

STORMWATER MANAGEMENT LDP CHECKLIST

No.	Description	Comments by Plan Preparer	Comments by Plan Reviewer
1	Common Address and Legal Description		
2	Vicinity Map		
Existing Conditions Hydrologic Analysis			
3	Show all relevant drainage basins (sub basins) on a topographic map		
4	Show acreage		
5	Show soil types and land cover		
6	Show all intermittent and perennial streams (state waters) and other surface water features.		
7	Show existing stormwater conveyances and structural control facilities.		
8	Include directional arrows for all flows and indicate where flow exits the site.		
9	Analysis must include any contribution from off site, upstream basins that enter the property.		
10	Analysis must include methodologies, assumptions, site parameters and supporting design calculations used in analyzing the existing conditions site hydrology.		
11	For redevelopment sites, predevelopment conditions shall be modeled using the established guidelines for the portion of the site undergoing land development activities.		
Post Development Hydrologic Analysis			
12	Topographic map with post-development drainage basin boundaries		
13	Water Quality Treatment per Georgia Stormwater Management Manual (see enclosed Quick Reference Guide)		
14	Provide calculations on percent impervious (%I), volumetric runoff coefficient (Rv) and water quality volume in the hydro study. If site design credits are applied, state what type of credits, why the site is eligible for credits and subtract the area used for credits from WQv.		
15	Address methods used for channel protection, over bank flood protection and extreme flood protection. If channel protection and over bank flood protection are eligible to be waived, provide reasons and supporting analysis. Show major water bodies that entitle the site to be waived from Q_{P25} control.		
16	Location and boundaries of proposed natural feature protection and conservation areas. Delineate any wetlands present. If none, so note, or provide letter from USACE approved consultant. NWI maps can be viewed at Rockdale County (Kent Asher 770-785-6959)		
Stormwater Management System			
17	State the type of water quality BMP/structural control used, locations, calculations and detail drawings (plan view and cross-section view).		
18	Location of all non structural site design features.		
19	Provide calculations (for orifice sizing), program output, stage-storage curve and hydrograph, plan view and cross section view drawings of the detention control structure components.		
20	narrative describing effectiveness of chosen controls		
21	Show that water quality treatment provided achieve 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).		
22	Hydrologic and Hydraulic analysis of stormwater management system for all applicable design storms.		
Post Development Downstream Analysis			
23	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.		

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Landscaping and Open Space Plan			
24	A detailed landscaping and vegetation plan describing the woody and herbaceous vegetation that will be used within and adjacent to the stormwater management facilities and practices. The plan should include: arrangement of planted areas, natural and green space areas, and other landscaped features on the site plan.		
25	Information necessary to construct the landscaping elements shown on the plans, descriptions and standards for the methods, materials and vegetation to be used, density of plantings, description of the stabilization and management techniques to be used to establish vegetation.		
26	A maintenance plan for the landscaping to include; who will be responsible for ongoing maintenance and what practices will be employed to ensure that adequate vegetative cover is preserved.		
Operations and Maintenance Plan			
27	Provide an operation and maintenance program for the Stormwater Management System. Include tasks, schedule & person(s) responsible for maintenance in this program.		
28	Identification of controls requiring regular maintenance		
29	Maintenance Schedule		
30	Maintenance Tasks		
31	Responsible parties		
32	Funding		
33	Access and safety issues		
34	Provisions for the periodic review and evaluation of the effectiveness of the maintenance program and the need for revisions or additional maintenance procedures.		
Maintenance Access Easements			
35	Must provide adequate access from Public Right of Way for all stormwater management facilities and practices requiring regular maintenance for the purpose of inspection and repair by providing permanent access easements.		
36	Drainage Easements shall be 20 feet wide		
37	Maintenance access easements shall be 10 feet wide, to include the perimeter of ponds or other facilities.		
38	All easements shall be cleared and grubbed during construction.		
39	Upon final inspection and approval, a plat or document indicating that such easements exist shall be recorded and shall remain in effect even with the transfer of title of the property.		
40	Regular maintenance shall be the responsibility of the homeowners association or the property owner.		
Inspection and Maintenance Agreements			
41	Unless an on-site stormwater management facility or practice is dedicated to and accepted by the Director (UDO 310-44(e)), the applicant must execute an easement and an inspection and maintenance agreement binding on all subsequent owners of land served by an on-site stormwater management facility or practice in accordance with section 310-44 of the Rockdale County UDO.		
Evidence of Acquisition of Applicable Environmental Permits			
42	The Applicant shall certify and provide documentation to the director that all other applicable environmental permits have been acquired for the site prior to approval of the LDP. Including but not limited to GA EPD, USACE, and Safe Dams permits.		

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	Other		
43	Note on the plan for compacted earthen embankments: "All fill soils for berm section shall be clean, impermeable material and compacted to at least 95% Standard Proctor Maximum Dry Density, at optimum moisture content. No blasted materials shall be used in the embankment construction. Soils shall not exhibit significant shrink/swell or dispersive characteristics. A key trench is to be provided in all areas to extend a minimum of five feet below existing grade. No trees of any type may be located on the berm section. Fill placement shall not exceed a maximum 8" lift. Each lift shall be continuous for the entire length of embankment. Before placement of fill for the berm section, all unsuitable material shall be removed and the surface properly prepared for fill placement" .		
44	Show details of retaining wall(s)		
45	Show limits of detention, 100-yr volume and 100-yr ponding elevation on plan		
46	Show 4-foot high chain link fence with access gate around detention pond or state that it is not required (refer to Chapter 130-18(7) of Rockdale County Zoning Ordinance for fencing of retention and detention areas)		
47	Storm drain system must be designed to convey 100 year storm runoff to detention facility		
48	Note on the plan: "Length of rip-rap area shall be six times the diameter of the storm drain"		
49	<u>PIPE SIZE</u>	<u>MEDIAN RIP-RAP SIZE</u>	
	Over 72"	150 pounds	
	54" to 66"	100 pounds	
	42" to 48"	50 pounds	
	30" to 36"	40 pounds	
	18" to 24"	20 pounds	
	ADDITIONAL SIZES AS FOLLOWS:		
	CLASS 1 D.O.T. STANDARD	250 pounds	
ARMOR TYPE	2,000 pounds		
50	Cross-drains on public streets must be sized for 100-yr storm. Longitudal pipes on public streets may be sized for 25-yr storm. Maximum gutter spread at catch basin is 8' on a 10 yr storm.		
51	Note on the plan: "All catch basins are to be flush-mounted"		
52	Delineate any wetlands present. If none, so note, or provide letter from USACE approved consultant. NWI maps can be viewed at Rockdale County (Kent Asher 770-785-6959)		
53	Note on the plan: "<u>Specifications</u> - All storm sewer components shall be reinforced concrete, fully bituminous coated corrugated metal or aluminum coated coated corrugated steel pipe (aluminized type 2). All components shall conform to Section 550, Georgia DOT Standard Specifications. Code 6-2016 (3)(a).		
	<u>Exception</u> - Fully bituminous coated corrugated metal pipe shall not be used in any installation if the storm sewer is to be maintained by Rockdale County.		
54	Show IRF contour, spot elevation and source.		
55	Show on plan whether FEMA or county benchmark used to establish IRF. Also identify location of benchmark.		
56	The maximum percent of impervious surface allowed in a development is shown in Rockdale County's UDO 214-1 Table 1 and 2. The Percent impervious on the project and the amount allowed shall be shown on the plans.		