


**CMGT 235 – Electrical and Mechanical Systems**

Department of Construction Management  California State University, Chico

Homework #16

Points: 20

Due: 10/18/2022

Name: \_\_\_\_\_

1. Determine the number of roof drains required for ideal drainage for a roof area that has a width of 240 feet and a length of 570 feet located in Little Rock, Arkansas. Round drain number up to the next whole number.

- A. Use the handout **Roof Drain to Roof Area Sizing Schedule**

Calculate the Roof Area

Rainfall = \_\_\_\_\_

Calculate the number of 5" Roof Drains

Calculate the Number of 8" Roof Drains

- B. Use **2016 CPC Appendix D – Table D 101.1 and Table 1101.12**

Rainfall = \_\_\_\_\_

Calculate the number of 5" Roof Drains

Calculate the Number of 8" Roof Drains

2. For the BMP shown below answer the following:



What is the BMP called? \_\_\_\_\_

What BMP objectives does it address?

What is the Standard Symbol used on site drawings? \_\_\_\_\_

3. For the BMP shown below answer the following:



What is the BMP called? \_\_\_\_\_

What BMP objectives does it address?

What is the Standard Symbol used on site drawings? \_\_\_\_\_

4. Using the Web site [www.usclimatedata.com](http://www.usclimatedata.com) complete the following:

City	Portland
State	Oregon
Total Annual Rainfall (inches)	
Average per month (inches)	
Highest Month (inches)	

If rainfall is collected from a 12,500 square foot roof determine the following:  
Average Volume of Runoff that can be Captured

Highest Month Volume of Runoff that can be captured