LAND DEVELOPMENT – COMMERCIAL/SUBDIVISION CHECKLIST

STORMWATER MANAGEMENT COMMERCIAL/SUBDIVISION CHECKLIST			
Page#	GENERAL INFORMATION TO BE SHOWN ON THE DRAWINGS	Comments by Plan Preparer	Comments by Plan Reviewer
	1. Add statement on cover sheet: I, _____ , a professional engineer, Architect, or Landscape Architect licensed in the State of Georgia, hereby certify that I have personally reviewed the attached submittal plans for a land disturbance/development permit. In my opinion, these submittal plans meet all applicable regulations and ordinances of Rockdale County, and other affected parties may rely on this certification. Signature_____ Georgia Registration# _____		
	2. Place on cover sheet "Rockdale County Permit #	☐	☐
	3. Add a page block for the Rockdale County stamp on each sheet.	☐	☐
	4. Describe in detail the scope of work on the **cover sheet.**	☐	☐
	5. Indicate on the cover sheet, along with the name of the subdivision, whether or not it is a fee simple development (examples of non-fee simple development are condominiums, apartment complexes, townhouses for rent, etc.).	☐	☐
	6. All sheets must be sealed, signed, and dated by a professional engineer, architect, or landscape architect (as applicable) currently registered in the State of Georgia.	☐	☐
	7. Required sheet size 24" x 36" **All conditions, statements, and details must be complete and legible.**	☐	☐
	8. Provide current property metes and bounds survey. Must show surveyor's acknowledgement sealed and signed and surveyor's certification. Identification of benchmarks used.	☐	☐
	9. Use clear, distinct, varied drawing line weights and line types to reflect existing and proposed features.	☐	☐

	10. On the cover sheet, show a location map with the Rockdale County boundary outline and indicate the approximate site location.	☐	☐
	11. Insert in the plan set a copy of the approved sketch/preliminary plat signed by County representative documenting the approval. (Preliminary/sketch plat expires twenty-four (24) months from the date of the approval of the preliminary/sketch plat.	☐	☐
	12. On the cover sheet, show the zoning district, zoning case #, Special Administration Permit #, Special Land Use Permit #, or Zoning Board of Appeals case #. Embed in the plan set a copy of approved conditions, documenting and embed all case specific plans and details. Embed in the drawings, County documentation of all approvals with conditions, site-specific plans, and approved details.	☐	☐
	13. Show property address(es), tax parcel ID, zoning district, and zoning case numbers on the cover sheet.	☐	☐
	14. Show graphically all building setbacks, transition buffers, easements, and separations, and label them accordingly.		
	15. Place on the cover sheet a vicinity map with an adequate scale to identify the surrounding streets.	☐	☐
	16. Design professional's seal, signature, address, and telephone number.	☐	☐
	17. On the **cover sheet,** show the name, physical address, and phone number of the owner, developer, and design engineer.	☐	☐
	18. List a valid 24-hour contact name and telephone number on the **cover sheet.**	☐	☐
	19. Show names of adjoining property owners, deed book and page numbers, and zoning districts on those parcels.	☐	☐
	20. Total site area.	☐	☐
	21. Show the soil series on the overall site plan.		
	22. Total amount of disturbed area(acres).	☐	☐
	23. Show the disturbed area, total tract size, and total impervious area (at the end of the project) on the cover sheet.		
	24. Provide the following details regarding the impervious areas on the **cover** sheet: - Existing impervious area ▪ Existing impervious area to be removed ▪ Existing impervious area to be replaced - New impervious area to be added	☐	☐
	25. If property/development will use onsite private septic tank system, documentation of approval by the Health Dept. must be provided.	☐	☐
	26. Show septic tank and drain field location on the plan: provide a copy of approval from the Health Department.	☐	☐

	27. Add note on **cover sheet**: **Rockdale County is not responsible for any errors or omissions by the design engineer or other design professionals.**	☐	☐
	28. Add note on **cover sheet**: 72 hours' notice is required to Georgia 811 Utility Protection Center before any planned digging.	☐	☐
	29. Statement regarding ownership of stormwater management system after construction is complete.	☐	☐
	30. Statement regarding the existence/absence of 100-year floodplain onsite and the FEMA FIRM number that's referenced for this determination.	☐	☐
	31. No structure is allowed in the required buffer or Right-of-way.	☐	☐
	32. Provide a landscape plan for areas of transitional buffer encroachment/re-vegetation. Within the transitional buffer, the natural topography of the land shall be preserved, and existing growth shall not be disturbed.	☐	☐
	33. Grading or construction adjacent to the transitional buffer zone shall not disturb or encroach upon the transitional buffer zone.	☐	☐
	34. Any approved utility crossings within the transitional buffer shall be perpendicular to the transitional buffer.	☐	☐
	35. Note on the plan that any conservation areas will be recorded in perpetuity with the affected properties.	☐	☐
	36. Show existing and proposed R/W lines, lot lines, building envelopes, pavement and other impervious areas, curb and gutter, and R/W widths.	☐	☐
	37. Note on the plan: "Before construction of any utility facilities within the right-of-way of any county-maintained roadway, approval must be obtained from RDOT and appropriate Dept.	☐	☐
	38. Statement regarding any offsite easements that may be necessary.	☐	☐
	39. Provide the approved Notice of Intent (NOI). NOI must state the approved permit number and expiration date. The NOI application will not be accepted. (If applicable)	☐	☐
	40. Statement regarding any proposed facilities or uses that may be classified as a stormwater hotspot, including a description of the anticipated pollutants.	☐	☐
	41. Show the FEMA map panel image and map panel number for the property on the cover sheet.	☐	☐
	42. Provide floodplain statement. Reference the effective FEMA Firm Panel number, revision date, and any applicable CLOMR or LOMR.	☐	☐
	43. For 1 acre or more disturbed, show N.P.D.E.S. fees table to be paid to state and county on the **cover** sheet. Provide wetlands statement. (The statement is to indicate if the site is within any area of a wetland). Delineate wetlands areas, and note the areas (in acres/sq.ft) to be impacted. **Provide a copy of the IpaC Letter from the USFWS (US. Fish and Wildlife Service) if state waters buffers, floodplain, and/or wetland are to be impacted.**	☐	☐

	44. "Select appropriate wetlands note(s). Select either A or B if wetlands are being disturbed on the site; select Note C. A. There are no wetlands being disturbed on this site. B. All wetlands to be disturbed are delineated on this site. C. The wetlands are being disturbed in accordance with permit _ _____ _	☐	☐
	45. "Select the appropriate SWM note. A. Storm Water Management for this project is provided on-site. B. Storm Water Management for this site is provided off-site in project named _____ with case number XX-XXXXXX.	☐	☐
	46. Select appropriate Floodplain Note(s). Either select Note A or B and select Notes C and D as applicable. a. There is no floodplain on this property from a watercourse with a drainage area exceeding 100 acres or floodplain per FIRM Panel _____ dated _ _____. b. Floodplain on this property from all watercourses with a drainage area exceeding 100 acres is shown. c. The floodplain shown is from FIRM panel _____ dated _____. d. The floodplain shown is from Floodplain study titled _____ by _____ dated ____. Study was done as a part of project number XX-XXXXXX.	☐	☐
	47. "Select appropriate State Waters Note(s). Select either A or B and if a State Waters buffer is being disturbed on the site, select note C. A. There are no stream buffers on this property. B. A 50-foot undisturbed buffer and a 75-foot impervious setback shall be maintained adjacent to all streams. C. Stream buffer variance number _____ _ was obtained to work in buffer as shown.	☐	☐
	48. Wetland certification: The design professional, whose seal appears hereon, certifies the following: 1) The National Wetland Inventory maps have been consulted; and, 2) The appropriate plan sheet [ ] does / [ ] does not (circle appropriate box) indicate areas of united states army corps of engineers jurisdictional wetlands as shown on the maps; and, 3) If wetlands are indicated, the land owner or developer has been advised that land disturbance of protected wetlands shall not occur unless the appropriate federal wetlands alteration ("section 404") permit has been obtained.	☐	☐
	49. Show/note all Minimum Finished Floor Elevations (MFFE) for all lots located adjacent to the flood hazard area or detention/retention pond. For residential developments, the MFFE is the AFCF, and for non-residential, the MFFE is either (whichever is greater) based flood +1', or Future Condition Flood elevation, or top of dam of pond +1' or 100-yr WSE for pond +3'	☐	☐
	50. Contact U.S. Army Corps of Engineers (USACoE) regarding wetland permit determination. Provide a copy of Nationwide or Individual Permit from USACOE.	☐	☐

	51. The source of topography is _____, and the reference datum is (i.e., NGVD 1929, Mean Sea Level, etc.).	☐	☐
	52. Add Note to plans: Contractor shall provide positive drainage away from all buildings.	☐	☐
	53. Provide offsite drainage easement agreements between property owners. Provide documentation to the stormwater department.	☐	☐
	54. Show water quality ponds and BMPs outside of creeks/streams, floodplains, wetlands, and buffers.	☐	☐
	55. Scaled drawing showing the location of all existing topography, utilities, impervious surfaces, wooded areas, stormwater facilities, wetlands, State Waters, buffers, setbacks, and floodplains.	☐	☐
Grading Plan			
	56. Provide flood plain certificate certificates in the plans and in the stormwater/hydrology report (if applicable)	☐	☐
	57. Show existing stormwater conveyances and structural control facilities.	☐	☐
	58. Number all pipes and structures on the plan. & Label structures as SWCB, DWCB, DI, WI, JB, HW, and FES (SHOW THE SAME ON THE PIPE PROFILES).	☐	☐
	59. Show on grading plan: ▪ Existing contour/grade with elevation ▪ Proposed contour/grade with elevation ▪ Grading for detention pond ▪ Pond's dam with width ▪ Pond's wall with top and bottom elevation (if applicable) ▪ Location of detention pond ▪ 10' easement around pond (must be inside fence) (If the pond is walled and has a 10' easement outside of the wall, a detailed explanation must be provided as to how the pond will be maintained, having a wall between the 10' easement and the pond)	☐	☐
	60. Show and label all existing drainage structures. Provide inverts and angles. Show catch basin top and pipe invert elevations. Inverts on all structures shown to be paved smooth.	☐	☐
	61. All storm drain pipes or culverts carrying stormwater from the street and the adjacent property between or through lots shall be extended to at least thirty (30) feet behind the rear of the house.	☐	☐
	62. Add note on grading plan: Any wall of 4' or greater in height requires a separate building permit before construction and must be certified by a Structural Engineer.	☐	☐
	63. Retaining walls (including footing) shall be located within the confines of the owner's/applicant's property. Retaining walls shall not be located within undisturbed stream buffers, transitional buffers, floodplains, drainage easements, or drainage ways in a manner that impedes the flow of water.	☐	☐
	64. Latitude and longitude of all proposed detention and water quality treatment facilities.	☐	☐
	65. Show topography at a 2' contour interval or less.	☐	☐

	66. Show drainage easement on pipes consistent with table in the Rockdale County's ordinance Sec. 332-16.	☐	☐
	67. Show 20’ access easement to pond from public right-of-way.	☐	☐
	68. Provide spot elevations for high points and areas shown having split drainage.	☐	☐
	69. Show the 100-year ponding limit and elevation above inlets and provide a well-defined contour around the inlet to provide proper drainage. Show the 100-year ponding elevation at inlets. Ponding shall not occur on adjacent property without obtaining a drainage easement.	☐	☐
	70. Show regulatory and 100-year floodplain contour, elevation, and floodway limits and indicate the information source.	☐	☐
	71. Indicate the finished floor elevation of the home on plans & provide spot elevations around the corners of the home to ensure runoff will drain away from the building.	☐	☐
	72. Standard landscaping and landscaping requirements that are part of zoning conditions are not permitted within designated drainage or BMP easements.	☐	☐
	73. Provide a cleared access easement to the detention pond from a public street.	☐	☐
	74. Provide the top width of the detention pond’s earthen dam. Provide a callout on the grading sheet.	☐	☐
	75. Provide the 100-year ponding elevation of the detention pond & provide a callout.	☐	☐
	76. Energy dissipation shall be located entirely within the project site, no closer than 25 feet from any property line, and not encroach upon any required buffer.	☐	☐
	77. The slope of the discharge pipe shall not exceed 2%	☐	☐
	78. Provide the top and bottom elevation of all retaining walls.	☐	☐
	79. Indicate finish floor elevation, garage finish floor, and basement finish floor elevation **FOR ALL LOTS** on plans.	☐	☐
	80. Each residential parcel shall be tagged by the design engineer with S or B, which represents Slab or Basement.	☐	☐
	81. Details, design calculations, and construction notes for all proposed open channels, including dimensions, slopes, subgrade preparations, lining materials, flow rates, depths, and velocities.	☐	☐
Stormwater Management Details			
	82. Provide a detailed profile of the OCS for all the proposed SWM facilities. The profile must include the top of OCS elevation, earthen dam elevation, invert of the outlet pipe, & the bottom of the pond elevation.	☐	☐
	83. Provide a detail and cross section for all stormwater ponds that have a wall acting as the control structure. Provide whether the wall will be a monolithic pour and also ensure no leakage at the joints.	☐	☐
	84. Provide Outlet Control Detail & cross section for Dry & Extended Dry Detention Ponds.	☐	☐
	85. Provide Outlet Control Detail and a cross section for Wet Ponds, Wet-Extended Ponds, & Micro pools.	☐	☐

	86. Provide Outlet Control Structure and the manufacturer's details, cross section, and maintenance details for an Underground Detention Facility.	☐	☐
	87. A forebay equaling 10% of the water quality volume must be provided for each inlet to the pond. Provide calculations within the hydrology report and show grading details on plans. (Provide the forebay volume on the grading sheets.)	☐	☐
	88. Provide forebay cross section Detail.	☐	☐
	89. If feasible and hydraulically possible, do not place the OCS in the bottom of the SWM pond (inspector must be able to safely reach the structure).	☐	☐
	90. The OCS profile must reflect the actual field conditions as shown on the grading sheet. Provide freeboard for earthen dams at least 1.5 feet above 100-year ponding elevation and 1 foot for non-earthen walled dams.	☐	☐
	91. Provide a cross section of the SWM facility (section will reflect actual field conditions with all elevations, structures, embankment, spillway, OCS, outlet pipe, forebay, and trash rack).	☐	☐
	92. Inlets and outlets should be at opposite ends of the pond to maximize flow length. Baffles or islands may be installed to increase the flow path length and to minimize short-circuiting.	☐	☐
	93. Provide the cross sections for all the proposed SWM BMPs. Cross-sections will reflect actual field conditions as shown on the grading sheet. (Include: top of bank elevations, ponding depths, underdrain size & elevation, width, side slopes, filter fabric, landscape filter strip, overflow structure, washed stone, planting media, etc.)	☐	☐
	94. Provide the 100-year ponding elevation of the detention pond & provide a callout.	☐	☐
	95. Provide a drainage easement and access easement around the stormwater management facility. Provide the drainage easement at a minimum of 10 feet outside of the 100-year ponding limits of the stormwater management facility.	☐	☐
	96. Provide orifice protection via end caps or other methods and provide a trash rack.	☐	☐
	97. Provide a fence around the facility (fence requirements must adhere to Rockdale County's Ordinance Sec. 310-36. 6' high fence around pond, if water/ponding depth to be 4' or greater. Provide 6' chain link fence with 10' access gates to be placed at the outer edge of the 10' easement to serve around the pound.	☐	☐
	98. Scaled drawing, details, and construction notes showing the location, species, spacing, installation, and protection of all proposed plantings for water quality facilities.	☐	☐
	99. Pond construction requires a minimum setback of 20' from the property line, 100' to 250' from a private well, and 50' from a septic tank/leach field.	☐	☐
	100. The developer is to clean out accumulated silt in the detention pond at the end of construction when disturbed areas have been stabilized. Regular maintenance shall be the responsibility of the homeowner's association or the property owner. **Show on the cover sheet under General Notes.**	☐	☐

Pipes and Channel Profiles			
	101. Provide pipe profiles with existing and proposed ground surface profiles, pipe lengths, slopes, inverts, type, and hydraulic grade lines. • Show 25-year hydraulic grade line. It must be below the crown of the pipe. Please provide supporting data in the pipe profile chart or hydro study • Show 100-yr HGL. Must be below the proposed grade • The minimum acceptable pipe diameter for county-maintained sections and systems is 18 inches • The minimum slope is 1% for BCCMP and 0.50% for RCP. For slopes < 1%, show that a minimum of 2.5 fps is attained for the 2-year frequency event. • CMP' or BCCMP pipe(s) exceed(s) 12% slope. RCP pipe exceed(s) 12% slope • On CMP pipe exceeding a 12% slope, show anchor collars. Provide construction detail and locations • RCP is recommended under roads • Angle conflict among pipes will require a larger manhole for the structure.	☐	☐
	102. All pipes requiring a manhole base larger than 48" in diameter must be identified by showing the base unit and reduction cone, inverts of pipes, etc.	☐	☐
	103. Show/Label all drainage easements for pipes. Required D.E. Widths: 18"-36" = 20' DE; 42"-72" = 25' DE; >72" = 30' DE	☐	☐
	104. Provide pipe chart indicating the following: (Include OCS Outlet Pipe) • Pipe Numbers • Invert elevations • Pipe Sizes • Pipe Slope • Pipe Length • Contributing Drainage Area • Design discharge (Q25 for piped drainage; Q100 for culverts) • Design storm frequency (25-year for piped drainage; 100-year for Culverts) • Runoff Coefficient for CMP • Pipe material/coating. Indicate corrugation spacing and height	☐	☐

	• Velocity (V25 may not exceed erosive velocity at outlet headwall unless additional energy dissipation is provided.) • Gutter spread (not to exceed 8 feet in width for a 10-year design storm event) • Rainfall Intensity (in/hr.)		
	105. Provide an open channel chart indicating: • Open Channel Numbers • Contributing Drainage Area • Runoff coefficient (per future land use plan and assuming no detention) • Conveyance Size. Provide a typical cross section • Lining Material (riprap, sod, vegetative, etc.) • Channel Length • Channel Slope (Max 10%) • Velocity (V25 may not exceed erosive velocity) • Design Storm frequency (25-year) • Design discharge (25-year) • Normal flow Depth (25-year) • Indicate freeboard capacity	☐	☐
	106. Cross-drain culverts or pipe systems designed to convey water from one side of a public right-of-way to the other shall be designed to pass the fully developed peak flow associated with a 100-year storm. Required 1.5 feet of freeboard between the 100-yr. ponding elevation and the centerline of the road, without raising the 100-year. flood elevation on upstream properties. (Per Rockdale County Ordinance Sec.332-16)	☐	☐
	107. Show all sanitary and water lines and other utility crossings on storm profiles. Provide a minimum of 18" vertical and horizontal separation between all buried utilities & storm pipes.	☐	☐
	108. Provide at least 1.5 feet of cover over all storm sewer pipes under unpaved areas and at least 2.0 feet of cover over all storm sewer pipes under paved areas.	☐	☐

	109. Show storm sewers extending to the rear of the lot unless discharging to a defined channel approved by the Stormwater Management Department.	☐	☐
	110. Provide the storm pipe bedding detail and notes.	☐	☐
	111. Note on plans: All storm pipe and structures shall comply with GADOT standards for design, construction, and installation	☐	☐
	112. Drainage other than sheet flow across two or more lots requires a dedicated drainage easement. Define any such drainage easements with adequate labels.	☐	☐
	113. All criteria from Section 5.3, culvert design, of the GSMM are required.	☐	☐
	114. RCP is required for culvert(s) placed in streams with any base flow.	☐	☐
Soil Erosion and Sedimentation Control Plan			
	115. Must submit Erosion, Sedimentation & Pollution Control Plans Checklist on plans. The checklist must be updated for the year in which the permit is to be issued. The plan shall conform to the design guidelines in the 2016 Manual for Erosion and Sediment Control in Georgia and the Rockdale County Soil Erosion and Sedimentation Control Ordinance Chapter 306.	☐	☐
	116. Show double-row Type 'S' silt fence between land-disturbing activity and State waters, wetlands, and/or floodplain.	☐	☐
	117. Show the 25' GA EPD buffer, 50' County buffer, and a 75' impervious buffer.	☐	☐
	118. Variance from GA. E.P.D. required for encroachment in 25-foot state waters buffers	☐	☐
	119. Variance from the County is required for encroachment into 50-foot state waters buffers	☐	☐
	Provide a graphic scale and a North point or arrow indicating magnetic North.	☐	☐
	120. Show the name and phone number of the 24-hour local emergency contact on the erosion and sediment pollution control plan.	☐	☐
	121. Show total tract size in acres. Show total disturbed area in acres. All common development must consider proposed land disturbance for all lots' area	☐	☐
	122. Show the soil series on the erosion control plan	☐	☐
	123. Show existing and proposed contours with labels and differing line weights and/or types.	☐	☐
	124. Show adjacent areas, such as streams, lakes, drainage ditches, residential areas, etc., which might be affected.	☐	☐
	125. Show vegetative plan for all temporary and permanent vegetative practices, including species, planting dates, seeding, fertilizer, and mulching rates.	☐	☐
	126. Provide retrofit sediment control structure at detention/sediment basin outlet to one-half the height of the outlet control structure with a filter blanket of 3"- 4" stone	☐	☐
	127. Show **location and details** of all erosion and sediment control practices to be used, using uniform coding symbols and details from the current Manual for Erosion and Sediment Control in Georgia.	☐	☐

	Practices may include, but not be limited to: ▪ Construction exit. ▪ Sediment Barrier per the Manual. ▪ Retrofitting. ▪ Temporary sediment basin and calculations. ▪ Storm drains inlet sediment traps. ▪ Storm drains outlet protection. ▪ Channel stabilization and vegetation. ▪ Check dams. ▪ Rock filter dams. ▪ Down drains. ▪ Temporary creek crossings. ▪ Other:		
	128. Show Construction Activity Schedule with anticipated starting and completion dates for project, and detailed sequence of events for all activities, including but not limited to: ▪ Installation of initial sediment control measures. ▪ Installation of temporary sediment basins or retrofitting. ▪ Clearing, grubbing and grading operations. ▪ Maintenance of erosion and sediment control measures. ▪ Installation of detention facility. ▪ Grassing-including mulching, temporary and permanent vegetation. ▪ Construction and installation of other site improvements. ▪ Final landscaping, grassing, cleaning of storm drains, etc.	☐	☐
	129. Show the proposed location of topsoil stockpile on the plan	☐	☐
	130. Provide a narrative for storage location, method of containment and emergency procedures in the event of a spill or reportable quantity of petroleum products	☐	☐
	131. Provide a narrative for paint and/or other chemicals with respect to storage, clean-up and disposal.	☐	☐
	132. Delineate all State waters on or within 200 feet of the site. Note state waters may be off property, but required buffers may be on the property. You may use the Rockdale County GIS resources:	☐	☐
	133. Add note: Erosion control measures will be maintained at all times. If full implementation of the approved plan does not provide effective erosion control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source	☐	☐
	134. Add note: Sediment and erosion measures and practices to be inspected daily	☐	☐
	135. Add note: All disturbed areas to be grassed as soon as construction phases permit.	☐	☐

	136. Add note: The escape of sediment from the site shall be prevented by the installation of erosion control measures and practices prior to, or concurrent with land disturbing activities	☐	☐
	137. Add note: "I certify that the permittee's erosion, sedimentation and pollution control plan provides for an appropriate and comprehensive system of best management practices required by the Georgia Water Quality Control Act and the document 'manual for Erosion and Sediment control in Georgia', published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land disturbing activity was permitted, provides for the sampling of the receiving water(s) or the sampling of the storm water outfalls and the designed system of Best Management Practices and sampling methods is expected to meet the requirements contained in the General NPDES Permit N0. Gar 10000_(1, 2 or 3)."	☐	☐
	138. Add note: "I certify under penalty of law that this plan was prepared after a site visit to the locations described herein by myself or my authorized agent, under my direct supervision."	☐	☐
	139. Add note: Notice of intent and notice of termination must be filed with GA. E.P.D. A copy of the Submittal ID # to the GEOS and a copy of the NOI form shall be submitted to the County before issuance of the permit if the land disturbance is one acre or more or within 200 feet of state waters. Submission must be 14 days prior to the start of land disturbance activities.	☐	☐
	140. Erosion control maps, drawings, and supportive computations shall bear the signature, date of signature, and seal of a registered or certified professional in engineering, architecture, landscape architecture, land surveying, or erosion and sediment control.	☐	☐
	141. Provide boundary line survey information.	☐	☐
	142. If retrofit is provided, specify what type of retrofit and engineer will need to provide a letter stating reasoning.	☐	☐
	143. Location and boundaries of natural feature protection and conservation areas such as wetlands, lakes, ponds, and other setbacks. (stream buffers, drinking water well setbacks, septic setbacks, etc.)	☐	☐
	144. Show all proposed structures or additions to existing structures.	☐	☐
	145. Provide the NTU values of the surface water drainage area (sq mile) and site size (acres). Make sure the values match Appendix B NTU Table	☐	☐
	146. For projects in Big Haynes Creek watershed inside the 7-mile radius to Black Shoals Reservoir, on perennial streams shown on the USGS Quad maps show a minimum **100-foot buffer** and **150-foot** non-impervious surface setback. See the zoning resolution for exempt activities.	☐	☐
	147. Locate the erosion and sediment control measures on the plan using the uniform coding symbols from chapter 6 of the Manual for Erosion and Sediment Control in Georgia.	☐	☐
	148. Discharge of water from sediment basins and impoundments must utilize outlet structures that withdraw water from the surface. Add detail, Sk, and provide the manufacturer's information.	☐	☐
	149. After consulting the National Wetlands Inventory Map, it appears that wetlands exist on the project property. These wetland areas must be indicated on the site plan. NWI Maps are also available on the internet at http://www.fws.gov/wetlands/Data/Mapper.html	☐	☐

	150. Any work proposed in the stream bed will require authorization from the US Army Corps of Engineers.	☐	☐
	151. Rockdale County will not issue a land disturbance permit until we receive documentation from the Corps of Engineers that an Individual Permit or a Letter of Permission authorizes the proposed encroachment in wetland areas. If the encroachment is authorized under a Nationwide Permit, we must receive documentation from the applicant's engineer about which Nationwide Permit is applicable and why the encroachment meets the conditions of that Nationwide Permit. We also must receive a copy of the approved PCN letter from the Corps of Engineers, if applicable.	☐	☐
	152. Provide the GSWCC Level 2 Design Pro Cert. & include the issued and expiration dates.	☐	☐
	153. Show all perennial and/or intermittent streams.	☐	☐
Stormwater Management Report			
	154. The Stormwater Management Report shall be prepared in accordance with the current Georgia Stormwater Management Manual & the Rockdale County Post Development Stormwater Management Ordinance Chapter 310.	☐	☐
	155. Professional Engineer seal, signature, and date.	☐	☐
	156. Narrative of existing site conditions, proposed project, and post-construction stormwater management measures.	☐	☐
	157. Provide an Energy Dissipation Sheet.	☐	☐
	158. "Provide a table of contents and either provide page numbers or tabs referencing sections for the following. 1) Narrative 2) Hydrology 3) Water quality 4) Floodplain 5) Environmental permits 6) Annotated checklists.	☐	☐
	159. The Mandated Model Ordinance requires 100% Runoff Reduction. See Rockdale County's Ordinance Sec. 310-36. Provide a runoff reduction infeasibility report if the requirements are not met. See Rockdale County's website under the Stormwater Management Department for the report.	☐	☐
	160. Provide Downstream receiving conveyance velocity summary sheet.	☐	☐
	161. Provide Time of Concentration Summary Sheet.	☐	☐
	162. Provide a Curve Number Summary Sheet.	☐	☐
	163. Provide Gutter Spread Calculations Summary Sheet.	☐	☐

	164. Calculations determining the capacity of the existing pipe to carry the proposed discharges.	☐	☐
	165. Calculations showing the discharge of concentrated flows into the streets do not exceed the flow rates in Rockdale County's Ordinance.	☐	☐
	166. Show Time of Concentration calculations for all hydrographs. Follow the procedures set forth in the Georgia Stormwater Management Manual (GSMM).	☐	☐
	167. Curve Number calculations for both pre-developed and post-developed conditions for all hydrographs. Follow the procedures set forth in the Georgia Stormwater Management Manual (GSMM).	☐	☐
	168. Provide Energy dissipater calculations/designs for outlet headwalls of pipes and detention ponds.	☐	☐
	169. Analyze downstream watercourses and receiving conveyances to determine 25-year. flow channel velocities. If the non-erosive velocity of the stream is exceeded, detention may be required. Provide calculations with cross-section, depth of flow, and velocity in the channel.	☐	☐
	170. Analyze existing pipe systems and culverts for compliance with current development regulation design criteria. Culverts should pass Q100. If existing pipes are not adequate for increased 100-year flow, detention may be required.	☐	☐
	171. Hydrograph comparisons for the 1, 2, 5, 10, and 25, 50, and 100-year storms for both the downstream property line study point and the point where the drainage basin equals 10 times the project area.	☐	☐
	172. A detailed written description of the first 500 feet off-site and at least one photograph looking downstream with some object included in the photograph for scale shall be included.	☐	☐
	173. Post-developed peak flows at every location where run-off will leave the development must be less than or equal to pre-developed flows, unless meeting the conditions.	☐	☐
	174. Provide a scale on all drainage maps in the Stormwater Management report.	☐	☐
	175. Provide a cross-section of all proposed BMPs (detention ponds, bioretention, etc.). Where applicable, it should include but not be limited to the outlet pipe, emergency spillway, embankment slopes, minimum embankment top width, outlet control structures, headwalls, soil media, underdrains, aggregate base, riprap outlet protection, etc. Verify that a minimum 1'-6" freeboard above maximum water surface elevation is provided for earthen dams.	☐	☐
	176. "Prior to approval of the report, the applicant shall certify and provide all corresponding documentation, and all other applicable environmental permits required for the site. A) NOI- Notice of Intent B) USACE 404 Permit (wetlands) C) Ga. EPD Stream Buffer Variance	☐	☐
	177. Provide the 24-hour rainfall depths for the 1, 2, 5, 10, 25, 50 and 100-year design storms. Rainfall values can be obtained from NOAA Atlas 14	☐	☐

	178. Provide a table that summarizes land use distribution for each drainage basin shown on the pre-developed drainage maps in the Stormwater Management Report.	☐	☐
	179. Provide a table that summarizes land use distribution for each drainage basin shown on the post-developed drainage map in the Stormwater Management Report.	☐	☐
	180. All selected BMPs shall be designed in accordance with the design guidelines provided in the GSMM. Show detailed design calculations for each proposed BMP and reference section in the GSMM where design calculations can be found. Include an annotated checklist that shows that the proposed BMP meets all design requirements outlined in the GSMM.	☐	☐
	181. Provide calculations for the required water quality and channel protection volumes for the proposed BMPs based on the unified sizing criteria in the GSMM.	☐	☐
	182. Provide water quality and channel protection orifice sizing calculations.	☐	☐
	183. Dam safety and breach analysis if applicable.	☐	☐
	184. Provide the web soil survey information.	☐	☐
	185. Provide calculations showing that the emergency spillway is designed to pass the 100-year storm event and that freeboard for earthen dams is at least 1 foot above 100-year ponding elevation.	☐	☐
	186. Provide the geotechnical testing documentation to support the soil infiltration rate of a min 0.5in/hr. Testing must be performed by a licensed State of GA professional Geotechnical Engineer, and the documents must be signed and sealed.	☐	☐
	187. Detain the runoff from the 1-year storm for 24 hours. Use the SCS runoff equation to size the volume required.	☐	☐
	188. 24-hour detention of the 1-year storm is required if water quality is required. Provide channel protection.	☐	☐
	189. Size the outlet orifice for a 24-hour drawdown time. Provide the correct method of analysis (average head or maximum head method per GSMM).	☐	☐
	190. The peak flow summary sheet must include the pre-dev, post-dev, routed flows from the pond, bypass, combined post-dev at the study points, 10% pre-dev, and 10% post-dev.	☐	☐
	191. For stormwater hotspot locations, the designer is required to provide a detailed pollution management plan. The pollution management plan must include detailed information regarding the various pollutants expected and the methods used for the collection, storage, and disposal of those pollutants.	☐	☐
	192. Show that the water quality treatment provided achieves 80% TSS goal by providing calculations or a completed copy of the Stormwater Quality Site Development Review Tool form (download from http://www.northgeorgiawater.com).	☐	☐

	193. Provide a downstream hydrologic analysis (pre- and post-peak flows and peak timing) to the point in the watershed where the area of the site comprises 10% (or less than 10%) of the total drainage area. Show all confluences downstream, to and including the 10% point on a topo/basin map.	☐	☐
Drainage Basins			
	194. A map showing drainage areas used for pipe design.	☐	☐
	195. A map showing drainage areas for all hydrographs.	☐	☐
	196. A map showing all on-site drainage areas, off-site drainage areas, and all pond bypass areas considered in detention calculations.	☐	☐
	197. Show all existing and proposed lakes with surface area, normal pool elevation, and dam height, top width, % slopes. Provide details for existing/proposed outlets/drain pipes and spillways.	☐	☐
	198. Show hydraulic flow path, CN, Tc, and Acreage for all Pre- and Post-Developed Drainage Basins.	☐	☐
	199. Describe, in combination with a topographic map, all culverts, obstructions, existing and potential erosion problems, elevations of existing improvements, and existing drainage complaints between the downstream property line and the 10% point.	☐	☐
	200. Provide the correct delineation of the drainage basins.	☐	☐
	201. Provide the point of analysis for each basin-POA is the location where the water discharges off the site (show on the site boundary).	☐	☐
	202. Provide the topography on the pre and post-developed maps.	☐	☐
	203. Post development map delineation must match the proposed grading on the civil site plans.	☐	☐
	204. Provide the overland sheet flow, shallow concentrated flow, and open channel flow information on pre/post-development maps (tc calculations should match the map info).	☐	☐
Water Quality Performance			
	205. Use the Georgia Stormwater Management Manual – Stormwater Quality Site Development Review Tool-provided additional information that supports the SWM system will achieve the 80% TSS removal rate.	☐	☐
	206. The minimum reduction in TSS Loading shall be 80% based on the average rainfall depth of 1.2" in Georgia.	☐	☐
	207. Provide a map delineating the different land use types for the water quality analysis purposes. (i.e., Impervious Area, Disturbed Pervious Area, Undisturbed Upland Area, and Undisturbed Stream Buffer Area)	☐	☐
	208. Provide a print-out of the complete Stormwater Quality Site Development Review Tool. The printout should include both input and output files.	☐	☐
	209. Provide a BMP and water quality map. The map must match the proposed BMPs shown in the review tool. Provide the impervious total, acre total, for each proposed BMP.	☐	☐

	210. Provide the runoff reduction infeasibility report if the requirement is not met. The report must be submitted to the Stormwater Management Department prior to the initial plan review submittal.	☐	☐
Flood Study Review- Only use if Flood Area is on Property			
	211. All locations with FEMA floodplain and Rockdale County's future floodplain located on the lot must submit a FEMA Elevations Certificate prior to the issuance of the Building Permit. (Per Rockdale County's Ordinance Sec. 320-3.)	☐	☐
	212. Per Rockdale County's Ordinance Sec. 320-3. Permit Procedures and Requirements: No owner or developer shall perform any development activities on a site where an area of special flood hazard or area of future-conditions flood hazard is located without first meeting the requirements of this chapter prior to commencing the proposed activity.	☐	☐
	213. An application for a development project with any area of special flood hazard or area of future-conditions flood hazard located on the site shall include a floodplain management/flood damage prevention plan.	☐	☐
	214. The floodplain management/flood damage prevention plan. The plan shall include all items listed in Ordinance Sec. 320-3 (b).	☐	☐
	215. For all new construction and substantial improvements on sites with a floodplain management/flood damage prevention plan, the permit holder shall provide to the floodplain manager a certified as-built elevation certificate or floodproofing certificate for nonresidential construction, including the lowest floor elevation or floodproofing level immediately after the lowest floor or floodproofing is completed. A final elevation certificate shall be provided after the completion of construction, including final grading of the site. Any lowest floor certification made relative to mean sea level shall be prepared by or under the direct supervision of a licensed land surveyor or professional engineer and certified by same. When floodproofing is utilized for nonresidential structures, said certification shall be prepared by or under the direct supervision of a licensed professional engineer or architect and certified by same using the FEMA floodproofing certificate. This certification shall also include the design and operation/maintenance plan to assure the continued viability of the floodproofing measures. (Per Rockdale County's Ordinance Sec. 320-3)	☐	☐
Notes on Plan			
	216. **Compaction of all fill material between the front and rear building lines to be 95% standard proctor must be certified by Georgia Registered Professional Soils Engineer prior to the installation of curb. This certification will be submitted to the Stormwater Management Department. Lots with 2' of fill or greater, as delineated on the construction plans, will require a compaction certification prior to the issuance of building permits. The Engineer will also provide a letter listing those lots that require compaction certification. Those lots that require compaction certification will be indicated on the final recorded plat.**	☐	☐

	217. ***Pipe installation standards.*** **Reinforced concrete pipe, corrugated steel, and aluminum alloy pipe shall be bedded and backfilled in the same manner. Corrugated high-density polyethylene pipe shall be bedded and backfilled in accordance with the GDOT Standard Specifications. In addition, prior to approval of a final plat, the county may require the submittal of certification from a mandrel testing agency indicating that any HDPE pipe installed does not exceed 5.0 percent deflection.** **(1)** ***Pipe bedding.*** **All piping and structures shall be placed on rock backfill, the characteristics of which would be expected to provide long-term stability and allow for the pipe to be laid accurately. In all live stream pipe installations, in areas of low-bearing solid or non-uniform foundations, in areas where rock is encountered at the foundation level, or in other locations where conditions warrant, a minimum of six inches of crushed stone bedding is required (maximum size of stone shall be ¾-inch). Geo-textiles or geo-grids may also be required by the county inspector in unstable materials.** **(2)** ***Backfilling.*** **Backfill on all pipe installations shall be constructed using rock backfill material, as specified in GDOT Standards 812.01 and 812.02, respectively. These materials shall be placed in layers of not more than six inches loose. Compaction of these materials shall be accomplished by hand tamping or machine tamping. Required compaction levels are as follows:** **a.** **Backfill within all street rights-of-way shall be compacted to 98 percent maximum.** **b.** **Backfill in all other areas shall be compacted to 95 percent maximum density, tested using the AASHTO Method T-99.** **(3)** ***Construction loads and minimum cover.*** **The minimum cover for any pipe or culvert shall be two feet. Minimum cover shall be measured from sub-grade elevations, to ensure adequate pipe protection from construction loads.** **(4)** ***Inspection of pipe installation.*** **All pipes shall be installed in a straight approach in strict accordance with the lines and grades shown in the approved construction drawings. The county inspector shall provide periodic inspections of all drainage system installation, to ensure compliance with these regulations. No cross-drain piping or piping under the proposed paved surface shall be completely backfilled prior to the inspection of all pipe joints, bedding, initial backfill and compaction up to the pipe center line. A final inspection and approval of all pipe installation shall be required at the completion of construction activities, and prior to final plat approval.**	☐	☐
	218. Conservation area must remain undisturbed (if disturbed in the future, the credit is no longer valid and additional water quality measures will be required)	☐	☐

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