Module 7 Sanitary Sewer Design Project Assignment CE 378 Water Resources Engineering

Use the same general area you used for your water supply design project. Select an overall area having at least 10 pipe segments and at least 3 branches for your design. If your area is an unsuitable segment for this design, feel free to shift it or change its location for a more logical layout. The following is the listing of the maximum points associated with each item for this assignment. Please leave enough time to write a good description of your work and to evaluate your results.

ITEM	Max. Points	Points Received
Copies of aerial photograph and topographic map showing	5	Received
area	5	
List of Assumptions and Design Requirements (reference sources)		
Problem statement	5	
Wastewater production calculations	15	
Design objectives (list of requirements based on readings,	10	
for minimum cover, min. pipe diameter, min. and max.		
velocities, manhole spacing, min. slopes, etc.)		
Design equation used and pipe roughness and type	5	
Pipe System Layout on Map		
Show manhole locations and sewage flow directions, and	10	
areas contributing to each pipe segment		
Calculation format		
Spreadsheet setup and documentation of equations used	5	
Use complete column headings showing necessary data	20	
and calculated values and correct layout/calculations		
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Final Map and Profile, labeling all pertinent information	10	
Discussion of Results		
Include discussion of problems meeting design objectives,	15	
obtaining reasonable data/information, unique aspects of site		
that complicated design, etc.		
TOTAL POINTS	100	