# Work Sheet 1 – Roof Gutter Design

COOPERATOR _____ DATE 02/13/2015

ADDRESS _____ BY _____

**1)** Ten-year or twenty-five-year frequency five minute rainfall, from Chart 1.
(Rainfall intensity _____ ft./sec.)

Note: For systems protecting a waste storage structures, use the 25-year frequency.

| **2)** | **(Length x Width) = Roof Area** | | | **Rainfall Intensity** | | **Peak Flow** |
|---|---|---|---|---|---|---|
| Roof #_____ | _____x_____ | = | 0 sq.ft. | X | _____ft./sec. | = 0.000 cfs |
| Roof #_____ | _____x_____ | = | 0 sq.ft. | X | _____ft./sec. | = 0.000 cfs |
| Roof #_____ | _____x_____ | = | 0 sq.ft. | X | _____ft./sec. | = 0.000 cfs |
| Roof #_____ | _____x_____ | = | 0 sq.ft. | X | _____ft./sec. | = 0.000 cfs |
| Roof #_____ | _____x_____ | = | 0 sq.ft. | X | _____ft./sec. | = 0.000 cfs |
| Roof #_____ | _____x_____ | = | 0 sq.ft. | X | _____ft./sec. | = 0.000 cfs |
| Roof #_____ | _____x_____ | = | 0 sq.ft. | X | _____ft./sec. | = 0.000 cfs |

**3) Roof Gutter Size (From Figures 1, 2 or 3)**

| | | | | | |
|---|---|---|---|---|---|
| Roof #_____ | Use _____" | Top K-Style Aluminum | @ | 1 1/2" | Pitch in 100 ft. |
| Roof #_____ | Use _____" | Top K-Style Aluminum | @ | 6" | Pitch in 100 ft. |
| Roof #_____ | Use _____" | Top K-Style Aluminum | @ | 6" | Pitch in 100 ft. |
| Roof #_____ | Use _____" | Top K-Style Galvanized | @ | 6" | Pitch in 100 ft. |
| Roof #_____ | Use _____" | Top K-Style Aluminum | @ | 6" | Pitch in 100 ft. |
| Roof #_____ | Use _____" | Top K-Style Aluminum | @ | 6" | Pitch in 100 ft. |
| Roof #_____ | Use _____" | Top K-Style Aluminum | @ | 6" | Pitch in 100 ft. |

**4) Downspout Opening (orifice) Sizing. (See Figure 4).**

| | | | | |
|---|---|---|---|---|
| Roof #_____ | Use _____ - | 2" x 3" | Downspout w/_____" | (combination) Leader _____ |
| Roof #_____ | Use _____ - | 2" x 3" | Downspout w/_____" | Leader _____ |
| Roof #_____ | Use _____ - | 2" x 3" | Downspout w/_____" | Leader _____ |
| Roof #_____ | Use _____ - | 2" x 3" | Downspout w/_____" | Leader _____ |
| Roof #_____ | Use _____ - | 2" x 3" | Downspout w/_____" | Leader _____ |
| Roof #_____ | Use _____ - | 2" x 3" | Downspout w/_____" | Leader _____ |
| Roof #_____ | Use _____ - | 2" x 3" | Downspout w/_____" | Leader _____ |

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# Underground Outlet Design Sheet - Worksheet 2

| Design Reach | | | Length In design reach | Input "Q" this reach | Input upper reaches | Total required "Q" | Minimum grade in reach | Pipe Size | Minimum capacity | Minimum velocity |
|---|---|---|---|---|---|---|---|---|---|---|
| Line | Sta. to | Sta. | (Feet) | (CFS) | (CFS) | (CFS) | (Ft/Ft) | (Inches) | (CFS) | (FPS) |
| | | | 0 | | | 0.000 | | | | |
| | | | 0 | | | 0.000 | | | | |
| | | | 0 | | | 0.000 | | | | |
| | | | 0 | | | 0.000 | | | | |
| | | | 0 | | | 0.000 | | | | |
| | | | 0 | | | 0.000 | | | | |
| | | | 0 | | | 0.000 | | | | |
| | | | 0 | | | 0.000 | | | | |
| | | | 0 | | | 0.000 | | | | |
| | | | 0 | | | 0.000 | | | | |
| | | | 0 | | | 0.000 | | | | |
| | | | 0 | | | 0.000 | | | | |
| | | | 0 | | | 0.000 | | | | |

Cooperator:

Address:

Job Class:

Comments:

Designed by: Date: 02/13/2015

Approved by: Date:

Certified by: Date:

DESIGN SKETCH

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