**Practice**: 362 - Diversion

**Scenario**: #1 - Small, <2 CY/FT

**Scenario Description**: An earthen channel constructed across long slopes with supporting ridge on lower side, to divert runoff away from farmsteads, agricultural waste systems, gullies, critical erosion areas, construction areas or other sensitive areas. Outlet may be waterway, underground outlet, or other suitable outlet. Scenario is for diversions requiring less than 2 CY of excavation per foot of diversion. Channel my be level or gradient and ridge may be vegetated or farmed. The quantity of excavation and fill is balanced.

**Before Situation**: Excessive sedimentation and soil erosion as a result of gully, rill or sheet erosion which exceeds "T" from farm fields and other locations. Also, roof runoff or surface runoff that becomes contaminated with agricultral wastes that significantly contributes to the amount of runoff that has to be stored or treated.

**After Situation**: Scenario assumes a typical installation of a diversion 1000 feet long installed using a dozer. Diversion is 2.5' tall with 4' wide top width and slopes 3:1. Field system meets "T" or "clean" storm water runoff is diverted away from an agricultural waste management system to minimize the volume of runoff that is contaminated by agricultral waste. Associated practices are Critical Area Planting (342), Grassed Waterway (412), Underground Outlet (620), Mulching (484), and Subsurface Drainage (606).

**Scenario Feature Measure**: Length of Diversion

**Scenario Unit**: Foot

**Scenario Typical Size**: 1000

**Total Scenario Cost**: $3,573.21

**Scenario Cost/Unit**: $3.57

**Cost Details**

| Component Name | Id | Description | Unit | Cost | Qty | Total |
|---|---|---|---|---|---|---|
| **Labor** | | | | | | |
| General Labor | 231 | Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc. | Hour | $23.83 | 2 | $47.67 |
| Supervisor or Manager | 234 | Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc. | Hour | $38.95 | 2 | $77.91 |
| **Mobilization** | | | | | | |
| Mobilization, medium equipment | 1139 | Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds. | Each | $260.93 | 1 | $260.93 |
| **Equipment Installation** | | | | | | |
| Excavation, common earth, small equipment, 50 ft | 1220 | Bulk excavation of common earth with dozer <100 HP with average push distance of 50 feet. Includes equipment and labor. | Cubic Yard | $2.55 | 1000 | $2,552.66 |
| Stripping and stockpiling, topsoil | 1199 | Stripping and stockpiling of topsoil adjacent to stripping area. Includes equipment and labor. | Cubic Yard | $0.91 | 700 | $634.05 |

**Practice**: 362 - Diversion

**Scenario**: #2 - Medium, 2 - 2.9 CY/FT

**Scenario Description**: An earthen channel constructed across long slopes with supporting ridge on lower side, to divert runoff away from farmsteads, agricultural waste systems, gullies, critical erosion areas, construction areas or other sensitive areas. Outlet may be waterway, underground outlet, or other suitable outlet. Scenario is for diversions requiring 2 CY to 2.9 CY of excavation per foot of diversion. Channel my be level or gradient and ridge may be vegetated or farmed. The quantity of excavation and fill is balanced.

**Before Situation**: Excessive sedimentation and soil erosion as a result of gully, rill or sheet erosion which exceeds "T" from farm fields and other locations. Also, roof runoff or surface runoff that becomes contaminated with agricultral wastes that significantly contributes to the amount of runoff that has to be stored or treated.

**After Situation**: Scenario assumes a typical installation of a diversion 1000 feet long installed using a dozer. Diversion is 4' tall with 4' wide top width and slopes 3:1. Field system meets "T" or "clean" storm water runoff is diverted away from an agricultural waste management system to minimize the volume of runoff that is contaminated by agricultral waste. Associated practices are Critical Area Planting (342), Grassed Waterway (412), Underground Outlet (620), Mulching (484), and Subsurface Drainage (606).

**Scenario Feature Measure**: Length of Diversion

**Scenario Unit**: Foot

**Scenario Typical Size**: 1000

**Total Scenario Cost**: $7,673.94

**Scenario Cost/Unit**: $7.67

**Cost Details**

| Component Name | Id | Description | Unit | Cost | Qty | Total |
|---|---|---|---|---|---|---|
| **Labor** | | | | | | |
| General Labor | 231 | Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc. | Hour | $23.83 | 2 | $47.67 |
| Supervisor or Manager | 234 | Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc. | Hour | $38.95 | 2 | $77.91 |
| **Mobilization** | | | | | | |
| Mobilization, medium equipment | 1139 | Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds. | Each | $260.93 | 1 | $260.93 |
| **Equipment Installation** | | | | | | |
| Excavation, common earth, small equipment, 50 ft | 1220 | Bulk excavation of common earth with dozer <100 HP with average push distance of 50 feet. Includes equipment and labor. | Cubic Yard | $2.55 | 2500 | $6,381.66 |
| Stripping and stockpiling, topsoil | 1199 | Stripping and stockpiling of topsoil adjacent to stripping area. Includes equipment and labor. | Cubic Yard | $0.91 | 1000 | $905.78 |

**Practice**: 362 - Diversion

**Scenario**: #3 - Large, =3 CY/FT

**Scenario Description**: An earthen channel constructed across long slopes with supporting ridge on lower side, to divert runoff away from farmsteads, agricultural waste systems, gullies, critical erosion areas, construction areas or other sensitive areas. Outlet may be waterway, underground outlet, or other suitable outlet. Scenario is for diversions requiring greater than or equal to 3 CY of excavation per foot of diversion. Channel my be level or gradient and ridge may be vegetated or farmed. The quantity of excavation and fill is balanced.

**Before Situation**: Excessive sedimentation and soil erosion as a result of gully, rill or sheet erosion which exceeds "T" from farm fields and other locations. Also, roof runoff or surface runoff that becomes contaminated with agricultral wastes that significantly contributes to the amount of runoff that has to be stored or treated.

**After Situation**: Scenario assumes a typical installation of a diversion 1000 feet long installed using a dozer. Diversion is 5' tall with 4' wide top width and slopes 3:1.Field system meets "T" or "clean" storm water runoff is diverted away from an agricultural waste management system to minimize the volume of runoff that is contaminated by agricultral waste. Associated practices are Critical Area Planting (342), Grassed Waterway (412), Underground Outlet (620), Mulching (484), and Subsurface Drainage (606).

**Scenario Feature Measure**: Length of Diversion

**Scenario Unit**: Foot

**Scenario Typical Size**: 1000

**Total Scenario Cost**: $10,407.76

**Scenario Cost/Unit**: $10.41

**Cost Details**

| Component Name | Id | Description | Unit | Cost | Qty | Total |
|---|---|---|---|---|---|---|
| **Labor** | | | | | | |
| General Labor | 231 | Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc. | Hour | $23.83 | 2 | $47.67 |
| Supervisor or Manager | 234 | Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc. | Hour | $38.95 | 2 | $77.91 |
| **Mobilization** | | | | | | |
| Mobilization, medium equipment | 1139 | Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds. | Each | $260.93 | 1 | $260.93 |
| **Equipment Installation** | | | | | | |
| Excavation, common earth, small equipment, 50 ft | 1220 | Bulk excavation of common earth with dozer <100 HP with average push distance of 50 feet. Includes equipment and labor. | Cubic Yard | $2.55 | 3500 | $8,934.32 |
| Stripping and stockpiling, topsoil | 1199 | Stripping and stockpiling of topsoil adjacent to stripping area. Includes equipment and labor. | Cubic Yard | $0.91 | 1200 | $1,086.94 |