

WATER & SEWER ORDINANCE CHECKLIST		APPLICANT			For County Use
		Provided	Not Provided	Not Applicable	
8.0	DESIGN CRITERIA				
	8.1 Water Mains				
	8.1.C. Hydraulic Computations				
	(1) Submittal in accordance with Pipeline Design for Water & Wastewater				
	(2) 20 psi (min.) - Peak hourly flow & maximum daily flow plus fire flow or 65 psi for average daily flow at service connections				
	(3) Flow velocities between 0.5 fps and 7 fps				
	8.1.D. Distribution Mains				
	(1) General				
	(a) Looping				
	(b) Jack & Bore				
	(c) Temporary Terminal Points				
	(d) Flag lot utilities				
	(e) Distribution Main Extensions				
	(2) Residential Subdivision				
	(a) Terminal portion of 6 inch shall not exceed 400 ft.				
	(b) Terminal portion of 8 inch shall not exceed 1500 ft.				
	(c) Provide looping for terminal points where practical				
	(3) Commercial & Industrial				
	(a) 8 inch minimum size except hydrant leads < 200 ft. & service connections				
	(b) Terminal portion of 8 inch shall not exceed 800 ft.				
	(c) Terminal portion of 10 inch shall not exceed 2500 ft.				
	(d) Provide looping for terminal points where practical				
	(e) Provide calculations for flow rates exceeding 1500 gpm on terminal points				
	(4) Distribution Main Location				
	(a) Locate 5 ft. off center line				
	(5) Distribution Main Sizing				
	(a) Size per design flow rate				
	(b) Minimum size is 8 inch except when serving terminal hydrant. Set 6x8 inch valve reducer after 8" valve prior to terminal hydrant				
	(6) Distribution Main Cover				
	(a) Cover is 42 inch min., 3 ft. min.. when crossing utilities, 9 ft. max.				
	(7) Clearances				
	(b) 10 ft. min.. horizontal separation				
	(c) 18 inch min.. vertical separation at crossings				
	(8) Appurtenances				
	(a) Valves shall be the same size as the main				
	(b) Provide isolation valves at:				
	(i) 2000 ft. intervals - maximum				
	(ii) 75 service/dwellings units isolated at once				
	(iii) After last service				
	(iv) Provide valves around all tees and crosses				
	(c) Fire hydrants				
	(ii) Hydrant spacing is 300 ft. for commercial/industrial/multi-family 400 ft. for single family detached residential & 800 ft. for all other areas.				
	(iii) Hydrant location is 100 ft. to Siamese connections and within 300 ft. of all portions of a building				
	(d) Blow-offs @ all lows & terminuses; Air Release valves @ all peaks				
	8.1.E. Transmission Mains				
	8.1.F. Service Connections				
	(1) Location - curbstop/boxes @ right-of-way/easement line				
	(2) Service/meter sizing based on COMAR 09.20.11.13 + AWWA M-22				
	(4) Clearances				
	(a) 10 ft. min.. horizontal separation				
	(b) 12 inch min.. vertical separation at crossings				
	8.1.G. Structural Considerations				
	(1) Size per Standard Details				
	8.1.J. Water Pumping; Treatment Storage - submit detailed design criteria				

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8.0	8.2 Sewer Mains				
	8.2.A. General				
	(2) Manhole with 1 ft. stub @ end of lines to be extended in the future				
	(3) Reflect computations on plans				
	(5) Design in accordance with Standard Specifications & Details				
	(7) Design to property line of all adjacent properties for future connections				
	8.2.B. Collector Sewers				
	(1) Designed for future drainage basin				
	(4) Design average daily flows based on Appendices "E", "F", "O", "P" & "Q"				
	(5) Peak domestic flows in accordance with Appendix "V"				
	(6) Infiltration/Inflow				
	(7) Design hydraulic flow				
	8.2.C. Interceptor Sewers				
	8.2.D. Hydraulic Criteria				
	(1) Collector Sewers				
	(a) Size - hydraulic gradient less than or equal to crown of pipe				
	(b) velocity = 2.5 fps (min.), if v>15fps than design to protect against erosion				
	(2) Interceptor Sewers				
	(a) Size - hydraulic gradient at or below d/D = 0.67				
	(b) velocity = 2.5 fps (min.), if v>15fps than design to protect against erosion				
	8.2.E. System Layout Criteria				
	(1) Collector Sewers				
	(a) horizontal layout				
	(b) profile layout				
	(c) clearances				
	(d) appurtenances				
	(i) Manholes				
	(ii) Frames and Covers				
	(2) Interceptor Sewers				
	(a) horizontal layout				
	(b) profile layout				
	(c) clearances				
	(d) appurtenances				
	(i) Manholes				
	(ii) Frames and Covers				
	8.2.F. Grinder Pumps; Pressure Systems; Step Systems - reviewed on a case by case basis				
	8.2.G. Sewer House Connections				
	(1) Location - County cleanout set @ right-of-way/easement line				
	8.2.H. Grease Interceptors				
	(2) Located outside & per Standard Details				
	(3) 2,000 gal/min				
	8.2.I. Oil & Flammable Liquid Separators				
	(1) In accordance with COMAR				
	8.2.J. Flag Lot Utilities				
	(1) Two lots or less				
	(2) Three lots or more				
	8.3 Minimum Design Guidelines and Requirements for Wastewater Pump Stations				
	8.3.A. General				
	8.3.B. Design				
	8.3.C. Building				
	8.3.D. Site				
	8.3.E. Electrical				
	8.3.F. Safety				

Notes:
