



# DITCH ANALYSIS

**PID :** 116570    **Date :** 06/26/2025    **Project :** ERIE-US 6-CORRIDOR    **Location :** US 6 Right

**Description :** Ditch from Sta 1768+88 to 1769+20

**Designer :** HRT

**Rainfall Area :** A

**Allowable Shears**

|                      |                |      |                  |      |                       |      |
|----------------------|----------------|------|------------------|------|-----------------------|------|
|                      | <b>Seed:</b>   | 0.40 | <b>Jute Mat:</b> | 0.45 | <b>Temporary Mat:</b> | 1.00 |
| <b>Permanent Mat</b> | <b>Type 1:</b> | 2.00 | <b>Type 2:</b>   | 3.00 | <b>Type 3:</b>        | 5.00 |
| <b>RCP</b>           | <b>Type B:</b> | 6.00 |                  |      |                       |      |

(\*) Warning: Grade is steeper than allowable.

If value is parantheses, design parameters have been exceeded. - See user manual.

| STATION<br>BEGIN | STATION<br>END | SIDE | LENGTH<br>(ft.) | RADIUS<br>WIDTH<br>(ft.) | IN<br>SLOPE<br>(ft./ft.) | BACK<br>SLOPE<br>(ft./ft.) | GRADE<br>(ft./ft.) | AREA<br>(acres) | AREA<br>SUM<br>(acres) | RUNOFF<br>COEFF. | CA<br>(Sum) | PROTECT<br>TYPE | RAIN<br>INT.<br>(in./hr.) | STORM<br>FREQ.<br>(yrs.) | MANN.<br>COEFF. | TIME<br>FLOW<br>(min.) | VEL.<br>FLOW<br>(fps.) | SHEAR<br>(lbs./<br>sq.ft.) | DESIGN<br>FLOW<br>(cfs.) | DEPTH<br>FLOW<br>(ft.) | WIDTH<br>FLOW<br>(ft.) |
|------------------|----------------|------|-----------------|--------------------------|--------------------------|----------------------------|--------------------|-----------------|------------------------|------------------|-------------|-----------------|---------------------------|--------------------------|-----------------|------------------------|------------------------|----------------------------|--------------------------|------------------------|------------------------|
| 1768+88          | 1769+00        | R    | 12.00           | 4.00                     | 4.00                     | 4.00                       | 0.0242             | 0.06            | 0.06                   | 0.64             | 0.04        | Seed            | 3.62                      | 5                        | 0.030           | 15.23                  | 0.86                   | 0.06                       | 0.14                     | 0.04                   | 4.32                   |
|                  |                |      |                 |                          |                          |                            |                    |                 |                        |                  |             | Seed            | 4.09                      | 10                       | 0.040           | 15.26                  | 0.76                   | 0.08                       | 0.16                     | 0.05                   | 4.41                   |
| 1769+20          | 1769+00        | R    | 20.00           | 4.00                     | 4.00                     | 4.00                       | 0.0025             | 0.06            | 0.12                   | 0.64             | 0.08        | Seed            | 3.55                      | 5                        | 0.030           | 15.84                  | 0.55                   | 0.02                       | 0.28                     | 0.12                   | 4.92                   |
|                  |                |      |                 |                          |                          |                            |                    |                 |                        |                  |             | Seed            | 4.00                      | 10                       | 0.040           | 15.97                  | 0.48                   | 0.02                       | 0.32                     | 0.15                   | 5.16                   |