	Reference	Engineer Reference	Lex Co Check		
					Yes	No	N/A
R1. Roadway Typical Sections	R1.1	Typical section(s) included to fully describe intended work to be performed on a project. Do not include information on typical sections that is not applicable to the project.	Lex Co STD Drawings RDM 22.2.5 PPG Ch. 2				
	R1.2	Scale or "not to scale" provided for each typical section	RDM 22.2.5.1				
	R1.3	Dimensions properly shown. Dimensions include slopes and widths of all roadway and right-of-way features.	RDM 22.2.5.2 PPG Ch. 2				
	R1.4	Clearly identify all materials and their depth, which comprise the pavement structure, on each typical section. Provide the structural number shown as a calculation.	LDM 10.2.7, 10.2.9 RDM 22.2.5.3 PPG Ch. 2				
	R1.5	Station limits along all roadways are delineated to which the section applies below each typical section	RDM 22.2.5.4 PPG Ch. 2				
	R1.6	Notes used as necessary to help clarify the intent of each section	RDM 22.2.5.5 PPG Ch. 2				
	R1.7	Partial sections and blow-ups used as necessary to help clarify the design features of the improvements	RDM 22.2.5.6				
	R1.8	All proposed residential local streets are to have a 33:1 cross slope	LDM 10.3.10				
	R1.9	Typical section provided for 20 foot wide pond access road	LDM 5.1.3				

At a minimum, the following details shall be provided as needed. Other details shall be provided to fully describe the work to be performed on a project.							
R2. Roadway Details	R2.1	Cul-de-sac and turnaround details	Lex Co STD Drawings				
	R2.2	Curb and gutter details	Lex Co STD Drawings				
	R2.3	Curb transition details	Lex Co STD Drawings				
	R2.4	Concrete key detail	Lex Co STD Drawings				
	R2.5	Mail cluster box unit placement and parking details	Lex Co STD Drawings				
	R2.6	Intersection knuckle detail	Lex Co STD Drawings				

R3. Drainage Details	R3.1	Rip-rap headwall detail	Lex Co STD Drawings				
	R3.2	Concrete headwall detail	Lex Co STD Drawings				
	R3.3	Rip-rap apron detail and dimensions for each outfall. Include exit velocities for each outfall.	Lex Co STD Drawings				
	R3.4	Ditch and swale typical sections	Lex Co STD Drawings				
	R3.5	Drainage inlet details	Lex Co STD Drawings				
	R3.6	Manhole lid detail	Lex Co STD Drawings				

R4. Other Details	R4.1	Security fence detail	Lex Co STD Drawings				
	R4.2	Security fence gate detail	Lex Co STD Drawings				
	R4.3	Open cut repair for asphalt roads standard drawing	Lex Co STD Drawings				
	R4.4	Sidewalk details	Lex Co STD Drawings				
	R4.5	Driveway details	Lex Co STD Drawings				
	R4.6	Pavement marking details	Lex Co STD Drawings				

Section S: Supporting Calculations							
Group	Item Number	Item Description	Reference	Engineer Reference	Lex Co Check		
					Yes	No	N/A
S1. Sedimentology	S1.0	Drainage area maps outlining sections contributing to sediment basins, traps, and/or rock sediment dikes to include at minimum:	LDM Chapter 3 LDM Appx. D Checklist				
	S1.1	Watershed identifiers	LDM Chapter 3 LDM Appx. D Checklist				
	S1.2	Pre/Post contours	LDM Chapter 4 LDM Appx. D Checklist				
	S1.3	Analysis points	LDM Appx. D Checklist				
	S1.4	Calculations illustrating at least 80% trapping efficiency for the design storm event	LDM Chapter 6 LDM Appx. D Checklist				
	S1.5	Show sediment basin/trap storage for the design storm event of the disturbed condition or 3600 ft ³ /acre draining to the basin	SCDES CGP Section 72-425, D, (5), (b), (c) LDM Appx. D Checklist				
	S1.6	Pre and post discharge rates	LDM 3.5				
	S1.7	Show no overtopping of spillways	LDM Appx. D Checklist				
	S1.8	Use disturbed condition curve numbers, HSG: A-77, B-86, C-91, D-94	LDM Appx. D Checklist				

S2. Hydrology Summary Table	S2.0	Comprehensive summary table for 2, 10, 25, and 100 year storm events corresponding to calculations, including at minimum:	LDM Appx. D Checklist				
	S2.1	Pre/Post discharge rates	LDM Chapter 3				
	S2.2	Pre/Post volumes	LDM Chapter 3				
	S2.3	Pre/Post velocities	LDM Chapter 3				
	S2.4	Water surface elevations	LDM Chapter 3				
	S2.5	Dewatering times	LDM Chapter 3				

Group	Item Number	Item Description	Reference	Engineer Reference	Lex Co Check		
					Yes	No	N/A
S3. Drainage Maps	S3.0	Pre and post drainage area maps, including at minimum:	LDM Appx. D Checklist				
	S3.1	Outline of drainage area to each analysis point	LDM Appx. D Checklist				
	S3.2	Existing contours on pre	LDM Appx. D Checklist				
	S3.3	Existing and proposed contours on post	LDM Appx. D Checklist				
	S3.4	Watershed identifiers including: area, curve numbers, slope, time of concentration, and soil types	LDM Appx. D Checklist				
S4. Analysis Information	S4.1	Analysis performed at the same points for both pre and post development	LDM Appx. D Checklist				
	S4.2	Analysis performed using SCS 24 hour, Type II Storm (Rational Method not Acceptable)	LDM Appx. D Checklist				
	S4.3	2, 10, 25, and 100 year rain fall data from SCDES Storm water Management BMP Handbook: 3.6, 5.3, 6.4, and 8.3 inches	SCDES BMP Handbook				
S5. Hydrologic Analysis: Option A	S5.0	Option A: Traditional Methodology (for private maintenance only):	LDM 3.5				
	S5.1	Post development discharge rates do not exceed pre development discharges rates (2-25 year storm events)	LDM 3.5				
	S5.2	Detain the pre-development runoff volume for the 2 and 10 year storm event for 24 hours	LDM 3.5				
	S5.3	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	LDM 3.5				
	S5.4	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 WQ _v over a minimum period of 24 hours	LDM 3.5				
	S5.5	Pretreatment devices such as fore-bays, vaults, or other devices that remove debris and coarser sediments from the drainage system are required	LDM 3.5				
	S5.6	Downstream analysis	LDM 3.5				
	S5.7	Dam breach analysis where development is impacted by a dam. This requirement applies to any dam upstream of existing structures or proposed development.	LDM 11.6.2				
S6. Hydrologic Analysis: Option B	S6.0	Option B: Unified Sizing Criteria Methodology:	LDM 3.6				
	S6.1	Water Quality (WQ _v): Provide calculations to show that post-construction BMPs and water quality credits are used to treat WQ _v for each discharge point	LDM 3.6.1				
	S6.2	Channel Protection (CP _v): Provide calculations to show extended detention of the 1 year, 24 hour storm event released over a period of 24 hours for each discharge point	LDM 3.6.2				
	S6.3	Overbank Flood Protection (Q _{0F}): Provide peak discharge control of the 2 year, 10 year, and 25 year storm events such that the post-development peak rate does not exceed the predevelopment rate	LDM 3.6.3				
	S6.4	Extreme Flood Protection (Q ₁₀₀): Provide a downstream analysis to evaluate the effects of the 100 year storm on the storm water management system, adjacent property, and downstream facilities and properties	LDM 3.6.4				
	S6.5	Dam breach analysis where development is impacted by a dam. This requirement applies to any dam upstream of existing structures or proposed development.	LDM 11.6.2				
S7. Drainage Basins	S7.1	Pond routing using a volume based hydrograph for the 1 (USC only), 2, 10, 25, and 100 year SCS 24-hour rainfall event. Utilize Drain:Edge, ICPR, HEC-1, SedCAD, HYDRAFLOW, etc., to perform full pond routings	LDM Appx. D Checklist				
	S7.2	Hydrologic and hydraulic calculations necessary to determine the impact of hydrograph timing of the proposed development without a pond used in conjunction with the downstream analysis on a case by case basis in consultation with the county.	LDM Appx. D Checklist				
	S7.3	Inputs and outputs from the routing analysis program	LDM Appx. D Checklist				
	S7.4	Dimension inputs for all components of each pond	LDM Appx. D Checklist				
	S7.5	Stage-storage-discharge relationship for the outlet structure of each detention structure	LDM Appx. D Checklist				
	S7.6	If a rating curve for the outlet structure must be generated externally from the analysis program (Drain:Edge, HEC-1, HydroCAD), provide the data and equations used to rate the outlet structure	LDM Appx. D Checklist				
	S7.7	Include an as-built detail of the existing detention pond if the site drains to an existing detention pond	LDM Appx. D Checklist				
	S7.8	Maximum water surface elevation (WSE) for the 100-year storm event below the embankment with 1 foot of freeboard between maximum WSE for the 100-year storm embankment	LDM 3.9.7				
	S7.9	Dewatering time calculations for the 10-year storm event. Dry ponds must drain completely within 72 hours, wet ponds must drain to normal pool elevation within 72 hours.	LDM Chapter 3				
	S7.10	Provide a qualitative and quantitative assessment, described in Section 3.4C of SCR100000, if the nearest WQMS is listed on the 303(d) List of Impaired Waters and if the site's storm water construction discharges contain the pollutant of impairment and if the site disturbs 25 or more acres.	LDM Chapter 6 SCDES CGP 3.2.12, B				

Section T: Supporting Materials							
Group	Item Number	Item Description	Reference	Engineer Reference	Lex Co Check		
					Yes	No	N/A
T1. LCPW Permit	T1.1	Encroachment permit submitted and approved by LCPW prior to scheduling a preconstruction meeting	LDM 10.9				
	T1.2	Improvements to County roads must be fully detailed in a separate set of plans and comply with Lexington County and SCDOT design criteria. Refer to Chapter 22 of the SCDOT Roadway Design Manual for required information and sheet details, including but not limited to, horizontal, vertical, and cross-section design components.	Lex Co Encroachment Permit Lex Co Roadway Checklist RDM Chapter 22				
T2. Traffic Study	T2.1	Traffic Impact Study required for any proposed subdivision with 100 or more lots	LDM 10.3.12 ARMS 6B				
T3. Drainage Reports	T3.1	Provide gutter spread calculations that meet County requirements for residential roads. Include a report detailing each inlet with design parameters, spread, and ponding depth from the calculations. Reach out to Public Works for more drainage guidance.	LDM 4.2.5 FHWA HEC-22				
	T3.2	Drainage ditch and swale calculations for collector swales	LDM 4.2.1 HDM Part 2				
	T3.3	Other drainage design information and/or report	Lex Co Standard Practice				
T4. Roundabout Design Exhibits, Plan Sheets, and Details	T4.0	If there is no proposed roundabout in the residential plan, input "N/A" in the engineer reference cell box for T4.0 and disregard items T4.1 through T4.21.					
	T4.1	Roundabouts (RAB) are one of the following three types: mini, single-lane, or multi-lane. Traffic circles, traffic calming circles, rotaries, or other circular intersections are not allowed in the Lexington County road system.	RDM 9.7 NCHRP 1043 2.3.1				
	T4.2	Geometric speeds (fastest path exhibits) are provided	NCHRP 1043 9.4, A.1.2				
	T4.3	Sight distance and visibility exhibits are provided	NCHRP 1043 9.5, A.2				
	T4.4	Landscaping meets visibility requirements	NCHRP 1043 14.4				
	T4.5	Lighting design utilizes the Illuminating Engineering Society's (IES) <i>Recommended Practice for Design and Maintenance of Roadway and Parking Facility Lighting</i> , ANSI/IES RP-8-18 (1). Illumination is required at RABs.	RDM 9.7.16 NCHRP 1043 14.1				
	T4.6	Vehicle path alignment exhibits are provided	NCHRP 1043 9.6				
	T4.7	Raised splitter islands provided for proper vehicle deflection	RDM 9.7.4.8 NCHRP 1043 10.6.1				
	T4.8	Entry radii range from 50 feet to 100 feet	NCHRP 1043 10.6.4				
	T4.9	Exit radii are no less than 100 feet	NCHRP 1043 10.6.5				
	T4.10	Truck apron is designed to accommodate a WB-62 design vehicle	RDM 9.7.4.15 NCHRP 1043 10.5.2				
	T4.11	Circulatory lane widths are within typical ranges	RDM 9.7.4.5				
	T4.12	Design vehicle exhibits are provided	RDM 9.7.4.5 NCHRP 1043 9.7, A.4				
	T4.13	Alignment and profile for RAB legs provided	NCHRP 1043 11.2				
	T4.14	RAB leg profiles are under the maximum grade break-over of 3.0% within 200 feet of the RAB	NCHRP 1043 Exhibit 11.17				
	T4.15	Alignment and profile for circulatory path provided along outer edge of central island	NCHRP 1043 Exhibit 11.4				
	T4.16	Profile for circulatory path meets a design speed of 15 MPH	NCHRP 1043 11.2				
	T4.17	RAB typical section is provided and includes cross slope of 2.0% away from the central island	NCHRP 1043 11.4.1				
	T4.18	Detailed RAB grading including spot grades and information on cross slope transitions provided	NCHRP 1043 Exhibit 11.5				
	T4.19	Drainage structures properly designed and added to RAB where necessary	NCHRP 1043 11.2				
	T4.20	RAB pavement marking plans provided	SCDOT STD 625-000 NCHRP 1043 Chapter 12				
T4.21	RAB signing plans provided	SCDOT STD 651-115-XX NCHRP 1043 Chapter 12					
References							
Below are the references used in this checklist			Reference Abbreviation				
1.	Lexington County Land Development Manual, November 2025 Revision (including additional amendments via ordinances)	LDM					
2.	Lexington County Subdivision Ordinance, November 2021	Subdivision Ord.					
3.	Lexington County Zoning Ordinance, June 2024	Zoning Ord.					
4.	Lexington County Landscape and Open Space Ordinance, June 2024	LOSO					
5.	Lexington County Sidewalk Policy LR 6/27/17	LC Policy LR 6/27/17					
6.	SCDOT Requirements for Hydraulic Design Studies, May 2009	HDM					
7.	SCDOT Access and Roadside Management Standards, April 2008 (April 2015 Revision)	ARMS					
8.	SCDOT Road Design Plan Preparation Guide	PPG					
9.	SCDOT Roadway Design Manual, February 2021	RDM					
10.	SCDOT Supplement to the Manual of Uniform Traffic Control Devices	SCDOT Suppl. MUTCD					
11.	SCDES Regulation 61-67 Standards for Wastewater Facility Construction	SCDES Regulation 61-67					
12.	SCDES Construction General Permit	SCDES CGP					
13.	AASHTO A Policy on Geometric Design of Highways and Streets, 2018, Seventh Edition	AASHTO GB					
14.	AASHTO Roadside Design Guide, 2011 (July 2019 Revision), Fourth Edition	AASHTO RDG					
15.	AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities, December 2021, Second Edition	AASHTO PED					
16.	FHWA Urban Drainage Design Hydraulic Engineering Circular No. 22, February 2024, Fourth Edition	FHWA HEC-22					
17.	ADA Standards for Accessible Design, September 2010	ADA					
18.	NCHRP Research Report 1043 - Guide For Roundabouts, 2023	NCHRP 1043					
19.	Georgia Stormwater Management Manual Volume 2: Technical Handbook, 2016	GA SWMM					
Engineer Verification Statement and Signature:							
It is the intention of Lexington County that design engineers are held responsible for their work, including plans review. The engineer shall implement all necessary quality control measures to produce plans that conform to the Lexington County, State, and Federal guidelines and standards. The Engineer of Record must verify and certify that all items on this checklist have been reviewed and addressed to the best of their ability. By signing this checklist, the Engineer affirms that the submitted plans comply with applicable standards. If any items are incomplete or incorrect, Lexington County reserves the right to return the plans to the Engineer, accompanied by a checklist, fully or partially completed, indicating the deficiencies.							
Engineer Name: _____							
Engineer Signature: _____							