Assignment 4
Inlets and Storm Sewers

The solution to this homework should be posted in pdf format to the Canvas web site for this class under Assignment 4 by Thursday Feb 25.

1. Solve problem 1 on p.128 of Haested. For Part 1(a) use a hand computation to determine the maximum allowable discharge. For the remaining parts, use FlowMaster.

2. Solve problem 2 (a) on p.128 of Haested using FlowMaster.

3. Solve Problems 1 and 2 at the end of the StormCAD handout prepared by Dr Burgin
http://www.caee.utexas.edu/prof/maidment/CE365KSpr16/StormCAD/StormCAD.pdf

For Problem 1, I have prepared a StormCAD model and here is the solution that I got. Set up your model to see if you can replicate this solution. I recommend using the CAEE Virtual Desktop, which you can access at https://appd.engr.utexas.edu/ If you try and cannot build the model in StormCAD, here is the model I created to solve Problem 1:
http://www.caee.utexas.edu/prof/maidment/CE365KSpr16/Assignment4/Assignment4.zip

Slope (Calculated) (ft/ft)	Section Type	Diameter (in)	Manning's n	Flow (cfs)	Velocity (ft/s)	Depth (Out) (ft)	Capacity (Full Flow) (cfs)	Flow / Capacity (Design) (%)	Depth (Normal) / Rise (%)
0.009	Circle	19.0	0.013	11.14	6.66	1.69	11.50	96.8	79.2
0.006	Circle	26.0	0.013	20.31	6.59	2.05	21.36	95.1	77.9
0.005	Circle	32.0	0.013	31.11	6.74	2.14	33.12	93.9	77.0
0.013	Circle	32.0	0.013	41.17	10.99	1.70	56.19	73.3	63.6

For Problem 2, you need the EBDLKUP spreadsheet to access values for Hays County. You can obtain that at: http://www.caee.utexas.edu/prof/maidment/CE365KSpr16/Docs/EBDLKUP.xlsx

For the Problem 2 solution, you can pick up a complete StormCAD file with all elements sized to their maximum level at:
http://www.caee.utexas.edu/prof/maidment/CE365KSpr16/Assignment4/Prob2Initial.zip